

PDC ENERGY

**WELD COUNTY, COLORADO
NE SW SEC. 21 T4N R67W 6th P.M.
SHARON 21O-314**

**ORIGINAL WELLBORE
PROPOSAL #1**

Anticollision Report

28 March, 2016



Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Reference	PROPOSAL #1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD + Stations Interval 100.0usft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 10,000.0 us	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	28/03/2016		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	14,295.0	PROPOSAL #1 (ORIGINAL WELLBORE)	MWD	MWD - Standard

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
NE SW SEC. 21 T4N R67W 6th P.M.						
ABDN VERT BROWN 20-2 - Wellbore #1 - Wellbore #1	13,932.2	6,800.0	321.5	260.6	5.274	CC, ES, SF
EXIST DD BROWN 20AD - Wellbore #1 - Wellbore #1	13,610.7	7,253.8	662.1	462.9	3.324	CC, ES
EXIST DD BROWN 20AD - Wellbore #1 - Wellbore #1	13,700.0	7,255.3	668.1	466.4	3.313	SF
EXIST DD BROWN 20MD - Wellbore #1 - Wellbore #1	12,478.6	7,296.3	1,929.8	1,767.0	11.855	CC
EXIST DD BROWN 20MD - Wellbore #1 - Wellbore #1	12,500.0	7,296.1	1,929.9	1,766.6	11.813	ES
EXIST DD BROWN 20MD - Wellbore #1 - Wellbore #1	13,100.0	7,283.0	2,027.4	1,847.4	11.261	SF
EXIST DD BROWN 20ND - Wellbore #1 - Wellbore #1	12,470.7	7,145.2	567.3	407.4	3.547	CC
EXIST DD BROWN 20ND - Wellbore #1 - Wellbore #1	12,500.0	7,145.1	568.1	407.3	3.534	ES, SF
EXIST DD BROWN 20OD - Wellbore #1 - Wellbore #1	12,463.4	7,306.6	604.2	442.6	3.738	CC, ES
EXIST DD BROWN 20OD - Wellbore #1 - Wellbore #1	12,500.0	7,306.9	605.4	442.7	3.722	SF
EXIST DD CENTENNIAL 12-21DU - Wellbore #1 - Wellb	9,234.7	7,286.4	136.5	63.0	1.857	CC, ES, SF
EXIST DD CENTENNIAL 21GDU - Wellbore #1 - Wellbo	9,843.8	7,352.4	688.3	598.0	7.622	CC, ES
EXIST DD CENTENNIAL 21GDU - Wellbore #1 - Wellbo	10,000.0	7,349.2	705.8	611.3	7.470	SF
EXIST DD CENTENNIAL 21KDU - Wellbore #1 - Wellbor	8,578.4	7,478.9	661.2	595.5	10.066	CC
EXIST DD CENTENNIAL 21KDU - Wellbore #1 - Wellbor	8,600.0	7,478.6	661.5	595.3	9.993	ES
EXIST DD CENTENNIAL 21KDU - Wellbore #1 - Wellbor	8,700.0	7,477.6	672.3	603.6	9.791	SF
EXIST DD CENTENNIAL 22-21DU - Wellbore #1 - Wellb	7,945.0	7,509.7	95.1	33.7	1.549	CC, ES, SF
EXIST DD EEE 21ADU - Wellbore #1 - Wellbore #1	8,576.1	7,350.0	565.9	500.7	8.684	CC
EXIST DD EEE 21ADU - Wellbore #1 - Wellbore #1	8,600.0	7,350.0	566.4	500.6	8.616	ES
EXIST DD EEE 21ADU - Wellbore #1 - Wellbore #1	8,700.0	7,346.2	579.3	511.0	8.491	SF
EXIST DD EEE 21NDU - Wellbore #1 - Wellbore #1	7,333.0	7,518.4	546.7	480.8	8.291	CC, ES, SF
EXIST DD RYLAND 20CD - Wellbore #1 - Wellbore #1	11,203.6	7,415.3	590.2	447.9	4.148	CC, ES
EXIST DD RYLAND 20CD - Wellbore #1 - Wellbore #1	11,300.0	7,416.6	598.0	453.0	4.126	SF
EXIST DD RYLAND 20SD - Wellbore #1 - Wellbore #1	11,166.5	7,582.7	783.3	641.4	5.519	CC
EXIST DD RYLAND 20SD - Wellbore #1 - Wellbore #1	11,200.0	7,583.6	784.1	641.2	5.488	ES
EXIST DD RYLAND 20SD - Wellbore #1 - Wellbore #1	11,300.0	7,586.6	794.6	649.0	5.456	SF
EXIST DD RYLAND 20VD - Wellbore #1 - Wellbore #1	10,022.6	7,214.2	591.4	498.1	6.339	CC, ES
EXIST DD RYLAND 20VD - Wellbore #1 - Wellbore #1	10,100.0	7,214.2	596.4	501.0	6.252	SF
EXIST DD RYLAND 31-20D - Wellbore #1 - Wellbore #1	11,764.0	7,278.9	1,312.9	1,165.5	8.912	CC
EXIST DD RYLAND 31-20D - Wellbore #1 - Wellbore #1	11,800.0	7,278.9	1,313.4	1,165.0	8.855	ES
EXIST DD RYLAND 31-20D - Wellbore #1 - Wellbore #1	12,100.0	7,278.8	1,355.2	1,198.5	8.651	SF
EXIST DD RYLAND 32-20D - Wellbore #1 - Wellbore #1	11,787.6	7,303.8	52.6	-95.9	0.354	Level 1, CC, ES, SF
EXIST DD RYLAND 42-20D - Wellbore #1 - Wellbore #1	10,545.1	7,335.8	75.0	-38.8	0.659	Level 1, CC, ES, SF
EXIST VERT BROWN 20-1 - Wellbore #1 - Design #1	14,141.5	7,131.1	1,415.6	1,082.7	4.252	CC
EXIST VERT BROWN 20-1 - Wellbore #1 - Design #1	14,200.0	7,130.9	1,416.9	1,082.3	4.235	ES
EXIST VERT BROWN 20-1 - Wellbore #1 - Design #1	14,295.0	7,130.5	1,423.9	1,086.7	4.223	SF
EXIST VERT BROWN 22-20 - Wellbore #1 - Design #1	13,029.4	7,123.7	73.5	-228.4	0.244	Level 1, 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 SHARON 21O-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 21O-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Summary

Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
NE SW SEC. 21 T4N R67W 6th P.M.						
EXIST VERT CYPRUS 1 - Wellbore #1 - Design #1	12,881.3	7,131.3	1,298.8	1,000.9	4.361	CC
EXIST VERT CYPRUS 1 - Wellbore #1 - Design #1	12,900.0	7,131.3	1,298.9	1,000.6	4.354	ES
EXIST VERT CYPRUS 1 - Wellbore #1 - Design #1	13,000.0	7,130.9	1,304.2	1,003.1	4.331	SF
SHARON 21N-234 - ORIGINAL WELLBORE - PROPOS	400.0	400.0	14.9	13.4	9.680	CC
SHARON 21N-234 - ORIGINAL WELLBORE - PROPOS	14,295.0	14,221.2	221.4	-138.6	0.615	Level 1, ES, SF
SHARON 21N-334 - ORIGINAL WELLBORE - PROPOS	266.3	267.3	29.9	28.9	31.634	CC
SHARON 21N-334 - ORIGINAL WELLBORE - PROPOS	14,295.0	14,370.1	400.9	9.0	1.023	Level 2, ES, SF
SHARON 21O-204 - ORIGINAL WELLBORE - PROPOS	500.0	499.0	45.2	43.2	22.697	CC, ES
SHARON 21O-204 - ORIGINAL WELLBORE - PROPOS	11,900.0	11,702.4	676.4	420.8	2.647	SF
SHARON 21O-214 - ORIGINAL WELLBORE - PROPOS	500.0	500.0	15.3	13.3	7.680	CC
SHARON 21O-214 - ORIGINAL WELLBORE - PROPOS	14,295.0	14,154.2	258.2	-107.2	0.707	Level 1, ES, SF
SHARON 21O-234 - ORIGINAL WELLBORE - PROPOS	500.0	499.0	75.0	73.1	37.703	CC, ES
SHARON 21O-234 - ORIGINAL WELLBORE - PROPOS	12,000.0	11,692.6	1,213.2	952.5	4.654	SF
SHARON 21O-304 - ORIGINAL WELLBORE - PROPOS	500.0	499.0	30.2	28.2	15.193	CC, ES
SHARON 21O-304 - ORIGINAL WELLBORE - PROPOS	14,295.0	14,253.5	440.1	47.3	1.120	Level 2, SF
SHARON 21O-334 - ORIGINAL WELLBORE - PROPOS	500.0	499.0	60.1	58.1	30.203	CC, ES
SHARON 21O-334 - ORIGINAL WELLBORE - PROPOS	11,900.0	11,797.6	931.7	672.9	3.601	SF
SE SW SEC. 21 T4N R67W 6th P.M.						
EXIST DD RYLAND 33-20D - Wellbore #1 - Wellbore #1	11,770.6	7,259.2	1,349.8	1,208.3	9.537	CC
EXIST DD RYLAND 33-20D - Wellbore #1 - Wellbore #1	11,800.0	7,258.8	1,350.1	1,207.8	9.485	ES
EXIST DD RYLAND 33-20D - Wellbore #1 - Wellbore #1	12,100.0	7,255.8	1,389.4	1,238.7	9.222	SF
EXIST DD RYLAND 43-20D - Wellbore #1 - Wellbore #1	10,506.0	7,345.2	1,350.4	1,233.1	11.511	CC, ES
EXIST DD RYLAND 43-20D - Wellbore #1 - Wellbore #1	10,900.0	7,348.3	1,406.7	1,278.6	10.977	SF
EXIST DD WALTERS #21ODU - Wellbore #1 - Wellbore	4,608.2	4,846.9	672.3	644.5	24.174	CC, ES
EXIST DD WALTERS #21ODU - Wellbore #1 - Wellbore	6,621.0	6,680.1	884.1	832.0	16.954	SF
EXIST DD WALTERS 23-21DU - Wellbore #1 - Wellbore	0.0	2.5	945.9			
EXIST DD WALTERS 23-21DU - Wellbore #1 - Wellbore	500.0	502.4	946.0	944.4	622.806	ES
EXIST DD WALTERS 23-21DU - Wellbore #1 - Wellbore	8,900.0	7,262.2	1,711.2	1,646.1	26.294	SF
EXIST DD WEDCO #13-21DU - Wellbore #1 - Wellbore	0.0	0.0	926.5			
EXIST DD WEDCO #13-21DU - Wellbore #1 - Wellbore	200.0	199.0	926.8	926.3	1,750.214	ES
EXIST DD WEDCO #13-21DU - Wellbore #1 - Wellbore	9,900.0	7,321.3	1,563.0	1,464.8	15.917	SF
EXIST VERT BUNYAN #1 - Wellbore #1 - Wellbore #1	118.4	106.0	775.3	775.1	3,715.888	CC
EXIST VERT BUNYAN #1 - Wellbore #1 - Wellbore #1	200.0	183.1	775.5	775.1	1,666.095	ES
EXIST VERT BUNYAN #1 - Wellbore #1 - Wellbore #1	10,500.0	7,179.1	2,734.8	2,642.0	29.450	SF
WALTERS 21P-314 - ORIGINAL WELLBORE - PROPOS	953.8	1,112.7	1,195.0	1,190.0	242.487	CC, ES
WALTERS 21P-314 - ORIGINAL WELLBORE - PROPOS	12,200.0	11,802.2	1,726.5	1,460.0	6.480	SF

Offset Design												Offset Site Error:	0.0 usft
NE SW SEC. 21 T4N R67W 6th P.M. - ABDN VERT BROWN 20-2 - Wellbore #1 - Wellbore #1												Offset Well Error:	0.0 usft
Survey Program: 100-MWD													
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	-80.20	1,072.2	-6,209.0	6,301.1				
100.0	100.0	47.0	47.0	0.1	0.0	-80.20	1,072.2	-6,209.0	6,300.9	6,300.8	0.10	N/A	
200.0	200.0	139.2	139.2	0.3	0.0	-80.21	1,071.8	-6,209.2	6,301.0	6,300.6	0.37	N/A	
300.0	300.0	242.6	242.6	0.5	0.2	-80.21	1,071.4	-6,209.5	6,301.2	6,300.5	0.75	8,404.000	
400.0	400.0	385.6	385.6	0.8	0.5	-80.22	1,070.4	-6,209.3	6,301.0	6,299.7	1.28	4,912.614	
500.0	500.0	497.7	497.7	1.0	0.7	-80.23	1,069.3	-6,208.7	6,300.3	6,298.6	1.75	3,607.369	
556.2	556.2	553.4	553.4	1.1	0.9	-112.75	1,068.8	-6,208.4	6,300.1	6,298.1	1.99	3,173.575	
600.0	600.0	596.7	596.7	1.2	1.0	-112.76	1,068.5	-6,208.1	6,300.2	6,298.1	2.17	2,902.493	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 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-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	
700.0	699.8	708.7	708.7	1.4	1.2	-112.79	1,067.6	-6,207.3	6,301.4	6,298.8	2.63	2,397.127	
800.0	799.5	800.0	800.0	1.7	1.4	-112.82	1,066.7	-6,206.7	6,304.0	6,300.9	3.06	2,063.196	
900.0	898.7	862.8	862.8	1.9	1.5	-112.81	1,066.1	-6,206.5	6,308.2	6,304.8	3.44	1,834.146	
1,000.0	997.5	993.5	993.5	2.2	1.8	-112.89	1,064.8	-6,206.3	6,314.2	6,310.2	4.00	1,580.407	
1,100.0	1,095.6	1,060.8	1,060.7	2.6	1.9	-112.87	1,064.2	-6,206.1	6,321.2	6,316.7	4.46	1,417.342	
1,169.1	1,163.0	1,111.2	1,111.2	2.8	2.0	-112.86	1,063.8	-6,206.1	6,327.1	6,322.3	4.82	1,313.858	
1,200.0	1,193.1	1,167.9	1,167.8	3.0	2.1	-112.97	1,063.3	-6,206.1	6,329.9	6,324.9	5.05	1,253.045	
1,300.0	1,290.4	1,270.0	1,270.0	3.4	2.4	-113.18	1,062.4	-6,205.7	6,338.7	6,333.0	5.66	1,119.886	
1,400.0	1,387.7	1,362.3	1,362.2	3.8	2.6	-113.37	1,061.5	-6,205.4	6,347.6	6,341.3	6.26	1,013.516	
1,500.0	1,484.9	1,442.1	1,442.0	4.3	2.7	-113.52	1,060.7	-6,205.3	6,356.7	6,349.9	6.85	928.106	
1,600.0	1,582.2	1,521.7	1,521.6	4.7	2.9	-113.68	1,060.4	-6,205.4	6,366.3	6,358.8	7.44	855.556	
1,700.0	1,679.5	1,629.6	1,629.6	5.2	3.1	-113.90	1,059.5	-6,205.5	6,375.8	6,367.7	8.10	787.511	
1,800.0	1,776.8	1,703.2	1,703.1	5.7	3.3	-114.04	1,058.9	-6,205.7	6,385.6	6,376.9	8.68	735.321	
1,900.0	1,874.1	1,816.2	1,816.1	6.1	3.5	-114.26	1,058.1	-6,206.0	6,395.5	6,386.1	9.35	683.755	
2,000.0	1,971.4	1,900.0	1,899.9	6.6	3.7	-114.43	1,057.5	-6,206.3	6,405.5	6,395.5	9.97	642.766	
2,100.0	2,068.7	1,979.7	1,979.6	7.1	3.8	-114.58	1,057.2	-6,206.8	6,415.8	6,405.3	10.57	606.999	
2,200.0	2,165.9	2,052.8	2,052.7	7.6	4.0	-114.72	1,057.0	-6,207.4	6,426.5	6,415.3	11.16	575.723	
2,300.0	2,263.2	2,138.0	2,137.9	8.0	4.2	-114.88	1,057.1	-6,208.4	6,437.6	6,425.8	11.78	546.468	
2,400.0	2,360.5	2,271.6	2,271.5	8.5	4.5	-115.13	1,057.8	-6,209.5	6,448.6	6,436.1	12.49	516.150	
2,500.0	2,457.8	2,405.0	2,404.9	9.0	4.7	-115.37	1,058.3	-6,209.9	6,458.9	6,445.7	13.21	489.108	
2,600.0	2,555.1	2,496.2	2,496.1	9.5	4.9	-115.54	1,058.7	-6,209.9	6,469.2	6,455.4	13.83	467.602	
2,700.0	2,652.4	2,600.0	2,599.9	10.0	5.1	-115.73	1,059.1	-6,209.9	6,479.5	6,465.0	14.49	447.175	
2,800.0	2,749.7	2,671.8	2,671.7	10.4	5.3	-115.86	1,059.4	-6,210.0	6,490.0	6,474.9	15.08	430.346	
2,900.0	2,846.9	2,760.6	2,760.5	10.9	5.5	-116.02	1,060.0	-6,210.5	6,500.9	6,485.2	15.71	413.922	
3,000.0	2,944.2	2,869.8	2,869.7	11.4	5.7	-116.21	1,060.8	-6,210.9	6,511.8	6,495.5	16.37	397.782	
3,100.0	3,041.5	2,971.0	2,970.9	11.9	5.9	-116.39	1,061.4	-6,211.2	6,522.6	6,505.6	17.02	383.260	
3,200.0	3,138.8	3,066.4	3,066.3	12.4	6.1	-116.57	1,061.7	-6,211.5	6,533.5	6,515.8	17.66	370.044	
3,300.0	3,236.1	3,158.8	3,158.7	12.8	6.3	-116.74	1,061.5	-6,211.8	6,544.5	6,526.2	18.29	357.870	
3,400.0	3,333.4	3,261.8	3,261.7	13.3	6.5	-116.93	1,061.1	-6,212.3	6,555.6	6,536.6	18.94	346.156	
3,500.0	3,430.6	3,364.5	3,364.4	13.8	6.7	-117.11	1,061.0	-6,212.5	6,566.6	6,547.0	19.59	335.250	
3,600.0	3,527.9	3,485.0	3,484.9	14.3	7.0	-117.34	1,060.4	-6,212.7	6,577.5	6,557.3	20.27	324.477	
3,700.0	3,625.2	3,600.0	3,599.9	14.8	7.2	-117.55	1,059.7	-6,212.4	6,588.1	6,567.2	20.94	314.557	
3,800.0	3,722.5	3,687.1	3,686.9	15.3	7.4	-117.71	1,058.9	-6,212.2	6,598.8	6,577.2	21.56	306.033	
3,900.0	3,819.8	3,778.4	3,778.3	15.7	7.6	-117.88	1,057.9	-6,212.1	6,609.6	6,587.4	22.19	297.898	
4,000.0	3,917.1	3,869.1	3,868.9	16.2	7.8	-118.06	1,056.8	-6,212.1	6,620.6	6,597.8	22.81	290.235	
4,100.0	4,014.4	3,961.0	3,960.8	16.7	8.0	-118.23	1,055.5	-6,212.2	6,631.8	6,608.3	23.44	282.954	
4,200.0	4,111.6	4,047.0	4,046.9	17.2	8.2	-118.39	1,054.2	-6,212.4	6,643.1	6,619.0	24.05	276.196	
4,300.0	4,208.9	4,138.0	4,137.9	17.7	8.4	-118.57	1,052.7	-6,212.8	6,654.7	6,630.0	24.67	269.707	
4,400.0	4,306.2	4,232.1	4,231.9	18.2	8.6	-118.75	1,051.2	-6,213.1	6,666.3	6,641.0	25.30	263.525	
4,500.0	4,403.5	4,308.0	4,307.8	18.7	8.7	-118.89	1,050.4	-6,213.5	6,678.2	6,652.3	25.88	258.016	
4,600.0	4,500.8	4,425.1	4,424.9	19.1	9.0	-119.10	1,049.1	-6,214.3	6,690.3	6,663.7	26.55	251.987	
4,700.0	4,598.1	4,578.7	4,578.5	19.6	9.3	-119.39	1,047.0	-6,214.2	6,701.6	6,674.3	27.29	245.605	
4,800.0	4,695.4	4,668.1	4,667.9	20.1	9.5	-119.55	1,046.1	-6,213.8	6,712.8	6,684.9	27.90	240.642	
4,900.0	4,792.6	4,763.2	4,763.0	20.6	9.7	-119.72	1,045.3	-6,213.6	6,724.2	6,695.7	28.52	235.807	
5,000.0	4,889.9	4,848.5	4,848.2	21.1	9.9	-119.87	1,044.5	-6,213.4	6,735.7	6,706.5	29.12	231.319	
5,100.0	4,987.2	4,951.9	4,951.6	21.6	10.1	-120.06	1,043.5	-6,213.4	6,747.4	6,717.7	29.76	226.763	
5,200.0	5,084.5	5,051.6	5,051.4	22.1	10.3	-120.24	1,042.3	-6,213.0	6,758.9	6,728.5	30.38	222.445	
5,300.0	5,181.8	5,122.0	5,121.8	22.5	10.4	-120.37	1,041.4	-6,213.0	6,770.8	6,739.8	30.96	218.711	
5,400.0	5,279.1	5,200.0	5,199.8	23.0	10.6	-120.51	1,040.5	-6,213.3	6,783.1	6,751.6	31.54	215.043	
5,500.0	5,376.3	5,307.5	5,307.3	23.5	10.8	-120.70	1,038.9	-6,213.9	6,795.6	6,763.5	32.18	211.150	
5,600.0	5,473.6	5,416.3	5,416.0	24.0	11.1	-120.90	1,037.6	-6,214.1	6,807.9	6,775.1	32.82	207.404	
5,700.0	5,570.9	5,500.0	5,499.7	24.5	11.2	-121.05	1,036.6	-6,214.2	6,820.1	6,786.7	33.42	204.086	

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 SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 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-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,800.0	5,668.2	5,565.0	5,564.8	25.0	11.4	-121.16	1,035.8	-6,214.4	6,832.8	6,798.8	33.98	201.098	
5,900.0	5,765.5	5,646.6	5,646.4	25.5	11.5	-121.30	1,035.1	-6,215.3	6,846.1	6,811.5	34.57	198.063	
5,921.9	5,786.8	5,677.4	5,677.1	25.6	11.6	-121.36	1,034.9	-6,215.6	6,848.9	6,814.2	34.72	197.281	
6,000.0	5,863.0	5,745.5	5,745.3	25.9	11.7	-121.63	1,034.7	-6,216.2	6,858.7	6,823.6	35.13	195.239	
6,100.0	5,961.2	5,800.0	5,799.7	26.2	11.9	-121.91	1,034.1	-6,216.8	6,869.9	6,834.4	35.52	193.399	
6,200.0	6,060.0	5,871.5	5,871.1	26.5	12.0	-122.16	1,032.7	-6,217.9	6,879.8	6,843.9	35.91	191.569	
6,300.0	6,159.3	6,053.7	6,053.3	26.7	12.4	-122.47	1,030.7	-6,220.3	6,887.4	6,850.9	36.48	188.779	
6,400.0	6,259.0	6,100.0	6,099.6	26.9	12.5	-122.59	1,030.6	-6,220.7	6,893.0	6,856.2	36.75	187.553	
6,500.0	6,358.8	6,177.3	6,176.9	27.1	12.7	-122.69	1,030.4	-6,221.9	6,897.2	6,860.2	37.05	186.175	
6,591.0	6,449.8	6,294.3	6,293.9	27.2	12.9	-90.24	1,030.5	-6,224.1	6,899.7	6,866.5	33.23	207.641	
6,600.0	6,458.8	6,329.1	6,328.7	27.2	13.0	-90.23	1,030.6	-6,224.5	6,899.9	6,866.5	33.31	207.119	
6,621.0	6,479.8	6,400.0	6,399.6	27.2	13.1	-90.23	1,030.7	-6,225.1	6,900.0	6,866.5	33.49	206.016	
6,650.0	6,508.8	6,431.2	6,430.8	27.3	13.2	-0.23	1,030.8	-6,225.2	6,899.5	6,861.8	37.67	183.179	
6,700.0	6,558.7	6,474.8	6,474.4	27.3	13.3	-0.23	1,031.0	-6,225.4	6,896.0	6,858.4	37.57	183.563	
6,750.0	6,608.1	6,540.9	6,540.5	27.3	13.4	-0.23	1,031.4	-6,225.7	6,888.9	6,851.6	37.36	184.410	
6,800.0	6,657.0	6,600.0	6,599.6	27.3	13.5	-0.23	1,031.6	-6,225.7	6,878.3	6,841.3	36.97	186.032	
6,850.0	6,704.9	6,647.1	6,646.7	27.2	13.6	-0.24	1,031.6	-6,225.7	6,864.2	6,827.8	36.41	188.511	
6,900.0	6,751.8	6,680.2	6,679.8	27.2	13.7	-0.24	1,031.8	-6,225.7	6,847.0	6,811.3	35.68	191.922	
6,950.0	6,797.4	6,717.2	6,716.8	27.1	13.8	-0.25	1,031.9	-6,225.9	6,826.6	6,791.7	34.81	196.130	
7,000.0	6,841.4	6,760.5	6,760.1	27.0	13.9	-0.26	1,031.9	-6,226.1	6,803.0	6,769.2	33.82	201.168	
7,050.0	6,883.6	6,800.0	6,799.6	26.9	14.0	-0.28	1,031.8	-6,226.3	6,776.5	6,743.8	32.70	207.234	
7,100.0	6,923.9	6,800.0	6,799.6	26.8	14.0	-0.29	1,031.8	-6,226.3	6,747.2	6,715.8	31.40	214.897	
7,150.0	6,962.0	6,800.0	6,799.6	26.7	14.0	-0.31	1,031.8	-6,226.3	6,715.4	6,685.4	30.00	223.819	
7,200.0	6,997.8	6,800.0	6,799.6	26.5	14.0	-0.33	1,031.8	-6,226.3	6,681.2	6,652.6	28.54	234.128	
7,250.0	7,031.0	6,800.0	6,799.6	26.4	14.0	-0.35	1,031.8	-6,226.3	6,644.7	6,617.6	27.02	245.945	
7,300.0	7,061.6	6,800.0	6,799.6	26.3	14.0	-0.38	1,031.8	-6,226.3	6,606.0	6,580.6	25.47	259.363	
7,350.0	7,089.3	6,800.0	6,799.6	26.1	14.0	-0.42	1,031.8	-6,226.3	6,565.4	6,541.5	23.93	274.395	
7,400.0	7,114.0	6,800.0	6,799.6	26.0	14.0	-0.47	1,031.8	-6,226.3	6,522.9	6,500.5	22.42	290.900	
7,450.0	7,135.7	6,800.0	6,799.6	25.9	14.0	-0.54	1,031.8	-6,226.3	6,478.9	6,457.8	21.00	308.458	
7,500.0	7,154.2	6,800.0	6,799.6	25.7	14.0	-0.63	1,031.8	-6,226.3	6,433.3	6,413.6	19.72	326.210	
7,550.0	7,169.4	6,800.0	6,799.6	25.6	14.0	-0.76	1,031.8	-6,226.3	6,386.5	6,367.8	18.63	342.717	
7,600.0	7,181.2	6,800.0	6,799.6	25.5	14.0	-0.96	1,031.8	-6,226.3	6,338.6	6,320.7	17.81	355.986	
7,650.0	7,189.6	6,800.0	6,799.6	25.4	14.0	-1.32	1,031.8	-6,226.3	6,289.8	6,272.5	17.28	363.898	
7,700.0	7,194.5	6,800.0	6,799.6	25.3	14.0	-2.08	1,031.8	-6,226.3	6,240.4	6,223.3	17.09	365.185	
7,748.9	7,196.0	6,800.0	6,799.6	25.2	14.0	-4.82	1,031.8	-6,226.3	6,191.6	6,174.5	17.15	361.083	
7,800.0	7,195.8	6,800.0	6,799.6	25.1	14.0	-4.82	1,031.8	-6,226.3	6,140.6	6,123.3	17.38	353.393	
7,900.0	7,195.4	6,800.0	6,799.6	25.5	14.0	-4.82	1,031.8	-6,226.3	6,040.8	6,022.9	17.85	338.373	
8,000.0	7,195.0	6,800.0	6,799.6	27.5	14.0	-4.82	1,031.8	-6,226.3	5,940.9	5,922.6	18.36	323.550	
8,100.0	7,194.6	6,800.0	6,799.6	29.5	14.0	-4.82	1,031.8	-6,226.3	5,841.1	5,822.2	18.90	309.058	
8,200.0	7,194.1	6,800.0	6,799.6	31.7	14.0	-4.82	1,031.8	-6,226.3	5,741.2	5,721.8	19.46	294.991	
8,300.0	7,193.7	6,800.0	6,799.6	33.9	14.0	-4.82	1,031.8	-6,226.3	5,641.4	5,621.3	20.05	281.414	
8,400.0	7,193.3	6,800.0	6,799.6	36.3	14.0	-4.82	1,031.8	-6,226.3	5,541.6	5,520.9	20.65	268.363	
8,500.0	7,192.9	6,800.0	6,799.6	38.6	14.0	-4.82	1,031.8	-6,226.3	5,441.7	5,420.5	21.27	255.857	
8,600.0	7,192.5	6,800.0	6,799.6	41.1	14.0	-4.82	1,031.8	-6,226.3	5,341.9	5,320.0	21.90	243.902	
8,700.0	7,192.1	6,800.0	6,799.6	43.5	14.0	-4.82	1,031.8	-6,226.3	5,242.1	5,219.5	22.55	232.492	
8,800.0	7,191.7	6,800.0	6,799.6	46.0	14.0	-4.82	1,031.8	-6,226.3	5,142.3	5,119.1	23.20	221.614	
8,900.0	7,191.3	6,800.0	6,799.6	48.6	14.0	-4.82	1,031.8	-6,226.3	5,042.5	5,018.6	23.87	211.250	
9,000.0	7,190.9	6,800.0	6,799.6	51.1	14.0	-4.82	1,031.8	-6,226.3	4,942.7	4,918.1	24.54	201.380	
9,100.0	7,190.4	6,800.0	6,799.6	53.7	14.0	-4.82	1,031.8	-6,226.3	4,842.9	4,817.7	25.23	191.982	
9,200.0	7,190.0	6,800.0	6,799.6	56.3	14.0	-4.82	1,031.8	-6,226.3	4,743.1	4,717.2	25.91	183.032	
9,300.0	7,189.6	6,800.0	6,799.6	58.9	14.0	-4.82	1,031.8	-6,226.3	4,643.4	4,616.8	26.61	174.506	
9,400.0	7,189.2	6,800.0	6,799.6	61.6	14.0	-4.82	1,031.8	-6,226.3	4,543.6	4,516.3	27.31	166.382	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - ABDN VERT BROWN 20-2 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-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	
9,500.0	7,188.8	6,800.0	6,799.6	64.2	14.0	-4.82	1,031.8	-6,226.3	4,443.9	4,415.9	28.01	158.638	
9,600.0	7,188.4	6,800.0	6,799.6	66.9	14.0	-4.82	1,031.8	-6,226.3	4,344.1	4,315.4	28.72	151.251	
9,700.0	7,188.0	6,800.0	6,799.6	69.6	14.0	-4.82	1,031.8	-6,226.3	4,244.4	4,215.0	29.43	144.202	
9,800.0	7,187.6	6,800.0	6,799.6	72.3	14.0	-4.82	1,031.8	-6,226.3	4,144.7	4,114.6	30.15	137.470	
9,900.0	7,187.1	6,800.0	6,799.6	74.9	14.0	-4.82	1,031.8	-6,226.3	4,045.0	4,014.2	30.87	131.037	
10,000.0	7,186.7	6,800.0	6,799.6	77.6	14.0	-4.82	1,031.8	-6,226.3	3,945.3	3,913.8	31.59	124.887	
10,100.0	7,186.3	6,800.0	6,799.6	80.4	14.0	-4.82	1,031.8	-6,226.3	3,845.7	3,813.4	32.32	119.002	
10,200.0	7,185.9	6,800.0	6,799.6	83.1	14.0	-4.82	1,031.8	-6,226.3	3,746.1	3,713.0	33.04	113.368	
10,300.0	7,185.5	6,800.0	6,799.6	85.8	14.0	-4.82	1,031.8	-6,226.3	3,646.4	3,612.7	33.77	107.969	
10,400.0	7,185.1	6,800.0	6,799.6	88.5	14.0	-4.82	1,031.8	-6,226.3	3,546.8	3,512.3	34.50	102.794	
10,500.0	7,184.7	6,800.0	6,799.6	91.2	14.0	-4.82	1,031.8	-6,226.3	3,447.3	3,412.0	35.24	97.829	
10,600.0	7,184.3	6,800.0	6,799.6	94.0	14.0	-4.82	1,031.8	-6,226.3	3,347.7	3,311.7	35.97	93.062	
10,700.0	7,183.9	6,800.0	6,799.6	96.7	14.0	-4.82	1,031.8	-6,226.3	3,248.2	3,211.5	36.71	88.483	
10,800.0	7,183.4	6,800.0	6,799.6	99.4	14.0	-4.82	1,031.8	-6,226.3	3,148.7	3,111.2	37.45	84.082	
10,900.0	7,183.0	6,800.0	6,799.6	102.2	14.0	-4.82	1,031.8	-6,226.3	3,049.2	3,011.0	38.19	79.849	
11,000.0	7,182.6	6,800.0	6,799.6	104.9	14.0	-4.82	1,031.8	-6,226.3	2,949.8	2,910.9	38.93	75.776	
11,100.0	7,182.2	6,800.0	6,799.6	107.7	14.0	-4.82	1,031.8	-6,226.3	2,850.4	2,810.7	39.67	71.853	
11,200.0	7,181.8	6,800.0	6,799.6	110.4	14.0	-4.82	1,031.8	-6,226.3	2,751.1	2,710.7	40.41	68.074	
11,300.0	7,181.4	6,800.0	6,799.6	113.2	14.0	-4.82	1,031.8	-6,226.3	2,651.8	2,610.6	41.16	64.430	
11,400.0	7,181.0	6,800.0	6,799.6	116.0	14.0	-4.82	1,031.8	-6,226.3	2,552.6	2,510.7	41.90	60.916	
11,500.0	7,180.6	6,800.0	6,799.6	118.7	14.0	-4.82	1,031.8	-6,226.3	2,453.4	2,410.7	42.65	57.525	
11,600.0	7,180.1	6,800.0	6,799.6	121.5	14.0	-4.82	1,031.8	-6,226.3	2,354.3	2,310.9	43.40	54.251	
11,700.0	7,179.7	6,800.0	6,799.6	124.3	14.0	-4.82	1,031.8	-6,226.3	2,255.3	2,211.1	44.14	51.089	
11,800.0	7,179.3	6,800.0	6,799.6	127.0	14.0	-4.82	1,031.8	-6,226.3	2,156.3	2,111.4	44.89	48.034	
11,900.0	7,178.9	6,800.0	6,799.6	129.8	14.0	-4.82	1,031.8	-6,226.3	2,057.5	2,011.9	45.64	45.080	
12,000.0	7,178.5	6,800.0	6,799.6	132.6	14.0	-4.82	1,031.8	-6,226.3	1,958.8	1,912.4	46.39	42.224	
12,100.0	7,178.1	6,800.0	6,799.6	135.3	14.0	-4.82	1,031.8	-6,226.3	1,860.2	1,813.1	47.14	39.460	
12,200.0	7,177.7	6,800.0	6,799.6	138.1	14.0	-4.82	1,031.8	-6,226.3	1,761.8	1,713.9	47.89	36.787	
12,300.0	7,177.2	6,800.0	6,799.6	140.9	14.0	-4.82	1,031.8	-6,226.3	1,663.6	1,615.0	48.64	34.199	
12,400.0	7,176.8	6,800.0	6,799.6	143.7	14.0	-4.82	1,031.8	-6,226.3	1,565.6	1,516.2	49.40	31.695	
12,500.0	7,176.4	6,800.0	6,799.6	146.4	14.0	-4.82	1,031.8	-6,226.3	1,467.9	1,417.7	50.15	29.270	
12,600.0	7,176.0	6,800.0	6,799.6	149.2	14.0	-4.82	1,031.8	-6,226.3	1,370.5	1,319.6	50.90	26.924	
12,700.0	7,175.6	6,800.0	6,799.6	152.0	14.0	-4.82	1,031.8	-6,226.3	1,273.5	1,221.8	51.66	24.653	
12,800.0	7,175.2	6,800.0	6,799.6	154.8	14.0	-4.82	1,031.8	-6,226.3	1,177.0	1,124.6	52.41	22.457	
12,900.0	7,174.8	6,800.0	6,799.6	157.5	14.0	-4.82	1,031.8	-6,226.3	1,081.1	1,028.0	53.16	20.336	
13,000.0	7,174.4	6,800.0	6,799.6	160.3	14.0	-4.82	1,031.8	-6,226.3	986.1	932.2	53.92	18.289	
13,100.0	7,173.9	6,800.0	6,799.6	163.1	14.0	-4.82	1,031.8	-6,226.3	892.2	837.5	54.67	16.318	
13,200.0	7,173.5	6,800.0	6,799.6	165.9	14.0	-4.82	1,031.8	-6,226.3	799.7	744.3	55.43	14.427	
13,300.0	7,173.1	6,800.0	6,799.6	168.7	14.0	-4.82	1,031.8	-6,226.3	709.3	653.1	56.19	12.624	
13,400.0	7,172.7	6,800.0	6,799.6	171.5	14.0	-4.82	1,031.8	-6,226.3	621.8	564.9	56.94	10.920	
13,500.0	7,172.3	6,800.0	6,799.6	174.3	14.0	-4.82	1,031.8	-6,226.3	538.7	481.0	57.70	9.337	
13,600.0	7,171.9	6,800.0	6,799.6	177.0	14.0	-4.82	1,031.8	-6,226.3	462.3	403.9	58.46	7.909	
13,700.0	7,171.5	6,800.0	6,799.6	179.8	14.0	-4.82	1,031.8	-6,226.3	396.6	337.4	59.21	6.698	
13,800.0	7,171.0	6,800.0	6,799.6	182.6	14.0	-4.82	1,031.8	-6,226.3	347.7	287.7	59.97	5.797	
13,900.0	7,170.6	6,800.0	6,799.6	185.4	14.0	-4.82	1,031.8	-6,226.3	323.2	262.4	60.73	5.321	
13,932.2	7,170.5	6,800.0	6,799.6	186.3	14.0	-4.82	1,031.8	-6,226.3	321.5	260.6	60.97	5.274 CC, ES, SF	
14,000.0	7,170.2	6,800.0	6,799.6	188.2	14.0	-4.82	1,031.8	-6,226.3	328.6	267.1	61.49	5.344	
14,100.0	7,169.8	6,800.0	6,799.6	191.0	14.0	-4.82	1,031.8	-6,226.3	362.7	300.4	62.24	5.827	
14,200.0	7,169.4	6,800.0	6,799.6	193.8	14.0	-4.82	1,031.8	-6,226.3	418.4	355.4	63.00	6.642	
14,295.0	7,169.0	6,800.0	6,799.6	196.4	14.0	-4.82	1,031.8	-6,226.3	484.7	421.0	63.72	7.607	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD BROWN 20AD - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 545-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	-72.65	1,562.3	-4,999.7	5,238.3				
100.0	100.0	60.9	60.9	0.1	0.1	-72.65	1,562.3	-4,999.8	5,238.2	5,238.0	0.15	N/A	
200.0	200.0	158.4	158.4	0.3	0.1	-72.65	1,562.1	-4,999.9	5,238.2	5,237.7	0.46	N/A	
300.0	300.0	255.9	255.9	0.5	0.2	-72.65	1,561.9	-5,000.0	5,238.3	5,237.5	0.77	6,759.763	
400.0	400.0	353.4	353.4	0.8	0.3	-72.66	1,561.5	-5,000.3	5,238.5	5,237.4	1.09	4,820.895	
500.0	500.0	450.8	450.8	1.0	0.4	-72.66	1,561.0	-5,000.7	5,238.7	5,237.3	1.40	3,746.436	
600.0	600.0	548.7	548.7	1.2	0.5	-105.19	1,560.3	-5,001.1	5,239.4	5,237.7	1.71	3,058.026	
700.0	699.8	653.8	653.8	1.4	0.7	-105.22	1,559.8	-5,001.5	5,240.9	5,238.8	2.15	2,440.188	
800.0	799.5	732.0	732.0	1.7	0.9	-105.25	1,559.4	-5,001.9	5,243.5	5,241.0	2.54	2,061.184	
900.0	898.7	806.0	806.0	1.9	1.0	-105.27	1,559.1	-5,002.6	5,247.5	5,244.6	2.96	1,772.569	
1,000.0	997.5	904.2	904.1	2.2	1.2	-105.33	1,559.1	-5,003.7	5,252.9	5,249.4	3.46	1,518.952	
1,100.0	1,095.6	958.3	958.3	2.6	1.3	-105.32	1,558.9	-5,004.5	5,259.4	5,255.5	3.91	1,345.456	
1,169.1	1,163.0	1,012.0	1,012.0	2.8	1.5	-105.34	1,558.9	-5,005.9	5,265.2	5,260.9	4.29	1,228.721	
1,200.0	1,193.1	1,012.0	1,012.0	3.0	1.5	-105.34	1,558.9	-5,005.9	5,267.9	5,263.5	4.41	1,195.131	
1,300.0	1,290.4	1,045.4	1,045.3	3.4	1.5	-105.42	1,559.0	-5,007.1	5,277.7	5,272.8	4.89	1,078.905	
1,400.0	1,387.7	1,106.0	1,105.9	3.8	1.7	-105.58	1,559.4	-5,010.0	5,288.7	5,283.2	5.45	970.238	
1,500.0	1,484.9	1,106.0	1,105.9	4.3	1.7	-105.58	1,559.4	-5,010.0	5,300.7	5,294.8	5.89	900.506	
1,600.0	1,582.2	1,155.8	1,155.6	4.7	1.8	-105.70	1,560.0	-5,013.2	5,313.9	5,307.5	6.44	824.910	
1,700.0	1,679.5	1,199.0	1,198.6	5.2	1.9	-105.81	1,560.6	-5,016.6	5,328.5	5,321.5	6.99	762.562	
1,800.0	1,776.8	1,227.5	1,227.0	5.7	2.0	-105.88	1,561.0	-5,019.2	5,344.2	5,336.7	7.51	712.036	
1,900.0	1,874.1	1,293.0	1,292.1	6.1	2.1	-106.05	1,562.1	-5,026.0	5,361.1	5,353.0	8.11	660.983	
2,000.0	1,971.4	1,293.0	1,292.1	6.6	2.1	-106.05	1,562.1	-5,026.0	5,378.9	5,370.4	8.57	627.739	
2,100.0	2,068.7	1,345.6	1,344.3	7.1	2.3	-106.18	1,563.0	-5,032.2	5,397.9	5,388.8	9.15	589.967	
2,200.0	2,165.9	1,386.0	1,384.4	7.6	2.4	-106.29	1,563.8	-5,037.6	5,418.0	5,408.3	9.70	558.347	
2,300.0	2,263.2	1,386.0	1,384.4	8.0	2.4	-106.29	1,563.8	-5,037.6	5,439.6	5,429.4	10.17	535.053	
2,400.0	2,360.5	1,442.2	1,440.0	8.5	2.5	-106.43	1,565.4	-5,045.9	5,461.9	5,451.1	10.76	507.600	
2,500.0	2,457.8	1,480.0	1,477.2	9.0	2.7	-106.52	1,566.8	-5,052.1	5,485.7	5,474.4	11.31	484.884	
2,600.0	2,555.1	1,480.0	1,477.2	9.5	2.7	-106.52	1,566.8	-5,052.1	5,510.8	5,499.0	11.78	467.861	
2,700.0	2,652.4	1,542.6	1,538.7	10.0	2.9	-106.67	1,569.6	-5,063.4	5,536.7	5,524.3	12.39	446.751	
2,800.0	2,749.7	1,573.0	1,568.5	10.4	3.0	-106.74	1,571.1	-5,069.3	5,563.8	5,550.8	12.93	430.312	
2,900.0	2,846.9	1,607.5	1,602.2	10.9	3.1	-106.82	1,572.8	-5,076.3	5,592.0	5,578.5	13.48	414.841	
3,000.0	2,944.2	1,667.0	1,660.2	11.4	3.3	-106.96	1,576.0	-5,089.4	5,621.6	5,607.5	14.09	399.010	
3,100.0	3,041.5	1,667.0	1,660.2	11.9	3.3	-106.96	1,576.0	-5,089.4	5,651.8	5,637.2	14.56	388.280	
3,200.0	3,138.8	1,729.1	1,720.4	12.4	3.6	-107.11	1,579.3	-5,104.0	5,683.2	5,668.0	15.17	374.592	
3,300.0	3,236.1	1,791.4	1,780.9	12.8	3.9	-107.26	1,582.4	-5,119.0	5,715.0	5,699.3	15.79	362.028	
3,400.0	3,333.4	1,854.0	1,841.4	13.3	4.2	-107.41	1,585.4	-5,134.4	5,747.5	5,731.1	16.40	350.444	
3,500.0	3,430.6	1,854.0	1,841.4	13.8	4.2	-107.41	1,585.4	-5,134.4	5,781.0	5,764.2	16.87	342.715	
3,600.0	3,527.9	1,909.0	1,894.5	14.3	4.5	-107.55	1,588.1	-5,148.7	5,815.2	5,797.8	17.47	332.840	
3,700.0	3,625.2	1,948.0	1,931.9	14.8	4.7	-107.64	1,590.2	-5,159.5	5,850.7	5,832.7	18.04	324.376	
3,800.0	3,722.5	2,085.1	2,063.6	15.3	5.3	-107.97	1,596.7	-5,197.2	5,886.2	5,867.4	18.82	312.808	
3,900.0	3,819.8	2,165.1	2,140.4	15.7	5.8	-108.17	1,600.1	-5,219.1	5,921.6	5,902.1	19.47	304.176	
4,000.0	3,917.1	2,228.0	2,200.9	16.2	6.1	-108.32	1,603.3	-5,236.2	5,957.1	5,937.0	20.08	296.635	
4,100.0	4,014.4	2,294.9	2,265.0	16.7	6.4	-108.47	1,606.6	-5,254.7	5,993.1	5,972.4	20.71	289.394	
4,200.0	4,111.6	2,369.5	2,336.5	17.2	6.8	-108.65	1,610.1	-5,276.0	6,029.8	6,008.4	21.35	282.389	
4,300.0	4,208.9	2,415.0	2,380.1	17.7	7.1	-108.76	1,612.2	-5,288.9	6,066.6	6,044.7	21.93	276.685	
4,400.0	4,306.2	2,479.2	2,441.4	18.2	7.4	-108.90	1,615.7	-5,307.4	6,104.1	6,081.5	22.54	270.766	
4,500.0	4,403.5	2,526.0	2,486.1	18.7	7.7	-109.00	1,618.9	-5,321.3	6,142.3	6,119.2	23.12	265.633	
4,600.0	4,500.8	2,602.0	2,558.3	19.1	8.2	-109.16	1,624.3	-5,344.2	6,181.2	6,157.4	23.78	259.909	
4,700.0	4,598.1	2,802.6	2,749.5	19.6	9.3	-109.58	1,637.4	-5,403.1	6,219.5	6,194.8	24.72	251.620	
4,800.0	4,695.4	2,871.0	2,814.9	20.1	9.7	-109.72	1,641.2	-5,422.8	6,257.0	6,231.7	25.35	246.854	
4,900.0	4,792.6	3,071.0	3,006.7	20.6	10.8	-110.14	1,652.2	-5,478.6	6,293.5	6,267.2	26.28	239.468	
5,000.0	4,889.9	3,142.8	3,075.6	21.1	11.2	-110.29	1,655.9	-5,498.3	6,329.9	6,302.9	26.92	235.144	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD BROWN 20AD - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 545-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,100.0	4,987.2	3,245.7	3,174.4	21.6	11.7	-110.50	1,661.7	-5,526.6	6,366.4	6,338.8	27.63	230.418	
5,200.0	5,084.5	3,384.6	3,307.9	22.1	12.5	-110.78	1,668.7	-5,564.1	6,402.3	6,373.9	28.42	225.266	
5,300.0	5,181.8	3,462.4	3,382.8	22.5	12.9	-110.95	1,671.6	-5,585.1	6,438.3	6,409.2	29.07	221.465	
5,400.0	5,279.1	3,564.6	3,481.2	23.0	13.4	-111.16	1,676.1	-5,612.7	6,474.3	6,444.5	29.78	217.396	
5,500.0	5,376.3	3,661.0	3,468.8	23.5	19.5	-114.53	1,726.8	-5,871.0	6,503.6	6,469.8	33.84	192.192	
5,600.0	5,473.6	3,744.5	3,526.3	24.0	19.6	-114.69	1,725.8	-5,872.4	6,515.0	6,480.6	34.42	189.265	
5,700.0	5,570.9	3,840.6	3,592.4	24.5	19.6	-114.82	1,725.1	-5,873.7	6,526.9	6,491.9	34.99	186.560	
5,800.0	5,668.2	3,938.5	3,684.2	25.0	19.8	-115.07	1,723.9	-5,876.4	6,538.8	6,503.1	35.65	183.394	
5,900.0	5,765.5	4,036.4	3,781.8	25.5	20.0	-115.24	1,723.8	-5,877.8	6,550.4	6,514.2	36.25	180.681	
5,921.9	5,786.8	4,057.1	3,802.7	25.6	20.0	-115.26	1,723.8	-5,878.0	6,553.0	6,516.7	36.38	180.152	
6,000.0	5,863.0	4,138.6	3,883.3	25.9	20.0	-115.52	1,724.0	-5,879.1	6,562.1	6,525.4	36.79	178.390	
6,100.0	5,961.2	4,236.4	3,981.1	26.2	20.2	-115.86	1,724.5	-5,881.3	6,572.6	6,535.3	37.30	176.211	
6,200.0	6,060.0	4,334.2	4,078.9	26.5	20.3	-116.12	1,724.9	-5,883.1	6,581.7	6,543.9	37.74	174.413	
6,300.0	6,159.3	4,432.0	4,176.7	26.7	20.6	-116.46	1,724.1	-5,886.8	6,588.7	6,550.3	38.40	171.581	
6,400.0	6,259.0	4,529.8	4,274.5	26.9	20.7	-116.60	1,723.6	-5,887.4	6,593.2	6,554.4	38.76	170.121	
6,500.0	6,358.8	4,627.6	4,372.3	27.1	20.9	-116.68	1,723.8	-5,888.2	6,596.3	6,557.2	39.08	168.768	
6,591.0	6,449.8	4,725.4	4,463.1	27.2	21.0	-84.21	1,724.2	-5,889.1	6,598.1	6,557.9	40.20	164.142	
6,600.0	6,458.8	4,734.2	4,472.0	27.2	21.0	-84.21	1,724.2	-5,889.1	6,598.2	6,558.0	40.21	164.092	
6,621.0	6,479.8	4,755.2	4,493.0	27.2	21.0	-84.21	1,724.2	-5,889.3	6,598.6	6,558.3	40.26	163.880	
6,650.0	6,508.8	4,784.2	4,522.0	27.3	21.0	5.79	1,724.3	-5,889.7	6,598.5	6,558.9	39.51	166.990	
6,700.0	6,558.7	4,833.9	4,571.7	27.3	21.1	5.82	1,724.3	-5,890.5	6,595.5	6,556.0	39.56	166.739	
6,750.0	6,608.1	4,883.6	4,621.1	27.3	21.2	5.87	1,724.2	-5,891.2	6,589.2	6,549.8	39.42	167.142	
6,800.0	6,657.0	4,933.3	4,670.0	27.3	21.2	5.96	1,724.2	-5,891.9	6,579.5	6,540.4	39.12	168.173	
6,850.0	6,704.9	4,983.0	4,718.9	27.2	21.3	6.08	1,724.3	-5,892.8	6,566.5	6,527.9	38.67	169.797	
6,900.0	6,751.8	5,032.7	4,767.8	27.2	21.4	6.25	1,724.3	-5,893.8	6,550.2	6,512.2	38.08	172.004	
6,950.0	6,797.4	5,082.4	4,816.7	27.1	21.4	6.46	1,724.1	-5,895.0	6,530.7	6,493.3	37.36	174.809	
7,000.0	6,841.4	5,132.1	4,865.7	27.0	21.5	6.72	1,723.8	-5,896.1	6,507.8	6,471.3	36.51	178.268	
7,050.0	6,883.6	5,181.8	4,914.6	26.9	21.6	7.04	1,723.6	-5,896.7	6,481.9	6,446.5	35.49	182.662	
7,100.0	6,923.9	5,231.5	4,963.5	26.8	21.6	7.42	1,723.5	-5,897.3	6,453.2	6,418.9	34.35	187.850	
7,150.0	6,962.0	5,281.2	5,012.4	26.7	21.7	7.88	1,723.4	-5,898.0	6,421.7	6,388.6	33.13	193.825	
7,200.0	6,997.8	5,330.9	5,061.3	26.5	21.7	8.44	1,723.3	-5,898.6	6,387.7	6,355.8	31.85	200.558	
7,250.0	7,031.0	5,380.6	5,110.2	26.4	21.8	9.14	1,723.2	-5,899.2	6,351.2	6,320.7	30.54	207.997	
7,300.0	7,061.6	5,430.3	5,159.1	26.3	21.8	9.99	1,723.1	-5,899.6	6,312.5	6,283.3	29.21	216.111	
7,350.0	7,089.3	5,479.0	5,187.8	26.1	21.9	11.09	1,723.0	-5,900.3	6,271.7	6,243.7	27.99	224.059	
7,400.0	7,114.0	5,528.7	5,216.5	26.0	21.9	12.48	1,722.8	-5,900.8	6,229.1	6,202.2	26.91	231.480	
7,450.0	7,135.7	5,578.4	5,245.2	25.9	21.9	14.33	1,722.6	-5,901.2	6,184.8	6,158.7	26.11	236.881	
7,500.0	7,154.2	5,628.1	5,273.9	25.7	22.0	16.90	1,722.4	-5,901.7	6,139.1	6,113.2	25.81	237.883	
7,550.0	7,169.4	5,677.8	5,302.6	25.6	22.0	20.41	1,722.4	-5,901.7	6,092.1	6,065.9	26.19	232.588	
7,600.0	7,181.2	5,727.5	5,331.3	25.5	22.0	25.96	1,722.2	-5,902.1	6,044.1	6,016.2	27.94	216.324	
7,650.0	7,189.6	5,777.2	5,360.0	25.4	22.0	35.06	1,722.1	-5,902.3	5,995.3	5,963.6	31.76	188.752	
7,700.0	7,194.5	5,826.9	5,388.7	25.3	22.0	51.39	1,722.1	-5,902.5	5,946.1	5,907.5	38.54	154.284	
7,748.9	7,196.0	5,876.6	5,417.4	25.2	22.0	79.22	1,722.1	-5,902.5	5,897.5	5,852.5	45.02	130.984	
7,800.0	7,195.8	5,926.3	5,446.1	25.1	22.0	79.30	1,722.1	-5,902.5	5,846.8	5,801.0	45.76	127.779	
7,900.0	7,195.4	5,976.0	5,474.8	25.5	22.0	79.44	1,722.0	-5,902.6	5,747.5	5,700.1	47.36	121.365	
8,000.0	7,195.0	6,025.7	5,503.5	27.5	22.0	79.59	1,722.0	-5,902.6	5,648.2	5,599.0	49.14	114.929	
8,100.0	7,194.6	6,075.4	5,532.2	29.5	22.0	79.74	1,722.0	-5,902.7	5,548.9	5,497.8	51.09	108.615	
8,200.0	7,194.1	6,125.1	5,560.9	31.7	22.0	79.89	1,722.0	-5,902.7	5,449.6	5,396.5	53.16	102.520	
8,300.0	7,193.7	6,174.8	5,589.6	33.9	22.0	80.04	1,722.0	-5,902.8	5,350.4	5,295.1	55.33	96.699	
8,400.0	7,193.3	6,224.5	5,618.3	36.3	22.0	80.19	1,721.9	-5,902.8	5,251.2	5,193.6	57.59	91.183	
8,500.0	7,192.9	6,274.2	5,646.8	38.6	22.0	80.34	1,721.9	-5,902.9	5,152.1	5,092.2	59.92	85.981	
8,600.0	7,192.5	6,323.9	5,675.3	41.1	22.1	80.50	1,721.9	-5,902.9	5,053.0	4,990.6	62.31	81.093	
8,700.0	7,192.1	6,373.6	5,703.8	43.5	22.1	80.66	1,721.9	-5,903.0	4,953.9	4,889.1	64.75	76.507	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 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: 545-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	
8,800.0	7,191.7	7,141.7	7,027.2	46.0	22.1	80.81	1,721.9	-5,903.0	4,854.8	4,787.6	67.23	72.209	
8,900.0	7,191.3	7,143.6	7,029.1	48.6	22.1	80.97	1,721.8	-5,903.1	4,755.8	4,686.0	69.75	68.182	
9,000.0	7,190.9	7,145.5	7,031.0	51.1	22.1	81.13	1,721.8	-5,903.1	4,656.8	4,584.5	72.30	64.409	
9,100.0	7,190.4	7,147.4	7,032.9	53.7	22.1	81.30	1,721.8	-5,903.2	4,557.9	4,483.0	74.88	60.871	
9,200.0	7,190.0	7,149.4	7,034.8	56.3	22.1	81.46	1,721.8	-5,903.3	4,459.0	4,381.5	77.48	57.552	
9,300.0	7,189.6	7,151.3	7,036.8	58.9	22.1	81.62	1,721.8	-5,903.3	4,360.1	4,280.0	80.10	54.436	
9,400.0	7,189.2	7,153.3	7,038.7	61.6	22.1	81.79	1,721.7	-5,903.4	4,261.4	4,178.6	82.74	51.506	
9,500.0	7,188.8	7,155.3	7,040.7	64.2	22.1	81.96	1,721.7	-5,903.4	4,162.6	4,077.2	85.39	48.748	
9,600.0	7,188.4	7,157.3	7,042.7	66.9	22.1	82.13	1,721.7	-5,903.5	4,064.0	3,975.9	88.06	46.151	
9,700.0	7,188.0	7,159.3	7,044.7	69.6	22.1	82.30	1,721.7	-5,903.5	3,965.4	3,874.6	90.74	43.700	
9,800.0	7,187.6	7,161.3	7,046.8	72.3	22.1	82.47	1,721.7	-5,903.6	3,866.8	3,773.4	93.43	41.386	
9,900.0	7,187.1	7,163.4	7,048.8	74.9	22.1	82.65	1,721.7	-5,903.7	3,768.4	3,672.2	96.14	39.198	
10,000.0	7,186.7	7,165.4	7,050.9	77.6	22.1	82.82	1,721.6	-5,903.7	3,670.0	3,571.2	98.85	37.127	
10,100.0	7,186.3	7,167.5	7,053.0	80.4	22.1	83.00	1,721.6	-5,903.8	3,571.7	3,470.2	101.57	35.165	
10,200.0	7,185.9	7,169.6	7,055.1	83.1	22.1	83.18	1,721.6	-5,903.8	3,473.5	3,369.2	104.30	33.303	
10,300.0	7,185.5	7,171.7	7,057.2	85.8	22.1	83.36	1,721.6	-5,903.9	3,375.5	3,268.4	107.04	31.535	
10,400.0	7,185.1	7,173.9	7,059.3	88.5	22.1	83.54	1,721.6	-5,904.0	3,277.5	3,167.7	109.78	29.855	
10,500.0	7,184.7	7,176.0	7,061.5	91.2	22.1	83.72	1,721.5	-5,904.0	3,179.6	3,067.1	112.53	28.256	
10,600.0	7,184.3	7,178.2	7,063.7	94.0	22.1	83.91	1,721.5	-5,904.1	3,081.9	2,966.7	115.28	26.734	
10,700.0	7,183.9	7,180.7	7,072.4	96.7	22.1	84.66	1,721.4	-5,904.3	2,984.4	2,866.3	118.13	25.264	
10,800.0	7,183.4	7,187.0	7,072.4	99.4	22.1	84.66	1,721.4	-5,904.3	2,887.0	2,766.1	120.86	23.887	
10,900.0	7,183.0	7,187.0	7,072.4	102.2	22.1	84.66	1,721.4	-5,904.3	2,789.8	2,666.2	123.60	22.571	
11,000.0	7,182.6	7,187.2	7,072.6	104.9	22.1	84.68	1,721.4	-5,904.4	2,692.8	2,566.4	126.35	21.313	
11,100.0	7,182.2	7,190.9	7,076.4	107.7	22.1	85.00	1,721.4	-5,904.5	2,596.0	2,466.8	129.14	20.102	
11,200.0	7,181.8	7,194.6	7,080.0	110.4	22.1	85.31	1,721.4	-5,904.6	2,499.5	2,367.5	131.93	18.945	
11,300.0	7,181.4	7,198.1	7,083.5	113.2	22.2	85.61	1,721.3	-5,904.7	2,403.2	2,268.5	134.73	17.837	
11,400.0	7,181.0	7,201.4	7,086.9	116.0	22.2	85.90	1,721.3	-5,904.8	2,307.3	2,169.7	137.52	16.777	
11,500.0	7,180.6	7,204.7	7,090.1	118.7	22.2	86.18	1,721.3	-5,904.9	2,211.7	2,071.4	140.32	15.762	
11,600.0	7,180.1	7,207.8	7,093.3	121.5	22.2	86.45	1,721.2	-5,904.9	2,116.5	1,973.4	143.11	14.790	
11,700.0	7,179.7	7,210.9	7,096.3	124.3	22.2	86.71	1,721.2	-5,905.0	2,021.8	1,875.9	145.90	13.857	
11,800.0	7,179.3	7,213.8	7,099.2	127.0	22.2	86.96	1,721.2	-5,905.1	1,927.6	1,778.9	148.69	12.964	
11,900.0	7,178.9	7,216.6	7,102.0	129.8	22.2	87.21	1,721.2	-5,905.2	1,834.0	1,682.6	151.48	12.107	
12,000.0	7,178.5	7,219.4	7,104.8	132.6	22.2	87.45	1,721.2	-5,905.3	1,741.2	1,586.9	154.28	11.286	
12,100.0	7,178.1	7,222.0	7,107.4	135.3	22.2	87.67	1,721.1	-5,905.3	1,649.1	1,492.1	157.07	10.500	
12,200.0	7,177.7	7,224.6	7,110.0	138.1	22.2	87.90	1,721.1	-5,905.4	1,558.1	1,398.2	159.86	9.747	
12,300.0	7,177.2	7,227.1	7,112.5	140.9	22.2	88.11	1,721.1	-5,905.4	1,468.2	1,305.6	162.64	9.027	
12,400.0	7,176.8	7,229.5	7,114.9	143.7	22.2	88.32	1,721.1	-5,905.5	1,379.7	1,214.3	165.43	8.340	
12,500.0	7,176.4	7,231.8	7,117.3	146.4	22.2	88.52	1,721.0	-5,905.6	1,292.9	1,124.7	168.22	7.686	
12,600.0	7,176.0	7,234.1	7,119.5	149.2	22.2	88.72	1,721.0	-5,905.6	1,208.1	1,037.1	171.01	7.064	
12,700.0	7,175.6	7,236.3	7,121.7	152.0	22.2	88.91	1,721.0	-5,905.7	1,125.8	952.0	173.80	6.478	
12,800.0	7,175.2	7,238.5	7,123.9	154.8	22.2	89.10	1,721.0	-5,905.7	1,046.6	870.0	176.58	5.927	
12,900.0	7,174.8	7,240.5	7,126.0	157.5	22.2	89.28	1,721.0	-5,905.8	971.2	791.8	179.37	5.415	
13,000.0	7,174.4	7,242.6	7,128.0	160.3	22.2	89.45	1,721.0	-5,905.8	900.6	718.5	182.16	4.944	
13,100.0	7,173.9	7,244.5	7,130.0	163.1	22.2	89.62	1,721.0	-5,905.9	836.1	651.2	184.94	4.521	
13,200.0	7,173.5	7,246.5	7,131.9	165.9	22.2	89.79	1,720.9	-5,905.9	779.1	591.3	187.72	4.150	
13,300.0	7,173.1	7,248.3	7,133.7	168.7	22.2	89.95	1,720.9	-5,905.9	731.3	540.8	190.51	3.839	
13,400.0	7,172.7	7,250.1	7,135.6	171.5	22.2	90.11	1,720.9	-5,906.0	694.8	501.5	193.29	3.594	
13,500.0	7,172.3	7,251.9	7,137.3	174.3	22.2	90.26	1,720.9	-5,906.0	671.3	475.2	196.07	3.424	
13,600.0	7,171.9	7,253.6	7,139.1	177.0	22.2	90.41	1,720.9	-5,906.1	662.2	463.3	198.86	3.330	
13,610.7	7,171.8	7,253.8	7,139.2	177.3	22.2	90.42	1,720.9	-5,906.1	662.1	462.9	199.15	3.324 CC, ES	
13,700.0	7,171.5	7,255.3	7,140.7	179.8	22.2	90.55	1,720.9	-5,906.1	668.1	466.4	201.64	3.313 SF	
13,800.0	7,171.0	7,257.0	7,142.4	182.6	22.2	90.70	1,720.9	-5,906.1	688.6	484.2	204.42	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 SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD BROWN 20AD - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 545-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	
13,900.0	7,170.6	7,258.6	7,144.0	185.4	22.3	90.83	1,720.8	-5,906.2	722.5	515.3	207.20	3.487	
14,000.0	7,170.2	7,260.1	7,145.5	188.2	22.3	90.97	1,720.8	-5,906.2	768.0	558.0	209.98	3.658	
14,100.0	7,169.8	7,261.6	7,147.0	191.0	22.3	91.10	1,720.8	-5,906.2	823.2	610.5	212.76	3.869	
14,200.0	7,169.4	7,263.1	7,148.5	193.8	22.3	91.23	1,720.8	-5,906.3	886.3	670.8	215.54	4.112	
14,295.0	7,169.0	7,264.5	7,149.9	196.4	22.3	91.35	1,720.8	-5,906.3	952.1	733.9	218.18	4.364	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD BROWN 20MD - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 545-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	-72.21	1,586.3	-4,943.4	5,191.8				
100.0	100.0	59.6	59.6	0.1	0.1	-72.21	1,586.3	-4,943.4	5,191.7	5,191.5	0.15	N/A	
200.0	200.0	154.9	154.9	0.3	0.1	-72.21	1,586.4	-4,943.5	5,191.8	5,191.3	0.46	N/A	
300.0	300.0	250.2	250.2	0.5	0.2	-72.21	1,586.4	-4,943.7	5,192.0	5,191.2	0.77	6,751.567	
400.0	400.0	345.5	345.5	0.8	0.3	-72.21	1,586.6	-4,943.9	5,192.3	5,191.2	1.08	4,814.607	
500.0	500.0	440.8	440.8	1.0	0.4	-72.21	1,586.7	-4,944.2	5,192.7	5,191.3	1.39	3,741.429	
600.0	600.0	545.0	545.0	1.2	0.5	-104.72	1,586.9	-4,944.7	5,193.6	5,191.9	1.70	3,048.201	
700.0	699.8	618.2	618.2	1.4	0.6	-104.72	1,587.3	-4,945.1	5,195.6	5,193.5	2.09	2,483.896	
800.0	799.5	709.9	709.9	1.7	0.8	-104.74	1,587.9	-4,945.8	5,198.7	5,196.2	2.52	2,059.204	
900.0	898.7	800.2	800.1	1.9	1.0	-104.77	1,588.8	-4,946.5	5,202.9	5,200.0	2.97	1,751.174	
1,000.0	997.5	876.5	876.4	2.2	1.2	-104.77	1,591.1	-4,946.9	5,208.4	5,204.9	3.42	1,520.698	
1,100.0	1,095.6	948.7	948.5	2.6	1.4	-104.74	1,595.5	-4,947.0	5,215.2	5,211.3	3.92	1,330.554	
1,169.1	1,163.0	999.4	999.0	2.8	1.5	-104.70	1,599.8	-4,946.8	5,220.7	5,216.4	4.30	1,215.179	
1,200.0	1,193.1	1,024.0	1,023.5	3.0	1.5	-104.74	1,602.3	-4,946.7	5,223.4	5,218.9	4.48	1,166.488	
1,300.0	1,290.4	1,106.0	1,104.9	3.4	1.7	-104.83	1,612.4	-4,945.8	5,232.1	5,227.0	5.10	1,026.695	
1,400.0	1,387.7	1,173.6	1,171.8	3.8	1.9	-104.89	1,622.2	-4,945.0	5,241.4	5,235.6	5.71	917.195	
1,500.0	1,484.9	1,232.3	1,229.7	4.3	2.1	-104.94	1,631.6	-4,944.4	5,251.3	5,245.0	6.33	829.731	
1,600.0	1,582.2	1,293.0	1,289.4	4.7	2.3	-104.98	1,642.2	-4,944.1	5,262.1	5,255.1	6.97	755.459	
1,700.0	1,679.5	1,495.3	1,486.7	5.2	3.1	-104.99	1,686.4	-4,939.1	5,272.3	5,264.1	8.19	644.044	
1,800.0	1,776.8	1,574.0	1,562.8	5.7	3.5	-104.96	1,706.5	-4,935.5	5,281.6	5,272.6	8.99	587.409	
1,900.0	1,874.1	1,626.7	1,613.3	6.1	3.7	-104.93	1,721.2	-4,933.0	5,291.6	5,281.8	9.72	544.661	
2,000.0	1,971.4	1,687.3	1,671.1	6.6	4.1	-104.88	1,739.3	-4,930.5	5,302.4	5,292.0	10.49	505.463	
2,100.0	2,068.7	1,802.1	1,780.0	7.1	4.7	-104.76	1,775.2	-4,925.2	5,313.4	5,301.8	11.60	458.224	
2,200.0	2,165.9	1,855.0	1,829.9	7.6	5.0	-104.70	1,792.6	-4,922.4	5,324.5	5,312.1	12.37	430.474	
2,300.0	2,263.2	1,917.1	1,888.0	8.0	5.4	-104.61	1,814.2	-4,919.3	5,336.3	5,323.1	13.22	403.530	
2,400.0	2,360.5	1,984.4	1,950.6	8.5	5.8	-104.51	1,838.6	-4,916.5	5,349.3	5,335.2	14.11	379.147	
2,500.0	2,457.8	2,080.9	2,040.4	9.0	6.4	-104.36	1,873.8	-4,912.4	5,362.2	5,347.0	15.16	353.638	
2,600.0	2,555.1	2,260.9	2,207.7	9.5	7.6	-104.08	1,939.7	-4,904.2	5,375.4	5,358.7	16.75	320.936	
2,700.0	2,652.4	2,417.0	2,352.0	10.0	8.6	-103.81	1,998.3	-4,893.6	5,386.3	5,368.1	18.26	294.952	
2,800.0	2,749.7	2,466.8	2,397.4	10.4	9.0	-103.71	2,018.4	-4,889.7	5,397.4	5,378.3	19.11	282.499	
2,900.0	2,846.9	2,511.0	2,437.5	10.9	9.3	-103.62	2,036.7	-4,886.5	5,409.5	5,389.6	19.91	271.717	
3,000.0	2,944.2	2,571.3	2,492.0	11.4	9.8	-103.48	2,062.1	-4,882.6	5,422.5	5,401.6	20.83	260.265	
3,100.0	3,041.5	2,641.5	2,555.6	11.9	10.3	-103.33	2,091.7	-4,878.5	5,436.2	5,414.4	21.81	249.219	
3,200.0	3,138.8	2,735.8	2,641.9	12.4	11.0	-103.16	2,129.3	-4,874.1	5,450.2	5,427.3	22.93	237.737	
3,300.0	3,236.1	2,846.0	2,743.1	12.8	11.7	-102.96	2,172.8	-4,868.9	5,464.2	5,440.0	24.16	226.187	
3,400.0	3,333.4	3,091.2	2,968.3	13.3	13.5	-102.52	2,268.4	-4,854.4	5,477.1	5,450.8	26.32	208.061	
3,500.0	3,430.6	3,213.7	3,081.9	13.8	14.3	-102.32	2,313.3	-4,845.5	5,487.7	5,460.1	27.60	198.807	
3,600.0	3,527.9	3,277.9	3,141.6	14.3	14.7	-102.22	2,336.7	-4,841.2	5,498.9	5,470.4	28.50	192.971	
3,700.0	3,625.2	3,353.0	3,211.5	14.8	15.2	-102.11	2,363.8	-4,836.5	5,510.5	5,481.1	29.44	187.160	
3,800.0	3,722.5	3,415.7	3,269.9	15.3	15.6	-102.02	2,386.2	-4,833.1	5,522.7	5,492.4	30.31	182.232	
3,900.0	3,819.8	3,482.7	3,332.5	15.7	16.0	-101.94	2,409.9	-4,830.1	5,535.7	5,504.5	31.20	177.448	
4,000.0	3,917.1	3,575.0	3,418.9	16.2	16.6	-101.82	2,442.4	-4,826.3	5,549.0	5,516.8	32.24	172.102	
4,100.0	4,014.4	3,727.0	3,560.7	16.7	17.6	-101.61	2,496.7	-4,819.4	5,562.2	5,528.5	33.69	165.122	
4,200.0	4,111.6	3,778.7	3,608.3	17.2	18.0	-101.52	2,516.6	-4,816.3	5,575.1	5,540.5	34.54	161.431	
4,300.0	4,208.9	3,821.0	3,646.9	17.7	18.3	-101.45	2,533.6	-4,813.9	5,588.8	5,553.5	35.32	158.246	
4,400.0	4,306.2	3,883.0	3,703.3	18.2	18.8	-101.32	2,559.3	-4,810.6	5,603.4	5,567.2	36.26	154.538	
4,500.0	4,403.5	3,938.8	3,753.8	18.7	19.2	-101.21	2,582.7	-4,807.9	5,618.8	5,581.7	37.15	151.241	
4,600.0	4,500.8	4,008.0	3,816.5	19.1	19.7	-101.08	2,611.9	-4,805.2	5,635.0	5,596.8	38.14	147.744	
4,700.0	4,598.1	4,263.8	4,053.6	19.6	21.4	-100.71	2,707.1	-4,795.1	5,648.5	5,608.3	40.27	140.264	
4,800.0	4,695.4	4,330.5	4,115.9	20.1	21.9	-100.62	2,730.9	-4,792.4	5,662.4	5,621.2	41.17	137.546	
4,900.0	4,792.6	4,434.7	4,213.9	20.6	22.5	-100.51	2,766.1	-4,789.7	5,676.8	5,634.6	42.27	134.311	
5,000.0	4,889.9	4,757.0	4,522.5	21.1	24.2	-100.34	2,858.3	-4,779.5	5,688.4	5,644.0	44.41	128.076	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 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: 545-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,100.0	4,987.2	4,851.0	4,613.6	21.6	24.7	-100.33	2,881.4	-4,776.3	5,698.6	5,653.3	45.33	125.715	
5,200.0	5,084.5	4,988.8	4,747.9	22.1	25.3	-100.35	2,911.5	-4,773.2	5,709.1	5,662.7	46.38	123.092	
5,300.0	5,181.8	5,225.0	4,981.5	22.5	26.0	-100.56	2,946.3	-4,769.0	5,716.8	5,669.2	47.60	120.092	
5,400.0	5,279.1	5,306.1	5,062.1	23.0	26.2	-100.67	2,954.3	-4,768.4	5,724.2	5,675.9	48.27	118.580	
5,500.0	5,376.3	5,581.4	5,337.2	23.5	26.6	-101.22	2,962.5	-4,769.8	5,730.2	5,681.1	49.11	116.675	
5,600.0	5,473.6	5,666.1	5,421.9	24.0	26.6	-101.42	2,962.3	-4,770.0	5,735.0	5,685.3	49.66	115.480	
5,700.0	5,570.9	5,757.2	5,513.0	24.5	26.7	-101.63	2,962.1	-4,770.4	5,740.1	5,689.8	50.22	114.304	
5,800.0	5,668.2	5,854.6	5,610.4	25.0	26.8	-101.85	2,961.7	-4,770.9	5,745.3	5,694.5	50.78	113.145	
5,900.0	5,765.5	5,940.9	5,696.7	25.5	26.9	-102.05	2,961.9	-4,771.2	5,750.6	5,699.3	51.33	112.021	
5,921.9	5,786.8	5,959.0	5,714.8	25.6	26.9	-102.09	2,962.0	-4,771.3	5,751.8	5,700.4	51.46	111.781	
6,000.0	5,863.0	6,032.7	5,788.5	25.9	26.9	-102.32	2,962.3	-4,771.7	5,756.0	5,704.2	51.86	110.983	
6,100.0	5,961.2	6,159.5	5,915.3	26.2	27.1	-102.64	2,962.9	-4,772.1	5,760.6	5,708.3	52.33	110.087	
6,200.0	6,060.0	6,253.0	6,008.8	26.5	27.2	-102.84	2,963.4	-4,772.1	5,764.3	5,711.5	52.72	109.335	
6,300.0	6,159.3	6,350.8	6,106.5	26.7	27.3	-103.01	2,964.4	-4,772.0	5,767.2	5,714.1	53.08	108.650	
6,400.0	6,259.0	6,440.0	6,195.8	26.9	27.4	-103.11	2,965.3	-4,772.0	5,769.4	5,716.0	53.39	108.065	
6,500.0	6,358.8	6,516.7	6,272.5	27.1	27.5	-103.18	2,966.2	-4,772.1	5,771.1	5,717.5	53.64	107.592	
6,591.0	6,449.8	6,624.9	6,380.7	27.2	27.6	-70.69	2,968.0	-4,772.4	5,772.2	5,738.5	33.68	171.394	
6,600.0	6,458.8	6,634.4	6,390.1	27.2	27.6	-70.68	2,968.1	-4,772.4	5,772.2	5,738.5	33.71	171.242	
6,621.0	6,479.8	6,654.1	6,409.8	27.2	27.6	-70.68	2,968.5	-4,772.4	5,772.3	5,738.6	33.78	170.888	
6,650.0	6,508.8	6,681.3	6,437.0	27.3	27.7	19.34	2,969.0	-4,772.4	5,772.0	5,718.0	53.98	106.933	
6,700.0	6,558.7	6,727.8	6,483.5	27.3	27.7	19.44	2,969.8	-4,772.4	5,768.7	5,714.9	53.85	107.133	
6,750.0	6,608.1	6,772.0	6,527.7	27.3	27.8	19.65	2,970.7	-4,772.4	5,762.2	5,708.7	53.49	107.725	
6,800.0	6,657.0	6,815.8	6,571.5	27.3	27.8	19.96	2,971.7	-4,772.4	5,752.6	5,699.6	52.92	108.709	
6,850.0	6,704.9	6,875.0	6,630.7	27.2	27.9	20.40	2,973.0	-4,772.4	5,739.7	5,687.5	52.16	110.046	
6,900.0	6,751.8	6,923.6	6,679.3	27.2	28.0	20.95	2,974.0	-4,772.4	5,723.6	5,672.4	51.19	111.813	
6,950.0	6,797.4	6,958.9	6,714.6	27.1	28.0	21.61	2,974.8	-4,772.4	5,704.5	5,654.5	50.03	114.031	
7,000.0	6,841.4	7,002.0	6,757.7	27.0	28.1	22.45	2,975.9	-4,772.4	5,682.6	5,633.8	48.72	116.645	
7,050.0	6,883.6	7,020.8	6,776.4	26.9	28.1	23.38	2,976.4	-4,772.4	5,657.9	5,610.6	47.24	119.761	
7,100.0	6,923.9	7,045.4	6,801.1	26.8	28.1	24.52	2,977.1	-4,772.5	5,630.6	5,584.9	45.68	123.265	
7,150.0	6,962.0	7,068.8	6,824.5	26.7	28.2	25.87	2,977.9	-4,772.7	5,600.8	5,556.7	44.05	127.139	
7,200.0	6,997.8	7,095.0	6,850.6	26.5	28.2	27.50	2,978.8	-4,772.9	5,568.7	5,526.3	42.42	131.264	
7,250.0	7,031.0	7,128.3	6,883.9	26.4	28.3	29.49	2,980.0	-4,773.2	5,534.3	5,493.5	40.87	135.422	
7,300.0	7,061.6	7,166.5	6,922.0	26.3	28.3	31.92	2,981.4	-4,773.4	5,497.9	5,458.4	39.46	139.315	
7,350.0	7,089.3	7,202.7	6,958.2	26.1	28.4	34.86	2,982.8	-4,773.6	5,459.4	5,421.1	38.30	142.551	
7,400.0	7,114.0	7,237.6	6,993.1	26.0	28.5	38.43	2,984.2	-4,773.7	5,419.2	5,381.7	37.48	144.576	
7,450.0	7,135.7	7,267.9	7,023.4	25.9	28.5	42.74	2,985.4	-4,773.7	5,377.4	5,340.3	37.11	144.895	
7,500.0	7,154.2	7,296.4	7,051.8	25.7	28.6	48.00	2,986.7	-4,773.6	5,334.3	5,297.1	37.27	143.144	
7,550.0	7,169.4	7,322.7	7,078.2	25.6	28.6	54.37	2,987.9	-4,773.4	5,290.1	5,252.2	37.93	139.486	
7,600.0	7,181.2	7,342.6	7,098.0	25.5	28.6	61.87	2,988.9	-4,773.2	5,245.0	5,206.1	38.91	134.790	
7,650.0	7,189.6	7,356.1	7,111.5	25.4	28.7	70.46	2,989.6	-4,773.1	5,199.3	5,159.4	39.91	130.274	
7,700.0	7,194.5	7,363.5	7,118.8	25.3	28.7	79.88	2,990.0	-4,773.0	5,153.2	5,112.7	40.52	127.173	
7,748.9	7,196.0	7,364.8	7,120.2	25.2	28.7	89.44	2,990.1	-4,773.0	5,107.9	5,067.5	40.45	126.279	
7,800.0	7,195.8	7,363.3	7,118.7	25.1	28.7	89.39	2,990.0	-4,773.0	5,060.7	5,019.5	41.19	122.875	
7,900.0	7,195.4	7,360.4	7,115.8	25.5	28.7	89.31	2,989.8	-4,773.0	4,968.4	4,925.6	42.80	116.085	
8,000.0	7,195.0	7,357.6	7,113.0	27.5	28.7	89.23	2,989.7	-4,773.0	4,876.4	4,831.8	44.61	109.318	
8,100.0	7,194.6	7,355.0	7,110.4	29.5	28.7	89.15	2,989.5	-4,773.1	4,784.8	4,738.2	46.57	102.735	
8,200.0	7,194.1	7,352.4	7,107.8	31.7	28.7	89.07	2,989.4	-4,773.1	4,693.4	4,644.8	48.67	96.437	
8,300.0	7,193.7	7,350.0	7,105.4	33.9	28.6	89.00	2,989.3	-4,773.1	4,602.5	4,551.6	50.87	90.480	
8,400.0	7,193.3	7,347.7	7,103.1	36.3	28.6	88.93	2,989.1	-4,773.2	4,511.9	4,458.7	53.15	84.888	
8,500.0	7,192.9	7,345.4	7,100.8	38.6	28.6	88.87	2,989.0	-4,773.2	4,421.7	4,366.2	55.51	79.663	
8,600.0	7,192.5	7,343.3	7,098.7	41.1	28.6	88.80	2,988.9	-4,773.2	4,332.0	4,274.1	57.92	74.797	
8,700.0	7,192.1	7,341.2	7,096.6	43.5	28.6	88.74	2,988.8	-4,773.2	4,242.7	4,182.3	60.38	70.271	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 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: 545-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	
8,800.0	7,191.7	7,339.2	7,094.6	46.0	28.6	88.68	2,988.7	-4,773.3	4,153.9	4,091.0	62.88	66.065	
8,900.0	7,191.3	7,337.3	7,092.7	48.6	28.6	88.62	2,988.6	-4,773.3	4,065.6	4,000.2	65.41	62.156	
9,000.0	7,190.9	7,335.4	7,090.8	51.1	28.6	88.57	2,988.5	-4,773.3	3,977.9	3,909.9	67.97	58.523	
9,100.0	7,190.4	7,333.6	7,089.0	53.7	28.6	88.52	2,988.4	-4,773.3	3,890.7	3,820.2	70.56	55.142	
9,200.0	7,190.0	7,331.9	7,087.3	56.3	28.6	88.46	2,988.3	-4,773.3	3,804.2	3,731.1	73.17	51.994	
9,300.0	7,189.6	7,330.2	7,085.6	58.9	28.6	88.41	2,988.3	-4,773.4	3,718.4	3,642.6	75.79	49.060	
9,400.0	7,189.2	7,328.6	7,084.0	61.6	28.6	88.37	2,988.2	-4,773.4	3,633.3	3,554.9	78.44	46.322	
9,500.0	7,188.8	7,327.0	7,082.4	64.2	28.6	88.32	2,988.1	-4,773.4	3,549.0	3,467.9	81.09	43.765	
9,600.0	7,188.4	7,325.5	7,080.9	66.9	28.6	88.28	2,988.0	-4,773.4	3,465.5	3,381.7	83.76	41.374	
9,700.0	7,188.0	7,324.0	7,079.5	69.6	28.6	88.23	2,988.0	-4,773.4	3,382.9	3,296.5	86.44	39.136	
9,800.0	7,187.6	7,322.6	7,078.1	72.3	28.6	88.19	2,987.9	-4,773.4	3,301.3	3,212.1	89.13	37.039	
9,900.0	7,187.1	7,321.3	7,076.7	74.9	28.6	88.15	2,987.8	-4,773.4	3,220.7	3,128.8	91.83	35.073	
10,000.0	7,186.7	7,319.9	7,075.4	77.6	28.6	88.11	2,987.8	-4,773.4	3,141.2	3,046.7	94.53	33.229	
10,100.0	7,186.3	7,318.6	7,074.1	80.4	28.6	88.07	2,987.7	-4,773.4	3,062.9	2,965.7	97.24	31.497	
10,200.0	7,185.9	7,317.4	7,072.8	83.1	28.6	88.03	2,987.6	-4,773.5	2,985.9	2,886.0	99.96	29.870	
10,300.0	7,185.5	7,316.2	7,071.6	85.8	28.6	88.00	2,987.6	-4,773.5	2,910.3	2,807.6	102.69	28.342	
10,400.0	7,185.1	7,315.0	7,070.4	88.5	28.6	87.96	2,987.5	-4,773.5	2,836.3	2,730.8	105.42	26.905	
10,500.0	7,184.7	7,313.8	7,069.3	91.2	28.6	87.93	2,987.5	-4,773.5	2,763.8	2,655.7	108.15	25.556	
10,600.0	7,184.3	7,312.7	7,068.1	94.0	28.6	87.90	2,987.4	-4,773.5	2,693.1	2,582.2	110.89	24.287	
10,700.0	7,183.9	7,311.6	7,067.1	96.7	28.6	87.86	2,987.4	-4,773.5	2,624.4	2,510.7	113.63	23.096	
10,800.0	7,183.4	7,310.6	7,066.0	99.4	28.6	87.83	2,987.3	-4,773.5	2,557.7	2,441.3	116.37	21.978	
10,900.0	7,183.0	7,309.5	7,065.0	102.2	28.6	87.80	2,987.3	-4,773.5	2,493.2	2,374.1	119.12	20.930	
11,000.0	7,182.6	7,308.5	7,064.0	104.9	28.6	87.77	2,987.2	-4,773.5	2,431.1	2,309.2	121.87	19.948	
11,100.0	7,182.2	7,307.6	7,063.0	107.7	28.6	87.74	2,987.2	-4,773.5	2,371.6	2,247.0	124.63	19.030	
11,200.0	7,181.8	7,306.6	7,062.1	110.4	28.6	87.71	2,987.1	-4,773.5	2,314.9	2,187.5	127.38	18.173	
11,300.0	7,181.4	7,305.7	7,061.1	113.2	28.6	87.69	2,987.1	-4,773.5	2,261.2	2,131.1	130.14	17.375	
11,400.0	7,181.0	7,304.8	7,060.2	116.0	28.6	87.66	2,987.0	-4,773.5	2,210.8	2,077.9	132.90	16.634	
11,500.0	7,180.6	7,303.9	7,059.3	118.7	28.6	87.63	2,987.0	-4,773.5	2,163.7	2,028.1	135.67	15.949	
11,600.0	7,180.1	7,303.0	7,058.5	121.5	28.6	87.61	2,987.0	-4,773.5	2,120.4	1,982.0	138.43	15.317	
11,700.0	7,179.7	7,302.2	7,057.6	124.3	28.6	87.58	2,986.9	-4,773.6	2,080.9	1,939.7	141.20	14.738	
11,800.0	7,179.3	7,301.4	7,056.8	127.0	28.6	87.56	2,986.9	-4,773.6	2,045.6	1,901.7	143.97	14.209	
11,900.0	7,178.9	7,300.6	7,056.0	129.8	28.6	87.54	2,986.9	-4,773.6	2,014.7	1,867.9	146.74	13.730	
12,000.0	7,178.5	7,299.8	7,055.2	132.6	28.6	87.51	2,986.8	-4,773.6	1,988.3	1,838.8	149.51	13.299	
12,100.0	7,178.1	7,299.0	7,054.5	135.3	28.6	87.49	2,986.8	-4,773.6	1,966.6	1,814.3	152.28	12.914	
12,200.0	7,177.7	7,298.3	7,053.7	138.1	28.6	87.47	2,986.7	-4,773.6	1,949.8	1,794.8	155.05	12.575	
12,300.0	7,177.2	7,297.5	7,053.0	140.9	28.6	87.45	2,986.7	-4,773.6	1,938.1	1,780.2	157.83	12.280	
12,400.0	7,176.8	7,296.8	7,052.3	143.7	28.6	87.42	2,986.7	-4,773.6	1,931.4	1,770.8	160.60	12.026	
12,478.6	7,176.5	7,296.3	7,051.7	145.8	28.5	87.41	2,986.7	-4,773.6	1,929.8	1,767.0	162.79	11.855 CC	
12,500.0	7,176.4	7,296.1	7,051.6	146.4	28.5	87.40	2,986.7	-4,773.6	1,929.9	1,766.6	163.38	11.813 ES	
12,600.0	7,176.0	7,295.5	7,050.9	149.2	28.5	87.38	2,986.6	-4,773.6	1,933.6	1,767.5	166.16	11.637	
12,700.0	7,175.6	7,294.8	7,050.3	152.0	28.5	87.36	2,986.6	-4,773.6	1,942.5	1,773.5	168.94	11.498	
12,800.0	7,175.2	7,294.1	7,049.6	154.8	28.5	87.34	2,986.6	-4,773.6	1,956.4	1,784.7	171.72	11.393	
12,900.0	7,174.8	7,283.0	7,038.5	157.5	28.5	87.01	2,986.1	-4,773.6	1,975.3	1,800.9	174.47	11.322	
13,000.0	7,174.4	7,283.0	7,038.5	160.3	28.5	87.01	2,986.1	-4,773.6	1,999.0	1,821.8	177.25	11.299	
13,100.0	7,173.9	7,283.0	7,038.5	163.1	28.5	87.01	2,986.1	-4,773.6	2,027.4	1,847.4	180.03	11.261 SF	
13,200.0	7,173.5	7,283.0	7,038.5	165.9	28.5	87.01	2,986.1	-4,773.6	2,060.3	1,877.5	182.82	11.270	
13,300.0	7,173.1	7,283.0	7,038.5	168.7	28.5	87.01	2,986.1	-4,773.6	2,097.4	1,911.8	185.60	11.300	
13,400.0	7,172.7	7,283.0	7,038.5	171.5	28.5	87.01	2,986.1	-4,773.6	2,138.5	1,950.1	188.39	11.352	
13,500.0	7,172.3	7,283.0	7,038.5	174.3	28.5	87.01	2,986.1	-4,773.6	2,183.5	1,992.3	191.17	11.421	
13,600.0	7,171.9	7,283.0	7,038.5	177.0	28.5	87.01	2,986.1	-4,773.6	2,232.0	2,038.0	193.96	11.507	
13,700.0	7,171.5	7,283.0	7,038.5	179.8	28.5	87.01	2,986.1	-4,773.6	2,283.9	2,087.1	196.75	11.608	
13,800.0	7,171.0	7,283.0	7,038.5	182.6	28.5	87.01	2,986.1	-4,773.6	2,338.9	2,139.3	199.53	11.722	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD BROWN 20MD - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 545-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
13,900.0	7,170.6	7,283.0	7,038.5	185.4	28.5	87.01	2,986.1	-4,773.6	2,396.8	2,194.5	202.32	11.846	
14,000.0	7,170.2	7,283.0	7,038.5	188.2	28.5	87.01	2,986.1	-4,773.6	2,457.4	2,252.3	205.11	11.981	
14,100.0	7,169.8	7,283.0	7,038.5	191.0	28.5	87.01	2,986.1	-4,773.6	2,520.5	2,312.6	207.90	12.124	
14,200.0	7,169.4	7,283.0	7,038.5	193.8	28.5	87.01	2,986.1	-4,773.6	2,586.0	2,375.3	210.69	12.274	
14,295.0	7,169.0	7,283.0	7,038.5	196.4	28.5	87.01	2,986.1	-4,773.6	2,650.1	2,436.8	213.34	12.422	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 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: 545-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	-72.06	1,594.0	-4,924.1	5,175.8				
100.0	100.0	59.0	59.0	0.1	0.1	-72.06	1,594.0	-4,924.2	5,175.7	5,175.6	0.15	N/A	
200.0	200.0	153.3	153.3	0.3	0.1	-72.06	1,593.9	-4,924.3	5,175.9	5,175.4	0.46	N/A	
300.0	300.0	247.6	247.6	0.5	0.2	-72.06	1,593.9	-4,924.5	5,176.1	5,175.3	0.77	6,749.226	
400.0	400.0	341.9	341.9	0.8	0.3	-72.07	1,593.9	-4,924.9	5,176.4	5,175.4	1.08	4,812.795	
500.0	500.0	436.2	436.2	1.0	0.4	-72.07	1,593.8	-4,925.4	5,176.9	5,175.5	1.38	3,739.994	
600.0	600.0	545.0	545.0	1.2	0.5	-104.59	1,593.7	-4,926.0	5,177.9	5,176.2	1.70	3,037.446	
700.0	699.8	612.9	612.9	1.4	0.6	-104.59	1,593.6	-4,926.6	5,180.0	5,177.9	2.08	2,487.149	
800.0	799.5	707.9	707.9	1.7	0.8	-104.62	1,593.4	-4,927.8	5,183.2	5,180.7	2.52	2,053.585	
900.0	898.7	804.0	804.0	1.9	1.0	-104.67	1,593.1	-4,928.9	5,187.4	5,184.4	2.99	1,736.246	
1,000.0	997.5	903.7	903.7	2.2	1.3	-104.75	1,592.6	-4,930.2	5,192.5	5,189.0	3.49	1,486.525	
1,100.0	1,095.6	1,005.4	1,005.3	2.6	1.5	-104.85	1,592.1	-4,931.5	5,198.6	5,194.5	4.03	1,290.714	
1,169.1	1,163.0	1,063.8	1,063.7	2.8	1.6	-104.90	1,592.0	-4,932.2	5,203.3	5,198.9	4.40	1,182.174	
1,200.0	1,193.1	1,089.2	1,089.1	3.0	1.6	-104.96	1,592.0	-4,932.5	5,205.6	5,201.0	4.57	1,138.136	
1,300.0	1,290.4	1,317.3	1,317.2	3.4	2.1	-105.54	1,590.6	-4,933.5	5,212.3	5,206.9	5.44	957.584	
1,400.0	1,387.7	1,438.7	1,438.6	3.8	2.3	-105.81	1,592.4	-4,930.8	5,216.9	5,210.8	6.11	854.113	
1,500.0	1,484.9	1,510.8	1,510.6	4.3	2.5	-105.97	1,593.6	-4,929.3	5,221.9	5,215.2	6.69	780.232	
1,600.0	1,582.2	1,585.2	1,585.0	4.7	2.6	-106.13	1,594.9	-4,928.2	5,227.5	5,220.2	7.29	716.714	
1,700.0	1,679.5	1,667.0	1,666.8	5.2	2.8	-106.32	1,596.4	-4,927.2	5,233.5	5,225.5	7.92	661.075	
1,800.0	1,776.8	1,751.0	1,750.8	5.7	3.0	-106.50	1,597.9	-4,926.4	5,239.8	5,231.2	8.55	613.179	
1,900.0	1,874.1	2,632.1	2,626.9	6.1	5.0	-108.22	1,617.2	-4,850.3	5,238.4	5,227.5	10.86	482.292	
2,000.0	1,971.4	2,697.0	2,691.0	6.6	5.2	-108.33	1,619.4	-4,840.2	5,231.0	5,219.5	11.46	456.301	
2,100.0	2,068.7	2,819.6	2,812.0	7.1	5.6	-108.53	1,623.0	-4,820.9	5,223.8	5,211.6	12.20	428.073	
2,200.0	2,165.9	2,907.1	2,898.3	7.6	5.8	-108.67	1,626.0	-4,806.6	5,216.0	5,203.1	12.87	405.412	
2,300.0	2,263.2	2,977.0	2,967.3	8.0	6.0	-108.79	1,628.1	-4,795.5	5,208.7	5,195.2	13.49	386.161	
2,400.0	2,360.5	3,027.4	3,017.1	8.5	6.2	-108.88	1,629.3	-4,788.0	5,202.2	5,188.2	14.06	369.917	
2,500.0	2,457.8	3,071.0	3,060.3	9.0	6.3	-108.96	1,630.0	-4,782.0	5,196.7	5,182.1	14.62	355.381	
2,600.0	2,555.1	3,137.9	3,126.6	9.5	6.5	-109.09	1,630.8	-4,773.4	5,192.0	5,176.7	15.23	340.834	
2,700.0	2,652.4	3,190.6	3,178.9	10.0	6.6	-109.20	1,631.3	-4,767.1	5,188.1	5,172.3	15.81	328.115	
2,800.0	2,749.7	3,258.0	3,245.9	10.4	6.8	-109.33	1,632.3	-4,759.8	5,185.3	5,168.9	16.42	315.734	
2,900.0	2,846.9	3,258.0	3,245.9	10.9	6.8	-109.33	1,632.3	-4,759.8	5,183.6	5,166.7	16.89	306.990	
2,994.2	2,938.6	3,312.7	3,300.4	11.4	7.0	-109.44	1,633.4	-4,754.7	5,182.9	5,165.5	17.44	297.170	
3,000.0	2,944.2	3,314.7	3,302.4	11.4	7.0	-109.44	1,633.4	-4,754.5	5,182.9	5,165.5	17.47	296.642	
3,100.0	3,041.5	3,352.0	3,339.5	11.9	7.1	-109.52	1,634.2	-4,751.6	5,183.6	5,165.6	18.02	287.721	
3,200.0	3,138.8	3,389.8	3,377.3	12.4	7.2	-109.60	1,634.9	-4,749.2	5,185.5	5,167.0	18.56	279.400	
3,300.0	3,236.1	3,446.0	3,433.4	12.8	7.3	-109.71	1,635.9	-4,746.3	5,188.7	5,169.6	19.14	271.066	
3,400.0	3,333.4	3,446.0	3,433.4	13.3	7.3	-109.71	1,635.9	-4,746.3	5,193.0	5,173.4	19.61	264.883	
3,500.0	3,430.6	3,497.0	3,484.4	13.8	7.4	-109.83	1,636.4	-4,744.8	5,198.5	5,178.3	20.17	257.731	
3,600.0	3,527.9	3,540.0	3,527.3	14.3	7.5	-109.93	1,636.4	-4,744.4	5,205.5	5,184.7	20.72	251.242	
3,700.0	3,625.2	3,592.7	3,580.0	14.8	7.6	-110.06	1,636.0	-4,744.5	5,213.5	5,192.2	21.28	244.970	
3,800.0	3,722.5	3,681.5	3,668.8	15.3	7.8	-110.28	1,635.6	-4,744.8	5,221.9	5,200.0	21.91	238.318	
3,900.0	3,819.8	3,769.9	3,757.2	15.7	7.9	-110.49	1,635.4	-4,745.2	5,230.5	5,208.0	22.54	232.080	
4,000.0	3,917.1	3,869.0	3,856.3	16.2	8.1	-110.74	1,634.7	-4,745.9	5,239.5	5,216.3	23.18	226.025	
4,100.0	4,014.4	3,964.9	3,952.2	16.7	8.3	-110.97	1,634.1	-4,746.3	5,248.3	5,224.4	23.82	220.360	
4,200.0	4,111.6	4,075.1	4,062.4	17.2	8.5	-111.25	1,632.8	-4,747.1	5,257.3	5,232.8	24.48	214.784	
4,300.0	4,208.9	4,154.0	4,141.3	17.7	8.6	-111.45	1,631.4	-4,747.6	5,266.2	5,241.1	25.08	209.974	
4,400.0	4,306.2	4,221.1	4,208.4	18.2	8.8	-111.62	1,630.3	-4,748.4	5,275.8	5,250.2	25.66	205.581	
4,500.0	4,403.5	4,305.6	4,292.9	18.7	8.9	-111.84	1,628.7	-4,749.9	5,286.0	5,259.7	26.28	201.164	
4,600.0	4,500.8	4,456.8	4,444.0	19.1	9.2	-112.22	1,626.1	-4,751.4	5,295.5	5,268.5	27.00	196.120	
4,700.0	4,598.1	4,538.2	4,525.5	19.6	9.4	-112.42	1,625.3	-4,751.9	5,305.0	5,277.4	27.61	192.164	
4,800.0	4,695.4	4,654.0	4,641.2	20.1	9.6	-112.69	1,625.2	-4,752.7	5,314.7	5,286.4	28.28	187.958	
4,900.0	4,792.6	4,723.5	4,710.7	20.6	9.7	-112.85	1,625.5	-4,753.0	5,324.4	5,295.6	28.86	184.473	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD BROWN 20ND - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 usft
Survey Program: 545-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,000.0	4,889.9	4,807.5	4,794.7	21.1	9.9	-113.04	1,625.9	-4,753.8	5,334.7	5,305.2	29.48	180.980		
5,100.0	4,987.2	4,901.5	4,888.7	21.6	10.1	-113.25	1,626.2	-4,754.8	5,345.1	5,315.0	30.11	177.531		
5,200.0	5,084.5	4,994.6	4,981.8	22.1	10.2	-113.47	1,626.4	-4,755.9	5,355.8	5,325.0	30.74	174.246		
5,300.0	5,181.8	5,092.6	5,079.8	22.5	10.4	-113.69	1,626.6	-4,757.1	5,366.5	5,335.1	31.37	171.059		
5,400.0	5,279.1	5,184.0	5,171.2	23.0	10.6	-113.90	1,626.6	-4,758.2	5,377.3	5,345.3	31.99	168.069		
5,500.0	5,376.3	5,279.0	5,266.1	23.5	10.8	-114.12	1,626.6	-4,759.5	5,388.3	5,355.7	32.62	165.168		
5,600.0	5,473.6	5,375.3	5,362.5	24.0	11.0	-114.34	1,626.5	-4,760.8	5,399.4	5,366.1	33.25	162.378		
5,700.0	5,570.9	5,460.8	5,447.9	24.5	11.2	-114.53	1,626.4	-4,762.1	5,410.6	5,376.8	33.86	159.792		
5,800.0	5,668.2	5,544.6	5,531.8	25.0	11.3	-114.73	1,626.0	-4,763.6	5,422.2	5,387.8	34.47	157.320		
5,900.0	5,765.5	5,785.0	5,772.1	25.5	11.8	-115.29	1,623.6	-4,765.6	5,433.3	5,397.9	35.34	153.736		
5,921.9	5,786.8	5,810.1	5,797.2	25.6	11.8	-115.34	1,623.6	-4,765.4	5,435.3	5,399.8	35.49	153.166		
6,000.0	5,863.0	5,878.0	5,865.1	25.9	12.0	-115.61	1,623.7	-4,764.9	5,442.2	5,406.3	35.91	151.565		
6,100.0	5,961.2	5,957.5	5,944.6	26.2	12.1	-115.89	1,623.6	-4,764.6	5,450.0	5,413.7	36.35	149.912		
6,200.0	6,060.0	6,045.8	6,032.9	26.5	12.3	-116.14	1,623.0	-4,764.4	5,456.5	5,419.7	36.78	148.342		
6,300.0	6,159.3	6,143.9	6,131.0	26.7	12.5	-116.35	1,622.3	-4,764.3	5,461.6	5,424.5	37.19	146.839		
6,400.0	6,259.0	6,229.0	6,216.1	26.9	12.7	-116.49	1,621.5	-4,764.3	5,465.3	5,427.8	37.54	145.574		
6,500.0	6,358.8	6,335.6	6,322.7	27.1	12.9	-116.58	1,621.1	-4,764.5	5,467.6	5,429.7	37.90	144.274		
6,591.0	6,449.8	6,418.9	6,405.9	27.2	13.1	-84.10	1,621.0	-4,764.5	5,468.3	5,436.0	32.32	169.209		
6,600.0	6,458.8	6,426.9	6,414.0	27.2	13.1	-84.10	1,621.0	-4,764.5	5,468.3	5,436.0	32.35	169.056		
6,621.0	6,479.8	6,440.0	6,427.1	27.2	13.1	-84.10	1,621.0	-4,764.6	5,468.4	5,435.9	32.41	168.742		
6,650.0	6,508.8	6,469.6	6,456.7	27.3	13.2	5.91	1,621.0	-4,764.6	5,467.8	5,429.6	38.27	142.886		
6,700.0	6,558.7	6,511.5	6,498.6	27.3	13.3	5.94	1,620.9	-4,764.8	5,464.3	5,426.1	38.16	143.175		
6,750.0	6,608.1	6,563.0	6,550.1	27.3	13.4	6.00	1,620.9	-4,765.0	5,457.3	5,419.4	37.93	143.889		
6,800.0	6,657.0	6,624.3	6,611.4	27.3	13.5	6.11	1,620.8	-4,765.2	5,446.8	5,409.2	37.56	145.027		
6,850.0	6,704.9	6,700.1	6,687.2	27.2	13.7	6.26	1,621.0	-4,765.1	5,432.8	5,395.7	37.07	146.559		
6,900.0	6,751.8	6,747.5	6,734.6	27.2	13.8	6.45	1,621.3	-4,764.8	5,415.3	5,378.9	36.38	148.835		
6,950.0	6,797.4	6,784.1	6,771.2	27.1	13.8	6.68	1,621.6	-4,764.7	5,394.7	5,359.1	35.55	151.759		
7,000.0	6,841.4	6,814.0	6,801.1	27.0	13.9	6.96	1,622.0	-4,764.6	5,371.1	5,336.5	34.58	155.334		
7,050.0	6,883.6	6,847.8	6,834.9	26.9	14.0	7.31	1,622.5	-4,764.6	5,344.5	5,311.0	33.51	159.488		
7,100.0	6,923.9	6,875.8	6,862.9	26.8	14.0	7.72	1,622.9	-4,764.6	5,315.2	5,282.9	32.34	164.347		
7,150.0	6,962.0	6,908.0	6,895.1	26.7	14.1	8.23	1,623.3	-4,764.8	5,283.2	5,252.1	31.11	169.812		
7,200.0	6,997.8	6,933.4	6,920.5	26.5	14.1	8.84	1,623.6	-4,764.9	5,248.8	5,218.9	29.83	175.980		
7,250.0	7,031.0	6,964.0	6,951.1	26.4	14.2	9.60	1,624.0	-4,765.1	5,211.9	5,183.4	28.54	182.610		
7,300.0	7,061.6	6,992.2	6,979.3	26.3	14.3	10.55	1,624.3	-4,765.3	5,172.8	5,145.6	27.28	189.591		
7,350.0	7,089.3	7,025.3	7,012.4	26.1	14.3	11.79	1,624.7	-4,765.6	5,131.7	5,105.6	26.13	196.381		
7,400.0	7,114.0	7,058.3	7,045.4	26.0	14.4	13.40	1,625.1	-4,765.8	5,088.7	5,063.6	25.15	202.301		
7,450.0	7,135.7	7,087.1	7,074.1	25.9	14.5	15.56	1,625.4	-4,765.9	5,044.1	5,019.6	24.46	206.219		
7,500.0	7,154.2	7,108.9	7,096.0	25.7	14.5	18.53	1,625.7	-4,765.9	4,998.0	4,973.8	24.21	206.425		
7,550.0	7,169.4	7,126.1	7,113.1	25.6	14.5	22.83	1,625.9	-4,766.0	4,950.8	4,926.1	24.69	200.541		
7,600.0	7,181.2	7,139.4	7,126.5	25.5	14.6	29.50	1,626.0	-4,766.0	4,902.6	4,876.2	26.33	186.214		
7,650.0	7,189.6	7,148.9	7,136.0	25.4	14.6	40.68	1,626.2	-4,766.0	4,853.6	4,823.9	29.78	162.975		
7,700.0	7,194.5	7,154.5	7,141.6	25.3	14.6	60.46	1,626.2	-4,766.0	4,804.3	4,769.1	35.11	136.827		
7,748.9	7,196.0	7,156.3	7,143.3	25.2	14.6	90.43	1,626.2	-4,766.1	4,755.7	4,718.0	37.73	126.057		
7,800.0	7,195.8	7,156.1	7,143.2	25.1	14.6	90.42	1,626.2	-4,766.1	4,705.0	4,666.5	38.46	122.333		
7,900.0	7,195.4	7,155.9	7,142.9	25.5	14.6	90.39	1,626.2	-4,766.1	4,605.8	4,565.7	40.07	114.939		
8,000.0	7,195.0	7,155.6	7,142.7	27.5	14.6	90.36	1,626.2	-4,766.1	4,506.5	4,464.7	41.88	107.615		
8,100.0	7,194.6	7,155.4	7,142.4	29.5	14.6	90.34	1,626.2	-4,766.1	4,407.3	4,363.5	43.84	100.531		
8,200.0	7,194.1	7,155.1	7,142.2	31.7	14.6	90.31	1,626.2	-4,766.1	4,308.2	4,262.3	45.93	93.791		
8,300.0	7,193.7	7,154.9	7,141.9	33.9	14.6	90.29	1,626.2	-4,766.1	4,209.1	4,161.0	48.13	87.449		
8,400.0	7,193.3	7,154.6	7,141.7	36.3	14.6	90.26	1,626.2	-4,766.0	4,110.0	4,059.6	50.42	81.523		
8,500.0	7,192.9	7,154.4	7,141.4	38.6	14.6	90.24	1,626.2	-4,766.0	4,011.0	3,958.2	52.77	76.011		
8,600.0	7,192.5	7,154.1	7,141.2	41.1	14.6	90.21	1,626.2	-4,766.0	3,912.0	3,856.9	55.18	70.895		

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD BROWN 20ND - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 545-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	
8,700.0	7,192.1	7,153.8	7,140.9	43.5	14.6	90.19	1,626.2	-4,766.0	3,813.1	3,755.5	57.64	66.154	
8,800.0	7,191.7	7,153.6	7,140.7	46.0	14.6	90.16	1,626.2	-4,766.0	3,714.3	3,654.1	60.14	61.760	
8,900.0	7,191.3	7,153.4	7,140.4	48.6	14.6	90.14	1,626.2	-4,766.0	3,615.5	3,552.8	62.68	57.686	
9,000.0	7,190.9	7,153.1	7,140.2	51.1	14.6	90.11	1,626.2	-4,766.0	3,516.7	3,451.5	65.24	53.906	
9,100.0	7,190.4	7,152.9	7,139.9	53.7	14.6	90.09	1,626.2	-4,766.0	3,418.1	3,350.3	67.83	50.395	
9,200.0	7,190.0	7,152.6	7,139.7	56.3	14.6	90.06	1,626.2	-4,766.0	3,319.5	3,249.1	70.44	47.128	
9,300.0	7,189.6	7,152.4	7,139.4	58.9	14.6	90.04	1,626.2	-4,766.0	3,221.0	3,148.0	73.06	44.085	
9,400.0	7,189.2	7,152.1	7,139.2	61.6	14.6	90.01	1,626.2	-4,766.0	3,122.7	3,046.9	75.71	41.246	
9,500.0	7,188.8	7,151.9	7,138.9	64.2	14.6	89.99	1,626.2	-4,766.0	3,024.4	2,946.0	78.37	38.593	
9,600.0	7,188.4	7,151.6	7,138.7	66.9	14.6	89.96	1,626.2	-4,766.0	2,926.2	2,845.2	81.04	36.109	
9,700.0	7,188.0	7,151.4	7,138.5	69.6	14.6	89.94	1,626.2	-4,766.0	2,828.2	2,744.5	83.72	33.782	
9,800.0	7,187.6	7,151.2	7,138.2	72.3	14.6	89.92	1,626.2	-4,766.0	2,730.3	2,643.9	86.41	31.597	
9,900.0	7,187.1	7,150.9	7,138.0	74.9	14.6	89.89	1,626.2	-4,766.0	2,632.5	2,543.4	89.11	29.543	
10,000.0	7,186.7	7,150.7	7,137.8	77.6	14.6	89.87	1,626.2	-4,766.0	2,535.0	2,443.2	91.82	27.609	
10,100.0	7,186.3	7,150.5	7,137.5	80.4	14.6	89.84	1,626.2	-4,766.0	2,437.6	2,343.1	94.53	25.786	
10,200.0	7,185.9	7,150.2	7,137.3	83.1	14.6	89.82	1,626.2	-4,766.0	2,340.5	2,243.2	97.25	24.066	
10,300.0	7,185.5	7,150.0	7,137.0	85.8	14.6	89.80	1,626.2	-4,766.0	2,243.6	2,143.6	99.98	22.440	
10,400.0	7,185.1	7,149.8	7,136.8	88.5	14.6	89.77	1,626.2	-4,766.0	2,147.0	2,044.3	102.71	20.903	
10,500.0	7,184.7	7,149.5	7,136.6	91.2	14.6	89.75	1,626.2	-4,766.0	2,050.7	1,945.3	105.45	19.448	
10,600.0	7,184.3	7,149.3	7,136.4	94.0	14.6	89.73	1,626.2	-4,766.0	1,954.8	1,846.6	108.19	18.069	
10,700.0	7,183.9	7,149.1	7,136.1	96.7	14.6	89.70	1,626.2	-4,766.0	1,859.4	1,748.4	110.93	16.761	
10,800.0	7,183.4	7,148.8	7,135.9	99.4	14.6	89.68	1,626.2	-4,766.0	1,764.4	1,650.7	113.68	15.520	
10,900.0	7,183.0	7,148.6	7,135.7	102.2	14.6	89.66	1,626.2	-4,766.0	1,670.0	1,553.6	116.43	14.343	
11,000.0	7,182.6	7,148.4	7,135.4	104.9	14.6	89.64	1,626.2	-4,766.0	1,576.3	1,457.1	119.19	13.225	
11,100.0	7,182.2	7,148.2	7,135.2	107.7	14.6	89.61	1,626.1	-4,766.0	1,483.5	1,361.5	121.95	12.165	
11,200.0	7,181.8	7,147.9	7,135.0	110.4	14.6	89.59	1,626.1	-4,766.0	1,391.6	1,266.9	124.71	11.159	
11,300.0	7,181.4	7,147.7	7,134.8	113.2	14.6	89.57	1,626.1	-4,766.0	1,300.9	1,173.4	127.47	10.206	
11,400.0	7,181.0	7,147.5	7,134.6	116.0	14.6	89.55	1,626.1	-4,766.0	1,211.7	1,081.5	130.23	9.304	
11,500.0	7,180.6	7,147.3	7,134.3	118.7	14.6	89.52	1,626.1	-4,766.0	1,124.3	991.3	133.00	8.454	
11,600.0	7,180.1	7,147.1	7,134.1	121.5	14.6	89.50	1,626.1	-4,766.0	1,039.2	903.4	135.77	7.654	
11,700.0	7,179.7	7,146.8	7,133.9	124.3	14.6	89.48	1,626.1	-4,766.0	957.0	818.5	138.54	6.908	
11,800.0	7,179.3	7,146.6	7,133.7	127.0	14.6	89.46	1,626.1	-4,766.0	878.5	737.2	141.31	6.217	
11,900.0	7,178.9	7,146.4	7,133.5	129.8	14.6	89.44	1,626.1	-4,766.0	804.7	660.6	144.08	5.585	
12,000.0	7,178.5	7,146.2	7,133.2	132.6	14.6	89.41	1,626.1	-4,766.0	737.2	590.3	146.86	5.020	
12,100.0	7,178.1	7,146.0	7,133.0	135.3	14.6	89.39	1,626.1	-4,766.0	677.7	528.1	149.63	4.529	
12,200.0	7,177.7	7,145.8	7,132.8	138.1	14.6	89.37	1,626.1	-4,766.0	628.6	476.2	152.41	4.124	
12,300.0	7,177.2	7,145.5	7,132.6	140.9	14.6	89.35	1,626.1	-4,766.0	592.5	437.3	155.19	3.818	
12,400.0	7,176.8	7,145.3	7,132.4	143.7	14.6	89.33	1,626.1	-4,766.0	571.7	413.8	157.97	3.619	
12,470.7	7,176.5	7,145.2	7,132.2	145.6	14.6	89.31	1,626.1	-4,766.0	567.3	407.4	159.94	3.547 CC	
12,500.0	7,176.4	7,145.1	7,132.2	146.4	14.6	89.31	1,626.1	-4,766.0	568.1	407.3	160.75	3.534 ES, SF	
12,600.0	7,176.0	7,144.9	7,132.0	149.2	14.6	89.28	1,626.1	-4,766.0	581.9	418.4	163.53	3.558	
12,700.0	7,175.6	7,144.7	7,131.7	152.0	14.6	89.26	1,626.1	-4,766.0	611.9	445.6	166.32	3.679	
12,800.0	7,175.2	7,144.5	7,131.5	154.8	14.6	89.24	1,626.1	-4,766.0	656.0	486.9	169.10	3.879	
12,900.0	7,174.8	7,144.3	7,131.3	157.5	14.6	89.22	1,626.1	-4,766.0	711.5	539.6	171.88	4.139	
13,000.0	7,174.4	7,144.1	7,131.1	160.3	14.6	89.20	1,626.1	-4,766.0	775.9	601.2	174.67	4.442	
13,100.0	7,173.9	7,143.9	7,130.9	163.1	14.6	89.18	1,626.1	-4,766.0	847.3	669.8	177.45	4.775	
13,200.0	7,173.5	7,143.7	7,130.7	165.9	14.6	89.16	1,626.1	-4,766.0	924.0	743.8	180.24	5.126	
13,300.0	7,173.1	7,143.4	7,130.5	168.7	14.6	89.14	1,626.1	-4,766.0	1,004.8	821.8	183.03	5.490	
13,400.0	7,172.7	7,143.2	7,130.3	171.5	14.6	89.12	1,626.1	-4,766.0	1,088.8	903.0	185.82	5.860	
13,500.0	7,172.3	7,143.0	7,130.1	174.3	14.6	89.10	1,626.1	-4,766.0	1,175.3	986.7	188.61	6.232	
13,600.0	7,171.9	7,142.8	7,129.9	177.0	14.6	89.08	1,626.1	-4,766.0	1,263.8	1,072.4	191.39	6.603	
13,700.0	7,171.5	7,142.6	7,129.7	179.8	14.6	89.06	1,626.1	-4,766.0	1,353.9	1,159.7	194.18	6.972	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD BROWN 20ND - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 545-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
13,800.0	7,171.0	7,142.4	7,129.5	182.6	14.6	89.04	1,626.1	-4,766.0	1,445.3	1,248.3	196.97	7.338	
13,900.0	7,170.6	7,142.2	7,129.3	185.4	14.6	89.02	1,626.1	-4,766.0	1,537.8	1,338.0	199.77	7.698	
14,000.0	7,170.2	7,142.0	7,129.1	188.2	14.6	88.99	1,626.1	-4,766.0	1,631.2	1,428.6	202.56	8.053	
14,100.0	7,169.8	7,141.8	7,128.9	191.0	14.6	88.97	1,626.1	-4,766.0	1,725.3	1,519.9	205.35	8.402	
14,200.0	7,169.4	7,141.6	7,128.7	193.8	14.6	88.95	1,626.1	-4,766.0	1,820.0	1,611.9	208.14	8.744	
14,295.0	7,169.0	7,141.5	7,128.5	196.4	14.6	88.94	1,626.1	-4,766.0	1,910.4	1,699.7	210.79	9.063	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD BROWN 20OD - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 575-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	-72.52	1,569.2	-4,981.6	5,223.1				
100.0	100.0	63.7	63.7	0.1	0.1	-72.52	1,569.2	-4,981.6	5,222.9	5,222.8	0.15	N/A	
200.0	200.0	165.5	165.5	0.3	0.1	-72.52	1,569.0	-4,981.6	5,222.9	5,222.4	0.47	N/A	
300.0	300.0	267.4	267.4	0.5	0.2	-72.52	1,568.7	-4,981.7	5,222.8	5,222.0	0.79	6,620.884	
400.0	400.0	369.3	369.3	0.8	0.3	-72.53	1,568.2	-4,981.7	5,222.7	5,221.6	1.11	4,722.877	
500.0	500.0	471.1	471.1	1.0	0.4	-72.53	1,567.5	-4,981.7	5,222.5	5,221.1	1.42	3,670.565	
519.0	519.0	490.4	490.4	1.0	0.4	-105.05	1,567.4	-4,981.7	5,222.5	5,221.0	1.48	3,522.473	
600.0	600.0	573.0	572.9	1.2	0.5	-105.07	1,566.7	-4,981.8	5,222.8	5,221.1	1.74	3,005.821	
700.0	699.8	654.4	654.4	1.4	0.7	-105.09	1,566.1	-4,982.0	5,224.1	5,222.0	2.13	2,456.929	
800.0	799.5	800.4	800.4	1.7	1.0	-105.21	1,563.9	-4,982.0	5,225.9	5,223.2	2.67	1,959.143	
900.0	898.7	962.7	962.6	1.9	1.3	-105.43	1,559.5	-4,981.6	5,228.4	5,225.1	3.28	1,595.995	
1,000.0	997.5	1,351.6	1,349.7	2.2	2.3	-106.41	1,525.4	-4,973.7	5,228.7	5,224.2	4.55	1,149.301	
1,100.0	1,095.6	1,465.2	1,462.1	2.6	2.7	-106.83	1,508.8	-4,969.7	5,226.5	5,221.3	5.22	1,000.606	
1,169.1	1,163.0	1,900.4	1,885.7	2.8	4.6	-108.79	1,413.7	-4,946.9	5,223.3	5,216.1	7.21	724.783	
1,200.0	1,193.1	1,925.5	1,909.7	3.0	4.7	-108.93	1,406.4	-4,945.3	5,221.1	5,213.6	7.46	700.137	
1,300.0	1,290.4	2,017.0	1,996.4	3.4	5.2	-109.42	1,377.6	-4,939.9	5,214.2	5,205.8	8.32	626.358	
1,400.0	1,387.7	2,281.2	2,246.0	3.8	6.7	-110.86	1,293.6	-4,919.1	5,205.6	5,195.5	10.11	514.895	
1,500.0	1,484.9	2,353.0	2,313.4	4.3	7.1	-111.26	1,269.7	-4,912.8	5,196.7	5,185.7	10.96	474.316	
1,600.0	1,582.2	2,397.4	2,355.0	4.7	7.4	-111.51	1,254.8	-4,909.1	5,188.8	5,177.1	11.63	446.303	
1,700.0	1,679.5	2,447.0	2,401.8	5.2	7.7	-111.79	1,238.6	-4,905.4	5,182.0	5,169.7	12.33	420.295	
1,800.0	1,776.8	2,508.2	2,459.4	5.7	8.0	-112.13	1,218.4	-4,901.1	5,176.2	5,163.1	13.11	394.926	
1,900.0	1,874.1	2,634.0	2,577.0	6.1	8.9	-112.87	1,174.5	-4,892.8	5,170.9	5,156.5	14.33	360.783	
2,000.0	1,971.4	2,697.6	2,636.2	6.6	9.3	-113.24	1,151.6	-4,888.5	5,165.7	5,150.5	15.17	340.596	
2,100.0	2,068.7	2,761.7	2,696.0	7.1	9.7	-113.62	1,128.9	-4,884.5	5,161.6	5,145.6	15.98	322.942	
2,200.0	2,165.9	2,842.3	2,771.5	7.6	10.1	-114.09	1,101.2	-4,879.4	5,158.2	5,141.3	16.88	305.560	
2,300.0	2,263.2	2,918.4	2,842.7	8.0	10.6	-114.54	1,074.6	-4,874.8	5,155.4	5,137.7	17.78	289.904	
2,400.0	2,360.5	3,140.6	3,051.9	8.5	11.9	-115.78	1,002.3	-4,857.4	5,152.0	5,132.5	19.49	264.400	
2,500.0	2,457.8	3,195.0	3,103.4	9.0	12.2	-116.08	985.3	-4,852.5	5,148.2	5,128.0	20.23	254.434	
2,600.0	2,555.1	3,254.6	3,159.8	9.5	12.6	-116.41	966.6	-4,847.5	5,145.5	5,124.5	21.01	244.907	
2,700.0	2,652.4	3,383.0	3,281.6	10.0	13.3	-117.10	927.5	-4,836.4	5,143.2	5,121.0	22.15	232.214	
2,800.0	2,749.7	3,431.5	3,327.6	10.4	13.6	-117.36	912.8	-4,832.0	5,141.1	5,118.3	22.86	224.897	
2,900.0	2,846.9	3,476.0	3,369.8	10.9	13.9	-117.61	899.2	-4,828.6	5,140.4	5,116.9	23.55	218.287	
2,909.3	2,856.0	3,476.0	3,369.8	11.0	13.9	-117.61	899.2	-4,828.6	5,140.4	5,116.8	23.59	217.905	
3,000.0	2,944.2	3,507.7	3,399.9	11.4	14.1	-117.78	889.4	-4,826.5	5,141.0	5,116.9	24.18	212.659	
3,100.0	3,041.5	3,570.0	3,458.9	11.9	14.4	-118.13	869.7	-4,822.9	5,142.9	5,118.0	24.98	205.913	
3,200.0	3,138.8	3,621.4	3,507.5	12.4	14.7	-118.41	853.3	-4,820.4	5,145.8	5,120.1	25.72	200.087	
3,300.0	3,236.1	3,702.7	3,584.4	12.8	15.2	-118.87	827.2	-4,816.2	5,149.2	5,122.6	26.64	193.311	
3,400.0	3,333.4	3,819.7	3,694.6	13.3	16.0	-119.54	788.4	-4,810.5	5,153.3	5,125.5	27.80	185.388	
3,500.0	3,430.6	3,945.0	3,811.5	13.8	16.9	-120.28	743.8	-4,803.2	5,156.8	5,127.8	29.06	177.462	
3,600.0	3,527.9	4,015.4	3,877.0	14.3	17.3	-120.70	718.4	-4,799.1	5,160.8	5,130.9	29.95	172.334	
3,700.0	3,625.2	4,112.1	3,967.4	14.8	17.9	-121.27	684.4	-4,793.4	5,165.5	5,134.6	30.96	166.864	
3,800.0	3,722.5	4,190.3	4,041.3	15.3	18.4	-121.70	659.4	-4,788.6	5,170.6	5,138.8	31.81	162.536	
3,900.0	3,819.8	4,265.7	4,113.3	15.7	18.8	-122.10	637.4	-4,784.1	5,176.3	5,143.7	32.64	158.589	
4,000.0	3,917.1	4,351.5	4,195.3	16.2	19.3	-122.55	612.7	-4,779.1	5,182.6	5,149.1	33.51	154.662	
4,100.0	4,014.4	4,441.6	4,282.1	16.7	19.7	-122.99	589.5	-4,773.7	5,189.3	5,154.9	34.36	151.009	
4,200.0	4,111.6	4,505.0	4,343.7	17.2	20.0	-123.28	574.6	-4,770.0	5,196.5	5,161.4	35.06	148.207	
4,300.0	4,208.9	4,570.3	4,407.3	17.7	20.3	-123.57	560.3	-4,766.6	5,204.5	5,168.7	35.75	145.595	
4,400.0	4,306.2	4,639.1	4,474.7	18.2	20.6	-123.87	546.4	-4,763.4	5,213.3	5,176.9	36.43	143.115	
4,500.0	4,403.5	4,692.0	4,526.6	18.7	20.8	-124.08	536.8	-4,761.1	5,222.8	5,185.8	37.04	141.001	
4,600.0	4,500.8	4,765.4	4,598.9	19.1	21.0	-124.37	524.8	-4,758.4	5,233.0	5,195.3	37.69	138.826	
4,700.0	4,598.1	4,823.3	4,656.2	19.6	21.2	-124.58	516.2	-4,756.8	5,244.1	5,205.8	38.29	136.963	
4,800.0	4,695.4	4,884.2	4,716.5	20.1	21.4	-124.80	507.9	-4,755.5	5,256.1	5,217.2	38.88	135.178	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 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: 575-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	
4,900.0	4,792.6	4,968.8	4,800.4	20.6	21.6	-125.09	497.2	-4,754.1	5,268.6	5,229.0	39.52	133.301	
5,000.0	4,889.9	5,089.0	4,920.0	21.1	21.9	-125.47	485.0	-4,752.0	5,281.0	5,240.8	40.21	131.344	
5,100.0	4,987.2	5,161.0	4,991.7	21.6	22.1	-125.67	479.5	-4,750.9	5,293.6	5,252.9	40.76	129.860	
5,200.0	5,084.5	5,254.0	5,084.5	22.1	22.2	-125.93	473.5	-4,749.8	5,306.7	5,265.3	41.34	128.366	
5,300.0	5,181.8	5,335.8	5,166.2	22.5	22.4	-126.14	469.6	-4,749.1	5,320.0	5,278.1	41.88	127.042	
5,400.0	5,279.1	5,405.4	5,235.8	23.0	22.5	-126.30	467.6	-4,748.8	5,333.7	5,291.3	42.38	125.869	
5,500.0	5,376.3	5,484.4	5,314.8	23.5	22.6	-126.47	466.5	-4,749.0	5,348.0	5,305.2	42.87	124.742	
5,600.0	5,473.6	5,572.7	5,403.1	24.0	22.7	-126.66	465.7	-4,749.4	5,362.6	5,319.2	43.37	123.645	
5,700.0	5,570.9	5,654.7	5,485.1	24.5	22.8	-126.83	465.0	-4,749.9	5,377.4	5,333.6	43.86	122.599	
5,800.0	5,668.2	5,734.5	5,564.9	25.0	22.8	-126.99	464.4	-4,750.7	5,392.6	5,348.3	44.35	121.590	
5,900.0	5,765.5	5,834.4	5,664.8	25.5	22.9	-127.20	463.5	-4,751.9	5,408.1	5,363.3	44.86	120.562	
5,921.9	5,786.8	5,876.2	5,706.6	25.6	23.0	-127.28	463.1	-4,752.3	5,411.5	5,366.5	44.98	120.296	
6,000.0	5,863.0	5,975.7	5,806.1	25.9	23.1	-127.65	462.4	-4,752.7	5,422.4	5,377.0	45.38	119.485	
6,100.0	5,961.2	6,075.8	5,906.1	26.2	23.2	-128.01	461.3	-4,752.9	5,434.3	5,388.5	45.79	118.672	
6,200.0	6,060.0	6,213.1	6,043.5	26.5	23.4	-128.35	460.4	-4,752.7	5,443.8	5,397.6	46.20	117.829	
6,300.0	6,159.3	6,335.3	6,165.6	26.7	23.5	-128.59	459.0	-4,752.1	5,450.8	5,404.3	46.56	117.059	
6,400.0	6,259.0	6,450.0	6,280.3	26.9	23.7	-128.75	457.9	-4,750.7	5,455.0	5,408.1	46.88	116.348	
6,500.0	6,358.8	6,564.0	6,394.3	27.1	23.8	-128.84	456.6	-4,749.1	5,456.8	5,409.6	47.17	115.683	
6,591.0	6,449.8	6,606.6	6,436.9	27.2	23.9	-96.34	456.1	-4,748.5	5,456.8	5,420.4	36.43	149.788	
6,600.0	6,458.8	6,610.1	6,440.4	27.2	23.9	-96.34	456.0	-4,748.5	5,456.8	5,420.3	36.45	149.712	
6,621.0	6,479.8	6,618.3	6,448.7	27.2	23.9	-96.34	455.9	-4,748.5	5,456.7	5,420.2	36.49	149.526	
6,650.0	6,508.8	6,657.0	6,487.3	27.3	24.0	-6.35	455.6	-4,748.6	5,456.3	5,408.9	47.36	115.212	
6,700.0	6,558.7	6,657.0	6,487.3	27.3	24.0	-6.39	455.6	-4,748.6	5,452.6	5,405.6	47.09	115.803	
6,750.0	6,608.1	6,677.3	6,507.6	27.3	24.0	-6.45	455.4	-4,748.8	5,445.9	5,399.3	46.62	116.807	
6,800.0	6,657.0	6,710.4	6,540.7	27.3	24.0	-6.56	455.1	-4,749.2	5,436.0	5,390.0	45.97	118.258	
6,850.0	6,704.9	6,751.0	6,581.3	27.2	24.1	-6.70	454.8	-4,749.8	5,422.8	5,377.7	45.11	120.200	
6,900.0	6,751.8	6,792.8	6,623.1	27.2	24.1	-6.89	454.6	-4,750.6	5,406.3	5,362.3	44.06	122.695	
6,950.0	6,797.4	6,844.0	6,674.3	27.1	24.2	-7.12	454.7	-4,751.4	5,386.6	5,343.8	42.83	125.757	
7,000.0	6,841.4	6,884.8	6,715.1	27.0	24.2	-7.41	454.9	-4,752.1	5,363.8	5,322.3	41.41	129.514	
7,050.0	6,883.6	6,921.8	6,752.1	26.9	24.3	-7.76	455.1	-4,752.7	5,337.9	5,298.1	39.83	134.019	
7,100.0	6,923.9	6,959.4	6,789.7	26.8	24.3	-8.18	455.3	-4,753.4	5,309.2	5,271.1	38.10	139.343	
7,150.0	6,962.0	6,996.8	6,827.1	26.7	24.3	-8.71	455.3	-4,754.1	5,277.8	5,241.6	36.25	145.593	
7,200.0	6,997.8	7,032.5	6,862.8	26.5	24.4	-9.35	455.1	-4,754.8	5,243.8	5,209.5	34.30	152.890	
7,250.0	7,031.0	7,085.6	6,915.8	26.4	24.4	-10.19	454.8	-4,755.6	5,207.3	5,175.0	32.30	161.221	
7,300.0	7,061.6	7,125.0	6,955.2	26.3	24.5	-11.21	454.7	-4,756.2	5,168.4	5,138.1	30.26	170.777	
7,350.0	7,089.3	7,151.8	6,982.1	26.1	24.5	-12.46	454.7	-4,756.5	5,127.4	5,099.2	28.25	181.484	
7,400.0	7,114.0	7,171.8	7,002.0	26.0	24.5	-14.07	454.6	-4,756.8	5,084.6	5,058.3	26.36	192.900	
7,450.0	7,135.7	7,189.5	7,019.7	25.9	24.6	-16.19	454.6	-4,757.1	5,040.3	5,015.5	24.72	203.888	
7,500.0	7,154.2	7,204.7	7,034.9	25.7	24.6	-19.08	454.6	-4,757.3	4,994.4	4,970.9	23.55	212.040	
7,550.0	7,169.4	7,218.0	7,048.2	25.6	24.6	-23.23	454.7	-4,757.5	4,947.4	4,924.2	23.22	213.051	
7,600.0	7,181.2	7,236.6	7,066.8	25.5	24.6	-29.69	454.7	-4,757.8	4,899.4	4,875.0	24.37	201.035	
7,650.0	7,189.6	7,250.9	7,081.1	25.4	24.6	-40.26	454.7	-4,758.1	4,850.7	4,822.8	27.84	174.232	
7,700.0	7,194.5	7,259.7	7,089.9	25.3	24.6	-58.34	454.7	-4,758.2	4,801.4	4,767.3	34.06	140.978	
7,748.9	7,196.0	7,263.0	7,093.2	25.2	24.6	-85.66	454.7	-4,758.2	4,752.9	4,713.4	39.44	120.507	
7,800.0	7,195.8	7,263.7	7,094.0	25.1	24.6	-85.73	454.7	-4,758.2	4,702.2	4,662.1	40.18	117.041	
7,900.0	7,195.4	7,265.2	7,095.4	25.5	24.7	-85.86	454.7	-4,758.3	4,603.1	4,561.3	41.79	110.147	
8,000.0	7,195.0	7,266.6	7,096.8	27.5	24.7	-86.00	454.7	-4,758.3	4,504.0	4,460.4	43.60	103.300	
8,100.0	7,194.6	7,268.0	7,098.2	29.5	24.7	-86.12	454.7	-4,758.3	4,404.9	4,359.3	45.57	96.660	
8,200.0	7,194.1	7,269.3	7,099.5	31.7	24.7	-86.25	454.7	-4,758.3	4,305.9	4,258.2	47.67	90.325	
8,300.0	7,193.7	7,270.6	7,100.8	33.9	24.7	-86.37	454.7	-4,758.3	4,206.9	4,157.0	49.88	84.349	
8,400.0	7,193.3	7,271.9	7,102.1	36.3	24.7	-86.50	454.7	-4,758.4	4,108.0	4,055.8	52.17	78.749	
8,500.0	7,192.9	7,273.1	7,103.4	38.6	24.7	-86.61	454.7	-4,758.4	4,009.1	3,954.6	54.53	73.527	

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 SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 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: 575-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	
8,600.0	7,192.5	7,274.3	7,104.6	41.1	24.7	-86.73	454.7	-4,758.4	3,910.3	3,853.3	56.94	68.670	
8,700.0	7,192.1	7,275.5	7,105.8	43.5	24.7	-86.84	454.7	-4,758.4	3,811.5	3,752.1	59.41	64.157	
8,800.0	7,191.7	7,276.7	7,106.9	46.0	24.7	-86.95	454.7	-4,758.4	3,712.8	3,650.9	61.91	59.966	
8,900.0	7,191.3	7,277.8	7,108.1	48.6	24.7	-87.06	454.7	-4,758.4	3,614.2	3,549.7	64.46	56.073	
9,000.0	7,190.9	7,279.0	7,109.2	51.1	24.7	-87.17	454.6	-4,758.4	3,515.6	3,448.6	67.02	52.453	
9,100.0	7,190.4	7,280.0	7,110.3	53.7	24.7	-87.27	454.6	-4,758.5	3,417.2	3,347.5	69.62	49.085	
9,200.0	7,190.0	7,281.1	7,111.3	56.3	24.7	-87.37	454.6	-4,758.5	3,318.8	3,246.5	72.23	45.946	
9,300.0	7,189.6	7,282.2	7,112.4	58.9	24.7	-87.47	454.6	-4,758.5	3,220.5	3,145.6	74.87	43.017	
9,400.0	7,189.2	7,283.2	7,113.4	61.6	24.7	-87.57	454.6	-4,758.5	3,122.3	3,044.8	77.52	40.280	
9,500.0	7,188.8	7,284.2	7,114.4	64.2	24.7	-87.66	454.6	-4,758.5	3,024.3	2,944.1	80.18	37.720	
9,600.0	7,188.4	7,285.2	7,115.4	66.9	24.7	-87.75	454.6	-4,758.5	2,926.4	2,843.5	82.85	35.320	
9,700.0	7,188.0	7,286.1	7,116.3	69.6	24.7	-87.84	454.6	-4,758.5	2,828.6	2,743.1	85.54	33.068	
9,800.0	7,187.6	7,287.1	7,117.3	72.3	24.7	-87.93	454.6	-4,758.5	2,731.0	2,642.8	88.24	30.951	
9,900.0	7,187.1	7,288.0	7,118.2	74.9	24.7	-88.02	454.6	-4,758.6	2,633.6	2,542.6	90.94	28.959	
10,000.0	7,186.7	7,288.9	7,119.1	77.6	24.7	-88.11	454.6	-4,758.6	2,536.4	2,442.7	93.65	27.083	
10,100.0	7,186.3	7,289.8	7,120.0	80.4	24.7	-88.19	454.6	-4,758.6	2,439.4	2,343.0	96.37	25.312	
10,200.0	7,185.9	7,290.6	7,120.9	83.1	24.7	-88.27	454.6	-4,758.6	2,342.6	2,243.5	99.10	23.639	
10,300.0	7,185.5	7,291.5	7,121.7	85.8	24.7	-88.35	454.6	-4,758.6	2,246.1	2,144.3	101.83	22.058	
10,400.0	7,185.1	7,292.3	7,122.6	88.5	24.7	-88.43	454.6	-4,758.6	2,150.0	2,045.4	104.56	20.562	
10,500.0	7,184.7	7,293.2	7,123.4	91.2	24.7	-88.51	454.6	-4,758.6	2,054.2	1,946.9	107.30	19.144	
10,600.0	7,184.3	7,294.0	7,124.2	94.0	24.7	-88.59	454.6	-4,758.6	1,958.9	1,848.8	110.05	17.800	
10,700.0	7,183.9	7,294.8	7,125.0	96.7	24.7	-88.66	454.6	-4,758.6	1,864.0	1,751.2	112.80	16.525	
10,800.0	7,183.4	7,295.5	7,125.8	99.4	24.7	-88.74	454.6	-4,758.6	1,769.7	1,654.2	115.55	15.316	
10,900.0	7,183.0	7,296.3	7,126.5	102.2	24.7	-88.81	454.6	-4,758.6	1,676.1	1,557.8	118.30	14.167	
11,000.0	7,182.6	7,297.0	7,127.3	104.9	24.7	-88.88	454.6	-4,758.7	1,583.2	1,462.1	121.06	13.078	
11,100.0	7,182.2	7,297.8	7,128.0	107.7	24.7	-88.95	454.6	-4,758.7	1,491.3	1,367.4	123.82	12.043	
11,200.0	7,181.8	7,298.5	7,128.7	110.4	24.7	-89.02	454.6	-4,758.7	1,400.4	1,273.8	126.59	11.063	
11,300.0	7,181.4	7,299.2	7,129.4	113.2	24.7	-89.09	454.6	-4,758.7	1,310.9	1,181.6	129.35	10.135	
11,400.0	7,181.0	7,299.9	7,130.1	116.0	24.7	-89.15	454.6	-4,758.7	1,223.1	1,090.9	132.12	9.257	
11,500.0	7,180.6	7,300.6	7,130.8	118.7	24.7	-89.22	454.6	-4,758.7	1,137.2	1,002.3	134.89	8.431	
11,600.0	7,180.1	7,301.3	7,131.5	121.5	24.7	-89.28	454.6	-4,758.7	1,053.8	916.2	137.66	7.655	
11,700.0	7,179.7	7,301.9	7,132.2	124.3	24.7	-89.34	454.6	-4,758.7	973.6	833.1	140.43	6.933	
11,800.0	7,179.3	7,302.6	7,132.8	127.0	24.7	-89.41	454.6	-4,758.7	897.3	754.1	143.21	6.266	
11,900.0	7,178.9	7,303.2	7,133.5	129.8	24.7	-89.47	454.6	-4,758.7	826.1	680.2	145.98	5.659	
12,000.0	7,178.5	7,303.9	7,134.1	132.6	24.7	-89.53	454.6	-4,758.7	761.5	612.7	148.76	5.119	
12,100.0	7,178.1	7,304.5	7,134.7	135.3	24.7	-89.59	454.6	-4,758.7	705.1	553.6	151.54	4.653	
12,200.0	7,177.7	7,305.1	7,135.3	138.1	24.7	-89.64	454.6	-4,758.7	659.2	504.8	154.32	4.271	
12,300.0	7,177.2	7,305.7	7,135.9	140.9	24.7	-89.70	454.6	-4,758.7	625.9	468.8	157.10	3.984	
12,400.0	7,176.8	7,306.3	7,136.5	143.7	24.7	-89.76	454.6	-4,758.8	607.6	447.7	159.88	3.800	
12,463.4	7,176.6	7,306.6	7,136.9	145.4	24.7	-89.79	454.6	-4,758.8	604.2	442.6	161.65	3.738 CC, ES	
12,500.0	7,176.4	7,306.9	7,137.1	146.4	24.7	-89.81	454.6	-4,758.8	605.4	442.7	162.66	3.722 SF	
12,600.0	7,176.0	7,307.4	7,137.7	149.2	24.7	-89.87	454.6	-4,758.8	619.5	454.1	165.45	3.744	
12,700.0	7,175.6	7,308.0	7,138.2	152.0	24.7	-89.92	454.6	-4,758.8	648.9	480.7	168.23	3.857	
12,800.0	7,175.2	7,308.5	7,138.8	154.8	24.7	-89.97	454.6	-4,758.8	691.7	520.7	171.02	4.044	
12,900.0	7,174.8	7,312.0	7,142.2	157.5	24.7	-90.30	454.5	-4,758.8	745.5	571.7	173.81	4.289	
13,000.0	7,174.4	7,312.0	7,142.2	160.3	24.7	-90.30	454.5	-4,758.8	808.1	631.5	176.59	4.576	
13,100.0	7,173.9	7,312.0	7,142.2	163.1	24.7	-90.30	454.5	-4,758.8	877.7	698.3	179.38	4.893	
13,200.0	7,173.5	7,312.0	7,142.2	165.9	24.7	-90.30	454.5	-4,758.8	952.7	770.6	182.17	5.230	
13,300.0	7,173.1	7,312.0	7,142.2	168.7	24.7	-90.30	454.5	-4,758.8	1,032.0	847.0	184.95	5.580	
13,400.0	7,172.7	7,312.0	7,142.2	171.5	24.7	-90.30	454.5	-4,758.8	1,114.6	926.9	187.74	5.937	
13,500.0	7,172.3	7,312.2	7,142.5	174.3	24.7	-90.32	454.5	-4,758.8	1,199.9	1,009.3	190.53	6.297	
13,600.0	7,171.9	7,312.8	7,143.0	177.0	24.7	-90.37	454.5	-4,758.8	1,287.2	1,093.9	193.32	6.658	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD BROWN 200D - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 575-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	
13,700.0	7,171.5	7,313.4	7,143.6	179.8	24.7	-90.43	454.5	-4,758.8	1,376.3	1,180.2	196.11	7.018	
13,800.0	7,171.0	7,313.9	7,144.2	182.6	24.7	-90.48	454.5	-4,758.8	1,466.8	1,267.9	198.90	7.375	
13,900.0	7,170.6	7,314.5	7,144.7	185.4	24.7	-90.54	454.5	-4,758.8	1,558.5	1,356.8	201.69	7.727	
14,000.0	7,170.2	7,315.1	7,145.3	188.2	24.7	-90.59	454.5	-4,758.8	1,651.1	1,446.6	204.49	8.075	
14,100.0	7,169.8	7,315.6	7,145.9	191.0	24.7	-90.64	454.5	-4,758.8	1,744.6	1,537.3	207.28	8.417	
14,200.0	7,169.4	7,316.2	7,146.4	193.8	24.7	-90.70	454.5	-4,758.8	1,838.7	1,628.6	210.07	8.753	
14,295.0	7,169.0	7,316.7	7,146.9	196.4	24.7	-90.75	454.5	-4,758.9	1,928.6	1,715.9	212.72	9.067	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 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: 704-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	-46.54	1,811.0	-1,911.2	2,633.0				
100.0	100.0	86.4	86.4	0.1	0.1	-46.54	1,811.0	-1,911.2	2,632.9	2,632.7	0.18	N/A	
200.0	200.0	188.6	188.6	0.3	0.2	-46.54	1,810.9	-1,911.1	2,632.8	2,632.3	0.49	5,334.151	
300.0	300.0	290.8	290.8	0.5	0.3	-46.55	1,810.6	-1,911.1	2,632.6	2,631.8	0.81	3,244.734	
400.0	400.0	393.0	393.0	0.8	0.4	-46.55	1,810.3	-1,911.0	2,632.3	2,631.2	1.13	2,331.308	
500.0	500.0	495.2	495.2	1.0	0.5	-46.56	1,809.8	-1,910.9	2,632.0	2,630.5	1.45	1,819.045	
600.0	600.0	597.4	597.4	1.2	0.5	-79.13	1,809.3	-1,910.8	2,631.2	2,629.4	1.76	1,493.333	
700.0	699.8	699.5	699.5	1.4	0.6	-79.28	1,808.7	-1,910.6	2,629.7	2,627.6	2.08	1,264.037	
800.0	799.5	798.0	798.0	1.7	0.8	-79.51	1,808.0	-1,910.5	2,627.5	2,625.0	2.52	1,041.961	
900.0	898.7	893.7	893.7	1.9	1.0	-79.83	1,807.3	-1,910.5	2,624.8	2,621.8	2.98	881.259	
1,000.0	997.5	1,004.5	1,004.5	2.2	1.3	-80.28	1,806.6	-1,910.4	2,621.6	2,618.1	3.50	749.894	
1,100.0	1,095.6	1,213.9	1,213.7	2.6	1.7	-81.39	1,798.3	-1,909.7	2,615.6	2,611.3	4.31	607.511	
1,169.1	1,163.0	1,349.6	1,348.9	2.8	2.1	-82.34	1,786.6	-1,908.3	2,608.7	2,603.8	4.90	532.546	
1,200.0	1,193.1	1,421.7	1,420.5	3.0	2.3	-82.82	1,778.6	-1,907.2	2,605.1	2,599.8	5.21	500.221	
1,300.0	1,290.4	1,682.0	1,677.6	3.4	3.1	-84.69	1,739.0	-1,898.3	2,589.4	2,583.0	6.35	407.650	
1,400.0	1,387.7	1,886.8	1,877.8	3.8	3.9	-86.29	1,697.7	-1,885.7	2,569.3	2,561.9	7.43	345.946	
1,500.0	1,484.9	2,092.8	2,077.3	4.3	4.8	-87.90	1,651.8	-1,863.3	2,544.1	2,535.6	8.52	298.562	
1,600.0	1,582.2	2,182.8	2,164.2	4.7	5.1	-88.61	1,631.5	-1,852.1	2,519.0	2,509.7	9.24	272.630	
1,700.0	1,679.5	2,269.6	2,248.1	5.2	5.5	-89.31	1,611.8	-1,841.4	2,494.3	2,484.3	9.97	250.168	
1,800.0	1,776.8	2,365.1	2,340.3	5.7	6.0	-90.12	1,589.2	-1,830.4	2,470.2	2,459.4	10.77	229.429	
1,900.0	1,874.1	2,475.1	2,446.1	6.1	6.5	-91.09	1,562.1	-1,818.0	2,446.1	2,434.4	11.65	209.890	
2,000.0	1,971.4	2,634.3	2,598.3	6.6	7.4	-92.58	1,519.6	-1,798.4	2,420.5	2,407.7	12.80	189.037	
2,100.0	2,068.7	2,722.6	2,682.2	7.1	7.9	-93.44	1,494.7	-1,787.0	2,394.4	2,380.8	13.66	175.309	
2,200.0	2,165.9	2,791.8	2,748.1	7.6	8.3	-94.13	1,475.4	-1,778.3	2,369.4	2,355.0	14.42	164.325	
2,300.0	2,263.2	2,856.0	2,809.4	8.0	8.6	-94.78	1,457.6	-1,771.0	2,346.0	2,330.8	15.15	154.814	
2,400.0	2,360.5	2,945.7	2,895.0	8.5	9.1	-95.71	1,432.8	-1,761.3	2,323.7	2,307.6	16.03	144.917	
2,500.0	2,457.8	3,043.0	2,987.9	9.0	9.6	-96.74	1,405.8	-1,750.5	2,301.8	2,284.8	16.97	135.653	
2,600.0	2,555.1	3,118.7	3,060.2	9.5	10.0	-97.53	1,385.5	-1,741.8	2,280.7	2,262.9	17.78	128.306	
2,700.0	2,652.4	3,207.8	3,145.8	10.0	10.5	-98.45	1,362.6	-1,731.3	2,260.7	2,242.1	18.64	121.311	
2,800.0	2,749.7	3,280.7	3,215.8	10.4	10.8	-99.20	1,344.3	-1,722.7	2,241.6	2,222.2	19.42	115.399	
2,900.0	2,846.9	3,351.2	3,283.7	10.9	11.2	-99.92	1,327.2	-1,714.8	2,224.0	2,203.8	20.20	110.105	
3,000.0	2,944.2	3,417.0	3,347.3	11.4	11.5	-100.60	1,311.9	-1,707.6	2,207.8	2,186.9	20.95	105.393	
3,100.0	3,041.5	3,494.1	3,422.0	11.9	11.9	-101.38	1,294.6	-1,699.5	2,193.0	2,171.3	21.74	100.870	
3,200.0	3,138.8	3,561.3	3,487.2	12.4	12.2	-102.07	1,280.0	-1,693.2	2,180.0	2,157.5	22.49	96.917	
3,300.0	3,236.1	3,646.0	3,569.8	12.8	12.5	-102.94	1,261.9	-1,685.9	2,168.5	2,145.1	23.32	92.996	
3,400.0	3,333.4	3,803.3	3,722.4	13.3	13.3	-104.58	1,227.4	-1,670.4	2,156.4	2,132.0	24.48	88.084	
3,500.0	3,430.6	3,915.5	3,830.4	13.8	13.9	-105.84	1,199.4	-1,658.1	2,143.0	2,117.5	25.51	84.005	
3,600.0	3,527.9	4,010.5	3,921.4	14.3	14.4	-106.94	1,174.4	-1,647.2	2,129.6	2,103.2	26.46	80.471	
3,700.0	3,625.2	4,071.0	3,979.4	14.8	14.7	-107.65	1,158.7	-1,640.6	2,117.6	2,090.4	27.24	77.753	
3,800.0	3,722.5	4,151.7	4,057.2	15.3	15.1	-108.57	1,139.0	-1,632.0	2,107.3	2,079.2	28.07	75.064	
3,900.0	3,819.8	4,239.0	4,141.6	15.7	15.6	-109.55	1,118.7	-1,623.1	2,098.2	2,069.3	28.94	72.506	
4,000.0	3,917.1	4,348.3	4,247.1	16.2	16.1	-110.80	1,092.4	-1,611.7	2,089.7	2,059.8	29.93	69.821	
4,100.0	4,014.4	4,419.7	4,316.0	16.7	16.5	-111.63	1,075.3	-1,604.2	2,082.0	2,051.2	30.73	67.755	
4,200.0	4,111.6	4,501.7	4,395.4	17.2	16.9	-112.56	1,056.4	-1,596.1	2,075.8	2,044.2	31.55	65.783	
4,300.0	4,208.9	4,574.4	4,465.9	17.7	17.2	-113.38	1,040.3	-1,589.0	2,070.7	2,038.4	32.32	64.068	
4,400.0	4,306.2	4,633.0	4,523.1	18.2	17.5	-114.01	1,028.4	-1,583.8	2,067.7	2,034.6	33.02	62.626	
4,500.0	4,403.5	4,715.9	4,604.3	18.7	17.8	-114.87	1,013.2	-1,577.1	2,066.3	2,032.5	33.78	61.172	
4,549.2	4,451.4	4,752.0	4,639.7	18.9	17.9	-115.24	1,007.1	-1,574.3	2,066.1	2,031.9	34.13	60.542	
4,600.0	4,500.8	4,788.4	4,675.5	19.1	18.1	-115.59	1,001.2	-1,571.7	2,066.3	2,031.8	34.48	59.928	
4,700.0	4,598.1	4,882.7	4,768.6	19.6	18.4	-116.49	987.1	-1,565.0	2,067.6	2,032.4	35.23	58.685	
4,800.0	4,695.4	4,957.2	4,842.2	20.1	18.7	-117.17	977.2	-1,559.6	2,069.4	2,033.5	35.90	57.652	
4,900.0	4,792.6	5,022.2	4,906.7	20.6	18.8	-117.72	970.2	-1,555.7	2,073.2	2,036.7	36.51	56.780	

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 SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD CENTENNIAL 12-21DU - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 704-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,000.0	4,889.9	5,101.0	4,985.1	21.1	19.1	-118.35	962.9	-1,551.7	2,078.4	2,041.2	37.14	55.958	
5,100.0	4,987.2	5,184.7	5,068.5	21.6	19.2	-118.97	956.8	-1,547.9	2,084.6	2,046.8	37.75	55.219	
5,200.0	5,084.5	5,258.0	5,141.6	22.1	19.4	-119.47	953.2	-1,545.1	2,092.0	2,053.6	38.32	54.598	
5,300.0	5,181.8	5,321.5	5,205.1	22.5	19.5	-119.89	950.8	-1,543.4	2,100.9	2,062.0	38.85	54.083	
5,400.0	5,279.1	5,382.0	5,265.5	23.0	19.6	-120.24	950.1	-1,542.9	2,111.8	2,072.4	39.36	53.654	
5,500.0	5,376.3	5,467.1	5,350.7	23.5	19.7	-120.70	950.2	-1,543.2	2,124.1	2,084.2	39.88	53.267	
5,600.0	5,473.6	5,565.2	5,448.8	24.0	19.8	-121.22	950.4	-1,543.6	2,136.7	2,096.3	40.40	52.890	
5,700.0	5,570.9	5,657.7	5,541.2	24.5	19.9	-121.71	950.4	-1,544.1	2,149.6	2,108.6	40.92	52.536	
5,800.0	5,668.2	5,764.2	5,647.7	25.0	20.0	-122.28	950.2	-1,544.6	2,162.5	2,121.1	41.45	52.177	
5,900.0	5,765.5	5,867.3	5,750.9	25.5	20.1	-122.83	949.6	-1,544.7	2,175.3	2,133.3	41.98	51.824	
5,921.9	5,786.8	5,889.3	5,772.9	25.6	20.2	-122.95	949.4	-1,544.7	2,178.1	2,136.0	42.09	51.748	
6,000.0	5,863.0	5,968.0	5,851.5	25.9	20.3	-123.51	948.6	-1,544.5	2,187.5	2,145.0	42.48	51.491	
6,100.0	5,961.2	6,068.4	5,951.9	26.2	20.4	-124.12	947.4	-1,544.3	2,197.8	2,154.9	42.91	51.221	
6,200.0	6,060.0	6,168.7	6,052.2	26.5	20.5	-124.62	946.2	-1,543.9	2,206.3	2,163.0	43.30	50.955	
6,300.0	6,159.3	6,270.1	6,153.6	26.7	20.7	-125.02	944.9	-1,543.5	2,212.7	2,169.0	43.65	50.691	
6,400.0	6,259.0	6,371.3	6,254.8	26.9	20.8	-125.31	943.6	-1,542.9	2,217.0	2,173.1	43.97	50.427	
6,500.0	6,358.8	6,473.8	6,357.3	27.1	21.0	-125.49	942.1	-1,542.3	2,219.3	2,175.1	44.24	50.160	
6,591.0	6,449.8	6,565.9	6,449.3	27.2	21.1	-93.05	940.8	-1,541.6	2,219.6	2,183.5	36.01	61.635	
6,600.0	6,458.8	6,574.9	6,458.4	27.2	21.1	-93.05	940.7	-1,541.5	2,219.5	2,183.5	36.04	61.584	
6,621.0	6,479.8	6,595.9	6,479.4	27.2	21.2	-93.06	940.4	-1,541.3	2,219.4	2,183.2	36.11	61.461	
6,650.0	6,508.8	6,626.3	6,509.7	27.3	21.2	-3.08	939.9	-1,541.1	2,218.6	2,174.0	44.53	49.824	
6,700.0	6,558.7	6,678.6	6,562.0	27.3	21.3	-3.12	939.0	-1,540.6	2,214.4	2,170.1	44.34	49.947	
6,750.0	6,608.1	6,731.8	6,615.3	27.3	21.4	-3.19	938.1	-1,540.1	2,206.7	2,162.8	43.95	50.212	
6,800.0	6,657.0	6,784.8	6,668.2	27.3	21.4	-3.29	937.2	-1,539.4	2,195.5	2,152.2	43.37	50.627	
6,850.0	6,704.9	6,834.8	6,718.2	27.2	21.5	-3.41	936.2	-1,538.8	2,180.9	2,138.3	42.59	51.201	
6,900.0	6,751.8	6,883.7	6,767.1	27.2	21.6	-3.56	935.1	-1,538.0	2,162.9	2,121.3	41.64	51.946	
6,950.0	6,797.4	6,931.9	6,815.2	27.1	21.7	-3.76	933.9	-1,537.2	2,141.7	2,101.2	40.51	52.869	
7,000.0	6,841.4	6,978.7	6,862.0	27.0	21.8	-4.00	932.6	-1,536.4	2,117.3	2,078.1	39.22	53.992	
7,050.0	6,883.6	7,025.6	6,908.9	26.9	21.9	-4.30	931.1	-1,535.4	2,089.8	2,052.1	37.77	55.326	
7,100.0	6,923.9	7,069.5	6,952.8	26.8	22.0	-4.66	929.5	-1,534.4	2,059.5	2,023.3	36.19	56.907	
7,150.0	6,962.0	7,105.5	6,988.7	26.7	22.0	-5.09	928.3	-1,533.6	2,026.4	1,991.9	34.48	58.775	
7,200.0	6,997.8	7,139.1	7,022.3	26.5	22.1	-5.60	927.2	-1,532.8	1,990.8	1,958.1	32.67	60.944	
7,250.0	7,031.0	7,169.6	7,052.8	26.4	22.1	-6.23	926.3	-1,532.2	1,952.9	1,922.1	30.78	63.438	
7,300.0	7,061.6	7,196.4	7,079.6	26.3	22.2	-7.00	925.4	-1,531.6	1,912.9	1,884.0	28.87	66.268	
7,350.0	7,089.3	7,220.7	7,103.9	26.1	22.2	-8.00	924.7	-1,531.2	1,870.9	1,844.0	26.96	69.396	
7,400.0	7,114.0	7,242.4	7,125.6	26.0	22.3	-9.31	923.9	-1,530.8	1,827.2	1,802.1	25.13	72.706	
7,450.0	7,135.7	7,261.4	7,144.5	25.9	22.3	-11.09	923.3	-1,530.4	1,782.0	1,758.5	23.48	75.896	
7,500.0	7,154.2	7,277.5	7,160.6	25.7	22.3	-13.61	922.7	-1,530.2	1,735.4	1,713.3	22.17	78.285	
7,550.0	7,169.4	7,290.7	7,173.8	25.6	22.4	-17.41	922.2	-1,530.0	1,687.8	1,666.3	21.51	78.448	
7,600.0	7,181.2	7,300.9	7,184.0	25.5	22.4	-23.65	921.9	-1,529.8	1,639.2	1,617.0	22.21	73.814	
7,650.0	7,189.6	7,307.9	7,191.0	25.4	22.4	-35.14	921.6	-1,529.7	1,590.1	1,564.3	25.78	61.681	
7,700.0	7,194.5	7,311.8	7,194.9	25.3	22.4	-58.98	921.5	-1,529.7	1,540.5	1,506.2	34.25	44.982	
7,748.9	7,196.0	7,312.6	7,195.7	25.2	22.4	-98.81	921.4	-1,529.7	1,491.7	1,451.8	39.91	37.374	
7,800.0	7,195.8	7,311.7	7,194.8	25.1	22.4	-98.47	921.5	-1,529.7	1,440.9	1,400.2	40.66	35.438	
7,900.0	7,195.4	7,310.1	7,193.2	25.5	22.4	-97.79	921.5	-1,529.7	1,341.4	1,299.1	42.29	31.719	
8,000.0	7,195.0	7,308.4	7,191.5	27.5	22.4	-97.11	921.6	-1,529.7	1,242.0	1,197.9	44.11	28.157	
8,100.0	7,194.6	7,306.7	7,189.8	29.5	22.4	-96.42	921.7	-1,529.8	1,142.7	1,096.6	46.09	24.794	
8,200.0	7,194.1	7,305.0	7,188.1	31.7	22.4	-95.72	921.7	-1,529.8	1,043.5	995.3	48.19	21.653	
8,300.0	7,193.7	7,303.3	7,186.4	33.9	22.4	-95.01	921.8	-1,529.8	944.4	894.0	50.40	18.740	
8,400.0	7,193.3	7,301.6	7,184.7	36.3	22.4	-94.30	921.8	-1,529.8	845.6	792.9	52.69	16.049	
8,500.0	7,192.9	7,299.8	7,182.9	38.6	22.4	-93.57	921.9	-1,529.9	747.1	692.1	55.05	13.572	
8,600.0	7,192.5	7,298.1	7,181.2	41.1	22.4	-92.83	922.0	-1,529.9	649.1	591.6	57.46	11.295	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 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: 704-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	
8,700.0	7,192.1	7,296.3	7,179.4	43.5	22.4	-92.08	922.0	-1,529.9	551.7	491.8	59.92	9.207	
8,800.0	7,191.7	7,294.5	7,177.6	46.0	22.4	-91.33	922.1	-1,529.9	455.5	393.1	62.42	7.298	
8,900.0	7,191.3	7,292.6	7,175.7	48.6	22.4	-90.56	922.2	-1,530.0	361.4	296.4	64.94	5.565	
9,000.0	7,190.9	7,290.8	7,173.9	51.1	22.4	-89.79	922.2	-1,530.0	271.4	204.0	67.48	4.022	
9,100.0	7,190.4	7,288.9	7,172.0	53.7	22.4	-89.01	922.3	-1,530.0	191.7	121.7	70.04	2.737	
9,200.0	7,190.0	7,287.0	7,170.1	56.3	22.3	-88.22	922.4	-1,530.0	140.8	68.2	72.61	1.940	
9,234.7	7,189.9	7,286.4	7,169.5	57.2	22.3	-87.94	922.4	-1,530.1	136.5	63.0	73.50	1.857 CC, ES, SF	
9,300.0	7,189.6	7,285.1	7,168.2	58.9	22.3	-87.42	922.4	-1,530.1	151.3	76.1	75.18	2.013	
9,400.0	7,189.2	7,283.2	7,166.3	61.6	22.3	-86.61	922.5	-1,530.1	214.4	136.6	77.75	2.757	
9,500.0	7,188.8	7,281.3	7,164.4	64.2	22.3	-85.80	922.6	-1,530.1	298.3	218.0	80.32	3.714	
9,600.0	7,188.4	7,279.3	7,162.4	66.9	22.3	-84.97	922.6	-1,530.2	389.9	307.1	82.88	4.705	
9,700.0	7,188.0	7,277.3	7,160.4	69.6	22.3	-84.14	922.7	-1,530.2	484.9	399.4	85.43	5.676	
9,800.0	7,187.6	7,275.3	7,158.4	72.3	22.3	-83.30	922.8	-1,530.2	581.5	493.5	87.96	6.610	
9,900.0	7,187.1	7,273.3	7,156.4	74.9	22.3	-82.46	922.9	-1,530.3	679.1	588.6	90.48	7.505	
10,000.0	7,186.7	7,271.2	7,154.3	77.6	22.3	-81.60	922.9	-1,530.3	777.3	684.3	92.98	8.360	
10,100.0	7,186.3	7,269.1	7,152.3	80.4	22.3	-80.75	923.0	-1,530.3	875.9	780.4	95.45	9.176	
10,200.0	7,185.9	7,267.0	7,150.2	83.1	22.3	-79.88	923.1	-1,530.4	974.7	876.9	97.90	9.957	
10,300.0	7,185.5	7,264.9	7,148.0	85.8	22.3	-79.01	923.2	-1,530.4	1,073.8	973.5	100.31	10.705	
10,400.0	7,185.1	7,262.8	7,145.9	88.5	22.3	-78.13	923.2	-1,530.4	1,173.1	1,070.4	102.70	11.422	
10,500.0	7,184.7	7,260.6	7,143.7	91.2	22.3	-77.25	923.3	-1,530.5	1,272.4	1,167.4	105.05	12.113	
10,600.0	7,184.3	7,258.4	7,141.5	94.0	22.3	-76.37	923.4	-1,530.5	1,371.9	1,264.5	107.36	12.778	
10,700.0	7,183.9	7,256.2	7,139.3	96.7	22.3	-75.47	923.5	-1,530.5	1,471.4	1,361.7	109.64	13.420	
10,800.0	7,183.4	7,253.9	7,137.1	99.4	22.3	-74.58	923.5	-1,530.6	1,571.0	1,459.1	111.87	14.042	
10,900.0	7,183.0	7,251.7	7,134.8	102.2	22.3	-73.68	923.6	-1,530.6	1,670.6	1,556.5	114.06	14.646	
11,000.0	7,182.6	7,249.4	7,132.5	104.9	22.3	-72.78	923.7	-1,530.6	1,770.2	1,654.0	116.21	15.233	
11,100.0	7,182.2	7,247.1	7,130.2	107.7	22.3	-71.88	923.8	-1,530.7	1,869.9	1,751.6	118.31	15.806	
11,200.0	7,181.8	7,244.7	7,127.9	110.4	22.3	-70.97	923.9	-1,530.7	1,969.7	1,849.3	120.35	16.366	
11,300.0	7,181.4	7,242.3	7,125.5	113.2	22.3	-70.07	923.9	-1,530.8	2,069.4	1,947.1	122.35	16.914	
11,400.0	7,181.0	7,239.9	7,123.1	116.0	22.3	-69.16	924.0	-1,530.8	2,169.2	2,044.9	124.29	17.453	
11,500.0	7,180.6	7,237.5	7,120.7	118.7	22.3	-68.25	924.1	-1,530.9	2,269.0	2,142.8	126.18	17.982	
11,600.0	7,180.1	7,235.0	7,118.2	121.5	22.3	-67.34	924.2	-1,530.9	2,368.8	2,240.8	128.01	18.505	
11,700.0	7,179.7	7,232.6	7,115.7	124.3	22.2	-66.43	924.3	-1,530.9	2,468.6	2,338.8	129.78	19.021	
11,800.0	7,179.3	7,230.0	7,113.2	127.0	22.2	-65.52	924.3	-1,531.0	2,568.4	2,436.9	131.49	19.533	
11,900.0	7,178.9	7,227.5	7,110.6	129.8	22.2	-64.61	924.4	-1,531.0	2,668.3	2,535.1	133.15	20.040	
12,000.0	7,178.5	7,224.9	7,108.1	132.6	22.2	-63.71	924.5	-1,531.1	2,768.1	2,633.4	134.74	20.544	
12,100.0	7,178.1	7,222.3	7,105.4	135.3	22.2	-62.80	924.6	-1,531.1	2,868.0	2,731.7	136.27	21.046	
12,200.0	7,177.7	7,219.6	7,102.8	138.1	22.2	-61.90	924.7	-1,531.2	2,967.8	2,830.1	137.74	21.546	
12,300.0	7,177.2	7,217.0	7,100.1	140.9	22.2	-61.00	924.8	-1,531.2	3,067.7	2,928.6	139.15	22.046	
12,400.0	7,176.8	7,214.2	7,097.4	143.7	22.2	-60.10	924.9	-1,531.3	3,167.6	3,027.1	140.49	22.546	
12,500.0	7,176.4	7,211.5	7,094.7	146.4	22.2	-59.21	925.0	-1,531.3	3,267.5	3,125.7	141.77	23.047	
12,600.0	7,176.0	7,208.7	7,091.9	149.2	22.2	-58.32	925.0	-1,531.4	3,367.4	3,224.4	142.99	23.550	
12,700.0	7,175.6	7,205.9	7,089.0	152.0	22.2	-57.44	925.1	-1,531.4	3,467.2	3,323.1	144.14	24.054	
12,800.0	7,175.2	7,203.0	7,086.2	154.8	22.2	-56.56	925.2	-1,531.5	3,567.1	3,421.9	145.23	24.562	
12,900.0	7,174.8	7,200.1	7,083.3	157.5	22.2	-55.68	925.3	-1,531.5	3,667.0	3,520.8	146.26	25.072	
13,000.0	7,174.4	7,197.2	7,080.4	160.3	22.2	-54.81	925.4	-1,531.6	3,766.9	3,619.7	147.23	25.586	
13,100.0	7,173.9	7,194.2	7,077.4	163.1	22.2	-53.95	925.5	-1,531.7	3,866.9	3,718.7	148.13	26.105	
13,200.0	7,173.5	7,191.2	7,074.4	165.9	22.2	-53.09	925.6	-1,531.7	3,966.8	3,817.8	148.97	26.628	
13,300.0	7,173.1	7,188.2	7,071.3	168.7	22.2	-52.24	925.7	-1,531.8	4,066.7	3,916.9	149.75	27.156	
13,400.0	7,172.7	7,185.1	7,068.3	171.5	22.2	-51.40	925.8	-1,531.8	4,166.6	4,016.1	150.48	27.690	
13,500.0	7,172.3	7,181.9	7,065.1	174.3	22.2	-50.57	925.9	-1,531.9	4,266.5	4,115.4	151.14	28.229	
13,600.0	7,171.9	7,178.8	7,061.9	177.0	22.2	-49.74	926.0	-1,532.0	4,366.4	4,214.7	151.75	28.775	
13,700.0	7,171.5	7,175.5	7,058.7	179.8	22.1	-48.92	926.1	-1,532.0	4,466.4	4,314.1	152.30	29.327	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD CENTENNIAL 12-21DU - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 704-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
13,800.0	7,171.0	7,172.3	7,055.5	182.6	22.1	-48.10	926.2	-1,532.1	4,566.3	4,413.5	152.79	29.885	
13,900.0	7,170.6	7,169.0	7,052.2	185.4	22.1	-47.30	926.3	-1,532.2	4,666.2	4,513.0	153.24	30.451	
14,000.0	7,170.2	7,165.6	7,048.8	188.2	22.1	-46.50	926.4	-1,532.3	4,766.1	4,612.5	153.63	31.024	
14,100.0	7,169.8	7,162.2	7,045.4	191.0	22.1	-45.72	926.5	-1,532.3	4,866.1	4,712.1	153.97	31.605	
14,200.0	7,169.4	7,158.8	7,042.0	193.8	22.1	-44.95	926.6	-1,532.4	4,966.0	4,811.7	154.28	32.189	
14,295.0	7,169.0	7,156.0	7,039.2	196.4	22.1	-44.32	926.7	-1,532.5	5,060.9	4,906.1	154.76	32.701	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 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: 703-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	-46.92	1,808.1	-1,933.8	2,647.5				
100.0	100.0	84.0	84.0	0.1	0.1	-46.92	1,808.2	-1,933.7	2,647.4	2,647.2	0.17	N/A	
200.0	200.0	183.4	183.4	0.3	0.2	-46.91	1,808.6	-1,933.4	2,647.4	2,647.0	0.49	5,402.048	
300.0	300.0	282.8	282.8	0.5	0.3	-46.89	1,809.2	-1,932.9	2,647.5	2,646.7	0.81	3,284.911	
400.0	400.0	382.2	382.2	0.8	0.4	-46.87	1,810.1	-1,932.2	2,647.6	2,646.5	1.12	2,360.054	
500.0	500.0	481.6	481.6	1.0	0.4	-46.84	1,811.2	-1,931.2	2,647.7	2,646.2	1.44	1,841.614	
600.0	600.0	581.0	581.0	1.2	0.5	-79.35	1,812.7	-1,930.0	2,647.5	2,645.7	1.75	1,509.964	
700.0	699.8	680.4	680.3	1.4	0.6	-79.43	1,814.3	-1,928.7	2,646.6	2,644.6	2.07	1,278.581	
800.0	799.5	778.4	778.3	1.7	0.8	-79.59	1,816.1	-1,927.3	2,645.2	2,642.8	2.48	1,065.711	
900.0	898.7	870.1	870.0	1.9	1.0	-79.84	1,816.9	-1,926.9	2,643.4	2,640.5	2.92	905.793	
1,000.0	997.5	1,007.9	1,007.8	2.2	1.2	-80.44	1,814.1	-1,929.3	2,640.7	2,637.2	3.48	758.327	
1,100.0	1,095.6	1,200.7	1,199.7	2.6	1.7	-81.69	1,798.9	-1,936.5	2,635.3	2,631.0	4.25	620.353	
1,169.1	1,163.0	1,362.5	1,359.7	2.8	2.1	-83.06	1,775.2	-1,942.9	2,628.1	2,623.1	4.96	529.891	
1,200.0	1,193.1	1,391.4	1,388.1	3.0	2.2	-83.30	1,770.1	-1,944.3	2,624.6	2,619.5	5.18	506.852	
1,300.0	1,290.4	1,629.1	1,619.2	3.4	3.2	-85.57	1,717.0	-1,958.8	2,613.3	2,606.8	6.51	401.168	
1,400.0	1,387.7	1,782.4	1,765.7	3.8	4.0	-87.20	1,672.8	-1,967.0	2,597.4	2,589.7	7.70	337.195	
1,500.0	1,484.9	1,905.9	1,882.9	4.3	4.6	-88.57	1,634.0	-1,972.5	2,580.2	2,571.5	8.78	293.803	
1,600.0	1,582.2	2,039.9	2,009.9	4.7	5.4	-90.07	1,591.4	-1,976.3	2,562.6	2,552.7	9.92	258.228	
1,700.0	1,679.5	2,106.0	2,072.4	5.2	5.7	-90.82	1,570.1	-1,977.8	2,545.5	2,534.7	10.74	237.059	
1,800.0	1,776.8	2,169.5	2,132.6	5.7	6.1	-91.54	1,550.0	-1,979.7	2,530.0	2,518.5	11.52	219.640	
1,900.0	1,874.1	2,235.4	2,195.3	6.1	6.4	-92.28	1,529.8	-1,982.1	2,516.4	2,504.1	12.32	204.199	
2,000.0	1,971.4	2,331.4	2,286.6	6.6	6.9	-93.39	1,500.1	-1,986.2	2,504.2	2,490.9	13.31	188.178	
2,100.0	2,068.7	2,449.8	2,399.0	7.1	7.6	-94.76	1,463.3	-1,989.6	2,491.7	2,477.3	14.43	172.666	
2,200.0	2,165.9	2,551.4	2,495.4	7.6	8.2	-95.94	1,431.3	-1,991.8	2,479.7	2,464.2	15.49	160.130	
2,300.0	2,263.2	2,652.9	2,591.2	8.0	8.8	-97.16	1,397.8	-1,994.2	2,468.0	2,451.5	16.58	148.817	
2,400.0	2,360.5	2,761.0	2,692.8	8.5	9.5	-98.49	1,361.1	-1,996.2	2,456.7	2,439.0	17.74	138.517	
2,500.0	2,457.8	2,834.5	2,762.1	9.0	9.9	-99.38	1,336.5	-1,997.1	2,446.3	2,427.7	18.63	131.342	
2,600.0	2,555.1	2,907.8	2,831.3	9.5	10.4	-100.28	1,312.6	-1,998.3	2,437.5	2,418.0	19.52	124.894	
2,700.0	2,652.4	2,973.4	2,893.1	10.0	10.8	-101.09	1,290.5	-1,999.9	2,430.2	2,409.8	20.37	119.286	
2,800.0	2,749.7	3,042.0	2,957.7	10.4	11.2	-101.96	1,267.5	-2,002.6	2,425.1	2,403.8	21.26	114.069	
2,900.0	2,846.9	3,083.8	2,997.2	10.9	11.4	-102.48	1,253.9	-2,004.7	2,422.1	2,400.1	21.96	110.281	
2,989.8	2,934.3	3,135.0	3,045.8	11.3	11.7	-103.10	1,238.1	-2,007.3	2,421.2	2,398.5	22.67	106.820	
3,000.0	2,944.2	3,143.3	3,053.7	11.4	11.7	-103.20	1,235.6	-2,007.8	2,421.2	2,398.5	22.76	106.374	
3,100.0	3,041.5	3,226.5	3,132.6	11.9	12.2	-104.22	1,209.9	-2,012.7	2,421.9	2,398.2	23.70	102.188	
3,200.0	3,138.8	3,287.6	3,190.5	12.4	12.6	-104.98	1,190.6	-2,016.7	2,424.2	2,399.7	24.53	98.843	
3,300.0	3,236.1	3,403.8	3,300.7	12.8	13.2	-106.41	1,154.5	-2,024.7	2,428.1	2,402.5	25.64	94.694	
3,400.0	3,333.4	3,509.0	3,400.4	13.3	13.9	-107.69	1,121.4	-2,029.8	2,431.0	2,404.3	26.70	91.060	
3,500.0	3,430.6	3,560.2	3,449.0	13.8	14.2	-108.32	1,105.3	-2,032.4	2,435.6	2,408.2	27.44	88.756	
3,600.0	3,527.9	3,603.0	3,489.6	14.3	14.4	-108.84	1,092.3	-2,035.5	2,443.0	2,414.9	28.14	86.824	
3,700.0	3,625.2	3,651.8	3,536.0	14.8	14.7	-109.42	1,077.8	-2,039.8	2,452.9	2,424.0	28.86	85.005	
3,800.0	3,722.5	3,719.0	3,599.8	15.3	15.1	-110.23	1,057.7	-2,046.5	2,464.9	2,435.2	29.67	83.066	
3,900.0	3,819.8	3,848.2	3,721.3	15.7	15.9	-111.84	1,015.8	-2,058.9	2,477.2	2,446.3	30.87	80.240	
4,000.0	3,917.1	3,969.8	3,834.5	16.2	16.7	-113.41	972.4	-2,069.2	2,489.4	2,457.3	32.07	77.631	
4,100.0	4,014.4	4,091.9	3,947.6	16.7	17.6	-114.99	927.4	-2,077.7	2,501.5	2,468.2	33.23	75.288	
4,200.0	4,111.6	4,180.8	4,030.2	17.2	18.2	-116.13	895.0	-2,083.0	2,513.9	2,479.8	34.15	73.618	
4,300.0	4,208.9	4,240.7	4,086.1	17.7	18.5	-116.88	873.8	-2,086.7	2,528.0	2,493.1	34.90	72.444	
4,400.0	4,306.2	4,333.1	4,172.5	18.2	19.1	-118.01	841.7	-2,092.9	2,543.5	2,507.7	35.81	71.026	
4,500.0	4,403.5	4,422.9	4,256.0	18.7	19.8	-119.13	809.0	-2,098.5	2,559.7	2,523.0	36.74	69.670	
4,600.0	4,500.8	4,521.1	4,347.1	19.1	20.5	-120.36	772.7	-2,104.3	2,576.8	2,539.1	37.71	68.325	
4,700.0	4,598.1	4,592.6	4,413.1	19.6	21.0	-121.25	745.7	-2,108.3	2,594.8	2,556.3	38.54	67.336	
4,800.0	4,695.4	4,665.2	4,479.9	20.1	21.5	-122.16	717.6	-2,112.7	2,614.4	2,575.1	39.33	66.466	
4,900.0	4,792.6	4,767.5	4,574.9	20.6	22.2	-123.39	680.0	-2,119.0	2,635.1	2,594.9	40.24	65.489	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD CENTENNIAL 21GDU - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 703-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,000.0	4,889.9	4,871.8	4,671.8	21.1	22.9	-124.63	642.0	-2,124.2	2,655.8	2,614.7	41.12	64.592	
5,100.0	4,987.2	4,950.3	4,745.2	21.6	23.4	-125.52	614.4	-2,128.0	2,677.4	2,635.5	41.86	63.956	
5,200.0	5,084.5	5,057.7	4,845.8	22.1	24.0	-126.72	577.2	-2,133.5	2,700.1	2,657.4	42.68	63.262	
5,300.0	5,181.8	5,231.7	5,013.0	22.5	24.9	-128.39	529.3	-2,139.7	2,721.3	2,677.7	43.58	62.438	
5,400.0	5,279.1	5,373.7	5,152.0	23.0	25.5	-129.50	501.2	-2,142.4	2,740.7	2,696.4	44.27	61.906	
5,500.0	5,376.3	5,479.8	5,256.8	23.5	25.8	-130.24	484.1	-2,144.0	2,759.7	2,714.9	44.84	61.548	
5,600.0	5,473.6	5,567.0	5,343.2	24.0	26.1	-130.80	472.7	-2,145.4	2,778.7	2,733.4	45.35	61.275	
5,700.0	5,570.9	5,660.0	5,435.6	24.5	26.3	-131.34	462.0	-2,147.5	2,798.3	2,752.5	45.84	61.041	
5,800.0	5,668.2	5,801.4	5,576.3	25.0	26.6	-132.13	447.8	-2,150.1	2,817.7	2,771.3	46.36	60.774	
5,900.0	5,765.5	5,922.5	5,697.0	25.5	26.9	-132.75	437.9	-2,150.9	2,835.8	2,788.9	46.84	60.536	
5,921.9	5,786.8	5,947.0	5,721.4	25.6	27.0	-132.87	436.1	-2,151.0	2,839.6	2,792.7	46.95	60.488	
6,000.0	5,863.0	6,027.9	5,802.1	25.9	27.1	-133.43	430.8	-2,151.3	2,852.8	2,805.5	47.27	60.356	
6,100.0	5,961.2	6,158.0	5,932.0	26.2	27.3	-134.13	423.8	-2,151.1	2,866.8	2,819.2	47.63	60.190	
6,200.0	6,060.0	6,275.8	6,049.7	26.5	27.5	-134.64	419.0	-2,150.4	2,877.9	2,829.9	47.96	60.005	
6,300.0	6,159.3	6,384.1	6,157.9	26.7	27.6	-134.99	416.3	-2,149.3	2,885.8	2,837.5	48.26	59.797	
6,400.0	6,259.0	6,472.9	6,246.7	26.9	27.7	-135.23	414.1	-2,148.5	2,891.4	2,842.9	48.52	59.590	
6,500.0	6,358.8	6,566.2	6,339.9	27.1	27.9	-135.39	411.3	-2,147.9	2,895.0	2,846.2	48.77	59.361	
6,591.0	6,449.8	6,654.8	6,428.5	27.2	28.0	-102.98	408.3	-2,147.3	2,896.1	2,855.5	40.65	71.242	
6,600.0	6,458.8	6,663.6	6,437.3	27.2	28.0	-102.99	408.0	-2,147.3	2,896.2	2,855.5	40.68	71.195	
6,621.0	6,479.8	6,684.1	6,457.8	27.2	28.1	-103.00	407.2	-2,147.2	2,896.2	2,855.5	40.75	71.079	
6,650.0	6,508.8	6,711.5	6,485.2	27.3	28.1	-13.03	406.2	-2,147.0	2,895.7	2,846.6	49.07	59.013	
6,700.0	6,558.7	6,758.1	6,531.8	27.3	28.2	-13.15	404.3	-2,146.7	2,892.2	2,843.3	48.88	59.165	
6,750.0	6,608.1	6,814.8	6,588.4	27.3	28.3	-13.37	401.9	-2,146.4	2,885.3	2,836.9	48.47	59.531	
6,800.0	6,657.0	6,881.6	6,655.1	27.3	28.4	-13.69	399.1	-2,145.6	2,874.9	2,827.0	47.82	60.114	
6,850.0	6,704.9	6,927.5	6,701.0	27.2	28.4	-14.08	397.1	-2,144.9	2,861.0	2,814.1	46.92	60.971	
6,900.0	6,751.8	6,971.0	6,744.4	27.2	28.5	-14.56	395.1	-2,144.2	2,843.9	2,798.1	45.80	62.101	
6,950.0	6,797.4	7,015.4	6,788.7	27.1	28.6	-15.17	392.9	-2,143.6	2,823.8	2,779.3	44.46	63.515	
7,000.0	6,841.4	7,056.9	6,830.2	27.0	28.7	-15.90	390.6	-2,142.9	2,800.6	2,757.7	42.92	65.253	
7,050.0	6,883.6	7,093.6	6,866.8	26.9	28.7	-16.77	388.6	-2,142.4	2,774.7	2,733.5	41.20	67.346	
7,100.0	6,923.9	7,128.0	6,901.2	26.8	28.8	-17.80	386.6	-2,142.0	2,746.0	2,706.7	39.33	69.823	
7,150.0	6,962.0	7,161.0	6,934.1	26.7	28.9	-19.05	384.6	-2,141.6	2,714.8	2,677.5	37.34	72.707	
7,200.0	6,997.8	7,197.2	6,970.3	26.5	28.9	-20.59	382.3	-2,141.2	2,681.2	2,645.9	35.29	75.979	
7,250.0	7,031.0	7,230.8	7,003.8	26.4	29.0	-22.46	380.1	-2,140.8	2,645.2	2,611.9	33.25	79.566	
7,300.0	7,061.6	7,262.1	7,035.0	26.3	29.1	-24.75	378.1	-2,140.3	2,607.1	2,575.8	31.32	83.233	
7,350.0	7,089.3	7,291.2	7,064.0	26.1	29.1	-27.56	376.2	-2,139.9	2,567.1	2,537.4	29.68	86.481	
7,400.0	7,114.0	7,317.0	7,089.8	26.0	29.2	-31.04	374.5	-2,139.6	2,525.3	2,496.8	28.55	88.452	
7,450.0	7,135.7	7,339.4	7,112.1	25.9	29.2	-35.39	373.0	-2,139.2	2,482.1	2,453.9	28.19	88.036	
7,500.0	7,154.2	7,358.3	7,131.0	25.7	29.3	-40.84	371.7	-2,138.9	2,437.5	2,408.7	28.86	84.449	
7,550.0	7,169.4	7,373.6	7,146.2	25.6	29.3	-47.69	370.7	-2,138.6	2,391.9	2,361.3	30.66	78.003	
7,600.0	7,181.2	7,385.2	7,157.8	25.5	29.3	-56.18	369.9	-2,138.4	2,345.5	2,312.1	33.42	70.180	
7,650.0	7,189.6	7,393.2	7,165.8	25.4	29.3	-66.40	369.3	-2,138.3	2,298.5	2,261.9	36.58	62.828	
7,700.0	7,194.5	7,397.5	7,170.1	25.3	29.3	-78.02	369.0	-2,138.2	2,251.1	2,211.8	39.28	57.310	
7,748.9	7,196.0	7,398.1	7,170.7	25.2	29.3	-89.90	369.0	-2,138.2	2,204.6	2,163.9	40.68	54.192	
7,800.0	7,195.8	7,397.0	7,169.5	25.1	29.3	-89.80	369.1	-2,138.2	2,156.1	2,114.7	41.41	52.065	
7,900.0	7,195.4	7,394.6	7,167.2	25.5	29.3	-89.61	369.2	-2,138.3	2,061.7	2,018.6	43.02	47.926	
8,000.0	7,195.0	7,392.3	7,164.9	27.5	29.3	-89.42	369.4	-2,138.3	1,967.7	1,922.9	44.82	43.906	
8,100.0	7,194.6	7,390.1	7,162.7	29.5	29.3	-89.23	369.5	-2,138.4	1,874.4	1,827.6	46.77	40.073	
8,200.0	7,194.1	7,387.8	7,160.4	31.7	29.3	-89.04	369.7	-2,138.4	1,781.7	1,732.9	48.86	36.466	
8,300.0	7,193.7	7,385.5	7,158.1	33.9	29.3	-88.86	369.8	-2,138.4	1,690.0	1,638.9	51.05	33.103	
8,400.0	7,193.3	7,383.3	7,155.9	36.3	29.3	-88.67	370.0	-2,138.5	1,599.2	1,545.9	53.33	29.988	
8,500.0	7,192.9	7,381.1	7,153.7	38.6	29.3	-88.49	370.1	-2,138.5	1,509.6	1,453.9	55.67	27.115	
8,600.0	7,192.5	7,378.9	7,151.5	41.1	29.3	-88.30	370.3	-2,138.6	1,421.3	1,363.2	58.08	24.473	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 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: 703-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	
8,700.0	7,192.1	7,376.7	7,149.3	43.5	29.3	-88.12	370.4	-2,138.6	1,334.7	1,274.2	60.53	22.052	
8,800.0	7,191.7	7,374.5	7,147.1	46.0	29.3	-87.94	370.6	-2,138.6	1,250.1	1,187.1	63.02	19.838	
8,900.0	7,191.3	7,372.3	7,144.9	48.6	29.3	-87.76	370.7	-2,138.7	1,168.0	1,102.4	65.54	17.820	
9,000.0	7,190.9	7,370.1	7,142.8	51.1	29.3	-87.58	370.9	-2,138.7	1,088.8	1,020.7	68.09	15.990	
9,100.0	7,190.4	7,368.0	7,140.6	53.7	29.3	-87.40	371.0	-2,138.7	1,013.3	942.6	70.67	14.339	
9,200.0	7,190.0	7,365.9	7,138.5	56.3	29.3	-87.22	371.2	-2,138.8	942.4	869.1	73.26	12.863	
9,300.0	7,189.6	7,363.7	7,136.4	58.9	29.3	-87.05	371.3	-2,138.8	877.1	801.2	75.88	11.560	
9,400.0	7,189.2	7,361.6	7,134.3	61.6	29.3	-86.87	371.5	-2,138.8	818.9	740.4	78.50	10.431	
9,500.0	7,188.8	7,359.5	7,132.2	64.2	29.3	-86.70	371.6	-2,138.9	769.4	688.2	81.15	9.481	
9,600.0	7,188.4	7,357.5	7,130.1	66.9	29.3	-86.52	371.8	-2,138.9	730.2	646.4	83.80	8.714	
9,700.0	7,188.0	7,355.4	7,128.1	69.6	29.3	-86.35	371.9	-2,139.0	703.2	616.7	86.46	8.133	
9,800.0	7,187.6	7,353.3	7,126.0	72.3	29.3	-86.18	372.0	-2,139.0	689.7	600.6	89.13	7.738	
9,843.8	7,187.4	7,352.4	7,125.1	73.4	29.3	-86.10	372.1	-2,139.0	688.3	598.0	90.30	7.622 CC, ES	
9,900.0	7,187.1	7,351.3	7,124.0	74.9	29.2	-86.01	372.2	-2,139.0	690.6	598.8	91.80	7.522	
10,000.0	7,186.7	7,349.2	7,122.0	77.6	29.2	-85.84	372.3	-2,139.1	705.8	611.3	94.49	7.470 SF	
10,100.0	7,186.3	7,347.2	7,119.9	80.4	29.2	-85.67	372.4	-2,139.1	734.4	637.2	97.17	7.558	
10,200.0	7,185.9	7,345.0	7,117.7	83.1	29.2	-85.49	372.6	-2,139.1	775.0	675.1	99.86	7.760	
10,300.0	7,185.5	7,343.3	7,116.0	85.8	29.2	-85.34	372.7	-2,139.2	825.7	723.1	102.56	8.051	
10,400.0	7,185.1	7,341.3	7,114.0	88.5	29.2	-85.18	372.8	-2,139.2	884.9	779.6	105.26	8.406	
10,500.0	7,184.7	7,339.4	7,112.1	91.2	29.2	-85.02	373.0	-2,139.2	950.9	842.9	107.97	8.807	
10,600.0	7,184.3	7,337.4	7,110.2	94.0	29.2	-84.86	373.1	-2,139.2	1,022.4	911.8	110.67	9.238	
10,700.0	7,183.9	7,335.5	7,108.3	96.7	29.2	-84.70	373.2	-2,139.3	1,098.4	985.0	113.38	9.688	
10,800.0	7,183.4	7,333.6	7,106.4	99.4	29.2	-84.54	373.4	-2,139.3	1,178.0	1,061.9	116.09	10.147	
10,900.0	7,183.0	7,331.7	7,104.5	102.2	29.2	-84.38	373.5	-2,139.3	1,260.5	1,141.7	118.80	10.610	
11,000.0	7,182.6	7,329.9	7,102.6	104.9	29.2	-84.23	373.6	-2,139.4	1,345.4	1,223.9	121.51	11.072	
11,100.0	7,182.2	7,328.0	7,100.8	107.7	29.2	-84.07	373.7	-2,139.4	1,432.2	1,308.0	124.22	11.529	
11,200.0	7,181.8	7,326.2	7,098.9	110.4	29.2	-83.92	373.9	-2,139.4	1,520.6	1,393.7	126.94	11.979	
11,300.0	7,181.4	7,324.3	7,097.1	113.2	29.2	-83.77	374.0	-2,139.5	1,610.4	1,480.8	129.65	12.421	
11,400.0	7,181.0	7,322.5	7,095.3	116.0	29.2	-83.61	374.1	-2,139.5	1,701.3	1,569.0	132.36	12.854	
11,500.0	7,180.6	7,320.7	7,093.4	118.7	29.2	-83.46	374.2	-2,139.5	1,793.2	1,658.2	135.08	13.276	
11,600.0	7,180.1	7,318.9	7,091.7	121.5	29.2	-83.31	374.4	-2,139.5	1,885.9	1,748.2	137.79	13.687	
11,700.0	7,179.7	7,317.1	7,089.9	124.3	29.2	-83.17	374.5	-2,139.6	1,979.4	1,838.9	140.50	14.088	
11,800.0	7,179.3	7,315.3	7,088.1	127.0	29.2	-83.02	374.6	-2,139.6	2,073.4	1,930.2	143.22	14.477	
11,900.0	7,178.9	7,313.6	7,086.3	129.8	29.2	-82.87	374.7	-2,139.6	2,168.0	2,022.0	145.93	14.856	
12,000.0	7,178.5	7,311.8	7,084.6	132.6	29.2	-82.73	374.8	-2,139.6	2,263.0	2,114.4	148.64	15.225	
12,100.0	7,178.1	7,310.1	7,082.9	135.3	29.2	-82.58	375.0	-2,139.7	2,358.4	2,207.1	151.35	15.583	
12,200.0	7,177.7	7,308.3	7,081.1	138.1	29.2	-82.44	375.1	-2,139.7	2,454.2	2,300.2	154.06	15.931	
12,300.0	7,177.2	7,306.6	7,079.4	140.9	29.2	-82.30	375.2	-2,139.7	2,550.4	2,393.6	156.77	16.269	
12,400.0	7,176.8	7,304.9	7,077.7	143.7	29.2	-82.15	375.3	-2,139.7	2,646.8	2,487.3	159.47	16.597	
12,500.0	7,176.4	7,303.2	7,076.0	146.4	29.1	-82.01	375.4	-2,139.8	2,743.4	2,581.3	162.18	16.916	
12,600.0	7,176.0	7,301.5	7,074.3	149.2	29.1	-81.87	375.5	-2,139.8	2,840.3	2,675.5	164.88	17.226	
12,700.0	7,175.6	7,299.9	7,072.7	152.0	29.1	-81.74	375.6	-2,139.8	2,937.4	2,769.9	167.59	17.528	
12,800.0	7,175.2	7,298.2	7,071.0	154.8	29.1	-81.60	375.7	-2,139.8	3,034.7	2,864.4	170.29	17.821	
12,900.0	7,174.8	7,296.5	7,069.4	157.5	29.1	-81.46	375.9	-2,139.9	3,132.2	2,959.2	172.99	18.106	
13,000.0	7,174.4	7,294.9	7,067.7	160.3	29.1	-81.33	376.0	-2,139.9	3,229.8	3,054.1	175.69	18.384	
13,100.0	7,173.9	7,293.3	7,066.1	163.1	29.1	-81.19	376.1	-2,139.9	3,327.6	3,149.2	178.38	18.654	
13,200.0	7,173.5	7,291.6	7,064.5	165.9	29.1	-81.06	376.2	-2,139.9	3,425.4	3,244.4	181.08	18.917	
13,300.0	7,173.1	7,290.0	7,062.9	168.7	29.1	-80.92	376.3	-2,140.0	3,523.4	3,339.7	183.77	19.173	
13,400.0	7,172.7	7,288.4	7,061.3	171.5	29.1	-80.79	376.4	-2,140.0	3,621.6	3,435.1	186.47	19.422	
13,500.0	7,172.3	7,286.8	7,059.7	174.3	29.1	-80.66	376.5	-2,140.0	3,719.8	3,530.6	189.16	19.665	
13,600.0	7,171.9	7,285.3	7,058.1	177.0	29.1	-80.53	376.6	-2,140.0	3,818.1	3,626.2	191.84	19.902	
13,700.0	7,171.5	7,283.7	7,056.5	179.8	29.1	-80.40	376.7	-2,140.1	3,916.5	3,721.9	194.53	20.133	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD CENTENNIAL 21GDU - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 703-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	
13,800.0	7,171.0	7,282.1	7,055.0	182.6	29.1	-80.27	376.8	-2,140.1	4,014.9	3,817.7	197.22	20.358	
13,900.0	7,170.6	7,280.6	7,053.4	185.4	29.1	-80.14	376.9	-2,140.1	4,113.5	3,913.6	199.90	20.578	
14,000.0	7,170.2	7,279.0	7,051.9	188.2	29.1	-80.02	377.0	-2,140.1	4,212.1	4,009.5	202.58	20.792	
14,100.0	7,169.8	7,277.5	7,050.4	191.0	29.1	-79.89	377.1	-2,140.1	4,310.7	4,105.5	205.26	21.001	
14,200.0	7,169.4	7,276.0	7,048.8	193.8	29.1	-79.76	377.2	-2,140.2	4,409.5	4,201.5	207.94	21.206	
14,295.0	7,169.0	7,274.5	7,047.4	196.4	29.1	-79.65	377.3	-2,140.2	4,503.3	4,292.8	210.48	21.396	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 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: 155-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	-46.19	1,813.6	-1,890.3	2,619.6				
100.0	100.0	92.5	92.5	0.1	0.0	-46.18	1,813.6	-1,890.1	2,619.4	2,619.3	0.11	N/A	
200.0	200.0	203.0	203.0	0.3	0.1	-46.17	1,813.5	-1,889.4	2,619.0	2,618.5	0.45	5,828.936	
300.0	300.0	617.0	615.6	0.5	1.2	-46.45	1,785.8	-1,878.4	2,612.8	2,611.1	1.73	1,512.842	
400.0	400.0	1,282.9	1,261.9	0.8	4.3	-47.33	1,656.4	-1,797.0	2,596.7	2,592.1	4.58	567.332	
500.0	500.0	1,483.8	1,449.0	1.0	5.8	-47.55	1,600.5	-1,749.7	2,560.0	2,554.1	5.85	437.629	
600.0	600.0	1,604.2	1,559.9	1.2	6.7	-81.10	1,564.3	-1,720.1	2,521.1	2,515.8	5.30	475.796	
700.0	699.8	1,670.0	1,620.6	1.4	7.1	-82.12	1,544.7	-1,704.0	2,482.2	2,476.4	5.76	431.276	
800.0	799.5	1,763.0	1,706.6	1.7	7.7	-83.33	1,516.8	-1,681.9	2,443.2	2,436.9	6.32	386.427	
900.0	898.7	1,846.4	1,783.6	1.9	8.3	-84.62	1,491.4	-1,662.5	2,404.0	2,397.1	6.91	347.669	
1,000.0	997.5	1,918.2	1,850.0	2.2	8.8	-85.92	1,469.6	-1,646.3	2,365.3	2,357.7	7.51	314.987	
1,100.0	1,095.6	2,005.7	1,931.2	2.6	9.4	-87.41	1,443.4	-1,626.8	2,327.0	2,318.8	8.24	282.485	
1,169.1	1,163.0	2,068.9	1,989.8	2.8	9.8	-88.53	1,424.1	-1,612.8	2,300.6	2,291.8	8.81	261.233	
1,200.0	1,193.1	2,093.7	2,012.7	3.0	10.0	-88.76	1,416.6	-1,607.3	2,288.8	2,279.8	9.04	253.199	
1,300.0	1,290.4	2,169.0	2,082.6	3.4	10.5	-89.45	1,394.1	-1,590.5	2,251.2	2,241.4	9.78	230.106	
1,400.0	1,387.7	2,242.1	2,150.7	3.8	11.0	-90.13	1,372.9	-1,574.3	2,214.7	2,204.1	10.53	210.312	
1,500.0	1,484.9	2,325.0	2,227.8	4.3	11.6	-90.93	1,348.4	-1,556.3	2,178.7	2,167.3	11.36	191.860	
1,600.0	1,582.2	2,402.0	2,299.5	4.7	12.1	-91.72	1,325.4	-1,540.2	2,143.5	2,131.3	12.18	175.971	
1,700.0	1,679.5	2,475.9	2,368.5	5.2	12.6	-92.48	1,303.8	-1,525.2	2,109.6	2,096.6	12.99	162.343	
1,800.0	1,776.8	2,606.8	2,490.6	5.7	13.5	-93.88	1,265.2	-1,498.3	2,076.1	2,062.0	14.13	146.938	
1,900.0	1,874.1	2,694.6	2,572.1	6.1	14.1	-94.89	1,237.8	-1,479.7	2,041.8	2,026.7	15.10	135.224	
2,000.0	1,971.4	2,817.1	2,684.8	6.6	15.1	-96.36	1,198.0	-1,453.2	2,006.9	1,990.5	16.31	123.019	
2,100.0	2,068.7	2,886.0	2,748.4	7.1	15.6	-97.21	1,176.0	-1,438.2	1,972.9	1,955.7	17.21	114.659	
2,200.0	2,165.9	2,987.6	2,842.2	7.6	16.3	-98.47	1,144.3	-1,415.7	1,939.9	1,921.6	18.30	105.984	
2,300.0	2,263.2	3,091.7	2,937.9	8.0	17.1	-99.80	1,111.2	-1,391.5	1,906.3	1,886.8	19.46	97.951	
2,400.0	2,360.5	3,167.0	3,007.2	8.5	17.7	-100.78	1,087.9	-1,373.6	1,873.6	1,853.2	20.42	91.737	
2,500.0	2,457.8	3,228.9	3,064.6	9.0	18.1	-101.58	1,069.5	-1,359.2	1,842.5	1,821.3	21.29	86.564	
2,600.0	2,555.1	3,307.6	3,137.6	9.5	18.7	-102.63	1,046.2	-1,341.6	1,813.1	1,790.9	22.27	81.417	
2,700.0	2,652.4	3,394.7	3,218.5	10.0	19.3	-103.82	1,020.5	-1,322.1	1,784.6	1,761.3	23.32	76.519	
2,800.0	2,749.7	3,473.3	3,291.8	10.4	19.8	-104.89	998.2	-1,304.3	1,757.1	1,732.8	24.32	72.263	
2,900.0	2,846.9	3,544.8	3,358.5	10.9	20.3	-105.89	977.8	-1,288.7	1,731.3	1,706.0	25.26	68.527	
3,000.0	2,944.2	3,635.0	3,442.8	11.4	20.9	-107.19	952.1	-1,269.4	1,706.7	1,680.3	26.36	64.752	
3,100.0	3,041.5	3,705.3	3,508.6	11.9	21.4	-108.22	932.2	-1,254.6	1,683.4	1,656.1	27.31	61.632	
3,200.0	3,138.8	3,778.6	3,577.4	12.4	21.9	-109.32	911.7	-1,240.0	1,662.2	1,633.9	28.29	58.750	
3,300.0	3,236.1	3,899.5	3,690.9	12.8	22.7	-111.18	877.6	-1,215.8	1,642.1	1,612.5	29.64	55.407	
3,400.0	3,333.4	3,992.0	3,776.8	13.3	23.4	-112.69	849.5	-1,196.2	1,621.4	1,590.5	30.83	52.590	
3,500.0	3,430.6	4,077.0	3,855.5	13.8	24.0	-114.14	822.9	-1,178.5	1,602.0	1,570.0	31.98	50.093	
3,600.0	3,527.9	4,150.8	3,923.9	14.3	24.5	-115.42	799.8	-1,163.4	1,584.2	1,551.2	33.03	47.959	
3,700.0	3,625.2	4,237.2	4,004.5	14.8	25.1	-116.90	773.7	-1,146.3	1,568.6	1,534.4	34.16	45.914	
3,800.0	3,722.5	4,329.3	4,090.7	15.3	25.7	-118.45	747.7	-1,126.9	1,553.5	1,518.2	35.30	44.006	
3,900.0	3,819.8	4,401.7	4,158.7	15.7	26.2	-119.67	727.6	-1,112.1	1,540.5	1,504.2	36.28	42.456	
4,000.0	3,917.1	4,476.0	4,228.5	16.2	26.7	-120.95	706.7	-1,097.6	1,529.6	1,492.3	37.28	41.028	
4,100.0	4,014.4	4,546.7	4,295.0	16.7	27.1	-122.19	686.6	-1,084.6	1,520.9	1,482.7	38.25	39.763	
4,200.0	4,111.6	4,674.5	4,415.1	17.2	28.0	-124.46	649.7	-1,060.8	1,513.6	1,473.9	39.64	38.179	
4,300.0	4,208.9	4,775.2	4,509.3	17.7	28.7	-126.25	621.3	-1,039.7	1,505.5	1,464.7	40.81	36.892	
4,400.0	4,306.2	4,850.0	4,579.4	18.2	29.2	-127.58	600.4	-1,024.1	1,499.0	1,457.3	41.77	35.890	
4,500.0	4,403.5	4,931.7	4,656.5	18.7	29.7	-129.00	578.6	-1,007.7	1,494.5	1,451.8	42.74	34.969	
4,600.0	4,500.8	5,021.0	4,741.0	19.1	30.2	-130.52	556.0	-990.1	1,491.7	1,448.0	43.73	34.110	
4,700.0	4,598.1	5,097.1	4,813.1	19.6	30.7	-131.82	536.5	-975.3	1,490.6	1,445.9	44.62	33.403	
4,701.5	4,599.5	5,098.2	4,814.2	19.6	30.7	-131.84	536.2	-975.1	1,490.6	1,445.9	44.64	33.393	
4,800.0	4,695.4	5,172.6	4,885.0	20.1	31.2	-133.07	518.3	-961.6	1,491.6	1,446.1	45.47	32.804	
4,900.0	4,792.6	5,245.7	4,955.3	20.6	31.6	-134.21	502.1	-949.3	1,494.7	1,448.5	46.26	32.312	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 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: 155-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,000.0	4,889.9	5,318.0	5,025.3	21.1	31.9	-135.27	487.8	-938.6	1,500.5	1,453.5	47.00	31.925	
5,100.0	4,987.2	5,383.2	5,089.0	21.6	32.2	-136.16	476.3	-930.3	1,508.5	1,460.9	47.66	31.655	
5,200.0	5,084.5	5,461.7	5,166.0	22.1	32.5	-137.16	464.0	-921.6	1,518.5	1,470.2	48.33	31.420	
5,300.0	5,181.8	5,540.9	5,244.1	22.5	32.8	-138.09	453.0	-913.9	1,530.0	1,481.1	48.96	31.248	
5,400.0	5,279.1	5,619.8	5,322.2	23.0	33.0	-138.94	443.6	-907.6	1,543.2	1,493.6	49.56	31.139	
5,500.0	5,376.3	5,704.7	5,406.4	23.5	33.2	-139.78	435.2	-902.0	1,557.6	1,507.5	50.13	31.073	
5,600.0	5,473.6	5,800.6	5,501.8	24.0	33.5	-140.64	427.3	-896.6	1,572.8	1,522.1	50.68	31.033	
5,700.0	5,570.9	5,904.0	5,604.9	24.5	33.7	-141.46	421.3	-891.2	1,588.0	1,536.8	51.21	31.011	
5,800.0	5,668.2	5,993.9	5,694.7	25.0	33.8	-142.11	417.3	-887.1	1,603.5	1,551.8	51.69	31.024	
5,900.0	5,765.5	6,085.6	5,786.2	25.5	34.0	-142.75	413.6	-883.2	1,619.6	1,567.4	52.16	31.052	
5,921.9	5,786.8	6,103.9	5,804.4	25.6	34.0	-142.87	412.9	-882.5	1,623.2	1,570.9	52.26	31.062	
6,000.0	5,863.0	6,171.1	5,871.5	25.9	34.1	-143.45	410.4	-880.3	1,635.6	1,582.9	52.69	31.044	
6,100.0	5,961.2	6,271.2	5,971.6	26.2	34.2	-144.10	408.2	-877.8	1,649.3	1,596.1	53.15	31.028	
6,200.0	6,060.0	6,356.2	6,056.6	26.5	34.3	-144.55	407.2	-876.3	1,660.6	1,607.1	53.54	31.017	
6,300.0	6,159.3	6,452.0	6,152.4	26.7	34.4	-144.94	405.9	-875.2	1,669.8	1,615.9	53.88	30.991	
6,400.0	6,259.0	6,550.5	6,250.9	26.9	34.5	-145.25	404.3	-874.0	1,676.1	1,622.0	54.17	30.944	
6,500.0	6,358.8	6,644.1	6,344.5	27.1	34.6	-145.45	402.5	-873.0	1,680.0	1,625.6	54.40	30.883	
6,591.0	6,449.8	6,733.4	6,433.7	27.2	34.7	-113.04	400.8	-872.2	1,681.1	1,638.0	43.14	38.970	
6,600.0	6,458.8	6,742.4	6,442.7	27.2	34.7	-113.05	400.7	-872.2	1,681.1	1,638.0	43.16	38.949	
6,621.0	6,479.8	6,763.2	6,463.5	27.2	34.8	-113.06	400.4	-872.0	1,681.1	1,637.9	43.22	38.897	
6,650.0	6,508.8	6,792.0	6,492.3	27.3	34.8	-23.10	400.0	-871.9	1,680.6	1,626.0	54.58	30.794	
6,700.0	6,558.7	6,839.6	6,539.9	27.3	34.8	-23.27	399.4	-871.7	1,677.2	1,622.9	54.29	30.893	
6,750.0	6,608.1	6,885.1	6,585.4	27.3	34.9	-23.59	398.8	-871.6	1,670.7	1,616.9	53.79	31.060	
6,800.0	6,657.0	6,930.8	6,631.1	27.3	34.9	-24.06	398.3	-871.7	1,661.2	1,608.1	53.08	31.296	
6,850.0	6,704.9	6,976.5	6,676.8	27.2	35.0	-24.69	397.9	-871.8	1,648.6	1,596.5	52.18	31.598	
6,900.0	6,751.8	7,021.5	6,721.8	27.2	35.0	-25.49	397.6	-872.1	1,633.1	1,582.0	51.10	31.963	
6,950.0	6,797.4	7,065.7	6,766.0	27.1	35.0	-26.49	397.4	-872.5	1,614.8	1,564.9	49.86	32.386	
7,000.0	6,841.4	7,109.7	6,810.0	27.0	35.1	-27.71	397.3	-872.9	1,593.6	1,545.1	48.51	32.854	
7,050.0	6,883.6	7,154.8	6,855.1	26.9	35.1	-29.22	397.1	-873.3	1,569.7	1,522.6	47.07	33.347	
7,100.0	6,923.9	7,197.6	6,897.8	26.8	35.2	-31.03	397.0	-873.6	1,543.2	1,497.6	45.62	33.831	
7,150.0	6,962.0	7,237.0	6,937.3	26.7	35.2	-33.16	396.9	-873.8	1,514.3	1,470.1	44.21	34.256	
7,200.0	6,997.8	7,274.1	6,974.4	26.5	35.2	-35.66	396.9	-874.1	1,483.2	1,440.2	42.94	34.543	
7,250.0	7,031.0	7,312.1	7,012.4	26.4	35.2	-38.70	397.0	-874.3	1,450.0	1,408.1	41.94	34.577	
7,300.0	7,061.6	7,348.0	7,048.3	26.3	35.3	-42.28	397.1	-874.3	1,414.9	1,373.6	41.32	34.239	
7,350.0	7,089.3	7,380.0	7,080.3	26.1	35.3	-46.43	397.2	-874.3	1,378.2	1,337.0	41.19	33.456	
7,400.0	7,114.0	7,405.5	7,105.7	26.0	35.3	-51.03	397.3	-874.2	1,340.1	1,298.6	41.55	32.254	
7,450.0	7,135.7	7,427.6	7,127.9	25.9	35.3	-56.19	397.4	-874.1	1,301.0	1,258.7	42.36	30.713	
7,500.0	7,154.2	7,446.5	7,146.7	25.7	35.4	-61.84	397.5	-874.0	1,261.1	1,217.6	43.50	28.993	
7,550.0	7,169.4	7,461.8	7,162.1	25.6	35.4	-67.84	397.6	-873.9	1,220.7	1,175.9	44.78	27.260	
7,600.0	7,181.2	7,473.8	7,174.0	25.5	35.4	-73.99	397.6	-873.9	1,180.1	1,134.1	46.03	25.636	
7,650.0	7,189.6	7,482.3	7,182.6	25.4	35.4	-80.09	397.6	-873.8	1,139.6	1,092.4	47.14	24.176	
7,700.0	7,194.5	7,487.2	7,187.5	25.3	35.4	-85.85	397.6	-873.8	1,099.4	1,051.3	48.04	22.884	
7,748.9	7,196.0	7,488.3	7,188.6	25.2	35.4	-91.00	397.6	-873.8	1,060.7	1,011.9	48.78	21.747	
7,800.0	7,195.8	7,487.7	7,188.0	25.1	35.4	-90.94	397.6	-873.8	1,021.3	971.8	49.51	20.629	
7,900.0	7,195.4	7,486.5	7,186.8	25.5	35.4	-90.84	397.6	-873.8	947.3	896.2	51.12	18.532	
8,000.0	7,195.0	7,485.3	7,185.6	27.5	35.4	-90.74	397.6	-873.8	878.5	825.5	52.92	16.600	
8,100.0	7,194.6	7,484.2	7,184.4	29.5	35.4	-90.64	397.6	-873.8	816.1	761.2	54.88	14.871	
8,200.0	7,194.1	7,483.0	7,183.3	31.7	35.4	-90.54	397.6	-873.8	761.8	704.8	56.97	13.372	
8,300.0	7,193.7	7,481.9	7,182.2	33.9	35.4	-90.44	397.6	-873.8	717.4	658.2	59.16	12.126	
8,400.0	7,193.3	7,480.8	7,181.1	36.3	35.4	-90.34	397.6	-873.8	684.8	623.4	61.44	11.146	
8,500.0	7,192.9	7,479.7	7,180.0	38.6	35.4	-90.25	397.6	-873.8	665.8	602.0	63.79	10.437	
8,578.4	7,192.6	7,478.9	7,179.1	40.5	35.4	-90.18	397.6	-873.8	661.2	595.5	65.68	10.066 CC	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 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: 155-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	
8,600.0	7,192.5	7,478.6	7,178.9	41.1	35.4	-90.16	397.6	-873.8	661.5	595.3	66.20	9.993	ES
8,700.0	7,192.1	7,477.6	7,177.8	43.5	35.4	-90.07	397.6	-873.8	672.3	603.6	68.66	9.791	SF
8,800.0	7,191.7	7,476.5	7,176.8	46.0	35.4	-89.98	397.6	-873.8	697.3	626.2	71.16	9.800	
8,900.0	7,191.3	7,475.5	7,175.8	48.6	35.4	-89.89	397.6	-873.9	735.2	661.6	73.69	9.978	
9,000.0	7,190.9	7,474.5	7,174.8	51.1	35.4	-89.80	397.6	-873.9	784.1	707.9	76.25	10.284	
9,100.0	7,190.4	7,471.0	7,171.3	53.7	35.4	-89.50	397.6	-873.9	842.1	763.3	78.83	10.683	
9,200.0	7,190.0	7,471.0	7,171.3	56.3	35.4	-89.50	397.6	-873.9	907.5	826.0	81.44	11.143	
9,300.0	7,189.6	7,471.0	7,171.3	58.9	35.4	-89.50	397.6	-873.9	978.7	894.6	84.06	11.642	
9,400.0	7,189.2	7,471.0	7,171.3	61.6	35.4	-89.50	397.6	-873.9	1,054.6	967.9	86.71	12.162	
9,500.0	7,188.8	7,471.0	7,171.3	64.2	35.4	-89.50	397.6	-873.9	1,134.2	1,044.8	89.36	12.692	
9,600.0	7,188.4	7,468.7	7,168.9	66.9	35.4	-89.29	397.6	-873.9	1,216.8	1,124.8	92.03	13.223	
9,700.0	7,188.0	7,467.7	7,168.0	69.6	35.4	-89.21	397.6	-873.9	1,301.9	1,207.2	94.71	13.747	
9,800.0	7,187.6	7,466.7	7,167.0	72.3	35.4	-89.13	397.6	-873.9	1,389.0	1,291.6	97.39	14.262	
9,900.0	7,187.1	7,465.8	7,166.0	74.9	35.4	-89.04	397.6	-873.9	1,477.7	1,377.6	100.09	14.764	
10,000.0	7,186.7	7,464.8	7,165.1	77.6	35.4	-88.96	397.6	-873.9	1,567.8	1,465.0	102.79	15.252	
10,100.0	7,186.3	7,463.9	7,164.1	80.4	35.4	-88.88	397.6	-873.9	1,659.0	1,553.5	105.50	15.724	
10,200.0	7,185.9	7,462.9	7,163.2	83.1	35.4	-88.80	397.6	-873.9	1,751.1	1,642.9	108.22	16.181	
10,300.0	7,185.5	7,462.0	7,162.3	85.8	35.4	-88.72	397.6	-873.9	1,844.1	1,733.2	110.94	16.623	
10,400.0	7,185.1	7,461.1	7,161.3	88.5	35.4	-88.64	397.6	-873.9	1,937.8	1,824.1	113.67	17.048	
10,500.0	7,184.7	7,460.1	7,160.4	91.2	35.4	-88.56	397.6	-873.9	2,032.1	1,915.7	116.40	17.458	
10,600.0	7,184.3	7,459.2	7,159.5	94.0	35.4	-88.48	397.5	-874.0	2,126.9	2,007.7	119.13	17.853	
10,700.0	7,183.9	7,458.3	7,158.6	96.7	35.4	-88.40	397.5	-874.0	2,222.1	2,100.3	121.87	18.233	
10,800.0	7,183.4	7,457.4	7,157.7	99.4	35.4	-88.32	397.5	-874.0	2,317.8	2,193.2	124.61	18.600	
10,900.0	7,183.0	7,456.5	7,156.8	102.2	35.4	-88.24	397.5	-874.0	2,413.8	2,286.4	127.36	18.953	
11,000.0	7,182.6	7,455.6	7,155.9	104.9	35.4	-88.16	397.5	-874.0	2,510.1	2,380.0	130.10	19.293	
11,100.0	7,182.2	7,454.7	7,155.0	107.7	35.4	-88.09	397.5	-874.0	2,606.7	2,473.9	132.85	19.621	
11,200.0	7,181.8	7,453.8	7,154.1	110.4	35.4	-88.01	397.5	-874.0	2,703.6	2,567.9	135.61	19.937	
11,300.0	7,181.4	7,453.0	7,153.2	113.2	35.4	-87.93	397.5	-874.0	2,800.6	2,662.3	138.36	20.242	
11,400.0	7,181.0	7,452.1	7,152.4	116.0	35.4	-87.86	397.5	-874.0	2,897.9	2,756.8	141.11	20.536	
11,500.0	7,180.6	7,451.2	7,151.5	118.7	35.4	-87.78	397.5	-874.0	2,995.3	2,851.5	143.87	20.819	
11,600.0	7,180.1	7,450.4	7,150.6	121.5	35.4	-87.71	397.5	-874.0	3,092.9	2,946.3	146.63	21.093	
11,700.0	7,179.7	7,449.5	7,149.8	124.3	35.4	-87.63	397.5	-874.0	3,190.7	3,041.3	149.39	21.358	
11,800.0	7,179.3	7,448.7	7,148.9	127.0	35.4	-87.56	397.5	-874.0	3,288.6	3,136.4	152.15	21.614	
11,900.0	7,178.9	7,447.8	7,148.1	129.8	35.4	-87.49	397.5	-874.0	3,386.6	3,231.7	154.91	21.861	
12,000.0	7,178.5	7,447.0	7,147.2	132.6	35.4	-87.41	397.5	-874.0	3,484.7	3,327.0	157.68	22.100	
12,100.0	7,178.1	7,446.1	7,146.4	135.3	35.4	-87.34	397.5	-874.0	3,583.0	3,422.5	160.44	22.332	
12,200.0	7,177.7	7,445.3	7,145.6	138.1	35.4	-87.27	397.5	-874.0	3,681.3	3,518.1	163.21	22.556	
12,300.0	7,177.2	7,444.5	7,144.8	140.9	35.4	-87.20	397.5	-874.0	3,779.7	3,613.7	165.97	22.773	
12,400.0	7,176.8	7,443.7	7,143.9	143.7	35.3	-87.13	397.5	-874.0	3,878.2	3,709.4	168.74	22.983	
12,500.0	7,176.4	7,442.8	7,143.1	146.4	35.3	-87.06	397.5	-874.0	3,976.8	3,805.2	171.51	23.187	
12,600.0	7,176.0	7,442.0	7,142.3	149.2	35.3	-86.99	397.5	-874.0	4,075.4	3,901.1	174.27	23.385	
12,700.0	7,175.6	7,441.2	7,141.5	152.0	35.3	-86.92	397.5	-874.0	4,174.1	3,997.0	177.04	23.577	
12,800.0	7,175.2	7,440.4	7,140.7	154.8	35.3	-86.85	397.5	-874.1	4,272.9	4,093.0	179.81	23.763	
12,900.0	7,174.8	7,439.6	7,139.9	157.5	35.3	-86.78	397.5	-874.1	4,371.7	4,189.1	182.58	23.944	
13,000.0	7,174.4	7,438.8	7,139.1	160.3	35.3	-86.71	397.5	-874.1	4,470.5	4,285.2	185.35	24.120	
13,100.0	7,173.9	7,438.0	7,138.3	163.1	35.3	-86.64	397.5	-874.1	4,569.5	4,381.3	188.12	24.290	
13,200.0	7,173.5	7,437.3	7,137.5	165.9	35.3	-86.57	397.5	-874.1	4,668.4	4,477.5	190.89	24.456	
13,300.0	7,173.1	7,436.5	7,136.8	168.7	35.3	-86.51	397.5	-874.1	4,767.4	4,573.8	193.66	24.618	
13,400.0	7,172.7	7,435.7	7,136.0	171.5	35.3	-86.44	397.5	-874.1	4,866.5	4,670.1	196.43	24.775	
13,500.0	7,172.3	7,434.9	7,135.2	174.3	35.3	-86.37	397.5	-874.1	4,965.6	4,766.4	199.20	24.928	
13,600.0	7,171.9	7,434.2	7,134.5	177.0	35.3	-86.31	397.5	-874.1	5,064.7	4,862.7	201.97	25.077	
13,700.0	7,171.5	7,433.4	7,133.7	179.8	35.3	-86.24	397.5	-874.1	5,163.9	4,959.1	204.74	25.222	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD CENTENNIAL 21KDU - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 155-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
13,800.0	7,171.0	7,432.7	7,132.9	182.6	35.3	-86.18	397.5	-874.1	5,263.0	5,055.5	207.51	25.363	
13,900.0	7,170.6	7,431.9	7,132.2	185.4	35.3	-86.11	397.4	-874.1	5,362.3	5,152.0	210.28	25.501	
14,000.0	7,170.2	7,431.2	7,131.4	188.2	35.3	-86.05	397.4	-874.1	5,461.5	5,248.5	213.05	25.635	
14,100.0	7,169.8	7,430.4	7,130.7	191.0	35.3	-85.98	397.4	-874.1	5,560.8	5,345.0	215.82	25.766	
14,200.0	7,169.4	7,429.7	7,130.0	193.8	35.3	-85.92	397.4	-874.1	5,660.1	5,441.5	218.59	25.894	
14,295.0	7,169.0	7,429.0	7,129.3	196.4	35.3	-85.86	397.4	-874.1	5,754.4	5,533.2	221.22	26.012	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 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: 147-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	-45.84	1,815.4	-1,869.3	2,605.8				
100.0	100.0	118.2	118.2	0.1	0.0	-45.83	1,815.2	-1,868.4	2,605.2	2,605.1	0.13	N/A	
200.0	200.0	231.2	231.2	0.3	0.2	-45.81	1,814.7	-1,866.4	2,603.6	2,603.1	0.52	4,977.309	
300.0	300.0	502.5	502.1	0.5	0.9	-45.77	1,806.5	-1,855.4	2,598.6	2,597.3	1.38	1,888.675	
400.0	400.0	657.2	656.1	0.8	1.3	-45.77	1,796.0	-1,845.1	2,589.2	2,587.2	1.98	1,305.500	
500.0	500.0	1,121.1	1,112.5	1.0	3.0	-45.64	1,744.7	-1,784.4	2,573.4	2,569.8	3.53	728.508	
600.0	600.0	1,198.0	1,187.0	1.2	3.3	-78.55	1,735.8	-1,767.4	2,549.1	2,545.4	3.75	679.584	
700.0	699.8	1,452.0	1,430.3	1.4	4.7	-78.83	1,706.4	-1,701.0	2,520.8	2,516.1	4.70	536.618	
800.0	799.5	1,631.0	1,598.8	1.7	5.9	-79.39	1,681.4	-1,646.1	2,486.8	2,481.3	5.50	452.005	
900.0	898.7	1,829.8	1,784.0	1.9	7.3	-80.16	1,651.6	-1,580.2	2,450.8	2,444.4	6.41	382.257	
1,000.0	997.5	1,937.5	1,883.1	2.2	8.2	-81.12	1,632.7	-1,542.5	2,410.6	2,403.6	7.04	342.264	
1,100.0	1,095.6	2,083.0	2,016.1	2.6	9.3	-82.31	1,606.3	-1,489.6	2,368.5	2,360.6	7.84	302.097	
1,169.1	1,163.0	2,134.0	2,062.5	2.8	9.8	-83.10	1,597.0	-1,470.6	2,338.7	2,330.5	8.25	283.458	
1,200.0	1,193.1	2,160.0	2,086.1	3.0	10.0	-83.18	1,592.4	-1,460.9	2,325.5	2,317.0	8.46	274.893	
1,300.0	1,290.4	2,227.0	2,147.3	3.4	10.5	-83.38	1,580.9	-1,436.1	2,283.3	2,274.2	9.09	251.089	
1,400.0	1,387.7	2,306.3	2,219.9	3.8	11.1	-83.62	1,568.0	-1,407.0	2,241.8	2,232.0	9.78	229.145	
1,500.0	1,484.9	2,402.7	2,308.3	4.3	11.8	-83.92	1,552.4	-1,371.6	2,200.5	2,189.9	10.54	208.674	
1,600.0	1,582.2	2,493.4	2,391.3	4.7	12.5	-84.23	1,537.1	-1,338.6	2,159.0	2,147.7	11.30	191.144	
1,700.0	1,679.5	2,595.6	2,484.8	5.2	13.4	-84.59	1,519.8	-1,301.3	2,117.4	2,105.3	12.09	175.124	
1,800.0	1,776.8	2,698.0	2,578.4	5.7	14.2	-84.98	1,501.7	-1,263.6	2,075.2	2,062.4	12.89	160.974	
1,900.0	1,874.1	2,789.0	2,661.3	6.1	15.0	-85.36	1,484.8	-1,230.2	2,032.6	2,018.9	13.65	148.862	
2,000.0	1,971.4	2,861.4	2,727.4	6.6	15.6	-85.68	1,471.5	-1,203.8	1,990.5	1,976.1	14.35	138.701	
2,100.0	2,068.7	2,952.8	2,811.2	7.1	16.3	-86.09	1,455.3	-1,171.1	1,949.2	1,934.1	15.11	129.035	
2,200.0	2,165.9	3,045.7	2,896.2	7.6	17.0	-86.53	1,438.6	-1,137.6	1,907.7	1,891.8	15.87	120.211	
2,300.0	2,263.2	3,146.2	2,988.2	8.0	17.9	-87.04	1,420.0	-1,101.5	1,866.0	1,849.4	16.66	112.037	
2,400.0	2,360.5	3,220.1	3,055.7	8.5	18.5	-87.45	1,406.1	-1,075.1	1,824.5	1,807.1	17.35	105.135	
2,500.0	2,457.8	3,294.9	3,124.6	9.0	19.1	-87.89	1,392.1	-1,049.3	1,784.0	1,765.9	18.05	98.839	
2,600.0	2,555.1	3,373.4	3,196.9	9.5	19.7	-88.33	1,378.6	-1,021.8	1,744.2	1,725.4	18.76	92.987	
2,700.0	2,652.4	3,444.0	3,262.1	10.0	20.2	-88.72	1,367.3	-997.3	1,705.4	1,686.0	19.44	87.704	
2,800.0	2,749.7	3,538.0	3,349.1	10.4	20.9	-89.26	1,352.5	-964.9	1,667.1	1,646.9	20.20	82.524	
2,900.0	2,846.9	3,615.4	3,420.8	10.9	21.5	-89.73	1,340.5	-938.5	1,629.3	1,608.4	20.91	77.925	
3,000.0	2,944.2	3,702.1	3,501.4	11.4	22.1	-90.29	1,326.9	-909.6	1,592.3	1,570.7	21.64	73.596	
3,100.0	3,041.5	3,788.6	3,582.0	11.9	22.7	-90.94	1,312.1	-882.0	1,555.7	1,533.3	22.36	69.587	
3,200.0	3,138.8	3,925.9	3,709.4	12.4	23.7	-91.98	1,288.9	-836.2	1,518.4	1,495.2	23.24	65.349	
3,300.0	3,236.1	4,023.8	3,799.4	12.8	24.5	-92.74	1,271.9	-801.6	1,479.3	1,455.3	24.02	61.593	
3,400.0	3,333.4	4,110.7	3,879.2	13.3	25.2	-93.48	1,256.2	-771.2	1,440.3	1,415.5	24.76	58.165	
3,500.0	3,430.6	4,183.7	3,946.5	13.8	25.8	-94.13	1,243.1	-746.2	1,402.3	1,376.8	25.46	55.073	
3,600.0	3,527.9	4,285.0	4,040.1	14.3	26.6	-95.07	1,225.5	-711.4	1,364.8	1,338.5	26.26	51.982	
3,700.0	3,625.2	4,356.6	4,106.2	14.8	27.1	-95.78	1,212.9	-687.2	1,327.8	1,300.8	26.96	49.246	
3,800.0	3,722.5	4,455.3	4,197.8	15.3	27.9	-96.91	1,194.1	-655.5	1,291.8	1,264.0	27.77	46.522	
3,900.0	3,819.8	4,532.8	4,269.5	15.7	28.4	-97.85	1,178.9	-630.4	1,255.9	1,227.4	28.52	44.041	
4,000.0	3,917.1	4,625.9	4,356.1	16.2	29.1	-98.87	1,164.3	-599.4	1,221.3	1,192.0	29.33	41.646	
4,100.0	4,014.4	4,721.1	4,444.3	16.7	29.9	-99.95	1,149.3	-566.9	1,186.3	1,156.2	30.16	39.335	
4,200.0	4,111.6	4,809.8	4,526.5	17.2	30.5	-101.05	1,134.8	-537.0	1,151.9	1,120.9	30.99	37.176	
4,300.0	4,208.9	4,894.2	4,604.9	17.7	31.1	-102.15	1,121.0	-508.8	1,118.2	1,086.4	31.81	35.152	
4,400.0	4,306.2	4,979.4	4,684.2	18.2	31.8	-103.38	1,106.6	-481.3	1,085.7	1,053.1	32.67	33.237	
4,500.0	4,403.5	5,069.0	4,767.7	18.7	32.4	-104.75	1,091.3	-452.6	1,054.0	1,020.5	33.57	31.394	
4,600.0	4,500.8	5,154.3	4,847.3	19.1	33.0	-106.07	1,077.6	-425.2	1,023.3	988.8	34.48	29.677	
4,700.0	4,598.1	5,222.0	4,910.7	19.6	33.5	-107.18	1,066.8	-404.0	994.2	958.8	35.32	28.151	
4,800.0	4,695.4	5,283.2	4,968.6	20.1	33.9	-108.25	1,057.2	-386.6	968.4	932.3	36.13	26.807	
4,900.0	4,792.6	5,348.3	5,031.0	20.6	34.2	-109.43	1,047.5	-370.6	947.1	910.2	36.97	25.618	
5,000.0	4,889.9	5,428.9	5,108.5	21.1	34.7	-110.94	1,035.9	-352.1	928.4	890.5	37.92	24.483	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 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: 147-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,100.0	4,987.2	5,502.0	5,179.2	21.6	35.0	-112.31	1,026.2	-336.2	912.2	873.3	38.83	23.490	
5,200.0	5,084.5	5,577.5	5,252.7	22.1	35.4	-113.70	1,017.5	-321.2	899.0	859.2	39.75	22.618	
5,300.0	5,181.8	5,648.4	5,322.2	22.5	35.6	-114.98	1,010.4	-308.7	889.2	848.6	40.62	21.892	
5,400.0	5,279.1	5,723.6	5,396.2	23.0	35.9	-116.31	1,004.0	-297.5	882.9	841.4	41.50	21.275	
5,500.0	5,376.3	5,803.4	5,475.1	23.5	36.2	-117.67	998.4	-286.8	879.2	836.8	42.38	20.745	
5,580.8	5,455.0	5,865.9	5,537.1	23.9	36.3	-118.70	994.6	-279.6	878.3	835.2	43.07	20.393	
5,600.0	5,473.6	5,877.0	5,548.1	24.0	36.4	-118.88	994.0	-278.4	878.3	835.1	43.21	20.328	
5,700.0	5,570.9	5,961.4	5,632.0	24.5	36.6	-120.21	990.1	-270.5	880.1	836.1	44.06	19.975	
5,800.0	5,668.2	6,043.5	5,713.8	25.0	36.7	-121.46	987.0	-264.2	884.3	839.4	44.87	19.707	
5,900.0	5,765.5	6,128.4	5,798.5	25.5	36.9	-122.70	984.5	-259.0	890.6	844.9	45.67	19.501	
5,921.9	5,786.8	6,147.2	5,817.3	25.6	36.9	-122.96	984.0	-258.0	892.2	846.4	45.84	19.463	
6,000.0	5,863.0	6,217.4	5,887.4	25.9	37.0	-123.99	982.4	-254.6	898.0	851.5	46.46	19.328	
6,100.0	5,961.2	6,309.6	5,979.5	26.2	37.1	-125.14	980.4	-250.8	904.7	857.5	47.13	19.194	
6,200.0	6,060.0	6,404.1	6,073.9	26.5	37.3	-126.09	978.8	-247.4	910.2	862.5	47.71	19.077	
6,300.0	6,159.3	6,500.1	6,169.8	26.7	37.4	-126.82	977.4	-244.4	914.3	866.1	48.19	18.970	
6,400.0	6,259.0	6,600.4	6,270.1	26.9	37.5	-127.38	976.0	-241.5	916.5	867.9	48.59	18.862	
6,500.0	6,358.8	6,700.3	6,369.9	27.1	37.6	-127.74	974.5	-238.4	916.6	867.7	48.89	18.748	
6,591.0	6,449.8	6,788.8	6,458.3	27.2	37.7	-95.35	973.5	-235.8	914.9	860.4	54.49	16.792	
6,600.0	6,458.8	6,797.5	6,467.1	27.2	37.7	-95.36	973.4	-235.6	914.7	860.2	54.51	16.781	
6,621.0	6,479.8	6,812.0	6,481.6	27.2	37.8	-95.37	973.2	-235.2	914.2	859.6	54.56	16.757	
6,650.0	6,508.8	6,841.5	6,511.1	27.3	37.8	-5.41	973.0	-234.5	912.9	863.9	49.01	18.629	
6,700.0	6,558.7	6,883.6	6,553.2	27.3	37.8	-5.49	972.5	-233.8	908.4	859.8	48.60	18.691	
6,750.0	6,608.1	6,926.8	6,596.4	27.3	37.9	-5.62	972.0	-233.5	900.9	852.9	48.01	18.766	
6,800.0	6,657.0	6,971.0	6,640.5	27.3	37.9	-5.81	971.5	-233.3	890.2	843.0	47.22	18.851	
6,850.0	6,704.9	7,014.7	6,684.3	27.2	38.0	-6.05	970.9	-233.4	876.4	830.1	46.26	18.946	
6,900.0	6,751.8	7,058.0	6,727.5	27.2	38.0	-6.36	970.2	-233.7	859.5	814.4	45.13	19.045	
6,950.0	6,797.4	7,099.9	6,769.5	27.1	38.0	-6.76	969.5	-234.2	839.6	795.7	43.85	19.147	
7,000.0	6,841.4	7,139.5	6,809.0	27.0	38.0	-7.24	968.7	-234.8	816.8	774.3	42.44	19.247	
7,050.0	6,883.6	7,177.7	6,847.2	26.9	38.1	-7.85	967.7	-235.6	791.2	750.3	40.92	19.335	
7,100.0	6,923.9	7,220.1	6,889.6	26.8	38.1	-8.66	966.6	-236.6	762.9	723.5	39.35	19.386	
7,150.0	6,962.0	7,261.9	6,931.3	26.7	38.1	-9.66	965.8	-237.4	731.7	693.9	37.75	19.380	
7,200.0	6,997.8	7,300.2	6,969.7	26.5	38.1	-10.87	965.3	-238.1	697.7	661.6	36.17	19.290	
7,250.0	7,031.0	7,335.3	7,004.7	26.4	38.2	-12.41	965.0	-238.7	661.3	626.6	34.69	19.066	
7,300.0	7,061.6	7,367.5	7,036.9	26.3	38.2	-14.40	964.7	-239.1	622.7	589.3	33.42	18.633	
7,350.0	7,089.3	7,397.0	7,066.4	26.1	38.2	-17.04	964.5	-239.5	582.0	549.4	32.53	17.888	
7,400.0	7,114.0	7,423.3	7,092.7	26.0	38.2	-20.57	964.3	-239.8	539.4	507.1	32.30	16.699	
7,450.0	7,135.7	7,446.2	7,115.7	25.9	38.2	-25.40	964.1	-240.0	495.4	462.2	33.15	14.944	
7,500.0	7,154.2	7,465.7	7,135.2	25.7	38.3	-32.04	964.0	-240.1	450.0	414.4	35.65	12.625	
7,550.0	7,169.4	7,481.6	7,151.0	25.6	38.3	-41.09	963.9	-240.2	403.7	363.5	40.21	10.039	
7,600.0	7,181.2	7,493.9	7,163.3	25.5	38.3	-52.85	963.8	-240.3	356.8	310.3	46.43	7.684	
7,650.0	7,189.6	7,502.7	7,172.1	25.4	38.3	-66.48	963.8	-240.4	309.6	257.1	52.50	5.897	
7,700.0	7,194.5	7,507.9	7,177.3	25.3	38.3	-79.62	963.8	-240.4	262.7	206.2	56.48	4.652	
7,748.9	7,196.0	7,509.6	7,179.0	25.2	38.3	-89.60	963.7	-240.4	217.9	159.7	58.20	3.743	
7,800.0	7,195.8	7,509.6	7,179.1	25.1	38.3	-89.62	963.7	-240.4	173.4	114.4	58.94	2.941	
7,900.0	7,195.4	7,509.7	7,179.1	25.5	38.3	-89.64	963.7	-240.4	105.2	44.6	60.55	1.737	
7,945.0	7,195.2	7,509.7	7,179.1	26.4	38.3	-89.65	963.7	-240.4	95.1	33.7	61.36	1.549 CC, ES, SF	
8,000.0	7,195.0	7,509.7	7,179.1	27.5	38.3	-89.66	963.7	-240.4	109.8	47.5	62.35	1.761	
8,100.0	7,194.6	7,509.7	7,179.2	29.5	38.3	-89.68	963.7	-240.4	181.8	117.5	64.32	2.827	
8,200.0	7,194.1	7,509.8	7,179.2	31.7	38.3	-89.71	963.7	-240.4	272.2	205.8	66.41	4.098	
8,300.0	7,193.7	7,509.8	7,179.2	33.9	38.3	-89.73	963.7	-240.4	367.5	298.9	68.61	5.357	
8,400.0	7,193.3	7,509.9	7,179.3	36.3	38.3	-89.75	963.7	-240.4	464.9	394.0	70.89	6.557	
8,500.0	7,192.9	7,509.9	7,179.3	38.6	38.3	-89.77	963.7	-240.4	563.1	489.9	73.25	7.688	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 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: 147-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	
8,600.0	7,192.5	7,509.9	7,179.3	41.1	38.3	-89.79	963.7	-240.4	661.9	586.2	75.66	8.749	
8,700.0	7,192.1	7,510.0	7,179.4	43.5	38.3	-89.81	963.7	-240.4	761.0	682.9	78.12	9.742	
8,800.0	7,191.7	7,510.0	7,179.4	46.0	38.3	-89.83	963.7	-240.4	860.3	779.7	80.62	10.671	
8,900.0	7,191.3	7,510.0	7,179.5	48.6	38.3	-89.85	963.7	-240.4	959.7	876.6	83.15	11.542	
9,000.0	7,190.9	7,510.1	7,179.5	51.1	38.3	-89.87	963.7	-240.4	1,059.3	973.6	85.71	12.359	
9,100.0	7,190.4	7,510.1	7,179.5	53.7	38.3	-89.89	963.7	-240.4	1,158.9	1,070.6	88.30	13.125	
9,200.0	7,190.0	7,510.1	7,179.6	56.3	38.3	-89.91	963.7	-240.4	1,258.6	1,167.7	90.91	13.844	
9,300.0	7,189.6	7,510.2	7,179.6	58.9	38.3	-89.93	963.7	-240.4	1,358.4	1,264.8	93.54	14.522	
9,400.0	7,189.2	7,510.2	7,179.6	61.6	38.3	-89.95	963.7	-240.4	1,458.1	1,361.9	96.18	15.160	
9,500.0	7,188.8	7,510.2	7,179.7	64.2	38.3	-89.97	963.7	-240.4	1,557.9	1,459.1	98.84	15.762	
9,600.0	7,188.4	7,510.3	7,179.7	66.9	38.3	-89.99	963.7	-240.4	1,657.8	1,556.2	101.51	16.331	
9,700.0	7,188.0	7,510.3	7,179.7	69.6	38.3	-90.01	963.7	-240.4	1,757.6	1,653.4	104.19	16.869	
9,800.0	7,187.6	7,510.3	7,179.7	72.3	38.3	-90.03	963.7	-240.4	1,857.5	1,750.6	106.88	17.378	
9,900.0	7,187.1	7,510.4	7,179.8	74.9	38.3	-90.04	963.7	-240.4	1,957.3	1,847.8	109.58	17.861	
10,000.0	7,186.7	7,510.4	7,179.8	77.6	38.3	-90.06	963.7	-240.4	2,057.2	1,944.9	112.29	18.320	
10,100.0	7,186.3	7,510.4	7,179.8	80.4	38.3	-90.08	963.7	-240.4	2,157.1	2,042.1	115.01	18.757	
10,200.0	7,185.9	7,510.4	7,179.9	83.1	38.3	-90.10	963.7	-240.4	2,257.0	2,139.3	117.73	19.172	
10,300.0	7,185.5	7,510.5	7,179.9	85.8	38.3	-90.11	963.7	-240.4	2,356.9	2,236.5	120.45	19.567	
10,400.0	7,185.1	7,510.5	7,179.9	88.5	38.3	-90.13	963.7	-240.4	2,456.9	2,333.7	123.19	19.944	
10,500.0	7,184.7	7,510.5	7,180.0	91.2	38.3	-90.15	963.7	-240.4	2,556.8	2,430.9	125.92	20.305	
10,600.0	7,184.3	7,510.6	7,180.0	94.0	38.3	-90.16	963.7	-240.4	2,656.7	2,528.1	128.66	20.649	
10,700.0	7,183.9	7,510.6	7,180.0	96.7	38.3	-90.18	963.7	-240.4	2,756.7	2,625.3	131.41	20.978	
10,800.0	7,183.4	7,510.6	7,180.0	99.4	38.3	-90.20	963.7	-240.4	2,856.6	2,722.5	134.16	21.293	
10,900.0	7,183.0	7,510.6	7,180.1	102.2	38.3	-90.21	963.7	-240.4	2,956.6	2,819.7	136.91	21.595	
11,000.0	7,182.6	7,510.7	7,180.1	104.9	38.3	-90.23	963.7	-240.4	3,056.5	2,916.8	139.66	21.885	
11,100.0	7,182.2	7,510.7	7,180.1	107.7	38.3	-90.24	963.7	-240.4	3,156.5	3,014.0	142.42	22.163	
11,200.0	7,181.8	7,510.7	7,180.1	110.4	38.3	-90.26	963.7	-240.4	3,256.4	3,111.2	145.18	22.430	
11,300.0	7,181.4	7,510.8	7,180.2	113.2	38.3	-90.28	963.7	-240.4	3,356.4	3,208.4	147.94	22.687	
11,400.0	7,181.0	7,510.8	7,180.2	116.0	38.3	-90.29	963.7	-240.4	3,456.3	3,305.6	150.71	22.934	
11,500.0	7,180.6	7,510.8	7,180.2	118.7	38.3	-90.31	963.7	-240.4	3,556.3	3,402.8	153.47	23.172	
11,600.0	7,180.1	7,510.8	7,180.3	121.5	38.3	-90.32	963.7	-240.4	3,656.3	3,500.0	156.24	23.402	
11,700.0	7,179.7	7,510.9	7,180.3	124.3	38.3	-90.33	963.7	-240.4	3,756.2	3,597.2	159.01	23.622	
11,800.0	7,179.3	7,510.9	7,180.3	127.0	38.3	-90.35	963.7	-240.4	3,856.2	3,694.4	161.78	23.836	
11,900.0	7,178.9	7,510.9	7,180.3	129.8	38.3	-90.36	963.7	-240.4	3,956.2	3,791.6	164.56	24.041	
12,000.0	7,178.5	7,510.9	7,180.4	132.6	38.3	-90.38	963.7	-240.4	4,056.1	3,888.8	167.33	24.240	
12,100.0	7,178.1	7,511.0	7,180.4	135.3	38.3	-90.39	963.7	-240.4	4,156.1	3,986.0	170.11	24.432	
12,200.0	7,177.7	7,511.0	7,180.4	138.1	38.3	-90.40	963.7	-240.4	4,256.1	4,083.2	172.89	24.618	
12,300.0	7,177.2	7,511.0	7,180.4	140.9	38.3	-90.42	963.7	-240.4	4,356.1	4,180.4	175.66	24.798	
12,400.0	7,176.8	7,511.0	7,180.5	143.7	38.3	-90.43	963.7	-240.4	4,456.0	4,277.6	178.44	24.972	
12,500.0	7,176.4	7,511.1	7,180.5	146.4	38.3	-90.44	963.7	-240.4	4,556.0	4,374.8	181.23	25.140	
12,600.0	7,176.0	7,511.1	7,180.5	149.2	38.3	-90.46	963.7	-240.4	4,656.0	4,472.0	184.01	25.303	
12,700.0	7,175.6	7,511.1	7,180.5	152.0	38.3	-90.47	963.7	-240.4	4,756.0	4,569.2	186.79	25.462	
12,800.0	7,175.2	7,511.1	7,180.5	154.8	38.3	-90.48	963.7	-240.4	4,856.0	4,666.4	189.57	25.615	
12,900.0	7,174.8	7,511.1	7,180.6	157.5	38.3	-90.49	963.7	-240.4	4,955.9	4,763.6	192.36	25.764	
13,000.0	7,174.4	7,511.2	7,180.6	160.3	38.3	-90.51	963.7	-240.4	5,055.9	4,860.8	195.14	25.909	
13,100.0	7,173.9	7,511.2	7,180.6	163.1	38.3	-90.52	963.7	-240.4	5,155.9	4,958.0	197.93	26.049	
13,200.0	7,173.5	7,511.2	7,180.6	165.9	38.3	-90.53	963.7	-240.4	5,255.9	5,055.2	200.72	26.185	
13,300.0	7,173.1	7,511.2	7,180.7	168.7	38.3	-90.54	963.7	-240.4	5,355.9	5,152.4	203.51	26.318	
13,400.0	7,172.7	7,511.3	7,180.7	171.5	38.3	-90.56	963.7	-240.4	5,455.9	5,249.6	206.29	26.447	
13,500.0	7,172.3	7,511.3	7,180.7	174.3	38.3	-90.57	963.7	-240.4	5,555.8	5,346.8	209.08	26.572	
13,600.0	7,171.9	7,511.3	7,180.7	177.0	38.3	-90.58	963.7	-240.4	5,655.8	5,444.0	211.87	26.694	
13,700.0	7,171.5	7,511.3	7,180.7	179.8	38.3	-90.59	963.7	-240.4	5,755.8	5,541.1	214.66	26.813	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD CENTENNIAL 22-21DU - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 147-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
13,800.0	7,171.0	7,511.3	7,180.8	182.6	38.3	-90.60	963.7	-240.4	5,855.8	5,638.3	217.45	26.929	
13,900.0	7,170.6	7,511.4	7,180.8	185.4	38.3	-90.61	963.7	-240.4	5,955.8	5,735.5	220.25	27.042	
14,000.0	7,170.2	7,511.4	7,180.8	188.2	38.3	-90.62	963.7	-240.4	6,055.8	5,832.7	223.04	27.151	
14,100.0	7,169.8	7,511.4	7,180.8	191.0	38.3	-90.63	963.7	-240.4	6,155.8	5,929.9	225.83	27.258	
14,200.0	7,169.4	7,511.4	7,180.8	193.8	38.3	-90.64	963.7	-240.4	6,255.8	6,027.1	228.62	27.363	
14,295.0	7,169.0	7,511.4	7,180.9	196.4	38.3	-90.65	963.7	-240.4	6,350.7	6,119.4	231.28	27.459	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD EEE 21ADU - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 706-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	-45.67	1,938.2	-1,984.0	2,773.6				
100.0	100.0	83.3	83.3	0.1	0.1	-45.67	1,938.2	-1,984.0	2,773.6	2,773.4	0.17	N/A	
200.0	200.0	181.9	181.9	0.3	0.2	-45.66	1,938.4	-1,983.9	2,773.7	2,773.2	0.49	5,694.923	
300.0	300.0	280.5	280.5	0.5	0.3	-45.66	1,938.6	-1,983.8	2,773.8	2,773.0	0.80	3,461.720	
400.0	400.0	379.1	379.1	0.8	0.3	-45.65	1,939.0	-1,983.7	2,773.9	2,772.8	1.12	2,486.726	
500.0	500.0	477.7	477.7	1.0	0.4	-45.64	1,939.5	-1,983.5	2,774.2	2,772.7	1.43	1,940.342	
600.0	600.0	576.3	576.3	1.2	0.5	-78.18	1,940.1	-1,983.3	2,774.1	2,772.3	1.74	1,592.500	
700.0	699.8	674.8	674.8	1.4	0.6	-78.28	1,940.8	-1,983.0	2,773.3	2,771.3	2.06	1,348.473	
800.0	799.5	772.0	772.0	1.7	0.8	-78.46	1,941.6	-1,982.8	2,771.9	2,769.5	2.46	1,125.532	
900.0	898.7	879.6	879.6	1.9	1.0	-78.76	1,942.4	-1,982.5	2,769.9	2,766.9	2.94	943.117	
1,000.0	997.5	1,164.4	1,164.1	2.2	1.6	-79.69	1,939.9	-1,973.2	2,764.3	2,760.5	3.83	721.121	
1,100.0	1,095.6	1,441.3	1,439.1	2.6	2.3	-80.75	1,931.0	-1,942.3	2,749.6	2,744.8	4.83	569.545	
1,169.1	1,163.0	1,744.3	1,736.0	2.8	3.4	-81.92	1,913.0	-1,885.3	2,733.7	2,727.8	5.88	464.572	
1,200.0	1,193.1	1,778.0	1,768.8	3.0	3.6	-82.02	1,910.4	-1,877.7	2,725.8	2,719.7	6.10	446.625	
1,300.0	1,290.4	1,872.2	1,860.1	3.4	4.0	-82.28	1,903.8	-1,855.8	2,700.3	2,693.5	6.78	398.028	
1,400.0	1,387.7	2,018.8	2,001.9	3.8	4.7	-82.62	1,895.6	-1,819.3	2,674.7	2,667.0	7.65	349.742	
1,500.0	1,484.9	2,149.2	2,127.1	4.3	5.4	-82.92	1,887.0	-1,784.2	2,646.7	2,638.2	8.50	311.332	
1,600.0	1,582.2	2,252.9	2,226.6	4.7	5.9	-83.16	1,879.8	-1,755.7	2,618.3	2,609.0	9.28	282.210	
1,700.0	1,679.5	2,380.5	2,348.7	5.2	6.7	-83.45	1,870.8	-1,719.7	2,589.2	2,579.1	10.15	255.040	
1,800.0	1,776.8	2,546.7	2,506.7	5.7	7.7	-83.83	1,857.1	-1,670.0	2,558.2	2,547.0	11.17	228.927	
1,900.0	1,874.1	2,679.7	2,632.3	6.1	8.6	-84.15	1,844.0	-1,628.2	2,524.9	2,512.8	12.09	208.810	
2,000.0	1,971.4	2,764.0	2,711.8	6.6	9.1	-84.37	1,835.3	-1,601.5	2,491.3	2,478.4	12.83	194.127	
2,100.0	2,068.7	2,820.7	2,765.4	7.1	9.4	-84.52	1,829.5	-1,584.2	2,458.6	2,445.1	13.47	182.493	
2,200.0	2,165.9	2,894.0	2,835.2	7.6	9.9	-84.73	1,822.4	-1,562.8	2,427.3	2,413.1	14.16	171.378	
2,300.0	2,263.2	2,992.2	2,928.7	8.0	10.4	-85.03	1,812.8	-1,534.3	2,396.1	2,381.1	14.94	160.434	
2,400.0	2,360.5	3,065.6	2,998.5	8.5	10.8	-85.26	1,805.8	-1,513.0	2,365.2	2,349.6	15.63	151.292	
2,500.0	2,457.8	3,138.0	3,067.8	9.0	11.2	-85.47	1,800.1	-1,492.7	2,335.9	2,319.6	16.32	143.089	
2,600.0	2,555.1	3,219.3	3,145.7	9.5	11.7	-85.72	1,794.2	-1,470.3	2,307.5	2,290.5	17.05	135.331	
2,700.0	2,652.4	3,311.2	3,233.7	10.0	12.2	-86.00	1,787.2	-1,444.8	2,278.8	2,261.0	17.81	127.940	
2,800.0	2,749.7	3,402.4	3,321.1	10.4	12.7	-86.28	1,780.6	-1,419.4	2,250.4	2,231.9	18.57	121.193	
2,900.0	2,846.9	3,499.8	3,414.4	10.9	13.3	-86.58	1,774.0	-1,392.0	2,222.1	2,202.8	19.35	114.818	
3,000.0	2,944.2	3,572.0	3,483.4	11.4	13.7	-86.78	1,769.8	-1,371.5	2,194.3	2,174.2	20.06	109.359	
3,100.0	3,041.5	3,654.5	3,562.6	11.9	14.1	-87.01	1,765.8	-1,348.6	2,167.5	2,146.7	20.80	104.199	
3,200.0	3,138.8	3,789.1	3,692.0	12.4	14.9	-87.51	1,755.7	-1,313.1	2,140.4	2,118.7	21.67	98.789	
3,300.0	3,236.1	3,919.1	3,816.5	12.8	15.6	-88.05	1,743.0	-1,277.9	2,111.4	2,088.9	22.51	93.797	
3,400.0	3,333.4	4,023.2	3,915.8	13.3	16.3	-88.50	1,732.0	-1,248.5	2,081.0	2,057.8	23.28	89.394	
3,500.0	3,430.6	4,092.8	3,982.2	13.8	16.7	-88.81	1,724.9	-1,229.1	2,051.5	2,027.5	23.95	85.669	
3,600.0	3,527.9	4,169.0	4,055.4	14.3	17.1	-89.16	1,717.8	-1,209.1	2,023.5	1,998.9	24.62	82.192	
3,700.0	3,625.2	4,226.0	4,110.4	14.8	17.4	-89.44	1,712.7	-1,194.8	1,996.9	1,971.6	25.24	79.118	
3,800.0	3,722.5	4,317.4	4,198.7	15.3	17.8	-89.88	1,705.0	-1,172.4	1,971.2	1,945.3	25.94	75.977	
3,900.0	3,819.8	4,403.4	4,281.7	15.7	18.3	-90.29	1,698.3	-1,150.9	1,945.6	1,919.0	26.64	73.022	
4,000.0	3,917.1	4,505.1	4,379.9	16.2	18.8	-90.76	1,691.4	-1,125.6	1,920.8	1,893.4	27.39	70.130	
4,100.0	4,014.4	4,639.0	4,508.7	16.7	19.6	-91.38	1,681.6	-1,090.2	1,894.6	1,866.3	28.23	67.116	
4,200.0	4,111.6	4,730.0	4,595.9	17.2	20.1	-91.81	1,674.8	-1,065.2	1,867.6	1,838.6	28.95	64.505	
4,300.0	4,208.9	4,823.0	4,685.2	17.7	20.6	-92.26	1,667.8	-1,040.0	1,840.9	1,811.2	29.67	62.042	
4,400.0	4,306.2	4,917.0	4,775.4	18.2	21.1	-92.72	1,660.9	-1,014.5	1,814.3	1,783.9	30.40	59.690	
4,500.0	4,403.5	4,985.7	4,841.4	18.7	21.5	-93.07	1,656.0	-996.3	1,788.6	1,757.6	31.05	57.608	
4,600.0	4,500.8	5,044.8	4,898.6	19.1	21.8	-93.38	1,652.4	-981.5	1,764.8	1,733.1	31.67	55.725	
4,700.0	4,598.1	5,104.0	4,956.1	19.6	22.1	-93.71	1,649.2	-968.0	1,743.3	1,711.0	32.28	54.000	
4,800.0	4,695.4	5,162.1	5,012.9	20.1	22.3	-94.04	1,646.4	-956.0	1,724.1	1,691.2	32.88	52.429	
4,900.0	4,792.6	5,225.9	5,075.5	20.6	22.6	-94.43	1,643.6	-944.0	1,706.9	1,673.4	33.49	50.969	
5,000.0	4,889.9	5,291.0	5,139.6	21.1	22.8	-94.83	1,641.2	-933.0	1,691.7	1,657.6	34.09	49.626	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD EEE 21ADU - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 706-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
5,100.0	4,987.2	5,360.0	5,207.7	21.6	23.0	-95.27	1,638.9	-922.5	1,678.5	1,643.8	34.69	48.391	
5,200.0	5,084.5	5,433.0	5,280.1	22.1	23.2	-95.77	1,636.6	-912.7	1,667.1	1,631.8	35.28	47.250	
5,300.0	5,181.8	5,509.5	5,355.9	22.5	23.5	-96.30	1,634.5	-903.4	1,657.2	1,621.3	35.88	46.189	
5,400.0	5,279.1	5,573.0	5,419.0	23.0	23.6	-96.74	1,633.2	-896.2	1,648.8	1,612.4	36.45	45.232	
5,500.0	5,376.3	5,644.5	5,490.2	23.5	23.8	-97.24	1,632.2	-889.4	1,642.4	1,605.4	37.03	44.353	
5,600.0	5,473.6	5,706.8	5,552.3	24.0	23.9	-97.68	1,632.0	-884.8	1,638.5	1,600.9	37.59	43.588	
5,696.9	5,567.9	5,760.0	5,605.4	24.5	24.0	-98.05	1,632.4	-881.7	1,637.0	1,598.9	38.12	42.940	
5,700.0	5,570.9	5,760.0	5,605.4	24.5	24.0	-98.05	1,632.4	-881.7	1,637.0	1,598.9	38.14	42.923	
5,800.0	5,668.2	5,836.1	5,681.4	25.0	24.1	-98.60	1,633.2	-879.0	1,637.6	1,598.9	38.70	42.316	
5,900.0	5,765.5	5,919.3	5,764.6	25.5	24.2	-99.22	1,633.8	-877.6	1,640.1	1,600.8	39.26	41.776	
5,921.9	5,786.8	5,939.0	5,784.3	25.6	24.2	-99.37	1,634.0	-877.4	1,640.7	1,601.3	39.38	41.662	
6,000.0	5,863.0	6,013.7	5,859.1	25.9	24.3	-99.96	1,634.3	-876.6	1,643.1	1,603.3	39.76	41.329	
6,100.0	5,961.2	6,107.7	5,953.0	26.2	24.4	-100.60	1,634.6	-875.9	1,645.9	1,605.7	40.16	40.988	
6,200.0	6,060.0	6,204.8	6,050.2	26.5	24.5	-101.15	1,634.7	-875.5	1,648.4	1,607.9	40.53	40.674	
6,300.0	6,159.3	6,300.9	6,146.2	26.7	24.6	-101.58	1,634.7	-875.2	1,650.5	1,609.7	40.87	40.385	
6,400.0	6,259.0	6,396.6	6,241.9	26.9	24.7	-101.88	1,634.8	-875.2	1,652.2	1,611.0	41.18	40.121	
6,500.0	6,358.8	6,499.5	6,344.8	27.1	24.8	-102.06	1,635.0	-875.1	1,653.3	1,611.8	41.47	39.862	
6,591.0	6,449.8	6,586.4	6,431.7	27.2	24.9	-69.59	1,635.4	-875.0	1,653.6	1,611.5	42.06	39.317	
6,600.0	6,458.8	6,594.9	6,440.2	27.2	24.9	-69.59	1,635.5	-875.0	1,653.6	1,611.5	42.08	39.296	
6,621.0	6,479.8	6,615.5	6,460.9	27.2	25.0	-69.59	1,635.6	-875.0	1,653.7	1,611.5	42.14	39.242	
6,650.0	6,508.8	6,644.7	6,490.1	27.3	25.0	20.44	1,635.8	-875.0	1,653.2	1,611.4	41.74	39.609	
6,700.0	6,558.7	6,694.9	6,540.2	27.3	25.0	20.60	1,636.2	-875.0	1,649.7	1,608.2	41.52	39.729	
6,750.0	6,608.1	6,742.7	6,588.0	27.3	25.1	20.88	1,636.5	-875.0	1,643.1	1,601.9	41.17	39.911	
6,800.0	6,657.0	6,790.0	6,635.4	27.3	25.1	21.31	1,636.7	-875.0	1,633.2	1,592.6	40.68	40.145	
6,850.0	6,704.9	6,838.5	6,683.8	27.2	25.2	21.89	1,636.8	-875.2	1,620.3	1,580.2	40.09	40.416	
6,900.0	6,751.8	6,886.4	6,731.8	27.2	25.2	22.63	1,636.7	-875.4	1,604.2	1,564.8	39.41	40.710	
6,950.0	6,797.4	6,938.5	6,783.8	27.1	25.3	23.59	1,636.3	-875.6	1,585.1	1,546.4	38.67	40.985	
7,000.0	6,841.4	6,987.9	6,833.2	27.0	25.3	24.77	1,635.6	-875.7	1,562.9	1,525.0	37.92	41.220	
7,050.0	6,883.6	7,032.9	6,878.2	26.9	25.4	26.17	1,634.7	-875.8	1,537.8	1,500.7	37.17	41.374	
7,100.0	6,923.9	7,076.5	6,921.8	26.8	25.4	27.87	1,633.8	-875.8	1,510.1	1,473.6	36.50	41.368	
7,150.0	6,962.0	7,121.6	6,966.9	26.7	25.5	29.98	1,632.6	-875.7	1,479.8	1,443.8	36.01	41.094	
7,200.0	6,997.8	7,163.8	7,009.1	26.5	25.6	32.51	1,631.3	-875.5	1,447.1	1,411.4	35.75	40.478	
7,250.0	7,031.0	7,209.1	7,054.3	26.4	25.6	35.71	1,629.8	-875.1	1,412.1	1,376.3	35.87	39.363	
7,300.0	7,061.6	7,249.9	7,095.1	26.3	25.7	39.54	1,628.2	-874.4	1,375.1	1,338.7	36.42	37.758	
7,350.0	7,089.3	7,281.8	7,127.0	26.1	25.7	43.95	1,626.9	-873.7	1,336.3	1,298.9	37.37	35.755	
7,400.0	7,114.0	7,308.8	7,154.0	26.0	25.8	49.07	1,625.8	-872.9	1,296.1	1,257.4	38.77	33.429	
7,450.0	7,135.7	7,331.9	7,177.0	25.9	25.8	54.95	1,625.0	-872.2	1,254.9	1,214.3	40.55	30.946	
7,500.0	7,154.2	7,350.9	7,196.0	25.7	25.9	61.52	1,624.3	-871.6	1,212.8	1,170.3	42.54	28.512	
7,550.0	7,169.4	7,366.3	7,211.4	25.6	25.9	68.63	1,623.8	-871.0	1,170.2	1,125.7	44.49	26.305	
7,600.0	7,181.2	7,377.6	7,222.7	25.5	25.9	75.94	1,623.5	-870.5	1,127.4	1,081.3	46.12	24.445	
7,650.0	7,189.6	7,384.8	7,229.9	25.4	25.9	83.11	1,623.3	-870.2	1,084.7	1,037.4	47.25	22.955	
7,700.0	7,194.5	7,388.1	7,233.1	25.3	25.9	89.78	1,623.2	-870.1	1,042.3	994.5	47.84	21.787	
7,748.9	7,196.0	7,387.4	7,232.5	25.2	25.9	95.60	1,623.2	-870.1	1,001.6	953.6	47.99	20.870	
7,800.0	7,195.8	7,384.9	7,229.9	25.1	25.9	95.35	1,623.3	-870.2	959.9	911.2	48.74	19.693	
7,900.0	7,195.4	7,380.0	7,225.0	25.5	25.9	94.85	1,623.4	-870.4	881.2	830.8	50.40	17.485	
8,000.0	7,195.0	7,375.3	7,220.3	27.5	25.9	94.38	1,623.6	-870.6	807.2	754.9	52.24	15.450	
8,100.0	7,194.6	7,370.7	7,215.8	29.5	25.9	93.92	1,623.7	-870.8	739.2	685.0	54.24	13.628	
8,200.0	7,194.1	7,366.3	7,211.4	31.7	25.9	93.47	1,623.8	-871.0	679.3	622.9	56.37	12.049	
8,300.0	7,193.7	7,362.0	7,207.1	33.9	25.9	93.04	1,624.0	-871.1	629.5	570.9	58.60	10.742	
8,400.0	7,193.3	7,357.9	7,202.9	36.3	25.9	92.62	1,624.1	-871.3	592.6	531.7	60.92	9.727	
8,500.0	7,192.9	7,353.8	7,198.9	38.6	25.9	92.21	1,624.3	-871.4	570.9	507.6	63.30	9.020	
8,576.1	7,192.6	7,350.0	7,195.1	40.5	25.9	91.82	1,624.4	-871.6	565.9	500.7	65.16	8.684 CC	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD EEE 21ADU - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 706-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	
8,600.0	7,192.5	7,350.0	7,195.1	41.1	25.9	91.82	1,624.4	-871.6	566.4	500.6	65.74	8.616	ES
8,700.0	7,192.1	7,346.2	7,191.3	43.5	25.8	91.44	1,624.5	-871.7	579.3	511.0	68.22	8.491	SF
8,800.0	7,191.7	7,342.6	7,187.7	46.0	25.8	91.07	1,624.6	-871.8	608.5	537.8	70.74	8.602	
8,900.0	7,191.3	7,339.1	7,184.2	48.6	25.8	90.72	1,624.7	-872.0	651.9	578.6	73.29	8.895	
9,000.0	7,190.9	7,335.7	7,180.8	51.1	25.8	90.37	1,624.9	-872.1	706.9	631.0	75.87	9.317	
9,100.0	7,190.4	7,332.3	7,177.4	53.7	25.8	90.03	1,625.0	-872.2	770.9	692.5	78.46	9.825	
9,200.0	7,190.0	7,329.1	7,174.2	56.3	25.8	89.71	1,625.1	-872.3	842.0	760.9	81.08	10.384	
9,300.0	7,189.6	7,325.9	7,171.1	58.9	25.8	89.39	1,625.2	-872.4	918.5	834.7	83.71	10.971	
9,400.0	7,189.2	7,322.9	7,168.0	61.6	25.8	89.08	1,625.3	-872.5	999.1	912.7	86.36	11.569	
9,500.0	7,188.8	7,319.9	7,165.0	64.2	25.8	88.78	1,625.4	-872.6	1,082.9	993.9	89.02	12.165	
9,600.0	7,188.4	7,317.0	7,162.1	66.9	25.8	88.48	1,625.5	-872.7	1,169.3	1,077.6	91.68	12.753	
9,700.0	7,188.0	7,314.1	7,159.2	69.6	25.8	88.19	1,625.6	-872.8	1,257.7	1,163.3	94.36	13.329	
9,800.0	7,187.6	7,311.3	7,156.5	72.3	25.8	87.91	1,625.7	-872.9	1,347.7	1,250.6	97.04	13.888	
9,900.0	7,187.1	7,308.6	7,153.7	74.9	25.8	87.64	1,625.8	-872.9	1,439.0	1,339.3	99.73	14.429	
10,000.0	7,186.7	7,306.0	7,151.1	77.6	25.8	87.38	1,625.9	-873.0	1,531.4	1,429.0	102.42	14.952	
10,100.0	7,186.3	7,303.4	7,148.5	80.4	25.8	87.12	1,626.0	-873.1	1,624.7	1,519.6	105.12	15.456	
10,200.0	7,185.9	7,300.9	7,146.0	83.1	25.8	86.86	1,626.1	-873.2	1,718.7	1,610.9	107.82	15.941	
10,300.0	7,185.5	7,298.4	7,143.5	85.8	25.8	86.62	1,626.2	-873.2	1,813.4	1,702.9	110.52	16.408	
10,400.0	7,185.1	7,296.0	7,141.1	88.5	25.8	86.37	1,626.3	-873.3	1,908.6	1,795.4	113.23	16.856	
10,500.0	7,184.7	7,293.6	7,138.8	91.2	25.8	86.14	1,626.4	-873.4	2,004.3	1,888.4	115.94	17.288	
10,600.0	7,184.3	7,291.3	7,136.5	94.0	25.8	85.91	1,626.5	-873.4	2,100.4	1,981.8	118.65	17.703	
10,700.0	7,183.9	7,289.1	7,134.2	96.7	25.8	85.68	1,626.6	-873.5	2,196.8	2,075.5	121.36	18.102	
10,800.0	7,183.4	7,286.9	7,132.0	99.4	25.7	85.46	1,626.7	-873.5	2,293.5	2,169.5	124.07	18.486	
10,900.0	7,183.0	7,284.7	7,129.9	102.2	25.7	85.25	1,626.7	-873.6	2,390.5	2,263.8	126.78	18.855	
11,000.0	7,182.6	7,282.6	7,127.8	104.9	25.7	85.04	1,626.8	-873.6	2,487.8	2,358.3	129.50	19.211	
11,100.0	7,182.2	7,280.6	7,125.7	107.7	25.7	84.83	1,626.9	-873.7	2,585.2	2,453.0	132.21	19.554	
11,200.0	7,181.8	7,278.5	7,123.7	110.4	25.7	84.63	1,627.0	-873.8	2,682.8	2,547.9	134.92	19.884	
11,300.0	7,181.4	7,276.6	7,121.7	113.2	25.7	84.43	1,627.1	-873.8	2,780.6	2,643.0	137.64	20.202	
11,400.0	7,181.0	7,274.6	7,119.8	116.0	25.7	84.24	1,627.2	-873.8	2,878.6	2,738.2	140.35	20.510	
11,500.0	7,180.6	7,272.7	7,117.9	118.7	25.7	84.05	1,627.2	-873.9	2,976.6	2,833.6	143.07	20.806	
11,600.0	7,180.1	7,257.0	7,102.2	121.5	25.7	82.50	1,627.9	-874.3	3,074.9	2,929.5	145.43	21.143	
11,700.0	7,179.7	7,257.0	7,102.2	124.3	25.7	82.50	1,627.9	-874.3	3,173.2	3,025.0	148.18	21.414	
11,800.0	7,179.3	7,257.0	7,102.2	127.0	25.7	82.50	1,627.9	-874.3	3,271.6	3,120.7	150.93	21.676	
11,900.0	7,178.9	7,257.0	7,102.2	129.8	25.7	82.50	1,627.9	-874.3	3,370.1	3,216.4	153.68	21.929	
12,000.0	7,178.5	7,257.0	7,102.2	132.6	25.7	82.50	1,627.9	-874.3	3,468.7	3,312.2	156.44	22.173	
12,100.0	7,178.1	7,257.0	7,102.2	135.3	25.7	82.50	1,627.9	-874.3	3,567.3	3,408.1	159.19	22.409	
12,200.0	7,177.7	7,257.0	7,102.2	138.1	25.7	82.50	1,627.9	-874.3	3,666.1	3,504.1	161.94	22.638	
12,300.0	7,177.2	7,257.0	7,102.2	140.9	25.7	82.50	1,627.9	-874.3	3,764.9	3,600.2	164.70	22.859	
12,400.0	7,176.8	7,257.0	7,102.2	143.7	25.7	82.50	1,627.9	-874.3	3,863.7	3,696.3	167.46	23.073	
12,500.0	7,176.4	7,257.0	7,102.2	146.4	25.7	82.50	1,627.9	-874.3	3,962.6	3,792.4	170.22	23.280	
12,600.0	7,176.0	7,257.0	7,102.2	149.2	25.7	82.50	1,627.9	-874.3	4,061.6	3,888.6	172.98	23.481	
12,700.0	7,175.6	7,257.0	7,102.2	152.0	25.7	82.50	1,627.9	-874.3	4,160.6	3,984.9	175.74	23.675	
12,800.0	7,175.2	7,257.0	7,102.2	154.8	25.7	82.50	1,627.9	-874.3	4,259.7	4,081.2	178.50	23.864	
12,900.0	7,174.8	7,257.0	7,102.2	157.5	25.7	82.50	1,627.9	-874.3	4,358.8	4,177.5	181.26	24.047	
13,000.0	7,174.4	7,257.0	7,102.2	160.3	25.7	82.50	1,627.9	-874.3	4,458.0	4,273.9	184.02	24.225	
13,100.0	7,173.9	7,257.0	7,102.2	163.1	25.7	82.50	1,627.9	-874.3	4,557.1	4,370.3	186.79	24.397	
13,200.0	7,173.5	7,257.0	7,102.2	165.9	25.7	82.50	1,627.9	-874.3	4,656.4	4,466.8	189.55	24.565	
13,300.0	7,173.1	7,257.0	7,102.2	168.7	25.7	82.50	1,627.9	-874.3	4,755.6	4,563.3	192.32	24.728	
13,400.0	7,172.7	7,257.0	7,102.2	171.5	25.7	82.50	1,627.9	-874.3	4,854.9	4,659.8	195.09	24.886	
13,500.0	7,172.3	7,257.0	7,102.2	174.3	25.7	82.50	1,627.9	-874.3	4,954.2	4,756.4	197.85	25.040	
13,600.0	7,171.9	7,257.0	7,102.2	177.0	25.7	82.50	1,627.9	-874.3	5,053.5	4,852.9	200.62	25.190	
13,700.0	7,171.5	7,257.0	7,102.2	179.8	25.7	82.50	1,627.9	-874.3	5,152.9	4,949.5	203.39	25.335	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD EEE 21ADU - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 706-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
13,800.0	7,171.0	7,257.0	7,102.2	182.6	25.7	82.50	1,627.9	-874.3	5,252.3	5,046.1	206.16	25.477	
13,900.0	7,170.6	7,257.0	7,102.2	185.4	25.7	82.50	1,627.9	-874.3	5,351.7	5,142.8	208.93	25.615	
14,000.0	7,170.2	7,234.9	7,080.1	188.2	25.7	80.34	1,628.8	-874.7	5,451.1	5,240.4	210.66	25.877	
14,100.0	7,169.8	7,233.7	7,078.9	191.0	25.7	80.23	1,628.8	-874.7	5,550.5	5,337.2	213.35	26.016	
14,200.0	7,169.4	7,232.6	7,077.8	193.8	25.7	80.11	1,628.9	-874.7	5,650.0	5,433.9	216.04	26.153	
14,295.0	7,169.0	7,231.5	7,076.7	196.4	25.7	80.01	1,628.9	-874.7	5,744.4	5,525.8	218.59	26.279	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD EEE 21NDU - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 147-MWD												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	-45.49	1,817.2	-1,848.7	2,592.3				
100.0	100.0	103.3	103.3	0.1	0.0	-45.49	1,817.0	-1,848.4	2,592.0	2,591.9	0.12	N/A	
200.0	200.0	347.9	347.7	0.3	0.5	-45.44	1,813.4	-1,841.4	2,589.6	2,588.7	0.81	3,193.599	
300.0	300.0	606.5	604.9	0.5	1.2	-45.22	1,802.9	-1,816.7	2,579.5	2,577.8	1.67	1,546.323	
400.0	400.0	699.7	697.2	0.8	1.5	-45.09	1,798.8	-1,804.6	2,567.0	2,564.9	2.10	1,219.542	
500.0	500.0	795.6	792.2	1.0	1.8	-44.95	1,795.0	-1,792.0	2,555.0	2,552.5	2.53	1,010.851	
600.0	600.0	1,089.9	1,080.2	1.2	3.0	-77.04	1,788.6	-1,733.0	2,539.0	2,535.3	3.71	684.767	
700.0	699.8	1,338.2	1,316.7	1.4	4.5	-76.63	1,783.2	-1,657.9	2,513.9	2,508.9	5.01	502.059	
800.0	799.5	1,605.6	1,565.4	1.7	6.5	-76.21	1,774.4	-1,560.1	2,484.5	2,477.8	6.65	373.797	
900.0	898.7	1,739.6	1,686.6	1.9	7.7	-76.35	1,770.4	-1,503.1	2,449.8	2,442.1	7.70	317.972	
1,000.0	997.5	1,853.0	1,788.2	2.2	8.7	-76.68	1,766.2	-1,453.0	2,412.6	2,403.9	8.68	277.801	
1,100.0	1,095.6	1,928.3	1,855.6	2.6	9.4	-77.24	1,763.5	-1,419.6	2,374.9	2,365.4	9.43	251.816	
1,169.1	1,163.0	1,983.3	1,905.0	2.8	9.9	-77.65	1,762.0	-1,395.3	2,348.8	2,338.8	9.98	235.442	
1,200.0	1,193.1	2,009.2	1,928.2	3.0	10.1	-77.59	1,761.2	-1,384.0	2,337.1	2,326.8	10.25	227.919	
1,300.0	1,290.4	2,102.6	2,012.3	3.4	10.9	-77.40	1,758.3	-1,343.3	2,299.4	2,288.2	11.22	204.881	
1,400.0	1,387.7	2,198.2	2,098.5	3.8	11.7	-77.22	1,754.6	-1,302.2	2,261.6	2,249.3	12.22	185.003	
1,500.0	1,484.9	2,266.4	2,160.1	4.3	12.2	-77.09	1,752.0	-1,273.1	2,224.0	2,210.9	13.08	170.081	
1,600.0	1,582.2	2,327.0	2,215.1	4.7	12.7	-76.97	1,750.7	-1,247.6	2,187.9	2,174.0	13.89	157.481	
1,700.0	1,679.5	2,464.3	2,339.8	5.2	13.9	-76.72	1,745.9	-1,190.3	2,151.2	2,136.1	15.19	141.608	
1,800.0	1,776.8	2,620.9	2,481.0	5.7	15.3	-76.43	1,737.6	-1,123.3	2,112.8	2,096.1	16.65	126.904	
1,900.0	1,874.1	2,722.9	2,572.4	6.1	16.3	-76.23	1,730.8	-1,078.2	2,072.2	2,054.5	17.77	116.592	
2,000.0	1,971.4	2,789.0	2,631.4	6.6	16.9	-76.09	1,726.6	-1,049.0	2,032.0	2,013.3	18.66	108.884	
2,100.0	2,068.7	2,867.8	2,702.2	7.1	17.6	-75.92	1,722.0	-1,014.7	1,992.5	1,972.9	19.62	101.579	
2,200.0	2,165.9	2,932.1	2,760.3	7.6	18.1	-75.78	1,718.8	-987.3	1,954.4	1,933.9	20.48	95.406	
2,300.0	2,263.2	3,007.8	2,828.8	8.0	18.8	-75.60	1,716.2	-955.3	1,917.5	1,896.0	21.44	89.439	
2,400.0	2,360.5	3,122.8	2,932.9	8.5	19.8	-75.30	1,712.1	-906.5	1,880.5	1,857.8	22.68	82.904	
2,500.0	2,457.8	3,200.4	3,002.7	9.0	20.5	-75.08	1,709.3	-872.6	1,842.7	1,819.0	23.69	77.775	
2,600.0	2,555.1	3,257.0	3,053.9	9.5	21.0	-74.90	1,708.1	-848.6	1,806.8	1,782.2	24.56	73.572	
2,700.0	2,652.4	3,379.8	3,165.0	10.0	22.1	-74.50	1,705.9	-796.3	1,771.0	1,745.1	25.90	68.371	
2,800.0	2,749.7	3,477.0	3,252.7	10.4	23.0	-74.18	1,703.0	-754.7	1,734.2	1,707.2	27.06	64.085	
2,900.0	2,846.9	3,563.3	3,331.0	10.9	23.7	-73.92	1,700.0	-718.3	1,697.6	1,669.5	28.13	60.359	
3,000.0	2,944.2	3,647.8	3,407.6	11.4	24.4	-73.63	1,697.5	-682.6	1,661.5	1,632.3	29.19	56.925	
3,100.0	3,041.5	3,725.2	3,477.7	11.9	25.1	-73.35	1,696.0	-650.0	1,626.1	1,595.8	30.21	53.820	
3,200.0	3,138.8	3,843.9	3,585.4	12.4	26.1	-72.92	1,692.8	-600.3	1,590.2	1,558.7	31.53	50.430	
3,300.0	3,236.1	3,947.4	3,679.4	12.8	27.0	-72.57	1,688.6	-557.1	1,553.7	1,521.0	32.74	47.462	
3,400.0	3,333.4	4,053.9	3,775.9	13.3	27.9	-72.21	1,683.0	-512.4	1,516.2	1,482.2	33.96	44.648	
3,500.0	3,430.6	4,165.1	3,876.4	13.8	28.9	-71.82	1,676.5	-465.4	1,478.0	1,442.8	35.23	41.957	
3,600.0	3,527.9	4,257.3	3,959.3	14.3	29.8	-71.45	1,670.7	-425.4	1,438.9	1,402.5	36.38	39.556	
3,700.0	3,625.2	4,330.1	4,025.1	14.8	30.4	-71.16	1,666.2	-394.5	1,400.5	1,363.2	37.37	37.478	
3,800.0	3,722.5	4,404.7	4,092.9	15.3	31.0	-70.87	1,662.5	-363.7	1,363.7	1,325.3	38.37	35.538	
3,900.0	3,819.8	4,503.7	4,182.8	15.7	31.9	-70.42	1,658.3	-322.4	1,327.3	1,287.7	39.59	33.527	
4,000.0	3,917.1	4,600.4	4,269.7	16.2	32.8	-69.86	1,654.7	-280.2	1,290.1	1,249.3	40.87	31.569	
4,100.0	4,014.4	4,681.8	4,342.3	16.7	33.6	-69.26	1,653.5	-243.3	1,253.9	1,211.8	42.08	29.794	
4,200.0	4,111.6	4,790.1	4,438.5	17.2	34.6	-68.37	1,651.9	-193.5	1,217.2	1,173.6	43.60	27.921	
4,300.0	4,208.9	4,887.1	4,524.9	17.7	35.5	-67.61	1,648.8	-149.7	1,180.0	1,135.0	44.96	26.244	
4,400.0	4,306.2	4,986.4	4,614.1	18.2	36.4	-66.90	1,644.0	-106.3	1,142.6	1,096.3	46.30	24.676	
4,500.0	4,403.5	5,091.7	4,708.3	18.7	37.4	-66.07	1,638.2	-59.6	1,104.4	1,056.6	47.74	23.135	
4,600.0	4,500.8	5,188.4	4,794.2	19.1	38.4	-65.19	1,632.6	-15.5	1,065.4	1,016.3	49.14	21.680	
4,700.0	4,598.1	5,267.5	4,864.4	19.6	39.1	-64.42	1,628.2	20.5	1,026.8	976.4	50.38	20.381	
4,800.0	4,695.4	5,340.6	4,930.1	20.1	39.8	-63.73	1,624.6	52.4	990.1	938.5	51.53	19.214	
4,900.0	4,792.6	5,409.0	4,992.4	20.6	40.4	-63.15	1,621.4	80.5	955.2	902.6	52.59	18.164	
5,000.0	4,889.9	5,494.4	5,071.3	21.1	41.0	-62.52	1,617.7	113.2	921.9	868.2	53.72	17.163	

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 SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD EEE 21NDU - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 147-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,100.0	4,987.2	5,575.1	5,146.5	21.6	41.6	-61.99	1,614.6	142.2	890.4	835.6	54.77	16.256	
5,200.0	5,084.5	5,654.4	5,220.9	22.1	42.2	-61.49	1,612.3	169.5	860.4	804.6	55.79	15.423	
5,300.0	5,181.8	5,736.2	5,298.3	22.5	42.7	-61.05	1,610.6	195.8	832.3	775.5	56.78	14.659	
5,400.0	5,279.1	5,817.3	5,375.8	23.0	43.2	-60.72	1,609.2	219.9	805.7	748.0	57.71	13.961	
5,500.0	5,376.3	5,896.3	5,451.9	23.5	43.6	-60.51	1,608.7	241.1	781.3	722.7	58.57	13.340	
5,600.0	5,473.6	5,982.1	5,535.2	24.0	44.0	-60.46	1,608.4	261.3	758.7	699.3	59.38	12.776	
5,700.0	5,570.9	6,071.2	5,622.4	24.5	44.3	-60.59	1,608.1	279.7	737.4	677.2	60.13	12.263	
5,800.0	5,668.2	6,158.0	5,707.9	25.0	44.6	-60.93	1,607.7	294.9	717.5	656.7	60.78	11.805	
5,900.0	5,765.5	6,244.4	5,793.4	25.5	44.9	-61.50	1,607.4	307.1	699.2	637.8	61.33	11.401	
5,921.9	5,786.8	6,263.4	5,812.3	25.6	44.9	-61.66	1,607.4	309.5	695.4	633.9	61.44	11.319	
6,000.0	5,863.0	6,331.1	5,879.5	25.9	45.1	-61.98	1,607.3	317.0	683.0	621.1	61.94	11.027	
6,100.0	5,961.2	6,423.3	5,971.3	26.2	45.3	-62.41	1,607.6	325.5	669.9	607.4	62.46	10.726	
6,200.0	6,060.0	6,515.3	6,063.0	26.5	45.4	-62.79	1,607.9	332.3	659.4	596.5	62.90	10.483	
6,300.0	6,159.3	6,608.1	6,155.7	26.7	45.5	-63.15	1,608.1	336.9	651.6	588.4	63.26	10.301	
6,400.0	6,259.0	6,706.9	6,254.5	26.9	45.6	-63.46	1,608.1	340.1	646.2	582.6	63.56	10.167	
6,500.0	6,358.8	6,803.9	6,351.5	27.1	45.7	-63.58	1,608.0	342.8	642.5	578.6	63.83	10.065	
6,591.0	6,449.8	6,892.9	6,440.5	27.2	45.8	-31.02	1,607.9	344.5	640.8	590.2	50.57	12.673	
6,600.0	6,458.8	6,901.8	6,449.3	27.2	45.8	-31.01	1,607.9	344.7	640.7	590.1	50.58	12.666	
6,621.0	6,479.8	6,923.0	6,470.5	27.2	45.8	-30.98	1,607.9	345.1	640.5	589.9	50.63	12.651	
6,650.0	6,508.8	6,952.5	6,500.1	27.3	45.9	59.14	1,607.9	345.6	639.9	575.7	64.18	9.970	
6,700.0	6,558.7	7,003.2	6,550.7	27.3	45.9	59.67	1,607.7	346.4	637.4	573.1	64.29	9.915	
6,750.0	6,608.1	7,051.8	6,599.4	27.3	46.0	60.56	1,607.5	347.2	633.2	568.8	64.42	9.830	
6,800.0	6,657.0	7,099.7	6,647.2	27.3	46.0	61.83	1,607.4	347.9	627.5	562.9	64.58	9.717	
6,850.0	6,704.9	7,146.2	6,693.7	27.2	46.0	63.45	1,607.2	348.4	620.4	555.7	64.75	9.581	
6,900.0	6,751.8	7,191.9	6,739.4	27.2	46.1	65.41	1,607.0	348.6	612.2	547.3	64.96	9.425	
6,950.0	6,797.4	7,237.3	6,784.8	27.1	46.1	67.74	1,606.9	348.8	603.1	537.9	65.19	9.252	
7,000.0	6,841.4	7,281.1	6,828.6	27.0	46.1	70.38	1,606.7	349.0	593.4	528.0	65.42	9.070	
7,050.0	6,883.6	7,324.3	6,871.8	26.9	46.2	73.34	1,606.5	349.2	583.4	517.8	65.65	8.886	
7,100.0	6,923.9	7,365.3	6,912.8	26.8	46.2	76.50	1,606.3	349.4	573.6	507.8	65.84	8.712	
7,150.0	6,962.0	7,403.0	6,950.5	26.7	46.2	79.67	1,606.0	349.6	564.5	498.6	65.96	8.558	
7,200.0	6,997.8	7,438.1	6,985.6	26.5	46.2	82.80	1,605.8	349.7	556.8	490.7	66.02	8.433	
7,250.0	7,031.0	7,470.7	7,018.3	26.4	46.3	85.81	1,605.7	349.8	550.9	484.8	66.01	8.345	
7,300.0	7,061.6	7,500.4	7,047.9	26.3	46.3	88.54	1,605.5	349.8	547.4	481.4	65.96	8.298	
7,333.0	7,080.2	7,518.4	7,065.9	26.2	46.3	90.15	1,605.5	349.9	546.7	480.8	65.94	8.291 CC, ES, SF	
7,350.0	7,089.3	7,527.2	7,074.7	26.1	46.3	90.92	1,605.5	349.9	546.9	481.0	65.91	8.297	
7,400.0	7,114.0	7,551.0	7,098.5	26.0	46.3	92.85	1,605.5	350.0	549.8	483.9	65.90	8.343	
7,450.0	7,135.7	7,572.1	7,119.6	25.9	46.3	94.31	1,605.5	350.1	556.4	490.5	65.98	8.434	
7,500.0	7,154.2	7,590.5	7,138.0	25.7	46.3	95.23	1,605.5	350.2	567.0	500.8	66.17	8.568	
7,550.0	7,169.4	7,605.6	7,153.1	25.6	46.4	95.52	1,605.5	350.3	581.5	514.9	66.53	8.740	
7,600.0	7,181.2	7,617.3	7,164.8	25.5	46.4	95.13	1,605.4	350.3	599.8	532.7	67.05	8.945	
7,650.0	7,189.6	7,625.6	7,173.1	25.4	46.4	94.04	1,605.4	350.4	621.7	553.9	67.74	9.177	
7,700.0	7,194.5	7,630.4	7,177.9	25.3	46.4	92.21	1,605.4	350.4	646.9	578.3	68.54	9.437	
7,748.9	7,196.0	7,631.7	7,179.2	25.2	46.4	89.69	1,605.4	350.4	674.3	604.9	69.37	9.720	
7,800.0	7,195.8	7,631.3	7,178.8	25.1	46.4	89.65	1,605.4	350.4	705.4	635.3	70.10	10.062	
7,900.0	7,195.4	7,630.5	7,178.0	25.5	46.4	89.56	1,605.4	350.4	772.5	700.8	71.72	10.771	
8,000.0	7,195.0	7,629.6	7,177.1	27.5	46.4	89.48	1,605.4	350.4	846.1	772.6	73.53	11.508	
8,100.0	7,194.6	7,628.8	7,176.3	29.5	46.4	89.39	1,605.4	350.4	924.7	849.2	75.49	12.249	
8,200.0	7,194.1	7,628.0	7,175.5	31.7	46.4	89.31	1,605.4	350.4	1,007.1	929.5	77.59	12.980	
8,300.0	7,193.7	7,627.2	7,174.7	33.9	46.4	89.22	1,605.4	350.4	1,092.4	1,012.6	79.78	13.692	
8,400.0	7,193.3	7,626.3	7,173.9	36.3	46.4	89.13	1,605.4	350.4	1,180.0	1,098.0	82.07	14.379	
8,500.0	7,192.9	7,625.5	7,173.0	38.6	46.4	89.05	1,605.4	350.4	1,269.5	1,185.1	84.42	15.038	
8,600.0	7,192.5	7,624.7	7,172.2	41.1	46.4	88.96	1,605.4	350.4	1,360.4	1,273.6	86.83	15.667	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD EEE 21NDU - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 147-MWD												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
8,700.0	7,192.1	7,623.8	7,171.3	43.5	46.4	88.87	1,605.4	350.4	1,452.6	1,363.3	89.29	16.268	
8,800.0	7,191.7	7,623.0	7,170.5	46.0	46.4	88.78	1,605.4	350.4	1,545.7	1,453.9	91.79	16.839	
8,900.0	7,191.3	7,622.1	7,169.7	48.6	46.4	88.69	1,605.4	350.4	1,639.6	1,545.3	94.32	17.382	
9,000.0	7,190.9	7,621.3	7,168.8	51.1	46.4	88.60	1,605.4	350.4	1,734.2	1,637.3	96.89	17.899	
9,100.0	7,190.4	7,620.4	7,168.0	53.7	46.4	88.51	1,605.4	350.4	1,829.4	1,729.9	99.47	18.391	
9,200.0	7,190.0	7,619.6	7,167.1	56.3	46.4	88.42	1,605.4	350.4	1,925.0	1,822.9	102.08	18.858	
9,300.0	7,189.6	7,618.7	7,166.2	58.9	46.4	88.33	1,605.4	350.3	2,021.1	1,916.4	104.70	19.303	
9,400.0	7,189.2	7,617.9	7,165.4	61.6	46.4	88.24	1,605.4	350.3	2,117.5	2,010.2	107.34	19.727	
9,500.0	7,188.8	7,617.0	7,164.5	64.2	46.4	88.15	1,605.4	350.3	2,214.3	2,104.3	110.00	20.130	
9,600.0	7,188.4	7,616.1	7,163.6	66.9	46.4	88.06	1,605.4	350.3	2,311.3	2,198.7	112.66	20.515	
9,700.0	7,188.0	7,615.3	7,162.8	69.6	46.4	87.97	1,605.4	350.3	2,408.6	2,293.3	115.34	20.882	
9,800.0	7,187.6	7,614.4	7,161.9	72.3	46.4	87.88	1,605.4	350.3	2,506.1	2,388.1	118.03	21.233	
9,900.0	7,187.1	7,613.5	7,161.0	74.9	46.4	87.79	1,605.5	350.3	2,603.8	2,483.1	120.72	21.569	
10,000.0	7,186.7	7,612.6	7,160.1	77.6	46.4	87.69	1,605.5	350.3	2,701.6	2,578.2	123.42	21.889	
10,100.0	7,186.3	7,611.7	7,159.2	80.4	46.4	87.60	1,605.5	350.3	2,799.6	2,673.5	126.13	22.196	
10,200.0	7,185.9	7,610.8	7,158.3	83.1	46.4	87.51	1,605.5	350.3	2,897.8	2,768.9	128.84	22.491	
10,300.0	7,185.5	7,609.9	7,157.4	85.8	46.4	87.41	1,605.5	350.3	2,996.0	2,864.5	131.56	22.773	
10,400.0	7,185.1	7,609.0	7,156.5	88.5	46.4	87.32	1,605.5	350.3	3,094.4	2,960.1	134.28	23.044	
10,500.0	7,184.7	7,608.1	7,155.6	91.2	46.4	87.22	1,605.5	350.3	3,192.9	3,055.9	137.01	23.304	
10,600.0	7,184.3	7,607.2	7,154.7	94.0	46.4	87.13	1,605.5	350.3	3,291.4	3,151.7	139.74	23.554	
10,700.0	7,183.9	7,606.3	7,153.8	96.7	46.4	87.03	1,605.5	350.3	3,390.1	3,247.6	142.47	23.795	
10,800.0	7,183.4	7,605.4	7,152.9	99.4	46.4	86.94	1,605.5	350.3	3,488.8	3,343.6	145.21	24.026	
10,900.0	7,183.0	7,604.5	7,152.0	102.2	46.4	86.84	1,605.5	350.3	3,587.6	3,439.7	147.95	24.249	
11,000.0	7,182.6	7,603.5	7,151.1	104.9	46.4	86.74	1,605.5	350.3	3,686.5	3,535.8	150.69	24.464	
11,100.0	7,182.2	7,602.6	7,150.1	107.7	46.4	86.65	1,605.5	350.3	3,785.4	3,632.0	153.43	24.672	
11,200.0	7,181.8	7,601.7	7,149.2	110.4	46.4	86.55	1,605.5	350.3	3,884.4	3,728.2	156.17	24.872	
11,300.0	7,181.4	7,600.8	7,148.3	113.2	46.4	86.45	1,605.5	350.3	3,983.4	3,824.5	158.92	25.066	
11,400.0	7,181.0	7,599.8	7,147.3	116.0	46.4	86.35	1,605.5	350.3	4,082.5	3,920.8	161.67	25.252	
11,500.0	7,180.6	7,598.9	7,146.4	118.7	46.4	86.26	1,605.5	350.3	4,181.6	4,017.2	164.41	25.433	
11,600.0	7,180.1	7,597.9	7,145.4	121.5	46.4	86.16	1,605.5	350.3	4,280.7	4,113.6	167.16	25.608	
11,700.0	7,179.7	7,597.0	7,144.5	124.3	46.3	86.06	1,605.5	350.3	4,379.9	4,210.0	169.91	25.778	
11,800.0	7,179.3	7,596.0	7,143.5	127.0	46.3	85.96	1,605.5	350.3	4,479.2	4,306.5	172.66	25.942	
11,900.0	7,178.9	7,595.1	7,142.6	129.8	46.3	85.86	1,605.5	350.2	4,578.4	4,403.0	175.41	26.101	
12,000.0	7,178.5	7,594.1	7,141.6	132.6	46.3	85.76	1,605.5	350.2	4,677.7	4,499.6	178.16	26.255	
12,100.0	7,178.1	7,593.1	7,140.6	135.3	46.3	85.66	1,605.5	350.2	4,777.0	4,596.1	180.91	26.405	
12,200.0	7,177.7	7,592.2	7,139.7	138.1	46.3	85.55	1,605.5	350.2	4,876.4	4,692.7	183.66	26.551	
12,300.0	7,177.2	7,591.2	7,138.7	140.9	46.3	85.45	1,605.5	350.2	4,975.8	4,789.4	186.41	26.692	
12,400.0	7,176.8	7,590.2	7,137.7	143.7	46.3	85.35	1,605.5	350.2	5,075.2	4,886.0	189.16	26.830	
12,500.0	7,176.4	7,589.2	7,136.7	146.4	46.3	85.25	1,605.5	350.2	5,174.6	4,982.7	191.91	26.963	
12,600.0	7,176.0	7,588.2	7,135.7	149.2	46.3	85.14	1,605.5	350.2	5,274.1	5,079.4	194.66	27.093	
12,700.0	7,175.6	7,587.2	7,134.8	152.0	46.3	85.04	1,605.5	350.2	5,373.5	5,176.1	197.41	27.220	
12,800.0	7,175.2	7,586.2	7,133.8	154.8	46.3	84.94	1,605.5	350.2	5,473.0	5,272.8	200.16	27.343	
12,900.0	7,174.8	7,585.2	7,132.8	157.5	46.3	84.83	1,605.5	350.2	5,572.5	5,369.6	202.91	27.463	
13,000.0	7,174.4	7,584.2	7,131.7	160.3	46.3	84.73	1,605.5	350.2	5,672.0	5,466.4	205.66	27.580	
13,100.0	7,173.9	7,583.2	7,130.7	163.1	46.3	84.62	1,605.5	350.2	5,771.6	5,563.2	208.40	27.694	
13,200.0	7,173.5	7,582.2	7,129.7	165.9	46.3	84.52	1,605.5	350.2	5,871.1	5,660.0	211.15	27.806	
13,300.0	7,173.1	7,581.2	7,128.7	168.7	46.3	84.41	1,605.5	350.2	5,970.7	5,756.8	213.89	27.914	
13,400.0	7,172.7	7,580.2	7,127.7	171.5	46.3	84.30	1,605.5	350.2	6,070.3	5,853.6	216.64	28.021	
13,500.0	7,172.3	7,579.1	7,126.7	174.3	46.3	84.20	1,605.5	350.2	6,169.9	5,950.5	219.38	28.124	
13,600.0	7,171.9	7,578.1	7,125.6	177.0	46.3	84.09	1,605.5	350.2	6,269.5	6,047.4	222.12	28.226	
13,700.0	7,171.5	7,577.1	7,124.6	179.8	46.3	83.98	1,605.5	350.2	6,369.1	6,144.2	224.86	28.325	
13,800.0	7,171.0	7,576.0	7,123.5	182.6	46.3	83.87	1,605.5	350.2	6,468.7	6,241.1	227.60	28.422	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD EEE 21NDU - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 147-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
13,900.0	7,170.6	7,575.0	7,122.5	185.4	46.3	83.77	1,605.5	350.2	6,568.4	6,338.0	230.34	28.517	
14,000.0	7,170.2	7,573.9	7,121.4	188.2	46.3	83.66	1,605.5	350.1	6,668.0	6,435.0	233.07	28.609	
14,100.0	7,169.8	7,572.9	7,120.4	191.0	46.3	83.55	1,605.5	350.1	6,767.7	6,531.9	235.81	28.700	
14,200.0	7,169.4	7,571.8	7,119.3	193.8	46.3	83.44	1,605.5	350.1	6,867.4	6,628.8	238.54	28.789	
14,295.0	7,169.0	7,570.8	7,118.3	196.4	46.3	83.33	1,605.5	350.1	6,962.0	6,720.9	241.13	28.872	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 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: 155-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	-45.37	1,959.3	-1,984.8	2,789.0				
100.0	100.0	55.6	55.6	0.1	0.0	-45.37	1,959.4	-1,985.1	2,789.4	2,789.3	0.12	N/A	
200.0	200.0	121.4	121.4	0.3	0.1	-45.38	1,959.9	-1,986.2	2,791.1	2,790.7	0.38	7,339.751	
300.0	300.0	194.9	194.8	0.5	0.1	-45.40	1,960.6	-1,988.3	2,793.9	2,793.2	0.69	4,031.206	
400.0	400.0	267.7	267.6	0.8	0.3	-45.43	1,961.4	-1,991.2	2,797.5	2,796.4	1.06	2,629.462	
500.0	500.0	333.0	332.8	1.0	0.4	-45.48	1,962.2	-1,995.0	2,802.4	2,800.9	1.44	1,943.888	
600.0	600.0	396.9	396.5	1.2	0.6	-77.96	1,962.9	-1,999.9	2,808.2	2,806.4	1.82	1,540.399	
700.0	699.8	475.4	474.6	1.4	0.8	-78.01	1,963.7	-2,007.0	2,814.2	2,812.0	2.24	1,254.627	
800.0	799.5	557.1	556.0	1.7	1.1	-78.14	1,964.4	-2,015.1	2,820.2	2,817.5	2.69	1,048.259	
900.0	898.7	647.5	645.8	1.9	1.3	-78.37	1,965.0	-2,024.9	2,826.1	2,823.0	3.19	887.099	
1,000.0	997.5	730.2	728.0	2.2	1.6	-78.64	1,965.2	-2,034.3	2,831.6	2,827.9	3.70	765.872	
1,100.0	1,095.6	796.0	793.2	2.6	1.8	-78.89	1,965.6	-2,042.7	2,837.7	2,833.5	4.21	673.704	
1,169.1	1,163.0	832.4	829.2	2.8	1.9	-79.02	1,965.8	-2,047.9	2,842.3	2,837.7	4.58	620.036	
1,200.0	1,193.1	852.2	848.8	3.0	2.0	-79.15	1,965.8	-2,050.9	2,844.5	2,839.8	4.77	596.518	
1,300.0	1,290.4	919.6	915.3	3.4	2.2	-79.62	1,965.4	-2,062.2	2,852.6	2,847.2	5.40	528.252	
1,400.0	1,387.7	983.0	977.5	3.8	2.5	-80.08	1,964.0	-2,074.2	2,861.9	2,855.9	6.05	473.352	
1,500.0	1,484.9	1,050.0	1,042.9	4.3	2.8	-80.61	1,961.6	-2,088.6	2,872.5	2,865.8	6.74	426.139	
1,600.0	1,582.2	1,131.9	1,122.4	4.7	3.2	-81.28	1,957.5	-2,108.0	2,884.5	2,877.0	7.53	383.160	
1,700.0	1,679.5	1,203.3	1,191.2	5.2	3.6	-81.90	1,952.5	-2,126.0	2,897.2	2,888.9	8.30	349.246	
1,800.0	1,776.8	1,264.0	1,249.6	5.7	3.9	-82.44	1,948.2	-2,142.3	2,911.5	2,902.5	9.03	322.381	
1,900.0	1,874.1	1,331.5	1,314.2	6.1	4.3	-83.04	1,943.4	-2,161.1	2,927.3	2,917.5	9.82	298.137	
2,000.0	1,971.4	1,417.6	1,396.5	6.6	4.8	-83.81	1,936.9	-2,185.7	2,944.0	2,933.3	10.70	275.117	
2,100.0	2,068.7	1,485.0	1,460.8	7.1	5.2	-84.41	1,931.6	-2,205.2	2,961.5	2,950.0	11.49	257.687	
2,200.0	2,165.9	1,544.0	1,517.0	7.6	5.5	-84.94	1,927.4	-2,222.7	2,980.6	2,968.4	12.24	243.504	
2,300.0	2,263.2	1,592.6	1,563.1	8.0	5.8	-85.37	1,924.1	-2,237.6	3,001.4	2,988.4	12.95	231.727	
2,400.0	2,360.5	1,638.0	1,606.0	8.5	6.1	-85.77	1,921.1	-2,252.1	3,023.8	3,010.1	13.65	221.549	
2,500.0	2,457.8	1,689.4	1,654.5	9.0	6.5	-86.23	1,917.9	-2,269.1	3,047.9	3,033.5	14.39	211.797	
2,600.0	2,555.1	1,731.0	1,693.4	9.5	6.8	-86.60	1,915.4	-2,283.4	3,073.8	3,058.8	15.08	203.819	
2,700.0	2,652.4	1,809.1	1,766.4	10.0	7.3	-87.29	1,911.0	-2,310.8	3,101.1	3,085.2	15.97	194.236	
2,800.0	2,749.7	1,919.0	1,869.0	10.4	8.1	-88.27	1,904.1	-2,349.7	3,128.9	3,112.0	16.98	184.241	
2,900.0	2,846.9	1,986.5	1,931.9	10.9	8.6	-88.86	1,899.4	-2,373.6	3,157.2	3,139.4	17.78	177.525	
3,000.0	2,944.2	2,045.7	1,987.0	11.4	9.0	-89.38	1,895.5	-2,394.9	3,186.6	3,168.1	18.56	171.714	
3,100.0	3,041.5	2,106.0	2,042.9	11.9	9.5	-89.90	1,891.6	-2,417.2	3,217.5	3,198.1	19.34	166.333	
3,200.0	3,138.8	2,242.3	2,169.5	12.4	10.4	-91.07	1,882.4	-2,466.8	3,248.4	3,228.0	20.42	159.083	
3,300.0	3,236.1	2,326.9	2,248.4	12.8	11.0	-91.77	1,876.7	-2,496.9	3,279.1	3,257.9	21.25	154.340	
3,400.0	3,333.4	2,396.6	2,313.3	13.3	11.5	-92.34	1,872.2	-2,521.9	3,310.8	3,288.8	22.03	150.301	
3,500.0	3,430.6	2,479.0	2,390.0	13.8	12.1	-93.01	1,866.6	-2,551.6	3,343.1	3,320.2	22.87	146.151	
3,600.0	3,527.9	2,530.2	2,437.5	14.3	12.5	-93.42	1,863.1	-2,570.2	3,376.4	3,352.8	23.58	143.181	
3,700.0	3,625.2	2,576.6	2,480.4	14.8	12.8	-93.79	1,860.3	-2,587.7	3,411.2	3,386.9	24.27	140.578	
3,800.0	3,722.5	2,666.0	2,562.9	15.3	13.5	-94.50	1,854.5	-2,621.8	3,446.8	3,421.7	25.14	137.081	
3,900.0	3,819.8	2,743.8	2,634.5	15.7	14.1	-95.12	1,849.1	-2,651.5	3,483.0	3,457.1	25.95	134.198	
4,000.0	3,917.1	2,853.2	2,829.1	16.2	15.6	-96.71	1,833.4	-2,727.2	3,516.9	3,489.7	27.21	129.268	
4,100.0	4,014.4	3,039.6	2,909.9	16.7	16.1	-97.34	1,827.2	-2,757.3	3,551.1	3,523.1	27.99	126.891	
4,200.0	4,111.6	3,142.5	3,006.3	17.2	16.8	-98.07	1,820.5	-2,792.8	3,585.5	3,556.7	28.80	124.484	
4,300.0	4,208.9	3,262.4	3,119.1	17.7	17.6	-98.88	1,813.4	-2,832.6	3,619.2	3,589.6	29.66	122.043	
4,400.0	4,306.2	3,322.0	3,175.1	18.2	18.0	-99.28	1,809.7	-2,852.6	3,653.7	3,623.4	30.32	120.488	
4,500.0	4,403.5	3,473.4	3,317.7	18.7	19.0	-100.28	1,799.6	-2,902.4	3,687.8	3,656.5	31.26	117.954	
4,600.0	4,500.8	3,634.6	3,470.4	19.1	20.0	-101.31	1,787.9	-2,952.8	3,720.7	3,688.5	32.19	115.581	
4,700.0	4,598.1	3,704.3	3,536.7	19.6	20.4	-101.74	1,783.3	-2,974.0	3,753.6	3,720.7	32.86	114.240	
4,800.0	4,695.4	3,813.6	3,640.6	20.1	21.1	-102.40	1,776.3	-3,007.1	3,786.6	3,752.9	33.62	112.622	
4,900.0	4,792.6	3,886.6	3,709.9	20.6	21.6	-102.85	1,770.9	-3,029.4	3,819.9	3,785.6	34.29	111.389	
5,000.0	4,889.9	3,976.0	3,794.7	21.1	22.1	-103.39	1,763.8	-3,056.9	3,853.7	3,818.7	35.01	110.061	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 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: 155-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,100.0	4,987.2	4,037.9	3,853.4	21.6	22.5	-103.77	1,758.9	-3,076.1	3,888.1	3,852.5	35.66	109.042	
5,200.0	5,084.5	4,126.8	3,937.4	22.1	23.1	-104.30	1,752.0	-3,104.1	3,923.3	3,886.9	36.37	107.873	
5,300.0	5,181.8	4,308.9	4,110.2	22.5	24.2	-105.36	1,736.8	-3,159.2	3,957.7	3,920.4	37.29	106.147	
5,400.0	5,279.1	4,385.5	4,183.5	23.0	24.7	-105.78	1,731.7	-3,181.1	3,991.1	3,953.2	37.92	105.237	
5,500.0	5,376.3	4,444.0	4,239.3	23.5	25.0	-106.08	1,728.5	-3,198.3	4,025.6	3,987.1	38.52	104.502	
5,600.0	5,473.6	4,536.3	4,327.3	24.0	25.6	-106.56	1,723.8	-3,225.7	4,060.8	4,021.6	39.19	103.623	
5,700.0	5,570.9	4,610.6	4,398.2	24.5	26.0	-106.94	1,719.5	-3,247.7	4,096.1	4,056.3	39.82	102.869	
5,800.0	5,668.2	4,675.7	4,460.2	25.0	26.4	-107.27	1,715.5	-3,267.3	4,131.9	4,091.5	40.43	102.202	
5,900.0	5,765.5	5,953.8	5,714.7	25.5	30.8	-112.40	1,671.0	-3,468.4	4,155.2	4,112.9	42.28	98.280	
5,921.9	5,786.8	5,974.5	5,735.4	25.6	30.8	-112.46	1,670.8	-3,468.6	4,157.4	4,115.0	42.39	98.082	
6,000.0	5,863.0	6,050.2	5,811.1	25.9	30.9	-112.82	1,669.9	-3,469.5	4,164.8	4,122.1	42.70	97.545	
6,100.0	5,961.2	6,150.8	5,911.7	26.2	31.0	-113.23	1,668.6	-3,470.5	4,173.0	4,130.0	43.04	96.954	
6,200.0	6,060.0	6,243.0	6,003.8	26.5	31.1	-113.56	1,667.4	-3,471.5	4,180.1	4,136.7	43.37	96.378	
6,300.0	6,159.3	6,343.4	6,104.3	26.7	31.2	-113.84	1,666.0	-3,472.7	4,185.9	4,142.2	43.70	95.785	
6,400.0	6,259.0	6,438.3	6,199.1	26.9	31.3	-114.04	1,664.4	-3,473.9	4,190.3	4,146.3	44.01	95.209	
6,500.0	6,358.8	6,531.5	6,292.3	27.1	31.4	-114.18	1,663.1	-3,475.1	4,193.4	4,149.1	44.31	94.648	
6,591.0	6,449.8	6,611.8	6,372.6	27.2	31.5	-81.73	1,662.0	-3,476.4	4,195.2	4,146.2	49.02	85.582	
6,600.0	6,458.8	6,619.2	6,379.9	27.2	31.5	-81.73	1,661.9	-3,476.5	4,195.4	4,146.3	49.04	85.546	
6,621.0	6,479.8	6,636.4	6,397.1	27.2	31.5	-81.74	1,661.7	-3,476.8	4,195.7	4,146.6	49.10	85.456	
6,650.0	6,508.8	6,660.1	6,420.9	27.3	31.6	8.26	1,661.4	-3,477.2	4,195.6	4,150.8	44.77	93.721	
6,700.0	6,558.7	6,702.9	6,463.6	27.3	31.6	8.29	1,660.8	-3,478.1	4,192.8	4,147.9	44.88	93.430	
6,750.0	6,608.1	6,749.9	6,510.6	27.3	31.7	8.36	1,660.1	-3,479.1	4,186.6	4,141.7	44.82	93.405	
6,800.0	6,657.0	6,794.3	6,555.0	27.3	31.7	8.49	1,659.4	-3,480.1	4,177.0	4,132.4	44.59	93.670	
6,850.0	6,704.9	6,833.3	6,594.0	27.2	31.8	8.66	1,658.8	-3,481.1	4,164.1	4,119.9	44.19	94.235	
6,900.0	6,751.8	6,876.0	6,636.7	27.2	31.8	8.88	1,658.0	-3,482.2	4,148.1	4,104.5	43.63	95.071	
6,950.0	6,797.4	6,906.7	6,667.3	27.1	31.9	9.17	1,657.5	-3,483.1	4,128.9	4,086.0	42.90	96.243	
7,000.0	6,841.4	6,940.5	6,701.1	27.0	31.9	9.52	1,657.0	-3,484.2	4,106.7	4,064.7	42.04	97.696	
7,050.0	6,883.6	6,974.3	6,734.9	26.9	32.0	9.95	1,656.6	-3,485.3	4,081.7	4,040.6	41.05	99.440	
7,100.0	6,923.9	7,014.0	6,774.6	26.8	32.0	10.49	1,656.1	-3,486.7	4,053.7	4,013.7	39.96	101.433	
7,150.0	6,962.0	7,051.8	6,812.3	26.7	32.1	11.14	1,655.5	-3,488.1	4,023.0	3,984.2	38.80	103.686	
7,200.0	6,997.8	7,089.2	6,849.8	26.5	32.2	11.94	1,654.9	-3,489.5	3,989.7	3,952.1	37.59	106.133	
7,250.0	7,031.0	7,125.0	6,885.5	26.4	32.2	12.93	1,654.3	-3,490.7	3,953.9	3,917.5	36.38	108.679	
7,300.0	7,061.6	7,158.8	6,919.2	26.3	32.3	14.15	1,653.6	-3,492.0	3,915.8	3,880.6	35.23	111.144	
7,350.0	7,089.3	7,198.7	6,959.1	26.1	32.3	15.74	1,652.9	-3,493.3	3,875.6	3,841.3	34.26	113.115	
7,400.0	7,114.0	7,234.4	6,994.8	26.0	32.4	17.78	1,652.2	-3,494.4	3,833.4	3,799.8	33.58	114.172	
7,450.0	7,135.7	7,264.0	7,024.4	25.9	32.4	20.44	1,651.7	-3,495.3	3,789.4	3,756.1	33.35	113.622	
7,500.0	7,154.2	7,288.0	7,048.3	25.7	32.4	24.02	1,651.2	-3,496.0	3,744.0	3,710.2	33.86	110.568	
7,550.0	7,169.4	7,307.9	7,068.3	25.6	32.5	28.99	1,650.8	-3,496.5	3,697.4	3,661.9	35.51	104.131	
7,600.0	7,181.2	7,323.7	7,084.1	25.5	32.5	36.19	1,650.5	-3,496.9	3,649.7	3,610.9	38.80	94.074	
7,650.0	7,189.6	7,335.3	7,095.7	25.4	32.5	46.96	1,650.3	-3,497.2	3,601.3	3,557.2	44.15	81.564	
7,700.0	7,194.5	7,342.8	7,103.1	25.3	32.5	63.06	1,650.2	-3,497.4	3,552.4	3,501.5	50.91	69.773	
7,748.9	7,196.0	7,346.2	7,106.6	25.2	32.5	84.23	1,650.1	-3,497.5	3,504.2	3,448.9	55.26	63.414	
7,800.0	7,195.8	7,347.6	7,107.9	25.1	32.5	84.36	1,650.1	-3,497.5	3,453.9	3,397.9	56.00	61.678	
7,900.0	7,195.4	7,350.3	7,110.6	25.5	32.5	84.62	1,650.0	-3,497.6	3,355.4	3,297.8	57.61	58.239	
8,000.0	7,195.0	7,352.9	7,113.3	27.5	32.5	84.87	1,650.0	-3,497.7	3,257.0	3,197.6	59.42	54.812	
8,100.0	7,194.6	7,355.5	7,115.9	29.5	32.5	85.12	1,649.9	-3,497.7	3,158.8	3,097.4	61.39	51.457	
8,200.0	7,194.1	7,358.0	7,118.4	31.7	32.5	85.37	1,649.9	-3,497.8	3,060.6	2,997.1	63.48	48.214	
8,300.0	7,193.7	7,360.5	7,120.9	33.9	32.5	85.60	1,649.8	-3,497.9	2,962.6	2,896.9	65.68	45.109	
8,400.0	7,193.3	7,362.9	7,123.3	36.3	32.5	85.84	1,649.8	-3,497.9	2,864.7	2,796.7	67.96	42.153	
8,500.0	7,192.9	7,365.3	7,125.6	38.6	32.5	86.07	1,649.8	-3,498.0	2,766.9	2,696.6	70.31	39.352	
8,600.0	7,192.5	7,367.6	7,128.0	41.1	32.6	86.29	1,649.7	-3,498.0	2,669.3	2,596.6	72.72	36.705	
8,700.0	7,192.1	7,369.9	7,130.3	43.5	32.6	86.51	1,649.7	-3,498.1	2,571.9	2,496.7	75.18	34.208	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD RYLAND 20CD - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 155-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	
8,800.0	7,191.7	7,372.2	7,132.5	46.0	32.6	86.73	1,649.6	-3,498.1	2,474.7	2,397.0	77.68	31.856	
8,900.0	7,191.3	7,374.3	7,134.7	48.6	32.6	86.94	1,649.6	-3,498.2	2,377.7	2,297.5	80.22	29.640	
9,000.0	7,190.9	7,376.5	7,136.8	51.1	32.6	87.15	1,649.6	-3,498.2	2,281.0	2,198.2	82.78	27.554	
9,100.0	7,190.4	7,378.6	7,138.9	53.7	32.6	87.35	1,649.5	-3,498.3	2,184.5	2,099.2	85.37	25.588	
9,200.0	7,190.0	7,380.7	7,141.0	56.3	32.6	87.55	1,649.5	-3,498.3	2,088.5	2,000.5	87.98	23.737	
9,300.0	7,189.6	7,382.7	7,143.0	58.9	32.6	87.75	1,649.4	-3,498.4	1,992.7	1,902.1	90.61	21.992	
9,400.0	7,189.2	7,384.7	7,145.0	61.6	32.6	87.94	1,649.4	-3,498.4	1,897.5	1,804.2	93.26	20.347	
9,500.0	7,188.8	7,386.7	7,147.0	64.2	32.6	88.13	1,649.4	-3,498.4	1,802.7	1,706.8	95.92	18.795	
9,600.0	7,188.4	7,388.6	7,148.9	66.9	32.6	88.32	1,649.3	-3,498.5	1,708.6	1,610.0	98.59	17.330	
9,700.0	7,188.0	7,390.5	7,150.8	69.6	32.6	88.50	1,649.3	-3,498.5	1,615.1	1,513.8	101.27	15.948	
9,800.0	7,187.6	7,392.3	7,152.7	72.3	32.6	88.68	1,649.3	-3,498.6	1,522.5	1,418.5	103.96	14.645	
9,900.0	7,187.1	7,394.2	7,154.5	74.9	32.6	88.86	1,649.3	-3,498.6	1,430.8	1,324.2	106.66	13.415	
10,000.0	7,186.7	7,395.9	7,156.3	77.6	32.6	89.03	1,649.2	-3,498.6	1,340.4	1,231.0	109.37	12.256	
10,100.0	7,186.3	7,397.7	7,158.0	80.4	32.6	89.20	1,649.2	-3,498.7	1,251.4	1,139.3	112.08	11.165	
10,200.0	7,185.9	7,399.4	7,159.8	83.1	32.6	89.37	1,649.2	-3,498.7	1,164.2	1,049.4	114.80	10.141	
10,300.0	7,185.5	7,401.1	7,161.5	85.8	32.6	89.53	1,649.1	-3,498.7	1,079.2	961.6	117.52	9.182	
10,400.0	7,185.1	7,402.8	7,163.1	88.5	32.6	89.69	1,649.1	-3,498.8	997.0	876.7	120.25	8.290	
10,500.0	7,184.7	7,404.4	7,164.8	91.2	32.6	89.85	1,649.1	-3,498.8	918.3	795.3	122.99	7.467	
10,600.0	7,184.3	7,406.1	7,166.4	94.0	32.6	90.01	1,649.1	-3,498.8	844.1	718.4	125.72	6.714	
10,700.0	7,183.9	7,407.6	7,168.0	96.7	32.6	90.16	1,649.0	-3,498.9	775.8	647.3	128.46	6.039	
10,800.0	7,183.4	7,409.2	7,169.5	99.4	32.6	90.32	1,649.0	-3,498.9	715.0	583.7	131.20	5.449	
10,900.0	7,183.0	7,410.7	7,171.1	102.2	32.6	90.46	1,649.0	-3,498.9	663.7	529.7	133.95	4.955	
11,000.0	7,182.6	7,412.2	7,172.6	104.9	32.6	90.61	1,649.0	-3,499.0	624.3	487.6	136.70	4.567	
11,100.0	7,182.2	7,413.7	7,174.1	107.7	32.6	90.76	1,648.9	-3,499.0	599.2	459.7	139.44	4.297	
11,200.0	7,181.8	7,415.2	7,175.5	110.4	32.6	90.90	1,648.9	-3,499.0	590.2	448.0	142.20	4.150	
11,203.6	7,181.8	7,415.3	7,175.6	110.5	32.6	90.90	1,648.9	-3,499.0	590.2	447.9	142.29	4.148 CC, ES	
11,300.0	7,181.4	7,416.6	7,177.0	113.2	32.6	91.04	1,648.9	-3,499.0	598.0	453.0	144.95	4.126 SF	
11,400.0	7,181.0	7,418.1	7,178.4	116.0	32.6	91.18	1,648.9	-3,499.1	622.0	474.3	147.70	4.211	
11,500.0	7,180.6	7,419.5	7,179.8	118.7	32.6	91.31	1,648.8	-3,499.1	660.4	510.0	150.46	4.389	
11,600.0	7,180.1	7,420.8	7,181.1	121.5	32.6	91.44	1,648.8	-3,499.1	710.9	557.7	153.21	4.640	
11,700.0	7,179.7	7,422.2	7,182.5	124.3	32.6	91.58	1,648.8	-3,499.1	771.1	615.2	155.97	4.944	
11,800.0	7,179.3	7,423.5	7,183.8	127.0	32.6	91.70	1,648.8	-3,499.2	839.0	680.3	158.73	5.286	
11,900.0	7,178.9	7,424.8	7,185.1	129.8	32.6	91.83	1,648.8	-3,499.2	912.8	751.3	161.49	5.652	
12,000.0	7,178.5	7,426.1	7,186.4	132.6	32.6	91.96	1,648.7	-3,499.2	991.2	826.9	164.25	6.035	
12,100.0	7,178.1	7,427.4	7,187.7	135.3	32.6	92.08	1,648.7	-3,499.2	1,073.2	906.2	167.01	6.426	
12,200.0	7,177.7	7,428.6	7,189.0	138.1	32.6	92.20	1,648.7	-3,499.3	1,158.0	988.2	169.77	6.821	
12,300.0	7,177.2	7,429.9	7,190.2	140.9	32.6	92.32	1,648.7	-3,499.3	1,245.1	1,072.5	172.53	7.217	
12,400.0	7,176.8	7,431.1	7,191.4	143.7	32.6	92.44	1,648.7	-3,499.3	1,333.9	1,158.7	175.29	7.610	
12,500.0	7,176.4	7,437.0	7,197.3	146.4	32.6	93.01	1,648.6	-3,499.4	1,424.3	1,246.3	177.98	8.003	
12,600.0	7,176.0	7,437.0	7,197.3	149.2	32.6	93.01	1,648.6	-3,499.4	1,515.9	1,335.1	180.75	8.386	
12,700.0	7,175.6	7,437.0	7,197.3	152.0	32.6	93.01	1,648.6	-3,499.4	1,608.4	1,424.9	183.53	8.764	
12,800.0	7,175.2	7,437.0	7,197.3	154.8	32.6	93.01	1,648.6	-3,499.4	1,701.9	1,515.5	186.31	9.134	
12,900.0	7,174.8	7,437.0	7,197.3	157.5	32.6	93.01	1,648.6	-3,499.4	1,796.0	1,606.9	189.10	9.498	
13,000.0	7,174.4	7,437.0	7,197.3	160.3	32.6	93.01	1,648.6	-3,499.4	1,890.7	1,698.8	191.88	9.854	
13,100.0	7,173.9	7,439.5	7,199.8	163.1	32.6	93.25	1,648.5	-3,499.5	1,985.9	1,791.3	194.61	10.205	
13,200.0	7,173.5	7,440.7	7,201.0	165.9	32.6	93.37	1,648.5	-3,499.5	2,081.6	1,884.3	197.37	10.547	
13,300.0	7,173.1	7,441.9	7,202.3	168.7	32.6	93.49	1,648.5	-3,499.5	2,177.7	1,977.6	200.13	10.882	
13,400.0	7,172.7	7,443.2	7,203.5	171.5	32.6	93.61	1,648.5	-3,499.5	2,274.1	2,071.2	202.88	11.209	
13,500.0	7,172.3	7,444.4	7,204.7	174.3	32.7	93.73	1,648.5	-3,499.5	2,370.8	2,165.2	205.64	11.529	
13,600.0	7,171.9	7,445.7	7,206.0	177.0	32.7	93.85	1,648.4	-3,499.6	2,467.8	2,259.4	208.39	11.842	
13,700.0	7,171.5	7,446.9	7,207.2	179.8	32.7	93.97	1,648.4	-3,499.6	2,565.0	2,353.8	211.15	12.148	
13,800.0	7,171.0	7,448.1	7,208.4	182.6	32.7	94.09	1,648.4	-3,499.6	2,662.4	2,448.5	213.90	12.447	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD RYLAND 20CD - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 155-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
13,900.0	7,170.6	7,449.3	7,209.6	185.4	32.7	94.20	1,648.4	-3,499.6	2,760.0	2,543.3	216.65	12.739	
14,000.0	7,170.2	7,450.5	7,210.8	188.2	32.7	94.32	1,648.4	-3,499.6	2,857.8	2,638.4	219.40	13.025	
14,100.0	7,169.8	7,451.7	7,212.0	191.0	32.7	94.44	1,648.4	-3,499.7	2,955.7	2,733.5	222.15	13.305	
14,200.0	7,169.4	7,452.9	7,213.2	193.8	32.7	94.55	1,648.3	-3,499.7	3,053.7	2,828.8	224.90	13.578	
14,295.0	7,169.0	7,454.0	7,214.3	196.4	32.7	94.66	1,648.3	-3,499.7	3,146.9	2,919.4	227.51	13.832	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 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: 155-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	-47.28	1,805.6	-1,955.0	2,661.2				
100.0	100.0	130.6	130.6	0.1	0.0	-47.27	1,805.0	-1,954.0	2,660.5	2,660.3	0.14	N/A	
200.0	200.0	213.3	213.3	0.3	0.2	-47.27	1,804.2	-1,952.9	2,658.9	2,658.4	0.48	5,589.981	
287.2	287.2	271.7	271.7	0.5	0.3	-47.27	1,803.7	-1,952.9	2,658.4	2,657.6	0.79	3,369.143	
300.0	300.0	280.0	279.9	0.5	0.3	-47.28	1,803.6	-1,952.9	2,658.4	2,657.5	0.84	3,178.581	
400.0	400.0	336.0	336.0	0.8	0.4	-47.31	1,802.7	-1,954.4	2,659.2	2,658.0	1.19	2,243.360	
500.0	500.0	403.7	403.5	1.0	0.6	-47.39	1,801.2	-1,957.8	2,661.5	2,659.9	1.58	1,689.290	
600.0	600.0	470.0	469.7	1.2	0.7	-79.96	1,799.3	-1,962.8	2,664.9	2,663.0	1.96	1,359.638	
700.0	699.8	549.5	548.7	1.4	1.0	-80.13	1,796.3	-1,970.7	2,668.8	2,666.4	2.40	1,110.851	
800.0	799.5	645.5	643.9	1.7	1.3	-80.48	1,791.2	-1,981.9	2,672.5	2,669.6	2.92	913.699	
900.0	898.7	729.8	727.4	1.9	1.5	-80.85	1,786.3	-1,992.4	2,676.0	2,672.6	3.45	774.623	
1,000.0	997.5	806.6	803.3	2.2	1.8	-81.26	1,781.1	-2,003.2	2,679.9	2,675.9	4.01	667.928	
1,100.0	1,095.6	927.2	921.5	2.6	2.3	-82.13	1,769.1	-2,023.1	2,683.4	2,678.6	4.82	556.364	
1,169.1	1,163.0	996.4	988.9	2.8	2.6	-82.72	1,759.7	-2,035.9	2,685.6	2,680.2	5.39	498.022	
1,200.0	1,193.1	1,025.7	1,017.3	3.0	2.8	-83.00	1,755.3	-2,041.7	2,686.5	2,680.9	5.66	474.581	
1,300.0	1,290.4	1,154.8	1,141.5	3.4	3.4	-84.33	1,732.5	-2,068.7	2,689.8	2,683.1	6.75	398.481	
1,400.0	1,387.7	1,257.7	1,239.2	3.8	4.1	-85.48	1,709.9	-2,091.7	2,692.7	2,684.9	7.79	345.741	
1,500.0	1,484.9	1,372.2	1,347.2	4.3	4.8	-86.78	1,682.5	-2,117.7	2,695.8	2,686.9	8.92	302.156	
1,600.0	1,582.2	1,439.8	1,410.8	4.7	5.2	-87.57	1,665.5	-2,133.4	2,700.0	2,690.2	9.80	275.582	
1,700.0	1,679.5	1,505.4	1,472.1	5.2	5.7	-88.35	1,648.6	-2,149.5	2,705.7	2,695.0	10.70	252.786	
1,800.0	1,776.8	1,577.3	1,538.7	5.7	6.2	-89.22	1,629.1	-2,168.2	2,713.2	2,701.5	11.68	232.352	
1,900.0	1,874.1	1,656.3	1,611.4	6.1	6.8	-90.20	1,606.7	-2,189.3	2,721.9	2,709.1	12.72	213.937	
2,000.0	1,971.4	1,720.0	1,669.8	6.6	7.3	-91.00	1,588.2	-2,206.9	2,732.2	2,718.5	13.67	199.880	
2,100.0	2,068.7	1,784.3	1,728.4	7.1	7.8	-91.82	1,569.0	-2,225.3	2,744.2	2,729.6	14.64	187.454	
2,200.0	2,165.9	1,858.4	1,795.3	7.6	8.4	-92.78	1,546.2	-2,247.3	2,758.0	2,742.3	15.67	176.013	
2,300.0	2,263.2	1,989.8	1,913.9	8.0	9.4	-94.47	1,504.7	-2,285.6	2,772.6	2,755.5	17.05	162.612	
2,400.0	2,360.5	2,055.7	1,973.4	8.5	9.9	-95.31	1,483.0	-2,304.2	2,787.4	2,769.4	17.98	155.005	
2,500.0	2,457.8	2,108.0	2,020.4	9.0	10.3	-95.99	1,466.0	-2,319.6	2,804.4	2,785.5	18.83	148.958	
2,600.0	2,555.1	2,186.3	2,090.9	9.5	10.9	-96.98	1,440.9	-2,342.8	2,823.0	2,803.2	19.82	142.458	
2,700.0	2,652.4	2,259.9	2,157.3	10.0	11.5	-97.90	1,417.8	-2,364.3	2,842.9	2,822.1	20.74	137.069	
2,800.0	2,749.7	2,338.2	2,228.2	10.4	12.0	-98.86	1,393.7	-2,387.3	2,864.1	2,842.4	21.70	131.962	
2,900.0	2,846.9	2,417.4	2,299.7	10.9	12.7	-99.83	1,369.0	-2,410.4	2,886.3	2,863.6	22.71	127.116	
3,000.0	2,944.2	2,492.5	2,367.4	11.4	13.3	-100.75	1,345.0	-2,432.7	2,909.9	2,886.2	23.71	122.744	
3,100.0	3,041.5	2,598.1	2,462.2	11.9	14.2	-102.04	1,310.2	-2,463.6	2,934.1	2,909.2	24.90	117.832	
3,200.0	3,138.8	2,669.0	2,525.4	12.4	14.8	-102.91	1,285.9	-2,484.3	2,959.3	2,933.5	25.86	114.454	
3,300.0	3,236.1	2,782.1	2,626.0	12.8	15.8	-104.30	1,245.7	-2,517.1	2,985.4	2,958.3	27.08	110.237	
3,400.0	3,333.4	2,881.0	2,714.4	13.3	16.6	-105.50	1,210.9	-2,544.6	3,011.6	2,983.5	28.13	107.052	
3,500.0	3,430.6	2,950.0	2,776.3	13.8	17.1	-106.30	1,187.3	-2,563.7	3,039.1	3,010.1	28.98	104.882	
3,600.0	3,527.9	2,986.1	2,808.7	14.3	17.4	-106.72	1,175.1	-2,574.0	3,068.3	3,038.6	29.65	103.475	
3,700.0	3,625.2	3,043.0	2,859.6	14.8	17.9	-107.38	1,156.0	-2,590.9	3,099.4	3,068.9	30.44	101.819	
3,800.0	3,722.5	3,076.8	2,889.7	15.3	18.2	-107.77	1,144.6	-2,601.2	3,132.2	3,101.0	31.12	100.655	
3,900.0	3,819.8	3,137.0	2,942.9	15.7	18.7	-108.46	1,123.9	-2,620.1	3,166.6	3,134.7	31.95	99.109	
4,000.0	3,917.1	3,218.5	3,015.0	16.2	19.4	-109.38	1,095.8	-2,645.8	3,202.2	3,169.3	32.88	97.398	
4,100.0	4,014.4	3,316.5	3,101.9	16.7	20.3	-110.48	1,062.0	-2,676.1	3,238.2	3,204.4	33.87	95.618	
4,200.0	4,111.6	3,363.6	3,143.5	17.2	20.7	-111.00	1,045.5	-2,690.6	3,275.2	3,240.6	34.58	94.720	
4,300.0	4,208.9	3,417.0	3,190.7	17.7	21.1	-111.58	1,027.4	-2,707.7	3,313.8	3,278.5	35.32	93.826	
4,400.0	4,306.2	3,511.0	3,274.0	18.2	22.0	-112.58	995.8	-2,737.7	3,353.3	3,317.1	36.24	92.531	
4,500.0	4,403.5	3,565.1	3,322.1	18.7	22.4	-113.13	977.9	-2,754.9	3,393.4	3,356.5	36.94	91.856	
4,600.0	4,500.8	3,625.9	3,376.4	19.1	22.9	-113.73	959.2	-2,774.7	3,434.9	3,397.2	37.66	91.200	
4,700.0	4,598.1	3,735.0	3,474.4	19.6	23.8	-114.77	926.8	-2,809.9	3,476.8	3,438.2	38.56	90.172	
4,800.0	4,695.4	3,865.3	3,591.9	20.1	24.8	-115.98	887.5	-2,850.6	3,518.4	3,478.9	39.52	89.037	
4,900.0	4,792.6	3,999.8	3,714.3	20.6	25.9	-117.17	848.5	-2,890.3	3,559.1	3,518.6	40.45	87.984	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD RYLAND 20SD - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 155-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,000.0	4,889.9	4,057.5	3,766.6	21.1	26.4	-117.68	830.9	-2,907.2	3,600.2	3,559.1	41.12	87.561	
5,100.0	4,987.2	4,140.1	3,841.2	21.6	27.1	-118.42	804.8	-2,931.4	3,642.2	3,600.3	41.88	86.966	
5,200.0	5,084.5	4,245.4	3,936.0	22.1	27.9	-119.35	770.6	-2,961.7	3,684.4	3,641.7	42.71	86.275	
5,300.0	5,181.8	4,309.1	3,993.6	22.5	28.4	-119.90	750.4	-2,980.0	3,727.0	3,683.7	43.35	85.984	
5,400.0	5,279.1	4,387.4	4,065.0	23.0	29.0	-120.52	728.0	-3,003.1	3,770.5	3,726.4	44.01	85.670	
5,500.0	5,376.3	4,478.6	4,148.6	23.5	29.7	-121.22	702.9	-3,029.6	3,813.9	3,769.2	44.70	85.317	
5,600.0	5,473.6	4,539.0	4,203.4	24.0	30.2	-121.70	684.9	-3,047.2	3,858.2	3,812.8	45.31	85.151	
5,700.0	5,570.9	4,620.1	4,277.0	24.5	30.8	-122.34	660.2	-3,071.0	3,903.1	3,857.1	45.98	84.888	
5,800.0	5,668.2	4,670.9	4,323.1	25.0	31.2	-122.72	645.0	-3,085.9	3,948.5	3,902.0	46.56	84.810	
5,900.0	5,765.5	4,727.0	4,373.7	25.5	31.7	-123.15	627.9	-3,102.9	3,995.2	3,948.0	47.14	84.745	
5,921.9	5,786.8	4,727.0	4,373.7	25.6	31.7	-123.15	627.9	-3,102.9	4,005.5	3,958.2	47.24	84.794	
6,000.0	5,863.0	4,803.4	4,442.4	25.9	32.3	-124.41	603.9	-3,126.2	4,042.0	3,994.5	47.47	85.141	
6,100.0	5,961.2	4,949.4	4,574.6	26.2	33.5	-126.19	559.6	-3,169.4	4,086.5	4,038.7	47.83	85.437	
6,200.0	6,060.0	5,032.9	4,650.6	26.5	34.2	-127.43	534.8	-3,193.6	4,128.9	4,080.9	48.00	86.028	
6,300.0	6,159.3	5,126.6	4,747.9	26.7	34.7	-128.57	509.8	-3,219.5	4,167.2	4,116.9	50.32	82.817	
6,400.0	6,259.0	5,226.7	4,845.1	26.9	34.9	-130.85	484.8	-3,245.7	4,205.5	4,155.1	50.57	82.581	
6,500.0	6,358.8	5,326.9	4,942.3	27.1	35.0	-133.03	459.8	-3,271.9	4,243.7	4,193.3	50.83	82.289	
6,591.0	6,449.8	5,427.7	5,039.5	27.2	35.1	-135.31	434.8	-3,298.1	4,281.9	4,231.5	51.08	82.000	
6,600.0	6,458.8	5,437.9	5,048.7	27.2	35.1	-135.31	434.8	-3,298.1	4,281.9	4,231.5	51.08	82.000	
6,621.0	6,479.8	5,459.0	5,069.8	27.2	35.1	-135.31	434.8	-3,298.1	4,281.9	4,231.5	51.08	82.000	
6,650.0	6,508.8	5,488.0	5,098.8	27.3	35.2	-136.61	409.8	-3,324.3	4,319.9	4,269.5	51.26	81.687	
6,700.0	6,558.7	5,537.9	5,147.9	27.3	35.2	-136.61	409.8	-3,324.3	4,319.9	4,269.5	51.26	81.687	
6,750.0	6,608.1	5,587.3	5,197.3	27.3	35.2	-136.61	409.8	-3,324.3	4,319.9	4,269.5	51.26	81.687	
6,800.0	6,657.0	5,636.6	5,246.6	27.3	35.2	-136.61	409.8	-3,324.3	4,319.9	4,269.5	51.26	81.687	
6,850.0	6,704.9	5,685.9	5,295.9	27.2	35.1	-137.91	384.8	-3,350.5	4,357.6	4,307.2	49.55	83.916	
6,900.0	6,751.8	5,735.2	5,345.2	27.2	35.1	-137.91	384.8	-3,350.5	4,357.6	4,307.2	49.55	83.916	
6,950.0	6,797.4	5,784.5	5,394.5	27.1	35.0	-139.21	359.8	-3,376.7	4,395.5	4,345.1	47.13	87.487	
7,000.0	6,841.4	5,833.8	5,443.8	27.0	34.9	-140.51	334.8	-3,402.9	4,433.3	4,382.9	45.56	90.007	
7,050.0	6,883.6	5,883.0	5,493.0	26.9	34.8	-141.81	309.8	-3,428.1	4,471.1	4,420.7	43.78	93.093	
7,100.0	6,923.9	5,932.3	5,542.3	26.8	34.7	-143.11	284.8	-3,453.3	4,508.9	4,458.5	41.82	96.804	
7,150.0	6,962.0	5,981.6	5,591.6	26.7	34.6	-144.41	259.8	-3,478.5	4,546.7	4,496.3	39.70	101.195	
7,200.0	6,997.8	6,030.9	5,640.9	26.5	34.4	-145.71	234.8	-3,503.7	4,584.5	4,534.1	37.48	106.297	
7,250.0	7,031.0	6,079.2	5,690.2	26.4	34.3	-147.01	209.8	-3,528.9	4,622.3	4,571.9	35.24	112.060	
7,300.0	7,061.6	6,128.5	5,739.5	26.3	34.2	-148.31	184.8	-3,554.1	4,660.1	4,609.7	33.08	118.249	
7,350.0	7,089.3	6,177.8	5,788.8	26.1	34.0	-149.61	159.8	-3,579.3	4,697.9	4,647.5	31.16	124.241	
7,400.0	7,114.0	6,227.1	5,838.1	26.0	33.9	-150.91	134.8	-3,604.5	4,735.7	4,685.3	29.74	128.765	
7,450.0	7,135.7	6,276.4	5,887.4	25.9	33.8	-152.21	109.8	-3,629.7	4,773.5	4,722.9	29.18	129.777	
7,500.0	7,154.2	6,325.7	5,936.7	25.7	33.7	-153.51	84.8	-3,654.9	4,811.3	4,761.7	29.91	125.085	
7,550.0	7,169.4	6,375.0	5,986.0	25.6	33.6	-154.81	59.8	-3,680.1	4,849.1	4,800.1	32.41	114.016	
7,600.0	7,181.2	6,424.3	6,035.3	25.5	33.5	-156.11	34.8	-3,705.3	4,886.9	4,837.9	36.96	98.732	
7,650.0	7,189.6	6,473.6	6,084.6	25.4	33.4	-157.41	9.8	-3,730.5	4,924.7	4,875.7	43.35	83.065	
7,700.0	7,194.5	6,522.9	6,133.9	25.3	33.3	-158.71	-15.2	-3,755.7	4,962.5	4,913.5	50.39	70.500	
7,748.9	7,196.0	6,572.2	6,183.2	25.2	33.2	-160.01	-40.2	-3,780.9	5,000.3	4,951.3	55.32	63.362	
7,800.0	7,195.8	6,621.5	6,232.5	25.1	33.1	-161.31	-65.2	-3,806.1	5,038.1	4,989.1	56.06	61.638	
7,900.0	7,195.4	6,670.8	6,281.8	25.5	32.0	-162.61	-90.2	-3,831.3	5,075.9	5,026.9	57.68	58.216	
8,000.0	7,195.0	6,720.1	6,331.1	27.5	42.0	-82.77	277.2	-3,459.1	3,260.7	3,201.2	59.50	54.801	
8,100.0	7,194.6	6,769.4	6,380.4	29.5	42.0	-82.98	277.1	-3,459.2	3,163.8	3,102.3	61.48	51.458	
8,200.0	7,194.1	6,818.7	6,429.7	31.7	42.0	-83.19	277.1	-3,459.3	3,067.1	3,003.5	63.59	48.228	
8,300.0	7,193.7	6,868.0	6,479.0	33.9	42.0	-83.39	277.1	-3,459.4	2,970.5	2,904.7	65.81	45.137	
8,400.0	7,193.3	6,917.3	6,528.3	36.3	42.0	-83.60	277.0	-3,459.5	2,874.2	2,806.1	68.11	42.197	
8,500.0	7,192.9	6,966.6	6,577.6	38.6	42.0	-83.80	277.0	-3,459.6	2,778.2	2,707.7	70.49	39.414	
8,600.0	7,192.5	7,015.9	6,626.9	41.1	42.0	-84.01	276.9	-3,459.7	2,682.4	2,609.5	72.92	36.787	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD RYLAND 20SD - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 155-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
8,700.0	7,192.1	7,524.0	7,087.2	43.5	42.0	-84.21	276.9	-3,459.7	2,587.0	2,511.6	75.40	34.311	
8,800.0	7,191.7	7,526.8	7,089.9	46.0	42.0	-84.41	276.9	-3,459.8	2,491.9	2,413.9	77.92	31.981	
8,900.0	7,191.3	7,529.6	7,092.7	48.6	42.0	-84.61	276.8	-3,459.9	2,397.2	2,316.7	80.47	29.790	
9,000.0	7,190.9	7,532.3	7,095.4	51.1	42.0	-84.81	276.8	-3,460.0	2,302.9	2,219.9	83.05	27.728	
9,100.0	7,190.4	7,535.0	7,098.1	53.7	42.0	-85.01	276.7	-3,460.1	2,209.2	2,123.5	85.66	25.790	
9,200.0	7,190.0	7,535.0	7,098.1	56.3	42.0	-85.01	276.7	-3,460.1	2,116.0	2,027.7	88.26	23.974	
9,300.0	7,189.6	7,535.0	7,098.1	58.9	42.0	-85.01	276.7	-3,460.1	2,023.5	1,932.6	90.88	22.265	
9,400.0	7,189.2	7,535.0	7,098.1	61.6	42.0	-85.01	276.7	-3,460.1	1,931.7	1,838.2	93.52	20.656	
9,500.0	7,188.8	7,535.0	7,098.1	64.2	42.0	-85.01	276.7	-3,460.1	1,840.8	1,744.6	96.17	19.141	
9,600.0	7,188.4	7,535.0	7,098.1	66.9	42.0	-85.01	276.7	-3,460.1	1,750.8	1,652.0	98.83	17.716	
9,700.0	7,188.0	7,535.0	7,098.1	69.6	42.0	-85.01	276.7	-3,460.1	1,662.1	1,560.6	101.50	16.375	
9,800.0	7,187.6	7,548.7	7,111.8	72.3	42.1	-86.00	276.5	-3,460.5	1,574.6	1,470.2	104.33	15.091	
9,900.0	7,187.1	7,550.8	7,113.9	74.9	42.1	-86.16	276.5	-3,460.6	1,488.7	1,381.6	107.05	13.906	
10,000.0	7,186.7	7,553.0	7,116.1	77.6	42.1	-86.32	276.4	-3,460.7	1,404.7	1,294.9	109.77	12.796	
10,100.0	7,186.3	7,555.2	7,118.3	80.4	42.1	-86.48	276.4	-3,460.8	1,322.9	1,210.3	112.50	11.758	
10,200.0	7,185.9	7,557.5	7,120.6	83.1	42.1	-86.65	276.3	-3,460.8	1,243.7	1,128.5	115.24	10.792	
10,300.0	7,185.5	7,559.8	7,122.9	85.8	42.1	-86.82	276.3	-3,460.9	1,167.8	1,049.8	117.99	9.898	
10,400.0	7,185.1	7,562.2	7,125.3	88.5	42.1	-86.99	276.2	-3,461.0	1,095.7	975.0	120.74	9.075	
10,500.0	7,184.7	7,564.7	7,127.8	91.2	42.1	-87.17	276.2	-3,461.1	1,028.3	904.8	123.49	8.327	
10,600.0	7,184.3	7,567.2	7,130.3	94.0	42.1	-87.36	276.1	-3,461.2	966.5	840.3	126.25	7.656	
10,700.0	7,183.9	7,569.7	7,132.8	96.7	42.1	-87.54	276.1	-3,461.3	911.6	782.6	129.01	7.066	
10,800.0	7,183.4	7,572.4	7,135.5	99.4	42.1	-87.74	276.0	-3,461.4	864.7	733.0	131.78	6.562	
10,900.0	7,183.0	7,575.1	7,138.2	102.2	42.1	-87.93	275.9	-3,461.5	827.4	692.8	134.55	6.149	
11,000.0	7,182.6	7,577.9	7,141.0	104.9	42.1	-88.14	275.9	-3,461.6	800.8	663.5	137.32	5.832	
11,100.0	7,182.2	7,580.7	7,143.8	107.7	42.1	-88.35	275.8	-3,461.7	786.1	646.1	140.09	5.612	
11,166.5	7,181.9	7,582.7	7,145.7	109.5	42.1	-88.49	275.7	-3,461.8	783.3	641.4	141.94	5.519 CC	
11,200.0	7,181.8	7,583.6	7,146.7	110.4	42.1	-88.56	275.7	-3,461.8	784.1	641.2	142.87	5.488 ES	
11,300.0	7,181.4	7,586.6	7,149.7	113.2	42.1	-88.78	275.6	-3,461.9	794.6	649.0	145.64	5.456 SF	
11,400.0	7,181.0	7,589.7	7,152.8	116.0	42.1	-89.00	275.6	-3,462.0	817.4	669.0	148.42	5.507	
11,500.0	7,180.6	7,592.9	7,156.0	118.7	42.1	-89.24	275.5	-3,462.2	851.3	700.1	151.20	5.630	
11,600.0	7,180.1	7,596.2	7,159.2	121.5	42.1	-89.47	275.4	-3,462.3	895.2	741.2	153.98	5.814	
11,700.0	7,179.7	7,599.5	7,162.6	124.3	42.1	-89.72	275.3	-3,462.4	947.6	790.9	156.76	6.045	
11,800.0	7,179.3	7,603.0	7,166.0	127.0	42.1	-89.97	275.2	-3,462.6	1,007.2	847.7	159.54	6.314	
11,900.0	7,178.9	7,606.5	7,169.6	129.8	42.1	-90.23	275.0	-3,462.7	1,072.9	910.6	162.31	6.610	
12,000.0	7,178.5	7,610.2	7,173.2	132.6	42.1	-90.50	274.9	-3,462.9	1,143.5	978.4	165.09	6.927	
12,100.0	7,178.1	7,613.9	7,177.0	135.3	42.1	-90.77	274.8	-3,463.1	1,218.2	1,050.4	167.86	7.257	
12,200.0	7,177.7	7,617.8	7,180.9	138.1	42.2	-91.06	274.7	-3,463.2	1,296.4	1,125.7	170.63	7.597	
12,300.0	7,177.2	7,621.8	7,184.9	140.9	42.2	-91.35	274.5	-3,463.4	1,377.3	1,203.9	173.40	7.943	
12,400.0	7,176.8	7,626.0	7,189.0	143.7	42.2	-91.65	274.4	-3,463.6	1,460.6	1,284.5	176.16	8.291	
12,500.0	7,176.4	7,629.0	7,192.0	146.4	42.2	-91.87	274.3	-3,463.7	1,545.9	1,367.0	178.92	8.640	
12,600.0	7,176.0	7,629.0	7,192.0	149.2	42.2	-91.87	274.3	-3,463.7	1,632.8	1,451.1	181.71	8.986	
12,700.0	7,175.6	7,629.0	7,192.0	152.0	42.2	-91.87	274.3	-3,463.7	1,721.2	1,536.7	184.49	9.330	
12,800.0	7,175.2	7,640.2	7,203.2	154.8	42.2	-92.68	273.9	-3,464.2	1,810.7	1,623.5	187.19	9.673	
12,900.0	7,174.8	7,643.3	7,206.3	157.5	42.2	-92.91	273.7	-3,464.4	1,901.3	1,711.3	189.94	10.010	
13,000.0	7,174.4	7,646.4	7,209.4	160.3	42.2	-93.13	273.6	-3,464.5	1,992.8	1,800.1	192.69	10.342	
13,100.0	7,173.9	7,649.3	7,212.3	163.1	42.2	-93.35	273.5	-3,464.6	2,085.0	1,889.6	195.44	10.668	
13,200.0	7,173.5	7,652.2	7,215.2	165.9	42.2	-93.55	273.4	-3,464.7	2,178.0	1,979.8	198.19	10.990	
13,300.0	7,173.1	7,655.0	7,218.0	168.7	42.2	-93.75	273.3	-3,464.9	2,271.5	2,070.6	200.93	11.305	
13,400.0	7,172.7	7,657.7	7,220.6	171.5	42.2	-93.95	273.3	-3,465.0	2,365.5	2,161.9	203.67	11.614	
13,500.0	7,172.3	7,660.3	7,223.3	174.3	42.2	-94.14	273.2	-3,465.1	2,460.1	2,253.6	206.42	11.918	
13,600.0	7,171.9	7,662.8	7,225.8	177.0	42.2	-94.32	273.1	-3,465.2	2,555.0	2,345.8	209.16	12.216	
13,700.0	7,171.5	7,665.3	7,228.2	179.8	42.2	-94.50	273.0	-3,465.3	2,650.3	2,438.4	211.90	12.507	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD RYLAND 20SD - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 155-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
13,800.0	7,171.0	7,667.7	7,230.6	182.6	42.2	-94.67	272.9	-3,465.4	2,745.9	2,531.3	214.64	12.793	
13,900.0	7,170.6	7,670.0	7,232.9	185.4	42.2	-94.84	272.9	-3,465.5	2,841.9	2,624.5	217.37	13.074	
14,000.0	7,170.2	7,672.2	7,235.2	188.2	42.2	-95.00	272.8	-3,465.5	2,938.1	2,718.0	220.11	13.348	
14,100.0	7,169.8	7,674.4	7,237.4	191.0	42.2	-95.16	272.7	-3,465.6	3,034.5	2,811.7	222.85	13.617	
14,200.0	7,169.4	7,676.5	7,239.5	193.8	42.2	-95.31	272.6	-3,465.7	3,131.2	2,905.6	225.58	13.881	
14,295.0	7,169.0	7,678.5	7,241.5	196.4	42.2	-95.45	272.6	-3,465.8	3,223.2	2,995.0	228.18	14.126	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD RYLAND 20VD - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 672-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	-46.00	1,916.7	-1,984.5	2,759.0				
100.0	100.0	82.5	82.5	0.1	0.1	-46.00	1,916.7	-1,984.6	2,759.0	2,758.9	0.17	N/A	
200.0	200.0	180.0	180.0	0.3	0.2	-46.00	1,916.6	-1,984.8	2,759.1	2,758.7	0.48	5,697.290	
300.0	300.0	277.6	277.6	0.5	0.3	-46.01	1,916.4	-1,985.3	2,759.3	2,758.6	0.80	3,462.043	
400.0	400.0	375.2	375.2	0.8	0.3	-46.02	1,916.2	-1,985.9	2,759.6	2,758.5	1.11	2,486.691	
500.0	500.0	472.7	472.7	1.0	0.4	-46.04	1,915.9	-1,986.7	2,760.0	2,758.6	1.42	1,940.267	
600.0	600.0	570.3	570.2	1.2	0.5	-78.60	1,915.5	-1,987.7	2,760.2	2,758.4	1.73	1,591.270	
700.0	699.8	672.0	672.0	1.4	0.6	-78.75	1,915.1	-1,988.9	2,759.7	2,757.6	2.05	1,345.085	
800.0	799.5	771.0	771.0	1.7	0.8	-78.97	1,914.4	-1,990.3	2,758.5	2,756.0	2.51	1,099.920	
900.0	898.7	873.3	873.2	1.9	1.0	-79.29	1,913.7	-1,991.5	2,756.6	2,753.6	2.97	927.342	
1,000.0	997.5	955.6	955.6	2.2	1.2	-79.63	1,913.2	-1,992.7	2,754.4	2,750.9	3.44	801.735	
1,100.0	1,095.6	1,054.6	1,054.5	2.6	1.4	-80.09	1,912.6	-1,994.5	2,751.9	2,747.9	3.99	689.964	
1,169.1	1,163.0	1,122.1	1,122.0	2.8	1.6	-80.46	1,912.2	-1,995.7	2,749.9	2,745.5	4.40	625.316	
1,200.0	1,193.1	1,151.4	1,151.4	3.0	1.6	-80.61	1,912.0	-1,996.3	2,749.0	2,744.4	4.59	599.365	
1,300.0	1,290.4	1,250.1	1,250.0	3.4	1.8	-81.12	1,911.4	-1,998.2	2,746.3	2,741.1	5.22	526.017	
1,400.0	1,387.7	1,380.8	1,380.7	3.8	2.1	-81.78	1,910.1	-1,999.5	2,742.9	2,736.9	5.93	462.890	
1,500.0	1,484.9	1,478.4	1,478.3	4.3	2.3	-82.27	1,909.2	-1,999.9	2,739.2	2,732.6	6.57	417.133	
1,600.0	1,582.2	1,574.6	1,574.4	4.7	2.5	-82.74	1,908.4	-2,000.2	2,735.8	2,728.6	7.22	379.152	
1,700.0	1,679.5	1,670.1	1,670.0	5.2	2.7	-83.22	1,907.6	-2,000.5	2,732.6	2,724.7	7.87	347.149	
1,800.0	1,776.8	1,760.5	1,760.3	5.7	2.9	-83.67	1,907.1	-2,000.8	2,729.8	2,721.3	8.52	320.319	
1,900.0	1,874.1	1,849.3	1,849.1	6.1	3.1	-84.11	1,906.8	-2,001.3	2,727.4	2,718.3	9.17	297.271	
2,000.0	1,971.4	1,940.1	1,939.9	6.6	3.2	-84.56	1,906.6	-2,002.0	2,725.6	2,715.8	9.84	277.053	
2,100.0	2,068.7	2,022.6	2,022.5	7.1	3.4	-84.98	1,906.2	-2,003.1	2,724.2	2,713.7	10.49	259.702	
2,200.0	2,165.9	2,103.4	2,103.2	7.6	3.6	-85.43	1,904.8	-2,005.7	2,723.8	2,712.6	11.15	244.394	
2,242.3	2,207.0	2,144.3	2,144.0	7.8	3.7	-85.67	1,903.4	-2,007.6	2,723.8	2,712.3	11.44	238.097	
2,300.0	2,263.2	2,191.3	2,190.9	8.0	3.8	-85.97	1,901.1	-2,010.4	2,723.9	2,712.0	11.82	230.353	
2,400.0	2,360.5	2,263.0	2,262.3	8.5	4.0	-86.44	1,897.3	-2,015.4	2,725.0	2,712.5	12.47	218.456	
2,500.0	2,457.8	2,374.3	2,372.9	9.0	4.3	-87.23	1,889.0	-2,024.9	2,726.3	2,713.1	13.23	206.007	
2,600.0	2,555.1	2,450.0	2,447.8	9.5	4.5	-87.81	1,881.7	-2,032.9	2,728.5	2,714.6	13.92	196.046	
2,700.0	2,652.4	2,496.4	2,493.5	10.0	4.6	-88.19	1,876.4	-2,039.0	2,732.3	2,717.7	14.54	187.932	
2,800.0	2,749.7	2,543.0	2,539.1	10.4	4.7	-88.60	1,870.3	-2,046.3	2,737.9	2,722.7	15.16	180.576	
2,900.0	2,846.9	2,621.2	2,615.3	10.9	5.0	-89.31	1,859.4	-2,059.8	2,744.9	2,729.0	15.90	172.593	
3,000.0	2,944.2	2,731.0	2,722.4	11.4	5.4	-90.29	1,844.3	-2,078.8	2,752.8	2,736.0	16.73	164.510	
3,100.0	3,041.5	2,807.1	2,796.9	11.9	5.6	-90.95	1,834.8	-2,091.3	2,761.0	2,743.6	17.44	158.313	
3,200.0	3,138.8	2,879.3	2,867.6	12.4	5.9	-91.57	1,826.2	-2,103.4	2,770.6	2,752.4	18.16	152.596	
3,300.0	3,236.1	3,005.7	2,990.9	12.8	6.3	-92.67	1,809.7	-2,125.5	2,780.9	2,761.8	19.07	145.862	
3,400.0	3,333.4	3,120.8	3,103.5	13.3	6.7	-93.66	1,794.4	-2,143.8	2,790.3	2,770.3	19.91	140.142	
3,500.0	3,430.6	3,199.0	3,180.3	13.8	7.0	-94.29	1,785.3	-2,155.5	2,800.2	2,779.6	20.63	135.730	
3,600.0	3,527.9	3,270.3	3,250.4	14.3	7.3	-94.86	1,777.6	-2,166.3	2,811.2	2,789.9	21.34	131.760	
3,700.0	3,625.2	3,338.4	3,317.2	14.8	7.5	-95.40	1,770.4	-2,177.1	2,823.4	2,801.4	22.04	128.123	
3,800.0	3,722.5	3,418.6	3,395.8	15.3	7.8	-96.04	1,762.1	-2,190.6	2,836.9	2,814.1	22.78	124.536	
3,900.0	3,819.8	3,516.4	3,491.5	15.7	8.2	-96.83	1,750.9	-2,207.1	2,850.7	2,827.1	23.57	120.919	
4,000.0	3,917.1	3,679.4	3,651.3	16.2	8.8	-98.12	1,732.2	-2,233.3	2,864.6	2,840.1	24.56	116.645	
4,100.0	4,014.4	3,761.0	3,731.1	16.7	9.1	-98.80	1,720.6	-2,245.9	2,877.4	2,852.1	25.31	113.708	
4,200.0	4,111.6	3,861.4	3,829.2	17.2	9.5	-99.64	1,705.8	-2,261.8	2,890.8	2,864.7	26.11	110.699	
4,300.0	4,208.9	4,025.5	3,990.4	17.7	10.1	-100.91	1,684.7	-2,283.5	2,902.9	2,875.9	27.06	107.267	
4,400.0	4,306.2	4,220.9	4,184.0	18.2	10.7	-102.24	1,665.7	-2,301.3	2,913.1	2,885.1	28.01	103.989	
4,500.0	4,403.5	4,402.5	4,365.3	18.7	11.1	-103.25	1,656.8	-2,308.5	2,920.5	2,891.7	28.82	101.352	
4,600.0	4,500.8	4,525.3	4,488.0	19.1	11.3	-103.84	1,654.8	-2,309.6	2,926.4	2,897.0	29.47	99.315	
4,700.0	4,598.1	4,655.1	4,617.7	19.6	11.6	-104.44	1,652.9	-2,309.1	2,931.3	2,901.2	30.12	97.332	
4,800.0	4,695.4	4,751.8	4,714.5	20.1	11.7	-104.88	1,651.5	-2,308.3	2,936.1	2,905.4	30.72	95.571	
4,900.0	4,792.6	4,846.9	4,809.6	20.6	11.9	-105.31	1,650.4	-2,307.5	2,941.1	2,909.8	31.32	93.897	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 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: 672-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,000.0	4,889.9	4,937.0	4,899.6	21.1	12.0	-105.72	1,649.4	-2,306.9	2,946.4	2,914.5	31.92	92.317	
5,100.0	4,987.2	5,025.3	4,988.0	21.6	12.2	-106.12	1,648.6	-2,306.5	2,952.2	2,919.7	32.51	90.818	
5,200.0	5,084.5	5,119.7	5,082.4	22.1	12.3	-106.53	1,647.9	-2,306.2	2,958.4	2,925.3	33.10	89.365	
5,300.0	5,181.8	5,215.4	5,178.0	22.5	12.5	-106.95	1,647.3	-2,305.9	2,964.8	2,931.1	33.70	87.970	
5,400.0	5,279.1	5,309.2	5,271.9	23.0	12.6	-107.36	1,646.9	-2,305.7	2,971.5	2,937.2	34.30	86.639	
5,500.0	5,376.3	5,403.9	5,366.6	23.5	12.8	-107.77	1,646.7	-2,305.5	2,978.4	2,943.5	34.89	85.360	
5,600.0	5,473.6	5,504.5	5,467.1	24.0	13.0	-108.19	1,646.7	-2,305.3	2,985.5	2,950.0	35.49	84.119	
5,700.0	5,570.9	5,599.5	5,562.1	24.5	13.1	-108.58	1,647.2	-2,304.9	2,992.7	2,956.6	36.08	82.944	
5,800.0	5,668.2	5,681.9	5,644.6	25.0	13.3	-108.92	1,647.7	-2,304.7	3,000.3	2,963.6	36.65	81.856	
5,900.0	5,765.5	5,764.8	5,727.4	25.5	13.4	-109.26	1,648.4	-2,305.1	3,008.6	2,971.3	37.23	80.820	
5,921.9	5,786.8	5,784.2	5,746.8	25.6	13.5	-109.34	1,648.5	-2,305.2	3,010.5	2,973.1	37.35	80.596	
6,000.0	5,863.0	5,853.5	5,816.1	25.9	13.6	-109.72	1,649.2	-2,305.7	3,017.0	2,979.3	37.75	79.925	
6,100.0	5,961.2	5,944.3	5,906.9	26.2	13.7	-110.15	1,650.6	-2,306.5	3,024.7	2,986.5	38.18	79.222	
6,200.0	6,060.0	6,045.2	6,007.8	26.5	13.9	-110.52	1,652.2	-2,307.5	3,031.4	2,992.8	38.59	78.547	
6,300.0	6,159.3	6,147.6	6,110.2	26.7	14.1	-110.82	1,653.2	-2,308.4	3,036.7	2,997.8	38.98	77.906	
6,400.0	6,259.0	6,246.4	6,208.9	26.9	14.3	-111.03	1,654.1	-2,309.4	3,040.9	3,001.6	39.33	77.314	
6,500.0	6,358.8	6,344.3	6,306.8	27.1	14.5	-111.16	1,654.9	-2,310.4	3,043.8	3,004.2	39.65	76.762	
6,591.0	6,449.8	6,437.2	6,399.7	27.2	14.6	-78.70	1,655.5	-2,311.4	3,045.4	3,013.4	31.99	95.197	
6,600.0	6,458.8	6,446.9	6,409.5	27.2	14.6	-78.70	1,655.6	-2,311.5	3,045.5	3,013.5	32.02	95.103	
6,621.0	6,479.8	6,469.5	6,432.1	27.2	14.7	-78.70	1,655.7	-2,311.7	3,045.8	3,013.7	32.10	94.873	
6,650.0	6,508.8	6,500.8	6,463.3	27.3	14.7	11.31	1,655.7	-2,312.1	3,045.5	3,005.4	40.08	75.990	
6,700.0	6,558.7	6,554.5	6,517.0	27.3	14.8	11.37	1,655.7	-2,312.6	3,042.3	3,002.2	40.05	75.965	
6,750.0	6,608.1	6,602.4	6,564.9	27.3	14.9	11.50	1,655.7	-2,313.0	3,035.6	2,995.7	39.85	76.168	
6,800.0	6,657.0	6,648.1	6,610.6	27.3	15.0	11.70	1,655.5	-2,313.5	3,025.6	2,986.1	39.50	76.589	
6,850.0	6,704.9	6,698.9	6,661.4	27.2	15.1	11.90	1,655.3	-2,314.0	3,012.3	2,973.3	39.02	77.200	
6,900.0	6,751.8	6,750.7	6,713.3	27.2	15.2	12.34	1,654.9	-2,314.6	2,995.7	2,957.3	38.40	78.013	
6,950.0	6,797.4	6,797.2	6,759.7	27.1	15.3	12.80	1,654.6	-2,315.0	2,975.9	2,938.2	37.64	79.059	
7,000.0	6,841.4	6,841.8	6,804.4	27.0	15.4	13.36	1,654.1	-2,315.4	2,953.0	2,916.2	36.76	80.322	
7,050.0	6,883.6	6,887.1	6,849.7	26.9	15.5	14.05	1,653.7	-2,315.8	2,927.1	2,891.3	35.79	81.783	
7,100.0	6,923.9	6,930.7	6,893.3	26.8	15.6	14.89	1,653.2	-2,316.2	2,898.3	2,863.6	34.74	83.434	
7,150.0	6,962.0	6,969.9	6,932.4	26.7	15.6	15.91	1,652.7	-2,316.5	2,866.9	2,833.2	33.63	85.257	
7,200.0	6,997.8	7,005.9	6,968.4	26.5	15.7	17.15	1,652.3	-2,316.8	2,832.9	2,800.4	32.49	87.180	
7,250.0	7,031.0	7,039.8	7,002.3	26.4	15.8	18.67	1,651.9	-2,317.0	2,796.5	2,765.1	31.39	89.083	
7,300.0	7,061.6	7,072.4	7,034.9	26.3	15.8	20.56	1,651.5	-2,317.2	2,758.0	2,727.6	30.39	90.759	
7,350.0	7,089.3	7,102.0	7,064.5	26.1	15.9	22.93	1,651.2	-2,317.4	2,717.5	2,687.9	29.56	91.924	
7,400.0	7,114.0	7,128.4	7,090.9	26.0	15.9	25.92	1,651.0	-2,317.6	2,675.2	2,646.2	29.03	92.155	
7,450.0	7,135.7	7,150.5	7,113.0	25.9	16.0	29.74	1,650.8	-2,317.7	2,631.4	2,602.4	28.93	90.958	
7,500.0	7,154.2	7,169.4	7,131.9	25.7	16.0	34.71	1,650.6	-2,317.8	2,586.2	2,556.7	29.44	87.840	
7,550.0	7,169.4	7,184.9	7,147.4	25.6	16.0	41.29	1,650.4	-2,317.8	2,539.9	2,509.1	30.73	82.645	
7,600.0	7,181.2	7,197.1	7,159.6	25.5	16.1	50.01	1,650.3	-2,317.9	2,492.7	2,459.8	32.85	75.882	
7,650.0	7,189.6	7,205.8	7,168.3	25.4	16.1	61.38	1,650.2	-2,317.9	2,444.9	2,409.4	35.50	68.864	
7,700.0	7,194.5	7,211.0	7,173.5	25.3	16.1	75.35	1,650.2	-2,318.0	2,396.6	2,358.8	37.81	63.381	
7,748.9	7,196.0	7,212.7	7,175.2	25.2	16.1	90.39	1,650.2	-2,318.0	2,349.3	2,310.7	38.61	60.840	
7,800.0	7,195.8	7,212.7	7,175.2	25.1	16.1	90.40	1,650.2	-2,318.0	2,299.9	2,260.5	39.35	58.451	
7,900.0	7,195.4	7,212.8	7,175.3	25.5	16.1	90.40	1,650.2	-2,318.0	2,203.4	2,162.4	40.96	53.799	
8,000.0	7,195.0	7,212.9	7,175.4	27.5	16.1	90.41	1,650.2	-2,318.0	2,107.2	2,064.5	42.76	49.280	
8,100.0	7,194.6	7,212.9	7,175.4	29.5	16.1	90.42	1,650.2	-2,318.0	2,011.5	1,966.7	44.72	44.976	
8,200.0	7,194.1	7,213.0	7,175.5	31.7	16.1	90.42	1,650.2	-2,318.0	1,916.1	1,869.3	46.81	40.929	
8,300.0	7,193.7	7,213.1	7,175.6	33.9	16.1	90.43	1,650.2	-2,318.0	1,821.2	1,772.2	49.01	37.159	
8,400.0	7,193.3	7,213.1	7,175.6	36.3	16.1	90.43	1,650.2	-2,318.0	1,727.0	1,675.7	51.29	33.668	
8,500.0	7,192.9	7,213.2	7,175.7	38.6	16.1	90.44	1,650.2	-2,318.0	1,633.4	1,579.7	53.65	30.447	
8,600.0	7,192.5	7,213.3	7,175.8	41.1	16.1	90.45	1,650.2	-2,318.0	1,540.6	1,484.5	56.06	27.483	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 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: 672-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	
8,700.0	7,192.1	7,213.3	7,175.8	43.5	16.1	90.45	1,650.2	-2,318.0	1,448.8	1,390.2	58.52	24.758	
8,800.0	7,191.7	7,213.4	7,175.9	46.0	16.1	90.46	1,650.2	-2,318.0	1,358.1	1,297.1	61.01	22.258	
8,900.0	7,191.3	7,213.5	7,176.0	48.6	16.1	90.47	1,650.2	-2,318.0	1,268.8	1,205.3	63.55	19.966	
9,000.0	7,190.9	7,213.5	7,176.0	51.1	16.1	90.47	1,650.2	-2,318.0	1,181.3	1,115.1	66.11	17.868	
9,100.0	7,190.4	7,213.6	7,176.1	53.7	16.1	90.48	1,650.2	-2,318.0	1,095.8	1,027.1	68.70	15.952	
9,200.0	7,190.0	7,213.6	7,176.1	56.3	16.1	90.48	1,650.2	-2,318.0	1,013.1	941.8	71.31	14.208	
9,300.0	7,189.6	7,213.7	7,176.2	58.9	16.1	90.49	1,650.2	-2,318.0	933.7	859.8	73.93	12.629	
9,400.0	7,189.2	7,213.8	7,176.3	61.6	16.1	90.50	1,650.2	-2,318.0	858.7	782.1	76.58	11.213	
9,500.0	7,188.8	7,213.8	7,176.3	64.2	16.1	90.50	1,650.2	-2,318.0	789.2	709.9	79.23	9.960	
9,600.0	7,188.4	7,213.9	7,176.4	66.9	16.1	90.51	1,650.2	-2,318.0	726.8	644.9	81.90	8.874	
9,700.0	7,188.0	7,214.0	7,176.5	69.6	16.1	90.52	1,650.2	-2,318.0	673.6	589.1	84.58	7.964	
9,800.0	7,187.6	7,214.0	7,176.5	72.3	16.1	90.52	1,650.2	-2,318.0	631.9	544.6	87.27	7.240	
9,900.0	7,187.1	7,214.1	7,176.6	74.9	16.1	90.53	1,650.2	-2,318.0	604.0	514.0	89.97	6.713	
10,000.0	7,186.7	7,214.1	7,176.6	77.6	16.1	90.53	1,650.2	-2,318.0	591.8	499.1	92.68	6.386	
10,022.6	7,186.6	7,214.2	7,176.7	78.3	16.1	90.53	1,650.2	-2,318.0	591.4	498.1	93.29	6.339 CC, ES	
10,100.0	7,186.3	7,214.2	7,176.7	80.4	16.1	90.54	1,650.2	-2,318.0	596.4	501.0	95.39	6.252 SF	
10,200.0	7,185.9	7,214.3	7,176.8	83.1	16.1	90.55	1,650.2	-2,318.0	617.4	519.3	98.11	6.293	
10,300.0	7,185.5	7,214.3	7,176.8	85.8	16.1	90.55	1,650.2	-2,318.0	653.2	552.4	100.84	6.478	
10,400.0	7,185.1	7,214.4	7,176.9	88.5	16.1	90.56	1,650.2	-2,318.0	701.6	598.0	103.57	6.774	
10,500.0	7,184.7	7,214.5	7,177.0	91.2	16.1	90.56	1,650.2	-2,318.0	760.1	653.8	106.31	7.150	
10,600.0	7,184.3	7,214.5	7,177.0	94.0	16.1	90.57	1,650.2	-2,318.0	826.5	717.5	109.05	7.580	
10,700.0	7,183.9	7,214.6	7,177.1	96.7	16.1	90.58	1,650.2	-2,318.0	899.3	787.5	111.79	8.044	
10,800.0	7,183.4	7,214.6	7,177.1	99.4	16.1	90.58	1,650.2	-2,318.0	976.8	862.3	114.54	8.528	
10,900.0	7,183.0	7,214.7	7,177.2	102.2	16.1	90.59	1,650.2	-2,318.0	1,058.1	940.8	117.29	9.021	
11,000.0	7,182.6	7,214.8	7,177.3	104.9	16.1	90.59	1,650.2	-2,318.0	1,142.4	1,022.4	120.04	9.517	
11,100.0	7,182.2	7,214.8	7,177.3	107.7	16.1	90.60	1,650.2	-2,318.0	1,229.1	1,106.3	122.80	10.009	
11,200.0	7,181.8	7,214.9	7,177.4	110.4	16.1	90.61	1,650.2	-2,318.0	1,317.6	1,192.1	125.56	10.494	
11,300.0	7,181.4	7,215.0	7,177.5	113.2	16.1	90.61	1,650.2	-2,318.0	1,407.7	1,279.4	128.32	10.970	
11,400.0	7,181.0	7,215.0	7,177.5	116.0	16.1	90.62	1,650.2	-2,318.0	1,499.0	1,367.9	131.09	11.435	
11,500.0	7,180.6	7,215.1	7,177.6	118.7	16.1	90.62	1,650.2	-2,318.0	1,591.4	1,457.6	133.85	11.889	
11,600.0	7,180.1	7,215.1	7,177.6	121.5	16.1	90.63	1,650.2	-2,318.0	1,684.7	1,548.0	136.62	12.331	
11,700.0	7,179.7	7,215.2	7,177.7	124.3	16.1	90.64	1,650.2	-2,318.0	1,778.6	1,639.2	139.39	12.760	
11,800.0	7,179.3	7,215.3	7,177.8	127.0	16.1	90.64	1,650.2	-2,318.0	1,873.2	1,731.1	142.16	13.177	
11,900.0	7,178.9	7,215.3	7,177.8	129.8	16.1	90.65	1,650.2	-2,318.0	1,968.4	1,823.4	144.93	13.581	
12,000.0	7,178.5	7,215.4	7,177.9	132.6	16.1	90.65	1,650.2	-2,318.0	2,064.0	1,916.3	147.71	13.973	
12,100.0	7,178.1	7,215.4	7,177.9	135.3	16.1	90.66	1,650.2	-2,318.0	2,160.0	2,009.5	150.48	14.353	
12,200.0	7,177.7	7,215.5	7,178.0	138.1	16.1	90.66	1,650.2	-2,318.0	2,256.3	2,103.1	153.26	14.722	
12,300.0	7,177.2	7,215.6	7,178.1	140.9	16.1	90.67	1,650.2	-2,318.0	2,353.0	2,196.9	156.04	15.079	
12,400.0	7,176.8	7,215.6	7,178.1	143.7	16.1	90.68	1,650.2	-2,318.0	2,449.9	2,291.1	158.82	15.426	
12,500.0	7,176.4	7,215.7	7,178.2	146.4	16.1	90.68	1,650.2	-2,318.0	2,547.0	2,385.4	161.60	15.761	
12,600.0	7,176.0	7,215.7	7,178.3	149.2	16.1	90.69	1,650.2	-2,318.0	2,644.4	2,480.0	164.38	16.087	
12,700.0	7,175.6	7,215.8	7,178.3	152.0	16.1	90.69	1,650.2	-2,318.0	2,742.0	2,574.8	167.16	16.403	
12,800.0	7,175.2	7,215.9	7,178.4	154.8	16.1	90.70	1,650.2	-2,318.0	2,839.7	2,669.8	169.95	16.709	
12,900.0	7,174.8	7,215.9	7,178.4	157.5	16.1	90.70	1,650.2	-2,318.0	2,937.6	2,764.9	172.73	17.007	
13,000.0	7,174.4	7,216.0	7,178.5	160.3	16.1	90.71	1,650.2	-2,318.0	3,035.6	2,860.1	175.52	17.295	
13,100.0	7,173.9	7,216.1	7,178.6	163.1	16.1	90.72	1,650.2	-2,318.0	3,133.7	2,955.4	178.30	17.575	
13,200.0	7,173.5	7,216.1	7,178.6	165.9	16.1	90.72	1,650.1	-2,318.0	3,232.0	3,050.9	181.09	17.847	
13,300.0	7,173.1	7,216.2	7,178.7	168.7	16.1	90.73	1,650.1	-2,318.0	3,330.4	3,146.5	183.88	18.112	
13,400.0	7,172.7	7,216.2	7,178.7	171.5	16.1	90.73	1,650.1	-2,318.0	3,428.8	3,242.2	186.67	18.369	
13,500.0	7,172.3	7,216.3	7,178.8	174.3	16.1	90.74	1,650.1	-2,318.0	3,527.4	3,337.9	189.45	18.619	
13,600.0	7,171.9	7,216.4	7,178.9	177.0	16.1	90.74	1,650.1	-2,318.0	3,626.0	3,433.7	192.24	18.861	
13,700.0	7,171.5	7,216.4	7,178.9	179.8	16.1	90.75	1,650.1	-2,318.0	3,724.7	3,529.7	195.03	19.098	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD RYLAND 20VD - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 672-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	
13,800.0	7,171.0	7,216.5	7,179.0	182.6	16.1	90.76	1,650.1	-2,318.0	3,823.5	3,625.6	197.82	19.327	
13,900.0	7,170.6	7,216.5	7,179.0	185.4	16.1	90.76	1,650.1	-2,318.0	3,922.3	3,721.7	200.62	19.551	
14,000.0	7,170.2	7,216.6	7,179.1	188.2	16.1	90.77	1,650.1	-2,318.0	4,021.2	3,817.8	203.41	19.769	
14,100.0	7,169.8	7,216.6	7,179.2	191.0	16.1	90.77	1,650.1	-2,318.0	4,120.1	3,913.9	206.20	19.981	
14,200.0	7,169.4	7,216.7	7,179.2	193.8	16.1	90.78	1,650.1	-2,318.0	4,219.1	4,010.1	208.99	20.188	
14,295.0	7,169.0	7,216.8	7,179.3	196.4	16.1	90.78	1,650.1	-2,318.0	4,313.1	4,101.5	211.64	20.379	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 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: 546-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	-71.90	1,602.7	-4,904.9	5,160.2				
100.0	100.0	62.6	62.6	0.1	0.1	-71.91	1,602.7	-4,904.9	5,160.1	5,160.0	0.15	N/A	
200.0	200.0	162.8	162.8	0.3	0.1	-71.91	1,602.6	-4,904.9	5,160.1	5,159.6	0.47	N/A	
300.0	300.0	263.0	263.0	0.5	0.2	-71.91	1,602.5	-4,905.0	5,160.1	5,159.3	0.78	6,607.897	
400.0	400.0	363.2	363.2	0.8	0.3	-71.91	1,602.3	-4,905.0	5,160.1	5,159.0	1.09	4,712.982	
500.0	500.0	463.4	463.4	1.0	0.4	-71.91	1,602.0	-4,905.1	5,160.1	5,158.7	1.41	3,662.654	
502.0	502.0	465.4	465.4	1.0	0.4	-104.42	1,602.0	-4,905.1	5,160.1	5,158.7	1.42	3,646.152	
600.0	600.0	559.1	559.1	1.2	0.5	-104.44	1,601.7	-4,905.2	5,160.5	5,158.8	1.73	2,978.316	
700.0	699.8	851.3	851.1	1.4	1.1	-104.53	1,606.9	-4,899.3	5,161.3	5,158.8	2.55	2,023.495	
800.0	799.5	1,129.5	1,127.1	1.7	1.8	-104.52	1,630.8	-4,875.0	5,157.3	5,153.8	3.50	1,474.396	
900.0	898.7	1,231.0	1,226.9	1.9	2.2	-104.55	1,644.5	-4,863.2	5,153.4	5,149.3	4.08	1,262.029	
1,000.0	997.5	1,787.4	1,765.3	2.2	4.8	-104.26	1,740.5	-4,763.6	5,144.6	5,137.8	6.75	761.639	
1,100.0	1,095.6	1,881.8	1,855.4	2.6	5.3	-104.40	1,758.7	-4,742.2	5,133.7	5,126.1	7.54	681.057	
1,169.1	1,163.0	1,982.9	1,951.8	2.8	5.9	-104.49	1,778.0	-4,718.7	5,126.1	5,117.8	8.29	618.167	
1,200.0	1,193.1	2,007.9	1,975.6	3.0	6.0	-104.48	1,782.9	-4,712.8	5,122.8	5,114.3	8.55	599.422	
1,300.0	1,290.4	2,072.4	2,036.9	3.4	6.4	-104.45	1,796.2	-4,697.6	5,112.6	5,103.3	9.29	550.404	
1,400.0	1,387.7	2,136.0	2,097.5	3.8	6.7	-104.42	1,809.2	-4,683.3	5,103.2	5,093.2	10.03	508.626	
1,500.0	1,484.9	2,218.3	2,176.1	4.3	7.2	-104.38	1,825.8	-4,665.4	5,094.4	5,083.5	10.86	468.940	
1,600.0	1,582.2	2,346.9	2,298.7	4.7	7.9	-104.32	1,852.0	-4,636.8	5,085.3	5,073.3	11.97	424.959	
1,700.0	1,679.5	2,511.0	2,455.2	5.2	8.8	-104.25	1,884.5	-4,599.4	5,075.6	5,062.3	13.27	382.600	
1,800.0	1,776.8	2,582.0	2,522.5	5.7	9.3	-104.21	1,899.2	-4,582.6	5,065.2	5,051.1	14.11	358.953	
1,900.0	1,874.1	2,641.3	2,578.8	6.1	9.6	-104.17	1,912.1	-4,568.7	5,055.5	5,040.6	14.89	339.416	
2,000.0	1,971.4	2,698.0	2,632.5	6.6	10.0	-104.13	1,924.7	-4,556.0	5,046.6	5,030.9	15.67	322.146	
2,100.0	2,068.7	2,899.1	2,824.3	7.1	11.1	-104.03	1,965.7	-4,511.6	5,038.2	5,021.0	17.16	293.554	
2,200.0	2,165.9	3,016.1	2,935.9	7.6	11.8	-104.00	1,987.4	-4,484.1	5,027.3	5,009.1	18.22	275.880	
2,300.0	2,263.2	3,089.2	3,005.8	8.0	12.2	-103.98	2,000.8	-4,467.3	5,016.8	4,997.7	19.05	263.381	
2,400.0	2,360.5	3,181.5	3,094.2	8.5	12.7	-103.95	2,017.4	-4,446.4	5,006.6	4,986.7	19.96	250.799	
2,500.0	2,457.8	3,403.2	3,305.9	9.0	13.9	-103.89	2,057.2	-4,394.0	4,995.6	4,974.0	21.56	231.656	
2,600.0	2,555.1	3,447.0	3,347.6	9.5	14.2	-103.88	2,065.0	-4,383.0	4,983.3	4,961.1	22.26	223.823	
2,700.0	2,652.4	3,506.5	3,404.3	10.0	14.6	-103.86	2,075.8	-4,368.6	4,971.9	4,948.9	23.04	215.829	
2,800.0	2,749.7	3,550.4	3,446.3	10.4	14.8	-103.85	2,083.9	-4,358.8	4,961.9	4,938.2	23.73	209.116	
2,900.0	2,846.9	3,643.3	3,535.3	10.9	15.3	-103.82	2,101.0	-4,338.3	4,952.4	4,927.8	24.66	200.861	
3,000.0	2,944.2	3,728.0	3,616.5	11.4	15.8	-103.80	2,116.4	-4,319.9	4,943.1	4,917.6	25.54	193.532	
3,100.0	3,041.5	3,795.4	3,681.1	11.9	16.1	-103.79	2,128.9	-4,305.4	4,934.3	4,907.9	26.35	187.272	
3,200.0	3,138.8	3,867.2	3,749.8	12.4	16.5	-103.76	2,143.0	-4,290.4	4,926.1	4,898.9	27.19	181.171	
3,300.0	3,236.1	3,940.4	3,819.8	12.8	17.0	-103.73	2,158.1	-4,275.1	4,918.5	4,890.4	28.05	175.347	
3,400.0	3,333.4	4,008.0	3,884.5	13.3	17.3	-103.69	2,172.4	-4,261.4	4,911.5	4,882.6	28.88	170.044	
3,500.0	3,430.6	4,096.9	3,969.7	13.8	17.8	-103.66	2,190.7	-4,243.9	4,904.9	4,875.1	29.81	164.540	
3,600.0	3,527.9	4,348.7	4,212.4	14.3	19.1	-103.63	2,234.9	-4,193.2	4,897.1	4,865.6	31.48	155.567	
3,700.0	3,625.2	4,446.0	4,305.6	14.8	19.7	-103.61	2,252.6	-4,171.6	4,887.4	4,854.9	32.44	150.670	
3,800.0	3,722.5	4,509.9	4,367.0	15.3	20.0	-103.60	2,263.9	-4,157.8	4,878.2	4,844.9	33.22	146.839	
3,900.0	3,819.8	4,570.0	4,424.8	15.7	20.3	-103.59	2,274.3	-4,145.5	4,869.8	4,835.8	33.98	143.322	
4,000.0	3,917.1	4,607.6	4,461.2	16.2	20.5	-103.60	2,280.7	-4,138.3	4,862.5	4,827.9	34.62	140.473	
4,100.0	4,014.4	4,663.0	4,515.1	16.7	20.8	-103.61	2,289.3	-4,128.7	4,856.4	4,821.1	35.33	137.471	
4,200.0	4,111.6	4,690.3	4,541.7	17.2	20.9	-103.62	2,293.3	-4,124.4	4,851.5	4,815.6	35.91	135.118	
4,300.0	4,208.9	4,757.0	4,607.1	17.7	21.1	-103.66	2,302.8	-4,115.0	4,847.9	4,811.3	36.63	132.341	
4,400.0	4,306.2	4,779.1	4,628.8	18.2	21.2	-103.67	2,305.9	-4,112.1	4,845.2	4,808.0	37.18	130.306	
4,500.0	4,403.5	4,851.0	4,699.5	18.7	21.5	-103.72	2,315.5	-4,103.6	4,843.8	4,805.8	37.91	127.780	
4,600.0	4,500.8	4,901.9	4,749.6	19.1	21.7	-103.76	2,322.1	-4,098.1	4,843.0	4,804.5	38.55	125.639	
4,700.0	4,598.1	4,987.2	4,834.0	19.6	22.0	-103.84	2,332.2	-4,089.5	4,842.8	4,803.5	39.28	123.298	
4,756.1	4,652.7	5,038.0	4,884.3	19.9	22.1	-103.91	2,336.9	-4,084.9	4,842.7	4,803.1	39.68	122.041	
4,800.0	4,695.4	5,066.0	4,912.2	20.1	22.2	-103.95	2,339.0	-4,082.6	4,842.8	4,802.9	39.95	121.223	

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 SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 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: 546-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	
4,900.0	4,792.6	5,131.0	4,976.8	20.6	22.3	-104.06	2,343.3	-4,077.8	4,843.6	4,803.0	40.56	119.411	
5,000.0	4,889.9	5,186.8	5,032.4	21.1	22.5	-104.16	2,346.5	-4,074.3	4,845.1	4,804.0	41.14	117.783	
5,100.0	4,987.2	5,250.5	5,095.9	21.6	22.6	-104.28	2,349.7	-4,071.0	4,847.5	4,805.8	41.72	116.200	
5,200.0	5,084.5	5,319.0	5,164.3	22.1	22.7	-104.42	2,352.7	-4,068.0	4,850.6	4,808.3	42.30	114.681	
5,300.0	5,181.8	5,361.7	5,207.0	22.5	22.8	-104.51	2,354.3	-4,066.7	4,854.6	4,811.8	42.82	113.371	
5,400.0	5,279.1	5,412.0	5,257.2	23.0	22.9	-104.63	2,355.5	-4,066.0	4,859.9	4,816.5	43.35	112.103	
5,500.0	5,376.3	5,464.8	5,310.1	23.5	22.9	-104.76	2,356.4	-4,065.9	4,866.2	4,822.3	43.87	110.929	
5,600.0	5,473.6	5,541.4	5,386.6	24.0	23.0	-104.95	2,357.5	-4,066.3	4,873.1	4,828.7	44.40	109.759	
5,700.0	5,570.9	5,632.7	5,478.0	24.5	23.1	-105.18	2,358.7	-4,067.0	4,880.4	4,835.5	44.94	108.607	
5,800.0	5,668.2	5,749.1	5,594.3	25.0	23.2	-105.47	2,360.2	-4,067.7	4,887.7	4,842.3	45.49	107.445	
5,900.0	5,765.5	5,860.6	5,705.8	25.5	23.3	-105.76	2,360.8	-4,068.2	4,894.7	4,848.7	46.03	106.326	
5,921.9	5,786.8	5,883.4	5,728.5	25.6	23.4	-105.82	2,360.9	-4,068.3	4,896.2	4,850.1	46.15	106.087	
6,000.0	5,863.0	5,963.8	5,808.9	25.9	23.4	-106.11	2,361.1	-4,068.5	4,901.3	4,854.8	46.49	105.425	
6,100.0	5,961.2	6,075.0	5,920.2	26.2	23.6	-106.45	2,361.0	-4,068.8	4,906.9	4,860.0	46.85	104.730	
6,200.0	6,060.0	6,188.3	6,033.5	26.5	23.7	-106.73	2,361.1	-4,068.7	4,911.3	4,864.1	47.19	104.070	
6,300.0	6,159.3	6,310.1	6,155.3	26.7	23.8	-106.95	2,361.2	-4,068.0	4,914.2	4,866.7	47.52	103.413	
6,400.0	6,259.0	6,403.8	6,249.0	26.9	23.9	-107.06	2,361.5	-4,067.3	4,916.0	4,868.2	47.80	102.852	
6,500.0	6,358.8	6,506.6	6,351.8	27.1	24.0	-107.13	2,362.0	-4,066.6	4,916.9	4,868.8	48.06	102.311	
6,591.0	6,449.8	6,585.1	6,430.2	27.2	24.1	-74.62	2,362.7	-4,066.0	4,916.8	4,880.9	35.87	137.069	
6,600.0	6,458.8	6,591.9	6,437.1	27.2	24.2	-74.62	2,362.7	-4,065.9	4,916.8	4,880.9	35.90	136.976	
6,621.0	6,479.8	6,607.8	6,452.9	27.2	24.2	-74.62	2,362.9	-4,065.8	4,916.7	4,880.8	35.96	136.747	
6,650.0	6,508.8	6,631.3	6,476.5	27.3	24.2	15.40	2,363.2	-4,065.7	4,916.1	4,867.8	48.30	101.784	
6,700.0	6,558.7	6,734.5	6,579.7	27.3	24.3	15.52	2,364.2	-4,064.7	4,912.1	4,863.9	48.21	101.880	
6,750.0	6,608.1	6,783.2	6,628.4	27.3	24.4	15.72	2,364.6	-4,063.9	4,904.5	4,856.7	47.88	102.435	
6,800.0	6,657.0	6,833.0	6,678.2	27.3	24.5	16.00	2,365.1	-4,063.2	4,893.7	4,846.3	47.38	103.281	
6,850.0	6,704.9	6,885.5	6,730.6	27.2	24.5	16.39	2,365.5	-4,062.4	4,879.5	4,832.8	46.74	104.409	
6,900.0	6,751.8	6,929.7	6,774.8	27.2	24.6	16.87	2,365.9	-4,061.7	4,862.2	4,816.3	45.93	105.853	
6,950.0	6,797.4	6,966.9	6,812.0	27.1	24.7	17.47	2,366.3	-4,061.2	4,841.9	4,796.9	45.00	107.608	
7,000.0	6,841.4	7,003.0	6,848.1	27.0	24.7	18.19	2,366.7	-4,060.7	4,818.6	4,774.6	43.95	109.639	
7,050.0	6,883.6	7,032.7	6,877.9	26.9	24.8	19.05	2,367.1	-4,060.3	4,792.5	4,749.7	42.81	111.943	
7,100.0	6,923.9	7,061.3	6,906.5	26.8	24.8	20.08	2,367.6	-4,060.0	4,763.8	4,722.2	41.62	114.454	
7,150.0	6,962.0	7,096.0	6,941.1	26.7	24.8	21.34	2,368.2	-4,059.7	4,732.6	4,692.2	40.44	117.037	
7,200.0	6,997.8	7,116.6	6,961.7	26.5	24.9	22.80	2,368.6	-4,059.6	4,699.0	4,659.8	39.25	119.706	
7,250.0	7,031.0	7,143.7	6,988.8	26.4	24.9	24.61	2,369.1	-4,059.5	4,663.2	4,625.0	38.19	122.105	
7,300.0	7,061.6	7,168.7	7,013.8	26.3	24.9	26.80	2,369.6	-4,059.4	4,625.3	4,588.0	37.30	124.016	
7,350.0	7,089.3	7,190.0	7,035.1	26.1	25.0	29.46	2,370.0	-4,059.3	4,585.5	4,548.8	36.66	125.087	
7,400.0	7,114.0	7,211.5	7,056.6	26.0	25.0	32.76	2,370.4	-4,059.3	4,544.0	4,507.6	36.40	124.830	
7,450.0	7,135.7	7,229.2	7,074.3	25.9	25.0	36.84	2,370.8	-4,059.2	4,501.0	4,464.4	36.62	122.903	
7,500.0	7,154.2	7,244.4	7,089.5	25.7	25.0	41.95	2,371.0	-4,059.3	4,456.7	4,419.3	37.42	119.085	
7,550.0	7,169.4	7,257.0	7,102.1	25.6	25.1	48.36	2,371.2	-4,059.3	4,411.3	4,372.4	38.84	113.579	
7,600.0	7,181.2	7,266.9	7,112.0	25.5	25.1	56.35	2,371.4	-4,059.3	4,365.0	4,324.3	40.75	107.119	
7,650.0	7,189.6	7,274.0	7,119.0	25.4	25.1	66.07	2,371.5	-4,059.3	4,318.1	4,275.3	42.79	100.910	
7,700.0	7,194.5	7,284.0	7,129.1	25.3	25.1	77.60	2,371.6	-4,059.4	4,270.8	4,226.4	44.36	96.269	
7,748.9	7,196.0	7,284.0	7,129.1	25.2	25.1	89.44	2,371.6	-4,059.4	4,224.3	4,179.5	44.77	94.353	
7,800.0	7,195.8	7,284.0	7,129.1	25.1	25.1	89.44	2,371.6	-4,059.4	4,175.8	4,130.3	45.51	91.765	
7,900.0	7,195.4	7,284.0	7,129.1	25.5	25.1	89.44	2,371.6	-4,059.4	4,081.0	4,033.9	47.11	86.618	
8,000.0	7,195.0	7,284.0	7,129.1	27.5	25.1	89.44	2,371.6	-4,059.4	3,986.4	3,937.5	48.92	81.491	
8,100.0	7,194.6	7,284.0	7,129.1	29.5	25.1	89.44	2,371.6	-4,059.4	3,892.1	3,841.3	50.88	76.494	
8,200.0	7,194.1	7,284.0	7,129.1	31.7	25.1	89.44	2,371.6	-4,059.4	3,798.2	3,745.2	52.97	71.700	
8,300.0	7,193.7	7,284.0	7,129.1	33.9	25.1	89.44	2,371.6	-4,059.4	3,704.5	3,649.3	55.17	67.148	
8,400.0	7,193.3	7,284.0	7,129.1	36.3	25.1	89.44	2,371.6	-4,059.4	3,611.1	3,553.7	57.45	62.856	
8,500.0	7,192.9	7,284.0	7,129.1	38.6	25.1	89.44	2,371.6	-4,059.4	3,518.2	3,458.4	59.80	58.830	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD RYLAND 31-20D - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 546-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	
8,600.0	7,192.5	7,284.0	7,129.1	41.1	25.1	89.44	2,371.6	-4,059.4	3,425.6	3,363.4	62.21	55.063	
8,700.0	7,192.1	7,284.0	7,129.1	43.5	25.1	89.44	2,371.6	-4,059.4	3,333.5	3,268.8	64.67	51.545	
8,800.0	7,191.7	7,284.0	7,129.1	46.0	25.1	89.44	2,371.6	-4,059.4	3,241.8	3,174.6	67.17	48.263	
8,900.0	7,191.3	7,284.0	7,129.1	48.6	25.1	89.44	2,371.6	-4,059.4	3,150.6	3,080.9	69.70	45.201	
9,000.0	7,190.9	7,279.5	7,124.5	51.1	25.1	89.24	2,371.6	-4,059.3	3,060.0	2,987.7	72.27	42.341	
9,100.0	7,190.4	7,279.4	7,124.5	53.7	25.1	89.24	2,371.6	-4,059.3	2,970.0	2,895.1	74.86	39.675	
9,200.0	7,190.0	7,279.4	7,124.5	56.3	25.1	89.24	2,371.6	-4,059.3	2,880.6	2,803.1	77.47	37.186	
9,300.0	7,189.6	7,279.4	7,124.5	58.9	25.1	89.24	2,371.6	-4,059.3	2,792.0	2,711.9	80.09	34.860	
9,400.0	7,189.2	7,279.4	7,124.5	61.6	25.1	89.24	2,371.6	-4,059.3	2,704.1	2,621.4	82.73	32.684	
9,500.0	7,188.8	7,279.4	7,124.4	64.2	25.1	89.24	2,371.6	-4,059.3	2,617.2	2,531.8	85.39	30.649	
9,600.0	7,188.4	7,279.4	7,124.4	66.9	25.1	89.23	2,371.6	-4,059.3	2,531.1	2,443.1	88.06	28.743	
9,700.0	7,188.0	7,279.3	7,124.4	69.6	25.1	89.23	2,371.6	-4,059.3	2,446.2	2,355.5	90.74	26.958	
9,800.0	7,187.6	7,279.3	7,124.4	72.3	25.1	89.23	2,371.6	-4,059.3	2,362.4	2,269.0	93.43	25.285	
9,900.0	7,187.1	7,279.3	7,124.4	74.9	25.1	89.23	2,371.6	-4,059.3	2,280.0	2,183.8	96.13	23.717	
10,000.0	7,186.7	7,279.3	7,124.4	77.6	25.1	89.23	2,371.6	-4,059.3	2,199.0	2,100.1	98.84	22.248	
10,100.0	7,186.3	7,279.3	7,124.3	80.4	25.1	89.23	2,371.6	-4,059.3	2,119.6	2,018.0	101.55	20.872	
10,200.0	7,185.9	7,279.2	7,124.3	83.1	25.1	89.23	2,371.6	-4,059.3	2,042.0	1,937.7	104.27	19.584	
10,300.0	7,185.5	7,279.2	7,124.3	85.8	25.1	89.23	2,371.6	-4,059.3	1,966.5	1,859.5	107.00	18.379	
10,400.0	7,185.1	7,279.2	7,124.3	88.5	25.1	89.23	2,371.6	-4,059.3	1,893.2	1,783.5	109.73	17.254	
10,500.0	7,184.7	7,279.2	7,124.3	91.2	25.1	89.23	2,371.6	-4,059.3	1,822.5	1,710.0	112.46	16.205	
10,600.0	7,184.3	7,279.2	7,124.2	94.0	25.1	89.23	2,371.6	-4,059.3	1,754.6	1,639.4	115.20	15.230	
10,700.0	7,183.9	7,279.2	7,124.2	96.7	25.1	89.23	2,371.6	-4,059.3	1,689.9	1,572.0	117.95	14.328	
10,800.0	7,183.4	7,279.1	7,124.2	99.4	25.1	89.22	2,371.6	-4,059.3	1,628.8	1,508.1	120.69	13.495	
10,900.0	7,183.0	7,279.1	7,124.2	102.2	25.1	89.22	2,371.6	-4,059.3	1,571.7	1,448.2	123.45	12.732	
11,000.0	7,182.6	7,279.1	7,124.2	104.9	25.1	89.22	2,371.5	-4,059.3	1,519.0	1,392.8	126.20	12.036	
11,100.0	7,182.2	7,279.1	7,124.1	107.7	25.1	89.22	2,371.5	-4,059.3	1,471.2	1,342.3	128.96	11.409	
11,200.0	7,181.8	7,279.0	7,124.1	110.4	25.1	89.22	2,371.5	-4,059.3	1,428.9	1,297.2	131.72	10.848	
11,300.0	7,181.4	7,279.0	7,124.1	113.2	25.1	89.22	2,371.5	-4,059.3	1,392.5	1,258.0	134.48	10.355	
11,400.0	7,181.0	7,279.0	7,124.1	116.0	25.1	89.22	2,371.5	-4,059.3	1,362.4	1,225.2	137.24	9.927	
11,500.0	7,180.6	7,279.0	7,124.0	118.7	25.1	89.22	2,371.5	-4,059.3	1,339.1	1,199.1	140.01	9.565	
11,600.0	7,180.1	7,279.0	7,124.0	121.5	25.1	89.22	2,371.5	-4,059.3	1,323.1	1,180.3	142.78	9.267	
11,700.0	7,179.7	7,278.9	7,124.0	124.3	25.1	89.22	2,371.5	-4,059.3	1,314.4	1,168.9	145.55	9.031	
11,764.0	7,179.5	7,278.9	7,124.0	126.0	25.1	89.22	2,371.5	-4,059.3	1,312.9	1,165.5	147.32	8.912 CC	
11,800.0	7,179.3	7,278.9	7,124.0	127.0	25.1	89.22	2,371.5	-4,059.3	1,313.4	1,165.0	148.32	8.855 ES	
11,900.0	7,178.9	7,278.9	7,124.0	129.8	25.1	89.21	2,371.5	-4,059.3	1,319.9	1,168.8	151.09	8.736	
12,000.0	7,178.5	7,278.9	7,123.9	132.6	25.1	89.21	2,371.5	-4,059.3	1,333.9	1,180.0	153.86	8.669	
12,100.0	7,178.1	7,278.8	7,123.9	135.3	25.1	89.21	2,371.5	-4,059.3	1,355.2	1,198.5	156.64	8.651 SF	
12,200.0	7,177.7	7,278.8	7,123.9	138.1	25.1	89.21	2,371.5	-4,059.3	1,383.4	1,223.9	159.42	8.677	
12,300.0	7,177.2	7,278.8	7,123.8	140.9	25.1	89.21	2,371.5	-4,059.3	1,418.0	1,255.8	162.20	8.743	
12,400.0	7,176.8	7,278.7	7,123.8	143.7	25.1	89.21	2,371.5	-4,059.3	1,458.8	1,293.8	164.98	8.842	
12,500.0	7,176.4	7,278.7	7,123.8	146.4	25.1	89.21	2,371.5	-4,059.3	1,505.1	1,337.3	167.76	8.972	
12,600.0	7,176.0	7,278.7	7,123.8	149.2	25.1	89.21	2,371.5	-4,059.3	1,556.4	1,385.9	170.54	9.126	
12,700.0	7,175.6	7,278.7	7,123.7	152.0	25.1	89.20	2,371.5	-4,059.3	1,612.3	1,439.0	173.32	9.303	
12,800.0	7,175.2	7,278.6	7,123.7	154.8	25.1	89.20	2,371.5	-4,059.3	1,672.4	1,496.3	176.11	9.496	
12,900.0	7,174.8	7,278.6	7,123.7	157.5	25.1	89.20	2,371.5	-4,059.3	1,736.1	1,557.2	178.89	9.705	
13,000.0	7,174.4	7,278.6	7,123.6	160.3	25.1	89.20	2,371.5	-4,059.3	1,803.1	1,621.4	181.68	9.925	
13,100.0	7,173.9	7,278.5	7,123.6	163.1	25.1	89.20	2,371.5	-4,059.3	1,873.1	1,688.6	184.46	10.154	
13,200.0	7,173.5	7,278.5	7,123.6	165.9	25.1	89.20	2,371.5	-4,059.3	1,945.7	1,758.4	187.25	10.391	
13,300.0	7,173.1	7,278.5	7,123.5	168.7	25.1	89.20	2,371.5	-4,059.3	2,020.6	1,830.5	190.04	10.633	
13,400.0	7,172.7	7,278.4	7,123.5	171.5	25.1	89.19	2,371.5	-4,059.3	2,097.6	1,904.8	192.83	10.878	
13,500.0	7,172.3	7,278.4	7,123.5	174.3	25.1	89.19	2,371.5	-4,059.3	2,176.5	1,980.9	195.61	11.126	
13,600.0	7,171.9	7,278.4	7,123.4	177.0	25.1	89.19	2,371.5	-4,059.3	2,257.1	2,058.7	198.40	11.376	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD RYLAND 31-20D - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 546-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
13,700.0	7,171.5	7,278.3	7,123.4	179.8	25.1	89.19	2,371.5	-4,059.3	2,339.1	2,137.9	201.19	11.626	
13,800.0	7,171.0	7,278.3	7,123.4	182.6	25.1	89.19	2,371.5	-4,059.3	2,422.5	2,218.6	203.98	11.876	
13,900.0	7,170.6	7,278.3	7,123.3	185.4	25.1	89.19	2,371.5	-4,059.3	2,507.2	2,300.4	206.78	12.125	
14,000.0	7,170.2	7,278.2	7,123.3	188.2	25.1	89.18	2,371.5	-4,059.3	2,592.9	2,383.3	209.57	12.373	
14,100.0	7,169.8	7,278.2	7,123.3	191.0	25.1	89.18	2,371.5	-4,059.3	2,679.6	2,467.2	212.36	12.618	
14,200.0	7,169.4	7,278.1	7,123.2	193.8	25.1	89.18	2,371.5	-4,059.3	2,767.2	2,552.1	215.15	12.862	
14,295.0	7,169.0	7,278.1	7,123.2	196.4	25.1	89.18	2,371.5	-4,059.3	2,851.2	2,633.4	217.81	13.090	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD RYLAND 32-20D - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 542-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	-72.37	1,577.9	-4,964.3	5,209.2				
100.0	100.0	53.1	53.1	0.1	0.0	-72.37	1,578.0	-4,964.4	5,209.1	5,209.0	0.14	N/A	
200.0	200.0	138.1	138.1	0.3	0.1	-72.37	1,578.1	-4,964.6	5,209.4	5,209.0	0.45	N/A	
300.0	300.0	223.1	223.1	0.5	0.2	-72.36	1,578.4	-4,965.0	5,210.1	5,209.3	0.75	6,984.754	
400.0	400.0	308.1	308.1	0.8	0.3	-72.36	1,578.9	-4,965.7	5,211.0	5,209.9	1.05	4,979.150	
500.0	500.0	393.1	393.1	1.0	0.4	-72.36	1,579.5	-4,966.6	5,212.1	5,210.8	1.35	3,868.908	
600.0	600.0	2,319.0	2,276.4	1.2	7.2	-106.35	1,423.6	-4,704.6	5,205.9	5,199.8	6.12	850.675	
700.0	699.8	2,694.0	2,625.3	1.4	9.8	-107.76	1,347.5	-4,590.6	5,173.1	5,165.4	7.69	672.687	
800.0	799.5	2,731.5	2,659.8	1.7	10.1	-108.56	1,339.6	-4,578.4	5,138.1	5,130.0	8.10	634.480	
900.0	898.7	2,788.0	2,712.2	1.9	10.5	-109.37	1,328.4	-4,560.5	5,105.3	5,096.7	8.60	593.865	
1,000.0	997.5	2,788.0	2,712.2	2.2	10.5	-109.98	1,328.4	-4,560.5	5,074.5	5,065.6	8.92	568.817	
1,100.0	1,095.6	2,857.9	2,777.4	2.6	10.9	-110.78	1,314.9	-4,539.3	5,045.9	5,036.4	9.53	529.256	
1,169.1	1,163.0	2,907.8	2,824.1	2.8	11.3	-111.33	1,305.1	-4,524.6	5,027.3	5,017.3	9.99	503.022	
1,200.0	1,193.1	2,941.0	2,855.1	3.0	11.5	-111.46	1,298.8	-4,514.8	5,019.1	5,008.9	10.24	490.118	
1,300.0	1,290.4	3,032.1	2,940.5	3.4	12.1	-111.81	1,282.3	-4,487.3	4,992.8	4,981.8	10.99	454.366	
1,400.0	1,387.7	3,068.0	2,974.2	3.8	12.3	-111.94	1,276.2	-4,476.5	4,967.0	4,955.4	11.54	430.441	
1,500.0	1,484.9	3,128.3	3,030.9	4.3	12.7	-112.16	1,266.5	-4,458.5	4,942.0	4,929.9	12.18	405.767	
1,600.0	1,582.2	3,176.5	3,076.5	4.7	13.0	-112.33	1,259.4	-4,444.7	4,918.4	4,905.6	12.78	384.764	
1,700.0	1,679.5	3,255.0	3,150.9	5.2	13.5	-112.62	1,247.5	-4,422.5	4,895.3	4,881.8	13.50	362.627	
1,800.0	1,776.8	3,315.1	3,207.9	5.7	13.9	-112.84	1,238.3	-4,405.8	4,872.8	4,858.6	14.16	344.197	
1,900.0	1,874.1	3,380.3	3,269.9	6.1	14.3	-113.08	1,228.4	-4,388.3	4,851.2	4,836.4	14.83	327.017	
2,000.0	1,971.4	3,442.0	3,328.6	6.6	14.6	-113.31	1,219.4	-4,371.7	4,830.2	4,814.7	15.50	311.613	
2,100.0	2,068.7	3,509.0	3,392.5	7.1	15.0	-113.56	1,209.6	-4,354.1	4,809.8	4,793.6	16.19	297.140	
2,200.0	2,165.9	3,608.5	3,487.5	7.6	15.6	-113.94	1,194.6	-4,328.8	4,790.4	4,773.4	17.00	281.747	
2,300.0	2,263.2	3,665.3	3,541.8	8.0	15.9	-114.16	1,186.0	-4,314.3	4,771.0	4,753.3	17.66	270.142	
2,400.0	2,360.5	3,723.0	3,597.1	8.5	16.3	-114.38	1,177.7	-4,300.2	4,752.8	4,734.5	18.32	259.391	
2,500.0	2,457.8	3,894.5	3,761.0	9.0	17.3	-115.05	1,151.0	-4,257.3	4,734.1	4,714.7	19.44	243.546	
2,600.0	2,555.1	3,980.6	3,843.0	9.5	17.8	-115.41	1,136.3	-4,235.4	4,715.1	4,694.8	20.24	232.983	
2,700.0	2,652.4	4,082.1	3,939.6	10.0	18.4	-115.84	1,118.7	-4,209.8	4,696.3	4,675.2	21.11	222.465	
2,800.0	2,749.7	4,130.8	3,986.0	10.4	18.7	-116.05	1,110.3	-4,197.5	4,677.9	4,656.2	21.76	214.996	
2,900.0	2,846.9	4,191.0	4,043.6	10.9	19.1	-116.30	1,100.5	-4,183.1	4,661.0	4,638.5	22.45	207.606	
3,000.0	2,944.2	4,213.8	4,065.5	11.4	19.2	-116.39	1,097.0	-4,177.9	4,645.1	4,622.1	22.99	202.092	
3,100.0	3,041.5	4,284.0	4,133.2	11.9	19.5	-116.68	1,086.2	-4,162.4	4,630.6	4,606.9	23.70	195.383	
3,200.0	3,138.8	4,284.0	4,133.2	12.4	19.5	-116.68	1,086.2	-4,162.4	4,617.1	4,593.0	24.15	191.210	
3,300.0	3,236.1	4,352.2	4,199.1	12.8	19.9	-116.95	1,076.3	-4,148.4	4,604.8	4,579.9	24.84	185.350	
3,400.0	3,333.4	4,400.9	4,246.5	13.3	20.1	-117.15	1,069.8	-4,138.9	4,593.8	4,568.3	25.46	180.412	
3,500.0	3,430.6	4,471.0	4,314.8	13.8	20.4	-117.41	1,061.5	-4,125.8	4,583.8	4,557.7	26.15	175.313	
3,600.0	3,527.9	4,519.8	4,362.6	14.3	20.6	-117.59	1,056.2	-4,117.0	4,574.8	4,548.1	26.75	171.028	
3,700.0	3,625.2	4,565.0	4,406.8	14.8	20.8	-117.75	1,051.6	-4,108.9	4,566.6	4,539.3	27.34	167.038	
3,800.0	3,722.5	4,615.8	4,456.6	15.3	21.0	-117.93	1,046.7	-4,100.4	4,559.6	4,531.7	27.94	163.214	
3,900.0	3,819.8	4,658.0	4,498.2	15.7	21.2	-118.08	1,043.1	-4,093.9	4,554.0	4,525.5	28.51	159.748	
4,000.0	3,917.1	4,693.4	4,533.1	16.2	21.3	-118.20	1,040.2	-4,088.9	4,549.8	4,520.8	29.05	156.620	
4,100.0	4,014.4	4,752.0	4,591.0	16.7	21.5	-118.40	1,035.8	-4,081.4	4,547.1	4,517.4	29.66	153.331	
4,200.0	4,111.6	4,752.0	4,591.0	17.2	21.5	-118.40	1,035.8	-4,081.4	4,545.6	4,515.5	30.10	151.017	
4,273.4	4,183.1	4,802.2	4,640.8	17.6	21.6	-118.57	1,032.3	-4,075.8	4,545.2	4,514.7	30.55	148.757	
4,300.0	4,208.9	4,812.7	4,651.2	17.7	21.7	-118.60	1,031.6	-4,074.7	4,545.3	4,514.6	30.70	148.057	
4,400.0	4,306.2	4,845.0	4,683.3	18.2	21.7	-118.71	1,029.5	-4,071.7	4,546.6	4,515.3	31.23	145.600	
4,500.0	4,403.5	4,885.7	4,723.8	18.7	21.8	-118.84	1,026.8	-4,068.3	4,549.2	4,517.4	31.77	143.198	
4,600.0	4,500.8	4,939.0	4,776.9	19.1	22.0	-119.02	1,023.5	-4,064.9	4,553.4	4,521.1	32.34	140.798	
4,700.0	4,598.1	4,968.4	4,806.1	19.6	22.0	-119.11	1,021.8	-4,063.4	4,558.8	4,526.0	32.85	138.788	
4,800.0	4,695.4	5,032.0	4,869.6	20.1	22.1	-119.31	1,018.9	-4,060.3	4,565.3	4,531.8	33.43	136.570	
4,900.0	4,792.6	5,093.0	4,930.6	20.6	22.2	-119.48	1,017.2	-4,057.8	4,572.5	4,538.5	33.98	134.554	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD RYLAND 32-20D - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 usft
Survey Program: 542-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,000.0	4,889.9	5,126.0	4,963.5	21.1	22.3	-119.57	1,016.7	-4,056.6	4,580.8	4,546.3	34.49	132.834		
5,100.0	4,987.2	5,179.7	5,017.2	21.6	22.4	-119.71	1,016.5	-4,055.4	4,590.3	4,555.3	35.01	131.115		
5,200.0	5,084.5	5,220.0	5,057.5	22.1	22.4	-119.81	1,016.7	-4,055.0	4,601.2	4,565.7	35.51	129.565		
5,300.0	5,181.8	5,303.7	5,141.2	22.5	22.5	-120.01	1,017.5	-4,055.0	4,613.0	4,576.9	36.07	127.897		
5,400.0	5,279.1	5,374.8	5,212.3	23.0	22.5	-120.18	1,018.1	-4,055.2	4,625.1	4,588.5	36.61	126.351		
5,500.0	5,376.3	5,475.1	5,312.6	23.5	22.6	-120.42	1,018.4	-4,056.0	4,637.8	4,600.6	37.19	124.719		
5,600.0	5,473.6	5,598.5	5,436.0	24.0	22.7	-120.73	1,018.5	-4,056.3	4,650.1	4,612.3	37.80	123.010		
5,700.0	5,570.9	5,710.2	5,547.7	24.5	22.9	-121.01	1,018.2	-4,056.1	4,662.0	4,623.6	38.41	121.383		
5,800.0	5,668.2	5,796.2	5,633.7	25.0	22.9	-121.23	1,017.3	-4,055.9	4,674.0	4,635.0	38.98	119.910		
5,900.0	5,765.5	5,874.0	5,711.5	25.5	23.0	-121.43	1,016.5	-4,056.0	4,686.4	4,646.8	39.54	118.528		
5,921.9	5,786.8	5,896.9	5,734.4	25.6	23.1	-121.48	1,016.3	-4,056.1	4,689.1	4,649.5	39.67	118.208		
6,000.0	5,863.0	5,968.0	5,805.5	25.9	23.1	-121.81	1,015.9	-4,056.4	4,698.6	4,658.5	40.09	117.187		
6,100.0	5,961.2	6,083.2	5,920.7	26.2	23.2	-122.22	1,015.2	-4,056.9	4,709.1	4,668.5	40.59	116.016		
6,200.0	6,060.0	6,207.1	6,044.6	26.5	23.4	-122.57	1,014.0	-4,056.2	4,716.8	4,675.8	41.06	114.887		
6,300.0	6,159.3	6,283.1	6,120.6	26.7	23.5	-122.78	1,013.3	-4,056.1	4,723.1	4,681.7	41.40	114.091		
6,400.0	6,259.0	6,359.8	6,197.3	26.9	23.6	-122.93	1,012.9	-4,056.3	4,727.9	4,686.2	41.69	113.415		
6,500.0	6,358.8	6,436.0	6,273.5	27.1	23.6	-123.03	1,012.5	-4,056.9	4,731.4	4,689.5	41.92	112.861		
6,591.0	6,449.8	6,519.5	6,357.0	27.2	23.7	-90.56	1,012.1	-4,058.0	4,733.3	4,691.5	41.86	113.080		
6,600.0	6,458.8	6,529.0	6,366.5	27.2	23.7	-90.57	1,012.1	-4,058.1	4,733.4	4,691.5	41.88	113.022		
6,621.0	6,479.8	6,529.0	6,366.5	27.2	23.7	-90.57	1,012.1	-4,058.1	4,733.7	4,691.8	41.91	112.943		
6,650.0	6,508.8	6,563.4	6,400.8	27.3	23.8	-0.57	1,011.9	-4,058.5	4,733.5	4,691.4	42.10	112.429		
6,700.0	6,558.7	6,597.5	6,435.0	27.3	23.8	-0.57	1,011.7	-4,059.1	4,730.6	4,688.7	41.81	113.144		
6,750.0	6,608.1	6,623.0	6,460.4	27.3	23.8	-0.58	1,011.5	-4,059.6	4,724.3	4,683.0	41.32	114.326		
6,800.0	6,657.0	6,671.2	6,508.7	27.3	23.9	-0.59	1,011.1	-4,060.6	4,714.7	4,674.0	40.69	115.861		
6,850.0	6,704.9	6,716.0	6,553.4	27.2	23.9	-0.61	1,010.9	-4,061.8	4,701.9	4,662.0	39.89	117.883		
6,900.0	6,751.8	6,751.6	6,589.0	27.2	24.0	-0.63	1,010.8	-4,062.7	4,685.7	4,646.8	38.90	120.450		
6,950.0	6,797.4	6,794.1	6,631.5	27.1	24.0	-0.65	1,010.5	-4,063.8	4,666.4	4,628.6	37.77	123.538		
7,000.0	6,841.4	6,829.5	6,666.8	27.0	24.0	-0.68	1,010.1	-4,064.8	4,643.9	4,607.4	36.49	127.264		
7,050.0	6,883.6	6,860.1	6,697.5	26.9	24.0	-0.72	1,009.8	-4,065.8	4,618.5	4,583.5	35.07	131.691		
7,100.0	6,923.9	6,889.5	6,726.9	26.8	24.1	-0.76	1,009.6	-4,066.8	4,590.3	4,556.8	33.53	136.883		
7,150.0	6,962.0	6,926.7	6,764.0	26.7	24.1	-0.82	1,009.3	-4,068.1	4,559.3	4,527.4	31.91	142.868		
7,200.0	6,997.8	6,969.6	6,806.9	26.5	24.1	-0.88	1,009.1	-4,069.6	4,525.6	4,495.4	30.23	149.729		
7,250.0	7,031.0	6,997.0	6,834.3	26.4	24.2	-0.96	1,009.0	-4,070.5	4,489.5	4,461.0	28.47	157.705		
7,300.0	7,061.6	7,031.5	6,868.7	26.3	24.2	-1.05	1,008.9	-4,071.6	4,450.9	4,424.2	26.70	166.675		
7,350.0	7,089.3	7,055.0	6,892.3	26.1	24.2	-1.17	1,008.8	-4,072.5	4,410.4	4,385.4	24.95	176.790		
7,400.0	7,114.0	7,076.4	6,913.6	26.0	24.2	-1.32	1,008.7	-4,073.3	4,367.9	4,344.6	23.25	187.830		
7,450.0	7,135.7	7,091.0	6,928.2	25.9	24.2	-1.52	1,008.6	-4,073.8	4,323.7	4,302.0	21.68	199.475		
7,500.0	7,154.2	7,113.6	6,950.8	25.7	24.3	-1.81	1,008.5	-4,074.7	4,278.0	4,257.7	20.30	210.740		
7,550.0	7,169.4	7,128.7	6,965.9	25.6	24.3	-2.22	1,008.4	-4,075.3	4,231.0	4,211.8	19.18	220.647		
7,600.0	7,181.2	7,140.9	6,978.1	25.5	24.3	-2.87	1,008.3	-4,075.7	4,182.9	4,164.5	18.39	227.503		
7,650.0	7,189.6	7,150.1	6,987.3	25.4	24.3	-4.05	1,008.2	-4,076.1	4,134.0	4,116.0	18.01	229.547		
7,700.0	7,194.5	7,156.3	6,993.4	25.3	24.3	-6.79	1,008.1	-4,076.4	4,084.5	4,066.3	18.20	224.457		
7,748.9	7,196.0	7,159.3	6,996.5	25.2	24.3	-19.21	1,008.1	-4,076.5	4,035.7	4,014.3	21.44	188.266		
7,800.0	7,195.8	7,161.0	6,998.1	25.1	24.3	-19.42	1,008.1	-4,076.5	3,984.7	3,962.9	21.81	182.684		
7,900.0	7,195.4	7,164.2	7,001.3	25.5	24.3	-19.84	1,008.1	-4,076.7	3,884.7	3,862.1	22.63	171.636		
8,000.0	7,195.0	7,167.4	7,004.6	27.5	24.3	-20.28	1,008.1	-4,076.8	3,784.8	3,761.3	23.56	160.626		
8,100.0	7,194.6	7,170.7	7,007.8	29.5	24.3	-20.74	1,008.0	-4,076.9	3,684.9	3,660.3	24.59	149.842		
8,200.0	7,194.1	7,173.9	7,011.1	31.7	24.3	-21.22	1,008.0	-4,077.1	3,585.0	3,559.3	25.71	139.413		
8,300.0	7,193.7	7,177.2	7,014.4	33.9	24.3	-21.73	1,008.0	-4,077.2	3,485.0	3,458.1	26.93	129.423		
8,400.0	7,193.3	7,184.0	7,021.1	36.3	24.3	-22.85	1,007.9	-4,077.5	3,385.1	3,356.6	28.56	118.521		
8,500.0	7,192.9	7,184.0	7,021.1	38.6	24.3	-22.85	1,007.9	-4,077.5	3,285.2	3,255.6	29.63	110.884		
8,600.0	7,192.5	7,184.0	7,021.1	41.1	24.3	-22.85	1,007.9	-4,077.5	3,185.3	3,154.6	30.72	103.686		

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 SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 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: 542-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	
8,700.0	7,192.1	7,184.0	7,021.1	43.5	24.3	-22.85	1,007.9	-4,077.5	3,085.4	3,053.5	31.84	96.914	
8,800.0	7,191.7	7,184.0	7,021.1	46.0	24.3	-22.85	1,007.9	-4,077.5	2,985.5	2,952.5	32.97	90.550	
8,900.0	7,191.3	7,195.4	7,032.5	48.6	24.3	-25.00	1,007.8	-4,077.9	2,885.5	2,849.8	35.74	80.745	
9,000.0	7,190.9	7,198.4	7,035.5	51.1	24.3	-25.63	1,007.8	-4,078.1	2,785.6	2,748.2	37.47	74.335	
9,100.0	7,190.4	7,201.4	7,038.5	53.7	24.3	-26.30	1,007.7	-4,078.2	2,685.7	2,646.4	39.30	68.332	
9,200.0	7,190.0	7,204.5	7,041.6	56.3	24.3	-27.00	1,007.7	-4,078.3	2,585.8	2,544.6	41.23	62.715	
9,300.0	7,189.6	7,207.6	7,044.7	58.9	24.3	-27.76	1,007.7	-4,078.5	2,485.9	2,442.6	43.26	57.460	
9,400.0	7,189.2	7,210.8	7,047.9	61.6	24.3	-28.56	1,007.6	-4,078.6	2,386.0	2,340.6	45.41	52.545	
9,500.0	7,188.8	7,214.0	7,051.1	64.2	24.3	-29.43	1,007.6	-4,078.7	2,286.1	2,238.4	47.68	47.951	
9,600.0	7,188.4	7,217.2	7,054.3	66.9	24.3	-30.35	1,007.5	-4,078.9	2,186.2	2,136.1	50.08	43.657	
9,700.0	7,188.0	7,220.6	7,057.7	69.6	24.3	-31.34	1,007.5	-4,079.0	2,086.3	2,033.7	52.62	39.647	
9,800.0	7,187.6	7,223.9	7,061.0	72.3	24.3	-32.41	1,007.5	-4,079.2	1,986.4	1,931.1	55.33	35.905	
9,900.0	7,187.1	7,227.3	7,064.4	74.9	24.3	-33.57	1,007.4	-4,079.3	1,886.6	1,828.4	58.20	32.415	
10,000.0	7,186.7	7,230.8	7,067.9	77.6	24.4	-34.81	1,007.4	-4,079.5	1,786.7	1,725.4	61.26	29.165	
10,100.0	7,186.3	7,234.3	7,071.4	80.4	24.4	-36.16	1,007.3	-4,079.6	1,686.8	1,622.3	64.53	26.141	
10,200.0	7,185.9	7,237.9	7,075.0	83.1	24.4	-37.62	1,007.3	-4,079.8	1,587.0	1,518.9	68.02	23.332	
10,300.0	7,185.5	7,241.6	7,078.7	85.8	24.4	-39.21	1,007.2	-4,080.0	1,487.1	1,415.4	71.74	20.728	
10,400.0	7,185.1	7,245.3	7,082.4	88.5	24.4	-40.95	1,007.2	-4,080.2	1,387.3	1,311.5	75.73	18.319	
10,500.0	7,184.7	7,249.1	7,086.1	91.2	24.4	-42.84	1,007.1	-4,080.3	1,287.4	1,207.4	79.99	16.095	
10,600.0	7,184.3	7,252.9	7,090.0	94.0	24.4	-44.91	1,007.1	-4,080.5	1,187.6	1,103.1	84.54	14.048	
10,700.0	7,183.9	7,256.8	7,093.9	96.7	24.4	-47.17	1,007.0	-4,080.7	1,087.8	998.4	89.39	12.169	
10,800.0	7,183.4	7,260.8	7,097.8	99.4	24.4	-49.65	1,006.9	-4,080.9	988.0	893.5	94.54	10.451	
10,900.0	7,183.0	7,264.8	7,101.8	102.2	24.4	-52.37	1,006.9	-4,081.1	888.3	788.3	99.99	8.884	
11,000.0	7,182.6	7,268.9	7,105.9	104.9	24.4	-55.35	1,006.8	-4,081.3	788.6	682.9	105.71	7.460	
11,100.0	7,182.2	7,273.1	7,110.1	107.7	24.4	-58.61	1,006.7	-4,081.5	688.9	577.3	111.66	6.170	
11,200.0	7,181.8	7,278.0	7,115.0	110.4	24.4	-62.76	1,006.7	-4,081.7	589.4	471.0	118.34	4.980	
11,300.0	7,181.4	7,281.7	7,118.7	113.2	24.4	-66.09	1,006.6	-4,081.9	490.0	366.0	123.93	3.953	
11,400.0	7,181.0	7,286.1	7,123.1	116.0	24.4	-70.30	1,006.5	-4,082.1	390.8	260.8	129.98	3.006	
11,500.0	7,180.6	7,290.6	7,127.6	118.7	24.4	-74.79	1,006.4	-4,082.4	292.1	156.4	135.71	2.153	
11,600.0	7,180.1	7,295.1	7,132.1	121.5	24.4	-79.51	1,006.4	-4,082.6	194.7	53.8	140.91	1.382 Level 3	
11,700.0	7,179.7	7,299.7	7,136.7	124.3	24.4	-84.41	1,006.3	-4,082.8	102.2	-43.2	145.37	0.703 Level 1	
11,787.6	7,179.4	7,303.8	7,140.8	126.7	24.4	-88.81	1,006.2	-4,083.0	52.6	-95.9	148.54	0.354 Level 1, CC, ES, SF	
11,800.0	7,179.3	7,304.4	7,141.3	127.0	24.4	-89.44	1,006.2	-4,083.0	54.1	-94.9	148.93	0.363 Level 1	
11,900.0	7,178.9	7,309.0	7,146.0	129.8	24.4	-94.51	1,006.1	-4,083.3	124.0	-27.5	151.44	0.819 Level 1	
12,000.0	7,178.5	7,313.8	7,150.8	132.6	24.4	-99.55	1,006.0	-4,083.5	218.6	65.7	152.86	1.430 Level 3	
12,100.0	7,178.1	7,318.6	7,155.5	135.3	24.4	-104.48	1,005.9	-4,083.8	316.4	163.2	153.20	2.065	
12,200.0	7,177.7	7,323.4	7,160.4	138.1	24.4	-109.23	1,005.7	-4,084.0	415.2	262.7	152.56	2.722	
12,300.0	7,177.2	7,328.3	7,165.3	140.9	24.4	-113.74	1,005.6	-4,084.3	514.5	363.4	151.09	3.405	
12,400.0	7,176.8	7,333.3	7,170.2	143.7	24.4	-118.00	1,005.5	-4,084.5	613.9	465.0	148.95	4.122	
12,500.0	7,176.4	7,338.3	7,175.2	146.4	24.4	-121.96	1,005.4	-4,084.8	713.5	567.2	146.32	4.876	
12,600.0	7,176.0	7,343.3	7,180.2	149.2	24.4	-125.63	1,005.2	-4,085.1	813.1	669.8	143.36	5.672	
12,700.0	7,175.6	7,348.4	7,185.4	152.0	24.5	-129.01	1,005.1	-4,085.4	912.8	772.6	140.22	6.510	
12,800.0	7,175.2	7,353.6	7,190.5	154.8	24.5	-132.12	1,005.0	-4,085.6	1,012.6	875.5	137.01	7.390	
12,900.0	7,174.8	7,358.9	7,195.8	157.5	24.5	-134.96	1,004.8	-4,085.9	1,112.3	978.5	133.82	8.312	
13,000.0	7,174.4	7,364.2	7,201.1	160.3	24.5	-137.56	1,004.7	-4,086.2	1,212.1	1,081.4	130.72	9.273	
13,100.0	7,173.9	7,369.5	7,206.4	163.1	24.5	-139.93	1,004.5	-4,086.5	1,311.9	1,184.1	127.74	10.270	
13,200.0	7,173.5	7,371.0	7,207.9	165.9	24.5	-140.53	1,004.5	-4,086.6	1,411.7	1,283.4	128.32	11.001	
13,300.0	7,173.1	7,371.0	7,207.9	168.7	24.5	-140.53	1,004.5	-4,086.6	1,511.5	1,381.3	130.18	11.611	
13,400.0	7,172.7	7,382.4	7,219.3	171.5	24.5	-144.77	1,004.1	-4,087.2	1,611.3	1,488.9	122.44	13.160	
13,500.0	7,172.3	7,386.5	7,223.3	174.3	24.5	-146.07	1,004.0	-4,087.4	1,711.1	1,590.0	121.10	14.129	
13,600.0	7,171.9	7,390.4	7,227.2	177.0	24.5	-147.25	1,003.9	-4,087.6	1,811.0	1,691.1	119.92	15.101	
13,700.0	7,171.5	7,394.2	7,231.1	179.8	24.5	-148.34	1,003.8	-4,087.8	1,910.8	1,791.9	118.88	16.074	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD RYLAND 32-20D - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 542-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	
13,800.0	7,171.0	7,398.0	7,234.8	182.6	24.5	-149.34	1,003.7	-4,088.0	2,010.7	1,892.7	117.96	17.045	
13,900.0	7,170.6	7,401.7	7,238.5	185.4	24.5	-150.27	1,003.6	-4,088.2	2,110.5	1,993.4	117.17	18.013	
14,000.0	7,170.2	7,405.3	7,242.1	188.2	24.5	-151.12	1,003.5	-4,088.4	2,210.4	2,093.9	116.48	18.977	
14,100.0	7,169.8	7,408.8	7,245.6	191.0	24.5	-151.92	1,003.4	-4,088.5	2,310.3	2,194.4	115.89	19.935	
14,200.0	7,169.4	7,412.3	7,249.1	193.8	24.5	-152.66	1,003.4	-4,088.7	2,410.1	2,294.7	115.39	20.887	
14,295.0	7,169.0	7,415.5	7,252.3	196.4	24.5	-153.31	1,003.3	-4,088.9	2,505.0	2,390.0	114.99	21.784	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 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: 705-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	-46.32	1,895.9	-1,985.1	2,745.1				
100.0	100.0	88.7	88.7	0.1	0.1	-46.32	1,895.8	-1,985.1	2,744.9	2,744.8	0.18	N/A	
200.0	200.0	193.7	193.7	0.3	0.2	-46.32	1,895.5	-1,985.0	2,744.7	2,744.2	0.50	5,490.455	
300.0	300.0	298.7	298.7	0.5	0.3	-46.33	1,894.9	-1,985.0	2,744.3	2,743.5	0.82	3,342.171	
400.0	400.0	403.7	403.7	0.8	0.4	-46.34	1,894.1	-1,984.9	2,743.7	2,742.5	1.14	2,401.870	
500.0	500.0	508.7	508.7	1.0	0.5	-46.35	1,893.1	-1,984.7	2,742.9	2,741.4	1.46	1,874.189	
600.0	600.0	613.7	613.6	1.2	0.6	-78.94	1,891.8	-1,984.5	2,741.6	2,739.8	1.78	1,539.906	
700.0	699.8	705.0	705.0	1.4	0.6	-79.10	1,890.4	-1,984.4	2,739.4	2,737.4	2.09	1,310.785	
800.0	799.5	771.8	771.7	1.7	0.8	-79.28	1,889.3	-1,985.0	2,737.5	2,735.0	2.47	1,108.170	
900.0	898.7	838.0	837.9	1.9	0.9	-79.52	1,888.0	-1,987.3	2,736.4	2,733.5	2.87	951.848	
1,000.0	997.5	911.9	911.6	2.2	1.1	-79.87	1,885.5	-1,991.8	2,735.7	2,732.4	3.34	819.059	
1,100.0	1,095.6	1,036.2	1,035.3	2.6	1.4	-80.64	1,878.6	-2,002.5	2,735.2	2,731.2	4.01	682.354	
1,169.1	1,163.0	1,146.2	1,144.3	2.8	1.8	-81.48	1,867.7	-2,012.9	2,733.1	2,728.5	4.61	592.881	
1,200.0	1,193.1	1,181.0	1,178.6	3.0	1.9	-81.75	1,863.6	-2,016.6	2,732.0	2,727.2	4.85	563.262	
1,300.0	1,290.4	1,291.5	1,287.3	3.4	2.3	-82.68	1,848.2	-2,029.0	2,728.3	2,722.6	5.68	480.740	
1,400.0	1,387.7	1,360.0	1,354.4	3.8	2.5	-83.28	1,837.8	-2,037.8	2,725.5	2,719.1	6.38	427.368	
1,500.0	1,484.9	1,433.9	1,426.6	4.3	2.9	-83.95	1,826.1	-2,048.3	2,724.0	2,716.9	7.14	381.772	
1,592.5	1,575.0	1,510.4	1,501.0	4.7	3.2	-84.68	1,812.9	-2,060.4	2,723.6	2,715.7	7.91	344.193	
1,600.0	1,582.2	1,516.7	1,507.1	4.7	3.2	-84.74	1,811.8	-2,061.5	2,723.6	2,715.6	7.98	341.415	
1,700.0	1,679.5	1,595.7	1,583.2	5.2	3.7	-85.54	1,796.1	-2,075.8	2,724.2	2,715.4	8.84	308.055	
1,800.0	1,776.8	1,662.2	1,647.0	5.7	4.0	-86.23	1,782.5	-2,088.5	2,726.1	2,716.5	9.66	282.109	
1,900.0	1,874.1	1,714.2	1,696.9	6.1	4.3	-86.78	1,771.9	-2,099.1	2,729.9	2,719.5	10.41	262.204	
2,000.0	1,971.4	1,788.8	1,768.1	6.6	4.7	-87.56	1,756.8	-2,115.2	2,735.4	2,724.1	11.30	242.140	
2,100.0	2,068.7	1,935.6	1,908.1	7.1	5.5	-89.13	1,725.3	-2,146.4	2,741.2	2,728.6	12.56	218.276	
2,200.0	2,165.9	2,005.4	1,974.5	7.6	5.9	-89.88	1,709.7	-2,160.8	2,747.0	2,733.5	13.41	204.847	
2,300.0	2,263.2	2,073.6	2,039.4	8.0	6.3	-90.62	1,694.3	-2,175.5	2,754.2	2,740.0	14.25	193.258	
2,400.0	2,360.5	2,177.2	2,138.0	8.5	6.8	-91.71	1,671.9	-2,197.5	2,762.7	2,747.5	15.24	181.271	
2,500.0	2,457.8	2,274.5	2,231.0	9.0	7.3	-92.73	1,650.9	-2,217.2	2,771.3	2,755.1	16.18	171.300	
2,600.0	2,555.1	2,346.5	2,299.9	9.5	7.7	-93.47	1,635.7	-2,231.6	2,780.9	2,763.9	17.01	163.510	
2,700.0	2,652.4	2,458.6	2,407.2	10.0	8.3	-94.61	1,612.4	-2,254.3	2,791.7	2,773.6	18.03	154.829	
2,800.0	2,749.7	2,559.0	2,503.5	10.4	8.8	-95.61	1,591.5	-2,273.2	2,802.0	2,783.0	19.00	147.478	
2,900.0	2,846.9	2,662.2	2,601.9	10.9	9.4	-96.68	1,567.8	-2,293.3	2,813.0	2,793.0	20.02	140.509	
3,000.0	2,944.2	2,763.0	2,697.9	11.4	10.0	-97.72	1,544.0	-2,312.5	2,824.4	2,803.4	21.00	134.475	
3,100.0	3,041.5	2,841.4	2,772.8	11.9	10.4	-98.52	1,525.8	-2,327.2	2,836.5	2,814.7	21.84	129.864	
3,200.0	3,138.8	2,904.5	2,833.1	12.4	10.8	-99.15	1,511.6	-2,339.2	2,849.9	2,827.3	22.61	126.024	
3,300.0	3,236.1	3,028.7	2,951.8	12.8	11.4	-100.39	1,483.9	-2,363.3	2,864.7	2,841.0	23.67	121.044	
3,400.0	3,333.4	3,100.4	3,020.5	13.3	11.8	-101.08	1,468.1	-2,376.1	2,879.1	2,854.6	24.45	117.735	
3,500.0	3,430.6	3,164.1	3,081.7	13.8	12.2	-101.69	1,455.0	-2,387.9	2,895.0	2,869.8	25.20	114.859	
3,600.0	3,527.9	3,230.0	3,144.9	14.3	12.5	-102.31	1,441.2	-2,400.6	2,912.2	2,886.2	25.97	112.152	
3,700.0	3,625.2	3,300.3	3,212.2	14.8	12.9	-102.97	1,426.7	-2,414.6	2,930.7	2,904.0	26.74	109.591	
3,800.0	3,722.5	3,390.7	3,299.0	15.3	13.4	-103.80	1,408.9	-2,432.6	2,950.3	2,922.7	27.59	106.953	
3,900.0	3,819.8	3,479.3	3,384.1	15.7	13.8	-104.59	1,391.9	-2,450.0	2,970.4	2,942.0	28.39	104.617	
4,000.0	3,917.1	3,570.8	3,472.6	16.2	14.3	-105.36	1,376.3	-2,467.5	2,991.1	2,961.9	29.20	102.447	
4,100.0	4,014.4	3,658.8	3,557.4	16.7	14.8	-106.12	1,360.0	-2,484.5	3,012.2	2,982.3	29.99	100.455	
4,200.0	4,111.6	3,726.3	3,622.4	17.2	15.1	-106.70	1,347.4	-2,497.6	3,034.2	3,003.5	30.70	98.827	
4,300.0	4,208.9	3,792.0	3,685.6	17.7	15.5	-107.25	1,335.4	-2,511.2	3,057.8	3,026.4	31.41	97.356	
4,400.0	4,306.2	3,860.0	3,750.8	18.2	15.9	-107.83	1,322.7	-2,525.8	3,082.5	3,050.4	32.13	95.947	
4,500.0	4,403.5	3,985.7	3,871.1	18.7	16.6	-108.90	1,297.7	-2,552.2	3,107.4	3,074.4	33.05	94.014	
4,600.0	4,500.8	4,090.5	3,971.3	19.1	17.2	-109.81	1,275.3	-2,573.4	3,132.0	3,098.2	33.89	92.412	
4,700.0	4,598.1	4,188.9	4,065.5	19.6	17.7	-110.63	1,254.9	-2,592.9	3,156.9	3,122.2	34.68	91.030	
4,800.0	4,695.4	4,283.9	4,156.8	20.1	18.2	-111.41	1,235.6	-2,611.0	3,181.8	3,146.4	35.44	89.780	
4,900.0	4,792.6	4,353.0	4,223.0	20.6	18.6	-111.97	1,221.2	-2,624.7	3,207.8	3,171.7	36.12	88.799	

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 SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD RYLAND 42-20D - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 705-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,000.0	4,889.9	4,447.0	4,312.9	21.1	19.1	-112.74	1,201.3	-2,643.4	3,234.5	3,197.6	36.89	87.686	
5,100.0	4,987.2	4,504.5	4,367.8	21.6	19.4	-113.20	1,188.9	-2,654.9	3,261.9	3,224.3	37.53	86.906	
5,200.0	5,084.5	4,572.8	4,432.9	22.1	19.8	-113.76	1,173.7	-2,669.2	3,290.5	3,252.3	38.21	86.126	
5,300.0	5,181.8	4,756.0	4,608.0	22.5	20.8	-115.21	1,133.9	-2,705.5	3,318.9	3,279.7	39.20	84.656	
5,400.0	5,279.1	4,835.5	4,684.0	23.0	21.3	-115.83	1,115.9	-2,720.0	3,346.3	3,306.4	39.89	83.888	
5,500.0	5,376.3	4,899.2	4,744.9	23.5	21.7	-116.33	1,101.3	-2,731.9	3,374.6	3,334.1	40.53	83.260	
5,600.0	5,473.6	5,284.5	5,119.3	24.0	23.4	-118.89	1,034.2	-2,790.0	3,401.5	3,359.7	41.76	81.448	
5,700.0	5,570.9	5,573.7	5,406.3	24.5	24.2	-120.35	1,007.1	-2,812.0	3,421.1	3,378.6	42.49	80.519	
5,800.0	5,668.2	5,784.4	5,616.7	25.0	24.6	-121.23	996.4	-2,817.5	3,435.6	3,392.6	43.03	79.848	
5,900.0	5,765.5	5,886.7	5,718.9	25.5	24.7	-121.61	994.2	-2,818.4	3,448.9	3,405.4	43.49	79.308	
5,921.9	5,786.8	5,908.1	5,740.3	25.6	24.7	-121.69	993.8	-2,818.6	3,451.8	3,408.2	43.59	79.194	
6,000.0	5,863.0	5,981.6	5,813.8	25.9	24.8	-122.10	992.9	-2,819.3	3,461.7	3,417.8	43.87	78.916	
6,100.0	5,961.2	6,070.7	5,902.9	26.2	24.9	-122.54	992.0	-2,820.3	3,472.9	3,428.8	44.16	78.637	
6,200.0	6,060.0	6,164.2	5,996.4	26.5	25.0	-122.91	991.5	-2,821.6	3,482.7	3,438.2	44.45	78.349	
6,300.0	6,159.3	6,265.5	6,097.7	26.7	25.1	-123.22	990.8	-2,822.8	3,490.5	3,445.7	44.73	78.034	
6,400.0	6,259.0	6,355.9	6,188.0	26.9	25.2	-123.44	990.3	-2,824.1	3,496.5	3,451.6	44.99	77.723	
6,500.0	6,358.8	6,445.9	6,278.0	27.1	25.4	-123.57	990.0	-2,825.7	3,501.0	3,455.7	45.23	77.407	
6,591.0	6,449.8	6,524.9	6,357.1	27.2	25.5	-91.13	989.9	-2,827.3	3,503.6	3,462.4	41.23	84.980	
6,600.0	6,458.8	6,532.5	6,364.6	27.2	25.5	-91.13	989.9	-2,827.5	3,503.8	3,462.6	41.25	84.936	
6,621.0	6,479.8	6,550.0	6,382.2	27.2	25.5	-91.13	990.0	-2,827.9	3,504.3	3,463.0	41.31	84.826	
6,650.0	6,508.8	6,574.3	6,406.5	27.3	25.5	-1.13	990.0	-2,828.4	3,504.4	3,458.9	45.54	76.945	
6,700.0	6,558.7	6,619.5	6,451.6	27.3	25.6	-1.13	990.1	-2,829.6	3,501.9	3,456.5	45.46	77.027	
6,750.0	6,608.1	6,668.7	6,500.8	27.3	25.6	-1.14	990.3	-2,830.9	3,496.0	3,450.8	45.18	77.374	
6,800.0	6,657.0	6,719.3	6,551.4	27.3	25.7	-1.15	990.7	-2,832.2	3,486.6	3,441.9	44.70	77.998	
6,850.0	6,704.9	6,770.9	6,602.9	27.2	25.8	-1.16	991.3	-2,833.6	3,473.8	3,429.8	44.02	78.911	
6,900.0	6,751.8	6,819.9	6,651.9	27.2	25.8	-1.19	991.9	-2,834.8	3,457.6	3,414.4	43.15	80.132	
6,950.0	6,797.4	6,867.0	6,699.0	27.1	25.9	-1.22	992.2	-2,835.9	3,438.1	3,396.0	42.09	81.689	
7,000.0	6,841.4	6,939.0	6,771.0	27.0	26.0	-1.28	992.2	-2,837.4	3,415.3	3,374.4	40.89	83.533	
7,050.0	6,883.6	7,000.5	6,832.5	26.9	26.1	-1.37	991.4	-2,838.2	3,389.1	3,349.6	39.51	85.785	
7,100.0	6,923.9	7,047.1	6,879.0	26.8	26.1	-1.48	990.4	-2,838.6	3,359.9	3,322.0	37.96	88.517	
7,150.0	6,962.0	7,092.6	6,924.6	26.7	26.2	-1.61	989.3	-2,838.9	3,327.9	3,291.6	36.27	91.752	
7,200.0	6,997.8	7,136.4	6,968.4	26.5	26.2	-1.77	988.1	-2,839.1	3,293.1	3,258.7	34.46	95.556	
7,250.0	7,031.0	7,171.7	7,003.6	26.4	26.3	-1.96	987.3	-2,839.2	3,255.9	3,223.4	32.55	100.029	
7,300.0	7,061.6	7,197.4	7,029.4	26.3	26.3	-2.19	986.7	-2,839.3	3,216.5	3,186.0	30.56	105.257	
7,350.0	7,089.3	7,220.9	7,052.8	26.1	26.4	-2.47	986.1	-2,839.5	3,175.1	3,146.6	28.53	111.285	
7,400.0	7,114.0	7,242.0	7,073.9	26.0	26.4	-2.84	985.7	-2,839.6	3,131.8	3,105.3	26.51	118.139	
7,450.0	7,135.7	7,261.0	7,093.0	25.9	26.4	-3.33	985.3	-2,839.8	3,087.0	3,062.4	24.55	125.752	
7,500.0	7,154.2	7,278.0	7,109.9	25.7	26.4	-4.02	984.9	-2,839.9	3,040.7	3,018.0	22.72	133.858	
7,550.0	7,169.4	7,292.0	7,123.9	25.6	26.5	-5.06	984.6	-2,840.0	2,993.3	2,972.1	21.11	141.807	
7,600.0	7,181.2	7,303.1	7,135.0	25.5	26.5	-6.78	984.4	-2,840.1	2,944.8	2,924.9	19.87	148.176	
7,650.0	7,189.6	7,311.1	7,143.0	25.4	26.5	-10.12	984.3	-2,840.2	2,895.7	2,876.3	19.37	149.529	
7,700.0	7,194.5	7,316.0	7,147.9	25.3	26.5	-19.26	984.2	-2,840.3	2,846.0	2,824.6	21.42	132.871	
7,748.9	7,196.0	7,317.8	7,149.7	25.2	26.5	-75.53	984.1	-2,840.3	2,797.1	2,753.9	43.26	64.655	
7,800.0	7,195.8	7,318.1	7,150.0	25.1	26.5	-75.74	984.1	-2,840.3	2,746.1	2,702.1	44.01	62.395	
7,900.0	7,195.4	7,318.7	7,150.6	25.5	26.5	-76.16	984.1	-2,840.3	2,646.1	2,600.5	45.65	57.959	
8,000.0	7,195.0	7,319.3	7,151.2	27.5	26.5	-76.59	984.1	-2,840.3	2,546.2	2,498.7	47.50	53.605	
8,100.0	7,194.6	7,319.9	7,151.8	29.5	26.5	-77.03	984.1	-2,840.3	2,446.2	2,396.7	49.51	49.413	
8,200.0	7,194.1	7,320.5	7,152.4	31.7	26.5	-77.46	984.1	-2,840.3	2,346.3	2,294.6	51.64	45.431	
8,300.0	7,193.7	7,321.1	7,153.0	33.9	26.5	-77.90	984.1	-2,840.3	2,246.3	2,192.4	53.89	41.683	
8,400.0	7,193.3	7,321.7	7,153.6	36.3	26.5	-78.35	984.1	-2,840.3	2,146.4	2,090.1	56.23	38.174	
8,500.0	7,192.9	7,322.3	7,154.2	38.6	26.5	-78.80	984.1	-2,840.3	2,046.4	1,987.8	58.63	34.902	
8,600.0	7,192.5	7,322.9	7,154.8	41.1	26.5	-79.25	984.1	-2,840.4	1,946.5	1,885.4	61.10	31.856	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD RYLAND 42-20D - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 705-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	
8,700.0	7,192.1	7,323.5	7,155.4	43.5	26.5	-79.71	984.0	-2,840.4	1,846.6	1,783.0	63.62	29.024	
8,800.0	7,191.7	7,324.2	7,156.0	46.0	26.5	-80.18	984.0	-2,840.4	1,746.7	1,680.5	66.19	26.390	
8,900.0	7,191.3	7,324.8	7,156.7	48.6	26.5	-80.64	984.0	-2,840.4	1,646.8	1,578.0	68.79	23.940	
9,000.0	7,190.9	7,325.4	7,157.3	51.1	26.5	-81.12	984.0	-2,840.4	1,546.9	1,475.5	71.42	21.660	
9,100.0	7,190.4	7,326.0	7,157.9	53.7	26.5	-81.59	984.0	-2,840.4	1,447.0	1,372.9	74.07	19.535	
9,200.0	7,190.0	7,326.7	7,158.6	56.3	26.5	-82.08	984.0	-2,840.4	1,347.2	1,270.4	76.75	17.552	
9,300.0	7,189.6	7,327.3	7,159.2	58.9	26.5	-82.56	984.0	-2,840.4	1,247.3	1,167.9	79.45	15.699	
9,400.0	7,189.2	7,328.0	7,159.9	61.6	26.5	-83.05	984.0	-2,840.4	1,147.5	1,065.4	82.17	13.965	
9,500.0	7,188.8	7,328.6	7,160.5	64.2	26.5	-83.55	984.0	-2,840.4	1,047.8	962.9	84.90	12.341	
9,600.0	7,188.4	7,329.3	7,161.2	66.9	26.5	-84.04	983.9	-2,840.4	948.1	860.4	87.64	10.817	
9,700.0	7,188.0	7,329.9	7,161.8	69.6	26.5	-84.55	983.9	-2,840.4	848.4	758.0	90.39	9.386	
9,800.0	7,187.6	7,330.6	7,162.5	72.3	26.5	-85.06	983.9	-2,840.4	748.9	655.7	93.15	8.039	
9,900.0	7,187.1	7,331.3	7,163.2	74.9	26.5	-85.57	983.9	-2,840.4	649.4	553.5	95.92	6.771	
10,000.0	7,186.7	7,332.0	7,163.9	77.6	26.5	-86.09	983.9	-2,840.5	550.2	451.5	98.69	5.575	
10,100.0	7,186.3	7,332.6	7,164.5	80.4	26.5	-86.61	983.9	-2,840.5	451.4	349.9	101.46	4.449	
10,200.0	7,185.9	7,333.3	7,165.2	83.1	26.5	-87.13	983.9	-2,840.5	353.2	248.9	104.24	3.388	
10,300.0	7,185.5	7,334.0	7,165.9	85.8	26.5	-87.66	983.9	-2,840.5	256.3	149.3	107.01	2.395	
10,400.0	7,185.1	7,334.7	7,166.6	88.5	26.5	-88.19	983.8	-2,840.5	163.3	53.6	109.79	1.488 Level 3	
10,500.0	7,184.7	7,335.4	7,167.3	91.2	26.5	-88.73	983.8	-2,840.5	87.5	-25.0	112.56	0.777 Level 1	
10,545.1	7,184.5	7,335.8	7,167.6	92.5	26.5	-88.98	983.8	-2,840.5	75.0	-38.8	113.81	0.659 Level 1, CC, ES, SF	
10,600.0	7,184.3	7,336.1	7,168.0	94.0	26.5	-89.27	983.8	-2,840.5	92.9	-22.4	115.33	0.806 Level 1	
10,700.0	7,183.9	7,336.9	7,168.8	96.7	26.5	-89.82	983.8	-2,840.5	172.1	54.0	118.09	1.457 Level 3	
10,800.0	7,183.4	7,337.6	7,169.5	99.4	26.5	-90.37	983.8	-2,840.5	265.7	144.8	120.85	2.198	
10,900.0	7,183.0	7,338.3	7,170.2	102.2	26.5	-90.92	983.8	-2,840.5	362.7	239.1	123.60	2.935	
11,000.0	7,182.6	7,339.0	7,170.9	104.9	26.5	-91.48	983.8	-2,840.5	461.0	334.7	126.35	3.649	
11,100.0	7,182.2	7,339.8	7,171.7	107.7	26.5	-92.04	983.8	-2,840.5	559.9	430.8	129.08	4.338	
11,200.0	7,181.8	7,340.5	7,172.4	110.4	26.5	-92.61	983.7	-2,840.5	659.2	527.4	131.80	5.001	
11,300.0	7,181.4	7,341.3	7,173.2	113.2	26.5	-93.18	983.7	-2,840.6	758.6	624.1	134.51	5.640	
11,400.0	7,181.0	7,342.0	7,173.9	116.0	26.5	-93.75	983.7	-2,840.6	858.2	720.9	137.21	6.254	
11,500.0	7,180.6	7,342.8	7,174.7	118.7	26.5	-94.33	983.7	-2,840.6	957.8	817.9	139.89	6.847	
11,600.0	7,180.1	7,343.5	7,175.4	121.5	26.5	-94.91	983.7	-2,840.6	1,057.5	915.0	142.56	7.418	
11,700.0	7,179.7	7,344.3	7,176.2	124.3	26.5	-95.49	983.7	-2,840.6	1,157.3	1,012.1	145.21	7.970	
11,800.0	7,179.3	7,345.1	7,177.0	127.0	26.5	-96.08	983.7	-2,840.6	1,257.1	1,109.3	147.84	8.503	
11,900.0	7,178.9	7,345.9	7,177.8	129.8	26.5	-96.67	983.6	-2,840.6	1,356.9	1,206.5	150.46	9.019	
12,000.0	7,178.5	7,346.7	7,178.6	132.6	26.5	-97.26	983.6	-2,840.6	1,456.8	1,303.7	153.05	9.518	
12,100.0	7,178.1	7,347.0	7,178.9	135.3	26.5	-97.50	983.6	-2,840.6	1,556.7	1,400.9	155.74	9.996	
12,200.0	7,177.7	7,347.0	7,178.9	138.1	26.5	-97.50	983.6	-2,840.6	1,656.5	1,498.1	158.49	10.452	
12,300.0	7,177.2	7,347.0	7,178.9	140.9	26.5	-97.50	983.6	-2,840.6	1,756.4	1,595.2	161.25	10.893	
12,400.0	7,176.8	7,347.0	7,178.9	143.7	26.5	-97.50	983.6	-2,840.6	1,856.4	1,692.4	164.01	11.319	
12,500.0	7,176.4	7,347.0	7,178.9	146.4	26.5	-97.50	983.6	-2,840.6	1,956.3	1,789.5	166.76	11.731	
12,600.0	7,176.0	7,347.0	7,178.9	149.2	26.5	-97.50	983.6	-2,840.6	2,056.2	1,886.7	169.52	12.129	
12,700.0	7,175.6	7,347.0	7,178.9	152.0	26.5	-97.50	983.6	-2,840.6	2,156.1	1,983.9	172.29	12.515	
12,800.0	7,175.2	7,347.0	7,178.9	154.8	26.5	-97.50	983.6	-2,840.6	2,256.1	2,081.0	175.05	12.888	
12,900.0	7,174.8	7,347.0	7,178.9	157.5	26.5	-97.50	983.6	-2,840.6	2,356.0	2,178.2	177.81	13.250	
13,000.0	7,174.4	7,347.0	7,178.9	160.3	26.5	-97.50	983.6	-2,840.6	2,456.0	2,275.4	180.57	13.601	
13,100.0	7,173.9	7,353.8	7,185.7	163.1	26.5	-102.50	983.5	-2,840.7	2,555.9	2,375.0	180.90	14.129	
13,200.0	7,173.5	7,354.4	7,186.3	165.9	26.6	-102.93	983.5	-2,840.7	2,655.9	2,472.5	183.35	14.485	
13,300.0	7,173.1	7,355.0	7,186.9	168.7	26.6	-103.36	983.5	-2,840.7	2,755.8	2,570.1	185.79	14.833	
13,400.0	7,172.7	7,355.6	7,187.5	171.5	26.6	-103.77	983.5	-2,840.7	2,855.8	2,667.6	188.21	15.173	
13,500.0	7,172.3	7,356.2	7,188.1	174.3	26.6	-104.19	983.5	-2,840.7	2,955.8	2,765.1	190.63	15.506	
13,600.0	7,171.9	7,356.7	7,188.6	177.0	26.6	-104.59	983.5	-2,840.7	3,055.7	2,862.7	193.03	15.831	
13,700.0	7,171.5	7,357.3	7,189.2	179.8	26.6	-104.99	983.4	-2,840.7	3,155.7	2,960.3	195.42	16.149	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD RYLAND 42-20D - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 705-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	
13,800.0	7,171.0	7,357.9	7,189.8	182.6	26.6	-105.39	983.4	-2,840.7	3,255.7	3,057.9	197.79	16.460	
13,900.0	7,170.6	7,358.4	7,190.3	185.4	26.6	-105.78	983.4	-2,840.8	3,355.6	3,155.5	200.16	16.765	
14,000.0	7,170.2	7,359.0	7,190.9	188.2	26.6	-106.16	983.4	-2,840.8	3,455.6	3,253.1	202.51	17.064	
14,100.0	7,169.8	7,359.5	7,191.4	191.0	26.6	-106.54	983.4	-2,840.8	3,555.6	3,350.7	204.85	17.357	
14,200.0	7,169.4	7,360.0	7,191.9	193.8	26.6	-106.91	983.4	-2,840.8	3,655.6	3,448.4	207.17	17.645	
14,295.0	7,169.0	7,360.5	7,192.4	196.4	26.6	-107.25	983.4	-2,840.8	3,750.5	3,541.1	209.37	17.913	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST VERT BROWN 20-1 - 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	-68.97	2,474.5	-6,436.8	6,896.2				
100.0	100.0	61.5	61.5	0.1	0.0	-68.97	2,474.5	-6,436.8	6,896.1	6,896.0	0.10	N/A	
200.0	200.0	161.5	161.5	0.3	0.7	-68.97	2,474.5	-6,436.8	6,896.1	6,895.0	1.03	6,667.230	
300.0	300.0	261.5	261.5	0.5	2.6	-68.97	2,474.5	-6,436.8	6,896.1	6,892.9	3.12	2,211.233	
400.0	400.0	361.5	361.5	0.8	4.7	-68.97	2,474.5	-6,436.8	6,896.1	6,890.5	5.51	1,252.245	
500.0	500.0	461.5	461.5	1.0	6.8	-68.97	2,474.5	-6,436.8	6,896.1	6,888.3	7.79	885.450	
600.0	600.0	561.5	561.5	1.2	8.8	-101.49	2,474.5	-6,436.8	6,896.4	6,886.4	10.04	686.620	
700.0	699.8	661.3	661.3	1.4	10.8	-101.51	2,474.5	-6,436.8	6,897.4	6,885.2	12.29	561.251	
800.0	799.5	761.0	761.0	1.7	12.9	-101.55	2,474.5	-6,436.8	6,899.2	6,884.7	14.54	474.595	
900.0	898.7	860.2	860.2	1.9	14.9	-101.60	2,474.5	-6,436.8	6,901.7	6,884.9	16.80	410.899	
1,000.0	997.5	959.0	959.0	2.2	16.9	-101.66	2,474.5	-6,436.8	6,904.8	6,885.8	19.08	361.954	
1,100.0	1,095.6	1,057.1	1,057.1	2.6	18.8	-101.74	2,474.5	-6,436.8	6,908.8	6,887.4	21.38	323.074	
1,169.1	1,163.0	1,124.5	1,124.5	2.8	20.2	-101.79	2,474.5	-6,436.8	6,912.0	6,889.0	23.00	300.543	
1,200.0	1,193.1	1,154.6	1,154.6	3.0	20.8	-101.85	2,474.5	-6,436.8	6,913.5	6,889.7	23.73	291.378	
1,300.0	1,290.4	1,251.9	1,251.9	3.4	22.8	-102.03	2,474.5	-6,436.8	6,918.4	6,892.3	26.10	265.105	
1,400.0	1,387.7	1,349.2	1,349.2	3.8	24.7	-102.22	2,474.5	-6,436.8	6,923.4	6,894.9	28.48	243.087	
1,500.0	1,484.9	1,446.4	1,446.4	4.3	26.7	-102.40	2,474.5	-6,436.8	6,928.4	6,897.6	30.87	224.404	
1,600.0	1,582.2	1,543.7	1,543.7	4.7	28.6	-102.58	2,474.5	-6,436.8	6,933.6	6,900.3	33.28	208.369	
1,700.0	1,679.5	1,641.0	1,641.0	5.2	30.6	-102.76	2,474.5	-6,436.8	6,938.8	6,903.1	35.68	194.469	
1,800.0	1,776.8	1,738.3	1,738.3	5.7	32.5	-102.94	2,474.5	-6,436.8	6,944.1	6,906.0	38.09	182.309	
1,900.0	1,874.1	1,835.6	1,835.6	6.1	34.5	-103.12	2,474.5	-6,436.8	6,949.4	6,908.9	40.50	171.588	
2,000.0	1,971.4	1,932.9	1,932.9	6.6	36.5	-103.31	2,474.5	-6,436.8	6,954.9	6,911.9	42.91	162.066	
2,100.0	2,068.7	2,030.2	2,030.2	7.1	38.4	-103.49	2,474.5	-6,436.8	6,960.4	6,915.0	45.33	153.555	
2,200.0	2,165.9	2,127.4	2,127.4	7.6	40.4	-103.67	2,474.5	-6,436.8	6,965.9	6,918.2	47.74	145.904	
2,300.0	2,263.2	2,224.7	2,224.7	8.0	42.3	-103.85	2,474.5	-6,436.8	6,971.6	6,921.4	50.16	138.989	
2,400.0	2,360.5	2,322.0	2,322.0	8.5	44.3	-104.03	2,474.5	-6,436.8	6,977.3	6,924.7	52.58	132.711	
2,500.0	2,457.8	2,419.3	2,419.3	9.0	46.2	-104.21	2,474.5	-6,436.8	6,983.1	6,928.1	54.99	126.985	
2,600.0	2,555.1	2,516.6	2,516.6	9.5	48.2	-104.39	2,474.5	-6,436.8	6,989.0	6,931.6	57.41	121.742	
2,700.0	2,652.4	2,613.9	2,613.9	10.0	50.2	-104.56	2,474.5	-6,436.8	6,994.9	6,935.1	59.82	116.924	
2,800.0	2,749.7	2,711.2	2,711.2	10.4	52.1	-104.74	2,474.5	-6,436.8	7,000.9	6,938.7	62.24	112.481	
2,900.0	2,846.9	2,808.4	2,808.4	10.9	54.1	-104.92	2,474.5	-6,436.8	7,007.0	6,942.3	64.66	108.372	
3,000.0	2,944.2	2,905.7	2,905.7	11.4	56.0	-105.10	2,474.5	-6,436.8	7,013.1	6,946.1	67.07	104.561	
3,100.0	3,041.5	3,003.0	3,003.0	11.9	58.0	-105.28	2,474.5	-6,436.8	7,019.4	6,949.9	69.49	101.016	
3,200.0	3,138.8	3,100.3	3,100.3	12.4	59.9	-105.45	2,474.5	-6,436.8	7,025.6	6,953.7	71.90	97.711	
3,300.0	3,236.1	3,197.6	3,197.6	12.8	61.9	-105.63	2,474.5	-6,436.8	7,032.0	6,957.7	74.32	94.623	
3,400.0	3,333.4	3,294.9	3,294.9	13.3	63.9	-105.81	2,474.5	-6,436.8	7,038.4	6,961.7	76.73	91.730	
3,500.0	3,430.6	3,392.1	3,392.1	13.8	65.8	-105.99	2,474.5	-6,436.8	7,044.9	6,965.8	79.14	89.015	
3,600.0	3,527.9	3,489.4	3,489.4	14.3	67.8	-106.16	2,474.5	-6,436.8	7,051.5	6,970.0	81.56	86.463	
3,700.0	3,625.2	3,586.7	3,586.7	14.8	69.7	-106.34	2,474.5	-6,436.8	7,058.2	6,974.2	83.97	84.058	
3,800.0	3,722.5	3,684.0	3,684.0	15.3	71.7	-106.51	2,474.5	-6,436.8	7,064.9	6,978.5	86.38	81.790	
3,900.0	3,819.8	3,781.3	3,781.3	15.7	73.6	-106.69	2,474.5	-6,436.8	7,071.7	6,982.9	88.79	79.646	
4,000.0	3,917.1	3,878.6	3,878.6	16.2	75.6	-106.86	2,474.5	-6,436.8	7,078.5	6,987.3	91.20	77.616	
4,100.0	4,014.4	3,975.9	3,975.9	16.7	77.6	-107.04	2,474.5	-6,436.8	7,085.4	6,991.8	93.61	75.693	
4,200.0	4,111.6	4,073.1	4,073.1	17.2	79.5	-107.21	2,474.5	-6,436.8	7,092.4	6,996.4	96.02	73.867	
4,300.0	4,208.9	4,170.4	4,170.4	17.7	81.5	-107.39	2,474.5	-6,436.8	7,099.5	7,001.0	98.42	72.132	
4,400.0	4,306.2	4,267.7	4,267.7	18.2	83.4	-107.56	2,474.5	-6,436.8	7,106.6	7,005.8	100.83	70.481	
4,500.0	4,403.5	4,365.0	4,365.0	18.7	85.4	-107.73	2,474.5	-6,436.8	7,113.8	7,010.5	103.24	68.908	
4,600.0	4,500.8	4,462.3	4,462.3	19.1	87.3	-107.91	2,474.5	-6,436.8	7,121.0	7,015.4	105.64	67.408	
4,700.0	4,598.1	4,559.6	4,559.6	19.6	89.3	-108.08	2,474.5	-6,436.8	7,128.4	7,020.3	108.05	65.976	
4,800.0	4,695.4	4,656.9	4,656.9	20.1	91.2	-108.25	2,474.5	-6,436.8	7,135.8	7,025.3	110.45	64.607	
4,900.0	4,792.6	4,754.1	4,754.1	20.6	93.2	-108.42	2,474.5	-6,436.8	7,143.2	7,030.4	112.85	63.297	
5,000.0	4,889.9	4,851.4	4,851.4	21.1	95.2	-108.60	2,474.5	-6,436.8	7,150.8	7,035.5	115.25	62.044	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST VERT BROWN 20-1 - 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		
5,100.0	4,987.2	4,948.7	4,948.7	21.6	97.1	-108.77	2,474.5	-6,436.8	7,158.4	7,040.7	117.65	60.842		
5,200.0	5,084.5	5,046.0	5,046.0	22.1	99.1	-108.94	2,474.5	-6,436.8	7,166.0	7,046.0	120.05	59.690		
5,300.0	5,181.8	5,143.3	5,143.3	22.5	101.0	-109.11	2,474.5	-6,436.8	7,173.8	7,051.3	122.45	58.583		
5,400.0	5,279.1	5,240.6	5,240.6	23.0	103.0	-109.28	2,474.5	-6,436.8	7,181.6	7,056.7	124.85	57.521		
5,500.0	5,376.3	5,337.8	5,337.8	23.5	104.9	-109.45	2,474.5	-6,436.8	7,189.4	7,062.2	127.25	56.499		
5,600.0	5,473.6	5,435.1	5,435.1	24.0	106.9	-109.62	2,474.5	-6,436.8	7,197.4	7,067.7	129.65	55.515		
5,700.0	5,570.9	5,532.4	5,532.4	24.5	108.9	-109.79	2,474.5	-6,436.8	7,205.3	7,073.3	132.04	54.569		
5,800.0	5,668.2	5,629.7	5,629.7	25.0	110.8	-109.96	2,474.5	-6,436.8	7,213.4	7,079.0	134.44	53.657		
5,900.0	5,765.5	5,727.0	5,727.0	25.5	112.8	-110.12	2,474.5	-6,436.8	7,221.5	7,084.7	136.83	52.778		
5,921.9	5,786.8	5,748.3	5,748.3	25.6	113.2	-110.16	2,474.5	-6,436.8	7,223.3	7,086.0	137.35	52.589		
6,000.0	5,863.0	5,824.5	5,824.5	25.9	114.7	-110.40	2,474.5	-6,436.8	7,229.4	7,090.1	139.24	51.919		
6,100.0	5,961.2	5,922.7	5,922.7	26.2	116.7	-110.66	2,474.5	-6,436.8	7,236.0	7,094.4	141.59	51.105		
6,200.0	6,060.0	6,021.5	6,021.5	26.5	118.7	-110.88	2,474.5	-6,436.8	7,241.5	7,097.6	143.90	50.322		
6,300.0	6,159.3	6,120.8	6,120.8	26.7	120.7	-111.04	2,474.5	-6,436.8	7,245.8	7,099.6	146.18	49.569		
6,400.0	6,259.0	6,220.5	6,220.5	26.9	122.7	-111.16	2,474.5	-6,436.8	7,248.8	7,100.4	148.41	48.845		
6,500.0	6,358.8	6,320.3	6,320.3	27.1	124.7	-111.23	2,474.5	-6,436.8	7,250.6	7,100.0	150.59	48.149		
6,591.0	6,449.8	6,411.3	6,411.3	27.2	126.5	-78.74	2,474.5	-6,436.8	7,251.1	7,106.2	144.91	50.041		
6,600.0	6,458.8	6,420.3	6,420.3	27.2	126.7	-78.74	2,474.5	-6,436.8	7,251.1	7,106.0	145.10	49.973		
6,621.0	6,479.8	6,441.3	6,441.3	27.2	127.1	-78.74	2,474.5	-6,436.8	7,251.1	7,105.6	145.56	49.816		
6,650.0	6,508.8	6,470.3	6,470.3	27.3	127.7	11.27	2,474.5	-6,436.8	7,250.6	7,096.9	153.63	47.195		
6,700.0	6,558.7	6,520.2	6,520.2	27.3	128.7	11.33	2,474.5	-6,436.8	7,246.9	7,093.0	153.87	47.096		
6,750.0	6,608.1	6,569.6	6,569.6	27.3	129.7	11.46	2,474.5	-6,436.8	7,239.8	7,086.4	153.39	47.198		
6,800.0	6,657.0	6,618.5	6,618.5	27.3	130.7	11.65	2,474.5	-6,436.8	7,229.3	7,077.1	152.18	47.506		
6,850.0	6,704.9	6,666.4	6,666.4	27.2	131.7	11.90	2,474.5	-6,436.8	7,215.5	7,065.3	150.24	48.028		
6,900.0	6,751.8	6,713.3	6,713.3	27.2	132.6	12.23	2,474.5	-6,436.8	7,198.5	7,050.9	147.58	48.777		
6,950.0	6,797.4	6,758.9	6,758.9	27.1	133.5	12.65	2,474.5	-6,436.8	7,178.3	7,034.1	144.23	49.770		
7,000.0	6,841.4	6,802.9	6,802.9	27.0	134.4	13.16	2,474.5	-6,436.8	7,155.1	7,014.9	140.23	51.024		
7,050.0	6,883.6	6,845.1	6,845.1	26.9	135.3	13.78	2,474.5	-6,436.8	7,128.9	6,993.3	135.63	52.563		
7,100.0	6,923.9	6,885.4	6,885.4	26.8	136.1	14.54	2,474.5	-6,436.8	7,099.9	6,969.4	130.50	54.405		
7,150.0	6,962.0	6,923.5	6,923.5	26.7	136.8	15.46	2,474.5	-6,436.8	7,068.2	6,943.2	124.97	56.561		
7,200.0	6,997.8	6,959.3	6,959.3	26.5	137.6	16.57	2,474.5	-6,436.8	7,034.0	6,914.8	119.18	59.020		
7,250.0	7,031.0	6,992.5	6,992.5	26.4	138.2	17.93	2,474.5	-6,436.8	6,997.4	6,884.0	113.37	61.719		
7,300.0	7,061.6	7,023.1	7,023.1	26.3	138.8	19.61	2,474.5	-6,436.8	6,958.6	6,850.8	107.89	64.496		
7,350.0	7,089.3	7,050.8	7,050.8	26.1	139.4	21.71	2,474.5	-6,436.8	6,917.9	6,814.7	103.24	67.010		
7,400.0	7,114.0	7,075.5	7,075.5	26.0	139.9	24.37	2,474.5	-6,436.8	6,875.4	6,775.3	100.14	68.661		
7,450.0	7,135.7	7,097.2	7,097.2	25.9	140.3	27.81	2,474.5	-6,436.8	6,831.3	6,731.8	99.58	68.600		
7,500.0	7,154.2	7,115.7	7,115.7	25.7	140.7	32.35	2,474.5	-6,436.8	6,785.9	6,683.1	102.78	66.021		
7,550.0	7,169.4	7,130.9	7,130.9	25.6	141.0	38.49	2,474.5	-6,436.8	6,739.3	6,628.4	110.91	60.764		
7,600.0	7,181.2	7,142.7	7,142.7	25.5	141.2	46.92	2,474.5	-6,436.8	6,691.8	6,567.3	124.50	53.750		
7,650.0	7,189.6	7,151.1	7,151.1	25.4	141.4	58.50	2,474.5	-6,436.8	6,643.7	6,501.5	142.20	46.720		
7,700.0	7,194.5	7,156.0	7,156.0	25.3	141.5	73.72	2,474.5	-6,436.8	6,595.1	6,436.5	158.62	41.578		
7,748.9	7,196.0	7,157.5	7,157.5	25.2	141.5	91.06	2,474.5	-6,436.8	6,547.3	6,382.7	164.61	39.775		
7,800.0	7,195.8	7,157.3	7,157.3	25.1	141.5	91.05	2,474.5	-6,436.8	6,497.5	6,332.2	165.34	39.298		
7,900.0	7,195.4	7,156.9	7,156.9	25.5	141.5	91.04	2,474.5	-6,436.8	6,399.9	6,233.0	166.94	38.336		
8,000.0	7,195.0	7,156.5	7,156.5	27.5	141.5	91.02	2,474.5	-6,436.8	6,302.5	6,133.7	168.74	37.350		
8,100.0	7,194.6	7,156.1	7,156.1	29.5	141.5	91.01	2,474.5	-6,436.8	6,205.0	6,034.3	170.70	36.351		
8,200.0	7,194.1	7,155.6	7,155.6	31.7	141.5	90.99	2,474.5	-6,436.8	6,107.7	5,934.9	172.78	35.349		
8,300.0	7,193.7	7,155.2	7,155.2	33.9	141.5	90.97	2,474.5	-6,436.8	6,010.5	5,835.5	174.97	34.351		
8,400.0	7,193.3	7,154.8	7,154.8	36.3	141.5	90.96	2,474.5	-6,436.8	5,913.4	5,736.1	177.25	33.362		
8,500.0	7,192.9	7,154.4	7,154.4	38.6	141.5	90.94	2,474.5	-6,436.8	5,816.3	5,636.7	179.60	32.385		
8,600.0	7,192.5	7,154.0	7,154.0	41.1	141.5	90.92	2,474.5	-6,436.8	5,719.4	5,537.4	182.00	31.425		
8,700.0	7,192.1	7,153.6	7,153.6	43.5	141.5	90.91	2,474.5	-6,436.8	5,622.5	5,438.1	184.45	30.482		

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 SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST VERT BROWN 20-1 - 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		
8,800.0	7,191.7	7,153.2	7,153.2	46.0	141.5	90.89	2,474.5	-6,436.8	5,525.8	5,338.9	186.95	29.558		
8,900.0	7,191.3	7,152.8	7,152.8	48.6	141.4	90.87	2,474.5	-6,436.8	5,429.2	5,239.7	189.47	28.654		
9,000.0	7,190.9	7,152.4	7,152.4	51.1	141.4	90.86	2,474.5	-6,436.8	5,332.7	5,140.7	192.03	27.770		
9,100.0	7,190.4	7,151.9	7,151.9	53.7	141.4	90.84	2,474.5	-6,436.8	5,236.4	5,041.8	194.61	26.907		
9,200.0	7,190.0	7,151.5	7,151.5	56.3	141.4	90.82	2,474.5	-6,436.8	5,140.2	4,943.0	197.21	26.064		
9,300.0	7,189.6	7,151.1	7,151.1	58.9	141.4	90.81	2,474.5	-6,436.8	5,044.1	4,844.3	199.83	25.242		
9,400.0	7,189.2	7,150.7	7,150.7	61.6	141.4	90.79	2,474.5	-6,436.8	4,948.2	4,745.8	202.47	24.439		
9,500.0	7,188.8	7,150.3	7,150.3	64.2	141.4	90.77	2,474.5	-6,436.8	4,852.5	4,647.4	205.12	23.657		
9,600.0	7,188.4	7,149.9	7,149.9	66.9	141.4	90.76	2,474.5	-6,436.8	4,756.9	4,549.2	207.78	22.894		
9,700.0	7,188.0	7,149.5	7,149.5	69.6	141.4	90.74	2,474.5	-6,436.8	4,661.6	4,451.1	210.46	22.150		
9,800.0	7,187.6	7,149.1	7,149.1	72.3	141.4	90.72	2,474.5	-6,436.8	4,566.4	4,353.3	213.14	21.424		
9,900.0	7,187.1	7,148.6	7,148.6	74.9	141.4	90.71	2,474.5	-6,436.8	4,471.4	4,255.6	215.83	20.717		
10,000.0	7,186.7	7,148.2	7,148.2	77.6	141.4	90.69	2,474.5	-6,436.8	4,376.7	4,158.2	218.53	20.027		
10,100.0	7,186.3	7,147.8	7,147.8	80.4	141.3	90.67	2,474.5	-6,436.8	4,282.2	4,060.9	221.24	19.355		
10,200.0	7,185.9	7,147.4	7,147.4	83.1	141.3	90.66	2,474.5	-6,436.8	4,187.9	3,964.0	223.96	18.700		
10,300.0	7,185.5	7,147.0	7,147.0	85.8	141.3	90.64	2,474.5	-6,436.8	4,094.0	3,867.3	226.68	18.061		
10,400.0	7,185.1	7,146.6	7,146.6	88.5	141.3	90.62	2,474.5	-6,436.8	4,000.3	3,770.9	229.40	17.438		
10,500.0	7,184.7	7,146.2	7,146.2	91.2	141.3	90.61	2,474.5	-6,436.8	3,906.9	3,674.8	232.13	16.831		
10,600.0	7,184.3	7,145.8	7,145.8	94.0	141.3	90.59	2,474.5	-6,436.8	3,813.9	3,579.0	234.86	16.239		
10,700.0	7,183.9	7,145.4	7,145.4	96.7	141.3	90.57	2,474.5	-6,436.8	3,721.2	3,483.6	237.60	15.662		
10,800.0	7,183.4	7,144.9	7,144.9	99.4	141.3	90.56	2,474.5	-6,436.8	3,628.9	3,388.6	240.34	15.099		
10,900.0	7,183.0	7,144.5	7,144.5	102.2	141.3	90.54	2,474.5	-6,436.8	3,537.1	3,294.0	243.08	14.551		
11,000.0	7,182.6	7,144.1	7,144.1	104.9	141.3	90.52	2,474.5	-6,436.8	3,445.7	3,199.8	245.83	14.016		
11,100.0	7,182.2	7,143.7	7,143.7	107.7	141.3	90.51	2,474.5	-6,436.8	3,354.8	3,106.2	248.58	13.496		
11,200.0	7,181.8	7,143.3	7,143.3	110.4	141.3	90.49	2,474.5	-6,436.8	3,264.4	3,013.0	251.34	12.988		
11,300.0	7,181.4	7,142.9	7,142.9	113.2	141.2	90.47	2,474.5	-6,436.8	3,174.6	2,920.5	254.09	12.494		
11,400.0	7,181.0	7,142.5	7,142.5	116.0	141.2	90.46	2,474.5	-6,436.8	3,085.4	2,828.5	256.85	12.012		
11,500.0	7,180.6	7,142.1	7,142.1	118.7	141.2	90.44	2,474.5	-6,436.8	2,996.9	2,737.3	259.61	11.544		
11,600.0	7,180.1	7,141.6	7,141.6	121.5	141.2	90.42	2,474.5	-6,436.8	2,909.1	2,646.7	262.37	11.088		
11,700.0	7,179.7	7,141.2	7,141.2	124.3	141.2	90.41	2,474.5	-6,436.8	2,822.2	2,557.0	265.13	10.644		
11,800.0	7,179.3	7,140.8	7,140.8	127.0	141.2	90.39	2,474.5	-6,436.8	2,736.1	2,468.2	267.90	10.213		
11,900.0	7,178.9	7,140.4	7,140.4	129.8	141.2	90.37	2,474.5	-6,436.8	2,651.1	2,380.4	270.66	9.795		
12,000.0	7,178.5	7,140.0	7,140.0	132.6	141.2	90.36	2,474.5	-6,436.8	2,567.1	2,293.6	273.43	9.388		
12,100.0	7,178.1	7,139.6	7,139.6	135.3	141.2	90.34	2,474.5	-6,436.8	2,484.3	2,208.1	276.20	8.994		
12,200.0	7,177.7	7,139.2	7,139.2	138.1	141.2	90.32	2,474.5	-6,436.8	2,402.8	2,123.8	278.97	8.613		
12,300.0	7,177.2	7,138.7	7,138.7	140.9	141.2	90.31	2,474.5	-6,436.8	2,322.7	2,041.0	281.74	8.244		
12,400.0	7,176.8	7,138.3	7,138.3	143.7	141.2	90.29	2,474.5	-6,436.8	2,244.3	1,959.7	284.51	7.888		
12,500.0	7,176.4	7,137.9	7,137.9	146.4	141.1	90.27	2,474.5	-6,436.8	2,167.6	1,880.3	287.29	7.545		
12,600.0	7,176.0	7,137.5	7,137.5	149.2	141.1	90.26	2,474.5	-6,436.8	2,092.9	1,802.8	290.06	7.215		
12,700.0	7,175.6	7,137.1	7,137.1	152.0	141.1	90.24	2,474.5	-6,436.8	2,020.4	1,727.5	292.84	6.899		
12,800.0	7,175.2	7,136.7	7,136.7	154.8	141.1	90.22	2,474.5	-6,436.8	1,950.3	1,654.6	295.62	6.597		
12,900.0	7,174.8	7,136.3	7,136.3	157.5	141.1	90.21	2,474.5	-6,436.8	1,882.9	1,584.5	298.39	6.310		
13,000.0	7,174.4	7,135.9	7,135.9	160.3	141.1	90.19	2,474.5	-6,436.8	1,818.5	1,517.3	301.17	6.038		
13,100.0	7,173.9	7,135.4	7,135.4	163.1	141.1	90.17	2,474.5	-6,436.8	1,757.5	1,453.5	303.95	5.782		
13,200.0	7,173.5	7,135.0	7,135.0	165.9	141.1	90.16	2,474.5	-6,436.8	1,700.1	1,393.4	306.73	5.543		
13,300.0	7,173.1	7,134.6	7,134.6	168.7	141.1	90.14	2,474.5	-6,436.8	1,646.8	1,337.3	309.51	5.321		
13,400.0	7,172.7	7,134.2	7,134.2	171.5	141.1	90.12	2,474.5	-6,436.8	1,598.1	1,285.8	312.29	5.117		
13,500.0	7,172.3	7,133.8	7,133.8	174.3	141.1	90.11	2,474.5	-6,436.8	1,554.2	1,239.1	315.08	4.933		
13,600.0	7,171.9	7,133.4	7,133.4	177.0	141.1	90.09	2,474.5	-6,436.8	1,515.7	1,197.8	317.86	4.768		
13,700.0	7,171.5	7,133.0	7,133.0	179.8	141.0	90.07	2,474.5	-6,436.8	1,482.9	1,162.2	320.64	4.625		
13,800.0	7,171.0	7,132.5	7,132.5	182.6	141.0	90.06	2,474.5	-6,436.8	1,456.2	1,132.8	323.42	4.503		
13,900.0	7,170.6	7,132.1	7,132.1	185.4	141.0	90.04	2,474.5	-6,436.8	1,436.1	1,109.9	326.21	4.402		

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST VERT BROWN 20-1 - 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
14,000.0	7,170.2	7,131.7	7,131.7	188.2	141.0	90.02	2,474.5	-6,436.8	1,422.7	1,093.7	328.99	4.324	
14,100.0	7,169.8	7,131.3	7,131.3	191.0	141.0	90.01	2,474.5	-6,436.8	1,416.2	1,084.5	331.78	4.269	
14,141.5	7,169.6	7,131.1	7,131.1	192.1	141.0	90.00	2,474.5	-6,436.8	1,415.6	1,082.7	332.93	4.252 CC	
14,200.0	7,169.4	7,130.9	7,130.9	193.8	141.0	89.99	2,474.5	-6,436.8	1,416.9	1,082.3	334.56	4.235 ES	
14,295.0	7,169.0	7,130.5	7,130.5	196.4	141.0	89.97	2,474.5	-6,436.8	1,423.9	1,086.7	337.21	4.223 SF	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST VERT BROWN 22-20 - 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	-79.52	985.3	-5,324.8	5,415.4				
100.0	100.0	49.5	49.5	0.1	0.0	-79.52	985.3	-5,324.8	5,415.2	5,415.1	0.10	N/A	
200.0	200.0	149.5	149.5	0.3	0.7	-79.52	985.3	-5,324.8	5,415.2	5,414.2	0.97	5,557.426	
300.0	300.0	249.5	249.5	0.5	2.4	-79.52	985.3	-5,324.8	5,415.2	5,412.2	2.99	1,813.870	
400.0	400.0	349.5	349.5	0.8	4.6	-79.52	985.3	-5,324.8	5,415.2	5,409.8	5.38	1,006.342	
500.0	500.0	449.5	449.5	1.0	6.7	-79.52	985.3	-5,324.8	5,415.2	5,407.5	7.66	706.510	
600.0	600.0	549.5	549.5	1.2	8.7	-112.03	985.3	-5,324.8	5,415.9	5,405.9	9.92	545.901	
700.0	699.8	649.3	649.3	1.4	10.7	-112.05	985.3	-5,324.8	5,417.8	5,405.7	12.16	445.390	
800.0	799.5	749.0	749.0	1.7	12.7	-112.07	985.3	-5,324.8	5,421.1	5,406.7	14.41	376.316	
900.0	898.7	848.2	848.2	1.9	14.7	-112.10	985.3	-5,324.8	5,425.7	5,409.1	16.65	325.800	
1,000.0	997.5	947.0	947.0	2.2	16.7	-112.14	985.3	-5,324.8	5,431.7	5,412.8	18.92	287.161	
1,100.0	1,095.6	1,045.1	1,045.1	2.6	18.7	-112.19	985.3	-5,324.8	5,439.0	5,417.8	21.20	256.601	
1,169.1	1,163.0	1,112.5	1,112.5	2.8	20.1	-112.23	985.3	-5,324.8	5,444.9	5,422.1	22.79	238.953	
1,200.0	1,193.1	1,142.6	1,142.6	3.0	20.7	-112.30	985.3	-5,324.8	5,447.6	5,424.1	23.51	231.735	
1,300.0	1,290.4	1,239.9	1,239.9	3.4	22.6	-112.52	985.3	-5,324.8	5,456.7	5,430.8	25.85	211.050	
1,400.0	1,387.7	1,337.2	1,337.2	3.8	24.6	-112.73	985.3	-5,324.8	5,465.8	5,437.6	28.21	193.721	
1,500.0	1,484.9	1,434.4	1,434.4	4.3	26.6	-112.95	985.3	-5,324.8	5,475.0	5,444.4	30.58	179.020	
1,600.0	1,582.2	1,531.7	1,531.7	4.7	28.5	-113.17	985.3	-5,324.8	5,484.3	5,451.3	32.96	166.404	
1,700.0	1,679.5	1,629.0	1,629.0	5.2	30.5	-113.39	985.3	-5,324.8	5,493.6	5,458.3	35.34	155.469	
1,800.0	1,776.8	1,726.3	1,726.3	5.7	32.4	-113.60	985.3	-5,324.8	5,503.1	5,465.3	37.72	145.905	
1,900.0	1,874.1	1,823.6	1,823.6	6.1	34.4	-113.82	985.3	-5,324.8	5,512.6	5,472.5	40.10	137.473	
2,000.0	1,971.4	1,920.9	1,920.9	6.6	36.3	-114.03	985.3	-5,324.8	5,522.2	5,479.7	42.48	129.985	
2,100.0	2,068.7	2,018.2	2,018.2	7.1	38.3	-114.25	985.3	-5,324.8	5,531.9	5,487.0	44.87	123.292	
2,200.0	2,165.9	2,115.4	2,115.4	7.6	40.3	-114.46	985.3	-5,324.8	5,541.6	5,494.4	47.25	117.276	
2,300.0	2,263.2	2,212.7	2,212.7	8.0	42.2	-114.67	985.3	-5,324.8	5,551.5	5,501.8	49.64	111.840	
2,400.0	2,360.5	2,310.0	2,310.0	8.5	44.2	-114.89	985.3	-5,324.8	5,561.4	5,509.4	52.02	106.904	
2,500.0	2,457.8	2,407.3	2,407.3	9.0	46.1	-115.10	985.3	-5,324.8	5,571.4	5,517.0	54.41	102.404	
2,600.0	2,555.1	2,504.6	2,504.6	9.5	48.1	-115.31	985.3	-5,324.8	5,581.5	5,524.7	56.79	98.283	
2,700.0	2,652.4	2,601.9	2,601.9	10.0	50.0	-115.52	985.3	-5,324.8	5,591.6	5,532.5	59.17	94.497	
2,800.0	2,749.7	2,699.2	2,699.2	10.4	52.0	-115.73	985.3	-5,324.8	5,601.9	5,540.3	61.55	91.006	
2,900.0	2,846.9	2,796.4	2,796.4	10.9	54.0	-115.93	985.3	-5,324.8	5,612.2	5,548.2	63.94	87.778	
3,000.0	2,944.2	2,893.7	2,893.7	11.4	55.9	-116.14	985.3	-5,324.8	5,622.6	5,556.2	66.32	84.784	
3,100.0	3,041.5	2,991.0	2,991.0	11.9	57.9	-116.35	985.3	-5,324.8	5,633.0	5,564.3	68.70	82.000	
3,200.0	3,138.8	3,088.3	3,088.3	12.4	59.8	-116.55	985.3	-5,324.8	5,643.6	5,572.5	71.07	79.404	
3,300.0	3,236.1	3,185.6	3,185.6	12.8	61.8	-116.76	985.3	-5,324.8	5,654.2	5,580.7	73.45	76.979	
3,400.0	3,333.4	3,282.9	3,282.9	13.3	63.7	-116.96	985.3	-5,324.8	5,664.9	5,589.0	75.83	74.707	
3,500.0	3,430.6	3,380.1	3,380.1	13.8	65.7	-117.17	985.3	-5,324.8	5,675.6	5,597.4	78.20	72.576	
3,600.0	3,527.9	3,477.4	3,477.4	14.3	67.7	-117.37	985.3	-5,324.8	5,686.5	5,605.9	80.58	70.573	
3,700.0	3,625.2	3,574.7	3,574.7	14.8	69.6	-117.57	985.3	-5,324.8	5,697.4	5,614.4	82.95	68.685	
3,800.0	3,722.5	3,672.0	3,672.0	15.3	71.6	-117.77	985.3	-5,324.8	5,708.3	5,623.0	85.32	66.905	
3,900.0	3,819.8	3,769.3	3,769.3	15.7	73.5	-117.98	985.3	-5,324.8	5,719.4	5,631.7	87.69	65.223	
4,000.0	3,917.1	3,866.6	3,866.6	16.2	75.5	-118.18	985.3	-5,324.8	5,730.5	5,640.5	90.06	63.631	
4,100.0	4,014.4	3,963.9	3,963.9	16.7	77.4	-118.37	985.3	-5,324.8	5,741.7	5,649.3	92.43	62.122	
4,200.0	4,111.6	4,061.1	4,061.1	17.2	79.4	-118.57	985.3	-5,324.8	5,753.0	5,658.2	94.79	60.690	
4,300.0	4,208.9	4,158.4	4,158.4	17.7	81.3	-118.77	985.3	-5,324.8	5,764.3	5,667.2	97.16	59.329	
4,400.0	4,306.2	4,255.7	4,255.7	18.2	83.3	-118.97	985.3	-5,324.8	5,775.7	5,676.2	99.52	58.035	
4,500.0	4,403.5	4,353.0	4,353.0	18.7	85.3	-119.16	985.3	-5,324.8	5,787.2	5,685.3	101.88	56.802	
4,600.0	4,500.8	4,450.3	4,450.3	19.1	87.2	-119.36	985.3	-5,324.8	5,798.8	5,694.5	104.25	55.626	
4,700.0	4,598.1	4,547.6	4,547.6	19.6	89.2	-119.55	985.3	-5,324.8	5,810.4	5,703.8	106.61	54.503	
4,800.0	4,695.4	4,644.9	4,644.9	20.1	91.1	-119.75	985.3	-5,324.8	5,822.1	5,713.1	108.96	53.431	
4,900.0	4,792.6	4,742.1	4,742.1	20.6	93.1	-119.94	985.3	-5,324.8	5,833.8	5,722.5	111.32	52.405	
5,000.0	4,889.9	4,839.4	4,839.4	21.1	95.0	-120.13	985.3	-5,324.8	5,845.7	5,732.0	113.68	51.423	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST VERT BROWN 22-20 - 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	
5,100.0	4,987.2	4,936.7	4,936.7	21.6	97.0	-120.33	985.3	-5,324.8	5,857.6	5,741.5	116.03	50.482	
5,200.0	5,084.5	5,034.0	5,034.0	22.1	99.0	-120.52	985.3	-5,324.8	5,869.5	5,751.1	118.39	49.580	
5,300.0	5,181.8	5,131.3	5,131.3	22.5	100.9	-120.71	985.3	-5,324.8	5,881.6	5,760.8	120.74	48.713	
5,400.0	5,279.1	5,228.6	5,228.6	23.0	102.9	-120.90	985.3	-5,324.8	5,893.6	5,770.6	123.09	47.881	
5,500.0	5,376.3	5,325.8	5,325.8	23.5	104.8	-121.09	985.3	-5,324.8	5,905.8	5,780.4	125.44	47.081	
5,600.0	5,473.6	5,423.1	5,423.1	24.0	106.8	-121.27	985.3	-5,324.8	5,918.0	5,790.2	127.79	46.312	
5,700.0	5,570.9	5,520.4	5,520.4	24.5	108.7	-121.46	985.3	-5,324.8	5,930.3	5,800.2	130.13	45.571	
5,800.0	5,668.2	5,617.7	5,617.7	25.0	110.7	-121.65	985.3	-5,324.8	5,942.7	5,810.2	132.48	44.858	
5,900.0	5,765.5	5,715.0	5,715.0	25.5	112.6	-121.83	985.3	-5,324.8	5,955.1	5,820.3	134.82	44.170	
5,921.9	5,786.8	5,736.3	5,736.3	25.6	113.1	-121.88	985.3	-5,324.8	5,957.8	5,822.5	135.33	44.023	
6,000.0	5,863.0	5,812.5	5,812.5	25.9	114.6	-122.17	985.3	-5,324.8	5,967.0	5,829.7	137.29	43.464	
6,100.0	5,961.2	5,910.7	5,910.7	26.2	116.6	-122.49	985.3	-5,324.8	5,977.2	5,837.5	139.71	42.783	
6,200.0	6,060.0	6,009.5	6,009.5	26.5	118.6	-122.76	985.3	-5,324.8	5,985.5	5,843.4	142.09	42.126	
6,300.0	6,159.3	6,108.8	6,108.8	26.7	120.6	-122.96	985.3	-5,324.8	5,992.0	5,847.6	144.41	41.492	
6,400.0	6,259.0	6,208.5	6,208.5	26.9	122.6	-123.10	985.3	-5,324.8	5,996.6	5,849.9	146.68	40.883	
6,500.0	6,358.8	6,308.3	6,308.3	27.1	124.6	-123.19	985.3	-5,324.8	5,999.3	5,850.4	148.88	40.296	
6,591.0	6,449.8	6,399.3	6,399.3	27.2	126.4	-90.70	985.3	-5,324.8	6,000.1	5,853.2	146.84	40.861	
6,600.0	6,458.8	6,408.3	6,408.3	27.2	126.6	-90.70	985.3	-5,324.8	6,000.1	5,853.0	147.04	40.807	
6,621.0	6,479.8	6,429.3	6,429.3	27.2	127.0	-90.70	985.3	-5,324.8	6,000.1	5,852.6	147.49	40.681	
6,650.0	6,508.8	6,458.3	6,458.3	27.3	127.6	-0.70	985.3	-5,324.8	5,999.5	5,847.6	151.91	39.494	
6,700.0	6,558.7	6,508.2	6,508.2	27.3	128.6	-0.71	985.3	-5,324.8	5,995.7	5,843.6	152.10	39.421	
6,750.0	6,608.1	6,557.6	6,557.6	27.3	129.6	-0.71	985.3	-5,324.8	5,988.5	5,837.0	151.53	39.521	
6,800.0	6,657.0	6,606.5	6,606.5	27.3	130.6	-0.73	985.3	-5,324.8	5,977.8	5,827.6	150.19	39.801	
6,850.0	6,704.9	6,654.4	6,654.4	27.2	131.5	-0.74	985.3	-5,324.8	5,963.8	5,815.7	148.09	40.272	
6,900.0	6,751.8	6,701.3	6,701.3	27.2	132.5	-0.77	985.3	-5,324.8	5,946.4	5,801.2	145.21	40.950	
6,950.0	6,797.4	6,746.9	6,746.9	27.1	133.4	-0.79	985.3	-5,324.8	5,925.8	5,784.2	141.57	41.858	
7,000.0	6,841.4	6,790.9	6,790.9	27.0	134.3	-0.83	985.3	-5,324.8	5,902.1	5,764.9	137.17	43.027	
7,050.0	6,883.6	6,833.1	6,833.1	26.9	135.1	-0.87	985.3	-5,324.8	5,875.4	5,743.3	132.04	44.498	
7,100.0	6,923.9	6,873.4	6,873.4	26.8	135.9	-0.92	985.3	-5,324.8	5,845.8	5,719.6	126.19	46.325	
7,150.0	6,962.0	6,911.5	6,911.5	26.7	136.7	-0.98	985.3	-5,324.8	5,813.4	5,693.8	119.66	48.582	
7,200.0	6,997.8	6,947.3	6,947.3	26.5	137.4	-1.06	985.3	-5,324.8	5,778.5	5,666.0	112.49	51.368	
7,250.0	7,031.0	6,980.5	6,980.5	26.4	138.1	-1.15	985.3	-5,324.8	5,741.2	5,636.4	104.72	54.823	
7,300.0	7,061.6	7,011.1	7,011.1	26.3	138.7	-1.27	985.3	-5,324.8	5,701.6	5,605.2	96.41	59.139	
7,350.0	7,089.3	7,038.8	7,038.8	26.1	139.3	-1.42	985.3	-5,324.8	5,660.0	5,572.4	87.62	64.595	
7,400.0	7,114.0	7,063.5	7,063.5	26.0	139.8	-1.61	985.3	-5,324.8	5,616.6	5,538.1	78.44	71.606	
7,450.0	7,135.7	7,085.2	7,085.2	25.9	140.2	-1.88	985.3	-5,324.8	5,571.5	5,502.6	68.96	80.799	
7,500.0	7,154.2	7,103.7	7,103.7	25.7	140.6	-2.26	985.3	-5,324.8	5,525.1	5,465.8	59.31	93.155	
7,550.0	7,169.4	7,118.9	7,118.9	25.6	140.9	-2.84	985.3	-5,324.8	5,477.5	5,427.7	49.72	110.156	
7,600.0	7,181.2	7,130.7	7,130.7	25.5	141.1	-3.83	985.3	-5,324.8	5,428.9	5,388.2	40.71	133.368	
7,650.0	7,189.6	7,139.1	7,139.1	25.4	141.3	-5.84	985.3	-5,324.8	5,379.6	5,345.4	34.19	157.327	
7,700.0	7,194.5	7,144.0	7,144.0	25.3	141.4	-12.13	985.3	-5,324.8	5,329.9	5,288.7	41.15	129.517	
7,748.9	7,196.0	7,145.5	7,145.5	25.2	141.4	-106.45	985.3	-5,324.8	5,281.0	5,122.0	158.98	33.219	
7,800.0	7,195.8	7,145.3	7,145.3	25.1	141.4	-106.30	985.3	-5,324.8	5,229.9	5,070.1	159.80	32.729	
7,900.0	7,195.4	7,144.9	7,144.9	25.5	141.4	-106.01	985.3	-5,324.8	5,129.9	4,968.4	161.56	31.753	
8,000.0	7,195.0	7,144.5	7,144.5	27.5	141.4	-105.71	985.3	-5,324.8	5,029.9	4,866.4	163.50	30.764	
8,100.0	7,194.6	7,144.1	7,144.1	29.5	141.4	-105.42	985.3	-5,324.8	4,930.0	4,764.4	165.60	29.771	
8,200.0	7,194.1	7,143.6	7,143.6	31.7	141.4	-105.12	985.3	-5,324.8	4,830.0	4,662.2	167.81	28.782	
8,300.0	7,193.7	7,143.2	7,143.2	33.9	141.4	-104.82	985.3	-5,324.8	4,730.0	4,559.8	170.13	27.802	
8,400.0	7,193.3	7,142.8	7,142.8	36.3	141.4	-104.52	985.3	-5,324.8	4,630.0	4,457.5	172.53	26.835	
8,500.0	7,192.9	7,142.4	7,142.4	38.6	141.4	-104.22	985.3	-5,324.8	4,530.0	4,355.0	175.01	25.885	
8,600.0	7,192.5	7,142.0	7,142.0	41.1	141.3	-103.92	985.3	-5,324.8	4,430.0	4,252.5	177.54	24.952	
8,700.0	7,192.1	7,141.6	7,141.6	43.5	141.3	-103.62	985.3	-5,324.8	4,330.0	4,149.9	180.12	24.040	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST VERT BROWN 22-20 - 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	
8,800.0	7,191.7	7,141.2	7,141.2	46.0	141.3	-103.32	985.3	-5,324.8	4,230.0	4,047.3	182.74	23.147	
8,900.0	7,191.3	7,140.8	7,140.8	48.6	141.3	-103.02	985.3	-5,324.8	4,130.1	3,944.7	185.40	22.276	
9,000.0	7,190.9	7,140.4	7,140.4	51.1	141.3	-102.71	985.3	-5,324.8	4,030.1	3,842.0	188.09	21.426	
9,100.0	7,190.4	7,139.9	7,139.9	53.7	141.3	-102.41	985.3	-5,324.8	3,930.1	3,739.3	190.81	20.597	
9,200.0	7,190.0	7,139.5	7,139.5	56.3	141.3	-102.10	985.3	-5,324.8	3,830.1	3,636.6	193.54	19.789	
9,300.0	7,189.6	7,139.1	7,139.1	58.9	141.3	-101.80	985.3	-5,324.8	3,730.1	3,533.8	196.30	19.002	
9,400.0	7,189.2	7,138.7	7,138.7	61.6	141.3	-101.49	985.3	-5,324.8	3,630.2	3,431.1	199.07	18.235	
9,500.0	7,188.8	7,138.3	7,138.3	64.2	141.3	-101.18	985.3	-5,324.8	3,530.2	3,328.3	201.86	17.488	
9,600.0	7,188.4	7,137.9	7,137.9	66.9	141.3	-100.88	985.3	-5,324.8	3,430.2	3,225.5	204.66	16.760	
9,700.0	7,188.0	7,137.5	7,137.5	69.6	141.3	-100.57	985.3	-5,324.8	3,330.2	3,122.8	207.48	16.051	
9,800.0	7,187.6	7,137.1	7,137.1	72.3	141.2	-100.26	985.3	-5,324.8	3,230.3	3,020.0	210.30	15.360	
9,900.0	7,187.1	7,136.6	7,136.6	74.9	141.2	-99.95	985.3	-5,324.8	3,130.3	2,917.2	213.13	14.687	
10,000.0	7,186.7	7,136.2	7,136.2	77.6	141.2	-99.64	985.3	-5,324.8	3,030.3	2,814.3	215.97	14.031	
10,100.0	7,186.3	7,135.8	7,135.8	80.4	141.2	-99.32	985.3	-5,324.8	2,930.3	2,711.5	218.81	13.392	
10,200.0	7,185.9	7,135.4	7,135.4	83.1	141.2	-99.01	985.3	-5,324.8	2,830.4	2,608.7	221.66	12.769	
10,300.0	7,185.5	7,135.0	7,135.0	85.8	141.2	-98.70	985.3	-5,324.8	2,730.4	2,505.9	224.51	12.162	
10,400.0	7,185.1	7,134.6	7,134.6	88.5	141.2	-98.39	985.3	-5,324.8	2,630.5	2,403.1	227.37	11.569	
10,500.0	7,184.7	7,134.2	7,134.2	91.2	141.2	-98.07	985.3	-5,324.8	2,530.5	2,300.3	230.23	10.991	
10,600.0	7,184.3	7,133.8	7,133.8	94.0	141.2	-97.76	985.3	-5,324.8	2,430.5	2,197.4	233.09	10.428	
10,700.0	7,183.9	7,133.4	7,133.4	96.7	141.2	-97.44	985.3	-5,324.8	2,330.6	2,094.6	235.95	9.877	
10,800.0	7,183.4	7,132.9	7,132.9	99.4	141.2	-97.13	985.3	-5,324.8	2,230.6	1,991.8	238.81	9.341	
10,900.0	7,183.0	7,132.5	7,132.5	102.2	141.2	-96.81	985.3	-5,324.8	2,130.7	1,889.0	241.68	8.816	
11,000.0	7,182.6	7,132.1	7,132.1	104.9	141.1	-96.49	985.3	-5,324.8	2,030.8	1,786.2	244.54	8.304	
11,100.0	7,182.2	7,131.7	7,131.7	107.7	141.1	-96.18	985.3	-5,324.8	1,930.8	1,683.4	247.40	7.804	
11,200.0	7,181.8	7,131.3	7,131.3	110.4	141.1	-95.86	985.3	-5,324.8	1,830.9	1,580.6	250.26	7.316	
11,300.0	7,181.4	7,130.9	7,130.9	113.2	141.1	-95.54	985.3	-5,324.8	1,731.0	1,477.9	253.12	6.839	
11,400.0	7,181.0	7,130.5	7,130.5	116.0	141.1	-95.22	985.3	-5,324.8	1,631.1	1,375.1	255.98	6.372	
11,500.0	7,180.6	7,130.1	7,130.1	118.7	141.1	-94.91	985.3	-5,324.8	1,531.2	1,272.4	258.83	5.916	
11,600.0	7,180.1	7,129.6	7,129.6	121.5	141.1	-94.59	985.3	-5,324.8	1,431.3	1,169.6	261.68	5.470	
11,700.0	7,179.7	7,129.2	7,129.2	124.3	141.1	-94.27	985.3	-5,324.8	1,331.5	1,066.9	264.53	5.033	
11,800.0	7,179.3	7,128.8	7,128.8	127.0	141.1	-93.95	985.3	-5,324.8	1,231.6	964.3	267.38	4.606	
11,900.0	7,178.9	7,128.4	7,128.4	129.8	141.1	-93.63	985.3	-5,324.8	1,131.8	861.6	270.22	4.189	
12,000.0	7,178.5	7,128.0	7,128.0	132.6	141.1	-93.31	985.3	-5,324.8	1,032.1	759.0	273.05	3.780	
12,100.0	7,178.1	7,127.6	7,127.6	135.3	141.1	-92.99	985.3	-5,324.8	932.3	656.5	275.88	3.380	
12,200.0	7,177.7	7,127.2	7,127.2	138.1	141.0	-92.67	985.3	-5,324.8	832.7	554.0	278.70	2.988	
12,300.0	7,177.2	7,126.7	7,126.7	140.9	141.0	-92.35	985.3	-5,324.8	733.1	451.6	281.52	2.604	
12,400.0	7,176.8	7,126.3	7,126.3	143.7	141.0	-92.03	985.3	-5,324.8	633.7	349.4	284.34	2.229	
12,500.0	7,176.4	7,125.9	7,125.9	146.4	141.0	-91.70	985.3	-5,324.8	534.5	247.4	287.14	1.862	
12,600.0	7,176.0	7,125.5	7,125.5	149.2	141.0	-91.38	985.3	-5,324.8	435.7	145.7	289.94	1.503	
12,700.0	7,175.6	7,125.1	7,125.1	152.0	141.0	-91.06	985.3	-5,324.8	337.5	44.8	292.73	1.153 Level 2	
12,800.0	7,175.2	7,124.7	7,124.7	154.8	141.0	-90.74	985.3	-5,324.8	240.9	-54.6	295.52	0.815 Level 1	
12,900.0	7,174.8	7,124.3	7,124.3	157.5	141.0	-90.42	985.3	-5,324.8	148.9	-149.4	298.30	0.499 Level 1	
13,000.0	7,174.4	7,123.9	7,123.9	160.3	141.0	-90.09	985.3	-5,324.8	79.2	-221.9	301.07	0.263 Level 1	
13,029.4	7,174.2	7,123.7	7,123.7	161.1	141.0	-90.00	985.3	-5,324.8	73.5	-228.4	301.88	0.244 Level 1, CC, ES, SF	
13,100.0	7,173.9	7,123.4	7,123.4	163.1	141.0	-89.77	985.3	-5,324.8	101.9	-201.9	303.83	0.335 Level 1	
13,200.0	7,173.5	7,123.0	7,123.0	165.9	141.0	-89.45	985.3	-5,324.8	185.7	-120.9	306.58	0.606 Level 1	
13,300.0	7,173.1	7,122.6	7,122.6	168.7	141.0	-89.13	985.3	-5,324.8	280.4	-29.0	309.32	0.906 Level 1	
13,400.0	7,172.7	7,122.2	7,122.2	171.5	140.9	-88.81	985.3	-5,324.8	377.8	65.7	312.06	1.211 Level 2	
13,500.0	7,172.3	7,121.8	7,121.8	174.3	140.9	-88.48	985.3	-5,324.8	476.3	161.5	314.78	1.513	
13,600.0	7,171.9	7,121.4	7,121.4	177.0	140.9	-88.16	985.3	-5,324.8	575.3	257.8	317.50	1.812	
13,700.0	7,171.5	7,121.0	7,121.0	179.8	140.9	-87.84	985.3	-5,324.8	674.6	354.4	320.21	2.107	
13,800.0	7,171.0	7,120.5	7,120.5	182.6	140.9	-87.52	985.3	-5,324.8	774.0	451.1	322.90	2.397	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST VERT BROWN 22-20 - 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
13,900.0	7,170.6	7,120.1	7,120.1	185.4	140.9	-87.20	985.3	-5,324.8	873.6	548.1	325.59	2.683	
14,000.0	7,170.2	7,119.7	7,119.7	188.2	140.9	-86.87	985.3	-5,324.8	973.3	645.1	328.26	2.965	
14,100.0	7,169.8	7,119.3	7,119.3	191.0	140.9	-86.55	985.3	-5,324.8	1,073.1	742.1	330.92	3.243	
14,200.0	7,169.4	7,118.9	7,118.9	193.8	140.9	-86.23	985.3	-5,324.8	1,172.9	839.3	333.58	3.516	
14,295.0	7,169.0	7,118.5	7,118.5	196.4	140.9	-85.93	985.3	-5,324.8	1,267.6	931.5	336.08	3.772	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST VERT CYPRUS 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	-65.51	2,357.6	-5,176.7	5,688.4				
100.0	100.0	56.5	56.5	0.1	0.0	-65.51	2,357.6	-5,176.7	5,688.3	5,688.2	0.10	N/A	
200.0	200.0	156.5	156.5	0.3	0.7	-65.51	2,357.6	-5,176.7	5,688.3	5,687.3	1.01	5,609.640	
300.0	300.0	256.5	256.5	0.5	2.5	-65.51	2,357.6	-5,176.7	5,688.3	5,685.2	3.06	1,857.733	
400.0	400.0	356.5	356.5	0.8	4.7	-65.51	2,357.6	-5,176.7	5,688.3	5,682.8	5.45	1,042.928	
500.0	500.0	456.5	456.5	1.0	6.7	-65.51	2,357.6	-5,176.7	5,688.3	5,680.5	7.74	735.249	
600.0	600.0	556.5	556.5	1.2	8.8	-98.04	2,357.6	-5,176.7	5,688.5	5,678.5	9.99	569.255	
700.0	699.8	656.3	656.3	1.4	10.8	-98.07	2,357.6	-5,176.7	5,689.3	5,677.0	12.24	464.838	
800.0	799.5	756.0	756.0	1.7	12.8	-98.14	2,357.6	-5,176.7	5,690.5	5,676.0	14.49	392.763	
900.0	898.7	855.2	855.2	1.9	14.8	-98.22	2,357.6	-5,176.7	5,692.2	5,675.5	16.75	339.827	
1,000.0	997.5	954.0	954.0	2.2	16.8	-98.33	2,357.6	-5,176.7	5,694.5	5,675.5	19.03	299.170	
1,100.0	1,095.6	1,052.1	1,052.1	2.6	18.8	-98.46	2,357.6	-5,176.7	5,697.3	5,676.0	21.35	266.884	
1,169.1	1,163.0	1,119.5	1,119.5	2.8	20.1	-98.56	2,357.6	-5,176.7	5,699.7	5,676.7	22.97	248.178	
1,200.0	1,193.1	1,149.6	1,149.6	3.0	20.7	-98.63	2,357.6	-5,176.7	5,700.7	5,677.1	23.70	240.581	
1,300.0	1,290.4	1,246.9	1,246.9	3.4	22.7	-98.86	2,357.6	-5,176.7	5,704.4	5,678.3	26.07	218.808	
1,400.0	1,387.7	1,344.2	1,344.2	3.8	24.7	-99.08	2,357.6	-5,176.7	5,708.1	5,679.6	28.46	200.572	
1,500.0	1,484.9	1,441.4	1,441.4	4.3	26.6	-99.30	2,357.6	-5,176.7	5,711.9	5,681.0	30.86	185.105	
1,600.0	1,582.2	1,538.7	1,538.7	4.7	28.6	-99.53	2,357.6	-5,176.7	5,715.8	5,682.5	33.26	171.837	
1,700.0	1,679.5	1,636.0	1,636.0	5.2	30.5	-99.75	2,357.6	-5,176.7	5,719.7	5,684.1	35.67	160.339	
1,800.0	1,776.8	1,733.3	1,733.3	5.7	32.5	-99.97	2,357.6	-5,176.7	5,723.8	5,685.7	38.09	150.286	
1,900.0	1,874.1	1,830.6	1,830.6	6.1	34.5	-100.19	2,357.6	-5,176.7	5,728.0	5,687.5	40.50	141.424	
2,000.0	1,971.4	1,927.9	1,927.9	6.6	36.4	-100.41	2,357.6	-5,176.7	5,732.2	5,689.3	42.92	133.557	
2,100.0	2,068.7	2,025.2	2,025.2	7.1	38.4	-100.64	2,357.6	-5,176.7	5,736.6	5,691.2	45.34	126.527	
2,200.0	2,165.9	2,122.4	2,122.4	7.6	40.3	-100.86	2,357.6	-5,176.7	5,741.0	5,693.2	47.76	120.208	
2,300.0	2,263.2	2,219.7	2,219.7	8.0	42.3	-101.08	2,357.6	-5,176.7	5,745.5	5,695.3	50.18	114.500	
2,400.0	2,360.5	2,317.0	2,317.0	8.5	44.2	-101.30	2,357.6	-5,176.7	5,750.1	5,697.5	52.60	109.318	
2,500.0	2,457.8	2,414.3	2,414.3	9.0	46.2	-101.52	2,357.6	-5,176.7	5,754.8	5,699.8	55.02	104.594	
2,600.0	2,555.1	2,511.6	2,511.6	9.5	48.2	-101.74	2,357.6	-5,176.7	5,759.6	5,702.2	57.44	100.269	
2,700.0	2,652.4	2,608.9	2,608.9	10.0	50.1	-101.96	2,357.6	-5,176.7	5,764.5	5,704.6	59.86	96.295	
2,800.0	2,749.7	2,706.2	2,706.2	10.4	52.1	-102.18	2,357.6	-5,176.7	5,769.5	5,707.2	62.28	92.633	
2,900.0	2,846.9	2,803.4	2,803.4	10.9	54.0	-102.40	2,357.6	-5,176.7	5,774.5	5,709.8	64.70	89.246	
3,000.0	2,944.2	2,900.7	2,900.7	11.4	56.0	-102.61	2,357.6	-5,176.7	5,779.7	5,712.5	67.12	86.105	
3,100.0	3,041.5	2,998.0	2,998.0	11.9	57.9	-102.83	2,357.6	-5,176.7	5,784.9	5,715.4	69.54	83.185	
3,200.0	3,138.8	3,095.3	3,095.3	12.4	59.9	-103.05	2,357.6	-5,176.7	5,790.2	5,718.3	71.96	80.463	
3,300.0	3,236.1	3,192.6	3,192.6	12.8	61.9	-103.27	2,357.6	-5,176.7	5,795.6	5,721.2	74.38	77.919	
3,400.0	3,333.4	3,289.9	3,289.9	13.3	63.8	-103.48	2,357.6	-5,176.7	5,801.1	5,724.3	76.80	75.538	
3,500.0	3,430.6	3,387.1	3,387.1	13.8	65.8	-103.70	2,357.6	-5,176.7	5,806.7	5,727.5	79.21	73.304	
3,600.0	3,527.9	3,484.4	3,484.4	14.3	67.7	-103.92	2,357.6	-5,176.7	5,812.4	5,730.7	81.63	71.203	
3,700.0	3,625.2	3,581.7	3,581.7	14.8	69.7	-104.13	2,357.6	-5,176.7	5,818.1	5,734.1	84.05	69.225	
3,800.0	3,722.5	3,679.0	3,679.0	15.3	71.6	-104.35	2,357.6	-5,176.7	5,824.0	5,737.5	86.46	67.360	
3,900.0	3,819.8	3,776.3	3,776.3	15.7	73.6	-104.56	2,357.6	-5,176.7	5,829.9	5,741.0	88.87	65.597	
4,000.0	3,917.1	3,873.6	3,873.6	16.2	75.5	-104.78	2,357.6	-5,176.7	5,835.9	5,744.6	91.29	63.929	
4,100.0	4,014.4	3,970.9	3,970.9	16.7	77.5	-104.99	2,357.6	-5,176.7	5,842.0	5,748.3	93.70	62.348	
4,200.0	4,111.6	4,068.1	4,068.1	17.2	79.5	-105.20	2,357.6	-5,176.7	5,848.2	5,752.1	96.11	60.848	
4,300.0	4,208.9	4,165.4	4,165.4	17.7	81.4	-105.42	2,357.6	-5,176.7	5,854.5	5,755.9	98.52	59.423	
4,400.0	4,306.2	4,262.7	4,262.7	18.2	83.4	-105.63	2,357.6	-5,176.7	5,860.8	5,759.9	100.93	58.067	
4,500.0	4,403.5	4,360.0	4,360.0	18.7	85.3	-105.84	2,357.6	-5,176.7	5,867.2	5,763.9	103.34	56.776	
4,600.0	4,500.8	4,457.3	4,457.3	19.1	87.3	-106.05	2,357.6	-5,176.7	5,873.8	5,768.0	105.75	55.545	
4,700.0	4,598.1	4,554.6	4,554.6	19.6	89.2	-106.26	2,357.6	-5,176.7	5,880.4	5,772.2	108.15	54.370	
4,800.0	4,695.4	4,651.9	4,651.9	20.1	91.2	-106.47	2,357.6	-5,176.7	5,887.1	5,776.5	110.56	53.248	
4,900.0	4,792.6	4,749.1	4,749.1	20.6	93.2	-106.68	2,357.6	-5,176.7	5,893.8	5,780.9	112.96	52.174	
5,000.0	4,889.9	4,846.4	4,846.4	21.1	95.1	-106.89	2,357.6	-5,176.7	5,900.7	5,785.3	115.37	51.147	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST VERT CYPRUS 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	
5,100.0	4,987.2	4,943.7	4,943.7	21.6	97.1	-107.10	2,357.6	-5,176.7	5,907.6	5,789.9	117.77	50.162	
5,200.0	5,084.5	5,041.0	5,041.0	22.1	99.0	-107.31	2,357.6	-5,176.7	5,914.7	5,794.5	120.17	49.218	
5,300.0	5,181.8	5,138.3	5,138.3	22.5	101.0	-107.52	2,357.6	-5,176.7	5,921.8	5,799.2	122.57	48.312	
5,400.0	5,279.1	5,235.6	5,235.6	23.0	102.9	-107.73	2,357.6	-5,176.7	5,928.9	5,804.0	124.97	47.442	
5,500.0	5,376.3	5,332.8	5,332.8	23.5	104.9	-107.94	2,357.6	-5,176.7	5,936.2	5,808.8	127.37	46.606	
5,600.0	5,473.6	5,430.1	5,430.1	24.0	106.9	-108.14	2,357.6	-5,176.7	5,943.6	5,813.8	129.77	45.801	
5,700.0	5,570.9	5,527.4	5,527.4	24.5	108.8	-108.35	2,357.6	-5,176.7	5,951.0	5,818.8	132.16	45.027	
5,800.0	5,668.2	5,624.7	5,624.7	25.0	110.8	-108.56	2,357.6	-5,176.7	5,958.5	5,823.9	134.56	44.282	
5,900.0	5,765.5	5,722.0	5,722.0	25.5	112.7	-108.76	2,357.6	-5,176.7	5,966.1	5,829.1	136.95	43.563	
5,921.9	5,786.8	5,743.3	5,743.3	25.6	113.1	-108.81	2,357.6	-5,176.7	5,967.8	5,830.3	137.48	43.409	
6,000.0	5,863.0	5,819.5	5,819.5	25.9	114.7	-109.07	2,357.6	-5,176.7	5,973.4	5,834.0	139.36	42.864	
6,100.0	5,961.2	5,917.7	5,917.7	26.2	116.7	-109.35	2,357.6	-5,176.7	5,979.7	5,838.0	141.70	42.201	
6,200.0	6,060.0	6,016.5	6,016.5	26.5	118.6	-109.59	2,357.6	-5,176.7	5,984.8	5,840.8	144.00	41.561	
6,300.0	6,159.3	6,115.8	6,115.8	26.7	120.6	-109.77	2,357.6	-5,176.7	5,988.9	5,842.6	146.27	40.945	
6,400.0	6,259.0	6,215.5	6,215.5	26.9	122.6	-109.90	2,357.6	-5,176.7	5,991.7	5,843.2	148.49	40.351	
6,500.0	6,358.8	6,315.3	6,315.3	27.1	124.7	-109.97	2,357.6	-5,176.7	5,993.4	5,842.7	150.67	39.779	
6,591.0	6,449.8	6,406.3	6,406.3	27.2	126.5	-77.49	2,357.6	-5,176.7	5,993.9	5,849.2	144.67	41.433	
6,600.0	6,458.8	6,415.3	6,415.3	27.2	126.7	-77.49	2,357.6	-5,176.7	5,993.9	5,849.0	144.86	41.377	
6,621.0	6,479.8	6,436.3	6,436.3	27.2	127.1	-77.49	2,357.6	-5,176.7	5,993.9	5,848.6	145.32	41.247	
6,650.0	6,508.8	6,465.3	6,465.3	27.3	127.7	12.53	2,357.6	-5,176.7	5,993.3	5,839.6	153.72	38.990	
6,700.0	6,558.7	6,515.2	6,515.2	27.3	128.7	12.60	2,357.6	-5,176.7	5,989.7	5,835.7	153.97	38.902	
6,750.0	6,608.1	6,564.6	6,564.6	27.3	129.7	12.74	2,357.6	-5,176.7	5,982.6	5,829.1	153.50	38.974	
6,800.0	6,657.0	6,613.5	6,613.5	27.3	130.6	12.95	2,357.6	-5,176.7	5,972.2	5,819.9	152.31	39.210	
6,850.0	6,704.9	6,661.4	6,661.4	27.2	131.6	13.24	2,357.6	-5,176.7	5,958.5	5,808.1	150.40	39.616	
6,900.0	6,751.8	6,708.3	6,708.3	27.2	132.6	13.61	2,357.6	-5,176.7	5,941.5	5,793.7	147.80	40.201	
6,950.0	6,797.4	6,753.9	6,753.9	27.1	133.5	14.08	2,357.6	-5,176.7	5,921.4	5,776.9	144.51	40.975	
7,000.0	6,841.4	6,797.9	6,797.9	27.0	134.4	14.66	2,357.6	-5,176.7	5,898.3	5,757.7	140.60	41.952	
7,050.0	6,883.6	6,840.1	6,840.1	26.9	135.2	15.36	2,357.6	-5,176.7	5,872.2	5,736.1	136.11	43.144	
7,100.0	6,923.9	6,880.4	6,880.4	26.8	136.0	16.20	2,357.6	-5,176.7	5,843.4	5,712.2	131.14	44.558	
7,150.0	6,962.0	6,918.5	6,918.5	26.7	136.8	17.23	2,357.6	-5,176.7	5,811.8	5,686.0	125.82	46.192	
7,200.0	6,997.8	6,954.3	6,954.3	26.5	137.5	18.47	2,357.6	-5,176.7	5,777.8	5,657.5	120.33	48.018	
7,250.0	7,031.0	6,987.5	6,987.5	26.4	138.2	19.99	2,357.6	-5,176.7	5,741.4	5,626.5	114.92	49.959	
7,300.0	7,061.6	7,018.1	7,018.1	26.3	138.8	21.85	2,357.6	-5,176.7	5,702.9	5,592.9	109.99	51.851	
7,350.0	7,089.3	7,045.8	7,045.8	26.1	139.3	24.17	2,357.6	-5,176.7	5,662.4	5,556.3	106.06	53.391	
7,400.0	7,114.0	7,070.5	7,070.5	26.0	139.8	27.08	2,357.6	-5,176.7	5,620.1	5,516.2	103.88	54.104	
7,450.0	7,135.7	7,092.2	7,092.2	25.9	140.3	30.81	2,357.6	-5,176.7	5,576.3	5,471.9	104.39	53.420	
7,500.0	7,154.2	7,110.7	7,110.7	25.7	140.6	35.65	2,357.6	-5,176.7	5,531.1	5,422.5	108.61	50.927	
7,550.0	7,169.4	7,125.9	7,125.9	25.6	141.0	42.05	2,357.6	-5,176.7	5,484.8	5,367.5	117.34	46.744	
7,600.0	7,181.2	7,137.7	7,137.7	25.5	141.2	50.55	2,357.6	-5,176.7	5,437.7	5,307.1	130.54	41.656	
7,650.0	7,189.6	7,146.1	7,146.1	25.4	141.4	61.71	2,357.6	-5,176.7	5,389.8	5,243.5	146.33	36.832	
7,700.0	7,194.5	7,151.0	7,151.0	25.3	141.5	75.64	2,357.6	-5,176.7	5,341.6	5,181.7	159.87	33.413	
7,748.9	7,196.0	7,152.5	7,152.5	25.2	141.5	90.93	2,357.6	-5,176.7	5,294.1	5,129.6	164.58	32.168	
7,800.0	7,195.8	7,152.3	7,152.3	25.1	141.5	90.92	2,357.6	-5,176.7	5,244.6	5,079.3	165.30	31.727	
7,900.0	7,195.4	7,151.9	7,151.9	25.5	141.5	90.90	2,357.6	-5,176.7	5,147.8	4,980.9	166.91	30.842	
8,000.0	7,195.0	7,151.5	7,151.5	27.5	141.5	90.89	2,357.6	-5,176.7	5,051.1	4,882.4	168.71	29.940	
8,100.0	7,194.6	7,151.1	7,151.1	29.5	141.5	90.87	2,357.6	-5,176.7	4,954.5	4,783.9	170.66	29.031	
8,200.0	7,194.1	7,150.6	7,150.6	31.7	141.5	90.85	2,357.6	-5,176.7	4,858.1	4,685.4	172.75	28.123	
8,300.0	7,193.7	7,150.2	7,150.2	33.9	141.4	90.83	2,357.6	-5,176.7	4,761.8	4,586.9	174.94	27.220	
8,400.0	7,193.3	7,149.8	7,149.8	36.3	141.4	90.81	2,357.6	-5,176.7	4,665.7	4,488.5	177.21	26.328	
8,500.0	7,192.9	7,149.4	7,149.4	38.6	141.4	90.80	2,357.6	-5,176.7	4,569.7	4,390.2	179.56	25.450	
8,600.0	7,192.5	7,149.0	7,149.0	41.1	141.4	90.78	2,357.6	-5,176.7	4,474.0	4,292.0	181.97	24.587	
8,700.0	7,192.1	7,148.6	7,148.6	43.5	141.4	90.76	2,357.6	-5,176.7	4,378.4	4,193.9	184.42	23.742	

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 SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST VERT CYPRUS 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	
8,800.0	7,191.7	7,148.2	7,148.2	46.0	141.4	90.74	2,357.6	-5,176.7	4,283.0	4,096.1	186.91	22.914	
8,900.0	7,191.3	7,147.8	7,147.8	48.6	141.4	90.72	2,357.6	-5,176.7	4,187.8	3,998.3	189.44	22.106	
9,000.0	7,190.9	7,147.4	7,147.4	51.1	141.4	90.70	2,357.6	-5,176.7	4,092.8	3,900.8	191.99	21.318	
9,100.0	7,190.4	7,146.9	7,146.9	53.7	141.4	90.69	2,357.6	-5,176.7	3,998.1	3,803.6	194.57	20.548	
9,200.0	7,190.0	7,146.5	7,146.5	56.3	141.4	90.67	2,357.6	-5,176.7	3,903.7	3,706.5	197.18	19.798	
9,300.0	7,189.6	7,146.1	7,146.1	58.9	141.4	90.65	2,357.6	-5,176.7	3,809.5	3,609.7	199.80	19.067	
9,400.0	7,189.2	7,145.7	7,145.7	61.6	141.4	90.63	2,357.6	-5,176.7	3,715.7	3,513.2	202.43	18.355	
9,500.0	7,188.8	7,145.3	7,145.3	64.2	141.3	90.61	2,357.6	-5,176.7	3,622.2	3,417.1	205.08	17.662	
9,600.0	7,188.4	7,144.9	7,144.9	66.9	141.3	90.60	2,357.6	-5,176.7	3,529.0	3,321.2	207.75	16.987	
9,700.0	7,188.0	7,144.5	7,144.5	69.6	141.3	90.58	2,357.6	-5,176.7	3,436.2	3,225.8	210.42	16.330	
9,800.0	7,187.6	7,144.1	7,144.1	72.3	141.3	90.56	2,357.6	-5,176.7	3,343.8	3,130.7	213.11	15.691	
9,900.0	7,187.1	7,143.6	7,143.6	74.9	141.3	90.54	2,357.6	-5,176.7	3,251.9	3,036.1	215.80	15.069	
10,000.0	7,186.7	7,143.2	7,143.2	77.6	141.3	90.52	2,357.6	-5,176.7	3,160.5	2,942.0	218.50	14.465	
10,100.0	7,186.3	7,142.8	7,142.8	80.4	141.3	90.51	2,357.6	-5,176.7	3,069.6	2,848.4	221.21	13.877	
10,200.0	7,185.9	7,142.4	7,142.4	83.1	141.3	90.49	2,357.6	-5,176.7	2,979.3	2,755.4	223.92	13.305	
10,300.0	7,185.5	7,142.0	7,142.0	85.8	141.3	90.47	2,357.6	-5,176.7	2,889.6	2,663.0	226.64	12.750	
10,400.0	7,185.1	7,141.6	7,141.6	88.5	141.3	90.45	2,357.6	-5,176.7	2,800.7	2,571.3	229.36	12.211	
10,500.0	7,184.7	7,141.2	7,141.2	91.2	141.3	90.43	2,357.6	-5,176.7	2,712.5	2,480.4	232.09	11.687	
10,600.0	7,184.3	7,140.8	7,140.8	94.0	141.3	90.41	2,357.6	-5,176.7	2,625.1	2,390.3	234.83	11.179	
10,700.0	7,183.9	7,140.4	7,140.4	96.7	141.2	90.40	2,357.6	-5,176.7	2,538.7	2,301.1	237.56	10.686	
10,800.0	7,183.4	7,139.9	7,139.9	99.4	141.2	90.38	2,357.6	-5,176.7	2,453.3	2,213.0	240.30	10.209	
10,900.0	7,183.0	7,139.5	7,139.5	102.2	141.2	90.36	2,357.6	-5,176.7	2,369.1	2,126.0	243.05	9.747	
11,000.0	7,182.6	7,139.1	7,139.1	104.9	141.2	90.34	2,357.6	-5,176.7	2,286.1	2,040.3	245.80	9.301	
11,100.0	7,182.2	7,138.7	7,138.7	107.7	141.2	90.32	2,357.6	-5,176.7	2,204.5	1,956.0	248.55	8.870	
11,200.0	7,181.8	7,138.3	7,138.3	110.4	141.2	90.31	2,357.6	-5,176.7	2,124.5	1,873.2	251.30	8.454	
11,300.0	7,181.4	7,137.9	7,137.9	113.2	141.2	90.29	2,357.6	-5,176.7	2,046.3	1,792.3	254.05	8.055	
11,400.0	7,181.0	7,137.5	7,137.5	116.0	141.2	90.27	2,357.6	-5,176.7	1,970.1	1,713.2	256.81	7.671	
11,500.0	7,180.6	7,137.1	7,137.1	118.7	141.2	90.25	2,357.6	-5,176.7	1,896.0	1,636.4	259.57	7.304	
11,600.0	7,180.1	7,136.6	7,136.6	121.5	141.2	90.23	2,357.6	-5,176.7	1,824.4	1,562.1	262.33	6.955	
11,700.0	7,179.7	7,136.2	7,136.2	124.3	141.2	90.22	2,357.6	-5,176.7	1,755.7	1,490.6	265.09	6.623	
11,800.0	7,179.3	7,135.8	7,135.8	127.0	141.2	90.20	2,357.6	-5,176.7	1,690.0	1,422.1	267.86	6.309	
11,900.0	7,178.9	7,135.4	7,135.4	129.8	141.1	90.18	2,357.6	-5,176.7	1,627.8	1,357.2	270.63	6.015	
12,000.0	7,178.5	7,135.0	7,135.0	132.6	141.1	90.16	2,357.6	-5,176.7	1,569.6	1,296.2	273.39	5.741	
12,100.0	7,178.1	7,134.6	7,134.6	135.3	141.1	90.14	2,357.6	-5,176.7	1,515.7	1,239.5	276.16	5.488	
12,200.0	7,177.7	7,134.2	7,134.2	138.1	141.1	90.12	2,357.6	-5,176.7	1,466.6	1,187.7	278.93	5.258	
12,300.0	7,177.2	7,133.7	7,133.7	140.9	141.1	90.11	2,357.6	-5,176.7	1,422.9	1,141.2	281.70	5.051	
12,400.0	7,176.8	7,133.3	7,133.3	143.7	141.1	90.09	2,357.6	-5,176.7	1,385.1	1,100.6	284.48	4.869	
12,500.0	7,176.4	7,132.9	7,132.9	146.4	141.1	90.07	2,357.6	-5,176.7	1,353.6	1,066.4	287.25	4.712	
12,600.0	7,176.0	7,132.5	7,132.5	149.2	141.1	90.05	2,357.6	-5,176.7	1,328.9	1,038.9	290.03	4.582	
12,700.0	7,175.6	7,132.1	7,132.1	152.0	141.1	90.03	2,357.6	-5,176.7	1,311.4	1,018.6	292.80	4.479	
12,800.0	7,175.2	7,131.7	7,131.7	154.8	141.1	90.01	2,357.6	-5,176.7	1,301.3	1,005.7	295.58	4.403	
12,881.3	7,174.8	7,131.3	7,131.3	157.0	141.1	90.00	2,357.6	-5,176.7	1,298.8	1,000.9	297.84	4.361 CC	
12,900.0	7,174.8	7,131.3	7,131.3	157.5	141.1	90.00	2,357.6	-5,176.7	1,298.9	1,000.6	298.36	4.354 ES	
13,000.0	7,174.4	7,130.9	7,130.9	160.3	141.1	89.98	2,357.6	-5,176.7	1,304.2	1,003.1	301.13	4.331 SF	
13,100.0	7,173.9	7,130.4	7,130.4	163.1	141.0	89.96	2,357.6	-5,176.7	1,317.1	1,013.1	303.91	4.334	
13,200.0	7,173.5	7,130.0	7,130.0	165.9	141.0	89.94	2,357.6	-5,176.7	1,337.3	1,030.6	306.69	4.360	
13,300.0	7,173.1	7,129.6	7,129.6	168.7	141.0	89.92	2,357.6	-5,176.7	1,364.6	1,055.1	309.47	4.409	
13,400.0	7,172.7	7,129.2	7,129.2	171.5	141.0	89.91	2,357.6	-5,176.7	1,398.5	1,086.3	312.25	4.479	
13,500.0	7,172.3	7,128.8	7,128.8	174.3	141.0	89.89	2,357.6	-5,176.7	1,438.6	1,123.6	315.04	4.566	
13,600.0	7,171.9	7,128.4	7,128.4	177.0	141.0	89.87	2,357.6	-5,176.7	1,484.4	1,166.5	317.82	4.670	
13,700.0	7,171.5	7,128.0	7,128.0	179.8	141.0	89.85	2,357.6	-5,176.7	1,535.3	1,214.7	320.60	4.789	
13,800.0	7,171.0	7,127.5	7,127.5	182.6	141.0	89.83	2,357.6	-5,176.7	1,590.8	1,267.5	323.38	4.919	

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 SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - EXIST VERT CYPRUS 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
13,900.0	7,170.6	7,127.1	7,127.1	185.4	141.0	89.81	2,357.6	-5,176.7	1,650.6	1,324.4	326.17	5.061	
14,000.0	7,170.2	7,126.7	7,126.7	188.2	141.0	89.80	2,357.6	-5,176.7	1,714.1	1,385.2	328.95	5.211	
14,100.0	7,169.8	7,126.3	7,126.3	191.0	141.0	89.78	2,357.6	-5,176.7	1,781.0	1,449.3	331.74	5.369	
14,200.0	7,169.4	7,125.9	7,125.9	193.8	141.0	89.76	2,357.6	-5,176.7	1,850.9	1,516.3	334.52	5.533	
14,295.0	7,169.0	7,125.5	7,125.5	196.4	140.9	89.74	2,357.6	-5,176.7	1,919.7	1,582.5	337.17	5.694	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	0.00	14.9	0.0	14.9				
100.0	100.0	100.0	100.0	0.1	0.1	0.00	14.9	0.0	14.9	14.7	0.19	76.825	
200.0	200.0	200.0	200.0	0.3	0.3	0.00	14.9	0.0	14.9	14.3	0.64	23.195	
300.0	300.0	300.0	300.0	0.5	0.5	0.00	14.9	0.0	14.9	13.8	1.09	13.660	
400.0	400.0	400.0	400.0	0.8	0.8	0.00	14.9	0.0	14.9	13.4	1.54	9.680 CC	
500.0	500.0	499.5	499.5	1.0	1.0	2.85	16.5	0.8	16.5	14.5	1.99	8.283	
600.0	600.0	598.9	598.7	1.2	1.2	-25.64	21.0	3.3	19.7	17.3	2.44	8.083	
700.0	699.8	698.1	697.6	1.4	1.5	-23.37	28.6	7.4	23.1	20.2	2.89	7.989	
800.0	799.5	797.2	796.0	1.7	1.7	-22.21	39.1	13.1	26.5	23.2	3.35	7.930	
900.0	898.7	896.2	893.8	1.9	2.0	-21.77	52.7	20.4	30.1	26.2	3.82	7.877	
1,000.0	997.5	995.1	990.9	2.2	2.4	-21.84	69.1	29.2	33.6	29.3	4.30	7.814	
1,100.0	1,095.6	1,093.9	1,087.1	2.6	2.8	-22.27	88.5	39.7	37.2	32.4	4.82	7.731	
1,169.1	1,163.0	1,162.1	1,153.1	2.8	3.1	-22.73	103.6	47.8	39.8	34.6	5.19	7.660	
1,200.0	1,193.1	1,192.9	1,182.9	3.0	3.2	-22.95	110.8	51.7	40.9	35.5	5.37	7.619	
1,300.0	1,290.4	1,292.9	1,279.3	3.4	3.7	-23.58	134.0	64.2	44.7	38.7	5.97	7.486	
1,400.0	1,387.7	1,392.8	1,375.7	3.8	4.2	-24.12	157.1	76.7	48.4	41.8	6.58	7.358	
1,500.0	1,484.9	1,492.7	1,472.1	4.3	4.7	-24.58	180.3	89.2	52.2	45.0	7.20	7.242	
1,600.0	1,582.2	1,592.7	1,568.5	4.7	5.2	-24.98	203.5	101.7	55.9	48.1	7.84	7.131	
1,700.0	1,679.5	1,692.6	1,664.9	5.2	5.7	-25.33	226.7	114.2	59.7	51.2	8.49	7.031	
1,800.0	1,776.8	1,792.5	1,761.3	5.7	6.3	-25.64	249.9	126.7	63.4	54.3	9.14	6.940	
1,900.0	1,874.1	1,892.4	1,857.7	6.1	6.8	-25.91	273.1	139.2	67.2	57.4	9.80	6.856	
2,000.0	1,971.4	1,992.4	1,954.0	6.6	7.3	-26.15	296.2	151.7	70.9	60.5	10.46	6.781	
2,100.0	2,068.7	2,092.3	2,050.4	7.1	7.8	-26.37	319.4	164.3	74.7	63.6	11.13	6.711	
2,200.0	2,165.9	2,192.2	2,146.8	7.6	8.4	-26.57	342.6	176.8	78.5	66.7	11.80	6.648	
2,300.0	2,263.2	2,292.2	2,243.2	8.0	8.9	-26.75	365.8	189.3	82.2	69.8	12.48	6.590	
2,400.0	2,360.5	2,392.1	2,339.6	8.5	9.4	-26.92	389.0	201.8	86.0	72.8	13.16	6.537	
2,500.0	2,457.8	2,492.0	2,436.0	9.0	10.0	-27.07	412.2	214.3	89.8	75.9	13.84	6.487	
2,600.0	2,555.1	2,591.9	2,532.4	9.5	10.5	-27.21	435.3	226.8	93.5	79.0	14.52	6.442	
2,700.0	2,652.4	2,691.9	2,628.8	10.0	11.1	-27.33	458.5	239.3	97.3	82.1	15.20	6.400	
2,800.0	2,749.7	2,791.8	2,725.2	10.4	11.6	-27.45	481.7	251.8	101.1	85.2	15.89	6.361	
2,900.0	2,846.9	2,891.7	2,821.6	10.9	12.1	-27.56	504.9	264.3	104.8	88.3	16.58	6.324	
3,000.0	2,944.2	2,991.7	2,918.0	11.4	12.7	-27.66	528.1	276.8	108.6	91.3	17.27	6.291	
3,100.0	3,041.5	3,091.6	3,014.4	11.9	13.2	-27.76	551.3	289.3	112.4	94.4	17.95	6.259	
3,200.0	3,138.8	3,191.5	3,110.8	12.4	13.7	-27.85	574.4	301.8	116.1	97.5	18.65	6.229	
3,300.0	3,236.1	3,291.4	3,207.2	12.8	14.3	-27.93	597.6	314.3	119.9	100.6	19.34	6.202	
3,400.0	3,333.4	3,391.4	3,303.6	13.3	14.8	-28.01	620.8	326.8	123.7	103.7	20.03	6.175	
3,500.0	3,430.6	3,491.3	3,400.0	13.8	15.3	-28.08	644.0	339.3	127.5	106.7	20.72	6.151	
3,600.0	3,527.9	3,591.2	3,496.4	14.3	15.9	-28.15	667.2	351.8	131.2	109.8	21.42	6.128	
3,700.0	3,625.2	3,691.2	3,592.8	14.8	16.4	-28.22	690.4	364.3	135.0	112.9	22.11	6.106	
3,800.0	3,722.5	3,791.1	3,689.1	15.3	17.0	-28.28	713.5	376.9	138.8	116.0	22.80	6.085	
3,900.0	3,819.8	3,891.0	3,785.5	15.7	17.5	-28.34	736.7	389.4	142.5	119.0	23.50	6.065	
4,000.0	3,917.1	3,990.9	3,881.9	16.2	18.0	-28.40	759.9	401.9	146.3	122.1	24.20	6.047	
4,100.0	4,014.4	4,090.9	3,978.3	16.7	18.6	-28.45	783.1	414.4	150.1	125.2	24.89	6.029	
4,200.0	4,111.6	4,190.8	4,074.7	17.2	19.1	-28.50	806.3	426.9	153.8	128.3	25.59	6.012	
4,300.0	4,208.9	4,290.7	4,171.1	17.7	19.7	-28.55	829.5	439.4	157.6	131.3	26.29	5.997	
4,400.0	4,306.2	4,390.7	4,267.5	18.2	20.2	-28.59	852.6	451.9	161.4	134.4	26.98	5.981	
4,500.0	4,403.5	4,490.6	4,363.9	18.7	20.7	-28.64	875.8	464.4	165.2	137.5	27.68	5.967	
4,600.0	4,500.8	4,590.5	4,460.3	19.1	21.3	-28.68	899.0	476.9	168.9	140.6	28.38	5.953	
4,700.0	4,598.1	4,690.4	4,556.7	19.6	21.8	-28.72	922.2	489.4	172.7	143.6	29.08	5.940	
4,800.0	4,695.4	4,790.4	4,653.1	20.1	22.4	-28.76	945.4	501.9	176.5	146.7	29.78	5.927	
4,900.0	4,792.6	4,890.3	4,749.5	20.6	22.9	-28.79	968.6	514.4	180.2	149.8	30.47	5.915	
5,000.0	4,889.9	4,990.2	4,845.9	21.1	23.4	-28.83	991.7	526.9	184.0	152.8	31.17	5.903	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-MWDD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,100.0	4,987.2	5,090.2	4,942.3	21.6	24.0	-28.86	1,014.9	539.4	187.8	155.9	31.87	5.892	
5,200.0	5,084.5	5,190.1	5,038.7	22.1	24.5	-28.89	1,038.1	551.9	191.6	159.0	32.57	5.881	
5,300.0	5,181.8	5,290.0	5,135.1	22.5	25.1	-28.92	1,061.3	564.4	195.3	162.1	33.27	5.871	
5,400.0	5,279.1	5,389.9	5,231.5	23.0	25.6	-28.95	1,084.5	576.9	199.1	165.1	33.97	5.861	
5,500.0	5,376.3	5,489.9	5,327.9	23.5	26.1	-28.98	1,107.7	589.5	202.9	168.2	34.67	5.852	
5,600.0	5,473.6	5,589.8	5,424.3	24.0	26.7	-29.01	1,130.8	602.0	206.7	171.3	35.37	5.842	
5,700.0	5,570.9	5,689.7	5,520.6	24.5	27.2	-29.04	1,154.0	614.5	210.4	174.4	36.07	5.834	
5,800.0	5,668.2	5,792.0	5,619.4	25.0	27.7	-29.09	1,177.6	627.2	214.0	177.2	36.77	5.820	
5,900.0	5,765.5	5,899.3	5,723.7	25.5	28.2	-29.49	1,199.6	639.1	215.0	177.4	37.55	5.726	
5,921.9	5,786.8	5,922.7	5,746.6	25.6	28.2	-29.64	1,204.0	641.4	214.8	177.0	37.73	5.692	
6,000.0	5,863.0	6,006.5	5,828.7	25.9	28.5	-30.19	1,218.2	649.1	213.5	175.2	38.36	5.567	
6,100.0	5,961.2	6,113.5	5,934.4	26.2	28.8	-30.87	1,233.3	657.2	211.7	172.6	39.06	5.419	
6,200.0	6,060.0	6,220.5	6,040.5	26.5	29.1	-31.54	1,244.9	663.5	209.5	169.8	39.70	5.278	
6,300.0	6,159.3	6,327.3	6,147.0	26.7	29.3	-32.18	1,253.1	667.9	207.1	166.8	40.26	5.143	
6,400.0	6,259.0	6,434.0	6,253.5	26.9	29.5	-32.80	1,257.7	670.4	204.3	163.6	40.75	5.013	
6,500.0	6,358.8	6,539.3	6,358.8	27.1	29.6	-33.38	1,258.8	671.0	201.3	160.1	41.17	4.889	
6,579.7	6,438.5	6,618.4	6,437.8	27.2	29.6	-34.49	1,258.8	667.9	200.2	158.5	41.69	4.801	
6,591.0	6,449.8	6,629.6	6,448.9	27.2	29.6	-2.31	1,258.8	666.7	200.2	149.2	51.04	3.923	
6,600.0	6,458.8	6,638.4	6,457.7	27.2	29.6	-2.60	1,258.8	665.7	200.2	149.3	50.96	3.929	
6,621.0	6,479.8	6,658.9	6,478.0	27.2	29.6	-3.40	1,258.8	662.9	200.4	149.7	50.74	3.949	
6,650.0	6,508.8	6,687.1	6,505.7	27.3	29.6	85.38	1,258.8	658.2	200.7	157.9	42.84	4.685	
6,700.0	6,558.7	6,735.2	6,552.6	27.3	29.6	83.32	1,258.8	647.5	201.4	157.8	43.68	4.612	
6,750.0	6,608.1	6,782.8	6,598.3	27.3	29.6	81.31	1,258.8	633.9	202.4	158.0	44.41	4.558	
6,800.0	6,657.0	6,830.1	6,642.6	27.3	29.5	79.36	1,258.8	617.4	203.6	158.6	45.02	4.523	
6,850.0	6,704.9	6,876.9	6,685.3	27.2	29.5	77.49	1,258.8	598.3	205.0	159.5	45.48	4.507	
6,900.0	6,751.8	6,923.3	6,726.3	27.2	29.4	75.71	1,258.8	576.5	206.5	160.7	45.79	4.510	
6,950.0	6,797.4	6,969.4	6,765.6	27.1	29.3	74.02	1,258.8	552.4	208.2	162.3	45.94	4.532	
7,000.0	6,841.4	7,015.2	6,802.9	27.0	29.2	72.43	1,258.8	526.0	210.0	164.0	45.94	4.570	
7,050.0	6,883.6	7,060.6	6,838.2	26.9	29.1	70.95	1,258.8	497.4	211.8	166.0	45.79	4.625	
7,100.0	6,923.9	7,105.7	6,871.5	26.8	29.0	69.56	1,258.8	466.9	213.6	168.1	45.51	4.694	
7,150.0	6,962.0	7,150.0	6,902.2	26.7	28.9	68.30	1,258.8	435.0	215.5	170.3	45.13	4.774	
7,200.0	6,997.8	7,195.3	6,931.4	26.5	28.8	67.12	1,258.8	400.5	217.2	172.6	44.68	4.863	
7,250.0	7,031.0	7,239.7	6,958.0	26.4	28.6	66.07	1,258.8	364.9	219.0	174.8	44.18	4.956	
7,300.0	7,061.6	7,283.9	6,982.2	26.3	28.5	65.12	1,258.8	327.9	220.6	176.9	43.69	5.050	
7,350.0	7,089.3	7,328.0	7,003.9	26.1	28.4	64.28	1,258.8	289.6	222.1	178.9	43.23	5.138	
7,400.0	7,114.0	7,371.8	7,023.3	26.0	28.3	63.55	1,258.8	250.2	223.5	180.6	42.86	5.215	
7,450.0	7,135.7	7,415.6	7,040.1	25.9	28.2	62.93	1,258.8	209.8	224.7	182.1	42.60	5.274	
7,500.0	7,154.2	7,459.2	7,054.4	25.7	28.1	62.42	1,258.8	168.6	225.7	183.2	42.51	5.310	
7,550.0	7,169.4	7,500.0	7,065.4	25.6	28.0	62.03	1,258.8	129.3	226.6	184.0	42.60	5.319	
7,600.0	7,181.2	7,546.3	7,075.2	25.5	27.9	61.70	1,258.8	84.1	227.2	184.3	42.94	5.291	
7,650.0	7,189.6	7,589.7	7,081.8	25.4	27.8	61.50	1,258.8	41.2	227.6	184.1	43.49	5.233	
7,700.0	7,194.5	7,633.1	7,085.7	25.3	27.7	61.41	1,258.8	-2.0	227.8	183.5	44.28	5.145	
7,748.9	7,196.0	7,675.6	7,087.0	25.2	27.6	61.41	1,258.8	-44.5	227.8	182.5	45.27	5.032	
7,800.0	7,195.8	7,726.3	7,086.9	25.1	27.5	61.44	1,258.8	-95.2	227.8	181.1	46.61	4.886	
7,900.0	7,195.4	7,826.3	7,086.7	25.5	27.5	61.49	1,258.8	-195.2	227.6	178.2	49.49	4.600	
8,000.0	7,195.0	7,926.3	7,086.5	27.5	28.2	61.54	1,258.8	-295.2	227.5	174.9	52.69	4.319	
8,100.0	7,194.6	8,026.3	7,086.3	29.5	30.0	61.58	1,258.8	-395.2	227.4	171.3	56.15	4.051	
8,200.0	7,194.1	8,126.3	7,086.1	31.7	32.1	61.63	1,258.8	-495.2	227.3	167.5	59.83	3.799	
8,300.0	7,193.7	8,226.3	7,085.9	33.9	34.3	61.68	1,258.8	-595.2	227.2	163.5	63.70	3.567	
8,400.0	7,193.3	8,326.3	7,085.7	36.3	36.6	61.73	1,258.8	-695.2	227.1	159.4	67.73	3.354	
8,500.0	7,192.9	8,426.3	7,085.6	38.6	38.9	61.78	1,258.8	-795.2	227.0	155.1	71.88	3.158	
8,600.0	7,192.5	8,526.3	7,085.4	41.1	41.3	61.83	1,258.8	-895.2	226.9	150.8	76.14	2.980	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - SHARON 21N-234 - ORIGINAL WELLBORE - PROPOSAL #1													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		
8,700.0	7,192.1	8,626.3	7,085.2	43.5	43.8	61.87	1,258.8	-995.2	226.8	146.3	80.49	2.818		
8,800.0	7,191.7	8,726.3	7,085.0	46.0	46.3	61.92	1,258.8	-1,095.2	226.7	141.8	84.92	2.670		
8,900.0	7,191.3	8,826.3	7,084.8	48.6	48.8	61.97	1,258.8	-1,195.2	226.6	137.2	89.42	2.534		
9,000.0	7,190.9	8,926.3	7,084.6	51.1	51.3	62.02	1,258.8	-1,295.2	226.5	132.5	93.97	2.410		
9,100.0	7,190.4	9,026.3	7,084.4	53.7	53.9	62.07	1,258.8	-1,395.2	226.4	127.8	98.58	2.297		
9,200.0	7,190.0	9,126.3	7,084.2	56.3	56.5	62.12	1,258.8	-1,495.2	226.3	123.1	103.23	2.192		
9,300.0	7,189.6	9,226.3	7,084.0	58.9	59.1	62.16	1,258.8	-1,595.2	226.2	118.3	107.92	2.096		
9,400.0	7,189.2	9,326.3	7,083.8	61.6	61.7	62.21	1,258.8	-1,695.2	226.1	113.5	112.65	2.007		
9,500.0	7,188.8	9,426.3	7,083.6	64.2	64.4	62.26	1,258.8	-1,795.2	226.0	108.6	117.40	1.925		
9,600.0	7,188.4	9,526.3	7,083.4	66.9	67.0	62.31	1,258.8	-1,895.2	225.9	103.7	122.19	1.849		
9,700.0	7,188.0	9,626.3	7,083.2	69.6	69.7	62.36	1,258.8	-1,995.2	225.8	98.8	127.00	1.778		
9,800.0	7,187.6	9,726.3	7,083.0	72.3	72.4	62.41	1,258.8	-2,095.2	225.7	93.9	131.83	1.712		
9,900.0	7,187.1	9,826.3	7,082.8	74.9	75.1	62.46	1,258.8	-2,195.2	225.6	88.9	136.69	1.651		
10,000.0	7,186.7	9,926.3	7,082.6	77.6	77.8	62.50	1,258.8	-2,295.2	225.5	83.9	141.56	1.593		
10,100.0	7,186.3	10,026.3	7,082.4	80.4	80.5	62.55	1,258.8	-2,395.2	225.4	79.0	146.45	1.539		
10,200.0	7,185.9	10,126.3	7,082.2	83.1	83.2	62.60	1,258.8	-2,495.2	225.3	73.9	151.36	1.489 Level 3		
10,300.0	7,185.5	10,226.3	7,082.0	85.8	85.9	62.65	1,258.8	-2,595.2	225.2	68.9	156.29	1.441 Level 3		
10,400.0	7,185.1	10,326.3	7,081.8	88.5	88.6	62.70	1,258.8	-2,695.2	225.1	63.9	161.22	1.396 Level 3		
10,500.0	7,184.7	10,426.3	7,081.6	91.2	91.3	62.75	1,258.8	-2,795.2	225.0	58.8	166.18	1.354 Level 3		
10,600.0	7,184.3	10,526.3	7,081.4	94.0	94.1	62.79	1,258.8	-2,895.2	224.9	53.8	171.14	1.314 Level 3		
10,700.0	7,183.9	10,626.3	7,081.2	96.7	96.8	62.84	1,258.8	-2,995.2	224.8	48.7	176.12	1.277 Level 3		
10,800.0	7,183.4	10,726.3	7,081.0	99.4	99.5	62.89	1,258.8	-3,095.2	224.7	43.6	181.10	1.241 Level 2		
10,900.0	7,183.0	10,826.3	7,080.8	102.2	102.3	62.94	1,258.8	-3,195.2	224.6	38.5	186.10	1.207 Level 2		
11,000.0	7,182.6	10,926.3	7,080.6	104.9	105.0	62.99	1,258.8	-3,295.2	224.5	33.4	191.11	1.175 Level 2		
11,100.0	7,182.2	11,026.3	7,080.4	107.7	107.8	63.04	1,258.8	-3,395.2	224.4	28.3	196.12	1.144 Level 2		
11,200.0	7,181.8	11,126.3	7,080.2	110.4	110.5	63.09	1,258.8	-3,495.2	224.3	23.2	201.15	1.115 Level 2		
11,300.0	7,181.4	11,226.3	7,080.0	113.2	113.3	63.13	1,258.8	-3,595.2	224.2	18.0	206.19	1.088 Level 2		
11,400.0	7,181.0	11,326.3	7,079.8	116.0	116.0	63.18	1,258.8	-3,695.2	224.1	12.9	211.23	1.061 Level 2		
11,500.0	7,180.6	11,426.3	7,079.6	118.7	118.8	63.23	1,258.8	-3,795.2	224.0	7.8	216.28	1.036 Level 2		
11,600.0	7,180.1	11,526.3	7,079.4	121.5	121.5	63.28	1,258.8	-3,895.2	223.9	2.6	221.34	1.012 Level 2		
11,700.0	7,179.7	11,626.3	7,079.2	124.3	124.3	63.33	1,258.8	-3,995.2	223.8	-2.6	226.41	0.989 Level 1		
11,800.0	7,179.3	11,726.3	7,079.0	127.0	127.1	63.38	1,258.8	-4,095.2	223.7	-7.7	231.48	0.967 Level 1		
11,900.0	7,178.9	11,826.3	7,078.8	129.8	129.8	63.43	1,258.8	-4,195.2	223.7	-12.9	236.56	0.945 Level 1		
12,000.0	7,178.5	11,926.3	7,078.6	132.6	132.6	63.47	1,258.8	-4,295.2	223.6	-18.1	241.65	0.925 Level 1		
12,100.0	7,178.1	12,026.3	7,078.4	135.3	135.4	63.52	1,258.8	-4,395.2	223.5	-23.3	246.74	0.906 Level 1		
12,200.0	7,177.7	12,126.3	7,078.2	138.1	138.1	63.57	1,258.8	-4,495.2	223.4	-28.5	251.84	0.887 Level 1		
12,300.0	7,177.2	12,226.3	7,078.0	140.9	140.9	63.62	1,258.8	-4,595.2	223.3	-33.7	256.95	0.869 Level 1		
12,400.0	7,176.8	12,326.3	7,077.8	143.7	143.7	63.67	1,258.8	-4,695.2	223.2	-38.9	262.07	0.852 Level 1		
12,500.0	7,176.4	12,426.3	7,077.6	146.4	146.4	63.72	1,258.8	-4,795.2	223.1	-44.1	267.18	0.835 Level 1		
12,600.0	7,176.0	12,526.3	7,077.4	149.2	149.2	63.77	1,258.8	-4,895.2	223.0	-49.3	272.31	0.819 Level 1		
12,700.0	7,175.6	12,626.3	7,077.2	152.0	152.0	63.82	1,258.8	-4,995.2	222.9	-54.5	277.44	0.803 Level 1		
12,800.0	7,175.2	12,726.3	7,077.0	154.8	154.8	63.86	1,258.8	-5,095.2	222.8	-59.8	282.58	0.788 Level 1		
12,900.0	7,174.8	12,826.3	7,076.8	157.5	157.6	63.91	1,258.8	-5,195.2	222.7	-65.0	287.72	0.774 Level 1		
13,000.0	7,174.4	12,926.3	7,076.6	160.3	160.3	63.96	1,258.8	-5,295.2	222.6	-70.3	292.87	0.760 Level 1		
13,100.0	7,173.9	13,026.3	7,076.4	163.1	163.1	64.01	1,258.8	-5,395.2	222.5	-75.5	298.02	0.747 Level 1		
13,200.0	7,173.5	13,126.3	7,076.2	165.9	165.9	64.06	1,258.8	-5,495.2	222.4	-80.8	303.18	0.734 Level 1		
13,300.0	7,173.1	13,226.3	7,076.0	168.7	168.7	64.11	1,258.8	-5,595.2	222.3	-86.0	308.34	0.721 Level 1		
13,400.0	7,172.7	13,326.3	7,075.8	171.5	171.5	64.16	1,258.8	-5,695.2	222.2	-91.3	313.51	0.709 Level 1		
13,500.0	7,172.3	13,426.3	7,075.6	174.3	174.3	64.21	1,258.8	-5,795.2	222.1	-96.5	318.68	0.697 Level 1		
13,600.0	7,171.9	13,526.3	7,075.4	177.0	177.0	64.25	1,258.8	-5,895.2	222.1	-101.8	323.86	0.686 Level 1		
13,700.0	7,171.5	13,626.3	7,075.2	179.8	179.8	64.30	1,258.8	-5,995.2	222.0	-107.1	329.04	0.675 Level 1		
13,800.0	7,171.0	13,726.3	7,075.0	182.6	182.6	64.35	1,258.8	-6,095.2	221.9	-112.4	334.23	0.664 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 SHARON 21O-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 21O-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - SHARON 21N-234 - ORIGINAL WELLBORE - PROPOSAL #1												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	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
13,900.0	7,170.6	13,826.3	7,074.8	185.4	185.4	64.40	1,258.8	-6,195.2	221.8	-117.6	339.42	0.653	Level 1
14,000.0	7,170.2	13,926.3	7,074.6	188.2	188.2	64.45	1,258.8	-6,295.2	221.7	-122.9	344.62	0.643	Level 1
14,100.0	7,169.8	14,026.3	7,074.4	191.0	191.0	64.50	1,258.8	-6,395.2	221.6	-128.2	349.82	0.633	Level 1
14,200.0	7,169.4	14,126.3	7,074.2	193.8	193.8	64.55	1,258.8	-6,495.2	221.5	-133.5	355.03	0.624	Level 1
14,295.0	7,169.0	14,221.2	7,074.0	196.4	196.4	64.59	1,258.8	-6,590.1	221.4	-138.6	359.97	0.615	Level 1, ES, SF

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.0	0.0	1.0	1.0	0.0	0.0	0.53	29.9	0.3	29.9				
100.0	100.0	101.0	101.0	0.1	0.1	0.53	29.9	0.3	29.9	29.7	0.20	151.900	
200.0	200.0	201.0	201.0	0.3	0.3	0.53	29.9	0.3	29.9	29.2	0.65	46.231	
266.3	266.3	267.3	267.3	0.5	0.5	0.53	29.9	0.3	29.9	28.9	0.94	31.634 CC	
300.0	300.0	301.0	301.0	0.5	0.5	0.54	29.9	0.3	29.9	28.8	1.10	27.265	
400.0	400.0	400.0	400.0	0.8	0.8	1.86	31.5	1.0	31.5	29.9	1.54	20.410	
500.0	500.0	498.8	498.6	1.0	1.0	5.09	36.1	3.2	36.3	34.3	2.00	18.207	
600.0	600.0	597.3	596.7	1.2	1.2	-24.50	43.8	6.8	43.0	40.5	2.45	17.545	
700.0	699.8	695.5	694.2	1.4	1.5	-22.86	54.5	11.9	49.8	46.9	2.90	17.145	
800.0	799.5	793.5	791.1	1.7	1.8	-22.03	68.2	18.3	56.7	53.3	3.37	16.840	
900.0	898.7	891.3	887.1	1.9	2.2	-21.77	84.9	26.2	63.6	59.8	3.84	16.568	
1,000.0	997.5	988.8	982.2	2.2	2.6	-21.89	104.4	35.4	70.7	66.3	4.34	16.295	
1,100.0	1,095.6	1,086.1	1,076.3	2.6	3.0	-22.30	126.8	45.9	77.8	72.9	4.86	15.999	
1,169.1	1,163.0	1,153.9	1,141.4	2.8	3.4	-22.74	144.1	54.0	82.6	77.3	5.24	15.747	
1,200.0	1,193.1	1,184.8	1,171.0	3.0	3.5	-23.01	152.0	57.8	84.5	79.1	5.43	15.574	
1,300.0	1,290.4	1,284.6	1,266.6	3.4	4.1	-23.80	177.7	69.9	90.8	84.8	6.04	15.047	
1,400.0	1,387.7	1,384.4	1,362.3	3.8	4.6	-24.49	203.4	82.0	97.1	90.5	6.66	14.589	
1,500.0	1,484.9	1,484.2	1,457.9	4.3	5.2	-25.10	229.1	94.1	103.5	96.2	7.30	14.171	
1,600.0	1,582.2	1,584.0	1,553.6	4.7	5.7	-25.64	254.9	106.2	109.8	101.8	7.95	13.804	
1,700.0	1,679.5	1,683.8	1,649.3	5.2	6.3	-26.12	280.6	118.3	116.1	107.5	8.62	13.478	
1,800.0	1,776.8	1,783.6	1,744.9	5.7	6.8	-26.55	306.3	130.4	122.5	113.2	9.29	13.187	
1,900.0	1,874.1	1,883.3	1,840.6	6.1	7.4	-26.94	332.0	142.5	128.8	118.9	9.97	12.927	
2,000.0	1,971.4	1,983.1	1,936.3	6.6	8.0	-27.29	357.7	154.6	135.2	124.5	10.65	12.693	
2,100.0	2,068.7	2,082.9	2,031.9	7.1	8.5	-27.61	383.4	166.7	141.6	130.2	11.34	12.483	
2,200.0	2,165.9	2,182.7	2,127.6	7.6	9.1	-27.90	409.1	178.8	147.9	135.9	12.03	12.292	
2,300.0	2,263.2	2,282.5	2,223.2	8.0	9.7	-28.16	434.8	190.9	154.3	141.6	12.73	12.118	
2,400.0	2,360.5	2,382.3	2,318.9	8.5	10.2	-28.41	460.5	203.0	160.7	147.2	13.43	11.960	
2,500.0	2,457.8	2,482.1	2,414.6	9.0	10.8	-28.64	486.3	215.2	167.1	152.9	14.14	11.816	
2,600.0	2,555.1	2,581.9	2,510.2	9.5	11.4	-28.85	512.0	227.3	173.4	158.6	14.85	11.683	
2,700.0	2,652.4	2,681.7	2,605.9	10.0	12.0	-29.04	537.7	239.4	179.8	164.3	15.55	11.560	
2,800.0	2,749.7	2,781.5	2,701.6	10.4	12.5	-29.23	563.4	251.5	186.2	169.9	16.27	11.447	
2,900.0	2,846.9	2,881.3	2,797.2	10.9	13.1	-29.40	589.1	263.6	192.6	175.6	16.98	11.343	
3,000.0	2,944.2	2,981.1	2,892.9	11.4	13.7	-29.56	614.8	275.7	199.0	181.3	17.69	11.245	
3,100.0	3,041.5	3,080.9	2,988.5	11.9	14.2	-29.71	640.5	287.8	205.4	187.0	18.41	11.155	
3,200.0	3,138.8	3,180.7	3,084.2	12.4	14.8	-29.85	666.2	299.9	211.8	192.6	19.13	11.070	
3,300.0	3,236.1	3,280.5	3,179.9	12.8	15.4	-29.98	691.9	312.0	218.2	198.3	19.85	10.991	
3,400.0	3,333.4	3,380.3	3,275.5	13.3	16.0	-30.10	717.7	324.1	224.5	204.0	20.57	10.917	
3,500.0	3,430.6	3,480.1	3,371.2	13.8	16.5	-30.22	743.4	336.2	230.9	209.6	21.29	10.848	
3,600.0	3,527.9	3,579.8	3,466.9	14.3	17.1	-30.33	769.1	348.3	237.3	215.3	22.01	10.782	
3,700.0	3,625.2	3,679.6	3,562.5	14.8	17.7	-30.44	794.8	360.4	243.7	221.0	22.73	10.721	
3,800.0	3,722.5	3,779.4	3,658.2	15.3	18.3	-30.54	820.5	372.5	250.1	226.7	23.46	10.663	
3,900.0	3,819.8	3,879.2	3,753.8	15.7	18.8	-30.63	846.2	384.6	256.5	232.3	24.18	10.608	
4,000.0	3,917.1	3,979.0	3,849.5	16.2	19.4	-30.72	871.9	396.7	262.9	238.0	24.91	10.556	
4,100.0	4,014.4	4,078.8	3,945.2	16.7	20.0	-30.81	897.6	408.8	269.3	243.7	25.63	10.506	
4,200.0	4,111.6	4,178.6	4,040.8	17.2	20.6	-30.89	923.3	420.9	275.7	249.4	26.36	10.460	
4,300.0	4,208.9	4,278.4	4,136.5	17.7	21.1	-30.97	949.1	433.0	282.1	255.0	27.09	10.415	
4,400.0	4,306.2	4,378.2	4,232.2	18.2	21.7	-31.05	974.8	445.2	288.5	260.7	27.82	10.373	
4,500.0	4,403.5	4,478.0	4,327.8	18.7	22.3	-31.12	1,000.5	457.3	294.9	266.4	28.54	10.332	
4,600.0	4,500.8	4,577.8	4,423.5	19.1	22.9	-31.19	1,026.2	469.4	301.3	272.1	29.27	10.294	
4,700.0	4,598.1	4,677.6	4,519.1	19.6	23.4	-31.25	1,051.9	481.5	307.7	277.7	30.00	10.257	
4,800.0	4,695.4	4,777.4	4,614.8	20.1	24.0	-31.32	1,077.6	493.6	314.1	283.4	30.73	10.222	
4,900.0	4,792.6	4,877.2	4,710.5	20.6	24.6	-31.38	1,103.3	505.7	320.5	289.1	31.46	10.189	

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 SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - SHARON 21N-334 - ORIGINAL WELLBORE - PROPOSAL #1												Offset Site Error:	0.0 usft
Survey Program: 0-MWDD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,000.0	4,889.9	4,977.0	4,806.1	21.1	25.2	-31.44	1,129.0	517.8	326.9	294.7	32.19	10.157	
5,100.0	4,987.2	5,076.8	4,901.8	21.6	25.7	-31.49	1,154.7	529.9	333.3	300.4	32.92	10.126	
5,200.0	5,084.5	5,176.6	4,997.5	22.1	26.3	-31.55	1,180.4	542.0	339.7	306.1	33.65	10.096	
5,300.0	5,181.8	5,276.3	5,093.1	22.5	26.9	-31.60	1,206.2	554.1	346.1	311.8	34.38	10.068	
5,400.0	5,279.1	5,376.1	5,188.8	23.0	27.5	-31.65	1,231.9	566.2	352.5	317.4	35.11	10.041	
5,500.0	5,376.3	5,475.9	5,284.4	23.5	28.0	-31.70	1,257.6	578.3	359.0	323.1	35.84	10.014	
5,600.0	5,473.6	5,575.7	5,380.1	24.0	28.6	-31.74	1,283.3	590.4	365.4	328.8	36.58	9.989	
5,700.0	5,570.9	5,675.5	5,475.8	24.5	29.2	-31.79	1,309.0	602.5	371.8	334.5	37.31	9.965	
5,800.0	5,668.2	5,775.3	5,571.4	25.0	29.8	-31.83	1,334.7	614.6	378.2	340.1	38.04	9.941	
5,900.0	5,765.5	5,879.9	5,671.7	25.5	30.3	-31.89	1,361.4	627.2	384.4	345.6	38.78	9.911	
5,921.9	5,786.8	5,904.8	5,695.7	25.6	30.5	-31.93	1,367.4	630.0	385.4	346.5	38.95	9.895	
6,000.0	5,863.0	5,993.7	5,781.9	25.9	30.8	-32.11	1,387.4	639.4	388.6	349.1	39.48	9.843	
6,100.0	5,961.2	6,107.7	5,893.2	26.2	31.2	-32.31	1,409.5	649.8	392.2	352.1	40.05	9.792	
6,200.0	6,060.0	6,221.9	6,005.6	26.5	31.6	-32.48	1,427.5	658.3	395.1	354.6	40.54	9.746	
6,300.0	6,159.3	6,336.1	6,118.8	26.7	31.9	-32.60	1,441.5	664.9	397.3	356.4	40.94	9.706	
6,400.0	6,259.0	6,450.5	6,232.6	26.9	32.1	-32.69	1,451.4	669.6	398.9	357.7	41.25	9.671	
6,500.0	6,358.8	6,564.9	6,346.9	27.1	32.3	-32.74	1,457.2	672.3	399.8	358.4	41.48	9.640	
6,591.0	6,449.8	6,668.9	6,450.8	27.2	32.4	-0.25	1,458.9	673.1	400.1	345.4	54.65	7.321	
6,600.0	6,458.8	6,677.9	6,459.8	27.2	32.4	-0.25	1,458.9	673.1	400.1	345.4	54.66	7.319	
6,613.7	6,472.5	6,691.5	6,473.5	27.2	32.4	-0.25	1,458.9	673.1	400.1	345.4	54.69	7.315	
6,621.0	6,479.8	6,698.8	6,480.8	27.2	32.4	-0.25	1,458.9	673.1	400.1	345.4	54.71	7.313	
6,650.0	6,508.8	6,727.8	6,509.7	27.3	32.4	89.75	1,458.9	672.5	400.1	358.3	41.76	9.581	
6,700.0	6,558.7	6,777.7	6,559.5	27.3	32.5	89.74	1,458.9	668.6	400.1	358.3	41.83	9.565	
6,750.0	6,608.1	6,827.5	6,608.8	27.3	32.5	89.73	1,458.9	661.4	400.1	358.2	41.83	9.564	
6,800.0	6,657.0	6,877.4	6,657.5	27.3	32.4	89.73	1,458.9	650.7	400.1	358.3	41.78	9.575	
6,850.0	6,704.9	6,927.3	6,705.3	27.2	32.4	89.72	1,458.9	636.7	400.1	358.4	41.69	9.597	
6,900.0	6,751.8	6,977.2	6,752.1	27.2	32.4	89.72	1,458.9	619.3	400.1	358.5	41.55	9.630	
6,950.0	6,797.4	7,027.0	6,797.5	27.1	32.3	89.72	1,458.9	598.8	400.1	358.7	41.37	9.670	
7,000.0	6,841.4	7,076.9	6,841.4	27.0	32.2	89.72	1,458.9	575.1	400.1	358.9	41.18	9.715	
7,050.0	6,883.6	7,126.7	6,883.5	26.9	32.1	89.72	1,458.9	548.5	400.1	359.1	40.98	9.763	
7,100.0	6,923.9	7,176.6	6,923.7	26.8	32.0	89.72	1,458.9	519.0	400.1	359.3	40.79	9.809	
7,150.0	6,962.0	7,226.5	6,961.7	26.7	31.9	89.73	1,458.9	486.7	400.1	359.5	40.62	9.848	
7,200.0	6,997.8	7,276.3	6,997.4	26.5	31.8	89.73	1,458.9	451.9	400.1	359.6	40.51	9.876	
7,250.0	7,031.0	7,326.2	7,030.6	26.4	31.7	89.74	1,458.9	414.7	400.1	359.6	40.46	9.888	
7,300.0	7,061.6	7,376.1	7,061.1	26.3	31.6	89.75	1,458.9	375.3	400.1	359.6	40.51	9.877	
7,350.0	7,089.3	7,426.0	7,088.8	26.1	31.4	89.76	1,458.9	333.8	400.1	359.4	40.66	9.840	
7,400.0	7,114.0	7,475.9	7,113.6	26.0	31.3	89.76	1,458.9	290.5	400.1	359.1	40.94	9.772	
7,450.0	7,135.7	7,525.7	7,135.3	25.9	31.2	89.78	1,458.9	245.6	400.1	358.7	41.37	9.671	
7,500.0	7,154.2	7,575.6	7,153.8	25.7	31.1	89.79	1,458.9	199.3	400.1	358.1	41.94	9.539	
7,550.0	7,169.4	7,625.5	7,169.0	25.6	31.0	89.80	1,458.9	151.8	400.1	357.4	42.68	9.375	
7,600.0	7,181.2	7,675.4	7,180.9	25.5	30.9	89.81	1,458.9	103.3	400.1	356.5	43.56	9.184	
7,650.0	7,189.6	7,725.4	7,189.4	25.4	30.8	89.83	1,458.9	54.1	400.1	355.5	44.60	8.971	
7,700.0	7,194.5	7,775.3	7,194.4	25.3	30.7	89.84	1,458.9	4.5	400.1	354.3	45.76	8.742	
7,748.9	7,196.0	7,824.1	7,196.0	25.2	30.6	89.86	1,458.9	-44.3	400.1	353.1	47.02	8.509	
7,750.6	7,196.0	7,825.8	7,196.0	25.2	30.6	89.86	1,458.9	-46.0	400.1	353.0	47.06	8.501	
7,800.0	7,195.8	7,875.2	7,195.6	25.1	30.6	89.83	1,458.9	-95.4	400.1	351.6	48.47	8.253	
7,900.0	7,195.4	7,975.2	7,194.8	25.5	30.6	89.78	1,458.9	-195.4	400.1	348.4	51.65	7.746	
8,000.0	7,195.0	8,075.2	7,194.0	27.5	30.8	89.72	1,458.9	-295.4	400.1	344.9	55.21	7.246	
8,100.0	7,194.6	8,175.2	7,193.2	29.5	31.7	89.66	1,458.9	-395.4	400.1	341.0	59.09	6.771	
8,200.0	7,194.1	8,275.2	7,192.4	31.7	33.3	89.61	1,458.9	-495.4	400.1	336.8	63.23	6.327	
8,300.0	7,193.7	8,375.2	7,191.6	33.9	35.3	89.55	1,458.9	-595.4	400.1	332.5	67.59	5.919	
8,400.0	7,193.3	8,475.2	7,190.8	36.3	37.5	89.49	1,458.9	-695.4	400.1	328.0	72.12	5.547	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - SHARON 21N-334 - ORIGINAL WELLBORE - PROPOSAL #1												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	
8,500.0	7,192.9	8,575.2	7,190.0	38.6	39.7	89.44	1,458.9	-795.4	400.1	323.3	76.80	5.209	
8,600.0	7,192.5	8,675.2	7,189.2	41.1	42.1	89.38	1,458.9	-895.4	400.1	318.5	81.60	4.903	
8,700.0	7,192.1	8,775.2	7,188.4	43.5	44.5	89.32	1,458.9	-995.4	400.1	313.6	86.49	4.626	
8,800.0	7,191.7	8,875.2	7,187.6	46.0	46.9	89.27	1,458.9	-1,095.4	400.1	308.6	91.47	4.374	
8,900.0	7,191.3	8,975.2	7,186.8	48.6	49.4	89.21	1,458.9	-1,195.4	400.1	303.6	96.52	4.145	
9,000.0	7,190.9	9,075.2	7,185.9	51.1	51.9	89.15	1,458.9	-1,295.4	400.1	298.5	101.63	3.937	
9,100.0	7,190.4	9,175.2	7,185.1	53.7	54.5	89.10	1,458.9	-1,395.4	400.1	293.3	106.79	3.747	
9,200.0	7,190.0	9,275.2	7,184.3	56.3	57.0	89.04	1,458.9	-1,495.4	400.1	288.1	111.99	3.573	
9,300.0	7,189.6	9,375.2	7,183.5	58.9	59.6	88.98	1,458.9	-1,595.3	400.1	282.9	117.24	3.413	
9,400.0	7,189.2	9,475.2	7,182.7	61.6	62.2	88.93	1,458.9	-1,695.3	400.1	277.6	122.51	3.266	
9,500.0	7,188.8	9,575.2	7,181.9	64.2	64.9	88.87	1,458.9	-1,795.3	400.1	272.3	127.82	3.131	
9,600.0	7,188.4	9,675.2	7,181.1	66.9	67.5	88.81	1,458.9	-1,895.3	400.2	267.0	133.15	3.005	
9,700.0	7,188.0	9,775.2	7,180.3	69.6	70.1	88.76	1,458.9	-1,995.3	400.2	261.7	138.50	2.889	
9,800.0	7,187.6	9,875.2	7,179.5	72.3	72.8	88.70	1,458.9	-2,095.3	400.2	256.3	143.87	2.781	
9,900.0	7,187.1	9,975.2	7,178.7	74.9	75.5	88.64	1,458.9	-2,195.3	400.2	250.9	149.26	2.681	
10,000.0	7,186.7	10,075.2	7,177.9	77.6	78.1	88.59	1,458.9	-2,295.3	400.2	245.5	154.67	2.587	
10,100.0	7,186.3	10,175.2	7,177.1	80.4	80.8	88.53	1,458.9	-2,395.3	400.2	240.1	160.09	2.500	
10,200.0	7,185.9	10,275.2	7,176.3	83.1	83.5	88.47	1,458.9	-2,495.3	400.2	234.7	165.52	2.418	
10,300.0	7,185.5	10,375.2	7,175.4	85.8	86.2	88.42	1,458.9	-2,595.3	400.2	229.2	170.97	2.341	
10,400.0	7,185.1	10,475.2	7,174.6	88.5	88.9	88.36	1,458.9	-2,695.3	400.2	223.8	176.42	2.269	
10,500.0	7,184.7	10,575.2	7,173.8	91.2	91.7	88.30	1,458.9	-2,795.3	400.2	218.3	181.89	2.200	
10,600.0	7,184.3	10,675.2	7,173.0	94.0	94.4	88.25	1,458.9	-2,895.3	400.2	212.9	187.36	2.136	
10,700.0	7,183.9	10,775.2	7,172.2	96.7	97.1	88.19	1,458.9	-2,995.3	400.3	207.4	192.84	2.076	
10,800.0	7,183.4	10,875.2	7,171.4	99.4	99.8	88.13	1,458.9	-3,095.3	400.3	201.9	198.33	2.018	
10,900.0	7,183.0	10,975.2	7,170.6	102.2	102.6	88.08	1,458.9	-3,195.3	400.3	196.5	203.82	1.964	
11,000.0	7,182.6	11,075.2	7,169.8	104.9	105.3	88.02	1,458.9	-3,295.3	400.3	191.0	209.32	1.912	
11,100.0	7,182.2	11,175.2	7,169.0	107.7	108.0	87.96	1,458.9	-3,395.3	400.3	185.5	214.83	1.863	
11,200.0	7,181.8	11,275.2	7,168.2	110.4	110.8	87.90	1,458.9	-3,495.3	400.3	180.0	220.34	1.817	
11,300.0	7,181.4	11,375.2	7,167.3	113.2	113.5	87.85	1,458.9	-3,595.3	400.3	174.5	225.85	1.773	
11,400.0	7,181.0	11,475.2	7,166.5	116.0	116.3	87.79	1,458.9	-3,695.3	400.3	169.0	231.37	1.730	
11,500.0	7,180.6	11,575.2	7,165.7	118.7	119.0	87.73	1,458.9	-3,795.3	400.4	163.5	236.89	1.690	
11,600.0	7,180.1	11,675.2	7,164.9	121.5	121.8	87.68	1,458.9	-3,895.3	400.4	158.0	242.42	1.652	
11,700.0	7,179.7	11,775.2	7,164.1	124.3	124.5	87.62	1,458.9	-3,995.3	400.4	152.4	247.95	1.615	
11,800.0	7,179.3	11,875.2	7,163.3	127.0	127.3	87.56	1,458.9	-4,095.2	400.4	146.9	253.48	1.580	
11,900.0	7,178.9	11,975.2	7,162.5	129.8	130.1	87.51	1,458.9	-4,195.2	400.4	141.4	259.02	1.546	
12,000.0	7,178.5	12,075.2	7,161.7	132.6	132.8	87.45	1,458.9	-4,295.2	400.4	135.9	264.55	1.514	
12,100.0	7,178.1	12,175.2	7,160.9	135.3	135.6	87.39	1,458.9	-4,395.2	400.5	130.4	270.09	1.483 Level 3	
12,200.0	7,177.7	12,275.2	7,160.0	138.1	138.3	87.34	1,458.9	-4,495.2	400.5	124.8	275.63	1.453 Level 3	
12,300.0	7,177.2	12,375.2	7,159.2	140.9	141.1	87.28	1,458.9	-4,595.2	400.5	119.3	281.18	1.424 Level 3	
12,400.0	7,176.8	12,475.2	7,158.4	143.7	143.9	87.22	1,458.9	-4,695.2	400.5	113.8	286.72	1.397 Level 3	
12,500.0	7,176.4	12,575.2	7,157.6	146.4	146.7	87.16	1,458.9	-4,795.2	400.5	108.3	292.27	1.370 Level 3	
12,600.0	7,176.0	12,675.2	7,156.8	149.2	149.4	87.11	1,458.9	-4,895.2	400.5	102.7	297.82	1.345 Level 3	
12,700.0	7,175.6	12,775.2	7,156.0	152.0	152.2	87.05	1,458.9	-4,995.2	400.6	97.2	303.37	1.320 Level 3	
12,800.0	7,175.2	12,875.2	7,155.2	154.8	155.0	86.99	1,458.9	-5,095.2	400.6	91.7	308.92	1.297 Level 3	
12,900.0	7,174.8	12,975.2	7,154.4	157.5	157.7	86.94	1,458.8	-5,195.2	400.6	86.1	314.47	1.274 Level 3	
13,000.0	7,174.4	13,075.2	7,153.5	160.3	160.5	86.88	1,458.8	-5,295.2	400.6	80.6	320.02	1.252 Level 3	
13,100.0	7,173.9	13,175.2	7,152.7	163.1	163.3	86.82	1,458.8	-5,395.2	400.6	75.1	325.57	1.231 Level 2	
13,200.0	7,173.5	13,275.2	7,151.9	165.9	166.1	86.76	1,458.8	-5,495.2	400.7	69.5	331.13	1.210 Level 2	
13,300.0	7,173.1	13,375.2	7,151.1	168.7	168.9	86.71	1,458.8	-5,595.2	400.7	64.0	336.68	1.190 Level 2	
13,400.0	7,172.7	13,475.2	7,150.3	171.5	171.6	86.65	1,458.8	-5,695.2	400.7	58.5	342.24	1.171 Level 2	
13,500.0	7,172.3	13,575.2	7,149.5	174.3	174.4	86.59	1,458.8	-5,795.2	400.7	52.9	347.79	1.152 Level 2	
13,600.0	7,171.9	13,675.2	7,148.7	177.0	177.2	86.54	1,458.8	-5,895.2	400.8	47.4	353.35	1.134 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 SHARON 21O-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 21O-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - SHARON 21N-334 - ORIGINAL WELLBORE - PROPOSAL #1												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	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
13,700.0	7,171.5	13,775.2	7,147.8	179.8	180.0	86.48	1,458.8	-5,995.2	400.8	41.9	358.90	1.117	Level 2
13,800.0	7,171.0	13,875.2	7,147.0	182.6	182.8	86.42	1,458.8	-6,095.2	400.8	36.3	364.46	1.100	Level 2
13,900.0	7,170.6	13,975.2	7,146.2	185.4	185.6	86.36	1,458.8	-6,195.2	400.8	30.8	370.02	1.083	Level 2
14,000.0	7,170.2	14,075.2	7,145.4	188.2	188.3	86.31	1,458.8	-6,295.2	400.8	25.3	375.57	1.067	Level 2
14,100.0	7,169.8	14,175.2	7,144.6	191.0	191.1	86.25	1,458.8	-6,395.2	400.9	19.7	381.13	1.052	Level 2
14,200.0	7,169.4	14,275.2	7,143.8	193.8	193.9	86.19	1,458.8	-6,495.1	400.9	14.2	386.68	1.037	Level 2
14,295.0	7,169.0	14,370.1	7,143.0	196.4	196.6	86.14	1,458.8	-6,590.1	400.9	9.0	391.96	1.023	Level 2, ES, SF

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-179.65	-45.2	-0.3	45.2				
100.0	100.0	99.0	99.0	0.1	0.1	-179.65	-45.2	-0.3	45.2	45.0	0.19	233.520	
200.0	200.0	199.0	199.0	0.3	0.3	-179.65	-45.2	-0.3	45.2	44.5	0.64	70.398	
300.0	300.0	299.0	299.0	0.5	0.5	-179.65	-45.2	-0.3	45.2	44.1	1.09	41.398	
400.0	400.0	399.0	399.0	0.8	0.8	-179.65	-45.2	-0.3	45.2	43.6	1.54	29.320	
500.0	500.0	499.0	499.0	1.0	1.0	-179.65	-45.2	-0.3	45.2	43.2	1.99	22.697 CC, ES	
600.0	600.0	599.0	599.0	1.2	1.2	148.97	-45.2	-0.3	46.7	44.2	2.44	19.124	
700.0	699.8	698.8	698.8	1.4	1.4	151.94	-45.2	-0.3	51.2	48.3	2.89	17.716	
800.0	799.5	798.5	798.5	1.7	1.7	155.86	-45.2	-0.3	59.1	55.7	3.34	17.659	
900.0	898.7	899.4	899.4	1.9	1.9	158.89	-44.2	1.2	69.2	65.4	3.79	18.236	
1,000.0	997.5	1,000.6	1,000.5	2.2	2.1	160.19	-41.4	5.6	80.2	75.9	4.24	18.908	
1,100.0	1,095.6	1,102.1	1,101.5	2.6	2.3	160.32	-36.6	13.1	92.0	87.3	4.71	19.546	
1,169.1	1,163.0	1,172.3	1,171.3	2.8	2.5	159.94	-32.2	20.1	100.6	95.5	5.04	19.937	
1,200.0	1,193.1	1,203.8	1,202.5	3.0	2.6	159.66	-29.9	23.7	104.4	99.2	5.20	20.057	
1,300.0	1,290.4	1,305.9	1,303.3	3.4	2.9	158.05	-21.2	37.3	115.1	109.3	5.76	19.986	
1,400.0	1,387.7	1,408.1	1,403.5	3.8	3.2	155.47	-10.6	53.9	123.5	117.1	6.38	19.373	
1,500.0	1,484.9	1,507.6	1,500.9	4.3	3.6	152.78	0.6	71.3	131.2	124.2	7.04	18.629	
1,600.0	1,582.2	1,607.1	1,598.2	4.7	4.0	150.38	11.7	88.8	139.2	131.4	7.75	17.953	
1,700.0	1,679.5	1,706.6	1,695.6	5.2	4.4	148.25	22.8	106.2	147.4	138.9	8.49	17.352	
1,800.0	1,776.8	1,806.2	1,792.9	5.7	4.8	146.35	34.0	123.6	155.7	146.5	9.26	16.816	
1,900.0	1,874.1	1,905.7	1,890.3	6.1	5.2	144.63	45.1	141.1	164.2	154.2	10.05	16.342	
2,000.0	1,971.4	2,005.2	1,987.6	6.6	5.6	143.09	56.3	158.5	172.9	162.0	10.86	15.923	
2,100.0	2,068.7	2,104.7	2,085.0	7.1	6.0	141.70	67.4	175.9	181.6	170.0	11.68	15.552	
2,200.0	2,165.9	2,204.3	2,182.3	7.6	6.4	140.43	78.5	193.4	190.5	178.0	12.51	15.222	
2,300.0	2,263.2	2,303.8	2,279.7	8.0	6.9	139.28	89.7	210.8	199.4	186.1	13.36	14.929	
2,400.0	2,360.5	2,403.3	2,377.0	8.5	7.3	138.23	100.8	228.2	208.4	194.2	14.21	14.667	
2,500.0	2,457.8	2,502.8	2,474.4	9.0	7.7	137.26	111.9	245.7	217.5	202.5	15.07	14.432	
2,600.0	2,555.1	2,602.3	2,571.7	9.5	8.2	136.37	123.1	263.1	226.7	210.7	15.94	14.221	
2,700.0	2,652.4	2,701.9	2,669.0	10.0	8.6	135.55	134.2	280.5	235.8	219.0	16.81	14.030	
2,800.0	2,749.7	2,801.4	2,766.4	10.4	9.0	134.80	145.4	298.0	245.1	227.4	17.68	13.858	
2,900.0	2,846.9	2,900.9	2,863.7	10.9	9.5	134.09	156.5	315.4	254.3	235.8	18.56	13.701	
3,000.0	2,944.2	3,000.4	2,961.1	11.4	9.9	133.44	167.6	332.8	263.6	244.2	19.45	13.558	
3,100.0	3,041.5	3,100.0	3,058.4	11.9	10.4	132.83	178.8	350.3	273.0	252.6	20.33	13.427	
3,200.0	3,138.8	3,199.5	3,155.8	12.4	10.8	132.26	189.9	367.7	282.3	261.1	21.22	13.307	
3,300.0	3,236.1	3,299.0	3,253.1	12.8	11.3	131.73	201.0	385.1	291.7	269.6	22.10	13.197	
3,400.0	3,333.4	3,398.5	3,350.5	13.3	11.7	131.23	212.2	402.6	301.1	278.1	23.00	13.095	
3,500.0	3,430.6	3,498.0	3,447.8	13.8	12.1	130.76	223.3	420.0	310.6	286.7	23.89	13.001	
3,600.0	3,527.9	3,597.6	3,545.2	14.3	12.6	130.32	234.5	437.5	320.0	295.2	24.78	12.914	
3,700.0	3,625.2	3,697.1	3,642.5	14.8	13.0	129.91	245.6	454.9	329.5	303.8	25.67	12.833	
3,800.0	3,722.5	3,796.6	3,739.9	15.3	13.5	129.51	256.7	472.3	339.0	312.4	26.57	12.758	
3,900.0	3,819.8	3,896.1	3,837.2	15.7	13.9	129.14	267.9	489.8	348.5	321.0	27.47	12.687	
4,000.0	3,917.1	3,995.7	3,934.6	16.2	14.4	128.79	279.0	507.2	358.0	329.6	28.36	12.622	
4,100.0	4,014.4	4,095.2	4,031.9	16.7	14.8	128.46	290.2	524.6	367.5	338.3	29.26	12.560	
4,200.0	4,111.6	4,194.7	4,129.3	17.2	15.3	128.14	301.3	542.1	377.1	346.9	30.16	12.502	
4,300.0	4,208.9	4,294.2	4,226.6	17.7	15.7	127.84	312.4	559.5	386.6	355.5	31.06	12.448	
4,400.0	4,306.2	4,393.8	4,324.0	18.2	16.2	127.56	323.6	576.9	396.2	364.2	31.96	12.396	
4,500.0	4,403.5	4,493.3	4,421.3	18.7	16.6	127.28	334.7	594.4	405.7	372.9	32.86	12.348	
4,600.0	4,500.8	4,592.8	4,518.7	19.1	17.1	127.02	345.8	611.8	415.3	381.6	33.76	12.302	
4,700.0	4,598.1	4,692.2	4,615.9	19.6	17.5	126.78	357.0	629.2	424.9	390.2	34.66	12.261	
4,800.0	4,695.4	4,788.6	4,710.5	20.1	17.8	126.78	366.8	644.6	434.9	399.5	35.39	12.287	
4,900.0	4,792.6	4,884.7	4,805.5	20.6	18.1	127.18	374.9	657.3	445.6	409.6	36.03	12.368	
5,000.0	4,889.9	4,980.4	4,900.4	21.1	18.3	127.97	381.3	667.3	457.1	420.5	36.56	12.502	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,100.0	4,987.2	5,075.4	4,995.1	21.6	18.6	129.08	385.9	674.5	469.5	432.5	36.99	12.693	
5,200.0	5,084.5	5,169.6	5,089.0	22.1	18.7	130.49	388.8	679.1	483.0	445.7	37.32	12.943	
5,300.0	5,181.8	5,262.7	5,182.1	22.5	18.8	132.14	390.1	681.0	497.8	460.3	37.55	13.258	
5,400.0	5,279.1	5,358.6	5,278.1	23.0	19.0	133.99	390.1	681.1	513.8	476.1	37.71	13.626	
5,500.0	5,376.3	5,455.9	5,375.3	23.5	19.1	135.77	390.1	681.1	530.4	492.5	37.87	14.006	
5,600.0	5,473.6	5,553.2	5,472.6	24.0	19.2	137.44	390.1	681.1	547.4	509.4	38.03	14.395	
5,700.0	5,570.9	5,650.5	5,569.9	24.5	19.4	139.01	390.1	681.1	564.9	526.7	38.19	14.790	
5,800.0	5,668.2	5,747.8	5,667.2	25.0	19.5	140.48	390.1	681.1	582.7	544.4	38.36	15.189	
5,900.0	5,765.5	5,845.1	5,764.5	25.5	19.6	141.87	390.1	681.1	601.0	562.4	38.54	15.592	
5,921.9	5,786.8	5,866.3	5,785.8	25.6	19.7	142.17	390.1	681.1	605.0	566.4	38.58	15.680	
6,000.0	5,863.0	5,942.6	5,862.0	25.9	19.8	143.29	390.1	681.1	618.7	580.0	38.70	15.985	
6,100.0	5,961.2	6,040.8	5,960.2	26.2	19.9	144.48	390.1	681.1	633.9	595.1	38.84	16.322	
6,200.0	6,060.0	6,139.6	6,059.0	26.5	20.0	145.41	390.1	681.1	646.5	607.5	38.99	16.580	
6,300.0	6,159.3	6,238.9	6,158.3	26.7	20.2	146.11	390.1	681.1	656.4	617.2	39.16	16.760	
6,400.0	6,259.0	6,338.5	6,258.0	26.9	20.3	146.59	390.1	681.1	663.4	624.0	39.34	16.861	
6,500.0	6,358.8	6,438.4	6,357.8	27.1	20.5	146.87	390.1	681.1	667.5	628.0	39.53	16.884	
6,591.0	6,449.8	6,529.8	6,449.1	27.2	20.6	179.75	390.1	677.7	668.7	627.6	41.10	16.268	
6,600.0	6,458.8	6,538.8	6,458.0	27.2	20.6	179.84	390.1	676.7	668.7	627.5	41.15	16.251	
6,615.9	6,474.7	6,554.6	6,473.7	27.2	20.6	180.00	390.1	674.8	668.7	627.4	41.23	16.219	
6,621.0	6,479.8	6,559.6	6,478.7	27.2	20.6	-179.94	390.1	674.1	668.7	627.4	41.25	16.208	
6,650.0	6,508.8	6,588.2	6,507.0	27.3	20.6	-89.60	390.1	669.6	668.7	629.2	39.51	16.926	
6,700.0	6,558.7	6,637.2	6,554.8	27.3	20.6	-89.01	390.1	659.2	668.8	629.4	39.36	16.990	
6,750.0	6,608.1	6,685.7	6,601.4	27.3	20.5	-88.43	390.1	645.7	668.9	629.8	39.17	17.078	
6,800.0	6,657.0	6,733.8	6,646.6	27.3	20.5	-87.86	390.1	629.2	669.1	630.2	38.94	17.185	
6,850.0	6,704.9	6,781.5	6,690.1	27.2	20.4	-87.31	390.1	609.9	669.4	630.7	38.68	17.306	
6,900.0	6,751.8	6,828.7	6,732.0	27.2	20.3	-86.76	390.1	588.0	669.8	631.4	38.41	17.438	
6,950.0	6,797.4	6,875.7	6,772.0	27.1	20.2	-86.24	390.1	563.5	670.1	632.0	38.13	17.574	
7,000.0	6,841.4	6,922.2	6,810.1	27.0	20.1	-85.73	390.1	536.7	670.6	632.7	37.87	17.707	
7,050.0	6,883.6	6,968.5	6,846.1	26.9	20.0	-85.24	390.1	507.7	671.0	633.4	37.63	17.830	
7,100.0	6,923.9	7,014.4	6,879.9	26.8	19.9	-84.78	390.1	476.6	671.5	634.0	37.44	17.934	
7,150.0	6,962.0	7,060.1	6,911.5	26.7	19.9	-84.34	390.1	443.6	672.0	634.7	37.31	18.012	
7,200.0	6,997.8	7,105.4	6,940.7	26.5	19.8	-83.93	390.1	408.9	672.5	635.2	37.25	18.052	
7,250.0	7,031.0	7,150.0	6,967.3	26.4	19.8	-83.55	390.1	373.1	673.0	635.7	37.29	18.048	
7,300.0	7,061.6	7,195.5	6,992.0	26.3	19.8	-83.19	390.1	334.9	673.5	636.0	37.44	17.987	
7,350.0	7,089.3	7,240.3	7,013.9	26.1	19.9	-82.87	390.1	295.9	673.9	636.2	37.72	17.868	
7,400.0	7,114.0	7,284.8	7,033.3	26.0	20.0	-82.58	390.1	255.8	674.3	636.2	38.12	17.688	
7,450.0	7,135.7	7,329.2	7,050.0	25.9	20.1	-82.32	390.1	214.7	674.8	636.1	38.67	17.448	
7,500.0	7,154.2	7,373.5	7,064.2	25.7	20.4	-82.09	390.1	172.8	675.1	635.7	39.36	17.152	
7,550.0	7,169.4	7,417.6	7,075.7	25.6	20.7	-81.90	390.1	130.2	675.4	635.2	40.19	16.806	
7,600.0	7,181.2	7,461.7	7,084.5	25.5	21.1	-81.74	390.1	87.0	675.7	634.5	41.15	16.419	
7,650.0	7,189.6	7,505.6	7,090.7	25.4	21.6	-81.62	390.1	43.5	675.9	633.7	42.24	16.001	
7,700.0	7,194.5	7,550.0	7,094.2	25.3	22.1	-81.54	390.1	-0.7	676.0	632.6	43.44	15.561	
7,748.9	7,196.0	7,593.4	7,095.0	25.2	22.7	-81.49	390.1	-44.1	676.1	631.4	44.72	15.117	
7,800.0	7,195.8	7,644.5	7,094.9	25.1	23.5	-81.50	390.1	-95.2	676.1	629.8	46.26	14.616	
7,900.0	7,195.4	7,744.5	7,094.6	25.5	25.2	-81.51	390.1	-195.2	676.1	626.5	49.54	13.646	
8,000.0	7,195.0	7,844.5	7,094.4	27.5	27.1	-81.53	390.1	-295.2	676.1	622.8	53.21	12.706	
8,100.0	7,194.6	7,944.5	7,094.1	29.5	29.2	-81.54	390.1	-395.2	676.0	618.8	57.18	11.823	
8,200.0	7,194.1	8,044.5	7,093.9	31.7	31.3	-81.56	390.1	-495.2	676.0	614.6	61.40	11.010	
8,300.0	7,193.7	8,144.5	7,093.6	33.9	33.6	-81.57	390.1	-595.2	676.0	610.2	65.82	10.270	
8,400.0	7,193.3	8,244.5	7,093.4	36.3	35.9	-81.58	390.1	-695.2	676.0	605.5	70.40	9.601	
8,500.0	7,192.9	8,344.5	7,093.2	38.6	38.3	-81.60	390.1	-795.2	675.9	600.8	75.12	8.998	
8,600.0	7,192.5	8,444.5	7,092.9	41.1	40.8	-81.61	390.1	-895.2	675.9	596.0	79.94	8.455	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - SHARON 210-204 - ORIGINAL WELLBORE - PROPOSAL #1												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
8,700.0	7,192.1	8,544.5	7,092.7	43.5	43.3	-81.63	390.1	-995.2	675.9	591.0	84.86	7.965	
8,800.0	7,191.7	8,644.5	7,092.4	46.0	45.8	-81.64	390.1	-1,095.2	675.9	586.0	89.85	7.522	
8,900.0	7,191.3	8,744.5	7,092.2	48.6	48.4	-81.66	390.1	-1,195.2	675.8	580.9	94.90	7.121	
9,000.0	7,190.9	8,844.5	7,091.9	51.1	51.0	-81.67	390.1	-1,295.2	675.8	575.8	100.01	6.757	
9,100.0	7,190.4	8,944.5	7,091.7	53.7	53.6	-81.68	390.1	-1,395.2	675.8	570.6	105.17	6.426	
9,200.0	7,190.0	9,044.5	7,091.5	56.3	56.2	-81.70	390.1	-1,495.2	675.8	565.4	110.37	6.123	
9,300.0	7,189.6	9,144.5	7,091.2	58.9	58.9	-81.71	390.1	-1,595.2	675.7	560.1	115.60	5.846	
9,400.0	7,189.2	9,244.5	7,091.0	61.6	61.5	-81.73	390.1	-1,695.2	675.7	554.8	120.86	5.591	
9,500.0	7,188.8	9,344.5	7,090.7	64.2	64.2	-81.74	390.1	-1,795.2	675.7	549.5	126.15	5.356	
9,600.0	7,188.4	9,444.5	7,090.5	66.9	66.9	-81.75	390.1	-1,895.2	675.7	544.2	131.46	5.140	
9,700.0	7,188.0	9,544.5	7,090.2	69.6	69.6	-81.77	390.1	-1,995.2	675.6	538.8	136.79	4.939	
9,800.0	7,187.6	9,644.5	7,090.0	72.3	72.3	-81.78	390.1	-2,095.2	675.6	533.5	142.14	4.753	
9,900.0	7,187.1	9,744.5	7,089.8	74.9	75.0	-81.80	390.1	-2,195.2	675.6	528.1	147.51	4.580	
10,000.0	7,186.7	9,844.5	7,089.5	77.6	77.7	-81.81	390.1	-2,295.2	675.6	522.7	152.89	4.419	
10,100.0	7,186.3	9,944.5	7,089.3	80.4	80.4	-81.83	390.1	-2,395.2	675.5	517.3	158.28	4.268	
10,200.0	7,185.9	10,044.5	7,089.0	83.1	83.2	-81.84	390.1	-2,495.2	675.5	511.8	163.69	4.127	
10,300.0	7,185.5	10,144.5	7,088.8	85.8	85.9	-81.85	390.1	-2,595.2	675.5	506.4	169.11	3.994	
10,400.0	7,185.1	10,244.5	7,088.5	88.5	88.6	-81.87	390.1	-2,695.2	675.5	500.9	174.53	3.870	
10,500.0	7,184.7	10,344.5	7,088.3	91.2	91.4	-81.88	390.1	-2,795.2	675.4	495.5	179.97	3.753	
10,600.0	7,184.3	10,444.5	7,088.1	94.0	94.1	-81.90	390.1	-2,895.2	675.4	490.0	185.41	3.643	
10,700.0	7,183.9	10,544.5	7,087.8	96.7	96.9	-81.91	390.1	-2,995.2	675.4	484.5	190.87	3.539	
10,800.0	7,183.4	10,644.5	7,087.6	99.4	99.6	-81.93	390.1	-3,095.2	675.4	479.0	196.33	3.440	
10,900.0	7,183.0	10,744.5	7,087.3	102.2	102.4	-81.94	390.1	-3,195.2	675.4	473.6	201.79	3.347	
11,000.0	7,182.6	10,844.5	7,087.1	104.9	105.2	-81.95	390.1	-3,295.2	675.3	468.1	207.26	3.258	
11,100.0	7,182.2	10,944.5	7,086.8	107.7	107.9	-81.97	390.1	-3,395.2	675.3	462.6	212.74	3.174	
11,200.0	7,181.8	11,044.5	7,086.6	110.4	110.7	-81.98	390.1	-3,495.2	675.3	457.1	218.22	3.094	
11,300.0	7,181.4	11,144.5	7,086.4	113.2	113.4	-82.00	390.1	-3,595.2	675.3	451.5	223.71	3.018	
11,400.0	7,181.0	11,244.5	7,086.1	116.0	116.2	-82.01	390.1	-3,695.2	675.2	446.0	229.20	2.946	
11,500.0	7,180.6	11,344.5	7,085.9	118.7	119.0	-82.03	390.1	-3,795.2	675.2	440.5	234.70	2.877	
11,600.0	7,180.1	11,444.5	7,085.6	121.5	121.8	-82.04	390.1	-3,895.2	675.2	435.0	240.20	2.811	
11,700.0	7,179.7	11,544.5	7,085.4	124.3	124.5	-82.05	390.1	-3,995.2	675.2	429.5	245.70	2.748	
11,800.0	7,179.3	11,644.7	7,085.1	127.0	127.3	-82.07	390.1	-4,095.4	675.1	423.9	251.21	2.687	
11,848.5	7,179.1	11,693.2	7,085.0	128.4	128.7	-82.07	390.2	-4,143.9	675.1	421.2	253.88	2.659	
11,900.0	7,178.9	11,702.4	7,085.0	129.8	128.9	-82.08	390.2	-4,153.1	676.4	420.8	255.55	2.647 SF	
12,000.0	7,178.5	11,702.4	7,085.0	132.6	128.9	-82.08	390.2	-4,153.1	689.8	431.5	258.31	2.671	
12,100.0	7,178.1	11,702.4	7,085.0	135.3	128.9	-82.08	390.2	-4,153.1	717.1	456.1	261.06	2.747	
12,200.0	7,177.7	11,702.4	7,085.0	138.1	128.9	-82.08	390.2	-4,153.1	756.7	492.9	263.81	2.868	
12,300.0	7,177.2	11,702.4	7,085.0	140.9	128.9	-82.08	390.2	-4,153.1	806.9	540.3	266.56	3.027	
12,400.0	7,176.8	11,702.4	7,085.0	143.7	128.9	-82.08	390.2	-4,153.1	865.7	596.3	269.32	3.214	
12,500.0	7,176.4	11,702.4	7,085.0	146.4	128.9	-82.08	390.2	-4,153.1	931.5	659.5	272.08	3.424	
12,600.0	7,176.0	11,702.4	7,085.0	149.2	128.9	-82.08	390.2	-4,153.1	1,003.1	728.2	274.83	3.650	
12,700.0	7,175.6	11,702.4	7,085.0	152.0	128.9	-82.08	390.2	-4,153.1	1,079.1	801.5	277.59	3.887	
12,800.0	7,175.2	11,702.4	7,085.0	154.8	128.9	-82.08	390.2	-4,153.1	1,158.8	878.5	280.35	4.133	
12,900.0	7,174.8	11,702.4	7,085.0	157.5	128.9	-82.08	390.2	-4,153.1	1,241.5	958.4	283.11	4.385	
13,000.0	7,174.4	11,702.4	7,085.0	160.3	128.9	-82.08	390.2	-4,153.1	1,326.5	1,040.6	285.87	4.640	
13,100.0	7,173.9	11,702.4	7,085.0	163.1	128.9	-82.08	390.2	-4,153.1	1,413.5	1,124.9	288.63	4.897	
13,200.0	7,173.5	11,702.4	7,085.0	165.9	128.9	-82.08	390.2	-4,153.1	1,502.1	1,210.7	291.40	5.155	
13,300.0	7,173.1	11,702.4	7,085.0	168.7	128.9	-82.08	390.2	-4,153.1	1,592.1	1,297.9	294.16	5.412	
13,400.0	7,172.7	11,702.4	7,085.0	171.5	128.9	-82.08	390.2	-4,153.1	1,683.2	1,386.3	296.92	5.669	
13,500.0	7,172.3	11,702.4	7,085.0	174.3	128.9	-82.08	390.2	-4,153.1	1,775.3	1,475.6	299.69	5.924	
13,600.0	7,171.9	11,702.4	7,085.0	177.0	128.9	-82.08	390.2	-4,153.1	1,868.1	1,565.7	302.45	6.177	
13,700.0	7,171.5	11,702.4	7,085.0	179.8	128.9	-82.07	390.2	-4,153.1	1,961.7	1,656.5	305.22	6.427	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - SHARON 210-204 - ORIGINAL WELLBORE - PROPOSAL #1												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	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
13,800.0	7,171.0	11,702.4	7,085.0	182.6	128.9	-82.07	390.2	-4,153.1	2,055.9	1,747.9	307.98	6.675	
13,900.0	7,170.6	11,702.4	7,085.0	185.4	128.9	-82.07	390.2	-4,153.1	2,150.6	1,839.8	310.75	6.921	
14,000.0	7,170.2	11,702.4	7,085.0	188.2	128.9	-82.07	390.2	-4,153.1	2,245.8	1,932.2	313.52	7.163	
14,100.0	7,169.8	11,702.4	7,085.0	191.0	128.9	-82.07	390.2	-4,153.1	2,341.3	2,025.0	316.28	7.403	
14,200.0	7,169.4	11,702.4	7,085.0	193.8	128.9	-82.07	390.2	-4,153.1	2,437.2	2,118.2	319.05	7.639	
14,295.0	7,169.0	11,702.4	7,085.0	196.4	128.9	-82.07	390.2	-4,153.1	2,528.6	2,206.9	321.68	7.861	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 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	-178.96	-15.3	-0.3	15.3				
100.0	100.0	100.0	100.0	0.1	0.1	-178.96	-15.3	-0.3	15.3	15.1	0.19	78.712	
200.0	200.0	200.0	200.0	0.3	0.3	-178.96	-15.3	-0.3	15.3	14.7	0.64	23.765	
300.0	300.0	300.0	300.0	0.5	0.5	-178.96	-15.3	-0.3	15.3	14.2	1.09	13.995	
400.0	400.0	400.0	400.0	0.8	0.8	-178.96	-15.3	-0.3	15.3	13.8	1.54	9.918	
500.0	500.0	500.0	500.0	1.0	1.0	-178.96	-15.3	-0.3	15.3	13.3	1.99	7.680 CC	
600.0	600.0	600.0	600.0	1.2	1.2	151.62	-15.3	-0.3	16.8	14.4	2.44	6.886	
700.0	699.8	700.5	700.4	1.4	1.4	155.87	-13.9	0.8	20.0	17.2	2.89	6.936	
800.0	799.5	801.1	800.9	1.7	1.7	158.01	-9.8	4.2	23.5	20.2	3.34	7.042	
900.0	898.7	901.8	901.2	1.9	1.9	158.81	-3.0	9.7	27.1	23.3	3.79	7.151	
1,000.0	997.5	1,002.6	1,001.3	2.2	2.2	158.72	6.6	17.5	30.9	26.6	4.26	7.244	
1,100.0	1,095.6	1,103.6	1,101.0	2.6	2.5	158.02	19.0	27.5	34.8	30.0	4.76	7.309	
1,169.1	1,163.0	1,173.4	1,169.6	2.8	2.7	157.28	29.1	35.7	37.5	32.4	5.12	7.331	
1,200.0	1,193.1	1,204.6	1,200.1	3.0	2.8	156.82	34.1	39.7	38.7	33.4	5.29	7.302	
1,300.0	1,290.4	1,304.5	1,297.8	3.4	3.2	155.21	50.2	52.8	41.9	36.1	5.88	7.127	
1,400.0	1,387.7	1,404.4	1,395.6	3.8	3.6	153.84	66.4	65.9	45.2	38.7	6.50	6.959	
1,500.0	1,484.9	1,504.4	1,493.4	4.3	4.0	152.66	82.5	79.0	48.6	41.4	7.14	6.802	
1,600.0	1,582.2	1,604.3	1,591.1	4.7	4.4	151.63	98.6	92.1	51.9	44.1	7.80	6.657	
1,700.0	1,679.5	1,704.3	1,688.9	5.2	4.8	150.72	114.8	105.2	55.3	46.8	8.47	6.525	
1,800.0	1,776.8	1,804.2	1,786.6	5.7	5.2	149.92	130.9	118.3	58.7	49.5	9.16	6.404	
1,900.0	1,874.1	1,904.1	1,884.4	6.1	5.6	149.21	147.1	131.4	62.0	52.2	9.86	6.295	
2,000.0	1,971.4	2,004.1	1,982.1	6.6	6.1	148.57	163.2	144.5	65.4	54.9	10.56	6.196	
2,100.0	2,068.7	2,104.0	2,079.9	7.1	6.5	147.99	179.4	157.6	68.8	57.6	11.28	6.105	
2,200.0	2,165.9	2,204.0	2,177.6	7.6	6.9	147.47	195.5	170.6	72.2	60.2	11.99	6.023	
2,300.0	2,263.2	2,303.9	2,275.4	8.0	7.4	146.99	211.7	183.7	75.7	62.9	12.72	5.948	
2,400.0	2,360.5	2,403.8	2,373.1	8.5	7.8	146.55	227.8	196.8	79.1	65.6	13.45	5.879	
2,500.0	2,457.8	2,503.8	2,470.9	9.0	8.3	146.16	243.9	209.9	82.5	68.3	14.19	5.815	
2,600.0	2,555.1	2,603.7	2,568.7	9.5	8.7	145.79	260.1	223.0	85.9	71.0	14.92	5.757	
2,700.0	2,652.4	2,703.7	2,666.4	10.0	9.1	145.45	276.2	236.1	89.3	73.7	15.66	5.704	
2,800.0	2,749.7	2,803.6	2,764.2	10.4	9.6	145.14	292.4	249.2	92.8	76.4	16.41	5.654	
2,900.0	2,846.9	2,903.5	2,861.9	10.9	10.0	144.85	308.5	262.3	96.2	79.1	17.16	5.608	
3,000.0	2,944.2	3,003.5	2,959.7	11.4	10.5	144.57	324.7	275.4	99.6	81.7	17.90	5.565	
3,100.0	3,041.5	3,103.4	3,057.4	11.9	10.9	144.32	340.8	288.5	103.1	84.4	18.66	5.526	
3,200.0	3,138.8	3,203.4	3,155.2	12.4	11.3	144.08	357.0	301.6	106.5	87.1	19.41	5.488	
3,300.0	3,236.1	3,303.3	3,252.9	12.8	11.8	143.86	373.1	314.6	110.0	89.8	20.16	5.454	
3,400.0	3,333.4	3,403.2	3,350.7	13.3	12.2	143.65	389.2	327.7	113.4	92.5	20.92	5.421	
3,500.0	3,430.6	3,503.2	3,448.4	13.8	12.7	143.46	405.4	340.8	116.9	95.2	21.68	5.391	
3,600.0	3,527.9	3,603.1	3,546.2	14.3	13.1	143.27	421.5	353.9	120.3	97.9	22.43	5.362	
3,700.0	3,625.2	3,703.1	3,644.0	14.8	13.6	143.10	437.7	367.0	123.7	100.6	23.19	5.335	
3,800.0	3,722.5	3,803.0	3,741.7	15.3	14.0	142.93	453.8	380.1	127.2	103.2	23.95	5.310	
3,900.0	3,819.8	3,902.9	3,839.5	15.7	14.5	142.78	470.0	393.2	130.6	105.9	24.72	5.286	
4,000.0	3,917.1	4,002.9	3,937.2	16.2	14.9	142.63	486.1	406.3	134.1	108.6	25.48	5.263	
4,100.0	4,014.4	4,102.8	4,035.0	16.7	15.4	142.49	502.3	419.4	137.5	111.3	26.24	5.241	
4,200.0	4,111.6	4,202.8	4,132.7	17.2	15.8	142.35	518.4	432.5	141.0	114.0	27.01	5.221	
4,300.0	4,208.9	4,302.7	4,230.5	17.7	16.2	142.22	534.5	445.5	144.4	116.7	27.77	5.202	
4,400.0	4,306.2	4,402.6	4,328.2	18.2	16.7	142.10	550.7	458.6	147.9	119.4	28.54	5.183	
4,500.0	4,403.5	4,502.6	4,426.0	18.7	17.1	141.99	566.8	471.7	151.4	122.1	29.30	5.166	
4,600.0	4,500.8	4,602.5	4,523.7	19.1	17.6	141.88	583.0	484.8	154.8	124.7	30.07	5.149	
4,700.0	4,598.1	4,702.5	4,621.5	19.6	18.0	141.77	599.1	497.9	158.3	127.4	30.83	5.133	
4,800.0	4,695.4	4,802.4	4,719.3	20.1	18.5	141.67	615.3	511.0	161.7	130.1	31.60	5.118	
4,900.0	4,792.6	4,902.3	4,817.0	20.6	18.9	141.57	631.4	524.1	165.2	132.8	32.37	5.103	
5,000.0	4,889.9	5,002.3	4,914.8	21.1	19.4	141.48	647.6	537.2	168.6	135.5	33.14	5.089	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - SHARON 210-214 - ORIGINAL WELLBORE - PROPOSAL #1												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Tooface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,100.0	4,987.2	5,102.2	5,012.5	21.6	19.8	141.39	663.7	550.3	172.1	138.2	33.90	5.076	
5,200.0	5,084.5	5,202.2	5,110.3	22.1	20.3	141.30	679.8	563.4	175.5	140.9	34.67	5.063	
5,300.0	5,181.8	5,302.1	5,208.0	22.5	20.7	141.22	696.0	576.4	179.0	143.6	35.44	5.050	
5,400.0	5,279.1	5,402.0	5,305.8	23.0	21.2	141.14	712.1	589.5	182.5	146.2	36.21	5.039	
5,500.0	5,376.3	5,502.0	5,403.5	23.5	21.6	141.06	728.3	602.6	185.9	148.9	36.98	5.027	
5,600.0	5,473.6	5,601.9	5,501.3	24.0	22.1	140.99	744.4	615.7	189.4	151.6	37.75	5.016	
5,700.0	5,570.9	5,701.9	5,599.0	24.5	22.5	140.92	760.6	628.8	192.8	154.3	38.52	5.006	
5,800.0	5,668.2	5,800.0	5,695.1	25.0	22.9	140.90	776.2	641.5	196.5	157.2	39.25	5.006	
5,900.0	5,765.5	5,895.1	5,788.7	25.5	23.2	141.42	789.4	652.2	202.1	162.4	39.71	5.088	
5,921.9	5,786.8	5,915.9	5,809.2	25.6	23.3	141.62	792.0	654.3	203.6	163.8	39.78	5.118	
6,000.0	5,863.0	5,989.9	5,882.5	25.9	23.5	142.41	800.1	660.9	209.2	169.2	39.97	5.234	
6,100.0	5,961.2	6,084.5	5,976.5	26.2	23.7	143.41	808.4	667.6	216.1	176.0	40.11	5.387	
6,200.0	6,060.0	6,178.9	6,070.6	26.5	23.9	144.39	814.3	672.4	222.6	182.4	40.18	5.540	
6,300.0	6,159.3	6,273.1	6,164.6	26.7	24.1	145.35	817.7	675.2	228.8	188.6	40.19	5.694	
6,400.0	6,259.0	6,367.5	6,259.0	26.9	24.2	146.30	818.8	676.0	234.7	194.6	40.13	5.849	
6,500.0	6,358.8	6,467.3	6,358.8	27.1	24.3	147.00	818.8	676.0	238.8	198.7	40.12	5.951	
6,591.0	6,449.8	6,558.1	6,449.5	27.2	24.4	-179.26	818.8	671.7	240.0	194.0	46.03	5.214	
6,600.0	6,458.8	6,567.0	6,458.3	27.2	24.4	-179.01	818.8	670.7	240.0	193.9	46.12	5.204	
6,621.0	6,479.8	6,587.6	6,478.7	27.2	24.4	-178.34	818.8	667.8	240.1	193.7	46.36	5.179	
6,650.0	6,508.8	6,616.0	6,506.7	27.3	24.4	-87.31	818.8	663.0	240.3	201.0	39.27	6.118	
6,700.0	6,558.7	6,664.4	6,553.8	27.3	24.3	-85.56	818.8	652.2	240.7	202.0	38.70	6.220	
6,750.0	6,608.1	6,712.3	6,599.8	27.3	24.3	-83.85	818.8	638.4	241.4	203.3	38.11	6.334	
6,800.0	6,657.0	6,759.9	6,644.3	27.3	24.2	-82.18	818.8	621.8	242.3	204.8	37.52	6.459	
6,850.0	6,704.9	6,807.0	6,687.2	27.2	24.1	-80.56	818.8	602.4	243.4	206.4	36.93	6.590	
6,900.0	6,751.8	6,853.6	6,728.3	27.2	24.1	-79.01	818.8	580.4	244.6	208.2	36.36	6.726	
6,950.0	6,797.4	6,900.0	6,767.7	27.1	24.0	-77.52	818.8	556.0	245.9	210.1	35.82	6.865	
7,000.0	6,841.4	6,945.9	6,805.1	27.0	23.8	-76.11	818.8	529.3	247.3	212.0	35.33	7.001	
7,050.0	6,883.6	6,991.6	6,840.5	26.9	23.7	-74.78	818.8	500.5	248.8	214.0	34.88	7.133	
7,100.0	6,923.9	7,036.9	6,873.8	26.8	23.6	-73.53	818.8	469.7	250.4	215.9	34.51	7.256	
7,150.0	6,962.0	7,082.0	6,904.8	26.7	23.5	-72.37	818.8	437.0	252.0	217.7	34.20	7.366	
7,200.0	6,997.8	7,126.8	6,933.6	26.5	23.4	-71.29	818.8	402.7	253.5	219.5	33.98	7.459	
7,250.0	7,031.0	7,171.3	6,960.1	26.4	23.3	-70.31	818.8	366.9	255.0	221.2	33.86	7.530	
7,300.0	7,061.6	7,215.7	6,984.1	26.3	23.1	-69.42	818.8	329.6	256.5	222.6	33.86	7.575	
7,350.0	7,089.3	7,259.9	7,005.8	26.1	23.0	-68.62	818.8	291.1	257.8	223.9	33.97	7.590	
7,400.0	7,114.0	7,303.9	7,024.9	26.0	22.9	-67.91	818.8	251.5	259.1	224.9	34.22	7.571	
7,450.0	7,135.7	7,350.0	7,042.3	25.9	22.8	-67.27	818.8	208.8	260.2	225.6	34.62	7.516	
7,500.0	7,154.2	7,391.4	7,055.6	25.7	22.8	-66.77	818.8	169.6	261.2	226.0	35.17	7.427	
7,550.0	7,169.4	7,435.0	7,067.1	25.6	22.7	-66.35	818.8	127.5	262.0	226.2	35.87	7.305	
7,600.0	7,181.2	7,478.6	7,076.0	25.5	22.7	-66.01	818.8	84.9	262.7	226.0	36.72	7.154	
7,650.0	7,189.6	7,522.0	7,082.3	25.4	22.7	-65.77	818.8	41.9	263.2	225.5	37.71	6.979	
7,700.0	7,194.5	7,565.4	7,085.9	25.3	22.8	-65.63	818.8	-1.3	263.5	224.7	38.83	6.786	
7,748.9	7,196.0	7,608.3	7,087.0	25.2	23.0	-65.57	818.8	-44.1	263.6	223.6	40.04	6.583	
7,800.0	7,195.8	7,659.3	7,086.9	25.1	23.6	-65.60	818.8	-95.2	263.5	222.1	41.42	6.362	
7,900.0	7,195.4	7,759.3	7,086.7	25.5	25.1	-65.64	818.8	-195.2	263.5	219.0	44.42	5.931	
8,000.0	7,195.0	7,859.3	7,086.5	27.5	27.0	-65.68	818.8	-295.2	263.4	215.6	47.78	5.512	
8,100.0	7,194.6	7,959.3	7,086.3	29.5	29.0	-65.72	818.8	-395.2	263.3	211.8	51.45	5.117	
8,200.0	7,194.1	8,059.3	7,086.1	31.7	31.2	-65.77	818.8	-495.2	263.2	207.8	55.36	4.754	
8,300.0	7,193.7	8,159.3	7,085.9	33.9	33.5	-65.81	818.8	-595.2	263.1	203.6	59.46	4.425	
8,400.0	7,193.3	8,259.3	7,085.7	36.3	35.8	-65.85	818.8	-695.2	263.0	199.3	63.72	4.127	
8,500.0	7,192.9	8,359.3	7,085.5	38.6	38.2	-65.90	818.8	-795.2	262.9	194.8	68.11	3.860	
8,600.0	7,192.5	8,459.3	7,085.3	41.1	40.7	-65.94	818.8	-895.2	262.8	190.2	72.61	3.620	
8,700.0	7,192.1	8,559.3	7,085.2	43.5	43.1	-65.98	818.8	-995.2	262.7	185.6	77.20	3.404	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - SHARON 210-214 - ORIGINAL WELLBORE - PROPOSAL #1												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
8,800.0	7,191.7	8,659.3	7,085.0	46.0	45.7	-66.03	818.8	-1,095.2	262.7	180.8	81.86	3.209	
8,900.0	7,191.3	8,759.3	7,084.8	48.6	48.2	-66.07	818.8	-1,195.2	262.6	176.0	86.58	3.033	
9,000.0	7,190.9	8,859.3	7,084.6	51.1	50.8	-66.11	818.8	-1,295.2	262.5	171.1	91.36	2.873	
9,100.0	7,190.4	8,959.3	7,084.4	53.7	53.4	-66.16	818.8	-1,395.2	262.4	166.2	96.18	2.728	
9,200.0	7,190.0	9,059.3	7,084.2	56.3	56.0	-66.20	818.8	-1,495.2	262.3	161.3	101.04	2.596	
9,300.0	7,189.6	9,159.3	7,084.0	58.9	58.7	-66.24	818.8	-1,595.2	262.2	156.3	105.94	2.475	
9,400.0	7,189.2	9,259.3	7,083.8	61.6	61.3	-66.29	818.8	-1,695.2	262.1	151.3	110.87	2.364	
9,500.0	7,188.8	9,359.3	7,083.6	64.2	64.0	-66.33	818.8	-1,795.2	262.1	146.2	115.82	2.263	
9,600.0	7,188.4	9,459.3	7,083.4	66.9	66.6	-66.37	818.8	-1,895.2	262.0	141.2	120.80	2.169	
9,700.0	7,188.0	9,559.3	7,083.2	69.6	69.3	-66.42	818.8	-1,995.2	261.9	136.1	125.80	2.082	
9,800.0	7,187.6	9,659.3	7,083.0	72.3	72.0	-66.46	818.8	-2,095.2	261.8	131.0	130.82	2.001	
9,900.0	7,187.1	9,759.3	7,082.8	74.9	74.7	-66.50	818.8	-2,195.2	261.7	125.8	135.86	1.926	
10,000.0	7,186.7	9,859.3	7,082.6	77.6	77.4	-66.55	818.8	-2,295.2	261.6	120.7	140.92	1.857	
10,100.0	7,186.3	9,959.3	7,082.4	80.4	80.1	-66.59	818.8	-2,395.2	261.5	115.6	145.99	1.792	
10,200.0	7,185.9	10,059.3	7,082.2	83.1	82.9	-66.63	818.8	-2,495.2	261.5	110.4	151.07	1.731	
10,300.0	7,185.5	10,159.3	7,082.0	85.8	85.6	-66.68	818.8	-2,595.2	261.4	105.2	156.17	1.674	
10,400.0	7,185.1	10,259.3	7,081.8	88.5	88.3	-66.72	818.8	-2,695.2	261.3	100.0	161.28	1.620	
10,500.0	7,184.7	10,359.3	7,081.6	91.2	91.1	-66.76	818.8	-2,795.2	261.2	94.8	166.39	1.570	
10,600.0	7,184.3	10,459.3	7,081.4	94.0	93.8	-66.81	818.8	-2,895.2	261.1	89.6	171.52	1.522	
10,700.0	7,183.9	10,559.3	7,081.2	96.7	96.5	-66.85	818.8	-2,995.2	261.0	84.4	176.66	1.478 Level 3	
10,800.0	7,183.4	10,659.3	7,081.0	99.4	99.3	-66.89	818.8	-3,095.2	261.0	79.1	181.81	1.435 Level 3	
10,900.0	7,183.0	10,759.3	7,080.8	102.2	102.0	-66.94	818.8	-3,195.2	260.9	73.9	186.97	1.395 Level 3	
11,000.0	7,182.6	10,859.3	7,080.6	104.9	104.8	-66.98	818.8	-3,295.2	260.8	68.7	192.13	1.357 Level 3	
11,100.0	7,182.2	10,959.3	7,080.4	107.7	107.6	-67.02	818.8	-3,395.2	260.7	63.4	197.30	1.321 Level 3	
11,200.0	7,181.8	11,059.3	7,080.2	110.4	110.3	-67.07	818.8	-3,495.2	260.6	58.1	202.48	1.287 Level 3	
11,300.0	7,181.4	11,159.3	7,080.0	113.2	113.1	-67.11	818.8	-3,595.2	260.5	52.9	207.67	1.255 Level 3	
11,400.0	7,181.0	11,259.3	7,079.8	116.0	115.8	-67.15	818.8	-3,695.2	260.5	47.6	212.86	1.224 Level 2	
11,500.0	7,180.6	11,359.3	7,079.6	118.7	118.6	-67.20	818.8	-3,795.2	260.4	42.3	218.06	1.194 Level 2	
11,600.0	7,180.1	11,459.3	7,079.4	121.5	121.4	-67.24	818.8	-3,895.2	260.3	37.0	223.27	1.166 Level 2	
11,700.0	7,179.7	11,559.3	7,079.2	124.3	124.1	-67.28	818.8	-3,995.2	260.2	31.7	228.48	1.139 Level 2	
11,800.0	7,179.3	11,659.3	7,079.0	127.0	126.9	-67.33	818.8	-4,095.2	260.1	26.4	233.69	1.113 Level 2	
11,900.0	7,178.9	11,759.3	7,078.8	129.8	129.7	-67.37	818.8	-4,195.2	260.1	21.1	238.92	1.088 Level 2	
12,000.0	7,178.5	11,859.3	7,078.6	132.6	132.5	-67.41	818.8	-4,295.2	260.0	15.8	244.15	1.065 Level 2	
12,100.0	7,178.1	11,959.3	7,078.4	135.3	135.2	-67.46	818.8	-4,395.2	259.9	10.5	249.38	1.042 Level 2	
12,200.0	7,177.7	12,059.3	7,078.2	138.1	138.0	-67.50	818.8	-4,495.2	259.8	5.2	254.62	1.020 Level 2	
12,300.0	7,177.2	12,159.3	7,078.0	140.9	140.8	-67.54	818.8	-4,595.2	259.7	-0.1	259.86	0.999 Level 1	
12,400.0	7,176.8	12,259.3	7,077.8	143.7	143.6	-67.59	818.8	-4,695.2	259.7	-5.5	265.11	0.979 Level 1	
12,500.0	7,176.4	12,359.3	7,077.6	146.4	146.4	-67.63	818.8	-4,795.2	259.6	-10.8	270.36	0.960 Level 1	
12,600.0	7,176.0	12,459.3	7,077.4	149.2	149.1	-67.67	818.8	-4,895.2	259.5	-16.1	275.62	0.941 Level 1	
12,700.0	7,175.6	12,559.3	7,077.2	152.0	151.9	-67.72	818.8	-4,995.2	259.4	-21.5	280.88	0.924 Level 1	
12,800.0	7,175.2	12,659.3	7,077.0	154.8	154.7	-67.76	818.8	-5,095.2	259.3	-26.8	286.15	0.906 Level 1	
12,900.0	7,174.8	12,759.3	7,076.8	157.5	157.5	-67.81	818.8	-5,195.2	259.3	-32.2	291.42	0.890 Level 1	
13,000.0	7,174.4	12,859.3	7,076.6	160.3	160.3	-67.85	818.8	-5,295.2	259.2	-37.5	296.69	0.874 Level 1	
13,100.0	7,173.9	12,959.3	7,076.4	163.1	163.1	-67.89	818.8	-5,395.2	259.1	-42.9	301.97	0.858 Level 1	
13,200.0	7,173.5	13,059.3	7,076.2	165.9	165.8	-67.94	818.8	-5,495.2	259.0	-48.2	307.26	0.843 Level 1	
13,300.0	7,173.1	13,159.3	7,076.0	168.7	168.6	-67.98	818.8	-5,595.2	258.9	-53.6	312.54	0.829 Level 1	
13,400.0	7,172.7	13,259.3	7,075.8	171.5	171.4	-68.02	818.8	-5,695.2	258.9	-59.0	317.84	0.814 Level 1	
13,500.0	7,172.3	13,359.3	7,075.6	174.3	174.2	-68.07	818.8	-5,795.2	258.8	-64.3	323.13	0.801 Level 1	
13,600.0	7,171.9	13,459.3	7,075.4	177.0	177.0	-68.11	818.8	-5,895.2	258.7	-69.7	328.43	0.788 Level 1	
13,700.0	7,171.5	13,559.3	7,075.2	179.8	179.8	-68.15	818.8	-5,995.2	258.6	-75.1	333.73	0.775 Level 1	
13,800.0	7,171.0	13,659.3	7,075.0	182.6	182.6	-68.20	818.8	-6,095.2	258.6	-80.5	339.04	0.763 Level 1	
13,900.0	7,170.6	13,759.3	7,074.8	185.4	185.4	-68.24	818.8	-6,195.2	258.5	-85.9	344.35	0.751 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 SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - SHARON 210-214 - ORIGINAL WELLBORE - PROPOSAL #1												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	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
14,000.0	7,170.2	13,859.3	7,074.6	188.2	188.2	-68.28	818.8	-6,295.2	258.4	-91.2	349.66	0.739	Level 1
14,100.0	7,169.8	13,959.3	7,074.4	191.0	191.0	-68.33	818.8	-6,395.2	258.3	-96.6	354.98	0.728	Level 1
14,200.0	7,169.4	14,059.3	7,074.2	193.8	193.7	-68.37	818.8	-6,495.2	258.3	-102.0	360.30	0.717	Level 1
14,295.0	7,169.0	14,154.2	7,074.0	196.4	196.4	-68.41	818.8	-6,590.1	258.2	-107.2	365.35	0.707	Level 1, ES, SF

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - SHARON 210-234 - ORIGINAL WELLBORE - PROPOSAL #1												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	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	-179.57	-75.0	-0.6	75.0				
100.0	100.0	99.0	99.0	0.1	0.1	-179.57	-75.0	-0.6	75.0	74.8	0.19	387.906	
200.0	200.0	199.0	199.0	0.3	0.3	-179.57	-75.0	-0.6	75.0	74.4	0.64	116.939	
300.0	300.0	299.0	299.0	0.5	0.5	-179.57	-75.0	-0.6	75.0	73.9	1.09	68.766	
400.0	400.0	399.0	399.0	0.8	0.8	-179.57	-75.0	-0.6	75.0	73.5	1.54	48.703	
500.0	500.0	499.0	499.0	1.0	1.0	-179.57	-75.0	-0.6	75.0	73.1	1.99	37.703 CC, ES	
600.0	600.0	598.7	598.7	1.2	1.2	147.32	-75.2	1.1	76.7	74.2	2.43	31.601	
700.0	699.8	698.3	698.1	1.4	1.4	145.64	-75.7	6.3	81.6	78.8	2.86	28.513	
800.0	799.5	797.4	796.9	1.7	1.6	143.22	-76.5	14.8	90.0	86.7	3.33	27.067	
900.0	898.7	896.0	894.7	1.9	1.9	140.50	-77.7	26.6	101.9	98.1	3.83	26.634	
1,000.0	997.5	993.8	991.3	2.2	2.2	137.78	-79.2	41.7	117.4	113.0	4.38	26.809	
1,100.0	1,095.6	1,090.6	1,086.5	2.6	2.5	135.27	-80.9	59.8	136.5	131.5	5.00	27.316	
1,169.1	1,163.0	1,157.9	1,152.2	2.8	2.8	133.89	-82.3	73.7	151.6	146.1	5.46	27.748	
1,200.0	1,193.1	1,188.0	1,181.7	3.0	2.9	133.54	-82.9	79.9	158.6	152.9	5.68	27.929	
1,300.0	1,290.4	1,285.3	1,276.9	3.4	3.3	132.60	-84.8	100.1	181.4	175.0	6.40	28.335	
1,400.0	1,387.7	1,382.6	1,372.1	3.8	3.7	131.86	-86.8	120.2	204.1	197.0	7.15	28.566	
1,500.0	1,484.9	1,480.0	1,467.3	4.3	4.1	131.27	-88.8	140.4	227.0	219.0	7.91	28.693	
1,600.0	1,582.2	1,577.3	1,562.5	4.7	4.6	130.79	-90.7	160.5	249.8	241.1	8.69	28.755	
1,700.0	1,679.5	1,674.7	1,657.7	5.2	5.0	130.39	-92.7	180.6	272.6	263.2	9.47	28.780	
1,800.0	1,776.8	1,772.0	1,752.9	5.7	5.4	130.06	-94.7	200.8	295.5	285.2	10.27	28.780	
1,900.0	1,874.1	1,869.3	1,848.2	6.1	5.9	129.77	-96.6	220.9	318.3	307.3	11.07	28.765	
2,000.0	1,971.4	1,966.7	1,943.4	6.6	6.3	129.52	-98.6	241.0	341.2	329.3	11.87	28.741	
2,100.0	2,068.7	2,064.0	2,038.6	7.1	6.7	129.30	-100.5	261.2	364.1	351.4	12.68	28.712	
2,200.0	2,165.9	2,161.4	2,133.8	7.6	7.2	129.10	-102.5	281.3	387.0	373.5	13.49	28.680	
2,300.0	2,263.2	2,258.7	2,229.0	8.0	7.6	128.93	-104.5	301.4	409.8	395.5	14.31	28.646	
2,400.0	2,360.5	2,356.0	2,324.2	8.5	8.1	128.78	-106.4	321.6	432.7	417.6	15.12	28.612	
2,500.0	2,457.8	2,453.4	2,419.4	9.0	8.5	128.64	-108.4	341.7	455.6	439.7	15.94	28.578	
2,600.0	2,555.1	2,550.7	2,514.7	9.5	8.9	128.51	-110.4	361.9	478.5	461.7	16.76	28.545	
2,700.0	2,652.4	2,648.1	2,609.9	10.0	9.4	128.40	-112.3	382.0	501.4	483.8	17.58	28.513	
2,800.0	2,749.7	2,745.4	2,705.1	10.4	9.8	128.30	-114.3	402.1	524.3	505.9	18.41	28.482	
2,900.0	2,846.9	2,842.7	2,800.3	10.9	10.3	128.20	-116.2	422.3	547.2	528.0	19.23	28.452	
3,000.0	2,944.2	2,940.1	2,895.5	11.4	10.7	128.12	-118.2	442.4	570.1	550.0	20.06	28.423	
3,100.0	3,041.5	3,037.4	2,990.7	11.9	11.2	128.03	-120.2	462.5	593.0	572.1	20.88	28.396	
3,200.0	3,138.8	3,134.8	3,085.9	12.4	11.6	127.96	-122.1	482.7	615.9	594.2	21.71	28.369	
3,300.0	3,236.1	3,232.1	3,181.2	12.8	12.1	127.89	-124.1	502.8	638.8	616.2	22.54	28.344	
3,400.0	3,333.4	3,329.4	3,276.4	13.3	12.5	127.83	-126.1	522.9	661.7	638.3	23.36	28.320	
3,500.0	3,430.6	3,426.8	3,371.6	13.8	13.0	127.77	-128.0	543.1	684.6	660.4	24.19	28.297	
3,600.0	3,527.9	3,524.1	3,466.8	14.3	13.4	127.71	-130.0	563.2	707.5	682.5	25.02	28.275	
3,700.0	3,625.2	3,621.5	3,562.0	14.8	13.8	127.66	-131.9	583.4	730.4	704.5	25.85	28.254	
3,800.0	3,722.5	3,718.8	3,657.2	15.3	14.3	127.61	-133.9	603.5	753.3	726.6	26.68	28.234	
3,900.0	3,819.8	3,816.1	3,752.4	15.7	14.7	127.56	-135.9	623.6	776.2	748.7	27.51	28.214	
4,000.0	3,917.1	3,925.4	3,859.7	16.2	15.1	127.64	-137.9	644.4	798.4	770.1	28.30	28.208	
4,100.0	4,014.4	4,035.9	3,968.9	16.7	15.5	127.99	-139.5	661.2	819.1	790.1	29.01	28.235	
4,200.0	4,111.6	4,146.6	4,078.8	17.2	15.7	128.59	-140.8	673.9	838.3	808.6	29.66	28.261	
4,300.0	4,208.9	4,257.2	4,189.1	17.7	15.9	129.43	-141.6	682.3	856.1	825.8	30.25	28.296	
4,400.0	4,306.2	4,367.3	4,299.2	18.2	16.1	130.49	-142.0	686.4	872.6	841.8	30.78	28.346	
4,500.0	4,403.5	4,470.7	4,402.5	18.7	16.2	131.64	-142.0	686.9	888.2	857.0	31.26	28.414	
4,600.0	4,500.8	4,568.0	4,499.8	19.1	16.3	132.72	-142.0	686.9	904.0	872.3	31.72	28.497	
4,700.0	4,598.1	4,665.2	4,597.1	19.6	16.5	133.77	-142.0	686.9	920.1	887.9	32.18	28.592	
4,800.0	4,695.4	4,762.5	4,694.4	20.1	16.6	134.78	-142.0	686.9	936.5	903.9	32.63	28.700	
4,900.0	4,792.6	4,859.8	4,791.6	20.6	16.7	135.75	-142.0	686.9	953.2	920.1	33.07	28.819	
5,000.0	4,889.9	4,957.1	4,888.9	21.1	16.8	136.69	-142.0	686.9	970.1	936.6	33.51	28.947	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - SHARON 210-234 - ORIGINAL WELLBORE - PROPOSAL #1												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,100.0	4,987.2	5,054.4	4,986.2	21.6	17.0	137.60	-142.0	686.9	987.3	953.3	33.95	29.084	
5,200.0	5,084.5	5,151.7	5,083.5	22.1	17.1	138.48	-142.0	686.9	1,004.7	970.3	34.37	29.228	
5,300.0	5,181.8	5,249.0	5,180.8	22.5	17.2	139.33	-142.0	686.9	1,022.3	987.5	34.80	29.379	
5,400.0	5,279.1	5,346.2	5,278.1	23.0	17.4	140.15	-142.0	686.9	1,040.2	1,005.0	35.22	29.535	
5,500.0	5,376.3	5,443.5	5,375.3	23.5	17.5	140.95	-142.0	686.9	1,058.3	1,022.6	35.64	29.696	
5,600.0	5,473.6	5,540.8	5,472.6	24.0	17.7	141.72	-142.0	686.9	1,076.5	1,040.5	36.05	29.860	
5,700.0	5,570.9	5,638.1	5,569.9	24.5	17.8	142.46	-142.0	686.9	1,095.0	1,058.5	36.47	30.028	
5,800.0	5,668.2	5,735.4	5,667.2	25.0	17.9	143.18	-142.0	686.9	1,113.6	1,076.7	36.88	30.199	
5,900.0	5,765.5	5,832.7	5,764.5	25.5	18.1	143.87	-142.0	686.9	1,132.4	1,095.1	37.29	30.371	
5,921.9	5,786.8	5,853.9	5,785.8	25.6	18.1	144.02	-142.0	686.9	1,136.5	1,099.2	37.37	30.409	
6,000.0	5,863.0	5,930.2	5,862.0	25.9	18.2	144.68	-142.0	686.9	1,150.5	1,112.8	37.71	30.512	
6,100.0	5,961.2	6,028.4	5,960.2	26.2	18.4	145.39	-142.0	686.9	1,166.0	1,127.9	38.07	30.627	
6,200.0	6,060.0	6,127.2	6,059.0	26.5	18.5	145.96	-142.0	686.9	1,178.7	1,140.3	38.41	30.688	
6,300.0	6,159.3	6,226.5	6,158.3	26.7	18.7	146.39	-142.0	686.9	1,188.6	1,149.8	38.72	30.695	
6,400.0	6,259.0	6,326.1	6,258.0	26.9	18.8	146.69	-142.0	686.9	1,195.6	1,156.6	39.01	30.649	
6,500.0	6,358.8	6,426.0	6,357.8	27.1	19.0	146.86	-142.0	686.9	1,199.7	1,160.4	39.27	30.551	
6,591.0	6,449.8	6,518.0	6,449.7	27.2	19.1	179.59	-142.0	683.4	1,200.9	1,161.9	38.97	30.811	
6,600.0	6,458.8	6,527.0	6,458.7	27.2	19.1	179.63	-142.0	682.5	1,200.9	1,161.9	39.01	30.787	
6,621.0	6,479.8	6,548.0	6,479.5	27.2	19.1	179.76	-142.0	679.8	1,200.8	1,161.8	39.08	30.729	
6,650.0	6,508.8	6,576.9	6,508.0	27.3	19.1	-90.05	-142.0	675.2	1,200.8	1,161.4	39.43	30.453	
6,657.1	6,515.9	6,583.9	6,514.9	27.3	19.1	-90.00	-142.0	673.9	1,200.8	1,161.4	39.43	30.457	
6,700.0	6,558.7	6,626.2	6,556.2	27.3	19.1	-89.72	-142.0	664.6	1,200.9	1,161.5	39.39	30.487	
6,750.0	6,608.1	6,675.1	6,603.1	27.3	19.0	-89.39	-142.0	650.9	1,200.9	1,161.6	39.30	30.560	
6,800.0	6,657.0	6,723.5	6,648.5	27.3	19.0	-89.06	-142.0	634.2	1,201.0	1,161.8	39.16	30.667	
6,850.0	6,704.9	6,771.5	6,692.3	27.2	18.9	-88.75	-142.0	614.7	1,201.1	1,162.1	39.00	30.801	
6,900.0	6,751.8	6,819.1	6,734.4	27.2	18.8	-88.44	-142.0	592.4	1,201.3	1,162.5	38.81	30.952	
6,950.0	6,797.4	6,866.3	6,774.6	27.1	18.8	-88.13	-142.0	567.7	1,201.5	1,162.9	38.62	31.113	
7,000.0	6,841.4	6,913.1	6,812.7	27.0	18.7	-87.84	-142.0	540.5	1,201.7	1,163.3	38.43	31.272	
7,050.0	6,883.6	6,959.6	6,848.8	26.9	18.7	-87.56	-142.0	511.2	1,201.9	1,163.7	38.26	31.417	
7,100.0	6,923.9	7,005.8	6,882.6	26.8	18.7	-87.29	-142.0	479.8	1,202.2	1,164.1	38.12	31.534	
7,150.0	6,962.0	7,050.0	6,913.1	26.7	18.7	-87.04	-142.0	447.7	1,202.5	1,164.4	38.04	31.608	
7,200.0	6,997.8	7,097.2	6,943.3	26.5	18.7	-86.78	-142.0	411.5	1,202.8	1,164.7	38.04	31.621	
7,250.0	7,031.0	7,142.6	6,970.1	26.4	18.8	-86.55	-142.0	374.9	1,203.0	1,164.9	38.12	31.559	
7,300.0	7,061.6	7,187.6	6,994.3	26.3	19.0	-86.34	-142.0	336.9	1,203.3	1,165.0	38.31	31.411	
7,350.0	7,089.3	7,232.5	7,016.0	26.1	19.2	-86.14	-142.0	297.6	1,203.6	1,165.0	38.61	31.169	
7,400.0	7,114.0	7,277.2	7,035.2	26.0	19.5	-85.96	-142.0	257.3	1,203.8	1,164.8	39.05	30.829	
7,450.0	7,135.7	7,321.7	7,051.7	25.9	19.8	-85.80	-142.0	216.0	1,204.1	1,164.5	39.62	30.392	
7,500.0	7,154.2	7,366.0	7,065.6	25.7	20.2	-85.66	-142.0	173.9	1,204.3	1,164.0	40.33	29.864	
7,550.0	7,169.4	7,410.2	7,076.8	25.6	20.7	-85.53	-142.0	131.1	1,204.5	1,163.3	41.17	29.256	
7,600.0	7,181.2	7,454.3	7,085.4	25.5	21.2	-85.43	-142.0	87.9	1,204.7	1,162.5	42.15	28.582	
7,650.0	7,189.6	7,500.0	7,091.4	25.4	21.8	-85.34	-142.0	42.6	1,204.8	1,161.6	43.27	27.844	
7,700.0	7,194.5	7,542.3	7,094.4	25.3	22.4	-85.28	-142.0	0.4	1,204.9	1,160.5	44.47	27.098	
7,748.9	7,196.0	7,586.8	7,095.0	25.2	23.0	-85.24	-142.0	-44.1	1,205.0	1,159.2	45.77	26.326	
7,800.0	7,195.8	7,637.9	7,094.8	25.1	23.9	-85.24	-142.0	-95.2	1,205.0	1,157.7	47.34	25.456	
7,900.0	7,195.4	7,737.9	7,094.6	25.5	25.6	-85.25	-142.0	-195.2	1,205.0	1,154.3	50.68	23.775	
8,000.0	7,195.0	7,837.9	7,094.4	27.5	27.5	-85.26	-142.0	-295.2	1,205.0	1,150.6	54.40	22.150	
8,100.0	7,194.6	7,937.9	7,094.1	29.5	29.6	-85.27	-142.0	-395.2	1,204.9	1,146.5	58.42	20.626	
8,200.0	7,194.1	8,037.9	7,093.9	31.7	31.8	-85.28	-142.0	-495.2	1,204.9	1,142.3	62.68	19.223	
8,300.0	7,193.7	8,137.9	7,093.7	33.9	34.0	-85.28	-142.0	-595.2	1,204.9	1,137.8	67.14	17.946	
8,400.0	7,193.3	8,237.9	7,093.4	36.3	36.4	-85.29	-142.0	-695.2	1,204.9	1,133.1	71.76	16.790	
8,500.0	7,192.9	8,337.9	7,093.2	38.6	38.8	-85.30	-142.0	-795.2	1,204.9	1,128.4	76.51	15.748	
8,600.0	7,192.5	8,437.9	7,092.9	41.1	41.3	-85.31	-142.0	-895.2	1,204.9	1,123.5	81.37	14.807	

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 SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - SHARON 210-234 - ORIGINAL WELLBORE - PROPOSAL #1												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
8,700.0	7,192.1	8,537.9	7,092.7	43.5	43.8	-85.32	-142.0	-995.2	1,204.9	1,118.5	86.32	13.958	
8,800.0	7,191.7	8,637.9	7,092.5	46.0	46.3	-85.32	-142.0	-1,095.2	1,204.9	1,113.5	91.35	13.190	
8,900.0	7,191.3	8,737.9	7,092.2	48.6	48.9	-85.33	-142.0	-1,195.2	1,204.8	1,108.4	96.43	12.494	
9,000.0	7,190.9	8,837.9	7,092.0	51.1	51.5	-85.34	-142.0	-1,295.2	1,204.8	1,103.2	101.58	11.861	
9,100.0	7,190.4	8,937.9	7,091.7	53.7	54.1	-85.35	-142.0	-1,395.2	1,204.8	1,098.0	106.77	11.285	
9,200.0	7,190.0	9,037.9	7,091.5	56.3	56.7	-85.36	-142.0	-1,495.2	1,204.8	1,092.8	111.99	10.758	
9,300.0	7,189.6	9,137.9	7,091.3	58.9	59.4	-85.36	-142.0	-1,595.2	1,204.8	1,087.5	117.26	10.275	
9,400.0	7,189.2	9,237.9	7,091.0	61.6	62.0	-85.37	-142.0	-1,695.2	1,204.8	1,082.2	122.55	9.831	
9,500.0	7,188.8	9,337.9	7,090.8	64.2	64.7	-85.38	-142.0	-1,795.2	1,204.8	1,076.9	127.87	9.422	
9,600.0	7,188.4	9,437.9	7,090.5	66.9	67.4	-85.39	-142.0	-1,895.2	1,204.8	1,071.5	133.21	9.044	
9,700.0	7,188.0	9,537.9	7,090.3	69.6	70.1	-85.40	-142.0	-1,995.2	1,204.7	1,066.2	138.58	8.694	
9,800.0	7,187.6	9,637.9	7,090.0	72.3	72.8	-85.40	-142.1	-2,095.2	1,204.7	1,060.8	143.96	8.369	
9,900.0	7,187.1	9,737.9	7,089.8	74.9	75.5	-85.41	-142.1	-2,195.1	1,204.7	1,055.4	149.35	8.066	
10,000.0	7,186.7	9,837.9	7,089.6	77.6	78.2	-85.42	-142.1	-2,295.1	1,204.7	1,049.9	154.77	7.784	
10,100.0	7,186.3	9,937.9	7,089.3	80.4	80.9	-85.43	-142.1	-2,395.1	1,204.7	1,044.5	160.19	7.520	
10,200.0	7,185.9	10,037.9	7,089.1	83.1	83.7	-85.44	-142.1	-2,495.1	1,204.7	1,039.0	165.63	7.273	
10,300.0	7,185.5	10,137.9	7,088.8	85.8	86.4	-85.44	-142.1	-2,595.1	1,204.7	1,033.6	171.08	7.042	
10,400.0	7,185.1	10,237.9	7,088.6	88.5	89.1	-85.45	-142.1	-2,695.1	1,204.7	1,028.1	176.53	6.824	
10,500.0	7,184.7	10,337.9	7,088.3	91.2	91.9	-85.46	-142.1	-2,795.1	1,204.6	1,022.6	182.00	6.619	
10,600.0	7,184.3	10,437.9	7,088.1	94.0	94.6	-85.47	-142.1	-2,895.1	1,204.6	1,017.2	187.48	6.426	
10,700.0	7,183.9	10,537.9	7,087.8	96.7	97.4	-85.48	-142.1	-2,995.1	1,204.6	1,011.7	192.96	6.243	
10,800.0	7,183.4	10,637.9	7,087.6	99.4	100.1	-85.48	-142.1	-3,095.1	1,204.6	1,006.2	198.45	6.070	
10,900.0	7,183.0	10,737.9	7,087.4	102.2	102.9	-85.49	-142.1	-3,195.1	1,204.6	1,000.7	203.94	5.907	
11,000.0	7,182.6	10,837.9	7,087.1	104.9	105.7	-85.50	-142.1	-3,295.1	1,204.6	995.1	209.44	5.751	
11,100.0	7,182.2	10,937.9	7,086.9	107.7	108.4	-85.51	-142.1	-3,395.1	1,204.6	989.6	214.95	5.604	
11,200.0	7,181.8	11,037.9	7,086.6	110.4	111.2	-85.52	-142.1	-3,495.1	1,204.6	984.1	220.46	5.464	
11,300.0	7,181.4	11,137.9	7,086.4	113.2	114.0	-85.52	-142.1	-3,595.1	1,204.6	978.6	225.98	5.330	
11,400.0	7,181.0	11,237.9	7,086.1	116.0	116.7	-85.53	-142.1	-3,695.1	1,204.5	973.0	231.50	5.203	
11,500.0	7,180.6	11,337.9	7,085.9	118.7	119.5	-85.54	-142.1	-3,795.1	1,204.5	967.5	237.02	5.082	
11,600.0	7,180.1	11,437.9	7,085.6	121.5	122.3	-85.55	-142.1	-3,895.1	1,204.5	962.0	242.55	4.966	
11,700.0	7,179.7	11,537.9	7,085.4	124.3	125.0	-85.56	-142.1	-3,995.1	1,204.5	956.4	248.08	4.855	
11,800.0	7,179.3	11,637.9	7,085.1	127.0	127.8	-85.56	-142.1	-4,095.1	1,204.5	950.9	253.61	4.749	
11,844.5	7,179.1	11,682.4	7,085.0	128.3	129.1	-85.57	-142.1	-4,139.6	1,204.5	948.4	256.08	4.704	
11,900.0	7,178.9	11,692.6	7,085.0	129.8	129.3	-85.57	-142.1	-4,149.9	1,205.3	947.4	257.90	4.674	
12,000.0	7,178.5	11,692.6	7,085.0	132.6	129.3	-85.57	-142.1	-4,149.9	1,213.2	952.5	260.66	4.654 SF	
12,100.0	7,178.1	11,692.6	7,085.0	135.3	129.3	-85.57	-142.1	-4,149.9	1,229.2	965.8	263.43	4.666	
12,200.0	7,177.7	11,692.6	7,085.0	138.1	129.3	-85.57	-142.1	-4,149.9	1,253.0	986.8	266.20	4.707	
12,300.0	7,177.2	11,692.6	7,085.0	140.9	129.3	-85.57	-142.1	-4,149.9	1,284.1	1,015.1	268.97	4.774	
12,400.0	7,176.8	11,692.6	7,085.0	143.7	129.3	-85.57	-142.1	-4,149.9	1,322.1	1,050.4	271.75	4.865	
12,500.0	7,176.4	11,692.6	7,085.0	146.4	129.3	-85.57	-142.1	-4,149.9	1,366.4	1,091.9	274.52	4.977	
12,600.0	7,176.0	11,692.6	7,085.0	149.2	129.3	-85.57	-142.1	-4,149.9	1,416.4	1,139.1	277.29	5.108	
12,700.0	7,175.6	11,692.6	7,085.0	152.0	129.3	-85.57	-142.1	-4,149.9	1,471.4	1,191.4	280.07	5.254	
12,800.0	7,175.2	11,692.6	7,085.0	154.8	129.3	-85.57	-142.1	-4,149.9	1,531.0	1,248.2	282.85	5.413	
12,900.0	7,174.8	11,692.6	7,085.0	157.5	129.3	-85.57	-142.1	-4,149.9	1,594.7	1,309.1	285.62	5.583	
13,000.0	7,174.4	11,692.6	7,085.0	160.3	129.3	-85.57	-142.1	-4,149.9	1,662.0	1,373.6	288.40	5.763	
13,100.0	7,173.9	11,692.6	7,085.0	163.1	129.3	-85.57	-142.1	-4,149.9	1,732.4	1,441.2	291.18	5.950	
13,200.0	7,173.5	11,692.6	7,085.0	165.9	129.3	-85.57	-142.1	-4,149.9	1,805.6	1,511.6	293.96	6.142	
13,300.0	7,173.1	11,692.6	7,085.0	168.7	129.3	-85.57	-142.1	-4,149.9	1,881.3	1,584.5	296.74	6.340	
13,400.0	7,172.7	11,692.6	7,085.0	171.5	129.3	-85.57	-142.1	-4,149.9	1,959.2	1,659.6	299.52	6.541	
13,500.0	7,172.3	11,692.6	7,085.0	174.3	129.3	-85.57	-142.1	-4,149.9	2,038.9	1,736.6	302.30	6.745	
13,600.0	7,171.9	11,692.6	7,085.0	177.0	129.3	-85.57	-142.1	-4,149.9	2,120.5	1,815.4	305.08	6.950	
13,700.0	7,171.5	11,692.6	7,085.0	179.8	129.3	-85.57	-142.1	-4,149.9	2,203.5	1,895.6	307.87	7.157	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - SHARON 210-234 - ORIGINAL WELLBORE - PROPOSAL #1												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	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
13,800.0	7,171.0	11,692.6	7,085.0	182.6	129.3	-85.57	-142.1	-4,149.9	2,287.9	1,977.2	310.65	7.365	
13,900.0	7,170.6	11,692.6	7,085.0	185.4	129.3	-85.57	-142.1	-4,149.9	2,373.5	2,060.0	313.43	7.573	
14,000.0	7,170.2	11,692.6	7,085.0	188.2	129.3	-85.57	-142.1	-4,149.9	2,460.2	2,144.0	316.22	7.780	
14,100.0	7,169.8	11,692.6	7,085.0	191.0	129.3	-85.57	-142.1	-4,149.9	2,547.8	2,228.8	319.00	7.987	
14,200.0	7,169.4	11,692.6	7,085.0	193.8	129.3	-85.57	-142.1	-4,149.9	2,636.4	2,314.6	321.79	8.193	
14,295.0	7,169.0	11,692.6	7,085.0	196.4	129.3	-85.57	-142.1	-4,149.9	2,721.2	2,396.8	324.43	8.388	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-179.47	-30.2	-0.3	30.3				
100.0	100.0	99.0	99.0	0.1	0.1	-179.47	-30.2	-0.3	30.2	30.0	0.19	156.312	
200.0	200.0	199.0	199.0	0.3	0.3	-179.47	-30.2	-0.3	30.2	29.6	0.64	47.122	
300.0	300.0	299.0	299.0	0.5	0.5	-179.47	-30.2	-0.3	30.2	29.1	1.09	27.710	
400.0	400.0	399.0	399.0	0.8	0.8	-179.47	-30.2	-0.3	30.2	28.7	1.54	19.626	
500.0	500.0	499.0	499.0	1.0	1.0	-179.47	-30.2	-0.3	30.2	28.2	1.99	15.193 CC, ES	
600.0	600.0	599.0	599.0	1.2	1.2	149.67	-30.2	-0.3	31.7	29.3	2.44	13.005	
700.0	699.8	698.8	698.8	1.4	1.4	153.80	-30.2	-0.3	36.3	33.5	2.89	12.572	
800.0	799.5	799.7	799.7	1.7	1.7	157.45	-29.0	1.0	42.9	39.6	3.34	12.860	
900.0	898.7	900.8	900.6	1.9	1.9	159.22	-25.4	4.8	50.0	46.2	3.79	13.211	
1,000.0	997.5	1,002.0	1,001.5	2.2	2.1	159.77	-19.3	11.2	57.5	53.2	4.25	13.539	
1,100.0	1,095.6	1,103.5	1,102.2	2.6	2.4	159.49	-10.7	20.3	65.3	60.6	4.73	13.816	
1,169.1	1,163.0	1,173.8	1,171.6	2.8	2.6	158.95	-3.3	28.0	70.9	65.8	5.08	13.963	
1,200.0	1,193.1	1,205.2	1,202.6	3.0	2.7	158.61	0.4	31.9	73.3	68.0	5.24	13.978	
1,300.0	1,290.4	1,307.1	1,302.5	3.4	3.0	156.65	14.0	46.1	79.2	73.4	5.82	13.601	
1,400.0	1,387.7	1,406.9	1,400.2	3.8	3.4	154.35	28.3	61.1	84.0	77.5	6.45	13.027	
1,500.0	1,484.9	1,506.7	1,497.8	4.3	3.8	152.30	42.6	76.1	88.9	81.8	7.11	12.506	
1,600.0	1,582.2	1,606.6	1,595.5	4.7	4.2	150.47	57.0	91.1	93.9	86.1	7.80	12.044	
1,700.0	1,679.5	1,706.4	1,693.1	5.2	4.6	148.82	71.3	106.1	99.0	90.5	8.52	11.630	
1,800.0	1,776.8	1,806.2	1,790.8	5.7	5.0	147.34	85.6	121.2	104.2	95.0	9.25	11.262	
1,900.0	1,874.1	1,906.1	1,888.4	6.1	5.4	145.99	99.9	136.2	109.5	99.4	10.01	10.935	
2,000.0	1,971.4	2,005.9	1,986.1	6.6	5.8	144.77	114.2	151.2	114.8	104.0	10.78	10.644	
2,100.0	2,068.7	2,105.7	2,083.7	7.1	6.3	143.66	128.6	166.2	120.1	108.5	11.57	10.384	
2,200.0	2,165.9	2,205.6	2,181.4	7.6	6.7	142.65	142.9	181.2	125.5	113.1	12.36	10.151	
2,300.0	2,263.2	2,305.4	2,279.0	8.0	7.1	141.71	157.2	196.2	130.9	117.7	13.17	9.942	
2,400.0	2,360.5	2,405.2	2,376.7	8.5	7.6	140.86	171.5	211.3	136.4	122.4	13.98	9.754	
2,500.0	2,457.8	2,505.0	2,474.3	9.0	8.0	140.06	185.9	226.3	141.9	127.1	14.80	9.583	
2,600.0	2,555.1	2,604.9	2,572.0	9.5	8.4	139.33	200.2	241.3	147.4	131.7	15.63	9.429	
2,700.0	2,652.4	2,704.7	2,669.6	10.0	8.9	138.65	214.5	256.3	152.9	136.4	16.46	9.288	
2,800.0	2,749.7	2,804.5	2,767.3	10.4	9.3	138.02	228.8	271.3	158.4	141.1	17.30	9.160	
2,900.0	2,846.9	2,904.4	2,864.9	10.9	9.8	137.43	243.2	286.3	164.0	145.9	18.14	9.043	
3,000.0	2,944.2	3,004.2	2,962.6	11.4	10.2	136.88	257.5	301.4	169.6	150.6	18.98	8.935	
3,100.0	3,041.5	3,104.0	3,060.3	11.9	10.6	136.36	271.8	316.4	175.2	155.4	19.83	8.835	
3,200.0	3,138.8	3,203.9	3,157.9	12.4	11.1	135.88	286.1	331.4	180.8	160.1	20.68	8.744	
3,300.0	3,236.1	3,303.7	3,255.6	12.8	11.5	135.42	300.4	346.4	186.4	164.9	21.53	8.659	
3,400.0	3,333.4	3,403.5	3,353.2	13.3	12.0	135.00	314.8	361.4	192.1	169.7	22.39	8.580	
3,500.0	3,430.6	3,503.4	3,450.9	13.8	12.4	134.59	329.1	376.4	197.7	174.5	23.24	8.507	
3,600.0	3,527.9	3,603.2	3,548.5	14.3	12.9	134.21	343.4	391.5	203.4	179.3	24.10	8.438	
3,700.0	3,625.2	3,703.0	3,646.2	14.8	13.3	133.85	357.7	406.5	209.0	184.1	24.96	8.374	
3,800.0	3,722.5	3,802.8	3,743.8	15.3	13.7	133.51	372.1	421.5	214.7	188.9	25.82	8.315	
3,900.0	3,819.8	3,902.7	3,841.5	15.7	14.2	133.19	386.4	436.5	220.4	193.7	26.69	8.259	
4,000.0	3,917.1	4,002.5	3,939.1	16.2	14.6	132.88	400.7	451.5	226.1	198.5	27.55	8.206	
4,100.0	4,014.4	4,102.3	4,036.8	16.7	15.1	132.59	415.0	466.5	231.8	203.4	28.41	8.157	
4,200.0	4,111.6	4,202.2	4,134.4	17.2	15.5	132.31	429.4	481.5	237.5	208.2	29.28	8.110	
4,300.0	4,208.9	4,302.0	4,232.1	17.7	16.0	132.04	443.7	496.6	243.2	213.0	30.15	8.066	
4,400.0	4,306.2	4,401.8	4,329.7	18.2	16.4	131.79	458.0	511.6	248.9	217.9	31.01	8.025	
4,500.0	4,403.5	4,501.7	4,427.4	18.7	16.9	131.55	472.3	526.6	254.6	222.7	31.88	7.985	
4,600.0	4,500.8	4,601.5	4,525.0	19.1	17.3	131.32	486.6	541.6	260.3	227.6	32.75	7.948	
4,700.0	4,598.1	4,701.3	4,622.7	19.6	17.8	131.09	501.0	556.6	266.0	232.4	33.62	7.912	
4,800.0	4,695.4	4,801.2	4,720.3	20.1	18.2	130.88	515.3	571.6	271.7	237.3	34.49	7.879	
4,900.0	4,792.6	4,901.0	4,818.0	20.6	18.7	130.68	529.6	586.7	277.5	242.1	35.36	7.847	
5,000.0	4,889.9	5,000.8	4,915.6	21.1	19.1	130.48	543.9	601.7	283.2	247.0	36.23	7.816	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - SHARON 210-304 - ORIGINAL WELLBORE - PROPOSAL #1												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,100.0	4,987.2	5,100.7	5,013.3	21.6	19.6	130.30	558.3	616.7	288.9	251.8	37.10	7.787	
5,200.0	5,084.5	5,200.5	5,110.9	22.1	20.0	130.12	572.6	631.7	294.7	256.7	37.98	7.759	
5,300.0	5,181.8	5,296.8	5,205.3	22.5	20.4	130.12	585.7	645.5	300.9	262.1	38.75	7.765	
5,400.0	5,279.1	5,391.9	5,299.1	23.0	20.7	130.64	596.6	656.9	308.6	269.2	39.31	7.849	
5,500.0	5,376.3	5,486.5	5,392.8	23.5	20.9	131.63	605.3	666.0	317.8	278.1	39.72	8.001	
5,600.0	5,473.6	5,580.4	5,486.3	24.0	21.1	133.04	611.8	672.8	328.7	288.8	39.98	8.223	
5,700.0	5,570.9	5,673.5	5,579.1	24.5	21.3	134.79	616.1	677.4	341.6	301.5	40.10	8.518	
5,800.0	5,668.2	5,765.4	5,671.0	25.0	21.4	136.80	618.4	679.7	356.5	316.4	40.09	8.891	
5,900.0	5,765.5	5,858.9	5,764.5	25.5	21.6	139.04	618.8	680.1	373.5	333.5	39.98	9.342	
5,921.9	5,786.8	5,880.2	5,785.8	25.6	21.6	139.54	618.8	680.1	377.4	337.4	39.95	9.447	
6,000.0	5,863.0	5,956.4	5,862.0	25.9	21.7	141.31	618.8	680.1	390.7	350.8	39.83	9.809	
6,100.0	5,961.2	6,054.6	5,960.2	26.2	21.8	143.14	618.8	680.1	405.6	365.9	39.71	10.213	
6,200.0	6,060.0	6,153.4	6,059.0	26.5	21.9	144.54	618.8	680.1	418.0	378.4	39.68	10.536	
6,300.0	6,159.3	6,252.7	6,158.3	26.7	22.1	145.58	618.8	680.1	427.8	388.1	39.71	10.774	
6,400.0	6,259.0	6,352.4	6,258.0	26.9	22.2	146.28	618.8	680.1	434.8	395.0	39.79	10.928	
6,500.0	6,358.8	6,452.2	6,357.8	27.1	22.3	146.68	618.8	680.1	438.9	398.9	39.91	10.996	
6,591.0	6,449.8	6,543.2	6,448.8	27.2	22.5	179.31	618.8	680.1	440.1	396.8	43.28	10.168	
6,600.0	6,458.8	6,552.2	6,457.8	27.2	22.5	179.31	618.8	680.1	440.1	396.8	43.30	10.162	
6,621.0	6,479.8	6,573.2	6,478.8	27.2	22.5	179.31	618.8	680.1	440.1	396.7	43.36	10.149	
6,650.0	6,508.8	6,602.4	6,508.0	27.3	22.5	-90.70	618.8	679.6	440.1	399.8	40.23	10.939	
6,700.0	6,558.7	6,652.8	6,558.3	27.3	22.6	-90.70	618.8	675.8	440.1	399.8	40.30	10.920	
6,750.0	6,608.1	6,703.2	6,608.1	27.3	22.6	-90.70	618.8	668.5	440.1	399.8	40.31	10.918	
6,800.0	6,657.0	6,753.6	6,657.3	27.3	22.5	-90.70	618.8	657.8	440.1	399.8	40.26	10.932	
6,850.0	6,704.9	6,804.0	6,705.6	27.2	22.5	-90.70	618.8	643.6	440.1	399.9	40.16	10.959	
6,900.0	6,751.8	6,854.3	6,752.8	27.2	22.4	-90.69	618.8	626.0	440.1	400.1	40.01	10.999	
6,950.0	6,797.4	6,904.7	6,798.7	27.1	22.3	-90.68	618.8	605.2	440.1	400.2	39.83	11.048	
7,000.0	6,841.4	6,955.1	6,843.0	27.0	22.2	-90.66	618.8	581.2	440.1	400.4	39.63	11.103	
7,050.0	6,883.6	7,005.4	6,885.4	26.9	22.1	-90.65	618.8	554.2	440.1	400.6	39.43	11.161	
7,100.0	6,923.9	7,055.8	6,925.9	26.8	22.0	-90.62	618.8	524.2	440.1	400.8	39.24	11.215	
7,150.0	6,962.0	7,106.1	6,964.1	26.7	21.9	-90.60	618.8	491.5	440.1	401.0	39.08	11.261	
7,200.0	6,997.8	7,156.4	7,000.0	26.5	21.8	-90.57	618.8	456.2	440.1	401.1	38.97	11.291	
7,250.0	7,031.0	7,206.7	7,033.2	26.4	21.7	-90.54	618.8	418.5	440.1	401.1	38.94	11.300	
7,300.0	7,061.6	7,257.0	7,063.8	26.3	21.6	-90.51	618.8	378.6	440.1	401.0	39.01	11.281	
7,350.0	7,089.3	7,307.3	7,091.4	26.1	21.5	-90.47	618.8	336.6	440.1	400.9	39.19	11.227	
7,400.0	7,114.0	7,357.5	7,116.0	26.0	21.4	-90.44	618.8	292.8	440.1	400.5	39.52	11.136	
7,450.0	7,135.7	7,407.7	7,137.5	25.9	21.4	-90.40	618.8	247.4	440.0	400.1	39.99	11.004	
7,500.0	7,154.2	7,457.9	7,155.7	25.7	21.4	-90.35	618.8	200.7	440.0	399.4	40.62	10.834	
7,550.0	7,169.4	7,508.1	7,170.7	25.6	21.5	-90.31	618.8	152.8	440.0	398.6	41.41	10.626	
7,600.0	7,181.2	7,558.2	7,182.2	25.5	21.7	-90.27	618.8	104.0	440.0	397.7	42.36	10.388	
7,650.0	7,189.6	7,608.4	7,190.3	25.4	22.0	-90.22	618.8	54.5	440.0	396.6	43.46	10.126	
7,700.0	7,194.5	7,658.5	7,194.8	25.3	22.4	-90.17	618.8	4.6	440.0	395.3	44.69	9.846	
7,748.9	7,196.0	7,707.5	7,196.0	25.2	23.0	-90.13	618.8	-44.4	440.0	394.0	46.02	9.563	
7,800.0	7,195.8	7,758.6	7,195.8	25.1	23.7	-90.13	618.8	-95.4	440.0	392.5	47.54	9.256	
7,841.4	7,195.6	7,800.0	7,195.6	24.9	24.3	-90.13	618.8	-136.8	440.0	391.2	48.85	9.009	
7,900.0	7,195.4	7,858.6	7,195.4	25.5	25.3	-90.13	618.8	-195.4	440.0	389.2	50.81	8.660	
8,000.0	7,195.0	7,958.6	7,194.9	27.5	27.1	-90.13	618.8	-295.4	440.0	385.6	54.46	8.080	
8,100.0	7,194.6	8,058.6	7,194.5	29.5	29.2	-90.13	618.8	-395.4	440.0	381.6	58.43	7.531	
8,200.0	7,194.1	8,158.6	7,194.1	31.7	31.3	-90.13	618.8	-495.4	440.0	377.4	62.66	7.023	
8,300.0	7,193.7	8,258.6	7,193.7	33.9	33.6	-90.13	618.8	-595.4	440.0	373.0	67.09	6.559	
8,400.0	7,193.3	8,358.6	7,193.3	36.3	35.9	-90.13	618.8	-695.4	440.0	368.4	71.69	6.138	
8,500.0	7,192.9	8,458.6	7,192.9	38.6	38.3	-90.12	618.8	-795.4	440.0	363.6	76.42	5.758	
8,600.0	7,192.5	8,558.6	7,192.5	41.1	40.8	-90.12	618.8	-895.4	440.0	358.8	81.27	5.415	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - SHARON 210-304 - ORIGINAL WELLBORE - PROPOSAL #1												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
8,700.0	7,192.1	8,658.6	7,192.0	43.5	43.3	-90.12	618.8	-995.4	440.0	353.8	86.21	5.104	
8,800.0	7,191.7	8,758.6	7,191.6	46.0	45.8	-90.12	618.8	-1,095.4	440.0	348.8	91.23	4.824	
8,900.0	7,191.3	8,858.6	7,191.2	48.6	48.3	-90.12	618.8	-1,195.4	440.0	343.7	96.31	4.569	
9,000.0	7,190.9	8,958.6	7,190.8	51.1	50.9	-90.12	618.8	-1,295.4	440.0	338.6	101.45	4.337	
9,100.0	7,190.4	9,058.6	7,190.4	53.7	53.5	-90.12	618.8	-1,395.4	440.0	333.4	106.64	4.126	
9,200.0	7,190.0	9,158.6	7,190.0	56.3	56.1	-90.12	618.8	-1,495.4	440.0	328.2	111.88	3.933	
9,300.0	7,189.6	9,258.6	7,189.6	58.9	58.8	-90.12	618.8	-1,595.4	440.0	322.9	117.14	3.756	
9,400.0	7,189.2	9,358.6	7,189.1	61.6	61.4	-90.12	618.8	-1,695.4	440.0	317.6	122.44	3.594	
9,500.0	7,188.8	9,458.6	7,188.7	64.2	64.1	-90.12	618.8	-1,795.4	440.0	312.3	127.77	3.444	
9,600.0	7,188.4	9,558.6	7,188.3	66.9	66.8	-90.12	618.8	-1,895.4	440.0	306.9	133.11	3.306	
9,700.0	7,188.0	9,658.6	7,187.9	69.6	69.5	-90.12	618.8	-1,995.4	440.0	301.6	138.48	3.178	
9,800.0	7,187.6	9,758.6	7,187.5	72.3	72.2	-90.12	618.8	-2,095.4	440.0	296.2	143.87	3.059	
9,900.0	7,187.1	9,858.6	7,187.1	74.9	74.9	-90.12	618.8	-2,195.4	440.0	290.8	149.28	2.948	
10,000.0	7,186.7	9,958.6	7,186.7	77.6	77.6	-90.12	618.8	-2,295.4	440.0	285.3	154.70	2.844	
10,100.0	7,186.3	10,058.6	7,186.3	80.4	80.3	-90.12	618.8	-2,395.4	440.0	279.9	160.14	2.748	
10,200.0	7,185.9	10,158.6	7,185.8	83.1	83.0	-90.12	618.8	-2,495.4	440.0	274.5	165.58	2.658	
10,300.0	7,185.5	10,258.6	7,185.4	85.8	85.8	-90.12	618.8	-2,595.4	440.0	269.0	171.04	2.573	
10,400.0	7,185.1	10,358.6	7,185.0	88.5	88.5	-90.12	618.8	-2,695.4	440.0	263.5	176.51	2.493	
10,500.0	7,184.7	10,458.6	7,184.6	91.2	91.2	-90.12	618.8	-2,795.4	440.0	258.1	181.99	2.418	
10,600.0	7,184.3	10,558.6	7,184.2	94.0	94.0	-90.12	618.8	-2,895.4	440.0	252.6	187.47	2.347	
10,700.0	7,183.9	10,658.6	7,183.8	96.7	96.7	-90.12	618.8	-2,995.4	440.0	247.1	192.96	2.280	
10,800.0	7,183.4	10,758.6	7,183.4	99.4	99.5	-90.12	618.8	-3,095.4	440.0	241.6	198.46	2.217	
10,900.0	7,183.0	10,858.6	7,183.0	102.2	102.2	-90.12	618.8	-3,195.4	440.0	236.1	203.97	2.157	
11,000.0	7,182.6	10,958.6	7,182.5	104.9	105.0	-90.12	618.8	-3,295.4	440.0	230.6	209.48	2.101	
11,100.0	7,182.2	11,058.6	7,182.1	107.7	107.7	-90.12	618.8	-3,395.4	440.0	225.0	215.00	2.047	
11,200.0	7,181.8	11,158.6	7,181.7	110.4	110.5	-90.12	618.8	-3,495.4	440.1	219.5	220.52	1.995	
11,300.0	7,181.4	11,258.6	7,181.3	113.2	113.3	-90.12	618.8	-3,595.4	440.1	214.0	226.05	1.947	
11,400.0	7,181.0	11,358.6	7,180.9	116.0	116.0	-90.12	618.8	-3,695.4	440.1	208.5	231.58	1.900	
11,500.0	7,180.6	11,458.6	7,180.5	118.7	118.8	-90.12	618.8	-3,795.4	440.1	202.9	237.12	1.856	
11,600.0	7,180.1	11,558.6	7,180.1	121.5	121.6	-90.12	618.8	-3,895.4	440.1	197.4	242.66	1.813	
11,700.0	7,179.7	11,658.6	7,179.7	124.3	124.3	-90.12	618.8	-3,995.4	440.1	191.9	248.20	1.773	
11,800.0	7,179.3	11,758.6	7,179.3	127.0	127.1	-90.12	618.8	-4,095.4	440.1	186.3	253.75	1.734	
11,900.0	7,178.9	11,858.6	7,178.8	129.8	129.9	-90.12	618.8	-4,195.4	440.1	180.8	259.29	1.697	
12,000.0	7,178.5	11,958.6	7,178.4	132.6	132.7	-90.12	618.8	-4,295.4	440.1	175.2	264.85	1.662	
12,100.0	7,178.1	12,058.6	7,178.0	135.3	135.4	-90.12	618.8	-4,395.4	440.1	169.7	270.40	1.627	
12,200.0	7,177.7	12,158.6	7,177.6	138.1	138.2	-90.12	618.8	-4,495.4	440.1	164.1	275.96	1.595	
12,300.0	7,177.2	12,258.6	7,177.2	140.9	141.0	-90.12	618.8	-4,595.4	440.1	158.5	281.52	1.563	
12,400.0	7,176.8	12,358.6	7,176.8	143.7	143.8	-90.12	618.8	-4,695.4	440.1	153.0	287.08	1.533	
12,500.0	7,176.4	12,458.6	7,176.4	146.4	146.6	-90.12	618.8	-4,795.4	440.1	147.4	292.64	1.504	
12,600.0	7,176.0	12,558.6	7,176.0	149.2	149.3	-90.12	618.8	-4,895.4	440.1	141.9	298.21	1.476 Level 3	
12,700.0	7,175.6	12,658.6	7,175.5	152.0	152.1	-90.12	618.8	-4,995.4	440.1	136.3	303.78	1.449 Level 3	
12,800.0	7,175.2	12,758.6	7,175.1	154.8	154.9	-90.12	618.8	-5,095.4	440.1	130.7	309.35	1.423 Level 3	
12,900.0	7,174.8	12,858.6	7,174.7	157.5	157.7	-90.12	618.8	-5,195.4	440.1	125.1	314.92	1.397 Level 3	
13,000.0	7,174.4	12,958.6	7,174.3	160.3	160.5	-90.13	618.8	-5,295.4	440.1	119.6	320.49	1.373 Level 3	
13,100.0	7,173.9	13,058.6	7,173.9	163.1	163.3	-90.13	618.8	-5,395.4	440.1	114.0	326.07	1.350 Level 3	
13,200.0	7,173.5	13,158.6	7,173.5	165.9	166.1	-90.13	618.8	-5,495.4	440.1	108.4	331.64	1.327 Level 3	
13,300.0	7,173.1	13,258.6	7,173.1	168.7	168.8	-90.13	618.8	-5,595.4	440.1	102.8	337.22	1.305 Level 3	
13,400.0	7,172.7	13,358.6	7,172.7	171.5	171.6	-90.13	618.8	-5,695.4	440.1	97.3	342.80	1.284 Level 3	
13,500.0	7,172.3	13,458.6	7,172.3	174.3	174.4	-90.13	618.8	-5,795.4	440.1	91.7	348.38	1.263 Level 3	
13,600.0	7,171.9	13,558.6	7,171.9	177.0	177.2	-90.13	618.8	-5,895.4	440.1	86.1	353.96	1.243 Level 2	
13,700.0	7,171.5	13,658.6	7,171.4	179.8	180.0	-90.13	618.8	-5,995.4	440.1	80.5	359.54	1.224 Level 2	
13,800.0	7,171.0	13,758.6	7,171.0	182.6	182.8	-90.13	618.7	-6,095.4	440.1	74.9	365.13	1.205 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 SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - SHARON 210-304 - ORIGINAL WELLBORE - PROPOSAL #1												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis			Distance								Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
13,900.0	7,170.6	13,858.6	7,170.6	185.4	185.6	-90.13	618.7	-6,195.4	440.1	69.4	370.71	1.187	Level 2
14,000.0	7,170.2	13,958.6	7,170.2	188.2	188.4	-90.13	618.7	-6,295.4	440.1	63.8	376.30	1.170	Level 2
14,100.0	7,169.8	14,058.6	7,169.8	191.0	191.2	-90.13	618.7	-6,395.4	440.1	58.2	381.88	1.152	Level 2
14,200.0	7,169.4	14,158.6	7,169.4	193.8	194.0	-90.13	618.7	-6,495.4	440.1	52.6	387.47	1.136	Level 2
14,295.0	7,169.0	14,253.5	7,169.0	196.4	196.6	-90.13	618.7	-6,590.3	440.1	47.3	392.77	1.120	Level 2, SF

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-179.47	-60.1	-0.6	60.1				
100.0	100.0	99.0	99.0	0.1	0.1	-179.47	-60.1	-0.6	60.1	59.9	0.19	310.740	
200.0	200.0	199.0	199.0	0.3	0.3	-179.47	-60.1	-0.6	60.1	59.5	0.64	93.677	
300.0	300.0	299.0	299.0	0.5	0.5	-179.47	-60.1	-0.6	60.1	59.0	1.09	55.087	
400.0	400.0	399.0	399.0	0.8	0.8	-179.47	-60.1	-0.6	60.1	58.6	1.54	39.015	
500.0	500.0	499.0	499.0	1.0	1.0	-179.47	-60.1	-0.6	60.1	58.1	1.99	30.203 CC, ES	
600.0	600.0	599.0	599.0	1.2	1.2	148.87	-60.1	-0.6	61.6	59.2	2.44	25.247	
700.0	699.8	698.8	698.8	1.4	1.4	151.17	-60.1	-0.6	66.1	63.2	2.89	22.877	
800.0	799.5	798.5	798.5	1.7	1.7	154.36	-60.1	-0.6	73.9	70.5	3.34	22.095	
900.0	898.7	897.7	897.7	1.9	1.9	157.82	-60.1	-0.6	85.1	81.3	3.80	22.388	
1,000.0	997.5	998.1	998.1	2.2	2.1	160.31	-59.7	1.1	98.9	94.7	4.25	23.296	
1,100.0	1,095.6	1,098.7	1,098.5	2.6	2.3	161.17	-58.3	6.1	114.5	109.8	4.69	24.396	
1,169.1	1,163.0	1,168.2	1,167.8	2.8	2.5	161.10	-56.8	11.5	126.2	121.2	5.02	25.155	
1,200.0	1,193.1	1,199.3	1,198.8	3.0	2.5	160.94	-56.0	14.5	131.5	126.4	5.17	25.449	
1,300.0	1,290.4	1,300.3	1,299.0	3.4	2.8	159.71	-52.7	26.4	147.6	142.0	5.69	25.948	
1,400.0	1,387.7	1,401.6	1,399.0	3.8	3.1	157.60	-48.5	41.7	162.3	156.0	6.27	25.895	
1,500.0	1,484.9	1,502.8	1,498.3	4.3	3.4	154.77	-43.4	60.4	175.6	168.7	6.91	25.411	
1,600.0	1,582.2	1,601.5	1,594.9	4.7	3.8	151.93	-38.0	80.2	188.8	181.2	7.61	24.800	
1,700.0	1,679.5	1,700.2	1,691.5	5.2	4.1	149.47	-32.6	100.0	202.3	194.0	8.35	24.228	
1,800.0	1,776.8	1,798.9	1,788.0	5.7	4.5	147.32	-27.1	119.8	216.2	207.1	9.12	23.709	
1,900.0	1,874.1	1,897.7	1,884.6	6.1	4.9	145.43	-21.7	139.6	230.4	220.4	9.91	23.243	
2,000.0	1,971.4	1,996.4	1,981.2	6.6	5.3	143.76	-16.3	159.4	244.7	234.0	10.72	22.829	
2,100.0	2,068.7	2,095.1	2,077.7	7.1	5.7	142.27	-10.9	179.2	259.3	247.7	11.54	22.462	
2,200.0	2,165.9	2,193.8	2,174.3	7.6	6.1	140.94	-5.5	199.0	273.9	261.6	12.38	22.136	
2,300.0	2,263.2	2,292.6	2,270.9	8.0	6.6	139.75	0.0	218.8	288.8	275.5	13.22	21.846	
2,400.0	2,360.5	2,391.3	2,367.4	8.5	7.0	138.67	5.4	238.6	303.7	289.6	14.07	21.588	
2,500.0	2,457.8	2,490.0	2,464.0	9.0	7.4	137.70	10.8	258.4	318.7	303.8	14.92	21.357	
2,600.0	2,555.1	2,588.7	2,560.6	9.5	7.9	136.81	16.2	278.2	333.8	318.0	15.78	21.151	
2,700.0	2,652.4	2,687.5	2,657.1	10.0	8.3	136.00	21.7	298.0	349.0	332.4	16.65	20.965	
2,800.0	2,749.7	2,786.2	2,753.7	10.4	8.7	135.25	27.1	317.8	364.3	346.7	17.51	20.797	
2,900.0	2,846.9	2,884.9	2,850.3	10.9	9.2	134.57	32.5	337.6	379.6	361.2	18.38	20.645	
3,000.0	2,944.2	2,983.6	2,946.8	11.4	9.6	133.94	37.9	357.4	394.9	375.6	19.26	20.507	
3,100.0	3,041.5	3,082.4	3,043.4	11.9	10.0	133.35	43.4	377.2	410.3	390.2	20.13	20.381	
3,200.0	3,138.8	3,181.1	3,140.0	12.4	10.5	132.81	48.8	397.0	425.7	404.7	21.01	20.266	
3,300.0	3,236.1	3,279.8	3,236.5	12.8	10.9	132.31	54.2	416.8	441.2	419.3	21.88	20.160	
3,400.0	3,333.4	3,378.5	3,333.1	13.3	11.4	131.84	59.6	436.6	456.7	433.9	22.76	20.063	
3,500.0	3,430.6	3,477.3	3,429.7	13.8	11.8	131.40	65.1	456.4	472.2	448.6	23.64	19.974	
3,600.0	3,527.9	3,576.0	3,526.2	14.3	12.3	130.99	70.5	476.2	487.8	463.2	24.52	19.891	
3,700.0	3,625.2	3,674.7	3,622.8	14.8	12.7	130.61	75.9	496.0	503.3	477.9	25.40	19.814	
3,800.0	3,722.5	3,773.4	3,719.4	15.3	13.1	130.24	81.3	515.8	518.9	492.6	26.28	19.743	
3,900.0	3,819.8	3,872.2	3,815.9	15.7	13.6	129.90	86.8	535.6	534.5	507.4	27.17	19.676	
4,000.0	3,917.1	3,970.9	3,912.5	16.2	14.0	129.58	92.2	555.4	550.2	522.1	28.05	19.614	
4,100.0	4,014.4	4,069.6	4,009.1	16.7	14.5	129.28	97.6	575.2	565.8	536.9	28.93	19.556	
4,200.0	4,111.6	4,168.3	4,105.6	17.2	14.9	128.99	103.0	595.0	581.5	551.7	29.82	19.502	
4,300.0	4,208.9	4,267.1	4,202.2	17.7	15.4	128.72	108.5	614.8	597.1	566.4	30.70	19.451	
4,400.0	4,306.2	4,366.2	4,299.3	18.2	15.8	128.48	113.8	634.4	612.8	581.3	31.56	19.420	
4,500.0	4,403.5	4,466.1	4,397.6	18.7	16.1	128.53	118.5	651.4	628.3	596.1	32.30	19.456	
4,600.0	4,500.8	4,565.9	4,496.3	19.1	16.4	128.88	122.2	665.1	643.7	610.8	32.95	19.537	
4,700.0	4,598.1	4,665.3	4,595.1	19.6	16.6	129.52	125.1	675.5	659.0	625.5	33.53	19.655	
4,800.0	4,695.4	4,764.1	4,693.7	20.1	16.8	130.42	127.0	682.5	674.3	640.3	34.03	19.814	
4,900.0	4,792.6	4,862.2	4,791.7	20.6	17.0	131.55	128.0	686.2	689.7	655.3	34.46	20.017	
5,000.0	4,889.9	4,959.4	4,888.9	21.1	17.1	132.88	128.2	686.8	705.5	670.7	34.82	20.264	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - SHARON 210-334 - ORIGINAL WELLBORE - PROPOSAL #1												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,100.0	4,987.2	5,056.7	4,986.2	21.6	17.2	134.21	128.2	686.8	721.7	686.5	35.16	20.525	
5,200.0	5,084.5	5,154.0	5,083.5	22.1	17.4	135.48	128.2	686.8	738.2	702.7	35.50	20.793	
5,300.0	5,181.8	5,251.3	5,180.8	22.5	17.5	136.70	128.2	686.8	755.1	719.3	35.84	21.068	
5,400.0	5,279.1	5,348.6	5,278.1	23.0	17.6	137.86	128.2	686.8	772.3	736.2	36.18	21.349	
5,500.0	5,376.3	5,445.9	5,375.3	23.5	17.8	138.97	128.2	686.8	789.9	753.4	36.51	21.634	
5,600.0	5,473.6	5,543.1	5,472.6	24.0	17.9	140.04	128.2	686.8	807.7	770.8	36.84	21.923	
5,700.0	5,570.9	5,640.4	5,569.9	24.5	18.1	141.06	128.2	686.8	825.7	788.6	37.17	22.214	
5,800.0	5,668.2	5,737.7	5,667.2	25.0	18.2	142.04	128.2	686.8	844.1	806.6	37.50	22.506	
5,900.0	5,765.5	5,835.0	5,764.5	25.5	18.3	142.97	128.2	686.8	862.6	824.8	37.83	22.800	
5,921.9	5,786.8	5,856.3	5,785.8	25.6	18.4	143.17	128.2	686.8	866.7	828.8	37.91	22.864	
6,000.0	5,863.0	5,932.5	5,862.0	25.9	18.5	144.00	128.2	686.8	880.5	842.4	38.16	23.077	
6,100.0	5,961.2	6,030.7	5,960.2	26.2	18.6	144.88	128.2	686.8	895.9	857.5	38.43	23.312	
6,200.0	6,060.0	6,129.6	6,059.0	26.5	18.8	145.58	128.2	686.8	908.5	869.8	38.70	23.479	
6,300.0	6,159.3	6,228.8	6,158.3	26.7	18.9	146.11	128.2	686.8	918.4	879.4	38.95	23.577	
6,400.0	6,259.0	6,328.5	6,258.0	26.9	19.1	146.47	128.2	686.8	925.4	886.2	39.20	23.609	
6,500.0	6,358.8	6,428.4	6,357.8	27.1	19.3	146.69	128.2	686.8	929.5	890.1	39.43	23.575	
6,591.0	6,449.8	6,519.3	6,448.8	27.2	19.4	179.26	128.2	686.8	930.7	891.4	39.31	23.673	
6,600.0	6,458.8	6,528.3	6,457.8	27.2	19.4	179.26	128.2	686.8	930.7	891.3	39.34	23.656	
6,621.0	6,479.8	6,549.3	6,478.8	27.2	19.5	179.26	128.2	686.8	930.7	891.3	39.41	23.616	
6,650.0	6,508.8	6,578.8	6,508.3	27.3	19.5	-90.74	128.2	686.3	930.7	890.9	39.79	23.391	
6,700.0	6,558.7	6,629.7	6,559.0	27.3	19.5	-90.74	128.2	682.4	930.7	890.8	39.86	23.348	
6,750.0	6,608.1	6,680.5	6,609.3	27.3	19.5	-90.74	128.2	675.0	930.7	890.8	39.87	23.344	
6,800.0	6,657.0	6,731.4	6,658.9	27.3	19.5	-90.73	128.2	664.1	930.7	890.9	39.82	23.372	
6,850.0	6,704.9	6,782.2	6,707.7	27.2	19.5	-90.72	128.2	649.6	930.7	891.0	39.72	23.429	
6,900.0	6,751.8	6,833.0	6,755.2	27.2	19.4	-90.71	128.2	631.8	930.7	891.1	39.59	23.510	
6,950.0	6,797.4	6,883.9	6,801.4	27.1	19.3	-90.69	128.2	610.6	930.7	891.3	39.42	23.609	
7,000.0	6,841.4	6,934.6	6,845.9	27.0	19.2	-90.67	128.2	586.2	930.7	891.4	39.24	23.718	
7,050.0	6,883.6	6,985.4	6,888.6	26.9	19.2	-90.65	128.2	558.7	930.7	891.6	39.06	23.829	
7,100.0	6,923.9	7,036.1	6,929.2	26.8	19.1	-90.62	128.2	528.3	930.7	891.8	38.89	23.931	
7,150.0	6,962.0	7,086.8	6,967.5	26.7	19.0	-90.59	128.2	495.1	930.7	891.9	38.76	24.010	
7,200.0	6,997.8	7,137.5	7,003.4	26.5	19.0	-90.55	128.2	459.4	930.7	892.0	38.69	24.053	
7,250.0	7,031.0	7,188.1	7,036.6	26.4	19.0	-90.52	128.2	421.2	930.6	891.9	38.70	24.045	
7,300.0	7,061.6	7,238.6	7,067.0	26.3	19.1	-90.48	128.2	380.8	930.6	891.8	38.82	23.974	
7,350.0	7,089.3	7,289.2	7,094.4	26.1	19.3	-90.44	128.2	338.4	930.6	891.6	39.05	23.829	
7,400.0	7,114.0	7,339.6	7,118.8	26.0	19.5	-90.39	128.2	294.2	930.6	891.2	39.43	23.602	
7,450.0	7,135.7	7,390.1	7,139.9	25.9	19.8	-90.35	128.2	248.4	930.6	890.7	39.96	23.290	
7,500.0	7,154.2	7,440.4	7,157.8	25.7	20.1	-90.30	128.2	201.4	930.6	890.0	40.64	22.897	
7,550.0	7,169.4	7,490.7	7,172.4	25.6	20.6	-90.25	128.2	153.2	930.6	889.1	41.49	22.431	
7,600.0	7,181.2	7,541.0	7,183.4	25.5	21.1	-90.21	128.2	104.2	930.6	888.1	42.49	21.902	
7,650.0	7,189.6	7,591.2	7,191.1	25.4	21.7	-90.15	128.2	54.6	930.6	887.0	43.63	21.327	
7,700.0	7,194.5	7,641.3	7,195.2	25.3	22.4	-90.10	128.2	4.6	930.6	885.7	44.91	20.722	
7,748.9	7,196.0	7,690.3	7,195.9	25.2	23.1	-90.06	128.2	-44.4	930.6	884.3	46.27	20.115	
7,800.0	7,195.8	7,741.4	7,195.6	25.1	23.9	-90.05	128.2	-95.4	930.6	882.8	47.83	19.458	
7,900.0	7,195.4	7,841.4	7,194.9	25.5	25.7	-90.04	128.2	-195.4	930.6	879.4	51.16	18.189	
8,000.0	7,195.0	7,941.4	7,194.3	27.5	27.6	-90.02	128.2	-295.4	930.6	875.7	54.87	16.959	
8,100.0	7,194.6	8,041.4	7,193.6	29.5	29.6	-90.01	128.2	-395.4	930.6	871.7	58.89	15.804	
8,200.0	7,194.1	8,141.4	7,193.0	31.7	31.8	-89.99	128.2	-495.4	930.6	867.5	63.14	14.738	
8,300.0	7,193.7	8,241.4	7,192.3	33.9	34.0	-89.98	128.2	-595.4	930.6	863.0	67.60	13.766	
8,400.0	7,193.3	8,341.4	7,191.7	36.3	36.4	-89.96	128.2	-695.4	930.6	858.4	72.22	12.886	
8,500.0	7,192.9	8,441.4	7,191.0	38.6	38.8	-89.95	128.2	-795.4	930.6	853.6	76.97	12.090	
8,549.9	7,192.7	8,491.3	7,190.7	39.9	40.0	-89.94	128.2	-845.3	930.6	851.2	79.39	11.722	
8,600.0	7,192.5	8,541.4	7,190.4	41.1	41.2	-89.93	128.2	-895.4	930.6	848.8	81.84	11.372	

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 SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - SHARON 210-334 - ORIGINAL WELLBORE - PROPOSAL #1												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
8,700.0	7,192.1	8,641.4	7,189.7	43.5	43.7	-89.92	128.2	-995.4	930.6	843.8	86.79	10.723	
8,800.0	7,191.7	8,741.4	7,189.1	46.0	46.3	-89.90	128.2	-1,095.4	930.6	838.8	91.82	10.135	
8,900.0	7,191.3	8,841.4	7,188.4	48.6	48.8	-89.89	128.2	-1,195.4	930.6	833.7	96.91	9.603	
9,000.0	7,190.9	8,941.4	7,187.8	51.1	51.4	-89.87	128.2	-1,295.4	930.6	828.5	102.06	9.118	
9,100.0	7,190.4	9,041.4	7,187.1	53.7	54.0	-89.86	128.2	-1,395.4	930.6	823.4	107.26	8.676	
9,200.0	7,190.0	9,141.4	7,186.5	56.3	56.7	-89.84	128.2	-1,495.4	930.6	818.1	112.49	8.273	
9,300.0	7,189.6	9,241.4	7,185.8	58.9	59.3	-89.83	128.2	-1,595.4	930.6	812.8	117.76	7.902	
9,400.0	7,189.2	9,341.4	7,185.2	61.6	62.0	-89.81	128.2	-1,695.4	930.6	807.5	123.07	7.562	
9,500.0	7,188.8	9,441.4	7,184.5	64.2	64.6	-89.80	128.2	-1,795.4	930.6	802.2	128.40	7.248	
9,600.0	7,188.4	9,541.4	7,183.8	66.9	67.3	-89.78	128.2	-1,895.4	930.6	796.9	133.75	6.958	
9,700.0	7,188.0	9,641.4	7,183.2	69.6	70.0	-89.77	128.2	-1,995.4	930.6	791.5	139.12	6.689	
9,800.0	7,187.6	9,741.4	7,182.5	72.3	72.7	-89.75	128.2	-2,095.4	930.6	786.1	144.51	6.440	
9,900.0	7,187.1	9,841.4	7,181.9	74.9	75.4	-89.74	128.2	-2,195.4	930.6	780.7	149.92	6.207	
10,000.0	7,186.7	9,941.4	7,181.2	77.6	78.1	-89.72	128.2	-2,295.4	930.6	775.3	155.34	5.991	
10,100.0	7,186.3	10,041.4	7,180.6	80.4	80.9	-89.71	128.2	-2,395.4	930.6	769.8	160.78	5.788	
10,200.0	7,185.9	10,141.4	7,179.9	83.1	83.6	-89.69	128.2	-2,495.4	930.6	764.4	166.23	5.598	
10,300.0	7,185.5	10,241.4	7,179.3	85.8	86.3	-89.68	128.2	-2,595.4	930.6	758.9	171.69	5.420	
10,400.0	7,185.1	10,341.4	7,178.6	88.5	89.1	-89.66	128.2	-2,695.4	930.6	753.5	177.15	5.253	
10,500.0	7,184.7	10,441.4	7,177.9	91.2	91.8	-89.65	128.2	-2,795.4	930.6	748.0	182.63	5.096	
10,600.0	7,184.3	10,541.4	7,177.3	94.0	94.6	-89.63	128.2	-2,895.4	930.6	742.5	188.12	4.947	
10,700.0	7,183.9	10,641.4	7,176.6	96.7	97.3	-89.62	128.2	-2,995.4	930.6	737.0	193.61	4.807	
10,800.0	7,183.4	10,741.4	7,176.0	99.4	100.1	-89.60	128.2	-3,095.4	930.6	731.5	199.11	4.674	
10,900.0	7,183.0	10,841.4	7,175.3	102.2	102.8	-89.59	128.2	-3,195.4	930.6	726.0	204.62	4.548	
11,000.0	7,182.6	10,941.4	7,174.7	104.9	105.6	-89.57	128.2	-3,295.4	930.6	720.5	210.13	4.429	
11,100.0	7,182.2	11,041.4	7,174.0	107.7	108.3	-89.56	128.2	-3,395.4	930.6	715.0	215.65	4.315	
11,200.0	7,181.8	11,141.4	7,173.3	110.4	111.1	-89.54	128.2	-3,495.4	930.6	709.5	221.17	4.208	
11,300.0	7,181.4	11,241.4	7,172.7	113.2	113.9	-89.53	128.2	-3,595.3	930.6	703.9	226.70	4.105	
11,400.0	7,181.0	11,341.4	7,172.0	116.0	116.6	-89.51	128.2	-3,695.3	930.6	698.4	232.23	4.007	
11,500.0	7,180.6	11,441.4	7,171.4	118.7	119.4	-89.50	128.2	-3,795.3	930.6	692.9	237.76	3.914	
11,600.0	7,180.1	11,541.4	7,170.7	121.5	122.2	-89.48	128.2	-3,895.3	930.6	687.3	243.30	3.825	
11,700.0	7,179.7	11,641.4	7,170.0	124.3	124.9	-89.46	128.2	-3,995.3	930.6	681.8	248.84	3.740	
11,800.0	7,179.3	11,741.4	7,169.4	127.0	127.7	-89.45	128.2	-4,095.3	930.6	676.2	254.39	3.658	
11,835.0	7,179.2	11,776.4	7,169.1	128.0	128.7	-89.44	128.2	-4,130.4	930.6	674.3	256.33	3.631	
11,900.0	7,178.9	11,797.6	7,169.0	129.8	129.3	-89.44	128.2	-4,151.5	931.7	672.9	258.72	3.601 SF	
12,000.0	7,178.5	11,797.6	7,169.0	132.6	129.3	-89.44	128.2	-4,151.5	941.7	680.2	261.49	3.601	
12,100.0	7,178.1	11,797.6	7,169.0	135.3	129.3	-89.44	128.2	-4,151.5	962.0	697.8	264.27	3.640	
12,200.0	7,177.7	11,797.6	7,169.0	138.1	129.3	-89.44	128.2	-4,151.5	992.1	725.1	267.05	3.715	
12,300.0	7,177.2	11,797.6	7,169.0	140.9	129.3	-89.44	128.2	-4,151.5	1,031.1	761.2	269.83	3.821	
12,400.0	7,176.8	11,797.6	7,169.0	143.7	129.3	-89.44	128.2	-4,151.5	1,077.9	805.3	272.60	3.954	
12,500.0	7,176.4	11,797.6	7,169.0	146.4	129.3	-89.44	128.2	-4,151.5	1,131.6	856.3	275.39	4.109	
12,600.0	7,176.0	11,797.6	7,169.0	149.2	129.3	-89.44	128.2	-4,151.5	1,191.4	913.2	278.17	4.283	
12,700.0	7,175.6	11,797.6	7,169.0	152.0	129.3	-89.44	128.2	-4,151.5	1,256.2	975.3	280.95	4.471	
12,800.0	7,175.2	11,797.6	7,169.0	154.8	129.3	-89.44	128.2	-4,151.5	1,325.5	1,041.8	283.73	4.672	
12,900.0	7,174.8	11,797.6	7,169.0	157.5	129.3	-89.44	128.2	-4,151.5	1,398.5	1,111.9	286.52	4.881	
13,000.0	7,174.4	11,797.6	7,169.0	160.3	129.3	-89.44	128.2	-4,151.5	1,474.6	1,185.3	289.31	5.097	
13,100.0	7,173.9	11,797.6	7,169.0	163.1	129.3	-89.44	128.2	-4,151.5	1,553.5	1,261.4	292.09	5.318	
13,200.0	7,173.5	11,797.6	7,169.0	165.9	129.3	-89.44	128.2	-4,151.5	1,634.6	1,339.8	294.88	5.543	
13,300.0	7,173.1	11,797.6	7,169.0	168.7	129.3	-89.44	128.2	-4,151.5	1,717.8	1,420.1	297.67	5.771	
13,400.0	7,172.7	11,797.6	7,169.0	171.5	129.3	-89.44	128.2	-4,151.5	1,802.7	1,502.2	300.46	6.000	
13,500.0	7,172.3	11,797.6	7,169.0	174.3	129.3	-89.44	128.2	-4,151.5	1,889.0	1,585.8	303.24	6.229	
13,600.0	7,171.9	11,797.6	7,169.0	177.0	129.3	-89.44	128.2	-4,151.5	1,976.6	1,670.6	306.03	6.459	
13,700.0	7,171.5	11,797.6	7,169.0	179.8	129.3	-89.44	128.2	-4,151.5	2,065.4	1,756.6	308.82	6.688	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 21 T4N R67W 6th P.M. - SHARON 210-334 - ORIGINAL WELLBORE - PROPOSAL #1												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	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
13,800.0	7,171.0	11,797.6	7,169.0	182.6	129.3	-89.44	128.2	-4,151.5	2,155.1	1,843.5	311.62	6.916	
13,900.0	7,170.6	11,797.6	7,169.0	185.4	129.3	-89.44	128.2	-4,151.5	2,245.8	1,931.3	314.41	7.143	
14,000.0	7,170.2	11,797.6	7,169.0	188.2	129.3	-89.44	128.2	-4,151.5	2,337.1	2,019.9	317.20	7.368	
14,100.0	7,169.8	11,797.6	7,169.0	191.0	129.3	-89.44	128.2	-4,151.5	2,429.2	2,109.2	319.99	7.591	
14,200.0	7,169.4	11,797.6	7,169.0	193.8	129.3	-89.44	128.2	-4,151.5	2,521.9	2,199.1	322.78	7.813	
14,295.0	7,169.0	11,797.6	7,169.0	196.4	129.3	-89.44	128.2	-4,151.5	2,610.3	2,284.9	325.44	8.021	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 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: 568-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	-106.41	-1,168.7	-3,967.9	4,136.6				
100.0	100.0	56.4	56.4	0.1	0.1	-106.41	-1,168.7	-3,967.9	4,136.4	4,136.3	0.16	N/A	
200.0	200.0	152.7	152.7	0.3	0.2	-106.41	-1,168.8	-3,968.0	4,136.5	4,136.0	0.49	8,432.388	
300.0	300.0	249.0	249.0	0.5	0.3	-106.41	-1,168.8	-3,968.1	4,136.7	4,135.9	0.82	5,034.491	
400.0	400.0	345.3	345.3	0.8	0.4	-106.41	-1,168.9	-3,968.4	4,137.0	4,135.8	1.15	3,588.654	
500.0	500.0	441.7	441.7	1.0	0.5	-106.41	-1,169.0	-3,968.7	4,137.4	4,135.9	1.48	2,788.127	
600.0	600.0	538.0	538.0	1.2	0.6	-138.92	-1,169.2	-3,969.1	4,139.1	4,137.3	1.82	2,278.651	
700.0	699.8	643.5	643.5	1.4	0.8	-138.91	-1,169.2	-3,969.6	4,143.5	4,141.3	2.23	1,855.804	
800.0	799.5	754.1	754.1	1.7	1.0	-138.90	-1,169.0	-3,970.0	4,150.3	4,147.7	2.68	1,549.406	
900.0	898.7	832.4	832.4	1.9	1.2	-138.86	-1,169.0	-3,970.3	4,159.9	4,156.8	3.09	1,348.145	
1,000.0	997.5	930.8	930.8	2.2	1.4	-138.83	-1,169.0	-3,970.9	4,172.4	4,168.8	3.55	1,174.556	
1,100.0	1,095.6	1,032.1	1,032.1	2.6	1.6	-138.81	-1,168.9	-3,971.5	4,187.4	4,183.4	4.04	1,036.981	
1,169.1	1,163.0	1,091.6	1,091.6	2.8	1.7	-138.76	-1,169.0	-3,971.9	4,199.4	4,195.0	4.37	960.534	
1,200.0	1,193.1	1,117.9	1,117.9	3.0	1.8	-138.82	-1,169.0	-3,972.1	4,205.1	4,200.5	4.52	929.525	
1,300.0	1,290.4	1,214.0	1,213.9	3.4	2.0	-139.01	-1,168.8	-3,973.0	4,223.5	4,218.5	5.05	836.525	
1,400.0	1,387.7	1,312.7	1,312.6	3.8	2.2	-139.21	-1,168.4	-3,974.0	4,242.0	4,236.5	5.58	759.739	
1,500.0	1,484.9	1,424.1	1,424.0	4.3	2.4	-139.44	-1,168.1	-3,974.7	4,260.4	4,254.2	6.15	693.220	
1,600.0	1,582.2	1,514.2	1,514.2	4.7	2.6	-139.61	-1,167.6	-3,975.4	4,278.7	4,272.1	6.68	640.803	
1,700.0	1,679.5	1,611.6	1,611.6	5.2	2.8	-139.80	-1,166.9	-3,976.3	4,297.2	4,289.9	7.23	594.354	
1,800.0	1,776.8	1,690.0	1,690.0	5.7	3.0	-139.95	-1,166.5	-3,977.1	4,315.9	4,308.2	7.75	557.220	
1,900.0	1,874.1	2,065.0	2,064.3	6.1	3.8	-140.50	-1,149.8	-3,972.8	4,330.5	4,321.6	8.86	488.833	
2,000.0	1,971.4	2,113.8	2,112.7	6.6	3.9	-140.52	-1,143.9	-3,972.2	4,343.7	4,334.4	9.33	465.359	
2,100.0	2,068.7	2,161.7	2,160.2	7.1	4.0	-140.54	-1,137.6	-3,972.6	4,358.2	4,348.4	9.81	444.277	
2,200.0	2,165.9	2,388.2	2,383.2	7.6	4.6	-140.47	-1,098.0	-3,974.9	4,371.5	4,360.8	10.79	405.257	
2,300.0	2,263.2	2,459.0	2,452.0	8.0	4.8	-140.40	-1,081.9	-3,976.2	4,384.0	4,372.7	11.38	385.185	
2,400.0	2,360.5	2,551.4	2,541.0	8.5	5.2	-140.25	-1,057.1	-3,979.6	4,397.0	4,384.9	12.10	363.492	
2,500.0	2,457.8	2,653.9	2,638.6	9.0	5.6	-140.04	-1,026.2	-3,984.3	4,409.7	4,396.8	12.90	341.832	
2,600.0	2,555.1	2,721.2	2,702.7	9.5	5.9	-139.90	-1,005.8	-3,987.7	4,423.0	4,409.4	13.56	326.096	
2,700.0	2,652.4	2,831.1	2,807.7	10.0	6.4	-139.69	-974.0	-3,993.1	4,436.6	4,422.2	14.40	308.136	
2,800.0	2,749.7	2,985.1	2,955.6	10.4	7.0	-139.44	-931.5	-3,998.3	4,449.1	4,433.7	15.43	288.287	
2,900.0	2,846.9	3,103.9	3,070.4	10.9	7.5	-139.28	-900.9	-4,000.8	4,461.1	4,444.8	16.32	273.390	
3,000.0	2,944.2	3,205.1	3,168.3	11.4	8.0	-139.15	-875.1	-4,002.5	4,472.8	4,455.7	17.14	260.968	
3,100.0	3,041.5	3,281.0	3,241.7	11.9	8.3	-139.06	-856.1	-4,004.0	4,484.9	4,467.1	17.85	251.219	
3,200.0	3,138.8	3,371.3	3,329.2	12.4	8.7	-138.96	-833.9	-4,006.0	4,497.4	4,478.8	18.62	241.488	
3,300.0	3,236.1	3,547.8	3,500.2	12.8	9.5	-138.75	-790.4	-4,008.1	4,508.9	4,489.1	19.79	227.845	
3,400.0	3,333.4	3,622.3	3,572.3	13.3	9.9	-138.66	-771.3	-4,008.8	4,519.9	4,499.4	20.51	220.360	
3,500.0	3,430.6	3,699.2	3,646.6	13.8	10.2	-138.56	-751.4	-4,010.1	4,531.6	4,510.4	21.26	213.193	
3,600.0	3,527.9	3,783.1	3,727.3	14.3	10.6	-138.44	-728.6	-4,012.1	4,543.6	4,521.6	22.05	206.053	
3,700.0	3,625.2	3,862.9	3,803.8	14.8	11.0	-138.31	-706.3	-4,014.5	4,556.1	4,533.2	22.84	199.465	
3,800.0	3,722.5	3,943.7	3,881.2	15.3	11.5	-138.18	-683.4	-4,017.4	4,568.9	4,545.3	23.65	193.222	
3,900.0	3,819.8	4,030.0	3,964.0	15.7	11.9	-138.04	-659.1	-4,020.8	4,582.2	4,557.7	24.48	187.208	
4,000.0	3,917.1	4,274.9	4,199.3	16.2	13.1	-137.67	-591.3	-4,025.8	4,593.6	4,567.5	26.10	175.976	
4,100.0	4,014.4	4,404.0	4,322.8	16.7	13.8	-137.46	-553.7	-4,026.8	4,603.8	4,576.6	27.18	169.389	
4,200.0	4,111.6	4,497.0	4,411.2	17.2	14.3	-137.29	-525.0	-4,027.6	4,613.5	4,585.4	28.09	164.228	
4,300.0	4,208.9	4,558.2	4,469.2	17.7	14.7	-137.17	-505.6	-4,028.6	4,623.8	4,595.0	28.83	160.380	
4,400.0	4,306.2	4,634.6	4,541.8	18.2	15.1	-137.03	-481.9	-4,030.2	4,634.7	4,605.1	29.66	156.272	
4,500.0	4,403.5	4,711.2	4,614.6	18.7	15.6	-136.88	-457.7	-4,032.2	4,646.1	4,615.6	30.49	152.378	
4,600.0	4,500.8	4,781.0	4,680.9	19.1	15.9	-136.74	-436.3	-4,034.4	4,658.1	4,626.9	31.28	148.903	
4,700.0	4,598.1	4,833.8	4,731.2	19.6	16.2	-136.65	-420.5	-4,036.4	4,671.0	4,639.1	31.96	146.132	
4,800.0	4,695.4	4,903.9	4,798.4	20.1	16.6	-136.54	-400.5	-4,039.3	4,684.7	4,652.0	32.73	143.132	
4,900.0	4,792.6	4,992.2	4,883.8	20.6	17.0	-136.44	-378.4	-4,042.4	4,698.7	4,665.2	33.55	140.050	
5,000.0	4,889.9	5,061.0	4,951.0	21.1	17.3	-136.39	-363.8	-4,044.3	4,713.1	4,678.9	34.24	137.657	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 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: 568-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,100.0	4,987.2	5,124.2	5,013.2	21.6	17.5	-136.37	-352.3	-4,046.0	4,728.2	4,693.3	34.86	135.628	
5,200.0	5,084.5	5,194.0	5,082.1	22.1	17.8	-136.38	-341.5	-4,048.1	4,744.1	4,708.6	35.49	133.677	
5,300.0	5,181.8	5,305.6	5,192.6	22.5	18.1	-136.41	-326.5	-4,051.0	4,760.3	4,724.0	36.22	131.433	
5,400.0	5,279.1	5,470.5	5,356.6	23.0	18.6	-136.53	-310.0	-4,052.1	4,775.3	4,738.2	37.01	129.020	
5,500.0	5,376.3	5,554.0	5,439.8	23.5	18.8	-136.62	-303.5	-4,051.7	4,789.9	4,752.3	37.57	127.487	
5,600.0	5,473.6	5,622.0	5,507.7	24.0	18.9	-136.70	-299.0	-4,051.5	4,805.0	4,766.9	38.09	126.151	
5,700.0	5,570.9	5,700.4	5,586.0	24.5	19.1	-136.79	-294.5	-4,051.6	4,820.7	4,782.1	38.61	124.841	
5,800.0	5,668.2	5,762.7	5,648.2	25.0	19.2	-136.88	-291.6	-4,051.8	4,837.0	4,797.9	39.10	123.707	
5,900.0	5,765.5	5,809.0	5,694.5	25.5	19.3	-136.95	-290.1	-4,052.2	4,854.1	4,814.5	39.56	122.714	
5,921.9	5,786.8	5,837.3	5,722.8	25.6	19.3	-136.99	-289.3	-4,052.4	4,857.9	4,818.2	39.68	122.436	
6,000.0	5,863.0	5,902.0	5,787.5	25.9	19.4	-137.27	-287.9	-4,053.4	4,871.1	4,831.0	40.04	121.665	
6,100.0	5,961.2	6,004.8	5,890.2	26.2	19.6	-137.61	-287.4	-4,054.4	4,885.8	4,845.4	40.43	120.854	
6,200.0	6,060.0	6,096.1	5,981.6	26.5	19.7	-137.90	-288.3	-4,054.8	4,898.0	4,857.2	40.75	120.190	
6,300.0	6,159.3	6,212.9	6,098.3	26.7	19.8	-138.14	-288.8	-4,055.2	4,907.2	4,866.1	41.07	119.470	
6,400.0	6,259.0	6,275.0	6,160.5	26.9	19.9	-138.27	-289.0	-4,055.5	4,914.1	4,872.8	41.31	118.965	
6,500.0	6,358.8	6,368.0	6,253.4	27.1	20.0	-138.38	-289.6	-4,056.6	4,919.1	4,877.6	41.54	118.417	
6,591.0	6,449.8	6,431.8	6,317.3	27.2	20.1	-105.91	-289.9	-4,057.7	4,921.8	4,884.3	37.41	131.560	
6,600.0	6,458.8	6,440.1	6,325.5	27.2	20.1	-105.91	-290.0	-4,057.8	4,921.9	4,884.5	37.44	131.474	
6,621.0	6,479.8	6,462.0	6,347.4	27.2	20.1	-105.91	-290.0	-4,058.2	4,922.3	4,884.8	37.50	131.250	
6,650.0	6,508.8	6,503.2	6,388.7	27.3	20.2	-15.91	-290.2	-4,058.9	4,922.3	4,880.5	41.77	117.847	
6,700.0	6,558.7	6,572.9	6,458.3	27.3	20.3	-15.99	-290.5	-4,059.8	4,919.3	4,877.7	41.59	118.291	
6,750.0	6,608.1	6,624.7	6,510.1	27.3	20.3	-16.16	-290.6	-4,060.4	4,912.9	4,871.7	41.19	119.288	
6,800.0	6,657.0	6,667.2	6,552.6	27.3	20.4	-16.41	-290.6	-4,061.0	4,903.3	4,862.7	40.58	120.827	
6,850.0	6,704.9	6,701.3	6,586.7	27.2	20.4	-16.74	-290.6	-4,061.5	4,890.4	4,850.7	39.78	122.943	
6,900.0	6,751.8	6,743.0	6,628.4	27.2	20.5	-17.19	-290.8	-4,062.2	4,874.6	4,835.8	38.80	125.623	
6,950.0	6,797.4	6,806.5	6,691.9	27.1	20.6	-17.78	-291.1	-4,063.1	4,855.5	4,817.9	37.68	128.871	
7,000.0	6,841.4	6,862.2	6,747.6	27.0	20.6	-18.51	-291.4	-4,063.7	4,833.3	4,796.9	36.38	132.842	
7,050.0	6,883.6	6,901.5	6,786.9	26.9	20.7	-19.37	-291.6	-4,064.1	4,808.1	4,773.1	34.93	137.637	
7,100.0	6,923.9	6,945.2	6,830.5	26.8	20.8	-20.41	-291.8	-4,064.6	4,780.1	4,746.8	33.37	143.249	
7,150.0	6,962.0	7,004.0	6,889.4	26.7	20.8	-21.74	-292.0	-4,065.0	4,749.4	4,717.7	31.74	149.654	
7,200.0	6,997.8	7,045.9	6,931.3	26.5	20.9	-23.29	-292.1	-4,065.3	4,716.2	4,686.1	30.05	156.924	
7,250.0	7,031.0	7,078.6	6,964.0	26.4	20.9	-25.12	-292.1	-4,065.5	4,680.6	4,652.2	28.40	164.834	
7,300.0	7,061.6	7,108.8	6,994.1	26.3	21.0	-27.35	-291.9	-4,065.7	4,642.9	4,616.0	26.87	172.816	
7,350.0	7,089.3	7,144.9	7,030.3	26.1	21.0	-30.14	-291.7	-4,065.9	4,603.2	4,577.6	25.62	179.646	
7,400.0	7,114.0	7,180.3	7,065.7	26.0	21.1	-33.63	-291.4	-4,066.1	4,561.8	4,536.9	24.86	183.475	
7,450.0	7,135.7	7,212.8	7,098.2	25.9	21.1	-37.99	-291.2	-4,066.2	4,518.8	4,494.0	24.82	182.059	
7,500.0	7,154.2	7,279.5	7,164.9	25.7	21.2	-44.21	-290.9	-4,065.9	4,474.4	4,448.4	25.98	172.226	
7,550.0	7,169.4	7,312.8	7,198.1	25.6	21.3	-51.54	-290.8	-4,065.4	4,428.8	4,400.7	28.09	157.644	
7,600.0	7,181.2	7,325.4	7,210.8	25.5	21.3	-60.16	-290.7	-4,065.2	4,382.3	4,351.4	30.97	141.498	
7,650.0	7,189.6	7,334.1	7,219.5	25.4	21.3	-70.43	-290.7	-4,065.1	4,335.4	4,301.1	34.27	126.492	
7,700.0	7,194.5	7,338.8	7,224.2	25.3	21.3	-81.98	-290.7	-4,065.0	4,288.0	4,250.8	37.26	115.085	
7,748.9	7,196.0	7,339.5	7,224.9	25.2	21.3	-93.69	-290.7	-4,065.0	4,241.6	4,202.4	39.19	108.228	
7,800.0	7,195.8	7,338.3	7,223.7	25.1	21.3	-93.63	-290.7	-4,065.0	4,193.3	4,153.3	39.92	105.041	
7,900.0	7,195.4	7,336.0	7,221.3	25.5	21.3	-93.54	-290.7	-4,065.0	4,098.7	4,057.2	41.52	98.722	
8,000.0	7,195.0	7,333.6	7,219.0	27.5	21.3	-93.44	-290.7	-4,065.1	4,004.5	3,961.2	43.31	92.463	
8,100.0	7,194.6	7,331.3	7,216.7	29.5	21.3	-93.34	-290.7	-4,065.1	3,910.5	3,865.2	45.26	86.405	
8,200.0	7,194.1	7,329.0	7,214.4	31.7	21.3	-93.24	-290.7	-4,065.1	3,816.8	3,769.5	47.33	80.634	
8,300.0	7,193.7	7,326.8	7,212.1	33.9	21.3	-93.15	-290.7	-4,065.2	3,723.4	3,673.9	49.52	75.195	
8,400.0	7,193.3	7,324.5	7,209.9	36.3	21.3	-93.05	-290.7	-4,065.2	3,630.4	3,578.7	51.79	70.106	
8,500.0	7,192.9	7,322.3	7,207.7	38.6	21.3	-92.96	-290.7	-4,065.3	3,537.8	3,483.7	54.12	65.366	
8,600.0	7,192.5	7,320.1	7,205.4	41.1	21.3	-92.86	-290.7	-4,065.3	3,445.6	3,389.1	56.52	60.962	
8,700.0	7,192.1	7,317.9	7,203.2	43.5	21.3	-92.77	-290.7	-4,065.3	3,353.9	3,294.9	58.97	56.878	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 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: 568-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	
8,800.0	7,191.7	7,315.7	7,201.1	46.0	21.3	-92.68	-290.7	-4,065.4	3,262.6	3,201.1	61.45	53.091	
8,900.0	7,191.3	7,313.5	7,198.9	48.6	21.3	-92.59	-290.7	-4,065.4	3,171.8	3,107.9	63.97	49.580	
9,000.0	7,190.9	7,311.4	7,196.8	51.1	21.3	-92.50	-290.8	-4,065.4	3,081.6	3,015.1	66.53	46.323	
9,100.0	7,190.4	7,309.3	7,194.6	53.7	21.3	-92.41	-290.8	-4,065.5	2,992.1	2,923.0	69.10	43.300	
9,200.0	7,190.0	7,307.2	7,192.5	56.3	21.3	-92.32	-290.8	-4,065.5	2,903.2	2,831.5	71.70	40.492	
9,300.0	7,189.6	7,305.1	7,190.5	58.9	21.3	-92.23	-290.8	-4,065.5	2,815.1	2,740.8	74.32	37.880	
9,400.0	7,189.2	7,302.5	7,187.9	61.6	21.3	-92.12	-290.8	-4,065.6	2,727.8	2,650.8	76.95	35.450	
9,500.0	7,188.8	7,299.5	7,184.9	64.2	21.3	-91.99	-290.8	-4,065.6	2,641.3	2,561.7	79.59	33.186	
9,600.0	7,188.4	7,296.7	7,182.0	66.9	21.3	-91.87	-290.8	-4,065.6	2,555.9	2,473.7	82.25	31.075	
9,700.0	7,188.0	7,294.0	7,179.3	69.6	21.3	-91.76	-290.8	-4,065.7	2,471.6	2,386.6	84.92	29.105	
9,800.0	7,187.6	7,291.4	7,176.8	72.3	21.3	-91.65	-290.8	-4,065.7	2,388.4	2,300.8	87.60	27.266	
9,900.0	7,187.1	7,289.0	7,174.4	74.9	21.2	-91.55	-290.8	-4,065.7	2,306.6	2,216.3	90.29	25.548	
10,000.0	7,186.7	7,286.7	7,172.1	77.6	21.2	-91.45	-290.8	-4,065.8	2,226.3	2,133.3	92.98	23.943	
10,100.0	7,186.3	7,284.5	7,169.9	80.4	21.2	-91.36	-290.8	-4,065.8	2,147.7	2,052.0	95.69	22.444	
10,200.0	7,185.9	7,282.4	7,167.8	83.1	21.2	-91.27	-290.9	-4,065.8	2,070.8	1,972.4	98.40	21.045	
10,300.0	7,185.5	7,280.5	7,165.8	85.8	21.2	-91.18	-290.9	-4,065.9	1,996.1	1,895.0	101.12	19.740	
10,400.0	7,185.1	7,278.6	7,163.9	88.5	21.2	-91.10	-290.9	-4,065.9	1,923.6	1,819.8	103.84	18.525	
10,500.0	7,184.7	7,276.7	7,162.1	91.2	21.2	-91.03	-290.9	-4,065.9	1,853.7	1,747.1	106.57	17.394	
10,600.0	7,184.3	7,275.0	7,160.4	94.0	21.2	-90.95	-290.9	-4,065.9	1,786.6	1,677.3	109.30	16.346	
10,700.0	7,183.9	7,273.3	7,158.7	96.7	21.2	-90.88	-290.9	-4,065.9	1,722.8	1,610.7	112.04	15.377	
10,800.0	7,183.4	7,271.8	7,157.1	99.4	21.2	-90.81	-290.9	-4,065.9	1,662.5	1,547.7	114.78	14.484	
10,900.0	7,183.0	7,270.2	7,155.6	102.2	21.2	-90.75	-290.9	-4,066.0	1,606.2	1,488.7	117.52	13.667	
11,000.0	7,182.6	7,268.8	7,154.1	104.9	21.2	-90.69	-290.9	-4,066.0	1,554.3	1,434.0	120.27	12.923	
11,100.0	7,182.2	7,267.4	7,152.7	107.7	21.2	-90.63	-290.9	-4,066.0	1,507.2	1,384.2	123.02	12.251	
11,200.0	7,181.8	7,266.0	7,151.4	110.4	21.2	-90.57	-290.9	-4,066.0	1,465.4	1,339.7	125.78	11.651	
11,300.0	7,181.4	7,264.7	7,150.1	113.2	21.2	-90.51	-290.9	-4,066.0	1,429.5	1,300.9	128.53	11.122	
11,400.0	7,181.0	7,263.4	7,148.8	116.0	21.2	-90.46	-290.9	-4,066.0	1,399.7	1,268.4	131.29	10.661	
11,500.0	7,180.6	7,262.2	7,147.6	118.7	21.2	-90.41	-290.9	-4,066.0	1,376.6	1,242.6	134.05	10.270	
11,600.0	7,180.1	7,261.1	7,146.4	121.5	21.2	-90.36	-290.9	-4,066.0	1,360.5	1,223.7	136.81	9.944	
11,700.0	7,179.7	7,259.9	7,145.3	124.3	21.2	-90.31	-291.0	-4,066.0	1,351.6	1,212.1	139.58	9.684	
11,770.6	7,179.4	7,259.2	7,144.5	126.2	21.2	-90.28	-291.0	-4,066.0	1,349.8	1,208.3	141.53	9.537 CC	
11,800.0	7,179.3	7,258.8	7,144.2	127.0	21.2	-90.27	-291.0	-4,066.0	1,350.1	1,207.8	142.35	9.485 ES	
11,900.0	7,178.9	7,257.8	7,143.2	129.8	21.2	-90.22	-291.0	-4,066.1	1,356.0	1,210.9	145.11	9.344	
12,000.0	7,178.5	7,256.8	7,142.1	132.6	21.2	-90.18	-291.0	-4,066.1	1,369.1	1,221.2	147.88	9.258	
12,100.0	7,178.1	7,255.8	7,141.2	135.3	21.2	-90.14	-291.0	-4,066.1	1,389.4	1,238.7	150.65	9.222 SF	
12,200.0	7,177.7	7,254.8	7,140.2	138.1	21.2	-90.10	-291.0	-4,066.1	1,416.4	1,263.0	153.43	9.232	
12,300.0	7,177.2	7,253.9	7,139.3	140.9	21.2	-90.06	-291.0	-4,066.1	1,449.9	1,293.7	156.20	9.282	
12,400.0	7,176.8	7,253.0	7,138.4	143.7	21.2	-90.02	-291.0	-4,066.1	1,489.3	1,330.3	158.98	9.368	
12,500.0	7,176.4	7,252.1	7,137.5	146.4	21.2	-89.98	-291.0	-4,066.1	1,534.2	1,372.5	161.75	9.485	
12,600.0	7,176.0	7,251.3	7,136.7	149.2	21.2	-89.95	-291.0	-4,066.1	1,584.2	1,419.7	164.53	9.629	
12,700.0	7,175.6	7,250.5	7,135.9	152.0	21.2	-89.91	-291.0	-4,066.1	1,638.8	1,471.5	167.31	9.795	
12,800.0	7,175.2	7,249.7	7,135.1	154.8	21.2	-89.88	-291.0	-4,066.1	1,697.5	1,527.4	170.09	9.980	
12,900.0	7,174.8	7,248.9	7,134.3	157.5	21.2	-89.85	-291.0	-4,066.1	1,759.9	1,587.0	172.87	10.180	
13,000.0	7,174.4	7,248.2	7,133.6	160.3	21.2	-89.81	-291.0	-4,066.1	1,825.7	1,650.0	175.65	10.394	
13,100.0	7,173.9	7,247.5	7,132.8	163.1	21.2	-89.78	-291.0	-4,066.1	1,894.5	1,716.0	178.43	10.617	
13,200.0	7,173.5	7,246.8	7,132.1	165.9	21.2	-89.75	-291.0	-4,066.1	1,965.9	1,784.7	181.22	10.848	
13,300.0	7,173.1	7,246.1	7,131.4	168.7	21.2	-89.72	-291.0	-4,066.1	2,039.8	1,855.8	184.00	11.086	
13,400.0	7,172.7	7,245.4	7,130.8	171.5	21.2	-89.70	-291.0	-4,066.1	2,115.8	1,929.0	186.79	11.327	
13,500.0	7,172.3	7,244.7	7,130.1	174.3	21.2	-89.67	-291.0	-4,066.1	2,193.7	2,004.1	189.57	11.572	
13,600.0	7,171.9	7,244.1	7,129.5	177.0	21.2	-89.64	-291.0	-4,066.1	2,273.4	2,081.0	192.36	11.818	
13,700.0	7,171.5	7,243.5	7,128.9	179.8	21.2	-89.62	-291.0	-4,066.1	2,354.6	2,159.4	195.14	12.066	
13,800.0	7,171.0	7,242.9	7,128.3	182.6	21.2	-89.59	-291.0	-4,066.1	2,437.2	2,239.3	197.93	12.313	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD RYLAND 33-20D - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 568-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
13,900.0	7,170.6	7,242.3	7,127.7	185.4	21.2	-89.56	-291.0	-4,066.1	2,521.1	2,320.3	200.72	12.560	
14,000.0	7,170.2	7,241.7	7,127.1	188.2	21.2	-89.54	-291.0	-4,066.1	2,606.1	2,402.6	203.51	12.806	
14,100.0	7,169.8	7,241.2	7,126.6	191.0	21.2	-89.52	-291.1	-4,066.1	2,692.1	2,485.8	206.30	13.050	
14,200.0	7,169.4	7,240.6	7,126.0	193.8	21.2	-89.49	-291.1	-4,066.1	2,779.1	2,570.0	209.09	13.292	
14,295.0	7,169.0	7,240.1	7,125.5	196.4	21.2	-89.47	-291.1	-4,066.2	2,862.4	2,650.7	211.74	13.519	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 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: 599-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	-106.71	-1,190.6	-3,965.7	4,140.7				
100.0	100.0	59.1	59.1	0.1	0.1	-106.71	-1,190.6	-3,965.6	4,140.5	4,140.4	0.16	N/A	
200.0	200.0	160.2	160.2	0.3	0.2	-106.71	-1,190.6	-3,965.6	4,140.5	4,140.0	0.50	8,297.372	
300.0	300.0	261.3	261.3	0.5	0.3	-106.71	-1,190.5	-3,965.6	4,140.4	4,139.6	0.84	4,955.804	
400.0	400.0	362.3	362.3	0.8	0.4	-106.71	-1,190.5	-3,965.5	4,140.4	4,139.2	1.17	3,532.933	
500.0	500.0	463.4	463.4	1.0	0.5	-106.71	-1,190.4	-3,965.4	4,140.2	4,138.7	1.51	2,744.812	
600.0	600.0	1,826.5	1,802.6	1.2	5.0	-138.86	-1,083.7	-3,795.3	4,139.7	4,134.7	4.98	830.612	
700.0	699.8	1,911.7	1,883.2	1.4	5.5	-139.11	-1,066.5	-3,773.9	4,113.5	4,108.1	5.47	752.044	
800.0	799.5	2,025.9	1,991.2	1.7	6.2	-139.30	-1,042.6	-3,745.1	4,089.6	4,083.5	6.07	673.871	
900.0	898.7	2,096.0	2,057.5	1.9	6.6	-139.53	-1,027.9	-3,728.0	4,068.9	4,062.4	6.53	622.908	
1,000.0	997.5	2,145.1	2,104.2	2.2	6.9	-139.74	-1,017.7	-3,716.4	4,051.7	4,044.8	6.94	584.229	
1,100.0	1,095.6	2,322.9	2,273.2	2.6	7.9	-139.97	-984.0	-3,672.9	4,037.2	4,029.5	7.77	519.372	
1,169.1	1,163.0	2,408.5	2,354.1	2.8	8.4	-140.13	-967.4	-3,650.5	4,027.3	4,019.1	8.26	487.288	
1,200.0	1,193.1	2,430.9	2,375.3	3.0	8.5	-140.14	-963.0	-3,644.7	4,023.2	4,014.8	8.44	476.781	
1,300.0	1,290.4	2,598.0	2,533.0	3.4	9.6	-140.22	-929.2	-3,600.7	4,009.6	4,000.3	9.34	429.134	
1,400.0	1,387.7	2,688.0	2,617.4	3.8	10.2	-140.25	-910.1	-3,576.3	3,994.7	3,984.7	10.01	399.224	
1,500.0	1,484.9	2,751.0	2,676.7	4.3	10.6	-140.27	-896.4	-3,559.9	3,980.6	3,970.0	10.58	376.390	
1,600.0	1,582.2	2,789.1	2,712.6	4.7	10.8	-140.28	-888.3	-3,550.3	3,967.6	3,956.6	11.05	358.935	
1,700.0	1,679.5	2,844.0	2,764.8	5.2	11.1	-140.30	-877.0	-3,537.4	3,956.2	3,944.6	11.59	341.248	
1,800.0	1,776.8	2,977.6	2,891.6	5.7	11.9	-140.33	-848.9	-3,505.7	3,944.8	3,932.4	12.42	317.553	
1,900.0	1,874.1	3,054.0	2,963.9	6.1	12.4	-140.35	-832.7	-3,487.5	3,933.1	3,920.0	13.05	301.340	
2,000.0	1,971.4	3,125.0	3,031.4	6.6	12.8	-140.37	-817.9	-3,471.0	3,922.2	3,908.5	13.66	287.181	
2,100.0	2,068.7	3,195.3	3,098.3	7.1	13.2	-140.39	-803.4	-3,455.2	3,912.0	3,897.7	14.26	274.311	
2,200.0	2,165.9	3,296.7	3,195.1	7.6	13.7	-140.43	-783.6	-3,432.4	3,902.1	3,887.2	14.96	260.774	
2,300.0	2,263.2	3,391.6	3,285.8	8.0	14.3	-140.50	-766.5	-3,410.4	3,892.2	3,876.6	15.63	248.986	
2,400.0	2,360.5	3,531.8	3,419.7	8.5	15.1	-140.58	-740.5	-3,377.8	3,882.1	3,865.6	16.46	235.777	
2,500.0	2,457.8	3,646.8	3,529.1	9.0	15.8	-140.64	-718.2	-3,350.0	3,870.6	3,853.4	17.23	224.702	
2,600.0	2,555.1	3,744.9	3,622.4	9.5	16.3	-140.70	-699.5	-3,326.5	3,859.5	3,841.6	17.92	215.371	
2,700.0	2,652.4	3,883.4	3,754.1	10.0	17.2	-140.79	-673.5	-3,292.1	3,847.8	3,829.0	18.75	205.199	
2,800.0	2,749.7	3,967.0	3,833.4	10.4	17.7	-140.84	-657.5	-3,271.4	3,835.8	3,816.4	19.40	197.699	
2,900.0	2,846.9	4,031.8	3,895.0	10.9	18.1	-140.87	-645.0	-3,255.7	3,824.4	3,804.4	19.99	191.335	
3,000.0	2,944.2	4,106.2	3,966.0	11.4	18.5	-140.91	-630.7	-3,238.3	3,813.9	3,793.3	20.60	185.121	
3,100.0	3,041.5	4,228.9	4,083.1	11.9	19.2	-141.00	-608.6	-3,209.4	3,803.6	3,782.2	21.37	178.012	
3,200.0	3,138.8	4,393.8	4,239.4	12.4	20.2	-141.11	-577.0	-3,167.4	3,790.5	3,768.3	22.29	170.040	
3,300.0	3,236.1	4,491.2	4,331.9	12.8	20.8	-141.17	-558.6	-3,143.0	3,778.4	3,755.4	22.99	164.381	
3,400.0	3,333.4	4,623.0	4,456.4	13.3	21.6	-141.24	-532.1	-3,109.0	3,765.2	3,741.4	23.81	158.131	
3,500.0	3,430.6	4,697.5	4,526.9	13.8	22.1	-141.28	-517.3	-3,089.8	3,752.1	3,727.7	24.43	153.571	
3,600.0	3,527.9	4,799.1	4,623.1	14.3	22.7	-141.34	-497.2	-3,064.0	3,739.4	3,714.3	25.15	148.705	
3,700.0	3,625.2	4,876.2	4,696.1	14.8	23.2	-141.38	-481.7	-3,044.5	3,726.8	3,701.1	25.78	144.551	
3,800.0	3,722.5	4,942.7	4,759.1	15.3	23.6	-141.41	-468.1	-3,028.4	3,715.0	3,688.6	26.38	140.823	
3,900.0	3,819.8	4,999.0	4,812.7	15.7	24.0	-141.43	-456.7	-3,015.2	3,704.2	3,677.2	26.94	137.482	
4,000.0	3,917.1	5,092.0	4,901.3	16.2	24.5	-141.48	-438.5	-2,993.9	3,694.0	3,666.4	27.62	133.741	
4,100.0	4,014.4	5,174.4	4,980.1	16.7	25.0	-141.53	-423.3	-2,975.0	3,684.3	3,656.0	28.25	130.419	
4,200.0	4,111.6	5,333.7	5,132.0	17.2	25.9	-141.65	-394.0	-2,937.4	3,673.8	3,644.7	29.13	126.119	
4,300.0	4,208.9	5,373.0	5,169.5	17.7	26.1	-141.67	-386.4	-2,927.9	3,663.1	3,633.5	29.63	123.631	
4,400.0	4,306.2	5,466.0	5,258.4	18.2	26.7	-141.74	-369.4	-2,906.8	3,653.6	3,623.3	30.29	120.615	
4,500.0	4,403.5	5,466.0	5,258.4	18.7	26.7	-141.74	-369.4	-2,906.8	3,645.6	3,614.9	30.66	118.905	
4,600.0	4,500.8	5,526.0	5,316.3	19.1	27.0	-141.79	-359.6	-2,894.5	3,639.2	3,608.0	31.20	116.653	
4,700.0	4,598.1	5,560.0	5,349.3	19.6	27.1	-141.82	-354.4	-2,888.0	3,634.4	3,602.8	31.66	114.798	
4,800.0	4,695.4	5,611.5	5,399.4	20.1	27.4	-141.87	-347.0	-2,878.9	3,631.2	3,599.1	32.16	112.918	
4,900.0	4,792.6	5,653.0	5,440.0	20.6	27.5	-141.92	-341.5	-2,872.1	3,629.6	3,597.0	32.63	111.237	
4,965.3	4,856.1	5,690.0	5,476.2	20.9	27.7	-141.97	-337.0	-2,866.4	3,629.4	3,596.4	32.95	110.146	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 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: 599-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,000.0	4,889.9	5,709.2	5,495.1	21.1	27.8	-141.99	-334.8	-2,863.4	3,629.4	3,596.3	33.12	109.587	
5,100.0	4,987.2	5,766.1	5,551.2	21.6	28.0	-142.08	-329.2	-2,855.0	3,630.5	3,596.9	33.60	108.044	
5,200.0	5,084.5	5,840.0	5,624.0	22.1	28.2	-142.20	-322.3	-2,844.9	3,632.7	3,598.6	34.11	106.506	
5,300.0	5,181.8	5,885.8	5,669.2	22.5	28.4	-142.27	-318.1	-2,839.1	3,635.9	3,601.4	34.56	105.208	
5,400.0	5,279.1	5,948.5	5,731.3	23.0	28.6	-142.37	-312.5	-2,831.8	3,640.3	3,605.3	35.04	103.885	
5,500.0	5,376.3	6,025.0	5,807.0	23.5	28.8	-142.48	-305.5	-2,823.5	3,645.5	3,610.0	35.55	102.547	
5,600.0	5,473.6	6,075.3	5,856.8	24.0	29.0	-142.55	-301.1	-2,818.5	3,651.7	3,615.7	36.01	101.423	
5,700.0	5,570.9	6,119.0	5,900.2	24.5	29.1	-142.62	-297.6	-2,814.7	3,659.3	3,622.9	36.45	100.400	
5,800.0	5,668.2	6,180.9	5,961.8	25.0	29.2	-142.72	-293.2	-2,809.8	3,668.1	3,631.2	36.91	99.385	
5,900.0	5,765.5	6,212.0	5,992.7	25.5	29.3	-142.77	-291.3	-2,807.6	3,678.4	3,641.0	37.32	98.559	
5,921.9	5,786.8	6,242.5	6,023.2	25.6	29.4	-142.82	-289.6	-2,805.6	3,680.6	3,643.2	37.44	98.306	
6,000.0	5,863.0	6,279.2	6,059.7	25.9	29.4	-142.99	-287.8	-2,803.6	3,688.9	3,651.2	37.67	97.933	
6,100.0	5,961.2	6,306.0	6,086.5	26.2	29.5	-143.14	-286.7	-2,802.2	3,698.3	3,660.5	37.87	97.665	
6,200.0	6,060.0	6,374.0	6,154.4	26.5	29.6	-143.33	-285.0	-2,799.5	3,706.2	3,668.1	38.08	97.334	
6,300.0	6,159.3	6,432.7	6,213.0	26.7	29.7	-143.47	-284.5	-2,797.8	3,712.7	3,674.5	38.24	97.092	
6,400.0	6,259.0	6,504.5	6,284.9	26.9	29.8	-143.58	-284.2	-2,796.3	3,717.3	3,678.9	38.39	96.840	
6,500.0	6,358.8	6,586.0	6,366.3	27.1	29.9	-143.65	-284.0	-2,795.0	3,719.8	3,681.2	38.52	96.569	
6,591.0	6,449.8	6,641.7	6,422.1	27.2	29.9	-111.16	-284.1	-2,794.5	3,720.2	3,667.1	53.15	69.992	
6,600.0	6,458.8	6,647.7	6,428.0	27.2	29.9	-111.16	-284.1	-2,794.5	3,720.2	3,667.0	53.17	69.970	
6,621.0	6,479.8	6,661.4	6,441.8	27.2	29.9	-111.16	-284.2	-2,794.5	3,720.1	3,666.9	53.21	69.916	
6,650.0	6,508.8	6,680.0	6,460.3	27.3	29.9	-21.18	-284.4	-2,794.4	3,719.6	3,681.1	38.50	96.615	
6,700.0	6,558.7	6,726.8	6,507.1	27.3	30.0	-21.31	-284.7	-2,794.4	3,716.2	3,678.1	38.07	97.608	
6,750.0	6,608.1	6,773.0	6,553.3	27.3	30.0	-21.54	-285.1	-2,794.4	3,709.6	3,672.2	37.44	99.073	
6,800.0	6,657.0	6,817.9	6,598.3	27.3	30.1	-21.90	-285.4	-2,794.5	3,699.9	3,663.3	36.62	101.040	
6,850.0	6,704.9	6,862.5	6,642.9	27.2	30.1	-22.38	-285.6	-2,794.6	3,687.0	3,651.4	35.61	103.541	
6,900.0	6,751.8	6,902.5	6,682.8	27.2	30.1	-22.98	-285.9	-2,794.8	3,671.2	3,636.7	34.43	106.625	
6,950.0	6,797.4	6,941.0	6,721.3	27.1	30.2	-23.74	-286.3	-2,795.0	3,652.4	3,619.3	33.11	110.306	
7,000.0	6,841.4	6,977.0	6,757.4	27.0	30.2	-24.65	-286.7	-2,795.2	3,630.8	3,599.2	31.69	114.583	
7,050.0	6,883.6	7,010.5	6,790.8	26.9	30.2	-25.74	-287.1	-2,795.6	3,606.6	3,576.4	30.21	119.388	
7,100.0	6,923.9	7,042.6	6,823.0	26.8	30.2	-27.03	-287.4	-2,796.0	3,579.7	3,551.0	28.75	124.528	
7,150.0	6,962.0	7,072.3	6,852.6	26.7	30.3	-28.55	-287.6	-2,796.5	3,550.5	3,523.1	27.39	129.610	
7,200.0	6,997.8	7,099.8	6,880.1	26.5	30.3	-30.35	-287.8	-2,797.0	3,518.9	3,492.7	26.27	133.936	
7,250.0	7,031.0	7,125.6	6,905.9	26.4	30.3	-32.48	-288.1	-2,797.5	3,485.2	3,459.7	25.54	136.478	
7,300.0	7,061.6	7,150.0	6,930.3	26.3	30.3	-34.99	-288.4	-2,798.0	3,449.6	3,424.2	25.35	136.065	
7,350.0	7,089.3	7,181.6	6,961.9	26.1	30.3	-38.10	-288.8	-2,798.7	3,412.0	3,386.1	25.93	131.576	
7,400.0	7,114.0	7,209.8	6,990.1	26.0	30.3	-41.78	-289.3	-2,799.3	3,372.8	3,345.4	27.35	123.307	
7,450.0	7,135.7	7,234.5	7,014.8	25.9	30.4	-46.14	-289.7	-2,799.7	3,332.1	3,302.4	29.64	112.414	
7,500.0	7,154.2	7,259.3	7,039.5	25.7	30.4	-51.34	-290.2	-2,800.2	3,290.1	3,257.3	32.76	100.424	
7,550.0	7,169.4	7,281.0	7,061.2	25.6	30.4	-57.43	-290.6	-2,800.5	3,247.1	3,210.6	36.48	89.012	
7,600.0	7,181.2	7,298.0	7,078.3	25.5	30.4	-64.35	-290.8	-2,800.7	3,203.2	3,162.8	40.43	79.235	
7,650.0	7,189.6	7,310.3	7,090.6	25.4	30.4	-72.00	-291.0	-2,800.9	3,158.7	3,114.6	44.17	71.519	
7,700.0	7,194.5	7,317.9	7,098.1	25.3	30.4	-80.13	-291.1	-2,801.0	3,113.9	3,066.7	47.25	65.899	
7,748.9	7,196.0	7,320.7	7,100.9	25.2	30.4	-88.21	-291.2	-2,801.0	3,070.0	3,020.6	49.33	62.238	
7,800.0	7,195.8	7,321.3	7,101.5	25.1	30.4	-88.23	-291.2	-2,801.1	3,024.2	2,974.1	50.06	60.409	
7,900.0	7,195.4	7,322.4	7,102.6	25.5	30.4	-88.28	-291.2	-2,801.1	2,935.1	2,883.4	51.68	56.796	
8,000.0	7,195.0	7,323.5	7,103.7	27.5	30.4	-88.33	-291.2	-2,801.1	2,846.6	2,793.2	53.49	53.222	
8,100.0	7,194.6	7,324.6	7,104.8	29.5	30.4	-88.37	-291.2	-2,801.1	2,759.0	2,703.6	55.46	49.752	
8,200.0	7,194.1	7,325.7	7,105.9	31.7	30.4	-88.42	-291.2	-2,801.1	2,672.3	2,614.7	57.55	46.431	
8,300.0	7,193.7	7,326.7	7,107.0	33.9	30.4	-88.46	-291.3	-2,801.1	2,586.5	2,526.7	59.76	43.284	
8,400.0	7,193.3	7,327.8	7,108.0	36.3	30.4	-88.51	-291.3	-2,801.1	2,501.7	2,439.7	62.04	40.322	
8,500.0	7,192.9	7,328.8	7,109.0	38.6	30.4	-88.55	-291.3	-2,801.1	2,418.2	2,353.8	64.40	37.548	
8,600.0	7,192.5	7,329.8	7,110.1	41.1	30.4	-88.60	-291.3	-2,801.2	2,335.9	2,269.1	66.82	34.958	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 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: 599-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	
8,700.0	7,192.1	7,330.8	7,111.1	43.5	30.4	-88.64	-291.3	-2,801.2	2,255.0	2,185.7	69.28	32.548	
8,800.0	7,191.7	7,331.8	7,112.0	46.0	30.4	-88.68	-291.3	-2,801.2	2,175.8	2,104.0	71.79	30.308	
8,900.0	7,191.3	7,332.8	7,113.0	48.6	30.4	-88.72	-291.3	-2,801.2	2,098.3	2,024.0	74.33	28.231	
9,000.0	7,190.9	7,333.7	7,114.0	51.1	30.4	-88.76	-291.4	-2,801.2	2,022.8	1,945.9	76.89	26.306	
9,100.0	7,190.4	7,334.7	7,114.9	53.7	30.4	-88.80	-291.4	-2,801.2	1,949.5	1,870.0	79.49	24.526	
9,200.0	7,190.0	7,335.0	7,115.2	56.3	30.4	-88.82	-291.4	-2,801.2	1,878.6	1,796.5	82.10	22.883	
9,300.0	7,189.6	7,335.0	7,115.2	58.9	30.4	-88.82	-291.4	-2,801.2	1,810.5	1,725.8	84.72	21.370	
9,400.0	7,189.2	7,335.0	7,115.2	61.6	30.4	-88.82	-291.4	-2,801.2	1,745.5	1,658.2	87.37	19.979	
9,500.0	7,188.8	7,335.0	7,115.2	64.2	30.4	-88.82	-291.4	-2,801.2	1,683.9	1,593.9	90.02	18.705	
9,600.0	7,188.4	7,338.4	7,118.6	66.9	30.4	-88.96	-291.4	-2,801.3	1,626.2	1,533.5	92.71	17.540	
9,700.0	7,188.0	7,339.1	7,119.4	69.6	30.4	-88.99	-291.4	-2,801.3	1,572.7	1,477.3	95.40	16.485	
9,800.0	7,187.6	7,339.9	7,120.1	72.3	30.4	-89.02	-291.4	-2,801.3	1,523.8	1,425.7	98.09	15.535	
9,900.0	7,187.1	7,340.6	7,120.9	74.9	30.4	-89.05	-291.4	-2,801.3	1,480.2	1,379.4	100.79	14.685	
10,000.0	7,186.7	7,341.4	7,121.6	77.6	30.4	-89.09	-291.5	-2,801.3	1,442.1	1,338.6	103.51	13.933	
10,100.0	7,186.3	7,342.1	7,122.4	80.4	30.4	-89.12	-291.5	-2,801.3	1,410.1	1,303.9	106.22	13.275	
10,200.0	7,185.9	7,342.9	7,123.1	83.1	30.4	-89.15	-291.5	-2,801.3	1,384.7	1,275.7	108.95	12.709	
10,300.0	7,185.5	7,343.6	7,123.9	85.8	30.4	-89.18	-291.5	-2,801.3	1,366.0	1,254.4	111.68	12.232	
10,400.0	7,185.1	7,344.4	7,124.6	88.5	30.4	-89.22	-291.5	-2,801.3	1,354.6	1,240.2	114.41	11.839	
10,500.0	7,184.7	7,345.2	7,125.4	91.2	30.4	-89.25	-291.5	-2,801.3	1,350.4	1,233.3	117.15	11.527	
10,506.0	7,184.6	7,345.2	7,125.5	91.4	30.4	-89.25	-291.5	-2,801.3	1,350.4	1,233.1	117.32	11.511 CC, ES	
10,600.0	7,184.3	7,346.0	7,126.2	94.0	30.4	-89.28	-291.5	-2,801.3	1,353.7	1,233.8	119.90	11.290	
10,700.0	7,183.9	7,346.7	7,127.0	96.7	30.4	-89.31	-291.5	-2,801.4	1,364.3	1,241.6	122.64	11.124	
10,800.0	7,183.4	7,347.5	7,127.8	99.4	30.4	-89.35	-291.5	-2,801.4	1,382.0	1,256.7	125.40	11.021	
10,900.0	7,183.0	7,348.3	7,128.5	102.2	30.4	-89.38	-291.5	-2,801.4	1,406.7	1,278.6	128.15	10.977 SF	
11,000.0	7,182.6	7,349.1	7,129.3	104.9	30.4	-89.41	-291.6	-2,801.4	1,437.9	1,307.0	130.91	10.984	
11,100.0	7,182.2	7,349.9	7,130.1	107.7	30.4	-89.45	-291.6	-2,801.4	1,475.3	1,341.6	133.67	11.037	
11,200.0	7,181.8	7,350.7	7,130.9	110.4	30.4	-89.48	-291.6	-2,801.4	1,518.3	1,381.9	136.43	11.128	
11,300.0	7,181.4	7,351.5	7,131.7	113.2	30.4	-89.52	-291.6	-2,801.4	1,566.5	1,427.3	139.20	11.254	
11,400.0	7,181.0	7,352.3	7,132.6	116.0	30.4	-89.55	-291.6	-2,801.4	1,619.5	1,477.5	141.97	11.408	
11,500.0	7,180.6	7,353.1	7,133.4	118.7	30.4	-89.58	-291.6	-2,801.4	1,676.8	1,532.0	144.74	11.585	
11,600.0	7,180.1	7,354.0	7,134.2	121.5	30.4	-89.62	-291.6	-2,801.4	1,737.9	1,590.4	147.51	11.782	
11,700.0	7,179.7	7,354.8	7,135.0	124.3	30.4	-89.65	-291.6	-2,801.5	1,802.5	1,652.3	150.28	11.994	
11,800.0	7,179.3	7,355.6	7,135.8	127.0	30.4	-89.69	-291.6	-2,801.5	1,870.3	1,717.2	153.06	12.219	
11,900.0	7,178.9	7,356.4	7,136.7	129.8	30.4	-89.73	-291.6	-2,801.5	1,940.8	1,785.0	155.84	12.454	
12,000.0	7,178.5	7,357.3	7,137.5	132.6	30.4	-89.76	-291.7	-2,801.5	2,013.8	1,855.2	158.61	12.696	
12,100.0	7,178.1	7,358.1	7,138.4	135.3	30.4	-89.80	-291.7	-2,801.5	2,089.1	1,927.7	161.39	12.944	
12,200.0	7,177.7	7,359.0	7,139.2	138.1	30.4	-89.83	-291.7	-2,801.5	2,166.3	2,002.2	164.18	13.195	
12,300.0	7,177.2	7,359.8	7,140.1	140.9	30.4	-89.87	-291.7	-2,801.5	2,245.4	2,078.4	166.96	13.449	
12,400.0	7,176.8	7,360.7	7,140.9	143.7	30.4	-89.91	-291.7	-2,801.5	2,326.1	2,156.3	169.74	13.704	
12,500.0	7,176.4	7,361.6	7,141.8	146.4	30.4	-89.94	-291.7	-2,801.5	2,408.2	2,235.7	172.53	13.958	
12,600.0	7,176.0	7,362.4	7,142.7	149.2	30.4	-89.98	-291.7	-2,801.6	2,491.6	2,316.3	175.31	14.212	
12,700.0	7,175.6	7,363.3	7,143.5	152.0	30.4	-90.02	-291.7	-2,801.6	2,576.2	2,398.1	178.10	14.465	
12,800.0	7,175.2	7,364.2	7,144.4	154.8	30.4	-90.05	-291.8	-2,801.6	2,661.9	2,481.0	180.89	14.716	
12,900.0	7,174.8	7,365.1	7,145.3	157.5	30.4	-90.09	-291.8	-2,801.6	2,748.5	2,564.9	183.67	14.964	
13,000.0	7,174.4	7,365.9	7,146.2	160.3	30.4	-90.13	-291.8	-2,801.6	2,836.1	2,649.6	186.46	15.210	
13,100.0	7,173.9	7,366.8	7,147.1	163.1	30.4	-90.17	-291.8	-2,801.6	2,924.4	2,735.1	189.25	15.452	
13,200.0	7,173.5	7,367.7	7,148.0	165.9	30.4	-90.20	-291.8	-2,801.6	3,013.4	2,821.4	192.04	15.691	
13,300.0	7,173.1	7,368.6	7,148.9	168.7	30.4	-90.24	-291.8	-2,801.6	3,103.1	2,908.3	194.84	15.927	
13,400.0	7,172.7	7,369.6	7,149.8	171.5	30.4	-90.28	-291.8	-2,801.6	3,193.5	2,995.8	197.63	16.159	
13,500.0	7,172.3	7,370.5	7,150.7	174.3	30.4	-90.32	-291.8	-2,801.7	3,284.4	3,083.9	200.42	16.387	
13,600.0	7,171.9	7,371.4	7,151.6	177.0	30.4	-90.36	-291.9	-2,801.7	3,375.8	3,172.5	203.21	16.612	
13,700.0	7,171.5	7,372.3	7,152.6	179.8	30.4	-90.40	-291.9	-2,801.7	3,467.6	3,261.6	206.01	16.833	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD RYLAND 43-20D - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 599-MWD												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis			Distance								Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
13,800.0	7,171.0	7,373.3	7,153.5	182.6	30.4	-90.44	-291.9	-2,801.7	3,560.0	3,351.2	208.80	17.050	
13,900.0	7,170.6	7,374.2	7,154.4	185.4	30.4	-90.48	-291.9	-2,801.7	3,652.7	3,441.1	211.59	17.263	
14,000.0	7,170.2	7,375.1	7,155.4	188.2	30.5	-90.52	-291.9	-2,801.7	3,745.8	3,531.4	214.39	17.472	
14,100.0	7,169.8	7,376.1	7,156.3	191.0	30.5	-90.56	-291.9	-2,801.7	3,839.2	3,622.0	217.18	17.677	
14,200.0	7,169.4	7,377.1	7,157.3	193.8	30.5	-90.60	-291.9	-2,801.7	3,933.0	3,713.0	219.98	17.879	
14,295.0	7,169.0	7,378.0	7,158.2	196.4	30.5	-90.64	-291.9	-2,801.8	4,022.3	3,799.6	222.63	18.067	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 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: 703-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	-144.06	-733.7	-532.0	906.3				
100.0	100.0	101.6	101.6	0.1	0.1	-144.06	-733.8	-531.9	906.3	906.1	0.20	4,468.257	
200.0	200.0	200.7	200.7	0.3	0.2	-144.07	-734.0	-531.8	906.5	905.9	0.53	1,708.220	
300.0	300.0	299.9	299.9	0.5	0.3	-144.10	-734.4	-531.7	906.7	905.8	0.86	1,056.201	
400.0	400.0	399.0	399.0	0.8	0.4	-144.13	-735.0	-531.5	907.0	905.9	1.19	764.620	
500.0	500.0	498.1	498.1	1.0	0.5	-144.17	-735.7	-531.2	907.5	906.0	1.51	599.363	
600.0	600.0	597.2	597.2	1.2	0.6	-176.73	-736.6	-530.9	909.7	907.9	1.85	492.474	
700.0	699.8	696.1	696.1	1.4	0.7	-176.80	-737.7	-530.5	915.6	913.4	2.19	418.761	
800.0	799.5	841.9	841.9	1.7	1.0	-176.95	-736.6	-527.6	922.6	919.9	2.69	342.436	
900.0	898.7	997.2	996.6	1.9	1.4	-177.28	-730.1	-517.4	927.6	924.3	3.23	287.083	
1,000.0	997.5	1,168.1	1,165.9	2.2	1.8	-177.65	-713.8	-500.2	930.1	926.2	3.83	243.056	
1,042.2	1,038.9	1,219.4	1,216.2	2.4	2.0	-177.73	-706.7	-494.1	929.9	925.9	4.04	229.977	
1,100.0	1,095.6	1,287.2	1,282.7	2.6	2.2	-177.82	-696.4	-485.8	930.2	925.8	4.33	214.844	
1,169.1	1,163.0	1,366.0	1,359.9	2.8	2.5	-177.95	-684.1	-475.4	931.3	926.7	4.68	199.106	
1,200.0	1,193.1	1,403.7	1,396.8	3.0	2.7	-178.02	-678.0	-470.3	931.9	927.1	4.85	192.147	
1,300.0	1,290.4	1,542.7	1,531.9	3.4	3.3	-178.24	-652.6	-449.8	931.8	926.3	5.46	170.684	
1,400.0	1,387.7	1,684.0	1,667.3	3.8	4.0	-178.60	-622.3	-423.4	926.3	920.2	6.12	151.312	
1,500.0	1,484.9	1,801.6	1,779.0	4.3	4.7	-179.04	-595.9	-397.9	918.4	911.7	6.74	136.324	
1,600.0	1,582.2	1,893.5	1,866.1	4.7	5.2	-179.40	-574.6	-377.6	909.6	902.4	7.27	125.105	
1,700.0	1,679.5	1,996.1	1,963.5	5.2	5.8	-179.79	-551.4	-355.2	901.6	893.8	7.85	114.917	
1,800.0	1,776.8	2,095.6	2,057.8	5.7	6.4	-179.78	-528.8	-333.0	893.2	884.8	8.43	105.938	
1,900.0	1,874.1	2,181.1	2,139.1	6.1	6.8	179.41	-509.9	-314.2	885.6	876.7	8.96	98.798	
2,000.0	1,971.4	2,280.1	2,233.5	6.6	7.4	179.02	-488.4	-293.5	879.1	869.5	9.53	92.222	
2,100.0	2,068.7	2,381.0	2,329.5	7.1	8.0	178.59	-466.3	-271.8	871.9	861.8	10.13	86.079	
2,200.0	2,165.9	2,474.0	2,418.1	7.6	8.5	178.15	-446.8	-251.6	865.7	855.0	10.71	80.851	
2,300.0	2,263.2	2,586.9	2,525.8	8.0	9.1	177.64	-422.7	-227.6	859.4	848.1	11.35	75.707	
2,400.0	2,360.5	2,687.8	2,621.7	8.5	9.7	177.25	-399.7	-206.5	851.9	839.9	11.96	71.231	
2,500.0	2,457.8	2,781.4	2,710.8	9.0	10.2	176.96	-377.8	-187.7	844.6	832.0	12.53	67.401	
2,600.0	2,555.1	2,873.5	2,798.9	9.5	10.7	176.78	-356.5	-171.5	838.6	825.5	13.08	64.090	
2,700.0	2,652.4	2,978.8	2,899.4	10.0	11.3	176.53	-332.0	-152.0	832.1	818.4	13.69	60.761	
2,800.0	2,749.7	3,080.3	2,996.2	10.4	11.9	176.09	-309.9	-130.8	825.7	811.4	14.32	57.644	
2,900.0	2,846.9	3,184.8	3,095.5	10.9	12.5	175.63	-286.3	-108.7	818.6	803.6	14.97	54.672	
3,000.0	2,944.2	3,286.9	3,192.6	11.4	13.2	175.19	-263.0	-87.1	811.3	795.6	15.62	51.942	
3,100.0	3,041.5	3,386.8	3,287.3	11.9	13.8	174.64	-240.7	-64.6	803.7	787.4	16.28	49.355	
3,200.0	3,138.8	3,496.1	3,390.8	12.4	14.4	174.00	-215.9	-39.4	795.8	778.8	17.01	46.792	
3,300.0	3,236.1	3,596.3	3,485.3	12.8	15.1	173.38	-192.8	-15.6	787.1	769.4	17.71	44.435	
3,400.0	3,333.4	3,697.0	3,580.1	13.3	15.7	172.62	-170.1	9.7	778.4	759.9	18.46	42.166	
3,500.0	3,430.6	3,812.9	3,689.0	13.8	16.5	171.78	-143.1	38.5	769.3	750.0	19.29	39.888	
3,600.0	3,527.9	3,934.2	3,801.4	14.3	17.3	170.88	-110.6	70.4	756.1	735.9	20.17	37.486	
3,700.0	3,625.2	4,040.0	3,899.4	14.8	18.1	170.24	-80.4	96.5	742.3	721.3	20.96	35.421	
3,800.0	3,722.5	4,123.0	3,976.4	15.3	18.7	169.77	-56.4	116.4	728.7	707.0	21.63	33.691	
3,900.0	3,819.8	4,201.8	4,050.2	15.7	19.2	169.29	-35.8	134.7	717.9	695.6	22.29	32.212	
4,000.0	3,917.1	4,292.8	4,136.0	16.2	19.7	168.65	-14.3	155.9	709.6	686.5	23.03	30.807	
4,100.0	4,014.4	4,398.4	4,235.2	16.7	20.4	167.72	10.1	182.5	701.1	677.2	23.93	29.296	
4,200.0	4,111.6	4,488.7	4,320.1	17.2	21.0	166.90	31.2	205.5	692.6	667.8	24.76	27.969	
4,300.0	4,208.9	4,590.0	4,415.9	17.7	21.7	166.16	54.4	228.6	685.6	660.0	25.61	26.769	
4,400.0	4,306.2	4,677.5	4,498.8	18.2	22.2	165.63	75.2	247.3	678.4	652.1	26.35	25.745	
4,500.0	4,403.5	4,759.2	4,576.9	18.7	22.6	165.19	92.8	263.3	674.1	647.0	27.04	24.927	
4,600.0	4,500.8	4,840.5	4,655.1	19.1	23.1	164.68	108.1	279.6	672.3	644.6	27.75	24.224	
4,608.2	4,508.7	4,846.9	4,661.3	19.2	23.1	164.64	109.2	280.8	672.3	644.5	27.81	24.174 CC, ES	
4,700.0	4,598.1	4,926.3	4,738.2	19.6	23.5	164.13	121.9	296.1	673.5	645.0	28.50	23.633	
4,800.0	4,695.4	5,025.5	4,834.3	20.1	24.0	163.50	137.6	315.0	675.1	645.8	29.31	23.032	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 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: 703-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	
4,900.0	4,792.6	5,111.6	4,918.1	20.6	24.3	163.04	150.4	330.2	678.1	648.1	30.03	22.580	
5,000.0	4,889.9	5,194.6	4,999.3	21.1	24.7	162.72	161.3	343.0	683.5	652.8	30.68	22.277	
5,100.0	4,987.2	5,280.0	5,083.4	21.6	25.0	162.53	171.2	354.2	691.2	659.9	31.28	22.096	
5,200.0	5,084.5	5,363.0	5,165.5	22.1	25.3	162.46	179.6	363.4	700.8	668.9	31.82	22.025	
5,300.0	5,181.8	5,456.0	5,257.7	22.5	25.5	162.46	187.8	372.2	712.0	679.7	32.34	22.018	
5,400.0	5,279.1	5,540.8	5,342.0	23.0	25.7	162.53	194.0	379.2	725.0	692.2	32.81	22.100	
5,500.0	5,376.3	5,624.7	5,425.5	23.5	25.9	162.67	198.8	384.8	739.9	706.7	33.24	22.263	
5,600.0	5,473.6	5,716.6	5,517.2	24.0	26.1	162.88	203.0	389.6	756.4	722.8	33.64	22.484	
5,700.0	5,570.9	5,811.4	5,611.9	24.5	26.3	163.17	207.0	393.5	773.5	739.5	34.02	22.736	
5,800.0	5,668.2	5,905.6	5,705.9	25.0	26.4	163.55	210.9	395.8	791.1	756.8	34.35	23.030	
5,900.0	5,765.5	5,991.4	5,791.7	25.5	26.5	163.98	214.1	396.4	809.7	775.0	34.63	23.377	
5,921.9	5,786.8	6,015.0	5,815.3	25.6	26.6	164.10	214.8	396.4	814.0	779.3	34.69	23.462	
6,000.0	5,863.0	6,082.5	5,882.7	25.9	26.7	164.51	216.4	396.2	828.6	793.8	34.87	23.762	
6,100.0	5,961.2	6,172.2	5,972.4	26.2	26.7	164.96	218.1	396.0	845.2	810.1	35.06	24.107	
6,200.0	6,060.0	6,266.8	6,067.0	26.5	26.8	165.33	218.9	395.4	859.4	824.1	35.23	24.394	
6,300.0	6,159.3	6,365.3	6,165.5	26.7	26.9	165.63	219.5	394.9	870.4	835.0	35.38	24.598	
6,400.0	6,259.0	6,463.3	6,263.5	26.9	27.0	165.83	220.0	394.6	878.2	842.7	35.53	24.720	
6,500.0	6,358.8	6,563.6	6,363.8	27.1	27.1	165.96	220.3	394.3	882.7	847.1	35.65	24.761	
6,591.0	6,449.8	6,651.0	6,451.2	27.2	27.2	-161.48	220.6	393.9	884.1	832.0	52.08	16.974	
6,600.0	6,458.8	6,659.7	6,459.9	27.2	27.2	-161.47	220.6	393.9	884.1	832.0	52.10	16.968	
6,621.0	6,479.8	6,680.1	6,480.3	27.2	27.2	-161.46	220.6	393.7	884.1	832.0	52.15	16.954 SF	
6,650.0	6,508.8	6,708.6	6,508.9	27.3	27.3	-71.50	220.6	393.5	884.0	848.1	35.85	24.657	
6,700.0	6,558.7	6,757.7	6,557.9	27.3	27.3	-71.78	220.5	393.2	883.0	847.0	35.96	24.555	
6,750.0	6,608.1	6,805.6	6,605.8	27.3	27.4	-72.34	220.4	392.8	880.9	844.8	36.15	24.369	
6,800.0	6,657.0	6,853.0	6,653.2	27.3	27.4	-73.18	220.2	392.4	878.0	841.6	36.44	24.097	
6,850.0	6,704.9	6,901.2	6,701.4	27.2	27.4	-74.29	220.0	392.0	874.3	837.5	36.84	23.736	
6,900.0	6,751.8	6,948.5	6,748.7	27.2	27.5	-75.66	219.8	391.5	869.9	832.6	37.34	23.297	
6,950.0	6,797.4	6,994.2	6,794.4	27.1	27.5	-77.23	219.6	391.1	865.0	827.0	37.93	22.802	
7,000.0	6,841.4	7,038.5	6,838.7	27.0	27.6	-78.99	219.4	390.7	859.8	821.2	38.61	22.271	
7,050.0	6,883.6	7,080.5	6,880.7	26.9	27.6	-80.86	219.2	390.3	854.7	815.4	39.32	21.734	
7,100.0	6,923.9	7,120.5	6,920.7	26.8	27.6	-82.81	219.0	390.0	849.9	809.8	40.06	21.218	
7,150.0	6,962.0	7,159.2	6,959.3	26.7	27.7	-84.81	218.8	389.7	845.8	805.0	40.78	20.740	
7,200.0	6,997.8	7,195.8	6,996.0	26.5	27.7	-86.79	218.6	389.5	842.6	801.2	41.46	20.323	
7,250.0	7,031.0	7,229.9	7,030.1	26.4	27.7	-88.66	218.5	389.3	840.8	798.7	42.07	19.987	
7,280.9	7,050.2	7,249.3	7,049.5	26.3	27.8	-89.72	218.4	389.2	840.4	798.0	42.40	19.822	
7,300.0	7,061.6	7,260.8	7,061.0	26.3	27.8	-90.34	218.3	389.2	840.6	798.0	42.58	19.742	
7,350.0	7,089.3	7,288.7	7,088.9	26.1	27.8	-91.78	218.2	389.1	842.3	799.3	43.01	19.586	
7,400.0	7,114.0	7,313.4	7,113.6	26.0	27.8	-92.92	218.1	389.1	846.3	803.0	43.37	19.515	
7,450.0	7,135.7	7,335.2	7,135.3	25.9	27.8	-93.73	218.1	389.1	852.8	809.1	43.69	19.520	
7,500.0	7,154.2	7,353.7	7,153.9	25.7	27.9	-94.16	218.0	389.2	861.9	817.9	44.00	19.590	
7,550.0	7,169.4	7,368.9	7,169.0	25.6	27.9	-94.17	218.0	389.2	873.6	829.3	44.32	19.712	
7,600.0	7,181.2	7,380.6	7,180.8	25.5	27.9	-93.74	217.9	389.2	888.1	843.4	44.68	19.878	
7,650.0	7,189.6	7,389.0	7,189.2	25.4	27.9	-92.85	217.9	389.2	905.1	860.1	45.08	20.077	
7,700.0	7,194.5	7,393.8	7,194.0	25.3	27.9	-91.48	217.9	389.2	924.7	879.2	45.54	20.306	
7,748.9	7,196.0	7,395.2	7,195.4	25.2	27.9	-89.67	217.9	389.2	946.1	900.1	46.02	20.560	
7,800.0	7,195.8	7,394.9	7,195.1	25.1	27.9	-89.64	217.9	389.2	970.6	923.8	46.75	20.762	
7,900.0	7,195.4	7,394.2	7,194.4	25.5	27.9	-89.60	217.9	389.2	1,024.2	975.8	48.35	21.182	
8,000.0	7,195.0	7,393.6	7,193.8	27.5	27.9	-89.56	217.9	389.2	1,084.4	1,034.2	50.15	21.622	
8,100.0	7,194.6	7,393.0	7,193.2	29.5	27.9	-89.51	217.9	389.2	1,150.1	1,098.0	52.11	22.071	
8,200.0	7,194.1	7,392.3	7,192.5	31.7	27.9	-89.47	217.9	389.2	1,220.5	1,166.3	54.20	22.520	
8,300.0	7,193.7	7,391.7	7,191.9	33.9	27.9	-89.43	217.9	389.2	1,294.8	1,238.5	56.39	22.963	
8,400.0	7,193.3	7,391.1	7,191.3	36.3	27.9	-89.39	217.9	389.2	1,372.4	1,313.8	58.67	23.394	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 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: 703-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	
8,500.0	7,192.9	7,390.5	7,190.7	38.6	27.9	-89.34	217.9	389.2	1,452.7	1,391.7	61.01	23.810	
8,600.0	7,192.5	7,389.8	7,190.0	41.1	27.9	-89.30	217.9	389.2	1,535.4	1,472.0	63.42	24.209	
8,700.0	7,192.1	7,389.2	7,189.4	43.5	27.9	-89.26	217.9	389.2	1,620.0	1,554.1	65.87	24.592	
8,800.0	7,191.7	7,388.6	7,188.8	46.0	27.9	-89.22	217.9	389.2	1,706.2	1,637.9	68.37	24.956	
8,900.0	7,191.3	7,388.0	7,188.2	48.6	27.9	-89.18	217.9	389.2	1,793.9	1,723.0	70.90	25.303	
9,000.0	7,190.9	7,387.4	7,187.6	51.1	27.9	-89.13	217.9	389.2	1,882.8	1,809.4	73.46	25.632	
9,100.0	7,190.4	7,386.8	7,187.0	53.7	27.9	-89.09	217.9	389.2	1,972.8	1,896.8	76.04	25.945	
9,200.0	7,190.0	7,386.2	7,186.4	56.3	27.9	-89.05	217.9	389.2	2,063.7	1,985.1	78.64	26.242	
9,300.0	7,189.6	7,385.6	7,185.8	58.9	27.9	-89.01	217.9	389.2	2,155.4	2,074.2	81.26	26.523	
9,400.0	7,189.2	7,385.0	7,185.2	61.6	27.9	-88.97	217.9	389.2	2,247.8	2,163.9	83.90	26.791	
9,500.0	7,188.8	7,384.4	7,184.6	64.2	27.9	-88.93	217.9	389.2	2,340.9	2,254.3	86.56	27.045	
9,600.0	7,188.4	7,383.8	7,184.0	66.9	27.9	-88.89	217.9	389.2	2,434.5	2,345.2	89.22	27.286	
9,700.0	7,188.0	7,383.2	7,183.4	69.6	27.9	-88.85	217.9	389.2	2,528.5	2,436.6	91.90	27.515	
9,800.0	7,187.6	7,382.6	7,182.8	72.3	27.9	-88.81	217.9	389.2	2,623.0	2,528.5	94.58	27.733	
9,900.0	7,187.1	7,382.0	7,182.2	74.9	27.9	-88.77	217.9	389.2	2,718.0	2,620.7	97.27	27.941	
10,000.0	7,186.7	7,381.4	7,181.6	77.6	27.9	-88.73	217.9	389.2	2,813.2	2,713.2	99.98	28.139	
10,100.0	7,186.3	7,380.8	7,181.0	80.4	27.9	-88.69	217.9	389.2	2,908.8	2,806.1	102.68	28.328	
10,200.0	7,185.9	7,380.2	7,180.4	83.1	27.9	-88.65	217.9	389.2	3,004.7	2,899.3	105.40	28.507	
10,300.0	7,185.5	7,379.6	7,179.8	85.8	27.9	-88.61	217.9	389.2	3,100.8	2,992.7	108.12	28.679	
10,400.0	7,185.1	7,379.1	7,179.3	88.5	27.9	-88.57	217.9	389.2	3,197.2	3,086.3	110.84	28.844	
10,500.0	7,184.7	7,378.5	7,178.7	91.2	27.9	-88.53	217.9	389.2	3,293.7	3,180.2	113.57	29.001	
10,600.0	7,184.3	7,377.9	7,178.1	94.0	27.9	-88.49	217.9	389.2	3,390.5	3,274.2	116.31	29.151	
10,700.0	7,183.9	7,377.3	7,177.5	96.7	27.9	-88.45	217.9	389.2	3,487.5	3,368.4	119.05	29.295	
10,800.0	7,183.4	7,376.8	7,177.0	99.4	27.9	-88.41	217.9	389.2	3,584.6	3,462.8	121.79	29.433	
10,900.0	7,183.0	7,376.2	7,176.4	102.2	27.9	-88.37	217.9	389.2	3,681.9	3,557.4	124.53	29.566	
11,000.0	7,182.6	7,375.6	7,175.8	104.9	27.9	-88.33	218.0	389.2	3,779.3	3,652.0	127.28	29.693	
11,100.0	7,182.2	7,375.1	7,175.2	107.7	27.9	-88.29	218.0	389.2	3,876.9	3,746.8	130.03	29.815	
11,200.0	7,181.8	7,374.5	7,174.7	110.4	27.9	-88.25	218.0	389.2	3,974.6	3,841.8	132.78	29.933	
11,300.0	7,181.4	7,373.9	7,174.1	113.2	27.9	-88.22	218.0	389.2	4,072.3	3,936.8	135.54	30.046	
11,400.0	7,181.0	7,373.4	7,173.6	116.0	27.9	-88.18	218.0	389.2	4,170.2	4,031.9	138.29	30.155	
11,500.0	7,180.6	7,372.8	7,173.0	118.7	27.9	-88.14	218.0	389.2	4,268.2	4,127.2	141.05	30.260	
11,600.0	7,180.1	7,372.2	7,172.4	121.5	27.9	-88.10	218.0	389.2	4,366.3	4,222.5	143.81	30.361	
11,700.0	7,179.7	7,371.7	7,171.9	124.3	27.9	-88.06	218.0	389.2	4,464.5	4,317.9	146.58	30.458	
11,800.0	7,179.3	7,371.1	7,171.3	127.0	27.9	-88.03	218.0	389.2	4,562.7	4,413.4	149.34	30.553	
11,900.0	7,178.9	7,370.6	7,170.8	129.8	27.9	-87.99	218.0	389.2	4,661.0	4,508.9	152.10	30.644	
12,000.0	7,178.5	7,370.0	7,170.2	132.6	27.9	-87.95	218.0	389.2	4,759.4	4,604.6	154.87	30.732	
12,100.0	7,178.1	7,369.5	7,169.7	135.3	27.9	-87.91	218.0	389.2	4,857.9	4,700.3	157.64	30.817	
12,200.0	7,177.7	7,368.9	7,169.1	138.1	27.9	-87.88	218.0	389.2	4,956.4	4,796.0	160.41	30.899	
12,300.0	7,177.2	7,368.4	7,168.6	140.9	27.9	-87.84	218.0	389.2	5,055.0	4,891.8	163.18	30.978	
12,400.0	7,176.8	7,367.9	7,168.0	143.7	27.9	-87.80	218.0	389.2	5,153.6	4,987.7	165.95	31.055	
12,500.0	7,176.4	7,367.3	7,167.5	146.4	27.9	-87.76	218.0	389.2	5,252.3	5,083.6	168.72	31.130	
12,600.0	7,176.0	7,366.8	7,167.0	149.2	27.9	-87.73	218.0	389.2	5,351.0	5,179.5	171.49	31.203	
12,700.0	7,175.6	7,366.2	7,166.4	152.0	27.9	-87.69	218.0	389.2	5,449.8	5,275.6	174.27	31.273	
12,800.0	7,175.2	7,365.7	7,165.9	154.8	27.9	-87.65	218.0	389.2	5,548.6	5,371.6	177.04	31.341	
12,900.0	7,174.8	7,365.2	7,165.4	157.5	27.9	-87.62	218.0	389.2	5,647.5	5,467.7	179.82	31.407	
13,000.0	7,174.4	7,364.6	7,164.8	160.3	27.9	-87.58	218.0	389.2	5,746.4	5,563.8	182.59	31.471	
13,100.0	7,173.9	7,364.1	7,164.3	163.1	27.9	-87.54	218.0	389.2	5,845.3	5,660.0	185.37	31.534	
13,200.0	7,173.5	7,363.6	7,163.8	165.9	27.9	-87.51	218.0	389.2	5,944.3	5,756.2	188.15	31.594	
13,300.0	7,173.1	7,363.1	7,163.2	168.7	27.9	-87.47	218.0	389.2	6,043.3	5,852.4	190.92	31.653	
13,400.0	7,172.7	7,362.5	7,162.7	171.5	27.9	-87.44	218.0	389.2	6,142.4	5,948.7	193.70	31.711	
13,500.0	7,172.3	7,362.0	7,162.2	174.3	27.9	-87.40	218.0	389.2	6,241.4	6,045.0	196.48	31.767	
13,600.0	7,171.9	7,361.5	7,161.7	177.0	27.9	-87.37	218.0	389.2	6,340.5	6,141.3	199.26	31.821	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD WALTERS #21ODU - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 703-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
13,700.0	7,171.5	7,361.0	7,161.2	179.8	27.9	-87.33	218.0	389.2	6,439.7	6,237.6	202.04	31.874	
13,800.0	7,171.0	7,360.4	7,160.6	182.6	27.9	-87.29	218.0	389.2	6,538.8	6,334.0	204.82	31.926	
13,900.0	7,170.6	7,359.9	7,160.1	185.4	27.9	-87.26	218.0	389.2	6,638.0	6,430.4	207.59	31.976	
14,000.0	7,170.2	7,359.4	7,159.6	188.2	27.9	-87.22	218.0	389.2	6,737.2	6,526.8	210.37	32.025	
14,100.0	7,169.8	7,358.9	7,159.1	191.0	27.9	-87.19	218.0	389.2	6,836.4	6,623.3	213.16	32.073	
14,200.0	7,169.4	7,358.4	7,158.6	193.8	27.9	-87.15	218.0	389.2	6,935.7	6,719.8	215.94	32.119	
14,295.0	7,169.0	7,357.9	7,158.1	196.4	27.9	-87.12	218.0	389.2	7,030.0	6,811.4	218.58	32.162	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 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: 704-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	2.5	2.5	0.0	0.0	-144.73	-772.3	-546.2	945.9				
100.0	100.0	102.5	102.5	0.1	0.1	-144.73	-772.3	-546.2	945.9	945.7	0.20	4,641.302	
200.0	200.0	202.5	202.5	0.3	0.2	-144.72	-772.2	-546.4	945.9	945.4	0.53	1,776.173	
300.0	300.0	302.5	302.5	0.5	0.3	-144.70	-772.0	-546.7	945.9	945.1	0.86	1,098.229	
400.0	400.0	402.5	402.5	0.8	0.4	-144.67	-771.7	-547.0	945.9	944.8	1.19	794.849	
500.0	500.0	502.4	502.4	1.0	0.5	-144.64	-771.4	-547.5	946.0	944.4	1.52	622.806 ES	
600.0	600.0	602.4	602.4	1.2	0.6	-177.11	-771.0	-548.0	947.7	945.9	1.85	512.542	
700.0	699.8	702.3	702.2	1.4	0.7	-177.07	-770.6	-548.7	952.9	950.8	2.19	435.694	
800.0	799.5	802.7	802.6	1.7	1.0	-177.03	-769.9	-549.5	961.6	959.0	2.64	364.006	
900.0	898.7	900.5	900.5	1.9	1.2	-176.98	-769.2	-550.5	973.8	970.7	3.08	316.016	
1,000.0	997.5	995.8	995.8	2.2	1.4	-176.93	-768.6	-551.7	989.6	986.1	3.52	281.314	
1,100.0	1,095.6	1,097.1	1,097.1	2.6	1.6	-176.89	-768.3	-553.2	1,009.3	1,005.3	3.96	254.818	
1,169.1	1,163.0	1,211.8	1,211.7	2.8	1.8	-176.93	-766.2	-552.2	1,023.2	1,018.8	4.33	236.344	
1,200.0	1,193.1	1,271.1	1,270.9	3.0	1.9	-177.00	-763.6	-549.7	1,028.5	1,024.0	4.50	228.438	
1,300.0	1,290.4	1,416.6	1,415.7	3.4	2.2	-177.21	-753.4	-539.9	1,042.1	1,037.0	5.03	207.053	
1,400.0	1,387.7	1,582.0	1,579.2	3.8	2.7	-177.33	-733.4	-525.5	1,050.4	1,044.8	5.64	186.261	
1,500.0	1,484.9	1,709.9	1,704.7	4.3	3.1	-177.45	-713.5	-510.3	1,054.0	1,047.8	6.19	170.403	
1,600.0	1,582.2	1,841.5	1,832.9	4.7	3.6	-177.62	-690.5	-492.0	1,054.8	1,048.0	6.76	156.083	
1,628.0	1,609.5	1,865.1	1,855.9	4.9	3.7	-177.65	-686.1	-488.6	1,054.7	1,047.8	6.89	153.113	
1,700.0	1,679.5	1,928.6	1,917.7	5.2	3.9	-177.74	-675.0	-479.6	1,055.1	1,047.9	7.23	145.914	
1,800.0	1,776.8	2,041.6	2,027.7	5.7	4.4	-177.99	-655.9	-462.0	1,055.5	1,047.7	7.77	135.923	
1,900.0	1,874.1	2,151.5	2,134.2	6.1	4.8	-178.16	-635.2	-444.8	1,054.2	1,045.9	8.31	126.885	
2,000.0	1,971.4	2,247.5	2,227.4	6.6	5.2	-178.32	-617.2	-430.0	1,053.1	1,044.3	8.82	119.427	
2,100.0	2,068.7	2,351.9	2,328.6	7.1	5.7	-178.51	-597.9	-413.5	1,052.0	1,042.7	9.35	112.472	
2,200.0	2,165.9	2,452.4	2,426.0	7.6	6.2	-178.72	-579.2	-397.0	1,050.5	1,040.6	9.89	106.259	
2,300.0	2,263.2	2,574.4	2,543.9	8.0	6.7	-179.04	-556.5	-375.4	1,048.3	1,037.8	10.48	99.981	
2,400.0	2,360.5	2,673.3	2,639.1	8.5	7.2	-179.34	-537.3	-356.7	1,044.7	1,033.7	11.03	94.698	
2,500.0	2,457.8	2,754.0	2,717.0	9.0	7.6	-179.53	-521.8	-342.6	1,042.1	1,030.6	11.52	90.427	
2,600.0	2,555.1	2,838.5	2,799.0	9.5	8.0	-179.69	-506.2	-329.2	1,041.2	1,029.2	12.02	86.615	
2,700.0	2,652.4	2,950.6	2,907.8	10.0	8.5	-179.90	-485.9	-311.7	1,040.6	1,028.0	12.60	82.611	
2,785.2	2,735.3	3,025.7	2,980.7	10.4	8.8	179.95	-472.2	-299.8	1,040.0	1,026.9	13.03	79.790	
2,800.0	2,749.7	3,034.0	2,988.8	10.4	8.9	179.93	-470.8	-298.6	1,040.0	1,026.9	13.10	79.405	
2,900.0	2,846.9	3,127.0	3,079.4	10.9	9.3	179.78	-454.8	-285.1	1,040.9	1,027.3	13.62	76.448	
3,000.0	2,944.2	3,220.0	3,170.2	11.4	9.7	179.67	-439.0	-272.6	1,042.5	1,028.3	14.14	73.749	
3,100.0	3,041.5	3,297.7	3,246.2	11.9	10.0	179.55	-426.6	-262.1	1,045.0	1,030.4	14.61	71.510	
3,200.0	3,138.8	3,382.0	3,328.9	12.4	10.3	179.35	-415.4	-250.7	1,049.8	1,034.7	15.11	69.487	
3,300.0	3,236.1	3,477.6	3,423.0	12.8	10.7	179.11	-403.6	-237.7	1,055.5	1,039.8	15.63	67.522	
3,400.0	3,333.4	3,584.3	3,527.7	13.3	11.1	178.76	-391.2	-222.0	1,061.0	1,044.8	16.20	65.514	
3,500.0	3,430.6	3,677.3	3,618.9	13.8	11.5	178.37	-381.0	-206.9	1,066.5	1,049.8	16.73	63.735	
3,600.0	3,527.9	3,776.6	3,716.5	14.3	11.9	178.04	-369.7	-192.2	1,072.4	1,055.1	17.28	62.050	
3,700.0	3,625.2	3,903.6	3,841.1	14.8	12.4	177.79	-352.5	-175.3	1,077.2	1,059.3	17.90	60.179	
3,800.0	3,722.5	4,011.2	3,946.3	15.3	12.8	177.63	-335.2	-160.6	1,079.6	1,061.1	18.47	58.464	
3,900.0	3,819.8	4,096.7	4,030.1	15.7	13.2	177.51	-322.1	-149.6	1,083.0	1,064.0	18.97	57.090	
4,000.0	3,917.1	4,191.4	4,123.0	16.2	13.5	177.38	-308.4	-137.7	1,087.4	1,067.9	19.50	55.776	
4,100.0	4,014.4	4,297.9	4,227.6	16.7	14.0	177.23	-292.9	-124.2	1,091.7	1,071.6	20.06	54.429	
4,200.0	4,111.6	4,393.6	4,321.3	17.2	14.4	177.07	-279.0	-111.3	1,095.6	1,075.0	20.59	53.201	
4,300.0	4,208.9	4,479.3	4,405.5	17.7	14.7	176.94	-267.0	-100.6	1,100.5	1,079.4	21.10	52.159	
4,400.0	4,306.2	4,554.4	4,479.5	18.2	15.0	176.83	-257.5	-91.8	1,107.0	1,085.4	21.57	51.320	
4,500.0	4,403.5	4,617.0	4,541.5	18.7	15.2	176.78	-250.7	-86.0	1,116.3	1,094.3	22.00	50.737	
4,600.0	4,500.8	4,710.0	4,633.8	19.1	15.4	176.75	-242.2	-79.1	1,128.0	1,105.5	22.49	50.148	
4,700.0	4,598.1	4,777.5	4,701.0	19.6	15.6	176.74	-237.1	-74.9	1,141.4	1,118.5	22.92	49.802	
4,800.0	4,695.4	4,855.3	4,778.6	20.1	15.8	176.74	-232.2	-71.0	1,156.8	1,133.4	23.36	49.518	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 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: 704-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	
4,900.0	4,792.6	4,930.6	4,853.7	20.6	16.0	176.73	-228.8	-67.9	1,174.0	1,150.2	23.79	49.340	
5,000.0	4,889.9	5,003.4	4,926.4	21.1	16.1	176.74	-226.8	-65.7	1,193.3	1,169.1	24.22	49.277	
5,100.0	4,987.2	5,082.0	5,005.0	21.6	16.2	176.76	-225.6	-64.5	1,214.4	1,189.7	24.64	49.278	
5,200.0	5,084.5	5,175.0	5,098.0	22.1	16.3	176.81	-224.8	-63.8	1,236.4	1,211.3	25.09	49.281	
5,300.0	5,181.8	5,269.8	5,192.8	22.5	16.5	176.87	-224.2	-63.4	1,258.8	1,233.2	25.54	49.292	
5,400.0	5,279.1	5,364.9	5,287.9	23.0	16.6	176.93	-223.6	-63.2	1,281.3	1,255.3	25.98	49.311	
5,500.0	5,376.3	5,460.8	5,383.8	23.5	16.7	176.99	-223.1	-63.2	1,304.0	1,277.6	26.43	49.331	
5,600.0	5,473.6	5,556.3	5,479.3	24.0	16.9	177.06	-222.7	-63.4	1,326.8	1,299.9	26.88	49.356	
5,700.0	5,570.9	5,648.3	5,571.3	24.5	17.0	177.12	-222.5	-63.6	1,349.9	1,322.5	27.32	49.402	
5,800.0	5,668.2	5,740.4	5,663.4	25.0	17.1	177.17	-222.8	-63.8	1,373.3	1,345.6	27.77	49.459	
5,900.0	5,765.5	5,835.2	5,758.2	25.5	17.2	177.21	-223.3	-64.1	1,397.0	1,368.8	28.22	49.512	
5,921.9	5,786.8	5,855.9	5,778.9	25.6	17.3	177.22	-223.4	-64.1	1,402.3	1,373.9	28.31	49.524	
6,000.0	5,863.0	5,930.6	5,853.6	25.9	17.4	177.27	-224.0	-64.3	1,419.9	1,391.2	28.67	49.532	
6,100.0	5,961.2	6,030.1	5,953.1	26.2	17.5	177.31	-224.8	-64.5	1,439.4	1,410.3	29.06	49.528	
6,200.0	6,060.0	6,130.0	6,053.0	26.5	17.6	177.35	-225.5	-64.7	1,455.4	1,426.0	29.42	49.469	
6,300.0	6,159.3	6,229.5	6,152.5	26.7	17.8	177.38	-226.1	-65.0	1,467.9	1,438.2	29.74	49.363	
6,400.0	6,259.0	6,330.5	6,253.5	26.9	17.9	177.41	-226.5	-65.5	1,476.9	1,446.9	30.02	49.205	
6,500.0	6,358.8	6,433.9	6,356.9	27.1	18.0	177.44	-226.7	-66.0	1,482.2	1,452.0	30.26	48.986	
6,591.0	6,449.8	6,525.1	6,448.1	27.2	18.2	-150.03	-226.7	-66.4	1,483.9	1,438.7	45.19	32.839	
6,600.0	6,458.8	6,533.8	6,456.8	27.2	18.2	-150.03	-226.8	-66.4	1,483.9	1,438.7	45.21	32.824	
6,621.0	6,479.8	6,554.2	6,477.1	27.2	18.2	-150.03	-226.8	-66.5	1,484.0	1,438.7	45.26	32.787	
6,650.0	6,508.8	6,582.3	6,505.3	27.3	18.2	-60.06	-226.8	-66.6	1,483.8	1,453.3	30.56	48.553	
6,700.0	6,558.7	6,630.6	6,553.6	27.3	18.3	-60.29	-226.9	-66.9	1,482.2	1,451.6	30.56	48.494	
6,750.0	6,608.1	6,678.7	6,601.7	27.3	18.4	-60.75	-227.1	-67.2	1,478.9	1,448.3	30.56	48.385	
6,800.0	6,657.0	6,726.8	6,649.7	27.3	18.5	-61.44	-227.3	-67.5	1,473.9	1,443.4	30.58	48.204	
6,850.0	6,704.9	6,774.0	6,696.9	27.2	18.5	-62.35	-227.5	-67.8	1,467.4	1,436.8	30.62	47.931	
6,900.0	6,751.8	6,820.2	6,743.1	27.2	18.6	-63.49	-227.7	-68.1	1,459.5	1,428.8	30.70	47.539	
6,950.0	6,797.4	6,865.4	6,788.4	27.1	18.7	-64.83	-227.9	-68.4	1,450.3	1,419.4	30.85	47.005	
7,000.0	6,841.4	6,910.1	6,833.0	27.0	18.7	-66.38	-228.2	-68.7	1,439.8	1,408.7	31.09	46.311	
7,050.0	6,883.6	6,952.9	6,875.9	26.9	18.8	-68.12	-228.4	-68.9	1,428.3	1,396.9	31.42	45.461	
7,100.0	6,923.9	6,993.7	6,916.7	26.8	18.8	-70.00	-228.6	-69.2	1,416.0	1,384.2	31.84	44.470	
7,150.0	6,962.0	7,032.4	6,955.4	26.7	18.9	-72.00	-228.8	-69.4	1,403.1	1,370.8	32.35	43.369	
7,200.0	6,997.8	7,068.9	6,991.8	26.5	18.9	-74.09	-229.0	-69.5	1,389.9	1,356.9	32.94	42.193	
7,250.0	7,031.0	7,102.7	7,025.7	26.4	19.0	-76.21	-229.1	-69.6	1,376.4	1,342.9	33.58	40.990	
7,300.0	7,061.6	7,133.8	7,056.8	26.3	19.0	-78.33	-229.3	-69.7	1,363.2	1,328.9	34.25	39.800	
7,350.0	7,089.3	7,161.9	7,084.9	26.1	19.1	-80.38	-229.4	-69.8	1,350.3	1,315.3	34.93	38.656	
7,400.0	7,114.0	7,187.0	7,109.9	26.0	19.1	-82.33	-229.6	-69.8	1,338.0	1,302.4	35.61	37.579	
7,450.0	7,135.7	7,208.8	7,131.8	25.9	19.1	-84.12	-229.7	-69.8	1,326.7	1,290.4	36.27	36.580	
7,500.0	7,154.2	7,227.4	7,150.4	25.7	19.2	-85.71	-229.8	-69.7	1,316.5	1,279.6	36.92	35.660	
7,550.0	7,169.4	7,242.7	7,165.7	25.6	19.2	-87.07	-229.9	-69.7	1,307.6	1,270.1	37.56	34.816	
7,600.0	7,181.2	7,254.5	7,177.5	25.5	19.2	-88.17	-229.9	-69.7	1,300.3	1,262.1	38.20	34.041	
7,650.0	7,189.6	7,262.9	7,185.9	25.4	19.2	-88.99	-230.0	-69.7	1,294.7	1,255.9	38.85	33.329	
7,700.0	7,194.5	7,267.8	7,190.8	25.3	19.2	-89.51	-230.0	-69.7	1,290.9	1,251.4	39.51	32.673	
7,748.9	7,196.0	7,269.2	7,192.1	25.2	19.2	-89.72	-230.0	-69.7	1,289.1	1,248.9	40.18	32.083	
7,774.3	7,195.9	7,269.0	7,192.0	25.1	19.2	-89.71	-230.0	-69.7	1,288.8	1,248.3	40.54	31.790	
7,800.0	7,195.8	7,268.9	7,191.8	25.1	19.2	-89.71	-230.0	-69.7	1,289.1	1,248.1	40.91	31.510	
7,900.0	7,195.4	7,268.2	7,191.2	25.5	19.2	-89.68	-230.0	-69.7	1,294.9	1,252.4	42.52	30.457	
8,000.0	7,195.0	7,267.6	7,190.6	27.5	19.2	-89.65	-230.0	-69.7	1,308.4	1,264.1	44.32	29.524	
8,100.0	7,194.6	7,267.0	7,190.0	29.5	19.2	-89.63	-230.0	-69.7	1,329.3	1,283.0	46.28	28.725	
8,200.0	7,194.1	7,266.4	7,189.4	31.7	19.2	-89.60	-230.0	-69.7	1,357.3	1,308.9	48.37	28.063	
8,300.0	7,193.7	7,265.8	7,188.8	33.9	19.2	-89.57	-230.0	-69.7	1,391.9	1,341.3	50.56	27.530	
8,400.0	7,193.3	7,265.2	7,188.1	36.3	19.2	-89.54	-230.0	-69.7	1,432.7	1,379.8	52.84	27.114	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 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: 704-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		
8,500.0	7,192.9	7,264.6	7,187.5	38.6	19.2	-89.52	-230.0	-69.7	1,479.1	1,423.9	55.19	26.800		
8,600.0	7,192.5	7,264.0	7,186.9	41.1	19.2	-89.49	-230.0	-69.7	1,530.6	1,473.0	57.60	26.575		
8,700.0	7,192.1	7,263.4	7,186.3	43.5	19.2	-89.46	-230.0	-69.7	1,586.8	1,526.7	60.05	26.424		
8,800.0	7,191.7	7,262.8	7,185.7	46.0	19.2	-89.44	-230.0	-69.7	1,647.1	1,584.6	62.55	26.334		
8,900.0	7,191.3	7,262.2	7,185.2	48.6	19.2	-89.41	-230.0	-69.7	1,711.2	1,646.1	65.08	26.294 SF		
9,000.0	7,190.9	7,261.6	7,184.6	51.1	19.2	-89.39	-229.9	-69.7	1,778.6	1,710.9	67.64	26.295		
9,100.0	7,190.4	7,261.0	7,184.0	53.7	19.2	-89.36	-229.9	-69.7	1,848.9	1,778.7	70.22	26.329		
9,200.0	7,190.0	7,260.4	7,183.4	56.3	19.2	-89.33	-229.9	-69.7	1,921.9	1,849.0	72.83	26.389		
9,300.0	7,189.6	7,259.9	7,182.8	58.9	19.2	-89.31	-229.9	-69.7	1,997.2	1,921.7	75.45	26.470		
9,400.0	7,189.2	7,259.3	7,182.2	61.6	19.2	-89.28	-229.9	-69.7	2,074.6	1,996.5	78.09	26.566		
9,500.0	7,188.8	7,258.7	7,181.7	64.2	19.2	-89.26	-229.9	-69.7	2,153.8	2,073.1	80.75	26.674		
9,600.0	7,188.4	7,258.1	7,181.1	66.9	19.2	-89.23	-229.9	-69.7	2,234.8	2,151.3	83.41	26.791		
9,700.0	7,188.0	7,257.6	7,180.5	69.6	19.2	-89.20	-229.9	-69.7	2,317.2	2,231.1	86.09	26.915		
9,800.0	7,187.6	7,257.0	7,179.9	72.3	19.2	-89.18	-229.9	-69.7	2,400.9	2,312.1	88.78	27.044		
9,900.0	7,187.1	7,256.4	7,179.4	74.9	19.2	-89.15	-229.9	-69.7	2,485.9	2,394.4	91.47	27.175		
10,000.0	7,186.7	7,255.9	7,178.8	77.6	19.2	-89.13	-229.9	-69.7	2,571.9	2,477.7	94.18	27.309		
10,100.0	7,186.3	7,255.3	7,178.2	80.4	19.2	-89.10	-229.9	-69.7	2,658.9	2,562.0	96.89	27.443		
10,200.0	7,185.9	7,254.7	7,177.7	83.1	19.2	-89.08	-229.9	-69.7	2,746.8	2,647.2	99.61	27.576		
10,300.0	7,185.5	7,254.2	7,177.1	85.8	19.2	-89.05	-229.9	-69.7	2,835.5	2,733.2	102.33	27.709		
10,400.0	7,185.1	7,253.6	7,176.6	88.5	19.2	-89.03	-229.9	-69.7	2,924.9	2,819.9	105.06	27.841		
10,500.0	7,184.7	7,253.1	7,176.0	91.2	19.2	-89.00	-229.9	-69.7	3,015.0	2,907.2	107.79	27.971		
10,600.0	7,184.3	7,252.5	7,175.5	94.0	19.2	-88.98	-229.9	-69.7	3,105.7	2,995.2	110.53	28.099		
10,700.0	7,183.9	7,252.0	7,174.9	96.7	19.2	-88.96	-229.9	-69.7	3,197.0	3,083.7	113.27	28.225		
10,800.0	7,183.4	7,251.4	7,174.4	99.4	19.2	-88.93	-229.9	-69.7	3,288.7	3,172.7	116.01	28.348		
10,900.0	7,183.0	7,250.9	7,173.8	102.2	19.2	-88.91	-229.9	-69.7	3,380.9	3,262.2	118.76	28.469		
11,000.0	7,182.6	7,250.3	7,173.3	104.9	19.2	-88.88	-229.9	-69.7	3,473.6	3,352.1	121.51	28.587		
11,100.0	7,182.2	7,249.8	7,172.8	107.7	19.2	-88.86	-229.9	-69.7	3,566.6	3,442.4	124.26	28.702		
11,200.0	7,181.8	7,249.3	7,172.2	110.4	19.2	-88.84	-229.9	-69.7	3,660.1	3,533.1	127.02	28.815		
11,300.0	7,181.4	7,248.7	7,171.7	113.2	19.2	-88.81	-229.9	-69.7	3,753.8	3,624.1	129.78	28.925		
11,400.0	7,181.0	7,248.2	7,171.2	116.0	19.2	-88.79	-229.9	-69.7	3,847.9	3,715.4	132.54	29.033		
11,500.0	7,180.6	7,247.7	7,170.6	118.7	19.2	-88.76	-229.9	-69.7	3,942.3	3,807.0	135.30	29.137		
11,600.0	7,180.1	7,247.2	7,170.1	121.5	19.2	-88.74	-229.9	-69.7	4,036.9	3,898.8	138.06	29.239		
11,700.0	7,179.7	7,246.6	7,169.6	124.3	19.2	-88.72	-229.9	-69.7	4,131.8	3,991.0	140.83	29.339		
11,800.0	7,179.3	7,246.1	7,169.1	127.0	19.2	-88.69	-229.9	-69.7	4,226.9	4,083.3	143.60	29.436		
11,900.0	7,178.9	7,245.6	7,168.5	129.8	19.2	-88.67	-229.9	-69.7	4,322.3	4,175.9	146.37	29.530		
12,000.0	7,178.5	7,245.1	7,168.0	132.6	19.2	-88.65	-229.9	-69.7	4,417.8	4,268.7	149.14	29.622		
12,100.0	7,178.1	7,244.6	7,167.5	135.3	19.2	-88.63	-229.9	-69.7	4,513.6	4,361.6	151.91	29.712		
12,200.0	7,177.7	7,244.0	7,167.0	138.1	19.2	-88.60	-229.9	-69.7	4,609.5	4,454.8	154.68	29.800		
12,300.0	7,177.2	7,243.5	7,166.5	140.9	19.2	-88.58	-229.9	-69.7	4,705.6	4,548.1	157.46	29.885		
12,400.0	7,176.8	7,243.0	7,166.0	143.7	19.2	-88.56	-229.9	-69.7	4,801.8	4,641.6	160.23	29.968		
12,500.0	7,176.4	7,242.5	7,165.5	146.4	19.2	-88.53	-229.9	-69.7	4,898.2	4,735.2	163.01	30.049		
12,600.0	7,176.0	7,242.0	7,165.0	149.2	19.2	-88.51	-229.9	-69.7	4,994.8	4,829.0	165.79	30.128		
12,700.0	7,175.6	7,241.5	7,164.5	152.0	19.2	-88.49	-229.8	-69.7	5,091.4	4,922.9	168.56	30.205		
12,800.0	7,175.2	7,241.0	7,164.0	154.8	19.2	-88.47	-229.8	-69.7	5,188.3	5,016.9	171.34	30.280		
12,900.0	7,174.8	7,240.5	7,163.5	157.5	19.2	-88.44	-229.8	-69.7	5,285.2	5,111.0	174.12	30.353		
13,000.0	7,174.4	7,240.0	7,163.0	160.3	19.2	-88.42	-229.8	-69.7	5,382.2	5,205.3	176.91	30.424		
13,100.0	7,173.9	7,239.5	7,162.5	163.1	19.2	-88.40	-229.8	-69.7	5,479.4	5,299.7	179.69	30.494		
13,200.0	7,173.5	7,239.0	7,162.0	165.9	19.2	-88.38	-229.8	-69.7	5,576.6	5,394.1	182.47	30.562		
13,300.0	7,173.1	7,238.5	7,161.5	168.7	19.2	-88.36	-229.8	-69.7	5,673.9	5,488.7	185.25	30.628		
13,400.0	7,172.7	7,238.0	7,161.0	171.5	19.2	-88.33	-229.8	-69.7	5,771.4	5,583.3	188.04	30.693		
13,500.0	7,172.3	7,237.6	7,160.5	174.3	19.2	-88.31	-229.8	-69.7	5,868.9	5,678.1	190.82	30.756		
13,600.0	7,171.9	7,237.1	7,160.0	177.0	19.2	-88.29	-229.8	-69.7	5,966.5	5,772.9	193.60	30.818		

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD WALTERS 23-21DU - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 704-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
13,700.0	7,171.5	7,236.6	7,159.5	179.8	19.2	-88.27	-229.8	-69.7	6,064.2	5,867.8	196.39	30.878	
13,800.0	7,171.0	7,236.1	7,159.1	182.6	19.2	-88.25	-229.8	-69.7	6,161.9	5,962.7	199.17	30.937	
13,900.0	7,170.6	7,235.6	7,158.6	185.4	19.2	-88.23	-229.8	-69.7	6,259.7	6,057.8	201.96	30.995	
14,000.0	7,170.2	7,235.2	7,158.1	188.2	19.2	-88.21	-229.8	-69.7	6,357.6	6,152.9	204.75	31.051	
14,100.0	7,169.8	7,234.7	7,157.6	191.0	19.2	-88.18	-229.8	-69.7	6,455.6	6,248.0	207.53	31.106	
14,200.0	7,169.4	7,223.0	7,146.0	193.8	19.2	-87.67	-229.8	-69.7	6,553.6	6,343.4	210.21	31.177	
14,295.0	7,169.0	7,223.0	7,146.0	196.4	19.2	-87.67	-229.8	-69.7	6,646.7	6,433.9	212.86	31.226	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 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: 705-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	-144.41	-753.4	-539.2	926.5				
100.0	100.0	100.7	100.7	0.1	0.1	-144.41	-753.4	-539.3	926.6	926.4	0.20	4,580.481	
200.0	200.0	199.0	199.0	0.3	0.2	-144.40	-753.6	-539.5	926.8	926.3	0.53	1,750.214 ES	
300.0	300.0	297.3	297.3	0.5	0.3	-144.39	-753.9	-539.9	927.3	926.5	0.86	1,082.255	
400.0	400.0	395.6	395.6	0.8	0.4	-144.38	-754.3	-540.4	928.0	926.8	1.18	783.687	
500.0	500.0	493.8	493.8	1.0	0.5	-144.36	-754.8	-541.1	928.8	927.3	1.51	614.547	
600.0	600.0	592.1	592.0	1.2	0.6	-176.86	-755.5	-542.0	931.6	929.7	1.84	506.026	
700.0	699.8	690.1	690.1	1.4	0.7	-176.84	-756.2	-543.0	938.0	935.8	2.18	430.224	
800.0	799.5	789.7	789.7	1.7	0.9	-176.83	-757.0	-544.1	948.0	945.4	2.61	363.355	
900.0	898.7	887.1	887.0	1.9	1.1	-176.83	-757.8	-545.3	961.6	958.5	3.05	315.431	
1,000.0	997.5	1,012.6	1,012.5	2.2	1.4	-176.77	-756.8	-546.8	977.2	973.7	3.53	277.130	
1,100.0	1,095.6	1,112.7	1,112.5	2.6	1.6	-176.54	-752.7	-549.5	994.5	990.5	3.96	251.006	
1,169.1	1,163.0	1,173.0	1,172.6	2.8	1.7	-176.28	-749.4	-553.2	1,009.1	1,004.8	4.26	236.674	
1,200.0	1,193.1	1,194.4	1,193.9	3.0	1.8	-176.18	-748.1	-555.0	1,016.2	1,011.8	4.40	231.193	
1,300.0	1,290.4	1,279.4	1,278.2	3.4	2.0	-175.65	-742.3	-563.9	1,040.1	1,035.2	4.86	213.806	
1,400.0	1,387.7	1,359.0	1,356.8	3.8	2.2	-175.03	-736.2	-574.8	1,065.3	1,059.9	5.35	199.185	
1,500.0	1,484.9	1,430.9	1,427.6	4.3	2.5	-174.43	-731.0	-586.4	1,092.4	1,086.6	5.84	187.105	
1,600.0	1,582.2	1,511.9	1,506.9	4.7	2.8	-173.71	-725.5	-601.6	1,121.6	1,115.2	6.38	175.721	
1,700.0	1,679.5	1,595.2	1,587.9	5.2	3.1	-172.82	-718.4	-620.2	1,151.8	1,144.9	6.97	165.225	
1,800.0	1,776.8	1,673.3	1,663.1	5.7	3.5	-171.93	-711.0	-639.6	1,183.4	1,175.8	7.58	156.148	
1,900.0	1,874.1	1,749.4	1,736.0	6.1	3.9	-171.01	-703.5	-660.5	1,216.7	1,208.4	8.21	148.152	
2,000.0	1,971.4	1,838.3	1,820.5	6.6	4.4	-169.91	-694.2	-686.3	1,250.9	1,242.0	8.94	139.978	
2,100.0	2,068.7	1,918.0	1,896.1	7.1	4.8	-168.95	-685.5	-709.9	1,285.8	1,276.2	9.63	133.502	
2,200.0	2,165.9	1,996.2	1,970.4	7.6	5.3	-168.07	-677.9	-733.0	1,321.9	1,311.5	10.30	128.289	
2,300.0	2,263.2	2,104.1	2,072.9	8.0	5.9	-166.95	-668.2	-765.1	1,358.7	1,347.6	11.12	122.229	
2,400.0	2,360.5	2,179.7	2,144.7	8.5	6.3	-166.17	-660.8	-787.7	1,395.6	1,383.8	11.78	118.430	
2,500.0	2,457.8	2,268.3	2,228.9	9.0	6.8	-165.33	-652.9	-814.4	1,433.4	1,420.9	12.50	114.627	
2,600.0	2,555.1	2,365.4	2,321.1	9.5	7.4	-164.46	-644.2	-843.4	1,471.2	1,458.0	13.26	110.943	
2,700.0	2,652.4	2,492.2	2,441.8	10.0	8.1	-163.37	-631.2	-880.1	1,507.9	1,493.7	14.18	106.321	
2,800.0	2,749.7	2,575.6	2,520.8	10.4	8.7	-162.62	-620.9	-904.8	1,544.1	1,529.2	14.93	103.434	
2,900.0	2,846.9	2,666.2	2,606.0	10.9	9.3	-161.77	-608.4	-932.8	1,580.8	1,565.1	15.76	100.309	
3,000.0	2,944.2	2,775.5	2,708.6	11.4	10.0	-160.76	-592.0	-966.9	1,617.3	1,600.6	16.70	96.833	
3,100.0	3,041.5	2,877.5	2,805.0	11.9	10.7	-159.92	-577.5	-996.7	1,653.0	1,635.5	17.56	94.119	
3,200.0	3,138.8	2,964.3	2,887.1	12.4	11.2	-159.24	-565.3	-1,022.0	1,689.0	1,670.7	18.34	92.106	
3,300.0	3,236.1	3,062.0	2,979.7	12.8	11.8	-158.53	-551.9	-1,050.2	1,725.2	1,706.1	19.16	90.024	
3,400.0	3,333.4	3,159.8	3,072.8	13.3	12.4	-157.87	-538.8	-1,077.5	1,761.1	1,741.1	19.97	88.204	
3,500.0	3,430.6	3,246.1	3,155.0	13.8	12.9	-157.36	-528.2	-1,101.1	1,797.3	1,776.6	20.71	86.792	
3,600.0	3,527.9	3,333.1	3,237.9	14.3	13.4	-156.84	-517.3	-1,125.2	1,833.7	1,812.3	21.46	85.435	
3,700.0	3,625.2	3,408.0	3,309.2	14.8	13.9	-156.41	-508.3	-1,146.3	1,871.0	1,848.8	22.16	84.423	
3,800.0	3,722.5	3,502.5	3,399.0	15.3	14.4	-155.87	-496.7	-1,173.5	1,908.7	1,885.8	22.97	83.099	
3,900.0	3,819.8	3,593.6	3,485.4	15.7	15.0	-155.35	-484.8	-1,200.1	1,946.5	1,922.7	23.77	81.903	
4,000.0	3,917.1	3,749.1	3,633.6	16.2	15.9	-154.56	-464.5	-1,242.3	1,982.7	1,957.9	24.84	79.806	
4,100.0	4,014.4	3,852.9	3,733.5	16.7	16.5	-154.14	-452.1	-1,267.4	2,017.2	1,991.6	25.65	78.657	
4,200.0	4,111.6	3,958.5	3,834.9	17.2	17.1	-153.67	-437.8	-1,293.5	2,051.6	2,025.1	26.48	77.470	
4,300.0	4,208.9	4,038.8	3,911.7	17.7	17.6	-153.31	-426.4	-1,313.6	2,085.9	2,058.7	27.21	76.662	
4,400.0	4,306.2	4,144.7	4,013.2	18.2	18.2	-152.85	-411.4	-1,340.3	2,120.6	2,092.5	28.05	75.592	
4,500.0	4,403.5	4,208.4	4,074.4	18.7	18.5	-152.61	-403.3	-1,355.9	2,155.4	2,126.7	28.67	75.178	
4,600.0	4,500.8	4,279.7	4,143.0	19.1	18.9	-152.39	-396.1	-1,373.5	2,191.6	2,162.3	29.31	74.763	
4,700.0	4,598.1	4,383.4	4,243.1	19.6	19.4	-152.09	-385.9	-1,399.2	2,228.0	2,197.9	30.09	74.056	
4,800.0	4,695.4	4,504.7	4,360.5	20.1	20.0	-151.81	-375.2	-1,427.2	2,263.5	2,232.6	30.90	73.257	
4,900.0	4,792.6	4,639.2	4,491.8	20.6	20.6	-151.59	-365.1	-1,454.9	2,297.8	2,266.1	31.71	72.464	
5,000.0	4,889.9	4,809.3	4,659.2	21.1	21.3	-151.50	-355.6	-1,483.2	2,329.5	2,296.9	32.56	71.555	

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 SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 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: 705-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,100.0	4,987.2	4,976.8	4,825.2	21.6	21.7	-151.55	-348.7	-1,504.0	2,358.7	2,325.4	33.31	70.821	
5,200.0	5,084.5	5,130.2	4,978.1	22.1	22.1	-151.72	-344.3	-1,516.8	2,384.8	2,350.9	33.95	70.249	
5,300.0	5,181.8	5,283.9	5,131.6	22.5	22.3	-152.01	-342.6	-1,523.6	2,408.5	2,374.0	34.52	69.768	
5,400.0	5,279.1	5,381.2	5,228.9	23.0	22.5	-152.23	-342.4	-1,526.2	2,431.2	2,396.2	34.98	69.498	
5,500.0	5,376.3	5,476.7	5,324.3	23.5	22.6	-152.45	-342.4	-1,528.6	2,453.9	2,418.5	35.44	69.247	
5,600.0	5,473.6	5,568.3	5,415.9	24.0	22.7	-152.66	-342.7	-1,530.9	2,476.9	2,441.0	35.88	69.025	
5,700.0	5,570.9	5,669.4	5,517.0	24.5	22.8	-152.90	-343.5	-1,533.3	2,500.0	2,463.6	36.34	68.798	
5,800.0	5,668.2	5,775.6	5,623.1	25.0	23.0	-153.15	-344.2	-1,535.3	2,522.7	2,485.9	36.79	68.564	
5,900.0	5,765.5	5,882.3	5,729.8	25.5	23.1	-153.40	-344.9	-1,537.1	2,545.2	2,508.0	37.24	68.337	
5,921.9	5,786.8	5,908.2	5,755.7	25.6	23.1	-153.47	-345.1	-1,537.4	2,550.1	2,512.7	37.35	68.281	
6,000.0	5,863.0	5,991.7	5,839.2	25.9	23.2	-153.80	-345.8	-1,538.1	2,566.3	2,528.5	37.80	67.890	
6,100.0	5,961.2	6,096.8	5,944.3	26.2	23.3	-154.17	-346.6	-1,538.7	2,584.1	2,545.8	38.30	67.464	
6,200.0	6,060.0	6,193.0	6,040.5	26.5	23.4	-154.45	-347.5	-1,539.0	2,598.7	2,560.0	38.74	67.078	
6,300.0	6,159.3	6,295.0	6,142.5	26.7	23.5	-154.68	-348.4	-1,539.4	2,610.2	2,571.1	39.13	66.702	
6,400.0	6,259.0	6,388.0	6,235.5	26.9	23.7	-154.83	-349.3	-1,539.8	2,618.7	2,579.3	39.46	66.362	
6,500.0	6,358.8	6,491.0	6,338.5	27.1	23.8	-154.94	-350.5	-1,540.2	2,624.1	2,584.4	39.75	66.021	
6,591.0	6,449.8	6,583.0	6,430.5	27.2	23.9	-122.48	-351.6	-1,540.4	2,626.2	2,582.2	43.99	59.704	
6,600.0	6,458.8	6,592.0	6,439.5	27.2	23.9	-122.49	-351.7	-1,540.5	2,626.3	2,582.3	44.01	59.674	
6,621.0	6,479.8	6,613.0	6,460.5	27.2	23.9	-122.49	-351.9	-1,540.5	2,626.4	2,582.4	44.07	59.601	
6,650.0	6,508.8	6,642.0	6,489.5	27.3	23.9	-32.51	-352.3	-1,540.6	2,626.2	2,586.1	40.05	65.566	
6,700.0	6,558.7	6,694.7	6,542.1	27.3	24.0	-32.69	-352.9	-1,540.7	2,623.4	2,583.4	39.98	65.621	
6,750.0	6,608.1	6,749.7	6,597.1	27.3	24.0	-33.05	-353.4	-1,540.8	2,617.6	2,577.8	39.79	65.793	
6,800.0	6,657.0	6,794.0	6,641.5	27.3	24.1	-33.55	-353.7	-1,540.8	2,608.9	2,569.5	39.47	66.104	
6,850.0	6,704.9	6,835.0	6,682.5	27.2	24.1	-34.23	-354.2	-1,541.0	2,597.5	2,558.5	39.04	66.533	
6,900.0	6,751.8	6,878.4	6,725.9	27.2	24.2	-35.10	-354.7	-1,541.2	2,583.5	2,544.9	38.53	67.050	
6,950.0	6,797.4	6,923.5	6,770.9	27.1	24.2	-36.19	-355.3	-1,541.4	2,566.8	2,528.8	37.96	67.620	
7,000.0	6,841.4	6,965.6	6,813.1	27.0	24.3	-37.49	-355.9	-1,541.6	2,547.5	2,510.2	37.35	68.204	
7,050.0	6,883.6	7,004.6	6,852.0	26.9	24.3	-39.01	-356.5	-1,541.8	2,525.9	2,489.1	36.75	68.734	
7,100.0	6,923.9	7,040.0	6,887.4	26.8	24.4	-40.77	-357.1	-1,542.0	2,502.0	2,465.8	36.20	69.121	
7,150.0	6,962.0	7,076.1	6,923.5	26.7	24.4	-42.82	-357.7	-1,542.2	2,476.0	2,440.2	35.77	69.224	
7,200.0	6,997.8	7,108.5	6,955.9	26.5	24.5	-45.14	-358.3	-1,542.5	2,448.1	2,412.5	35.51	68.932	
7,250.0	7,031.0	7,139.8	6,987.2	26.4	24.5	-47.78	-358.9	-1,542.8	2,418.3	2,382.8	35.51	68.106	
7,300.0	7,061.6	7,172.4	7,019.8	26.3	24.5	-50.83	-359.5	-1,543.1	2,387.0	2,351.2	35.82	66.631	
7,350.0	7,089.3	7,202.1	7,049.5	26.1	24.6	-54.22	-360.0	-1,543.4	2,354.2	2,317.7	36.47	64.555	
7,400.0	7,114.0	7,228.4	7,075.8	26.0	24.6	-57.95	-360.4	-1,543.7	2,320.1	2,282.7	37.43	61.992	
7,450.0	7,135.7	7,249.9	7,097.3	25.9	24.6	-61.95	-360.8	-1,543.9	2,285.0	2,246.4	38.63	59.145	
7,500.0	7,154.2	7,268.2	7,115.6	25.7	24.7	-66.21	-361.1	-1,544.0	2,249.2	2,209.1	40.03	56.188	
7,550.0	7,169.4	7,283.4	7,130.8	25.6	24.7	-70.68	-361.4	-1,544.2	2,212.7	2,171.2	41.52	53.296	
7,600.0	7,181.2	7,295.3	7,142.7	25.5	24.7	-75.26	-361.6	-1,544.3	2,175.9	2,132.9	43.00	50.597	
7,650.0	7,189.6	7,303.9	7,151.3	25.4	24.7	-79.86	-361.8	-1,544.4	2,139.0	2,094.6	44.41	48.162	
7,700.0	7,194.5	7,309.1	7,156.5	25.3	24.7	-84.38	-361.9	-1,544.4	2,102.2	2,056.5	45.69	46.012	
7,748.9	7,196.0	7,311.0	7,158.4	25.2	24.7	-88.63	-361.9	-1,544.4	2,066.4	2,019.7	46.79	44.168	
7,800.0	7,195.8	7,311.2	7,158.6	25.1	24.7	-88.64	-361.9	-1,544.4	2,029.7	1,982.2	47.52	42.712	
7,900.0	7,195.4	7,311.7	7,159.1	25.5	24.7	-88.66	-361.9	-1,544.4	1,959.5	1,910.4	49.13	39.884	
8,000.0	7,195.0	7,312.2	7,159.6	27.5	24.7	-88.68	-361.9	-1,544.4	1,892.1	1,841.1	50.94	37.145	
8,100.0	7,194.6	7,312.7	7,160.0	29.5	24.7	-88.70	-361.9	-1,544.4	1,827.6	1,774.7	52.90	34.546	
8,200.0	7,194.1	7,313.2	7,160.5	31.7	24.7	-88.72	-361.9	-1,544.4	1,766.4	1,711.4	55.00	32.118	
8,300.0	7,193.7	7,313.6	7,161.0	33.9	24.7	-88.74	-361.9	-1,544.4	1,708.9	1,651.7	57.20	29.878	
8,400.0	7,193.3	7,314.1	7,161.5	36.3	24.7	-88.76	-362.0	-1,544.4	1,655.5	1,596.0	59.48	27.832	
8,500.0	7,192.9	7,314.6	7,162.0	38.6	24.7	-88.78	-362.0	-1,544.5	1,606.5	1,544.6	61.84	25.979	
8,600.0	7,192.5	7,315.1	7,162.4	41.1	24.7	-88.79	-362.0	-1,544.5	1,562.3	1,498.1	64.25	24.317	
8,700.0	7,192.1	7,315.5	7,162.9	43.5	24.7	-88.81	-362.0	-1,544.5	1,523.5	1,456.8	66.71	22.837	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 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: 705-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	
8,800.0	7,191.7	7,316.0	7,163.4	46.0	24.7	-88.83	-362.0	-1,544.5	1,490.4	1,421.2	69.21	21.533	
8,900.0	7,191.3	7,316.5	7,163.9	48.6	24.7	-88.85	-362.0	-1,544.5	1,463.4	1,391.6	71.75	20.395	
9,000.0	7,190.9	7,317.0	7,164.3	51.1	24.7	-88.87	-362.0	-1,544.5	1,442.8	1,368.5	74.31	19.414	
9,100.0	7,190.4	7,317.4	7,164.8	53.7	24.7	-88.89	-362.0	-1,544.5	1,428.9	1,352.0	76.90	18.580	
9,200.0	7,190.0	7,317.9	7,165.3	56.3	24.7	-88.91	-362.0	-1,544.5	1,421.9	1,342.4	79.51	17.883	
9,249.2	7,189.8	7,318.2	7,165.5	57.6	24.7	-88.92	-362.0	-1,544.5	1,421.1	1,340.3	80.81	17.586	
9,300.0	7,189.6	7,318.4	7,165.8	58.9	24.7	-88.93	-362.0	-1,544.5	1,422.0	1,339.8	82.14	17.311	
9,400.0	7,189.2	7,320.0	7,167.4	61.6	24.7	-88.99	-362.1	-1,544.5	1,429.1	1,344.3	84.80	16.853	
9,500.0	7,188.8	7,320.0	7,167.4	64.2	24.7	-88.99	-362.1	-1,544.5	1,443.0	1,355.6	87.45	16.501	
9,600.0	7,188.4	7,320.0	7,167.4	66.9	24.7	-88.99	-362.1	-1,544.5	1,463.7	1,373.6	90.12	16.242	
9,700.0	7,188.0	7,320.3	7,167.7	69.6	24.7	-89.01	-362.1	-1,544.5	1,490.9	1,398.1	92.80	16.065	
9,800.0	7,187.6	7,320.8	7,168.2	72.3	24.7	-89.03	-362.1	-1,544.5	1,524.1	1,428.6	95.50	15.959	
9,900.0	7,187.1	7,321.3	7,168.7	74.9	24.7	-89.05	-362.1	-1,544.5	1,563.0	1,464.8	98.20	15.917 SF	
10,000.0	7,186.7	7,321.8	7,169.2	77.6	24.7	-89.07	-362.1	-1,544.5	1,607.2	1,506.3	100.91	15.928	
10,100.0	7,186.3	7,322.3	7,169.6	80.4	24.7	-89.09	-362.1	-1,544.5	1,656.3	1,552.7	103.63	15.984	
10,200.0	7,185.9	7,322.8	7,170.1	83.1	24.7	-89.10	-362.1	-1,544.5	1,709.8	1,603.5	106.35	16.078	
10,300.0	7,185.5	7,323.2	7,170.6	85.8	24.7	-89.12	-362.1	-1,544.5	1,767.4	1,658.3	109.08	16.203	
10,400.0	7,185.1	7,323.7	7,171.1	88.5	24.7	-89.14	-362.1	-1,544.5	1,828.6	1,716.8	111.81	16.355	
10,500.0	7,184.7	7,324.2	7,171.6	91.2	24.7	-89.16	-362.1	-1,544.5	1,893.1	1,778.6	114.55	16.527	
10,600.0	7,184.3	7,324.7	7,172.1	94.0	24.7	-89.18	-362.2	-1,544.5	1,960.6	1,843.4	117.29	16.716	
10,700.0	7,183.9	7,325.2	7,172.5	96.7	24.7	-89.20	-362.2	-1,544.5	2,030.8	1,910.8	120.04	16.918	
10,800.0	7,183.4	7,325.6	7,173.0	99.4	24.7	-89.22	-362.2	-1,544.6	2,103.4	1,980.6	122.79	17.131	
10,900.0	7,183.0	7,326.1	7,173.5	102.2	24.7	-89.24	-362.2	-1,544.6	2,178.2	2,052.7	125.54	17.351	
11,000.0	7,182.6	7,326.6	7,174.0	104.9	24.7	-89.26	-362.2	-1,544.6	2,254.9	2,126.6	128.30	17.576	
11,100.0	7,182.2	7,327.1	7,174.4	107.7	24.7	-89.28	-362.2	-1,544.6	2,333.4	2,202.4	131.06	17.805	
11,200.0	7,181.8	7,327.5	7,174.9	110.4	24.7	-89.30	-362.2	-1,544.6	2,413.5	2,279.7	133.82	18.036	
11,300.0	7,181.4	7,328.0	7,175.4	113.2	24.7	-89.32	-362.2	-1,544.6	2,495.0	2,358.5	136.58	18.268	
11,400.0	7,181.0	7,328.5	7,175.8	116.0	24.7	-89.33	-362.2	-1,544.6	2,577.9	2,438.5	139.35	18.499	
11,500.0	7,180.6	7,328.9	7,176.3	118.7	24.7	-89.35	-362.2	-1,544.6	2,661.9	2,519.7	142.12	18.730	
11,600.0	7,180.1	7,329.4	7,176.8	121.5	24.7	-89.37	-362.2	-1,544.6	2,746.9	2,602.1	144.89	18.959	
11,700.0	7,179.7	7,329.9	7,177.2	124.3	24.7	-89.39	-362.3	-1,544.6	2,833.0	2,685.3	147.66	19.186	
11,800.0	7,179.3	7,330.3	7,177.7	127.0	24.7	-89.41	-362.3	-1,544.6	2,919.9	2,769.5	150.43	19.410	
11,900.0	7,178.9	7,330.8	7,178.2	129.8	24.7	-89.43	-362.3	-1,544.6	3,007.7	2,854.5	153.21	19.631	
12,000.0	7,178.5	7,331.2	7,178.6	132.6	24.7	-89.45	-362.3	-1,544.6	3,096.2	2,940.2	155.99	19.849	
12,100.0	7,178.1	7,331.7	7,179.1	135.3	24.7	-89.46	-362.3	-1,544.6	3,185.3	3,026.6	158.76	20.063	
12,200.0	7,177.7	7,332.2	7,179.5	138.1	24.7	-89.48	-362.3	-1,544.6	3,275.1	3,113.6	161.54	20.274	
12,300.0	7,177.2	7,332.6	7,180.0	140.9	24.7	-89.50	-362.3	-1,544.6	3,365.5	3,201.2	164.32	20.481	
12,400.0	7,176.8	7,333.1	7,180.4	143.7	24.7	-89.52	-362.3	-1,544.6	3,456.4	3,289.3	167.11	20.684	
12,500.0	7,176.4	7,333.5	7,180.9	146.4	24.7	-89.54	-362.3	-1,544.6	3,547.8	3,377.9	169.89	20.883	
12,600.0	7,176.0	7,334.0	7,181.3	149.2	24.7	-89.56	-362.3	-1,544.6	3,639.7	3,467.0	172.67	21.078	
12,700.0	7,175.6	7,334.4	7,181.8	152.0	24.7	-89.57	-362.3	-1,544.6	3,731.9	3,556.5	175.46	21.270	
12,800.0	7,175.2	7,334.8	7,182.2	154.8	24.7	-89.59	-362.3	-1,544.6	3,824.6	3,646.3	178.24	21.457	
12,900.0	7,174.8	7,335.3	7,182.7	157.5	24.7	-89.61	-362.4	-1,544.6	3,917.6	3,736.6	181.03	21.640	
13,000.0	7,174.4	7,335.7	7,183.1	160.3	24.7	-89.63	-362.4	-1,544.6	4,011.0	3,827.1	183.82	21.820	
13,100.0	7,173.9	7,336.2	7,183.5	163.1	24.7	-89.64	-362.4	-1,544.6	4,104.6	3,918.0	186.61	21.996	
13,200.0	7,173.5	7,336.6	7,184.0	165.9	24.7	-89.66	-362.4	-1,544.6	4,198.6	4,009.2	189.40	22.168	
13,300.0	7,173.1	7,337.1	7,184.4	168.7	24.7	-89.68	-362.4	-1,544.7	4,292.8	4,100.6	192.19	22.337	
13,400.0	7,172.7	7,337.5	7,184.9	171.5	24.7	-89.70	-362.4	-1,544.7	4,387.3	4,192.3	194.98	22.502	
13,500.0	7,172.3	7,337.9	7,185.3	174.3	24.7	-89.71	-362.4	-1,544.7	4,482.0	4,284.3	197.77	22.663	
13,600.0	7,171.9	7,338.4	7,185.7	177.0	24.7	-89.73	-362.4	-1,544.7	4,577.0	4,376.4	200.56	22.821	
13,700.0	7,171.5	7,338.8	7,186.2	179.8	24.7	-89.75	-362.4	-1,544.7	4,672.1	4,468.8	203.35	22.976	
13,800.0	7,171.0	7,339.2	7,186.6	182.6	24.7	-89.77	-362.4	-1,544.7	4,767.5	4,561.3	206.14	23.127	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD WEDCO #13-21DU - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 705-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
13,900.0	7,170.6	7,339.6	7,187.0	185.4	24.7	-89.78	-362.4	-1,544.7	4,863.0	4,654.1	208.94	23.275	
14,000.0	7,170.2	7,340.1	7,187.4	188.2	24.7	-89.80	-362.4	-1,544.7	4,958.8	4,747.0	211.73	23.420	
14,100.0	7,169.8	7,340.5	7,187.9	191.0	24.7	-89.82	-362.4	-1,544.7	5,054.6	4,840.1	214.53	23.562	
14,200.0	7,169.4	7,340.9	7,188.3	193.8	24.7	-89.84	-362.5	-1,544.7	5,150.7	4,933.4	217.32	23.701	
14,295.0	7,169.0	7,341.3	7,188.7	196.4	24.7	-89.85	-362.5	-1,544.7	5,242.0	5,022.0	219.98	23.830	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.0	0.0	0.0	0.0	0.0	0.0	-137.77	-574.1	-521.1	775.4				
100.0	100.0	87.9	87.9	0.1	0.1	-137.77	-574.1	-521.1	775.3	775.2	0.15	5,037.927	
118.4	118.4	106.0	106.0	0.1	0.1	-137.77	-574.1	-521.1	775.3	775.1	0.21	3,715.888 CC	
200.0	200.0	183.1	183.1	0.3	0.1	-137.76	-574.1	-521.4	775.5	775.1	0.47	1,666.095 ES	
300.0	300.0	286.1	286.1	0.5	0.2	-137.75	-574.4	-521.8	776.0	775.2	0.77	1,001.751	
400.0	400.0	380.3	380.3	0.8	0.3	-137.74	-574.7	-522.1	776.5	775.4	1.06	732.662	
500.0	500.0	480.9	480.9	1.0	0.4	-137.72	-575.2	-523.0	777.5	776.1	1.35	575.231	
600.0	600.0	578.3	578.3	1.2	0.4	-170.23	-575.8	-523.8	780.1	778.5	1.65	472.502	
700.0	699.8	680.5	680.4	1.4	0.5	-170.22	-576.1	-525.1	786.4	784.4	1.95	403.353	
800.0	799.5	780.2	780.2	1.7	0.5	-170.25	-576.3	-526.1	795.8	793.6	2.24	354.955	
900.0	898.7	874.8	874.7	1.9	0.6	-170.35	-577.0	-526.8	808.9	806.3	2.55	317.746	
1,000.0	997.5	972.3	972.2	2.2	0.6	-170.45	-578.0	-528.0	825.9	823.0	2.86	288.851	
1,100.0	1,095.6	1,070.4	1,070.4	2.6	0.7	-170.60	-579.1	-529.0	846.2	843.0	3.18	266.467	
1,169.1	1,163.0	1,139.5	1,139.4	2.8	0.7	-170.71	-579.8	-529.7	862.1	858.7	3.39	253.964	
1,200.0	1,193.1	1,170.9	1,170.8	3.0	0.7	-170.78	-580.0	-530.0	869.6	866.1	3.48	249.709	
1,300.0	1,290.4	1,265.5	1,265.4	3.4	0.7	-170.97	-580.4	-531.2	893.5	889.8	3.77	236.949	
1,400.0	1,387.7	1,364.1	1,364.0	3.8	0.8	-171.17	-581.1	-532.6	917.8	913.8	4.07	225.713	
1,500.0	1,484.9	1,461.0	1,460.9	4.3	0.8	-171.34	-581.5	-533.7	941.8	937.4	4.36	215.892	
1,600.0	1,582.2	1,555.2	1,555.1	4.7	0.9	-171.53	-582.4	-534.7	966.0	961.4	4.66	207.165	
1,700.0	1,679.5	1,651.0	1,650.9	5.2	0.9	-171.69	-583.1	-536.2	990.5	985.5	4.97	199.354	
1,800.0	1,776.8	1,752.9	1,752.7	5.7	0.9	-171.85	-583.9	-537.7	1,014.9	1,009.6	5.27	192.559	
1,900.0	1,874.1	1,854.0	1,853.8	6.1	1.0	-171.98	-583.8	-539.1	1,038.6	1,033.0	5.57	186.526	
2,000.0	1,971.4	1,946.1	1,945.9	6.6	1.0	-172.10	-583.9	-540.2	1,062.4	1,056.5	5.87	180.970	
2,100.0	2,068.7	2,039.3	2,039.1	7.1	1.1	-172.22	-584.5	-541.7	1,086.8	1,080.7	6.19	175.688	
2,200.0	2,165.9	2,140.5	2,140.3	7.6	1.1	-172.36	-585.2	-543.0	1,111.1	1,104.6	6.51	170.605	
2,300.0	2,263.2	2,239.0	2,238.8	8.0	1.2	-172.50	-585.8	-544.0	1,135.1	1,128.3	6.84	166.028	
2,400.0	2,360.5	2,333.4	2,333.2	8.5	1.2	-172.61	-586.2	-545.1	1,159.2	1,152.0	7.16	161.979	
2,500.0	2,457.8	2,428.7	2,428.5	9.0	1.3	-172.70	-586.6	-546.8	1,183.5	1,176.0	7.48	158.277	
2,600.0	2,555.1	2,526.6	2,526.4	9.5	1.3	-172.80	-587.1	-548.3	1,207.8	1,200.0	7.80	154.851	
2,700.0	2,652.4	2,624.2	2,624.0	10.0	1.4	-172.90	-587.6	-549.6	1,232.0	1,223.9	8.12	151.701	
2,800.0	2,749.7	2,720.9	2,720.6	10.4	1.4	-173.00	-588.1	-551.0	1,256.3	1,247.8	8.44	148.824	
2,900.0	2,846.9	2,817.9	2,817.7	10.9	1.5	-173.07	-588.4	-552.7	1,280.6	1,271.8	8.76	146.165	
3,000.0	2,944.2	2,917.0	2,916.8	11.4	1.5	-173.14	-588.5	-554.5	1,304.7	1,295.7	9.08	143.722	
3,100.0	3,041.5	3,015.6	3,015.3	11.9	1.6	-173.19	-588.3	-556.4	1,328.8	1,319.4	9.40	141.415	
3,200.0	3,138.8	3,110.8	3,110.5	12.4	1.6	-173.23	-588.2	-558.3	1,352.8	1,343.1	9.71	139.289	
3,300.0	3,236.1	3,206.4	3,206.1	12.8	1.6	-173.29	-588.3	-560.0	1,377.0	1,367.0	10.03	137.315	
3,400.0	3,333.4	3,309.7	3,309.4	13.3	1.7	-173.34	-588.1	-561.9	1,401.0	1,390.7	10.34	135.465	
3,500.0	3,430.6	3,412.3	3,411.9	13.8	1.7	-173.36	-587.2	-564.0	1,424.6	1,414.0	10.66	133.695	
3,600.0	3,527.9	3,508.1	3,507.7	14.3	1.8	-173.37	-586.0	-566.3	1,448.1	1,437.1	10.97	132.047	
3,700.0	3,625.2	3,604.1	3,603.6	14.8	1.8	-173.36	-584.7	-568.8	1,471.7	1,460.4	11.28	130.497	
3,800.0	3,722.5	3,706.8	3,706.3	15.3	1.8	-173.34	-583.0	-571.6	1,495.1	1,483.5	11.59	129.004	
3,900.0	3,819.8	3,808.5	3,807.9	15.7	1.9	-173.31	-580.9	-574.3	1,518.1	1,506.2	11.90	127.556	
4,000.0	3,917.1	3,897.9	3,897.3	16.2	1.9	-173.29	-579.2	-576.7	1,541.3	1,529.1	12.21	126.218	
4,100.0	4,014.4	3,987.1	3,986.5	16.7	1.9	-173.27	-577.9	-579.4	1,565.0	1,552.5	12.52	124.984	
4,200.0	4,111.6	4,091.6	4,090.9	17.2	2.0	-173.26	-576.6	-582.3	1,588.8	1,576.0	12.84	123.782	
4,300.0	4,208.9	4,199.0	4,198.2	17.7	2.0	-173.29	-575.3	-584.2	1,612.0	1,598.9	13.15	122.593	
4,400.0	4,306.2	4,295.0	4,294.3	18.2	2.0	-173.32	-574.2	-585.5	1,634.9	1,621.5	13.46	121.501	
4,500.0	4,403.5	4,391.0	4,390.2	18.7	2.1	-173.35	-573.1	-586.9	1,657.9	1,644.2	13.76	120.459	
4,600.0	4,500.8	4,490.0	4,489.2	19.1	2.1	-173.38	-572.0	-588.2	1,680.9	1,666.9	14.07	119.456	
4,700.0	4,598.1	4,589.4	4,588.6	19.6	2.1	-173.43	-571.2	-589.1	1,703.8	1,689.4	14.38	118.488	
4,800.0	4,695.4	4,679.5	4,678.7	20.1	2.2	-173.48	-570.5	-589.8	1,726.8	1,712.1	14.69	117.575	
4,900.0	4,792.6	4,768.4	4,767.6	20.6	2.2	-173.52	-570.1	-591.1	1,750.3	1,735.3	14.99	116.726	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,000.0	4,889.9	4,869.4	4,868.6	21.1	2.2	-173.55	-569.7	-592.7	1,774.0	1,758.7	15.31	115.906	
5,100.0	4,987.2	4,977.6	4,976.8	21.6	2.3	-173.60	-569.0	-594.0	1,797.2	1,781.6	15.62	115.071	
5,200.0	5,084.5	5,071.3	5,070.4	22.1	2.3	-173.64	-568.2	-594.7	1,820.1	1,804.2	15.93	114.287	
5,300.0	5,181.8	5,160.9	5,160.0	22.5	2.3	-173.68	-567.8	-595.7	1,843.4	1,827.2	16.23	113.560	
5,400.0	5,279.1	5,258.2	5,257.3	23.0	2.3	-173.73	-567.6	-596.9	1,867.0	1,850.5	16.54	112.901	
5,500.0	5,376.3	5,361.7	5,360.8	23.5	2.3	-173.80	-567.6	-597.4	1,890.3	1,873.5	16.84	112.274	
5,600.0	5,473.6	5,463.8	5,463.0	24.0	2.3	-173.88	-567.7	-597.3	1,913.4	1,896.2	17.13	111.690	
5,700.0	5,570.9	5,565.2	5,564.4	24.5	2.3	-173.95	-567.5	-597.2	1,936.2	1,918.8	17.42	111.131	
5,800.0	5,668.2	5,655.7	5,654.9	25.0	2.3	-174.02	-567.2	-597.2	1,959.0	1,941.3	17.72	110.572	
5,900.0	5,765.5	5,740.2	5,739.4	25.5	2.3	-174.07	-567.4	-597.5	1,982.4	1,964.4	18.01	110.055	
5,921.9	5,786.8	5,758.7	5,757.8	25.6	2.4	-174.08	-567.5	-597.6	1,987.6	1,969.5	18.08	109.948	
6,000.0	5,863.0	5,830.9	5,830.1	25.9	2.4	-174.17	-568.0	-598.2	2,005.3	1,987.1	18.22	110.036	
6,100.0	5,961.2	5,937.6	5,936.8	26.2	2.4	-174.25	-568.4	-599.0	2,024.8	2,006.4	18.38	110.145	
6,200.0	6,060.0	6,042.7	6,041.9	26.5	2.4	-174.31	-568.3	-599.9	2,040.4	2,021.9	18.51	110.237	
6,300.0	6,159.3	6,145.0	6,144.2	26.7	2.4	-174.37	-568.4	-600.0	2,052.4	2,033.8	18.60	110.341	
6,400.0	6,259.0	6,247.7	6,246.8	26.9	2.4	-174.43	-568.9	-599.5	2,060.9	2,042.2	18.67	110.378	
6,500.0	6,358.8	6,350.5	6,349.7	27.1	2.4	-174.46	-569.0	-599.2	2,065.7	2,046.9	18.72	110.319	
6,591.0	6,449.8	6,440.3	6,439.4	27.2	2.4	-141.95	-568.8	-599.2	2,066.9	2,037.6	29.36	70.397	
6,600.0	6,458.8	6,448.8	6,447.9	27.2	2.4	-141.95	-568.8	-599.2	2,066.9	2,037.6	29.37	70.375	
6,621.0	6,479.8	6,468.4	6,467.6	27.2	2.4	-141.95	-568.8	-599.2	2,066.9	2,037.5	29.39	70.319	
6,650.0	6,508.8	6,495.7	6,494.8	27.3	2.4	-51.98	-568.8	-599.2	2,066.6	2,047.8	18.80	109.949	
6,700.0	6,558.7	6,542.4	6,541.6	27.3	2.4	-52.20	-568.9	-599.2	2,064.3	2,045.6	18.74	110.148	
6,750.0	6,608.1	6,588.8	6,588.0	27.3	2.4	-52.63	-569.1	-599.1	2,060.0	2,041.3	18.69	110.246	
6,800.0	6,657.0	6,635.6	6,634.7	27.3	2.4	-53.27	-569.4	-599.0	2,053.7	2,035.1	18.64	110.167	
6,850.0	6,704.9	6,681.8	6,681.0	27.2	2.4	-54.11	-569.8	-599.0	2,045.4	2,026.8	18.61	109.924	
6,900.0	6,751.8	6,727.0	6,726.2	27.2	2.4	-55.17	-570.2	-598.9	2,035.3	2,016.7	18.59	109.496	
6,950.0	6,797.4	6,771.0	6,770.1	27.1	2.4	-56.42	-570.6	-598.9	2,023.3	2,004.7	18.59	108.837	
7,000.0	6,841.4	6,813.3	6,812.4	27.0	2.4	-57.88	-571.0	-598.8	2,009.7	1,991.0	18.63	107.893	
7,050.0	6,883.6	6,853.8	6,852.9	26.9	2.5	-59.53	-571.4	-598.9	1,994.5	1,975.8	18.71	106.621	
7,100.0	6,923.9	6,892.5	6,891.6	26.8	2.5	-61.36	-571.8	-599.0	1,978.0	1,959.2	18.84	104.979	
7,150.0	6,962.0	6,929.3	6,928.4	26.7	2.5	-63.36	-572.1	-599.2	1,960.3	1,941.2	19.04	102.961	
7,200.0	6,997.8	6,963.9	6,963.1	26.5	2.5	-65.51	-572.4	-599.5	1,941.5	1,922.2	19.30	100.597	
7,250.0	7,031.0	6,996.3	6,995.5	26.4	2.5	-67.79	-572.6	-599.8	1,921.9	1,902.3	19.62	97.947	
7,300.0	7,061.6	7,032.1	7,031.2	26.3	2.5	-70.31	-572.9	-600.1	1,901.6	1,881.6	20.01	95.038	
7,350.0	7,089.3	7,065.1	7,064.2	26.1	2.5	-72.91	-573.0	-600.4	1,880.8	1,860.4	20.44	92.005	
7,400.0	7,114.0	7,094.5	7,093.6	26.0	2.5	-75.53	-573.1	-600.6	1,859.7	1,838.8	20.91	88.937	
7,450.0	7,135.7	7,120.1	7,119.3	25.9	2.5	-78.11	-573.2	-600.7	1,838.6	1,817.2	21.41	85.882	
7,500.0	7,154.2	7,141.9	7,141.0	25.7	2.5	-80.60	-573.1	-600.8	1,817.7	1,795.8	21.94	82.863	
7,550.0	7,169.4	7,159.7	7,158.8	25.6	2.5	-82.96	-573.1	-600.8	1,797.3	1,774.8	22.50	79.881	
7,600.0	7,181.2	7,173.5	7,172.6	25.5	2.5	-85.14	-573.1	-600.8	1,777.4	1,754.3	23.10	76.932	
7,650.0	7,189.6	7,183.2	7,182.3	25.4	2.5	-87.11	-573.1	-600.8	1,758.5	1,734.7	23.76	74.020	
7,700.0	7,194.5	7,188.9	7,188.0	25.3	2.5	-88.85	-573.0	-600.8	1,740.5	1,716.1	24.46	71.163	
7,748.9	7,196.0	7,190.6	7,189.7	25.2	2.5	-90.30	-573.0	-600.8	1,724.1	1,698.9	25.19	68.449	
7,800.0	7,195.8	7,190.4	7,189.5	25.1	2.5	-90.29	-573.0	-600.8	1,708.3	1,682.4	25.92	65.903	
7,900.0	7,195.4	7,189.9	7,189.0	25.5	2.5	-90.27	-573.0	-600.8	1,681.5	1,653.9	27.53	61.077	
8,000.0	7,195.0	7,189.4	7,188.5	27.5	2.5	-90.26	-573.0	-600.8	1,660.2	1,630.9	29.33	56.597	
8,100.0	7,194.6	7,188.9	7,188.0	29.5	2.5	-90.24	-573.0	-600.8	1,644.7	1,613.4	31.30	52.555	
8,200.0	7,194.1	7,188.4	7,187.6	31.7	2.5	-90.22	-573.0	-600.8	1,635.3	1,601.9	33.39	48.980	
8,300.0	7,193.7	7,188.0	7,187.1	33.9	2.5	-90.21	-573.0	-600.8	1,631.9	1,596.3	35.58	45.863	
8,305.4	7,193.7	7,187.9	7,187.1	34.1	2.5	-90.21	-573.0	-600.8	1,631.9	1,596.2	35.70	45.705	
8,400.0	7,193.3	7,187.5	7,186.6	36.3	2.5	-90.19	-573.0	-600.8	1,634.6	1,596.7	37.86	43.172	
8,500.0	7,192.9	7,187.1	7,186.2	38.6	2.5	-90.17	-573.1	-600.8	1,643.4	1,603.2	40.21	40.867	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 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	
8,600.0	7,192.5	7,186.6	7,185.7	41.1	2.5	-90.16	-573.1	-600.8	1,658.2	1,615.6	42.62	38.904	
8,700.0	7,192.1	7,186.2	7,185.3	43.5	2.5	-90.14	-573.1	-600.8	1,678.9	1,633.8	45.08	37.241	
8,800.0	7,191.7	7,185.7	7,184.9	46.0	2.5	-90.13	-573.1	-600.8	1,705.2	1,657.6	47.58	35.838	
8,900.0	7,191.3	7,185.3	7,184.4	48.6	2.5	-90.11	-573.1	-600.8	1,736.8	1,686.7	50.11	34.659	
9,000.0	7,190.9	7,184.9	7,184.0	51.1	2.5	-90.10	-573.1	-600.8	1,773.5	1,720.9	52.67	33.670	
9,100.0	7,190.4	7,184.5	7,183.6	53.7	2.5	-90.08	-573.1	-600.8	1,815.0	1,759.8	55.26	32.845	
9,200.0	7,190.0	7,184.0	7,183.2	56.3	2.5	-90.07	-573.1	-600.8	1,861.0	1,803.1	57.87	32.159	
9,300.0	7,189.6	7,183.6	7,182.8	58.9	2.5	-90.05	-573.1	-600.8	1,911.1	1,850.6	60.49	31.591	
9,400.0	7,189.2	7,183.2	7,182.3	61.6	2.5	-90.04	-573.1	-600.8	1,965.0	1,901.8	63.14	31.123	
9,500.0	7,188.8	7,182.8	7,181.9	64.2	2.5	-90.03	-573.1	-600.8	2,022.4	1,956.6	65.79	30.738	
9,600.0	7,188.4	7,182.4	7,181.5	66.9	2.5	-90.01	-573.1	-600.8	2,083.0	2,014.6	68.46	30.426	
9,700.0	7,188.0	7,182.0	7,181.2	69.6	2.5	-90.00	-573.1	-600.8	2,146.6	2,075.5	71.14	30.173	
9,800.0	7,187.6	7,181.7	7,180.8	72.3	2.5	-89.98	-573.1	-600.8	2,212.9	2,139.0	73.83	29.971	
9,900.0	7,187.1	7,181.3	7,180.4	74.9	2.5	-89.97	-573.1	-600.8	2,281.6	2,205.1	76.53	29.813	
10,000.0	7,186.7	7,180.9	7,180.0	77.6	2.5	-89.96	-573.1	-600.8	2,352.6	2,273.3	79.24	29.690	
10,100.0	7,186.3	7,180.5	7,179.6	80.4	2.5	-89.94	-573.1	-600.8	2,425.6	2,343.7	81.95	29.598	
10,200.0	7,185.9	7,180.1	7,179.3	83.1	2.5	-89.93	-573.1	-600.8	2,500.5	2,415.8	84.67	29.532	
10,300.0	7,185.5	7,179.8	7,178.9	85.8	2.5	-89.92	-573.1	-600.8	2,577.1	2,489.7	87.40	29.487	
10,400.0	7,185.1	7,179.4	7,178.5	88.5	2.5	-89.91	-573.1	-600.8	2,655.2	2,565.1	90.13	29.461	
10,500.0	7,184.7	7,179.1	7,178.2	91.2	2.5	-89.89	-573.1	-600.8	2,734.8	2,642.0	92.86	29.450 SF	
10,600.0	7,184.3	7,178.7	7,177.8	94.0	2.5	-89.88	-573.1	-600.8	2,815.7	2,720.1	95.60	29.452	
10,700.0	7,183.9	7,178.4	7,177.5	96.7	2.5	-89.87	-573.1	-600.8	2,897.8	2,799.4	98.35	29.465	
10,800.0	7,183.4	7,178.0	7,177.1	99.4	2.5	-89.86	-573.1	-600.8	2,980.9	2,879.8	101.09	29.487	
10,900.0	7,183.0	7,177.7	7,176.8	102.2	2.5	-89.84	-573.1	-600.8	3,065.1	2,961.3	103.84	29.517	
11,000.0	7,182.6	7,177.3	7,176.4	104.9	2.5	-89.83	-573.1	-600.8	3,150.2	3,043.6	106.60	29.552	
11,100.0	7,182.2	7,177.0	7,176.1	107.7	2.5	-89.82	-573.1	-600.8	3,236.2	3,126.8	109.35	29.593	
11,200.0	7,181.8	7,176.7	7,175.8	110.4	2.5	-89.81	-573.1	-600.8	3,322.9	3,210.8	112.11	29.639	
11,300.0	7,181.4	7,176.3	7,175.4	113.2	2.5	-89.80	-573.1	-600.8	3,410.4	3,295.5	114.87	29.688	
11,400.0	7,181.0	7,176.0	7,175.1	116.0	2.5	-89.79	-573.1	-600.8	3,498.5	3,380.9	117.64	29.739	
11,500.0	7,180.6	7,175.7	7,174.8	118.7	2.5	-89.77	-573.1	-600.8	3,587.3	3,466.9	120.40	29.794	
11,600.0	7,180.1	7,175.4	7,174.5	121.5	2.5	-89.76	-573.1	-600.8	3,676.6	3,553.4	123.17	29.849	
11,700.0	7,179.7	7,175.1	7,174.2	124.3	2.5	-89.75	-573.1	-600.8	3,766.5	3,640.5	125.94	29.907	
11,800.0	7,179.3	7,174.7	7,173.9	127.0	2.5	-89.74	-573.1	-600.8	3,856.8	3,728.1	128.71	29.965	
11,900.0	7,178.9	7,174.4	7,173.5	129.8	2.5	-89.73	-573.1	-600.8	3,947.7	3,816.2	131.49	30.024	
12,000.0	7,178.5	7,174.1	7,173.2	132.6	2.5	-89.72	-573.1	-600.8	4,038.9	3,904.7	134.26	30.083	
12,100.0	7,178.1	7,173.8	7,172.9	135.3	2.5	-89.71	-573.1	-600.8	4,130.6	3,993.6	137.04	30.143	
12,200.0	7,177.7	7,173.5	7,172.6	138.1	2.5	-89.70	-573.1	-600.8	4,222.7	4,082.8	139.81	30.202	
12,300.0	7,177.2	7,173.2	7,172.3	140.9	2.5	-89.69	-573.1	-600.8	4,315.1	4,172.5	142.59	30.262	
12,400.0	7,176.8	7,172.9	7,172.1	143.7	2.5	-89.68	-573.1	-600.8	4,407.8	4,262.4	145.37	30.321	
12,500.0	7,176.4	7,172.6	7,171.8	146.4	2.5	-89.67	-573.1	-600.8	4,500.8	4,352.7	148.15	30.380	
12,600.0	7,176.0	7,172.4	7,171.5	149.2	2.5	-89.66	-573.1	-600.8	4,594.2	4,443.2	150.93	30.439	
12,700.0	7,175.6	7,172.1	7,171.2	152.0	2.5	-89.65	-573.1	-600.8	4,687.8	4,534.1	153.71	30.497	
12,800.0	7,175.2	7,171.8	7,170.9	154.8	2.5	-89.64	-573.1	-600.8	4,781.7	4,625.2	156.50	30.554	
12,900.0	7,174.8	7,171.5	7,170.6	157.5	2.5	-89.63	-573.1	-600.8	4,875.8	4,716.5	159.28	30.611	
13,000.0	7,174.4	7,171.2	7,170.4	160.3	2.5	-89.62	-573.1	-600.8	4,970.1	4,808.1	162.07	30.667	
13,100.0	7,173.9	7,171.0	7,170.1	163.1	2.5	-89.61	-573.1	-600.8	5,064.7	4,899.8	164.85	30.722	
13,200.0	7,173.5	7,170.7	7,169.8	165.9	2.5	-89.60	-573.1	-600.8	5,159.5	4,991.8	167.64	30.777	
13,300.0	7,173.1	7,170.4	7,169.5	168.7	2.5	-89.59	-573.1	-600.8	5,254.4	5,084.0	170.43	30.831	
13,400.0	7,172.7	7,170.2	7,169.3	171.5	2.5	-89.58	-573.1	-600.8	5,349.6	5,176.3	173.21	30.884	
13,500.0	7,172.3	7,169.9	7,169.0	174.3	2.5	-89.57	-573.1	-600.8	5,444.9	5,268.9	176.00	30.936	
13,600.0	7,171.9	7,169.6	7,168.7	177.0	2.5	-89.56	-573.1	-600.8	5,540.4	5,361.6	178.79	30.988	
13,700.0	7,171.5	7,169.4	7,168.5	179.8	2.5	-89.55	-573.1	-600.8	5,636.0	5,454.4	181.58	31.038	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST VERT BUNYAN #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
13,800.0	7,171.0	7,169.1	7,168.2	182.6	2.5	-89.54	-573.1	-600.8	5,731.8	5,547.4	184.37	31.088	
13,900.0	7,170.6	7,168.9	7,168.0	185.4	2.5	-89.53	-573.1	-600.8	5,827.7	5,640.6	187.16	31.137	
14,000.0	7,170.2	7,168.6	7,167.7	188.2	2.5	-89.52	-573.1	-600.8	5,923.8	5,733.8	189.95	31.185	
14,100.0	7,169.8	7,168.4	7,167.5	191.0	2.5	-89.52	-573.1	-600.8	6,020.0	5,827.2	192.75	31.233	
14,200.0	7,169.4	7,168.1	7,167.2	193.8	2.5	-89.51	-573.1	-600.8	6,116.3	5,920.8	195.54	31.279	
14,295.0	7,169.0	7,167.9	7,167.0	196.4	2.5	-89.50	-573.1	-600.8	6,207.9	6,009.7	198.19	31.323	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 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	
0.0	0.0	0.0	0.0	0.0	0.0	179.35	-1,222.6	13.9	1,222.7				
100.0	100.0	99.0	99.0	0.1	0.1	179.35	-1,222.6	13.9	1,222.7	1,222.5	0.19	6,320.402	
200.0	200.0	199.0	199.0	0.3	0.3	179.35	-1,222.6	13.9	1,222.7	1,222.0	0.64	1,905.365	
300.0	300.0	299.0	299.0	0.5	0.5	179.35	-1,222.6	13.9	1,222.7	1,221.6	1.09	1,120.457	
400.0	400.0	436.7	436.6	0.8	0.9	179.23	-1,220.5	16.4	1,221.2	1,219.5	1.62	752.689	
500.0	500.0	574.1	573.7	1.0	1.2	178.88	-1,214.0	23.8	1,216.5	1,214.4	2.17	560.090	
600.0	600.0	710.6	709.2	1.2	1.5	145.90	-1,203.3	36.1	1,210.4	1,207.6	2.75	440.071	
700.0	699.8	846.2	842.8	1.4	2.0	145.33	-1,188.6	53.1	1,204.1	1,200.7	3.38	355.887	
800.0	799.5	959.6	954.0	1.7	2.4	144.80	-1,173.4	70.6	1,198.4	1,194.4	4.00	299.749	
900.0	898.7	1,059.2	1,051.3	1.9	2.8	144.39	-1,159.8	86.2	1,195.4	1,190.8	4.59	260.163	
953.8	951.9	1,112.7	1,103.7	2.1	3.1	144.19	-1,152.5	94.6	1,195.0	1,190.0	4.93	242.487 CC, ES	
1,000.0	997.5	1,158.9	1,148.8	2.2	3.3	144.03	-1,146.2	101.8	1,195.3	1,190.1	5.22	229.095	
1,100.0	1,095.6	1,258.7	1,246.5	2.6	3.7	143.75	-1,132.6	117.5	1,198.0	1,192.2	5.87	204.150	
1,169.1	1,163.0	1,327.6	1,313.9	2.8	4.0	143.59	-1,123.2	128.3	1,201.6	1,195.3	6.33	189.844	
1,200.0	1,193.1	1,358.5	1,344.1	3.0	4.1	143.55	-1,119.0	133.2	1,203.5	1,196.9	6.55	183.874	
1,300.0	1,290.4	1,458.3	1,441.7	3.4	4.6	143.41	-1,105.4	148.8	1,209.6	1,202.3	7.25	166.733	
1,400.0	1,387.7	1,558.0	1,539.3	3.8	5.0	143.28	-1,091.8	164.5	1,215.7	1,207.8	7.98	152.413	
1,500.0	1,484.9	1,657.8	1,636.9	4.3	5.4	143.15	-1,078.2	180.1	1,221.9	1,213.2	8.71	140.310	
1,600.0	1,582.2	1,757.6	1,734.5	4.7	5.9	143.02	-1,064.6	195.8	1,228.0	1,218.6	9.45	129.974	
1,700.0	1,679.5	1,857.3	1,832.0	5.2	6.3	142.89	-1,051.0	211.5	1,234.1	1,224.0	10.19	121.062	
1,800.0	1,776.8	1,957.1	1,929.6	5.7	6.8	142.77	-1,037.3	227.1	1,240.3	1,229.4	10.95	113.311	
1,900.0	1,874.1	2,056.9	2,027.2	6.1	7.2	142.64	-1,023.7	242.8	1,246.5	1,234.8	11.70	106.513	
2,000.0	1,971.4	2,156.7	2,124.8	6.6	7.7	142.51	-1,010.1	258.4	1,252.6	1,240.2	12.46	100.509	
2,100.0	2,068.7	2,256.4	2,222.4	7.1	8.1	142.39	-996.5	274.1	1,258.8	1,245.6	13.23	95.170	
2,200.0	2,165.9	2,356.2	2,320.0	7.6	8.6	142.27	-982.9	289.8	1,265.0	1,251.0	13.99	90.394	
2,300.0	2,263.2	2,456.0	2,417.6	8.0	9.0	142.15	-969.3	305.4	1,271.2	1,256.4	14.76	86.098	
2,400.0	2,360.5	2,555.8	2,515.2	8.5	9.5	142.03	-955.7	321.1	1,277.3	1,261.8	15.54	82.214	
2,500.0	2,457.8	2,655.5	2,612.8	9.0	9.9	141.91	-942.1	336.7	1,283.5	1,267.2	16.31	78.687	
2,600.0	2,555.1	2,755.3	2,710.4	9.5	10.4	141.79	-928.5	352.4	1,289.7	1,272.6	17.09	75.470	
2,700.0	2,652.4	2,855.1	2,808.0	10.0	10.8	141.68	-914.9	368.1	1,295.9	1,278.1	17.87	72.524	
2,800.0	2,749.7	2,954.8	2,905.6	10.4	11.3	141.56	-901.3	383.7	1,302.1	1,283.5	18.65	69.818	
2,900.0	2,846.9	3,054.6	3,003.1	10.9	11.7	141.45	-887.6	399.4	1,308.4	1,288.9	19.43	67.323	
3,000.0	2,944.2	3,154.4	3,100.7	11.4	12.2	141.33	-874.0	415.1	1,314.6	1,294.4	20.22	65.016	
3,100.0	3,041.5	3,254.2	3,198.3	11.9	12.6	141.22	-860.4	430.7	1,320.8	1,299.8	21.01	62.876	
3,200.0	3,138.8	3,353.9	3,295.9	12.4	13.0	141.11	-846.8	446.4	1,327.0	1,305.2	21.80	60.886	
3,300.0	3,236.1	3,453.7	3,393.5	12.8	13.5	141.00	-833.2	462.0	1,333.3	1,310.7	22.59	59.032	
3,400.0	3,333.4	3,553.5	3,491.1	13.3	13.9	140.89	-819.6	477.7	1,339.5	1,316.1	23.38	57.299	
3,500.0	3,430.6	3,653.3	3,588.7	13.8	14.4	140.78	-806.0	493.4	1,345.8	1,321.6	24.17	55.677	
3,600.0	3,527.9	3,753.0	3,686.3	14.3	14.8	140.67	-792.4	509.0	1,352.0	1,327.0	24.97	54.155	
3,700.0	3,625.2	3,852.8	3,783.9	14.8	15.3	140.57	-778.8	524.7	1,358.3	1,332.5	25.76	52.724	
3,800.0	3,722.5	3,952.6	3,881.5	15.3	15.7	140.46	-765.2	540.3	1,364.5	1,338.0	26.56	51.376	
3,900.0	3,819.8	4,052.4	3,979.1	15.7	16.2	140.36	-751.6	556.0	1,370.8	1,343.4	27.36	50.105	
4,000.0	3,917.1	4,152.1	4,076.7	16.2	16.6	140.26	-737.9	571.7	1,377.0	1,348.9	28.16	48.903	
4,100.0	4,014.4	4,251.9	4,174.2	16.7	17.1	140.15	-724.3	587.3	1,383.3	1,354.4	28.96	47.767	
4,200.0	4,111.6	4,351.7	4,271.8	17.2	17.5	140.05	-710.7	603.0	1,389.6	1,359.8	29.76	46.689	
4,300.0	4,208.9	4,451.4	4,369.4	17.7	18.0	139.95	-697.1	618.6	1,395.9	1,365.3	30.57	45.667	
4,400.0	4,306.2	4,551.2	4,467.0	18.2	18.4	139.85	-683.5	634.3	1,402.2	1,370.8	31.37	44.696	
4,500.0	4,403.5	4,645.8	4,559.6	18.7	18.9	139.76	-670.6	649.1	1,408.5	1,376.3	32.14	43.819	
4,600.0	4,500.8	4,744.2	4,636.5	19.1	19.1	139.74	-661.0	660.2	1,415.9	1,383.1	32.78	43.192	
4,700.0	4,598.1	4,800.0	4,711.4	19.6	19.4	139.79	-652.9	669.5	1,424.8	1,391.5	33.36	42.716	
4,800.0	4,695.4	4,880.2	4,790.8	20.1	19.6	139.91	-645.9	677.6	1,435.2	1,401.3	33.90	42.342	
4,900.0	4,792.6	4,957.5	4,867.7	20.6	19.8	140.09	-640.4	683.9	1,447.2	1,412.8	34.39	42.076	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,000.0	4,889.9	5,034.4	4,944.3	21.1	19.9	140.34	-636.4	688.6	1,460.6	1,425.8	34.86	41.905	
5,100.0	4,987.2	5,100.0	5,009.8	21.6	20.0	140.61	-634.0	691.3	1,475.7	1,440.4	35.28	41.830	
5,200.0	5,084.5	5,186.0	5,095.8	22.1	20.1	141.02	-632.3	693.2	1,492.2	1,456.6	35.67	41.837	
5,300.0	5,181.8	5,271.0	5,180.8	22.5	20.2	141.49	-632.1	693.4	1,510.2	1,474.2	36.03	41.921	
5,400.0	5,279.1	5,368.3	5,278.1	23.0	20.3	142.02	-632.1	693.4	1,528.6	1,492.2	36.39	42.009	
5,500.0	5,376.3	5,465.6	5,375.3	23.5	20.5	142.55	-632.1	693.4	1,547.1	1,510.3	36.75	42.093	
5,600.0	5,473.6	5,562.9	5,472.6	24.0	20.6	143.06	-632.1	693.4	1,565.7	1,528.6	37.12	42.177	
5,700.0	5,570.9	5,660.1	5,569.9	24.5	20.7	143.55	-632.1	693.4	1,584.5	1,547.0	37.49	42.261	
5,800.0	5,668.2	5,757.4	5,667.2	25.0	20.8	144.04	-632.1	693.4	1,603.3	1,565.4	37.86	42.344	
5,900.0	5,765.5	5,854.7	5,764.5	25.5	21.0	144.52	-632.1	693.4	1,622.3	1,584.0	38.24	42.428	
5,921.9	5,786.8	5,876.0	5,785.8	25.6	21.0	144.62	-632.1	693.4	1,626.4	1,588.1	38.32	42.446	
6,000.0	5,863.0	5,952.2	5,862.0	25.9	21.1	145.12	-632.1	693.4	1,640.5	1,601.9	38.56	42.541	
6,100.0	5,961.2	6,050.4	5,960.2	26.2	21.2	145.67	-632.1	693.4	1,656.0	1,617.2	38.83	42.652	
6,200.0	6,060.0	6,149.3	6,059.0	26.5	21.3	146.11	-632.1	693.4	1,668.8	1,629.7	39.08	42.701	
6,300.0	6,159.3	6,248.5	6,158.3	26.7	21.5	146.45	-632.1	693.4	1,678.7	1,639.3	39.32	42.692	
6,400.0	6,259.0	6,348.2	6,258.0	26.9	21.6	146.68	-632.1	693.4	1,685.7	1,646.1	39.55	42.625	
6,500.0	6,358.8	6,448.1	6,357.8	27.1	21.8	146.82	-632.1	693.4	1,689.8	1,650.0	39.76	42.502	
6,591.0	6,449.8	6,539.0	6,448.8	27.2	21.9	179.37	-632.1	693.4	1,691.0	1,648.4	42.61	39.682	
6,600.0	6,458.8	6,548.0	6,457.8	27.2	21.9	179.37	-632.1	693.4	1,691.0	1,648.4	42.64	39.659	
6,621.0	6,479.8	6,569.5	6,479.2	27.2	21.9	179.37	-632.1	693.3	1,691.0	1,648.3	42.70	39.604	
6,650.0	6,508.8	6,599.2	6,509.0	27.3	22.0	-90.60	-632.1	692.0	1,691.0	1,650.9	40.09	42.185	
6,700.0	6,558.7	6,650.4	6,559.9	27.3	22.0	-90.56	-632.1	686.8	1,691.0	1,650.9	40.13	42.137	
6,750.0	6,608.1	6,701.5	6,610.3	27.3	22.0	-90.52	-632.1	678.1	1,691.0	1,650.9	40.11	42.155	
6,800.0	6,657.0	6,752.6	6,659.8	27.3	21.9	-90.47	-632.1	665.8	1,691.0	1,650.9	40.04	42.232	
6,850.0	6,704.9	6,803.5	6,708.2	27.2	21.9	-90.42	-632.1	650.1	1,691.0	1,651.0	39.92	42.361	
6,900.0	6,751.8	6,854.3	6,755.2	27.2	21.8	-90.37	-632.1	631.0	1,690.9	1,651.2	39.76	42.532	
6,950.0	6,797.4	6,905.0	6,800.7	27.1	21.7	-90.31	-632.1	608.7	1,690.9	1,651.4	39.57	42.736	
7,000.0	6,841.4	6,955.5	6,844.4	27.0	21.6	-90.26	-632.1	583.3	1,690.9	1,651.6	39.36	42.958	
7,050.0	6,883.6	7,006.0	6,886.2	26.9	21.5	-90.20	-632.1	554.9	1,690.9	1,651.8	39.16	43.181	
7,100.0	6,923.9	7,056.3	6,925.7	26.8	21.4	-90.15	-632.1	523.8	1,690.9	1,651.9	38.97	43.385	
7,150.0	6,962.0	7,106.5	6,962.8	26.7	21.3	-90.09	-632.1	490.0	1,690.9	1,652.1	38.83	43.548	
7,200.0	6,997.8	7,156.6	6,997.4	26.5	21.2	-90.03	-632.1	453.8	1,690.9	1,652.2	38.74	43.643	
7,225.2	7,014.8	7,181.8	7,013.9	26.5	21.1	-90.00	-632.1	434.7	1,690.9	1,652.2	38.74	43.649	
7,250.0	7,031.0	7,206.6	7,029.4	26.4	21.1	-89.97	-632.1	415.4	1,690.9	1,652.2	38.74	43.647	
7,300.0	7,061.6	7,256.4	7,058.5	26.3	21.0	-89.91	-632.1	374.9	1,690.9	1,652.1	38.84	43.535	
7,350.0	7,089.3	7,306.2	7,084.6	26.1	20.9	-89.86	-632.1	332.6	1,690.9	1,651.8	39.06	43.287	
7,400.0	7,114.0	7,355.8	7,107.7	26.0	20.9	-89.80	-632.1	288.7	1,690.9	1,651.5	39.42	42.892	
7,450.0	7,135.7	7,405.3	7,127.7	25.9	20.9	-89.74	-632.1	243.4	1,690.9	1,651.0	39.93	42.344	
7,500.0	7,154.2	7,454.7	7,144.5	25.7	21.0	-89.69	-632.1	197.0	1,690.9	1,650.3	40.60	41.649	
7,550.0	7,169.4	7,504.0	7,158.0	25.6	21.2	-89.64	-632.1	149.6	1,690.9	1,649.5	41.42	40.820	
7,600.0	7,181.2	7,553.2	7,168.2	25.5	21.5	-89.59	-632.1	101.5	1,691.0	1,648.6	42.40	39.881	
7,650.0	7,189.6	7,602.3	7,175.0	25.4	21.9	-89.54	-632.1	52.9	1,691.0	1,647.4	43.52	38.856	
7,700.0	7,194.5	7,651.3	7,178.5	25.3	22.5	-89.49	-632.1	4.0	1,691.0	1,646.2	44.76	37.775	
7,748.9	7,196.0	7,699.6	7,178.9	25.2	23.1	-89.46	-632.1	-44.3	1,691.0	1,644.9	46.10	36.681	
7,800.0	7,195.8	7,750.6	7,178.7	25.1	23.8	-89.46	-632.1	-95.4	1,691.0	1,643.3	47.65	35.491	
7,900.0	7,195.4	7,850.6	7,178.4	25.5	25.5	-89.46	-632.1	-195.4	1,691.0	1,640.0	50.94	33.194	
8,000.0	7,195.0	7,950.6	7,178.0	27.5	27.4	-89.46	-632.1	-295.4	1,691.0	1,636.4	54.61	30.963	
8,100.0	7,194.6	8,050.6	7,177.6	29.5	29.4	-89.46	-632.1	-395.4	1,691.0	1,632.4	58.59	28.859	
8,200.0	7,194.1	8,150.6	7,177.3	31.7	31.6	-89.46	-632.1	-495.4	1,691.0	1,628.2	62.82	26.916	
8,300.0	7,193.7	8,250.6	7,176.9	33.9	33.8	-89.46	-632.1	-595.4	1,691.0	1,623.7	67.26	25.141	
8,400.0	7,193.3	8,350.6	7,176.5	36.3	36.1	-89.47	-632.1	-695.4	1,691.0	1,619.1	71.86	23.532	
8,500.0	7,192.9	8,450.6	7,176.2	38.6	38.5	-89.47	-632.1	-795.4	1,691.0	1,614.4	76.60	22.077	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - WALTERS 21P-314 - ORIGINAL WELLBORE - PROPOSAL #1												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
8,600.0	7,192.5	8,550.6	7,175.8	41.1	41.0	-89.47	-632.1	-895.4	1,691.0	1,609.5	81.44	20.762	
8,700.0	7,192.1	8,650.6	7,175.4	43.5	43.5	-89.47	-632.1	-995.4	1,691.0	1,604.6	86.39	19.575	
8,800.0	7,191.7	8,750.6	7,175.1	46.0	46.0	-89.47	-632.1	-1,095.4	1,691.0	1,599.6	91.41	18.500	
8,900.0	7,191.3	8,850.6	7,174.7	48.6	48.6	-89.47	-632.1	-1,195.4	1,691.0	1,594.5	96.49	17.525	
9,000.0	7,190.9	8,950.6	7,174.4	51.1	51.1	-89.47	-632.1	-1,295.4	1,691.0	1,589.3	101.63	16.638	
9,100.0	7,190.4	9,050.6	7,174.0	53.7	53.7	-89.48	-632.1	-1,395.4	1,691.0	1,584.2	106.82	15.830	
9,200.0	7,190.0	9,150.6	7,173.6	56.3	56.4	-89.48	-632.1	-1,495.4	1,691.0	1,578.9	112.05	15.091	
9,300.0	7,189.6	9,250.6	7,173.3	58.9	59.0	-89.48	-632.1	-1,595.4	1,691.0	1,573.7	117.32	14.413	
9,400.0	7,189.2	9,350.6	7,172.9	61.6	61.7	-89.48	-632.1	-1,695.4	1,691.0	1,568.4	122.62	13.790	
9,500.0	7,188.8	9,450.6	7,172.5	64.2	64.3	-89.48	-632.1	-1,795.4	1,691.0	1,563.0	127.94	13.217	
9,600.0	7,188.4	9,550.6	7,172.2	66.9	67.0	-89.48	-632.1	-1,895.4	1,691.0	1,557.7	133.29	12.686	
9,700.0	7,188.0	9,650.6	7,171.8	69.6	69.7	-89.49	-632.1	-1,995.4	1,691.0	1,552.3	138.66	12.195	
9,800.0	7,187.6	9,750.7	7,171.4	72.3	72.4	-89.49	-632.1	-2,095.4	1,691.0	1,546.9	144.05	11.739	
9,900.0	7,187.1	9,850.7	7,171.1	74.9	75.1	-89.49	-632.1	-2,195.4	1,691.0	1,541.5	149.46	11.314	
10,000.0	7,186.7	9,950.7	7,170.7	77.6	77.8	-89.49	-632.1	-2,295.4	1,691.0	1,536.1	154.88	10.918	
10,100.0	7,186.3	10,050.7	7,170.3	80.4	80.5	-89.49	-632.1	-2,395.4	1,691.0	1,530.7	160.31	10.548	
10,200.0	7,185.9	10,150.7	7,170.0	83.1	83.2	-89.49	-632.1	-2,495.4	1,691.0	1,525.2	165.76	10.201	
10,300.0	7,185.5	10,250.7	7,169.6	85.8	86.0	-89.50	-632.1	-2,595.4	1,691.0	1,519.7	171.22	9.876	
10,400.0	7,185.1	10,350.7	7,169.3	88.5	88.7	-89.50	-632.1	-2,695.4	1,691.0	1,514.3	176.69	9.570	
10,500.0	7,184.7	10,450.7	7,168.9	91.2	91.4	-89.50	-632.1	-2,795.4	1,691.0	1,508.8	182.16	9.283	
10,600.0	7,184.3	10,550.7	7,168.5	94.0	94.2	-89.50	-632.1	-2,895.4	1,691.0	1,503.3	187.65	9.011	
10,700.0	7,183.9	10,650.7	7,168.2	96.7	96.9	-89.50	-632.1	-2,995.4	1,691.0	1,497.8	193.14	8.755	
10,800.0	7,183.4	10,750.7	7,167.8	99.4	99.7	-89.50	-632.1	-3,095.4	1,691.0	1,492.3	198.64	8.513	
10,900.0	7,183.0	10,850.7	7,167.4	102.2	102.4	-89.51	-632.1	-3,195.4	1,691.0	1,486.8	204.15	8.283	
11,000.0	7,182.6	10,950.7	7,167.1	104.9	105.2	-89.51	-632.1	-3,295.4	1,691.0	1,481.3	209.66	8.065	
11,100.0	7,182.2	11,050.7	7,166.7	107.7	108.0	-89.51	-632.1	-3,395.4	1,691.0	1,475.8	215.17	7.859	
11,200.0	7,181.8	11,150.7	7,166.4	110.4	110.7	-89.51	-632.1	-3,495.4	1,691.0	1,470.3	220.70	7.662	
11,300.0	7,181.4	11,250.7	7,166.0	113.2	113.5	-89.51	-632.1	-3,595.4	1,691.0	1,464.7	226.22	7.475	
11,400.0	7,181.0	11,350.7	7,165.6	116.0	116.2	-89.51	-632.1	-3,695.4	1,691.0	1,459.2	231.76	7.296	
11,500.0	7,180.6	11,450.7	7,165.3	118.7	119.0	-89.52	-632.1	-3,795.4	1,691.0	1,453.7	237.29	7.126	
11,600.0	7,180.1	11,550.7	7,164.9	121.5	121.8	-89.52	-632.1	-3,895.4	1,691.0	1,448.1	242.83	6.964	
11,700.0	7,179.7	11,650.7	7,164.5	124.3	124.6	-89.52	-632.1	-3,995.4	1,690.9	1,442.6	248.37	6.808	
11,800.0	7,179.3	11,750.7	7,164.2	127.0	127.3	-89.52	-632.1	-4,095.4	1,690.9	1,437.0	253.92	6.659	
11,840.4	7,179.1	11,791.1	7,164.0	128.1	128.4	-89.52	-632.1	-4,135.7	1,690.9	1,434.8	256.16	6.601	
11,900.0	7,178.9	11,802.2	7,164.0	129.8	128.8	-89.52	-632.1	-4,146.9	1,691.6	1,433.5	258.12	6.554	
12,000.0	7,178.5	11,802.2	7,164.0	132.6	128.8	-89.52	-632.1	-4,146.9	1,697.5	1,436.6	260.90	6.506	
12,100.0	7,178.1	11,802.2	7,164.0	135.3	128.8	-89.52	-632.1	-4,146.9	1,709.1	1,445.4	263.67	6.482	
12,200.0	7,177.7	11,802.2	7,164.0	138.1	128.8	-89.52	-632.1	-4,146.9	1,726.5	1,460.0	266.45	6.480 SF	
12,300.0	7,177.2	11,802.2	7,164.0	140.9	128.8	-89.52	-632.1	-4,146.9	1,749.4	1,480.2	269.23	6.498	
12,400.0	7,176.8	11,802.2	7,164.0	143.7	128.8	-89.52	-632.1	-4,146.9	1,777.7	1,505.7	272.01	6.535	
12,500.0	7,176.4	11,802.2	7,164.0	146.4	128.8	-89.52	-632.1	-4,146.9	1,811.0	1,536.2	274.79	6.591	
12,600.0	7,176.0	11,802.2	7,164.0	149.2	128.8	-89.52	-632.1	-4,146.9	1,849.2	1,571.6	277.57	6.662	
12,700.0	7,175.6	11,802.2	7,164.0	152.0	128.8	-89.52	-632.1	-4,146.9	1,891.9	1,611.5	280.36	6.748	
12,800.0	7,175.2	11,802.2	7,164.0	154.8	128.8	-89.52	-632.1	-4,146.9	1,938.8	1,655.6	283.14	6.847	
12,900.0	7,174.8	11,802.2	7,164.0	157.5	128.8	-89.52	-632.1	-4,146.9	1,989.6	1,703.7	285.92	6.959	
13,000.0	7,174.4	11,802.2	7,164.0	160.3	128.8	-89.52	-632.1	-4,146.9	2,044.1	1,755.4	288.71	7.080	
13,100.0	7,173.9	11,802.2	7,164.0	163.1	128.8	-89.52	-632.1	-4,146.9	2,101.9	1,810.4	291.50	7.211	
13,200.0	7,173.5	11,802.2	7,164.0	165.9	128.8	-89.52	-632.1	-4,146.9	2,162.8	1,868.5	294.28	7.349	
13,300.0	7,173.1	11,802.2	7,164.0	168.7	128.8	-89.52	-632.1	-4,146.9	2,226.5	1,929.4	297.07	7.495	
13,400.0	7,172.7	11,802.2	7,164.0	171.5	128.8	-89.52	-632.1	-4,146.9	2,292.8	1,993.0	299.86	7.646	
13,500.0	7,172.3	11,802.2	7,164.0	174.3	128.8	-89.52	-632.1	-4,146.9	2,361.5	2,058.9	302.65	7.803	
13,600.0	7,171.9	11,802.2	7,164.0	177.0	128.8	-89.52	-632.1	-4,146.9	2,432.4	2,126.9	305.44	7.964	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - WALTERS 21P-314 - ORIGINAL WELLBORE - PROPOSAL #1												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	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
13,700.0	7,171.5	11,802.2	7,164.0	179.8	128.8	-89.52	-632.1	-4,146.9	2,505.2	2,197.0	308.23	8.128	
13,800.0	7,171.0	11,802.2	7,164.0	182.6	128.8	-89.52	-632.1	-4,146.9	2,579.9	2,268.9	311.02	8.295	
13,900.0	7,170.6	11,802.2	7,164.0	185.4	128.8	-89.52	-632.1	-4,146.9	2,656.2	2,342.4	313.81	8.464	
14,000.0	7,170.2	11,802.2	7,164.0	188.2	128.8	-89.52	-632.1	-4,146.9	2,734.1	2,417.5	316.60	8.636	
14,100.0	7,169.8	11,802.2	7,164.0	191.0	128.8	-89.52	-632.1	-4,146.9	2,813.3	2,493.9	319.40	8.808	
14,200.0	7,169.4	11,802.2	7,164.0	193.8	128.8	-89.52	-632.1	-4,146.9	2,893.9	2,571.7	322.19	8.982	
14,295.0	7,169.0	11,802.2	7,164.0	196.4	128.8	-89.52	-632.1	-4,146.9	2,971.5	2,646.6	324.84	9.147	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 210-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 210-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

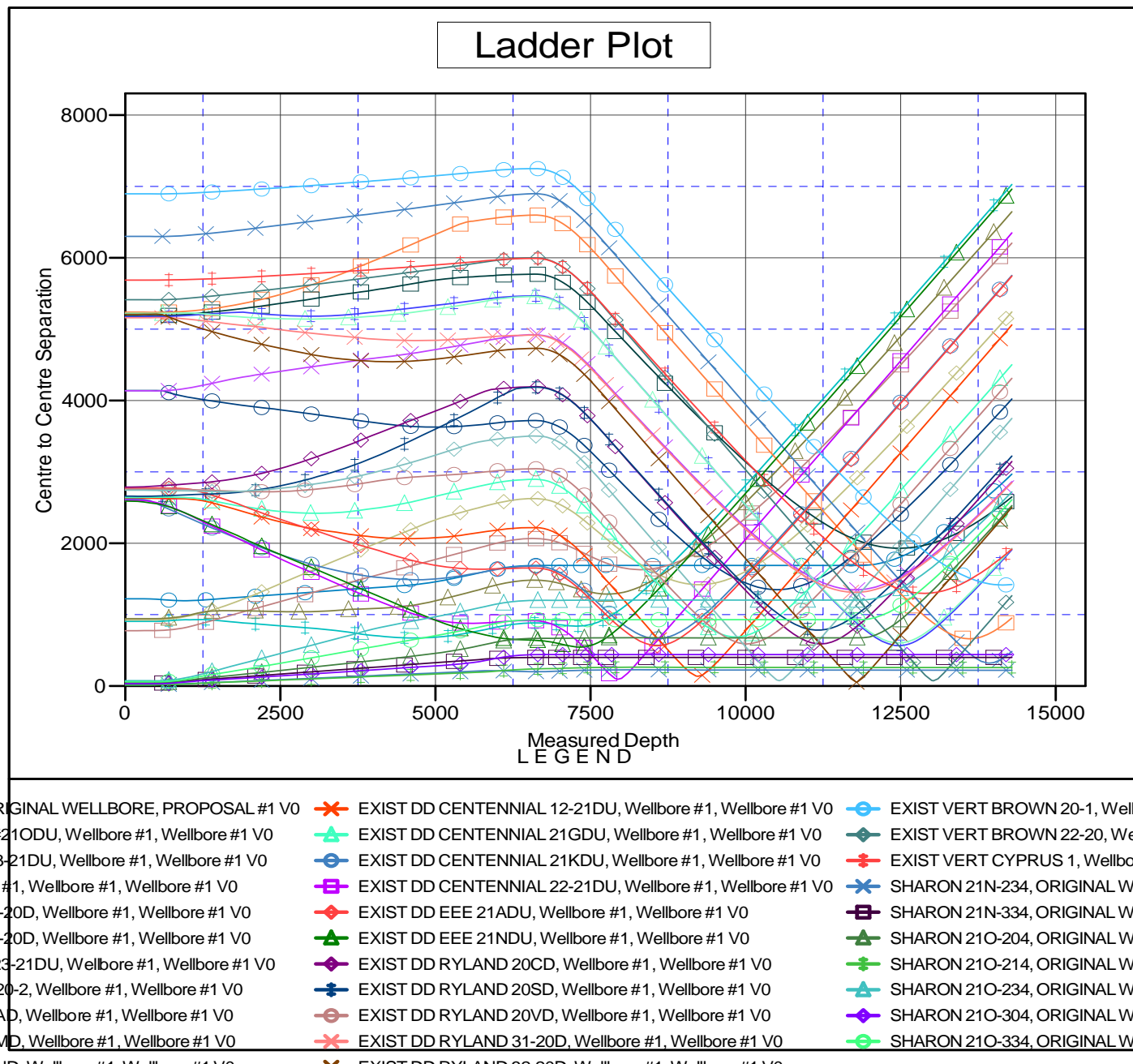
Reference Depths are relative to KB-EST @ 4951.5usft (Original Well ECoordinates are relative to: SHARON 210-314

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: 0.39°



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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SHARON 21O-314
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 21 T4N R67W 6th P.M.	MD Reference:	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SHARON 21O-314	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are 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 @ 4951.5usft (Original Well ECoordinates are relative to: SHARON 21O-314

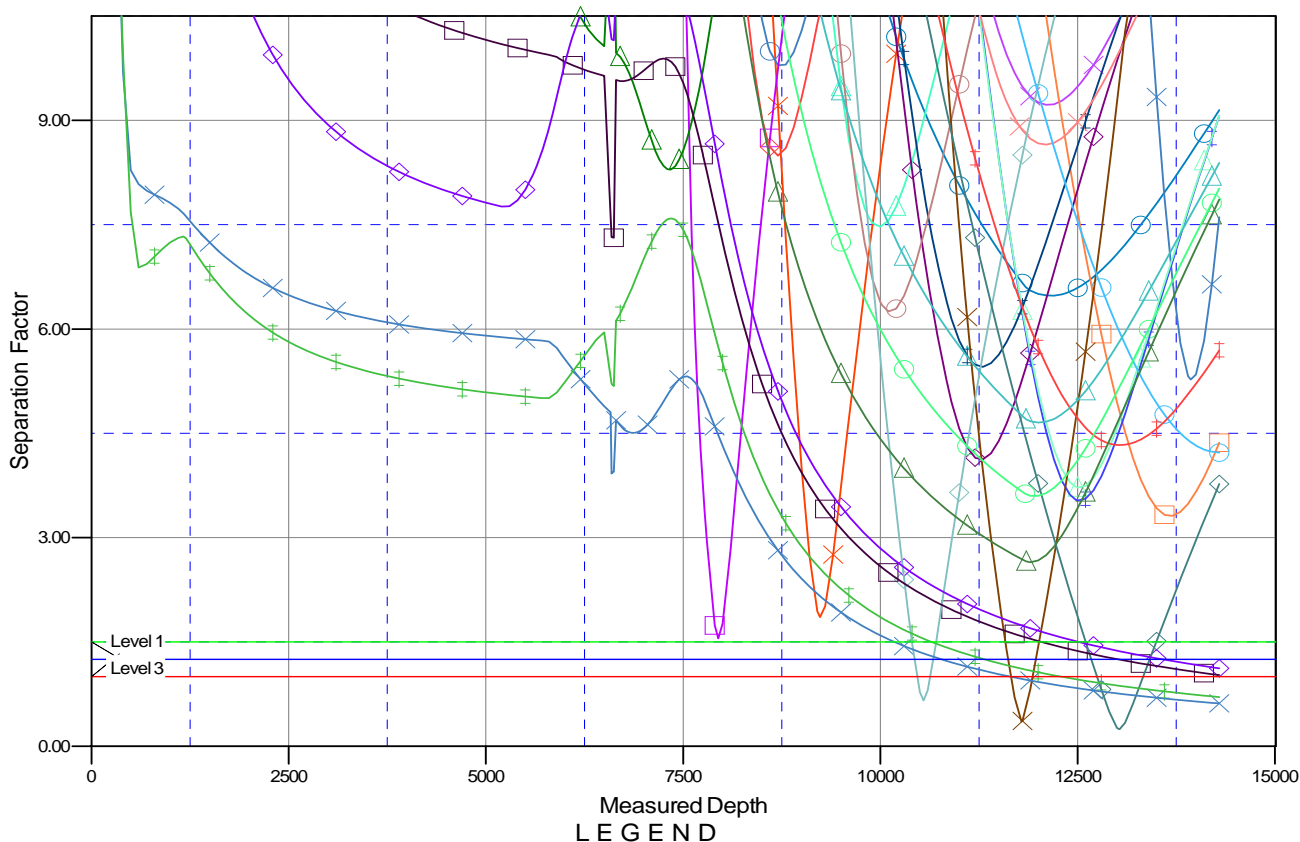
Offset Depths are relative to Offset Datum

Coordinate System is US State Plane 1983, Colorado Northern Zone

Central Meridian is -105.500000

Grid Convergence at Surface is: 0.39°

Separation Factor Plot



ORIGINAL WELLBORE, PROPOSAL #1 V0	EXIST DD CENTENNIAL 12-21DU, Wellbore #1, Wellbore #1 V0	EXIST VERT BROWN 20-1, Wellbore #1, Wellbore #1 V0
#21ODU, Wellbore #1, Wellbore #1 V0	EXIST DD CENTENNIAL 21GDU, Wellbore #1, Wellbore #1 V0	EXIST VERT BROWN 22-20, Wellbore #1, Wellbore #1 V0
3-21DU, Wellbore #1, Wellbore #1 V0	EXIST DD CENTENNIAL 21KDU, Wellbore #1, Wellbore #1 V0	EXIST VERT CYPRUS 1, Wellbore #1, Wellbore #1 V0
4-21DU, Wellbore #1, Wellbore #1 V0	EXIST DD CENTENNIAL 22-21DU, Wellbore #1, Wellbore #1 V0	SHARON 21N-234, ORIGINAL WELLBORE
3-20D, Wellbore #1, Wellbore #1 V0	EXIST DD EEE 21ADU, Wellbore #1, Wellbore #1 V0	SHARON 21N-334, ORIGINAL WELLBORE
3-20D, Wellbore #1, Wellbore #1 V0	EXIST DD EEE 21NDU, Wellbore #1, Wellbore #1 V0	SHARON 21O-204, ORIGINAL WELLBORE
23-21DU, Wellbore #1, Wellbore #1 V0	EXIST DD RYLAND 20CD, Wellbore #1, Wellbore #1 V0	SHARON 21O-214, ORIGINAL WELLBORE
20-2, Wellbore #1, Wellbore #1 V0	EXIST DD RYLAND 20SD, Wellbore #1, Wellbore #1 V0	SHARON 21O-234, ORIGINAL WELLBORE
1AD, Wellbore #1, Wellbore #1 V0	EXIST DD RYLAND 20VD, Wellbore #1, Wellbore #1 V0	SHARON 21O-304, ORIGINAL WELLBORE
1MD, Wellbore #1, Wellbore #1 V0	EXIST DD RYLAND 31-20D, Wellbore #1, Wellbore #1 V0	SHARON 21O-334, ORIGINAL WELLBORE