

PDC ENERGY

**WELD COUNTY, COLORADO
NE SW SEC. 7 T4N R64W 6th P.M.
HONEBEIN 7K-223**

**ORIGINAL WELLBORE
PROPOSAL #2**

Anticollision Report

09 July, 2015



Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Reference	PROPOSAL #2		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD + Stations Interval 98.4usft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 10,000.0 us	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date 09/07/2015			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	14,079.0	PROPOSAL #2 (ORIGINAL WELLBORE)	MWD	MWD - Standard

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
NE SW SEC. 7 T4N R64W 6th P.M.						
ABDN VERT FARR #1 - Wellbore #1 - Wellbore #1	13,950.5	6,939.5	881.0	739.8	6.239	CC
ABDN VERT FARR #1 - Wellbore #1 - Wellbore #1	13,976.3	6,938.4	881.4	739.7	6.219	ES
ABDN VERT FARR #1 - Wellbore #1 - Wellbore #1	14,074.8	6,934.2	889.7	746.1	6.195	SF
EXIST DD NEI C18-20D - Wellbore #1 - Wellbore #1	12,062.2	7,001.2	229.2	112.0	1.955	CC, ES, SF
EXIST DD NEI C18-32D - Wellbore #1 - Wellbore #1	12,063.9	7,330.0	1,638.8	1,516.9	13.448	CC
EXIST DD NEI C18-32D - Wellbore #1 - Wellbore #1	12,100.0	7,329.1	1,639.2	1,516.6	13.373	ES
EXIST DD NEI C18-32D - Wellbore #1 - Wellbore #1	12,500.0	7,319.0	1,695.8	1,565.3	12.999	SF
EXIST DD NEI C18-33D - Wellbore #1 - Wellbore #1	13,118.5	7,484.0	1,628.7	1,477.7	10.788	CC, ES
EXIST DD NEI C18-33D - Wellbore #1 - Wellbore #1	13,484.2	7,484.0	1,669.2	1,511.0	10.551	SF
EXIST VERT FARR #18-12 - Wellbore #1 - Design #1	12,639.6	6,883.7	931.1	679.5	3.701	CC, ES
EXIST VERT FARR #18-12 - Wellbore #1 - Design #1	12,700.0	6,883.1	933.1	680.3	3.691	SF
EXIST VERT FARR #18-14 - Wellbore #1 - Design #1	14,079.0	6,895.5	334.9	54.9	1.196	Level 2, CC, ES, SF
EXIST VERT FARR #2 - Wellbore #1 - Design #1	12,547.7	6,899.5	292.9	42.9	1.172	Level 2, CC, ES, SF
EXIST VERT FARR C #18-25 - Wellbore #1 - Design #1	13,260.0	6,890.0	223.3	-40.6	0.846	Level 1, CC, ES, SF
FRY 18-1 - Wellbore #1 - Wellbore #1	11,203.7	5,400.0	1,777.6	1,718.9	30.305	CC
FRY 18-1 - Wellbore #1 - Wellbore #1	11,220.4	5,400.0	1,777.6	1,718.8	30.199	ES
FRY 18-1 - Wellbore #1 - Wellbore #1	11,900.0	5,400.0	1,909.1	1,841.8	28.371	SF
FRY 21-18 - Wellbore #1 - Wellbore #1	9,896.8	6,928.2	272.8	211.3	4.441	CC
FRY 21-18 - Wellbore #1 - Wellbore #1	9,900.0	6,928.3	272.8	211.3	4.437	ES, SF
FRY 21-6I - Wellbore #1 - Wellbore #1	10,648.8	7,027.0	844.5	750.1	8.944	CC, ES
FRY 21-6I - Wellbore #1 - Wellbore #1	10,800.0	7,028.7	857.9	760.6	8.811	SF
FRY 22-18 - Wellbore #1 - Wellbore #1	11,195.3	6,913.7	223.6	136.8	2.577	CC
FRY 22-18 - Wellbore #1 - Wellbore #1	11,200.0	6,913.6	223.6	136.8	2.575	ES, SF
FRY 5 - Wellbore #1 - Wellbore #1	10,557.1	6,911.5	348.0	273.5	4.674	CC, ES
FRY 5 - Wellbore #1 - Wellbore #1	10,600.0	6,908.9	350.6	275.3	4.657	SF
FRY PM C 18-4 - Wellbore #1 - Wellbore #1	9,892.3	6,983.0	795.3	733.6	12.902	CC
FRY PM C 18-4 - Wellbore #1 - Wellbore #1	9,900.0	6,983.2	795.3	733.5	12.872	ES
FRY PM C 18-4 - Wellbore #1 - Wellbore #1	10,100.0	6,986.3	821.9	756.3	12.525	SF
HONEBEIN 13-7U - Wellbore #1 - Wellbore #1	98.4	74.6	904.7	904.6	5,206.709	CC
HONEBEIN 13-7U - Wellbore #1 - Wellbore #1	689.0	660.5	905.7	903.6	415.017	ES
HONEBEIN 13-7U - Wellbore #1 - Wellbore #1	7,677.1	6,978.1	1,201.9	1,167.2	34.631	SF
HONEBEIN 7G-203 - ORIGINAL WELLBORE - PROPOSAL	1,000.0	996.0	119.9	115.7	28.336	CC, ES
HONEBEIN 7G-203 - ORIGINAL WELLBORE - PROPOSAL	14,079.0	14,170.4	1,478.9	1,195.6	5.219	SF
HONEBEIN 7G-323 - ORIGINAL WELLBORE - PROPOSAL	1,100.0	1,097.0	89.2	84.5	19.053	CC, ES
HONEBEIN 7G-323 - ORIGINAL WELLBORE - PROPOSAL	14,079.0	14,210.5	1,227.4	948.9	4.408	SF
HONEBEIN 7K-243 - ORIGINAL WELLBORE - PROPOSAL	1,200.0	1,198.0	61.3	56.2	11.946	CC, ES
HONEBEIN 7K-243 - ORIGINAL WELLBORE - PROPOSAL	14,079.0	14,075.1	642.3	362.7	2.297	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 HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Summary

Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
NE SW SEC. 7 T4N R64W 6th P.M.						
HONEBEIN 7K-323 - ORIGINAL WELLBORE - PROPOS	1,093.9	1,094.9	30.7	26.0	6.575	CC
HONEBEIN 7K-323 - ORIGINAL WELLBORE - PROPOS	1,100.0	1,101.0	30.7	26.0	6.537	ES
HONEBEIN 7K-323 - ORIGINAL WELLBORE - PROPOS	14,079.0	14,160.0	382.6	105.3	1.380	Level 3, SF
HONEBEIN 7K-403 - ORIGINAL WELLBORE - PROPOS	1,200.0	1,199.0	30.7	25.5	5.971	CC, ES
HONEBEIN 7K-403 - ORIGINAL WELLBORE - PROPOS	14,079.0	14,219.1	326.6	96.5	1.420	Level 3, SF
HONEBEIN 7O-243 - ORIGINAL WELLBORE - PROPOS	989.0	991.0	58.6	54.4	13.957	CC
HONEBEIN 7O-243 - ORIGINAL WELLBORE - PROPOS	1,000.0	1,002.0	58.6	54.3	13.795	ES
HONEBEIN 7O-243 - ORIGINAL WELLBORE - PROPOS	14,079.0	14,139.9	638.7	357.3	2.269	SF
HOW SAD C 18-31 - Wellbore #1 - Design #1	10,493.1	6,883.3	1,769.8	1,560.2	8.442	CC
HOW SAD C 18-31 - Wellbore #1 - Design #1	10,531.5	6,883.0	1,770.3	1,559.9	8.414	ES
HOW SAD C 18-31 - Wellbore #1 - Design #1	10,800.0	6,880.5	1,796.2	1,580.7	8.332	SF
LATHAM 7-1 - Wellbore #1 - Wellbore #1	7,636.7	6,940.4	444.5	422.7	20.337	CC, ES
LATHAM 7-1 - Wellbore #1 - Wellbore #1	7,775.6	6,940.0	465.7	442.0	19.634	SF
LATHAM 7-2 - Wellbore #1 - Wellbore #1	7,519.8	6,962.1	291.2	270.5	14.042	CC, ES
LATHAM 7-2 - Wellbore #1 - Wellbore #1	7,578.7	6,962.1	297.1	275.7	13.864	SF
LATHAM 7-3 - Wellbore #1 - Wellbore #1	8,567.2	6,943.7	867.7	830.9	23.572	CC, ES
LATHAM 7-3 - Wellbore #1 - Wellbore #1	8,956.7	6,943.7	951.1	907.2	21.662	SF
LATHAM 7-4 - Wellbore #1 - Wellbore #1	8,640.4	6,952.5	168.2	130.1	4.411	CC, ES
LATHAM 7-4 - Wellbore #1 - Wellbore #1	8,661.4	6,952.5	169.5	131.0	4.402	SF
SE SE SEC. 18 T4N R64W 6th P.M.						
COLLINS 18Q-301 - ORIGINAL WELLBORE - PROPOS	9,805.1	11,613.7	1,027.7	880.5	6.980	CC, ES
COLLINS 18Q-301 - ORIGINAL WELLBORE - PROPOS	14,079.0	7,322.6	1,044.5	884.0	6.508	SF
NEI C17-33D - Wellbore #1 - Wellbore #1	13,088.8	6,154.3	3,048.2	2,908.9	21.879	CC
NEI C17-33D - Wellbore #1 - Wellbore #1	13,188.9	6,162.7	3,049.8	2,908.5	21.583	ES
NEI C17-33D - Wellbore #1 - Wellbore #1	14,079.0	6,238.8	3,203.7	3,044.6	20.143	SF
NEI C18-21D - Wellbore #1 - Wellbore #1	11,801.8	6,978.9	1,141.5	1,028.8	10.131	CC
NEI C18-21D - Wellbore #1 - Wellbore #1	11,811.0	6,978.8	1,141.5	1,028.7	10.116	ES
NEI C18-21D - Wellbore #1 - Wellbore #1	12,007.8	6,978.0	1,159.9	1,043.2	9.938	SF
NEI C18-22D - Wellbore #1 - Wellbore #1	11,836.2	7,164.9	2,229.4	2,113.3	19.196	CC
NEI C18-22D - Wellbore #1 - Wellbore #1	11,900.0	7,164.0	2,230.3	2,112.9	18.999	ES
NEI C18-22D - Wellbore #1 - Wellbore #1	12,696.8	7,153.6	2,389.7	2,256.6	17.955	SF
NEI C18-23D - Wellbore #1 - Wellbore #1	13,318.0	7,354.3	2,279.8	2,122.8	14.523	CC
NEI C18-23D - Wellbore #1 - Wellbore #1	13,385.8	7,351.6	2,280.8	2,122.5	14.406	ES
NEI C18-23D - Wellbore #1 - Wellbore #1	13,976.3	7,330.2	2,372.8	2,202.8	13.956	SF
NEI C18-24D - Wellbore #1 - Wellbore #1	13,133.6	7,052.2	1,136.6	989.6	7.731	CC, ES
NEI C18-24D - Wellbore #1 - Wellbore #1	13,300.0	7,051.9	1,148.7	998.4	7.643	SF
OSTER C19-27D - Wellbore #1 - Wellbore #1	14,079.0	7,132.0	2,255.5	2,069.2	12.103	CC, ES, SF

Offset Design										NE SW SEC. 7 T4N R64W 6th P.M. - ABDN VERT FARR #1 - Wellbore #1 - Wellbore #1			Offset Site Error:		0.0 usft
Survey Program:										100-GYD_CT			Offset Well Error:		0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor			
0.0	0.0	0.0	0.0	0.0	0.0	-174.17	-6,940.0	-708.4	6,976.1						
98.4	98.4	104.6	104.6	0.1	0.1	-174.17	-6,939.9	-708.2	6,976.0	6,975.8	0.15	N/A			
100.0	100.0	106.2	106.2	0.1	0.1	-174.17	-6,939.9	-708.2	6,976.0	6,975.8	0.16	N/A			
196.8	196.8	206.2	206.2	0.3	0.2	-174.18	-6,939.7	-707.9	6,975.7	6,975.2	0.53	N/A			
200.0	200.0	209.1	209.1	0.3	0.2	-174.18	-6,939.7	-707.9	6,975.7	6,975.2	0.54	N/A			
295.3	295.3	300.0	300.0	0.5	0.3	-174.18	-6,939.5	-707.8	6,975.5	6,974.7	0.83	8,387.335			

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

Anticollision Report



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Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - ABDN VERT FARR #1 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
300.0	300.0	300.0	300.0	0.5	0.3	-174.18	-6,939.5	-707.8	6,975.5	6,974.6	0.84	8,281.571	
393.7	393.7	388.0	388.0	0.8	0.3	-174.18	-6,939.4	-707.6	6,975.4	6,974.3	1.09	6,380.100	
400.0	400.0	393.9	393.9	0.8	0.4	-174.18	-6,939.4	-707.6	6,975.4	6,974.3	1.11	6,283.192	
429.4	429.4	418.9	418.9	0.8	0.4	-174.18	-6,939.4	-707.5	6,975.4	6,974.2	1.19	5,865.208	
492.1	492.1	470.7	470.7	1.0	0.4	-174.18	-6,939.5	-707.3	6,975.4	6,974.1	1.36	5,135.867	
500.0	500.0	477.2	477.2	1.0	0.4	-174.18	-6,939.5	-707.2	6,975.4	6,974.0	1.38	5,056.903	
590.5	590.5	558.4	558.4	1.2	0.4	-174.18	-6,939.7	-706.8	6,975.7	6,974.0	1.63	4,289.808	
600.0	600.0	567.2	567.2	1.2	0.4	-174.18	-6,939.8	-706.8	6,975.7	6,974.0	1.65	4,222.661	
689.0	689.0	647.8	647.8	1.4	0.5	-174.19	-6,940.1	-706.4	6,976.0	6,974.1	1.89	3,688.062	
700.0	700.0	657.7	657.6	1.4	0.5	-174.19	-6,940.1	-706.4	6,976.1	6,974.2	1.92	3,631.801	
787.4	787.4	736.4	736.4	1.6	0.5	-174.19	-6,940.6	-706.2	6,976.5	6,974.4	2.15	3,238.316	
800.0	800.0	747.9	747.9	1.7	0.5	-174.19	-6,940.6	-706.1	6,976.6	6,974.4	2.19	3,188.818	
885.8	885.8	827.7	827.7	1.9	0.6	-174.19	-6,941.2	-705.9	6,977.2	6,974.7	2.42	2,886.621	
900.0	900.0	841.4	841.4	1.9	0.6	-174.19	-6,941.3	-705.9	6,977.3	6,974.8	2.45	2,842.123	
984.2	984.2	921.0	921.0	2.1	0.6	-174.20	-6,941.9	-705.7	6,977.9	6,975.2	2.68	2,604.075	
1,000.0	1,000.0	935.2	935.2	2.1	0.6	-174.20	-6,942.0	-705.7	6,978.0	6,975.3	2.72	2,564.398	
1,082.7	1,082.7	1,009.3	1,009.2	2.3	0.6	-174.20	-6,942.6	-705.6	6,978.7	6,975.7	2.94	2,374.557	
1,100.0	1,100.0	1,024.5	1,024.5	2.3	0.6	-174.20	-6,942.8	-705.6	6,978.8	6,975.8	2.98	2,338.566	
1,181.1	1,181.1	1,100.0	1,100.0	2.5	0.7	-174.20	-6,943.5	-705.4	6,979.6	6,976.4	3.20	2,182.419	
1,200.0	1,200.0	1,115.3	1,115.3	2.6	0.7	-174.20	-6,943.7	-705.4	6,979.8	6,976.6	3.25	2,149.856	
1,279.5	1,279.5	1,200.9	1,200.8	2.7	0.7	149.28	-6,944.6	-705.5	6,981.6	6,978.2	3.44	2,029.968	
1,300.0	1,300.0	1,222.5	1,222.5	2.8	0.7	149.28	-6,944.8	-705.5	6,982.4	6,978.9	3.49	1,998.356	
1,377.9	1,377.8	1,305.0	1,304.9	3.0	0.8	149.25	-6,945.5	-705.6	6,986.3	6,982.6	3.70	1,886.321	
1,400.0	1,399.8	1,328.3	1,328.3	3.0	0.8	149.25	-6,945.7	-705.7	6,987.8	6,984.0	3.76	1,857.084	
1,476.4	1,475.9	1,411.1	1,411.0	3.2	0.8	149.21	-6,946.4	-706.0	6,993.9	6,989.9	3.97	1,760.816	
1,500.0	1,499.5	1,441.9	1,441.8	3.2	0.8	149.21	-6,946.6	-706.1	6,996.1	6,992.0	4.04	1,732.907	
1,574.8	1,573.7	1,539.6	1,539.5	3.4	0.8	149.18	-6,947.1	-706.7	7,004.0	6,999.8	4.25	1,648.865	
1,600.0	1,598.7	1,572.6	1,572.5	3.5	0.8	149.17	-6,947.1	-706.9	7,007.0	7,002.7	4.32	1,622.865	
1,673.2	1,671.1	1,668.4	1,668.4	3.7	0.8	149.13	-6,947.2	-707.2	7,016.6	7,012.1	4.51	1,555.087	
1,700.0	1,697.5	1,702.8	1,702.8	3.7	0.8	149.12	-6,947.1	-707.2	7,020.5	7,015.9	4.58	1,532.474	
1,771.6	1,767.9	1,781.2	1,781.1	4.0	0.9	149.06	-6,946.9	-707.1	7,031.8	7,027.0	4.79	1,469.318	
1,800.1	1,795.7	1,813.5	1,813.4	4.0	0.9	149.04	-6,946.8	-707.0	7,036.6	7,031.8	4.87	1,445.813	
1,870.1	1,864.2	1,897.7	1,897.7	4.3	0.9	149.11	-6,946.4	-706.8	7,048.8	7,043.8	5.07	1,390.962	
1,900.0	1,893.4	1,926.9	1,926.9	4.4	0.9	149.13	-6,946.2	-706.7	7,054.0	7,048.9	5.15	1,369.174	
1,968.5	1,960.4	1,992.6	1,992.5	4.6	0.9	149.19	-6,945.8	-706.5	7,065.9	7,060.6	5.35	1,319.967	
2,000.0	1,991.3	2,020.7	2,020.6	4.7	0.9	149.21	-6,945.7	-706.4	7,071.4	7,065.9	5.44	1,299.085	
2,066.9	2,056.7	2,078.9	2,078.8	5.0	0.9	149.26	-6,945.4	-706.2	7,083.1	7,077.4	5.64	1,255.821	
2,100.0	2,089.1	2,108.1	2,108.1	5.1	0.9	149.29	-6,945.3	-706.0	7,088.9	7,083.1	5.74	1,234.719	
2,165.3	2,153.0	2,168.4	2,168.4	5.3	0.9	149.34	-6,945.1	-705.6	7,100.4	7,094.4	5.94	1,194.983	
2,200.0	2,186.9	2,200.4	2,200.4	5.5	1.0	149.36	-6,945.0	-705.4	7,106.5	7,100.4	6.05	1,174.943	
2,263.8	2,249.3	2,263.9	2,263.8	5.7	1.0	149.42	-6,944.8	-705.0	7,117.8	7,111.5	6.25	1,139.277	
2,300.0	2,284.7	2,299.9	2,299.9	5.8	1.0	149.44	-6,944.7	-704.8	7,124.1	7,117.8	6.36	1,120.006	
2,362.2	2,345.5	2,349.0	2,348.9	6.1	1.0	149.48	-6,944.6	-704.5	7,135.2	7,128.6	6.55	1,088.529	
2,400.0	2,382.5	2,378.7	2,378.7	6.2	1.0	149.51	-6,944.6	-704.3	7,141.9	7,135.3	6.67	1,070.318	
2,460.6	2,441.8	2,427.6	2,427.6	6.5	1.0	149.55	-6,944.6	-704.1	7,152.9	7,146.0	6.86	1,042.047	
2,500.0	2,480.3	2,460.0	2,459.9	6.6	1.0	149.58	-6,944.6	-703.9	7,160.0	7,153.0	6.99	1,024.590	
2,559.0	2,538.1	2,510.0	2,509.9	6.9	1.0	149.62	-6,944.8	-703.8	7,170.8	7,163.6	7.18	999.090	
2,600.0	2,578.1	2,549.5	2,549.5	7.0	1.0	149.65	-6,944.9	-703.7	7,178.2	7,170.9	7.31	982.004	
2,657.5	2,634.4	2,604.7	2,604.7	7.3	1.1	149.70	-6,945.0	-703.5	7,188.8	7,181.3	7.50	958.884	
2,700.0	2,675.9	2,643.1	2,643.0	7.5	1.1	149.73	-6,945.2	-703.4	7,196.6	7,188.9	7.63	942.678	
2,755.9	2,730.6	2,693.5	2,693.4	7.7	1.1	149.77	-6,945.4	-703.3	7,206.9	7,199.0	7.82	922.112	
2,800.0	2,773.8	2,732.6	2,732.5	7.9	1.1	149.80	-6,945.5	-703.2	7,215.0	7,207.0	7.96	906.455	

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 HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - ABDN VERT FARR #1 - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
2,854.3	2,826.9	2,780.5	2,780.4	8.1	1.1	149.84	-6,945.7	-703.2	7,225.1	7,216.9	8.14	887.829		
2,857.4	2,829.9	2,783.2	2,783.1	8.1	1.1	149.84	-6,945.8	-703.2	7,225.6	7,217.5	8.15	886.814		
2,900.0	2,871.6	2,821.0	2,821.0	8.3	1.1	149.95	-6,946.0	-703.2	7,233.3	7,225.0	8.26	875.479		
2,952.7	2,923.5	2,868.2	2,868.1	8.4	1.1	150.08	-6,946.2	-703.2	7,242.1	7,233.7	8.38	864.071		
3,000.0	2,970.1	2,910.4	2,910.3	8.6	1.1	150.18	-6,946.5	-703.2	7,249.2	7,240.7	8.49	854.076		
3,051.2	3,020.7	2,955.8	2,955.7	8.7	1.2	150.27	-6,946.8	-703.3	7,256.3	7,247.7	8.60	843.958		
3,100.0	3,069.1	3,000.0	2,999.9	8.9	1.2	150.36	-6,947.2	-703.3	7,262.3	7,253.6	8.70	834.468		
3,149.6	3,118.3	3,046.0	3,045.9	9.0	1.2	150.43	-6,947.6	-703.3	7,267.7	7,258.9	8.80	825.494		
3,200.0	3,168.5	3,093.6	3,093.6	9.1	1.2	150.50	-6,948.0	-703.4	7,272.5	7,263.6	8.91	816.488		
3,248.0	3,216.3	3,144.0	3,143.9	9.2	1.2	150.55	-6,948.4	-703.5	7,276.3	7,267.3	9.00	808.465		
3,300.0	3,268.2	3,199.4	3,199.3	9.3	1.2	150.60	-6,948.8	-703.6	7,279.6	7,270.5	9.10	799.848		
3,346.4	3,314.6	3,241.3	3,241.3	9.4	1.2	150.63	-6,949.2	-703.8	7,281.9	7,272.7	9.18	792.886		
3,400.0	3,368.1	3,289.6	3,289.6	9.5	1.2	150.65	-6,949.6	-704.0	7,283.8	7,274.5	9.28	784.912		
3,444.9	3,413.0	3,334.5	3,334.5	9.6	1.2	150.67	-6,950.0	-704.3	7,284.7	7,275.3	9.36	778.576		
3,457.5	3,425.6	3,347.6	3,347.5	9.6	1.2	-172.83	-6,950.1	-704.4	7,284.8	7,275.4	9.38	776.221		
3,500.0	3,468.1	3,391.5	3,391.5	9.7	1.3	-172.82	-6,950.5	-704.7	7,285.2	7,275.7	9.47	769.078		
3,543.3	3,511.4	3,429.4	3,429.3	9.7	1.3	-172.82	-6,950.8	-704.9	7,285.6	7,276.1	9.57	761.453		
3,600.0	3,568.1	3,476.7	3,476.7	9.8	1.3	-172.82	-6,951.2	-705.3	7,286.2	7,276.5	9.69	751.751		
3,641.7	3,609.9	3,514.9	3,514.8	9.9	1.3	-172.82	-6,951.6	-705.6	7,286.7	7,276.9	9.79	744.677		
3,700.0	3,668.1	3,577.3	3,577.2	10.0	1.3	-172.81	-6,952.3	-706.3	7,287.4	7,277.4	9.92	734.889		
3,740.1	3,708.3	3,615.0	3,614.9	10.1	1.3	-172.81	-6,952.6	-706.8	7,287.8	7,277.8	10.01	728.361		
3,800.0	3,768.1	3,662.5	3,662.4	10.2	1.3	-172.80	-6,953.1	-707.7	7,288.5	7,278.4	10.14	719.031		
3,838.6	3,806.7	3,700.0	3,699.9	10.2	1.3	-172.80	-6,953.5	-708.5	7,289.1	7,278.8	10.22	713.007		
3,900.0	3,868.1	3,792.5	3,792.4	10.3	1.3	-172.78	-6,954.3	-710.6	7,289.8	7,279.4	10.37	703.220		
3,937.0	3,905.1	3,834.7	3,834.5	10.4	1.3	-172.78	-6,954.6	-711.5	7,290.1	7,279.7	10.45	697.632		
4,000.0	3,968.1	3,901.7	3,901.5	10.5	1.3	-172.76	-6,954.9	-713.0	7,290.6	7,280.0	10.59	688.395		
4,035.4	4,003.6	3,947.1	3,946.9	10.6	1.4	-172.76	-6,955.1	-714.0	7,290.9	7,280.2	10.67	683.208		
4,100.0	4,068.1	4,032.9	4,032.7	10.7	1.4	-172.74	-6,955.3	-715.7	7,291.2	7,280.4	10.82	673.944		
4,133.8	4,102.0	4,080.8	4,080.6	10.8	1.4	-172.74	-6,955.4	-716.4	7,291.3	7,280.4	10.90	669.155		
4,200.0	4,168.1	4,152.8	4,152.5	10.9	1.4	-172.73	-6,955.3	-717.2	7,291.3	7,280.3	11.04	660.233		
4,232.3	4,200.4	4,185.1	4,184.9	10.9	1.4	-172.73	-6,955.3	-717.6	7,291.3	7,280.2	11.12	655.980		
4,300.0	4,268.1	4,251.8	4,251.5	11.1	1.4	-172.72	-6,955.3	-718.2	7,291.4	7,280.1	11.27	647.237		
4,330.7	4,298.8	4,281.8	4,281.6	11.1	1.4	-172.72	-6,955.3	-718.5	7,291.4	7,280.1	11.33	643.341		
4,400.0	4,368.1	4,333.5	4,333.3	11.2	1.4	-172.72	-6,955.3	-718.9	7,291.5	7,280.1	11.48	634.894		
4,429.1	4,397.3	4,352.8	4,352.5	11.3	1.4	-172.72	-6,955.4	-719.0	7,291.7	7,280.1	11.55	631.434		
4,500.0	4,468.1	4,400.0	4,399.8	11.4	1.4	-172.72	-6,955.6	-719.1	7,292.1	7,280.4	11.70	623.164		
4,527.5	4,495.7	4,419.5	4,419.3	11.5	1.4	-172.72	-6,955.8	-719.1	7,292.3	7,280.6	11.76	619.875		
4,600.0	4,568.1	4,471.9	4,471.7	11.6	1.4	-172.72	-6,956.3	-719.2	7,293.1	7,281.2	11.93	611.386		
4,626.0	4,594.1	4,500.0	4,499.8	11.7	1.4	-172.72	-6,956.7	-719.3	7,293.4	7,281.4	11.99	608.268		
4,700.0	4,668.1	4,543.1	4,542.8	11.8	1.5	-172.72	-6,957.3	-719.3	7,294.5	7,282.3	12.16	600.052		
4,724.4	4,692.5	4,560.2	4,560.0	11.8	1.5	-172.72	-6,957.6	-719.3	7,294.9	7,282.7	12.21	597.349		
4,800.0	4,768.1	4,600.0	4,599.8	12.0	1.5	-172.72	-6,958.3	-719.2	7,296.3	7,283.9	12.38	589.317		
4,822.8	4,791.0	4,627.8	4,627.5	12.0	1.5	-172.72	-6,958.9	-719.1	7,296.7	7,284.3	12.44	586.740		
4,900.0	4,868.1	4,678.9	4,678.7	12.2	1.5	-172.72	-6,960.1	-718.7	7,298.5	7,285.9	12.61	578.721		
4,921.2	4,889.4	4,700.0	4,699.7	12.2	1.5	-172.73	-6,960.7	-718.4	7,299.0	7,286.3	12.66	576.465		
5,000.0	4,968.1	4,757.5	4,757.2	12.4	1.5	-172.73	-6,962.3	-717.7	7,301.1	7,288.3	12.84	568.507		
5,019.7	4,987.8	4,774.1	4,773.8	12.4	1.5	-172.74	-6,962.8	-717.4	7,301.6	7,288.7	12.89	566.527		
5,100.0	5,068.1	4,836.9	4,836.6	12.6	1.5	-172.75	-6,964.8	-716.6	7,304.0	7,290.9	13.07	558.649		
5,118.1	5,086.2	4,850.4	4,850.0	12.6	1.5	-172.75	-6,965.2	-716.5	7,304.5	7,291.4	13.12	556.908		
5,200.0	5,168.1	4,924.7	4,924.3	12.8	1.6	-172.75	-6,967.7	-716.1	7,307.1	7,293.8	13.31	549.025		
5,216.5	5,184.7	4,951.6	4,951.2	12.8	1.6	-172.75	-6,968.5	-716.0	7,307.7	7,294.3	13.35	547.318		
5,300.0	5,268.1	5,070.6	5,070.2	13.0	1.6	-172.76	-6,971.9	-715.7	7,310.0	7,296.4	13.56	539.030		

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

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	
5,314.9	5,283.1	5,090.3	5,089.8	13.0	1.6	-172.76	-6,972.4	-715.7	7,310.4	7,296.8	13.60	537.586	
5,400.0	5,368.1	5,195.5	5,195.0	13.1	1.6	-172.76	-6,974.9	-715.6	7,312.4	7,298.6	13.81	529.562	
5,413.4	5,381.5	5,211.1	5,210.6	13.2	1.6	-172.76	-6,975.3	-715.6	7,312.7	7,298.8	13.84	528.327	
5,500.0	5,468.1	5,313.0	5,312.5	13.3	1.7	-172.77	-6,977.4	-715.7	7,314.5	7,300.4	14.05	520.459	
5,511.8	5,479.9	5,330.1	5,329.5	13.4	1.7	-172.76	-6,977.7	-715.7	7,314.7	7,300.6	14.08	519.378	
5,600.0	5,568.1	5,438.0	5,437.4	13.5	1.7	-172.76	-6,979.5	-716.7	7,316.2	7,301.9	14.30	511.612	
5,610.2	5,578.4	5,447.7	5,447.1	13.6	1.7	-172.76	-6,979.6	-716.8	7,316.4	7,302.1	14.32	510.754	
5,700.0	5,668.1	5,608.0	5,607.4	13.7	1.7	-172.75	-6,981.6	-718.2	7,317.7	7,303.1	14.56	502.665	
5,708.6	5,676.8	5,616.0	5,615.4	13.8	1.7	-172.75	-6,981.6	-718.3	7,317.7	7,303.1	14.58	501.963	
5,800.0	5,768.1	5,700.9	5,700.4	13.9	1.8	-172.74	-6,982.2	-718.9	7,318.4	7,303.6	14.79	494.669	
5,807.1	5,775.2	5,709.3	5,708.8	14.0	1.8	-172.74	-6,982.2	-719.0	7,318.5	7,303.6	14.81	494.102	
5,900.0	5,868.1	5,817.4	5,816.8	14.1	1.8	-172.74	-6,982.8	-719.8	7,319.1	7,304.0	15.04	486.771	
5,905.5	5,873.6	5,823.1	5,822.5	14.1	1.8	-172.74	-6,982.9	-719.9	7,319.1	7,304.0	15.05	486.348	
6,000.0	5,968.1	5,918.3	5,917.8	14.3	1.8	-172.73	-6,983.3	-720.5	7,319.6	7,304.3	15.27	479.209	
6,003.9	5,972.1	5,921.8	5,921.2	14.3	1.8	-172.73	-6,983.3	-720.5	7,319.6	7,304.3	15.28	478.919	
6,100.0	6,068.1	6,008.5	6,007.9	14.5	1.8	-172.73	-6,983.8	-721.0	7,320.2	7,304.7	15.51	471.921	
6,102.3	6,070.5	6,011.6	6,011.0	14.5	1.8	-172.73	-6,983.8	-721.0	7,320.2	7,304.7	15.52	471.748	
6,200.0	6,168.1	6,131.3	6,130.7	14.7	1.9	-172.72	-6,984.3	-721.8	7,320.7	7,304.9	15.75	464.712	
6,200.8	6,168.9	6,132.1	6,131.5	14.7	1.9	-172.72	-6,984.3	-721.9	7,320.7	7,304.9	15.76	464.658	
6,288.5	6,256.6	6,245.1	6,244.5	14.9	1.9	-172.72	-6,984.6	-722.3	7,321.0	7,305.0	15.96	458.714	
6,299.2	6,267.3	6,269.3	6,268.7	14.9	1.9	7.07	-6,984.6	-722.2	7,320.9	7,304.9	15.97	458.501	
6,300.0	6,268.1	6,271.1	6,270.5	14.9	1.9	7.07	-6,984.6	-722.2	7,320.9	7,304.9	15.97	458.474	
6,350.0	6,318.1	6,379.7	6,379.1	15.0	1.9	7.09	-6,984.1	-720.9	7,318.1	7,302.0	16.04	456.288	
6,397.6	6,365.3	6,463.1	6,462.5	15.1	1.9	7.15	-6,983.3	-719.0	7,311.9	7,295.7	16.15	452.807	
6,400.0	6,367.7	6,467.0	6,466.4	15.1	1.9	7.15	-6,983.3	-718.9	7,311.5	7,295.3	16.15	452.603	
6,450.0	6,416.8	6,549.8	6,549.1	15.1	1.9	7.26	-6,982.1	-716.4	7,301.2	7,284.9	16.30	447.847	
6,496.0	6,461.3	6,620.3	6,619.5	15.1	1.9	7.39	-6,980.9	-714.0	7,288.6	7,272.2	16.45	443.055	
6,500.0	6,465.1	6,625.4	6,624.7	15.1	1.9	7.40	-6,980.8	-713.8	7,287.4	7,270.9	16.46	442.647	
6,550.0	6,512.4	6,689.5	6,688.7	15.1	1.9	7.60	-6,979.5	-711.4	7,270.1	7,253.5	16.61	437.593	
6,594.5	6,553.4	6,735.2	6,734.4	15.1	1.9	7.82	-6,978.6	-709.7	7,252.0	7,235.3	16.73	433.590	
6,600.0	6,558.4	6,740.5	6,739.7	15.1	1.9	7.85	-6,978.4	-709.5	7,249.6	7,232.9	16.74	433.129	
6,650.0	6,603.0	6,787.5	6,786.6	15.1	1.9	8.16	-6,977.4	-707.7	7,226.0	7,209.2	16.83	429.337	
6,692.9	6,639.9	6,937.4	6,936.3	15.1	1.9	8.53	-6,972.7	-701.4	7,202.8	7,185.8	16.99	423.869	
6,700.0	6,645.9	6,942.5	6,941.4	15.1	1.9	8.59	-6,972.5	-701.2	7,198.7	7,181.7	17.00	423.454	
6,750.0	6,686.8	6,977.5	6,976.4	15.1	1.9	9.07	-6,971.2	-699.9	7,168.6	7,151.6	17.03	420.970	
6,791.3	6,719.1	7,000.0	6,998.8	15.1	1.9	9.55	-6,970.4	-699.1	7,141.7	7,124.7	17.02	419.549	
6,800.0	6,725.7	7,000.0	6,998.8	15.1	1.9	9.65	-6,970.4	-699.1	7,135.9	7,118.8	17.01	419.455	
6,850.0	6,762.3	7,000.0	6,998.8	15.1	1.9	10.34	-6,970.4	-699.1	7,100.7	7,083.8	16.94	419.251	
6,889.7	6,789.7	7,000.0	6,998.8	15.1	1.9	10.99	-6,970.4	-699.1	7,071.2	7,054.4	16.86	419.436	
6,900.0	6,796.5	7,000.0	6,998.8	15.1	1.9	11.18	-6,970.4	-699.1	7,063.4	7,046.6	16.84	419.547	
6,950.0	6,828.0	7,000.0	6,998.8	15.1	1.9	12.21	-6,970.4	-699.1	7,024.0	7,007.3	16.72	420.061	
6,988.2	6,850.2	7,000.0	6,998.8	15.1	1.9	13.18	-6,970.4	-699.1	6,992.7	6,976.1	16.64	420.220	
7,000.0	6,856.7	7,000.0	6,998.8	15.1	1.9	13.52	-6,970.4	-699.1	6,982.8	6,966.2	16.61	420.397	
7,050.0	6,882.5	7,000.0	6,998.8	15.2	1.9	15.19	-6,970.4	-699.1	6,939.8	6,923.3	16.52	419.996	
7,086.6	6,899.5	7,000.0	6,998.8	15.3	1.9	16.73	-6,970.4	-699.1	6,907.4	6,890.9	16.49	418.780	
7,100.0	6,905.3	7,000.0	6,998.8	15.4	1.9	17.38	-6,970.4	-699.1	6,895.3	6,878.8	16.49	418.075	
7,150.0	6,924.9	7,000.0	6,998.8	15.7	1.9	20.37	-6,970.4	-699.1	6,849.4	6,832.8	16.56	413.534	
7,185.0	6,936.7	7,000.0	6,998.8	15.9	1.9	23.17	-6,970.4	-699.1	6,816.6	6,799.9	16.71	407.961	
7,200.0	6,941.2	7,000.0	6,998.8	16.0	1.9	24.62	-6,970.4	-699.1	6,802.4	6,785.6	16.80	404.875	
7,250.0	6,954.2	7,000.0	6,998.8	16.3	1.9	30.99	-6,970.4	-699.1	6,754.4	6,737.1	17.31	390.309	
7,283.4	6,961.0	7,000.0	6,998.8	16.6	1.9	37.22	-6,970.4	-699.1	6,721.9	6,704.0	17.85	376.637	
7,300.0	6,963.8	7,000.0	6,998.8	16.7	1.9	41.17	-6,970.4	-699.1	6,705.7	6,687.5	18.17	369.012	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - ABDN VERT FARR #1 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,350.0	6,970.0	7,000.0	6,998.8	17.2	1.9	58.18	-6,970.4	-699.1	6,656.5	6,637.3	19.19	346.878	
7,381.9	6,972.1	7,000.0	6,998.8	17.5	1.9	73.96	-6,970.4	-699.1	6,624.9	6,605.6	19.37	342.002	
7,400.0	6,972.7	7,000.0	6,998.8	17.7	1.9	84.37	-6,970.4	-699.1	6,607.0	6,587.7	19.25	343.284	
7,420.0	6,972.8	7,000.0	6,998.8	17.9	1.9	96.23	-6,970.4	-699.1	6,587.2	6,567.6	19.56	336.709	
7,480.3	6,972.2	7,000.0	6,998.8	18.5	1.9	96.23	-6,970.4	-699.1	6,527.4	6,507.2	20.21	323.040	
7,500.0	6,972.0	7,000.0	6,998.8	18.7	1.9	96.23	-6,970.4	-699.1	6,507.9	6,487.5	20.42	318.762	
7,578.7	6,971.3	7,000.0	6,998.8	19.7	1.9	96.23	-6,970.4	-699.1	6,429.9	6,408.6	21.34	301.338	
7,600.0	6,971.1	7,000.0	6,998.8	19.9	1.9	96.23	-6,970.4	-699.1	6,408.8	6,387.2	21.59	296.884	
7,677.1	6,970.4	7,000.0	6,998.8	20.9	1.9	96.23	-6,970.4	-699.1	6,332.4	6,309.8	22.57	280.506	
7,700.0	6,970.2	7,000.0	6,998.8	21.2	1.9	96.23	-6,970.4	-699.1	6,309.8	6,286.9	22.87	275.927	
7,775.6	6,969.5	7,000.0	6,998.8	22.2	1.9	96.23	-6,970.4	-699.1	6,235.0	6,211.1	23.91	260.736	
7,800.0	6,969.3	7,000.0	6,998.8	22.6	1.9	96.23	-6,970.4	-699.1	6,210.8	6,186.5	24.25	256.106	
7,874.0	6,968.6	7,000.0	6,998.8	23.7	1.9	96.23	-6,970.4	-699.1	6,137.5	6,112.2	25.34	242.235	
7,900.0	6,968.4	7,000.0	6,998.8	24.1	1.9	96.23	-6,970.4	-699.1	6,111.8	6,086.1	25.72	237.640	
7,972.4	6,967.8	7,000.0	6,998.8	25.2	1.9	96.23	-6,970.4	-699.1	6,040.2	6,013.3	26.83	225.105	
8,000.0	6,967.5	7,000.0	6,998.8	25.6	1.9	96.23	-6,970.4	-699.1	6,012.9	5,985.6	27.26	220.601	
8,070.8	6,966.9	7,000.0	6,998.8	26.7	1.9	96.23	-6,970.4	-699.1	5,942.8	5,914.4	28.39	209.345	
8,100.0	6,966.6	7,000.0	6,998.8	27.2	1.9	96.23	-6,970.4	-699.1	5,914.0	5,885.1	28.85	204.970	
8,169.3	6,966.0	7,000.0	6,998.8	28.3	1.9	96.23	-6,970.4	-699.1	5,845.5	5,815.5	29.99	194.902	
8,200.0	6,965.7	7,000.0	6,998.8	28.8	1.9	96.23	-6,970.4	-699.1	5,815.1	5,784.6	30.50	190.677	
8,267.7	6,965.1	7,000.0	6,998.8	30.0	1.9	96.23	-6,970.4	-699.1	5,748.2	5,716.6	31.64	181.687	
8,300.0	6,964.8	7,000.0	6,998.8	30.5	1.9	96.23	-6,970.4	-699.1	5,716.3	5,684.1	32.18	177.623	
8,366.1	6,964.2	7,000.0	6,998.8	31.7	1.9	96.23	-6,970.4	-699.1	5,651.0	5,617.7	33.32	169.603	
8,400.0	6,963.9	7,000.0	6,998.8	32.2	1.9	96.23	-6,970.4	-699.1	5,617.5	5,583.6	33.90	165.703	
8,464.5	6,963.3	7,000.0	6,998.8	33.4	1.9	96.23	-6,970.4	-699.1	5,553.8	5,518.8	35.03	158.546	
8,500.0	6,963.0	7,000.0	6,998.8	34.0	1.9	96.23	-6,970.4	-699.1	5,518.8	5,483.1	35.65	154.809	
8,563.0	6,962.4	7,000.0	6,998.8	35.1	1.9	96.23	-6,970.4	-699.1	5,456.6	5,419.9	36.77	148.418	
8,600.0	6,962.0	7,000.0	6,998.8	35.8	1.9	96.23	-6,970.4	-699.1	5,420.1	5,382.7	37.42	144.839	
8,661.4	6,961.5	7,000.0	6,998.8	36.9	1.9	96.23	-6,970.4	-699.1	5,359.5	5,321.0	38.52	139.126	
8,700.0	6,961.1	7,000.0	6,998.8	37.6	1.9	96.24	-6,970.4	-699.1	5,321.5	5,282.3	39.22	135.699	
8,759.8	6,960.6	7,000.0	6,998.8	38.7	1.9	96.24	-6,970.4	-699.1	5,262.5	5,222.2	40.30	130.585	
8,800.0	6,960.2	7,000.0	6,998.8	39.4	1.9	96.24	-6,970.4	-699.1	5,222.9	5,181.9	41.03	127.303	
8,858.2	6,959.7	7,000.0	6,998.8	40.5	1.9	96.24	-6,970.4	-699.1	5,165.5	5,123.4	42.09	122.719	
8,900.0	6,959.3	7,000.0	6,998.8	41.2	1.9	96.24	-6,970.4	-699.1	5,124.4	5,081.5	42.85	119.574	
8,956.7	6,958.8	7,000.0	6,998.8	42.3	1.9	96.24	-6,970.4	-699.1	5,068.5	5,024.6	43.90	115.460	
9,000.0	6,958.4	7,000.0	6,998.8	43.1	1.9	96.24	-6,970.4	-699.1	5,025.9	4,981.2	44.70	112.445	
9,055.1	6,957.9	7,000.0	6,998.8	44.1	1.9	96.24	-6,970.4	-699.1	4,971.6	4,925.9	45.72	108.746	
9,100.0	6,957.5	7,000.0	6,998.8	44.9	1.9	96.24	-6,970.4	-699.1	4,927.5	4,880.9	46.55	105.853	
9,153.5	6,957.0	7,000.0	6,998.8	45.9	1.9	96.24	-6,970.4	-699.1	4,874.8	4,827.3	47.55	102.525	
9,200.0	6,956.6	7,000.0	6,998.8	46.8	1.9	96.24	-6,970.4	-699.1	4,829.1	4,780.7	48.41	99.746	
9,251.9	6,956.1	7,000.0	6,998.8	47.8	1.9	96.24	-6,970.4	-699.1	4,778.1	4,728.7	49.39	96.746	
9,300.0	6,955.7	7,000.0	6,998.8	48.7	1.9	96.24	-6,970.4	-699.1	4,730.8	4,680.6	50.29	94.075	
9,350.4	6,955.2	7,000.0	6,998.8	49.6	1.9	96.24	-6,970.4	-699.1	4,681.4	4,630.1	51.24	91.369	
9,400.0	6,954.8	7,000.0	6,998.8	50.6	1.9	96.24	-6,970.4	-699.1	4,632.6	4,580.5	52.17	88.799	
9,448.8	6,954.3	7,000.0	6,998.8	51.5	1.9	96.24	-6,970.4	-699.1	4,584.7	4,531.6	53.09	86.355	
9,500.0	6,953.9	7,000.0	6,998.8	52.5	1.9	96.24	-6,970.4	-699.1	4,534.5	4,480.5	54.06	83.881	
9,547.2	6,953.4	7,000.0	6,998.8	53.4	1.9	96.24	-6,970.4	-699.1	4,488.2	4,433.2	54.95	81.671	
9,600.0	6,952.9	7,000.0	6,998.8	54.4	1.9	96.24	-6,970.4	-699.1	4,436.5	4,380.5	55.96	79.286	
9,645.6	6,952.5	7,000.0	6,998.8	55.2	1.9	96.24	-6,970.4	-699.1	4,391.7	4,334.9	56.82	77.287	
9,700.0	6,952.0	7,000.0	6,998.8	56.3	1.9	96.24	-6,970.4	-699.1	4,338.5	4,280.7	57.86	74.986	
9,744.1	6,951.6	7,000.0	6,998.8	57.1	1.9	96.24	-6,970.4	-699.1	4,295.4	4,236.7	58.70	73.177	
9,800.0	6,951.1	7,000.0	6,998.8	58.2	1.9	96.24	-6,970.4	-699.1	4,240.7	4,180.9	59.76	70.956	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - ABDN VERT FARR #1 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,842.5	6,950.7	7,000.0	6,998.8	59.0	1.9	96.24	-6,970.4	-699.1	4,199.1	4,138.5	60.58	69.318	
9,900.0	6,950.2	7,000.0	6,998.8	60.1	1.9	96.24	-6,970.4	-699.1	4,142.9	4,081.2	61.68	67.171	
9,940.9	6,949.8	7,000.0	6,998.8	60.9	1.9	96.24	-6,970.4	-699.1	4,102.9	4,040.5	62.46	65.687	
10,000.0	6,949.3	7,000.0	6,998.8	62.0	1.9	96.24	-6,970.4	-699.1	4,045.3	3,981.7	63.59	63.611	
10,039.3	6,948.9	7,000.0	6,998.8	62.8	1.9	96.24	-6,970.4	-699.1	4,006.9	3,942.5	64.35	62.267	
10,100.0	6,948.4	7,000.0	6,998.8	64.0	1.9	96.24	-6,970.4	-699.1	3,947.7	3,882.2	65.51	60.257	
10,137.8	6,948.0	7,000.0	6,998.8	64.7	1.9	96.24	-6,970.4	-699.1	3,910.9	3,844.7	66.24	59.040	
10,200.0	6,947.5	7,000.0	6,998.8	65.9	1.9	96.24	-6,970.4	-699.1	3,850.3	3,782.9	67.44	57.093	
10,236.2	6,947.1	7,000.0	6,998.8	66.6	1.9	96.24	-6,970.4	-699.1	3,815.1	3,747.0	68.14	55.992	
10,300.0	6,946.6	7,000.0	6,998.8	67.8	1.9	96.24	-6,970.4	-699.1	3,753.1	3,683.7	69.37	54.104	
10,334.6	6,946.3	7,000.0	6,998.8	68.5	1.9	96.24	-6,970.4	-699.1	3,719.4	3,649.4	70.04	53.108	
10,400.0	6,945.7	7,000.0	6,998.8	69.8	1.9	96.24	-6,970.4	-699.1	3,656.0	3,584.7	71.30	51.277	
10,433.0	6,945.4	7,000.0	6,998.8	70.4	1.9	96.24	-6,970.4	-699.1	3,623.9	3,552.0	71.94	50.376	
10,500.0	6,944.7	7,000.0	6,998.8	71.7	1.9	96.24	-6,970.4	-699.1	3,559.0	3,485.8	73.23	48.599	
10,531.5	6,944.5	7,000.0	6,998.8	72.3	1.9	96.24	-6,970.4	-699.1	3,528.5	3,454.7	73.84	47.785	
10,600.0	6,943.8	7,000.0	6,998.8	73.7	1.9	96.24	-6,970.4	-699.1	3,462.2	3,387.0	75.17	46.060	
10,629.9	6,943.6	7,000.0	6,998.8	74.2	1.9	96.24	-6,970.4	-699.1	3,433.3	3,357.6	75.75	45.326	
10,700.0	6,942.9	7,000.0	6,998.8	75.6	1.9	96.24	-6,970.4	-699.1	3,365.6	3,288.5	77.11	43.649	
10,728.3	6,942.7	7,000.0	6,998.8	76.2	1.9	96.24	-6,970.4	-699.1	3,338.3	3,260.6	77.66	42.988	
10,800.0	6,942.0	7,000.0	6,998.8	77.6	1.9	96.24	-6,970.4	-699.1	3,269.2	3,190.2	79.05	41.358	
10,826.7	6,941.8	7,000.0	6,998.8	78.1	1.9	96.24	-6,970.4	-699.1	3,243.5	3,163.9	79.57	40.764	
10,900.0	6,941.1	7,000.0	6,998.8	79.5	1.9	96.24	-6,970.4	-699.1	3,173.1	3,092.1	80.99	39.178	
10,925.2	6,940.9	7,000.0	6,998.8	80.0	1.9	96.24	-6,970.4	-699.1	3,148.9	3,067.4	81.48	38.646	
11,000.0	6,940.2	7,000.0	6,998.8	81.5	1.9	96.24	-6,970.4	-699.1	3,077.1	2,994.2	82.94	37.103	
11,023.6	6,940.0	7,000.0	6,998.8	81.9	1.9	96.24	-6,970.4	-699.1	3,054.5	2,971.1	83.40	36.627	
11,100.0	6,939.3	7,000.0	6,998.8	83.4	1.9	96.24	-6,970.4	-699.1	2,981.5	2,896.6	84.88	35.125	
11,122.0	6,939.1	7,000.0	6,998.8	83.8	1.9	96.24	-6,970.4	-699.1	2,960.5	2,875.1	85.31	34.702	
11,200.0	6,938.4	7,000.0	6,998.8	85.4	1.9	96.24	-6,970.4	-699.1	2,886.1	2,799.3	86.83	33.238	
11,220.4	6,938.2	7,000.0	6,998.8	85.8	1.9	96.24	-6,970.4	-699.1	2,866.7	2,779.4	87.23	32.863	
11,300.0	6,937.4	7,000.0	6,998.8	87.3	1.9	96.24	-6,970.4	-699.1	2,791.1	2,702.3	88.78	31.438	
11,318.9	6,937.3	7,000.0	6,998.8	87.7	1.9	96.24	-6,970.4	-699.1	2,773.2	2,684.0	89.15	31.107	
11,400.0	6,936.5	7,000.0	6,998.8	89.3	1.9	96.24	-6,970.4	-699.1	2,696.4	2,605.7	90.73	29.718	
11,417.3	6,936.4	7,000.0	6,998.8	89.6	1.9	96.24	-6,970.4	-699.1	2,680.1	2,589.0	91.07	29.429	
11,500.0	6,935.6	7,000.0	6,998.8	91.3	1.9	96.24	-6,970.4	-699.1	2,602.1	2,509.5	92.69	28.075	
11,515.7	6,935.5	7,000.0	6,998.8	91.6	1.9	96.24	-6,970.4	-699.1	2,587.4	2,494.4	92.99	27.823	
11,600.0	6,934.7	7,000.0	6,998.8	93.2	1.9	96.25	-6,970.4	-699.1	2,508.3	2,413.7	94.64	26.504	
11,614.1	6,934.6	7,000.0	6,998.8	93.5	1.9	96.25	-6,970.4	-699.1	2,495.1	2,400.2	94.92	26.287	
11,700.0	6,933.8	7,000.0	6,998.8	95.2	1.9	96.25	-6,970.4	-699.1	2,415.0	2,318.4	96.59	25.001	
11,712.6	6,933.7	7,000.0	6,998.8	95.4	1.9	96.25	-6,970.4	-699.1	2,403.3	2,306.4	96.84	24.817	
11,800.0	6,932.9	7,000.0	6,998.8	97.1	1.9	96.25	-6,970.4	-699.1	2,322.2	2,223.6	98.55	23.563	
11,811.0	6,932.8	7,000.0	6,998.8	97.4	1.9	96.25	-6,970.4	-699.1	2,312.0	2,213.3	98.77	23.409	
11,900.0	6,932.0	7,000.0	6,998.8	99.1	1.9	96.25	-6,970.4	-699.1	2,230.0	2,129.5	100.51	22.188	
11,909.4	6,931.9	7,000.0	6,998.8	99.3	1.9	96.25	-6,970.4	-699.1	2,221.4	2,120.7	100.69	22.061	
12,000.0	6,931.0	7,000.0	6,998.8	101.1	1.9	96.25	-6,970.4	-699.1	2,138.6	2,036.1	102.47	20.871	
12,007.8	6,931.0	7,000.0	6,998.8	101.2	1.9	96.25	-6,970.4	-699.1	2,131.4	2,028.8	102.62	20.770	
12,100.0	6,930.1	7,000.0	6,998.8	103.0	1.9	96.25	-6,970.4	-699.1	2,047.9	1,943.5	104.43	19.611	
12,106.3	6,930.1	7,000.0	6,998.8	103.2	1.9	96.25	-6,970.4	-699.1	2,042.3	1,937.7	104.55	19.534	
12,200.0	6,929.2	7,000.0	6,998.8	105.0	1.9	96.25	-6,970.4	-699.1	1,958.2	1,851.8	106.39	18.406	
12,204.7	6,929.2	7,000.0	6,998.8	105.1	1.9	96.25	-6,970.4	-699.1	1,954.0	1,847.5	106.48	18.351	
12,300.0	6,928.3	7,000.0	6,998.8	107.0	1.9	96.25	-6,970.4	-699.1	1,869.5	1,761.1	108.35	17.255	
12,303.1	6,928.3	7,000.0	6,998.8	107.1	1.9	96.25	-6,970.4	-699.1	1,866.7	1,758.3	108.41	17.219	
12,400.0	6,927.4	7,000.0	6,998.8	109.0	1.9	96.25	-6,970.4	-699.1	1,782.0	1,671.7	110.31	16.154	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - ABDN VERT FARR #1 - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT													Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
12,401.5	6,927.4	7,000.0	6,998.8	109.0	1.9	96.25	-6,970.4	-699.1	1,780.6	1,670.3	110.34	16.138		
12,500.0	6,926.5	7,000.0	6,998.8	110.9	1.9	96.25	-6,970.4	-699.1	1,695.8	1,583.6	112.27	15.105		
12,598.4	6,925.6	7,000.0	6,998.8	112.9	1.9	96.25	-6,970.4	-699.1	1,612.7	1,498.5	114.20	14.121		
12,600.0	6,925.6	7,000.0	6,998.8	112.9	1.9	96.25	-6,970.4	-699.1	1,611.3	1,497.1	114.23	14.105		
12,696.8	6,924.7	6,992.2	6,991.1	114.8	1.9	95.74	-6,970.6	-699.4	1,531.2	1,415.0	116.19	13.179		
12,700.0	6,924.6	6,992.1	6,990.9	114.9	1.9	95.74	-6,970.6	-699.4	1,528.6	1,412.4	116.25	13.149		
12,795.2	6,923.8	6,988.1	6,986.9	116.8	1.9	95.48	-6,970.8	-699.5	1,451.9	1,333.8	118.15	12.288		
12,800.0	6,923.7	6,987.9	6,986.8	116.9	1.9	95.46	-6,970.8	-699.5	1,448.2	1,329.9	118.25	12.247		
12,893.7	6,922.9	6,984.0	6,982.8	118.7	1.9	95.21	-6,971.0	-699.6	1,375.1	1,254.9	120.12	11.447		
12,900.0	6,922.8	6,983.7	6,982.6	118.8	1.9	95.19	-6,971.0	-699.7	1,370.2	1,250.0	120.24	11.395		
12,992.1	6,922.0	6,979.8	6,978.7	120.6	1.9	94.94	-6,971.1	-699.8	1,301.1	1,179.0	122.08	10.657		
13,000.0	6,921.9	6,979.5	6,978.4	120.8	1.9	94.92	-6,971.1	-699.8	1,295.3	1,173.1	122.24	10.596		
13,090.5	6,921.1	6,975.7	6,974.6	122.6	1.9	94.67	-6,971.3	-699.9	1,230.5	1,106.5	124.05	9.920		
13,100.0	6,921.0	6,975.3	6,974.2	122.8	1.9	94.65	-6,971.3	-700.0	1,223.9	1,099.7	124.24	9.852		
13,188.9	6,920.2	6,971.6	6,970.4	124.5	1.9	94.41	-6,971.4	-700.1	1,164.0	1,038.0	126.01	9.237		
13,200.0	6,920.1	6,971.1	6,970.0	124.8	1.9	94.38	-6,971.4	-700.1	1,156.8	1,030.6	126.23	9.164		
13,287.4	6,919.3	6,967.4	6,966.3	126.5	1.9	94.14	-6,971.6	-700.2	1,102.3	974.3	127.98	8.613		
13,300.0	6,919.1	6,966.9	6,965.8	126.7	1.9	94.10	-6,971.6	-700.3	1,094.7	966.5	128.23	8.537		
13,385.8	6,918.4	6,963.3	6,962.2	128.4	1.9	93.87	-6,971.7	-700.4	1,046.1	916.2	129.94	8.051		
13,400.0	6,918.2	6,962.7	6,961.6	128.7	1.9	93.83	-6,971.8	-700.4	1,038.6	908.3	130.23	7.975		
13,484.2	6,917.5	6,959.1	6,958.0	130.4	1.9	93.60	-6,971.9	-700.6	996.6	864.7	131.91	7.555		
13,500.0	6,917.3	6,958.5	6,957.4	130.7	1.9	93.56	-6,971.9	-700.6	989.3	857.1	132.22	7.482		
13,582.6	6,916.6	6,955.0	6,953.9	132.3	1.9	93.33	-6,972.0	-700.7	954.6	820.7	133.87	7.131		
13,600.0	6,916.4	6,954.3	6,953.1	132.7	1.9	93.28	-6,972.1	-700.7	948.0	813.8	134.22	7.063		
13,681.1	6,915.6	6,950.8	6,949.7	134.3	1.9	93.06	-6,972.2	-700.9	921.2	785.4	135.83	6.782		
13,700.0	6,915.5	6,950.0	6,948.9	134.6	1.9	93.01	-6,972.2	-700.9	915.9	779.6	136.21	6.724		
13,779.5	6,914.7	6,946.7	6,945.6	136.2	1.9	92.79	-6,972.4	-701.0	897.4	759.6	137.80	6.513		
13,800.0	6,914.6	6,945.8	6,944.7	136.6	1.9	92.73	-6,972.4	-701.1	893.7	755.5	138.21	6.467		
13,877.9	6,913.8	6,942.5	6,941.4	138.2	1.9	92.52	-6,972.5	-701.2	884.0	744.2	139.76	6.325		
13,900.0	6,913.6	6,941.6	6,940.5	138.6	1.9	92.46	-6,972.6	-701.2	882.5	742.3	140.20	6.294		
13,950.5	6,913.2	6,939.5	6,938.4	139.6	1.9	92.32	-6,972.6	-701.3	881.0	739.8	141.21	6.239 CC		
13,976.3	6,912.9	6,938.4	6,937.3	140.1	1.9	92.25	-6,972.7	-701.4	881.4	739.7	141.72	6.219 ES		
14,000.0	6,912.7	6,937.4	6,936.3	140.6	1.9	92.19	-6,972.7	-701.4	882.4	740.2	142.19	6.206		
14,074.8	6,912.0	6,934.2	6,933.1	142.0	1.9	91.98	-6,972.8	-701.5	889.7	746.1	143.62	6.195 SF		
14,079.0	6,912.0	6,934.0	6,932.9	142.1	1.9	91.97	-6,972.8	-701.6	890.3	746.6	143.70	6.196		

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 289-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	172.43	-5,118.5	680.5	5,163.6				
98.4	98.4	103.9	103.9	0.1	0.1	172.43	-5,118.3	680.5	5,163.4	5,163.2	0.19	N/A	
100.0	100.0	105.9	105.9	0.1	0.1	172.43	-5,118.3	680.5	5,163.3	5,163.1	0.20	N/A	
196.8	196.8	228.8	228.8	0.3	0.2	172.42	-5,117.4	680.6	5,162.7	5,162.2	0.53	9,724.934	
200.0	200.0	232.8	232.8	0.3	0.2	172.42	-5,117.4	680.6	5,162.7	5,162.1	0.54	9,530.064	
295.3	295.3	1,024.8	1,021.4	0.5	2.2	172.52	-5,060.8	664.3	5,158.0	5,155.5	2.54	2,033.192	
300.0	300.0	1,028.2	1,024.8	0.5	2.2	172.53	-5,060.4	663.9	5,157.3	5,154.8	2.56	2,018.084	
393.7	393.7	1,096.4	1,092.0	0.8	2.4	172.60	-5,051.8	656.0	5,144.1	5,141.1	2.92	1,760.591	
400.0	400.0	1,116.0	1,111.2	0.8	2.5	172.63	-5,049.4	653.4	5,143.2	5,140.2	2.98	1,726.201	
492.1	492.1	1,150.2	1,144.8	1.0	2.6	172.67	-5,045.4	648.6	5,130.8	5,127.5	3.26	1,573.591	
500.0	500.0	1,153.9	1,148.5	1.0	2.6	172.68	-5,045.0	648.1	5,129.7	5,126.5	3.29	1,560.952	
590.5	590.5	1,197.1	1,191.0	1.2	2.7	172.75	-5,040.4	641.5	5,118.4	5,114.8	3.58	1,429.359	
600.0	600.0	1,201.6	1,195.4	1.2	2.8	172.75	-5,040.0	640.8	5,117.3	5,113.7	3.61	1,416.933	
689.0	689.0	1,244.0	1,237.0	1.4	2.9	172.83	-5,036.0	633.7	5,107.0	5,103.1	3.90	1,310.022	
700.0	700.0	1,244.0	1,237.0	1.4	2.9	172.83	-5,036.0	633.7	5,105.8	5,101.9	3.92	1,301.440	
787.4	787.4	1,287.5	1,279.6	1.6	3.0	172.91	-5,032.4	626.1	5,096.7	5,092.5	4.21	1,210.372	
800.0	800.0	1,293.0	1,285.1	1.7	3.1	172.92	-5,032.0	625.1	5,095.4	5,091.2	4.25	1,198.714	
885.8	885.8	1,330.9	1,322.3	1.9	3.2	172.99	-5,029.3	618.2	5,087.4	5,082.9	4.52	1,125.010	
900.0	900.0	1,337.2	1,328.4	1.9	3.2	173.00	-5,028.9	617.1	5,086.1	5,081.6	4.57	1,113.716	
984.2	984.2	1,373.0	1,363.5	2.1	3.3	173.08	-5,026.8	610.4	5,079.2	5,074.3	4.83	1,051.721	
1,000.0	1,000.0	1,373.0	1,363.5	2.1	3.3	173.08	-5,026.8	610.4	5,078.0	5,073.1	4.86	1,043.820	
1,082.7	1,082.7	1,422.8	1,412.3	2.3	3.5	173.18	-5,024.3	600.9	5,072.0	5,066.8	5.16	982.279	
1,100.0	1,100.0	1,431.2	1,420.6	2.3	3.5	173.20	-5,024.0	599.2	5,070.8	5,065.6	5.22	971.113	
1,181.1	1,181.1	1,501.0	1,488.9	2.5	3.8	173.35	-5,021.5	585.2	5,065.9	5,060.4	5.56	910.782	
1,200.0	1,200.0	1,501.0	1,488.9	2.6	3.8	173.35	-5,021.5	585.2	5,064.7	5,059.1	5.60	903.669	
1,279.5	1,279.5	1,501.0	1,488.9	2.7	3.8	136.89	-5,021.5	585.2	5,061.4	5,055.3	6.12	827.630	
1,300.0	1,300.0	1,501.0	1,488.9	2.8	3.8	136.90	-5,021.5	585.2	5,061.0	5,054.8	6.16	821.427	
1,358.8	1,358.7	1,555.8	1,542.5	2.9	4.0	137.05	-5,020.4	573.8	5,060.3	5,053.7	6.50	778.154	
1,377.9	1,377.8	1,564.8	1,551.3	3.0	4.0	137.07	-5,020.3	571.9	5,060.3	5,053.8	6.58	769.073	
1,400.0	1,399.8	1,575.1	1,561.4	3.0	4.1	137.10	-5,020.1	569.7	5,060.6	5,053.9	6.67	758.939	
1,476.4	1,475.9	1,629.0	1,614.0	3.2	4.3	137.23	-5,019.9	558.3	5,062.9	5,055.9	7.05	718.543	
1,500.0	1,499.5	1,629.0	1,614.0	3.2	4.3	137.22	-5,019.9	558.3	5,064.0	5,056.9	7.10	713.447	
1,574.8	1,573.7	1,629.0	1,614.0	3.4	4.3	137.15	-5,019.9	558.3	5,069.1	5,061.8	7.27	697.561	
1,600.0	1,598.7	1,629.0	1,614.0	3.5	4.3	137.12	-5,019.9	558.3	5,071.4	5,064.1	7.32	692.503	
1,673.2	1,671.1	1,693.9	1,677.5	3.7	4.5	137.24	-5,020.4	544.9	5,078.7	5,070.9	7.74	656.219	
1,700.0	1,697.5	1,704.8	1,688.2	3.7	4.5	137.23	-5,020.6	542.7	5,081.9	5,074.1	7.84	648.005	
1,771.6	1,767.9	1,758.0	1,740.4	4.0	4.7	137.29	-5,022.0	532.4	5,092.1	5,083.9	8.22	619.516	
1,800.1	1,795.7	1,758.0	1,740.4	4.0	4.7	137.23	-5,022.0	532.4	5,096.5	5,088.3	8.29	614.845	
1,870.1	1,864.2	1,830.8	1,811.8	4.3	4.9	137.50	-5,024.0	518.2	5,108.1	5,099.3	8.76	583.182	
1,900.0	1,893.4	1,886.0	1,865.8	4.4	5.1	137.71	-5,025.3	507.1	5,112.9	5,103.8	9.05	564.989	
1,968.5	1,960.4	1,931.6	1,910.4	4.6	5.3	137.89	-5,026.3	497.8	5,123.8	5,114.4	9.42	543.776	
2,000.0	1,991.3	1,952.4	1,930.8	4.7	5.4	137.97	-5,026.8	493.7	5,129.0	5,119.4	9.59	534.681	
2,066.9	2,056.7	2,015.0	1,992.2	5.0	5.6	138.20	-5,028.5	481.6	5,140.2	5,130.1	10.03	512.621	
2,100.0	2,089.1	2,015.0	1,992.2	5.1	5.6	138.20	-5,028.5	481.6	5,145.8	5,135.6	10.13	507.983	
2,165.3	2,153.0	2,071.1	2,047.3	5.3	5.8	138.41	-5,030.2	471.0	5,157.0	5,146.5	10.53	489.633	
2,200.0	2,186.9	2,098.6	2,074.2	5.5	5.9	138.51	-5,031.1	465.9	5,163.1	5,152.4	10.74	480.828	
2,263.8	2,249.3	2,168.4	2,142.9	5.7	6.1	138.76	-5,033.3	453.2	5,174.4	5,163.2	11.19	462.384	
2,300.0	2,284.7	2,275.5	2,248.0	5.8	6.5	139.15	-5,035.8	432.9	5,180.5	5,168.8	11.70	442.824	
2,362.2	2,345.5	2,331.3	2,302.7	6.1	6.7	139.35	-5,036.7	422.0	5,190.6	5,178.5	12.11	428.633	
2,400.0	2,382.5	2,365.2	2,336.0	6.2	6.8	139.47	-5,037.3	415.4	5,196.9	5,184.5	12.36	420.476	
2,460.6	2,441.8	2,400.0	2,370.1	6.5	7.0	139.60	-5,037.9	408.7	5,207.0	5,194.3	12.69	410.402	
2,500.0	2,480.3	2,441.0	2,410.4	6.6	7.1	139.75	-5,038.7	400.7	5,213.6	5,200.6	12.98	401.798	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - EXIST DD NEI C18-20D - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 289-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,559.0	2,538.1	2,480.6	2,449.1	6.9	7.3	139.89	-5,039.5	393.1	5,223.8	5,210.5	13.32	392.088	
2,600.0	2,578.1	2,507.9	2,476.0	7.0	7.4	139.99	-5,040.2	387.8	5,231.0	5,217.4	13.56	385.664	
2,657.5	2,634.4	2,564.7	2,531.6	7.3	7.6	140.19	-5,041.7	376.7	5,241.2	5,227.2	13.97	375.084	
2,700.0	2,675.9	2,621.7	2,587.5	7.5	7.8	140.40	-5,043.0	365.6	5,248.7	5,234.4	14.33	366.169	
2,755.9	2,730.6	2,680.8	2,645.5	7.7	8.0	140.61	-5,044.2	354.1	5,258.5	5,243.7	14.75	356.434	
2,800.0	2,773.8	2,716.1	2,680.1	7.9	8.2	140.74	-5,044.9	346.8	5,266.2	5,251.2	15.04	350.082	
2,854.3	2,826.9	2,759.3	2,722.3	8.1	8.4	140.90	-5,045.9	337.6	5,275.9	5,260.5	15.40	342.611	
2,857.4	2,829.9	2,761.7	2,724.6	8.1	8.4	140.91	-5,045.9	337.1	5,276.5	5,261.0	15.42	342.206	
2,900.0	2,871.6	2,805.1	2,766.9	8.3	8.6	141.17	-5,047.0	327.4	5,283.9	5,268.2	15.74	335.597	
2,952.7	2,923.5	2,885.0	2,844.5	8.4	8.9	141.58	-5,048.6	308.8	5,292.3	5,276.0	16.26	325.567	
3,000.0	2,970.1	2,913.0	2,871.7	8.6	9.1	141.77	-5,049.0	302.0	5,299.1	5,282.6	16.51	320.920	
3,051.2	3,020.7	2,948.0	2,905.6	8.7	9.2	141.99	-5,049.7	293.4	5,306.0	5,289.1	16.81	315.620	
3,100.0	3,069.1	2,969.4	2,926.4	8.9	9.3	142.14	-5,050.3	288.1	5,312.1	5,295.1	17.04	311.811	
3,149.6	3,118.3	2,991.3	2,947.5	9.0	9.4	142.29	-5,050.9	282.7	5,318.0	5,300.7	17.26	308.194	
3,200.0	3,168.5	3,042.0	2,996.6	9.1	9.7	142.52	-5,052.8	270.0	5,323.7	5,306.1	17.61	302.244	
3,248.0	3,216.3	3,042.0	2,996.6	9.2	9.7	142.58	-5,052.8	270.0	5,328.4	5,310.7	17.71	300.872	
3,300.0	3,268.2	3,170.0	3,120.6	9.3	10.3	143.02	-5,057.0	238.6	5,332.6	5,314.2	18.41	289.686	
3,346.4	3,314.6	3,214.5	3,163.9	9.4	10.5	143.18	-5,058.0	228.1	5,335.5	5,316.8	18.69	285.506	
3,400.0	3,368.1	3,251.1	3,199.4	9.5	10.6	143.31	-5,059.0	219.5	5,338.2	5,319.2	18.94	281.835	
3,444.9	3,413.0	3,299.0	3,246.0	9.6	10.9	143.46	-5,060.5	208.4	5,340.0	5,320.8	19.22	277.818	
3,457.5	3,425.6	3,299.0	3,246.0	9.6	10.9	179.97	-5,060.5	208.4	5,340.4	5,321.1	19.24	277.509	
3,500.0	3,468.1	3,299.0	3,246.0	9.7	10.9	179.97	-5,060.5	208.4	5,341.8	5,322.5	19.32	276.518	
3,543.3	3,511.4	3,340.6	3,286.4	9.7	11.0	-179.93	-5,061.9	198.8	5,343.4	5,323.8	19.59	272.737	
3,600.0	3,568.1	3,372.6	3,317.6	9.8	11.2	-179.85	-5,063.2	191.5	5,345.7	5,325.9	19.85	269.339	
3,641.7	3,609.9	3,396.2	3,340.5	9.9	11.3	-179.79	-5,064.2	186.1	5,347.6	5,327.6	20.04	266.894	
3,700.0	3,668.1	3,435.1	3,378.4	10.0	11.5	-179.70	-5,066.1	177.3	5,350.5	5,330.2	20.33	263.213	
3,740.1	3,708.3	3,519.4	3,460.3	10.1	11.9	-179.49	-5,069.8	157.8	5,352.4	5,331.6	20.79	257.408	
3,800.0	3,768.1	3,619.9	3,557.9	10.2	12.3	-179.24	-5,073.4	134.1	5,354.8	5,333.4	21.37	250.623	
3,838.6	3,806.7	3,678.5	3,614.9	10.2	12.6	-179.09	-5,075.2	120.5	5,356.1	5,334.4	21.70	246.769	
3,900.0	3,868.1	3,747.4	3,681.8	10.3	12.9	-178.92	-5,077.0	104.4	5,358.1	5,335.9	22.14	241.954	
3,937.0	3,905.1	3,787.8	3,721.0	10.4	13.1	-178.82	-5,078.1	94.7	5,359.2	5,336.8	22.41	239.187	
4,000.0	3,968.1	3,812.0	3,744.5	10.5	13.2	-178.75	-5,078.7	88.7	5,361.3	5,338.7	22.64	236.769	
4,035.4	4,003.6	3,812.0	3,744.5	10.6	13.2	-178.75	-5,078.7	88.7	5,362.8	5,340.1	22.71	236.095	
4,100.0	4,068.1	3,873.5	3,804.0	10.7	13.5	-178.59	-5,080.6	73.3	5,365.4	5,342.2	23.15	231.745	
4,133.8	4,102.0	3,888.2	3,818.2	10.8	13.6	-178.55	-5,081.2	69.6	5,367.0	5,343.7	23.29	230.402	
4,200.0	4,168.1	3,941.0	3,869.2	10.9	13.9	-178.41	-5,083.7	56.2	5,370.6	5,346.9	23.69	226.691	
4,232.3	4,200.4	3,941.0	3,869.2	10.9	13.9	-178.41	-5,083.7	56.2	5,372.4	5,348.7	23.76	226.144	
4,300.0	4,268.1	3,979.2	3,906.1	11.1	14.1	-178.30	-5,085.8	46.5	5,376.7	5,352.6	24.08	223.306	
4,330.7	4,298.8	4,005.4	3,931.5	11.1	14.2	-178.23	-5,087.3	40.0	5,378.7	5,354.4	24.27	221.652	
4,400.0	4,368.1	4,069.0	3,993.0	11.2	14.5	-178.07	-5,090.9	24.6	5,383.3	5,358.5	24.71	217.830	
4,429.1	4,397.3	4,108.2	4,031.1	11.3	14.7	-177.98	-5,093.1	15.7	5,385.2	5,360.3	24.93	216.012	
4,500.0	4,468.1	4,233.0	4,153.6	11.4	15.1	-177.73	-5,099.6	-7.5	5,389.5	5,363.9	25.55	210.959	
4,527.5	4,495.7	4,292.4	4,212.3	11.5	15.3	-177.64	-5,102.4	-16.3	5,390.9	5,365.1	25.79	208.995	
4,600.0	4,568.1	4,760.6	4,677.9	11.6	16.5	-177.16	-5,106.7	-61.9	5,392.2	5,365.1	27.11	198.922	
4,626.0	4,594.1	4,774.4	4,691.6	11.7	16.5	-177.16	-5,106.4	-62.2	5,391.6	5,364.4	27.18	198.360	
4,700.0	4,668.1	4,839.0	4,756.2	11.8	16.6	-177.15	-5,105.3	-62.6	5,390.4	5,363.0	27.43	196.517	
4,724.4	4,692.5	4,839.0	4,756.2	11.8	16.6	-177.15	-5,105.3	-62.6	5,390.0	5,362.5	27.48	196.141	
4,800.0	4,768.1	4,876.6	4,793.9	12.0	16.7	-177.15	-5,105.0	-62.2	5,389.2	5,361.5	27.68	194.715	
4,822.8	4,791.0	4,893.0	4,810.2	12.0	16.7	-177.16	-5,104.9	-62.0	5,389.0	5,361.3	27.74	194.253	
4,900.0	4,868.1	4,948.4	4,865.6	12.2	16.7	-177.16	-5,104.6	-61.5	5,388.7	5,360.7	27.96	192.711	
4,921.2	4,889.4	4,968.0	4,885.2	12.2	16.8	-177.16	-5,104.6	-61.3	5,388.6	5,360.6	28.03	192.260	
5,000.0	4,968.1	5,043.3	4,960.5	12.4	16.8	-177.17	-5,104.5	-60.6	5,388.5	5,360.2	28.28	190.560	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - EXIST DD NEI C18-20D - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 usft
Survey Program: 289-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,019.7	4,987.8	5,063.7	4,980.9	12.4	16.9	-177.17	-5,104.5	-60.4	5,388.5	5,360.1	28.34	190.127		
5,100.0	5,068.1	5,151.6	5,068.8	12.6	17.0	-177.18	-5,104.3	-59.6	5,388.3	5,359.7	28.61	188.355		
5,118.1	5,086.2	5,172.1	5,089.3	12.6	17.0	-177.18	-5,104.3	-59.4	5,388.2	5,359.6	28.67	187.955		
5,200.0	5,168.1	5,263.0	5,180.2	12.8	17.1	-177.20	-5,104.0	-57.9	5,387.9	5,358.9	28.94	186.168		
5,216.5	5,184.7	5,280.8	5,198.0	12.8	17.1	-177.20	-5,103.9	-57.6	5,387.8	5,358.8	29.00	185.812		
5,300.0	5,268.1	5,366.7	5,283.9	13.0	17.2	-177.21	-5,103.4	-56.8	5,387.3	5,358.0	29.27	184.049		
5,314.9	5,283.1	5,379.1	5,296.3	13.0	17.2	-177.21	-5,103.3	-56.8	5,387.2	5,357.9	29.32	183.747		
5,400.0	5,368.1	5,449.5	5,366.7	13.1	17.3	-177.21	-5,103.0	-56.7	5,386.8	5,357.2	29.59	182.052		
5,413.4	5,381.5	5,460.5	5,377.7	13.2	17.3	-177.21	-5,103.0	-56.7	5,386.8	5,357.2	29.63	181.789		
5,500.0	5,468.1	5,538.0	5,455.2	13.3	17.4	-177.21	-5,102.9	-56.9	5,386.7	5,356.7	29.92	180.030		
5,511.8	5,479.9	5,548.9	5,466.1	13.4	17.5	-177.21	-5,102.9	-57.0	5,386.7	5,356.7	29.96	179.788		
5,551.8	5,519.9	5,585.7	5,502.9	13.4	17.5	-177.21	-5,102.9	-57.1	5,386.7	5,356.6	30.10	178.976		
5,600.0	5,568.1	5,610.0	5,527.2	13.5	17.5	-177.21	-5,102.9	-57.2	5,386.7	5,356.5	30.23	178.171		
5,610.2	5,578.4	5,610.0	5,527.2	13.6	17.5	-177.21	-5,102.9	-57.2	5,386.8	5,356.5	30.26	178.045		
5,700.0	5,668.1	5,688.7	5,605.9	13.7	17.7	-177.20	-5,103.2	-57.9	5,387.2	5,356.6	30.56	176.269		
5,708.6	5,676.8	5,694.3	5,611.5	13.8	17.7	-177.20	-5,103.2	-57.9	5,387.3	5,356.7	30.59	176.118		
5,800.0	5,768.1	5,945.5	5,862.6	13.9	18.0	-177.19	-5,101.6	-58.6	5,386.7	5,355.5	31.14	173.000		
5,807.1	5,775.2	5,952.7	5,869.8	14.0	18.0	-177.19	-5,101.5	-58.6	5,386.5	5,355.3	31.16	172.858		
5,900.0	5,868.1	6,033.9	5,951.1	14.1	18.1	-177.19	-5,099.9	-58.2	5,384.6	5,353.2	31.47	171.123		
5,905.5	5,873.6	6,038.1	5,955.2	14.1	18.1	-177.19	-5,099.8	-58.2	5,384.5	5,353.1	31.48	171.027		
6,000.0	5,968.1	6,123.0	6,040.1	14.3	18.2	-177.20	-5,098.5	-57.2	5,383.0	5,351.2	31.80	169.302		
6,003.9	5,972.1	6,123.0	6,040.1	14.3	18.2	-177.20	-5,098.5	-57.2	5,383.0	5,351.2	31.80	169.255		
6,100.0	6,068.1	6,232.3	6,149.4	14.5	18.4	-177.22	-5,096.9	-55.9	5,381.5	5,349.3	32.15	167.393		
6,102.3	6,070.5	6,235.4	6,152.5	14.5	18.4	-177.22	-5,096.8	-55.9	5,381.4	5,349.3	32.16	167.345		
6,200.0	6,168.1	6,317.6	6,234.6	14.7	18.5	-177.23	-5,095.4	-55.0	5,379.7	5,347.3	32.47	165.664		
6,200.8	6,168.9	6,318.2	6,235.2	14.7	18.5	-177.23	-5,095.4	-55.0	5,379.7	5,347.3	32.48	165.651		
6,288.5	6,256.6	6,387.2	6,304.2	14.9	18.6	-177.24	-5,094.5	-54.1	5,378.5	5,345.8	32.75	164.209		
6,299.2	6,267.3	6,397.6	6,314.7	14.9	18.6	2.55	-5,094.4	-54.0	5,378.3	5,345.6	32.77	164.118		
6,300.0	6,268.1	6,398.4	6,315.5	14.9	18.6	2.55	-5,094.4	-54.0	5,378.3	5,345.5	32.77	164.110		
6,350.0	6,318.1	6,446.9	6,364.0	15.0	18.7	2.56	-5,093.8	-53.3	5,375.2	5,342.4	32.78	163.987		
6,397.6	6,365.3	6,492.9	6,409.9	15.1	18.7	2.58	-5,093.3	-52.6	5,369.0	5,336.3	32.66	164.411		
6,400.0	6,367.7	6,495.2	6,412.2	15.1	18.7	2.58	-5,093.3	-52.6	5,368.6	5,335.9	32.65	164.446		
6,450.0	6,416.8	6,570.2	6,487.2	15.1	18.8	2.61	-5,092.4	-51.3	5,358.5	5,326.1	32.41	165.323		
6,496.0	6,461.3	6,637.0	6,554.0	15.1	18.9	2.65	-5,091.2	-49.9	5,345.9	5,313.8	32.08	166.660		
6,500.0	6,465.1	6,637.0	6,554.0	15.1	18.9	2.66	-5,091.2	-49.9	5,344.7	5,312.7	32.04	166.834		
6,550.0	6,512.4	6,684.3	6,601.3	15.1	19.0	2.72	-5,090.2	-49.0	5,327.5	5,296.0	31.51	169.072		
6,594.5	6,553.4	6,718.1	6,635.1	15.1	19.0	2.80	-5,089.6	-48.4	5,309.6	5,278.7	30.93	171.662		
6,600.0	6,558.4	6,722.2	6,639.2	15.1	19.0	2.81	-5,089.6	-48.3	5,307.2	5,276.4	30.85	172.021		
6,650.0	6,603.0	6,765.0	6,682.0	15.1	19.1	2.92	-5,088.8	-47.7	5,283.8	5,253.7	30.09	175.620		
6,692.9	6,639.9	6,787.0	6,703.9	15.1	19.1	3.03	-5,088.5	-47.4	5,261.4	5,232.1	29.33	179.395		
6,700.0	6,645.9	6,791.4	6,708.4	15.1	19.1	3.05	-5,088.4	-47.3	5,257.5	5,228.3	29.20	180.067		
6,750.0	6,686.8	6,822.0	6,738.9	15.1	19.1	3.22	-5,088.0	-46.9	5,228.3	5,200.1	28.22	185.265		
6,791.3	6,719.1	6,846.1	6,763.0	15.1	19.2	3.38	-5,087.7	-46.4	5,202.2	5,174.8	27.35	190.192		
6,800.0	6,725.7	6,851.0	6,768.0	15.1	19.2	3.42	-5,087.7	-46.3	5,196.5	5,169.3	27.16	191.303		
6,850.0	6,762.3	6,878.4	6,795.3	15.1	19.2	3.66	-5,087.4	-45.8	5,162.1	5,136.0	26.04	198.224		
6,889.7	6,789.7	6,900.4	6,817.4	15.1	19.2	3.90	-5,087.3	-45.3	5,133.0	5,107.9	25.12	204.355		
6,900.0	6,796.5	6,907.3	6,824.3	15.1	19.3	3.96	-5,087.2	-45.2	5,125.3	5,100.4	24.88	206.015		
6,950.0	6,828.0	6,939.4	6,856.3	15.1	19.3	4.35	-5,087.0	-44.5	5,086.2	5,062.5	23.70	214.603		
6,988.2	6,850.2	6,961.9	6,878.8	15.1	19.3	4.71	-5,086.8	-44.1	5,055.0	5,032.2	22.81	221.654		
7,000.0	6,856.7	6,968.5	6,885.4	15.1	19.3	4.84	-5,086.7	-44.0	5,045.1	5,022.6	22.53	223.944		
7,050.0	6,882.5	6,994.6	6,911.5	15.2	19.4	5.48	-5,086.5	-43.5	5,002.1	4,980.7	21.40	233.782		
7,086.6	6,899.5	7,011.7	6,928.6	15.3	19.4	6.08	-5,086.4	-43.2	4,969.6	4,949.0	20.62	241.014		

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - EXIST DD NEI C18-20D - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 289-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,100.0	6,905.3	7,017.6	6,934.5	15.4	19.4	6.34	-5,086.3	-43.1	4,957.4	4,937.1	20.35	243.615	
7,150.0	6,924.9	7,035.7	6,952.6	15.7	19.4	7.55	-5,086.2	-42.8	4,911.3	4,891.9	19.45	252.561	
7,185.0	6,936.7	7,046.4	6,963.3	15.9	19.4	8.72	-5,086.1	-42.6	4,878.3	4,859.3	18.95	257.457	
7,200.0	6,941.2	7,050.5	6,967.4	16.0	19.4	9.35	-5,086.1	-42.5	4,864.0	4,845.2	18.78	259.001	
7,250.0	6,954.2	7,062.2	6,979.1	16.3	19.5	12.27	-5,086.0	-42.3	4,815.7	4,797.1	18.53	259.954	
7,283.4	6,961.0	7,068.2	6,985.1	16.6	19.5	15.48	-5,085.9	-42.2	4,782.9	4,764.1	18.78	254.635	
7,300.0	6,963.8	7,070.7	6,987.6	16.7	19.5	17.76	-5,085.9	-42.1	4,766.6	4,747.4	19.14	249.082	
7,350.0	6,970.0	7,076.1	6,993.0	17.2	19.5	31.09	-5,085.9	-42.0	4,717.0	4,694.6	22.37	210.884	
7,381.9	6,972.1	7,077.8	6,994.7	17.5	19.5	53.69	-5,085.8	-42.0	4,685.2	4,656.8	28.38	165.080	
7,400.0	6,972.7	7,078.2	6,995.1	17.7	19.5	77.92	-5,085.8	-42.0	4,667.1	4,634.8	32.27	144.647	
7,420.0	6,972.8	7,078.2	6,995.1	17.9	19.5	109.57	-5,085.8	-42.0	4,647.2	4,616.0	31.15	149.197	
7,480.3	6,972.2	7,077.2	6,994.1	18.5	19.5	109.36	-5,085.9	-42.0	4,586.9	4,555.1	31.80	144.261	
7,500.0	6,972.0	7,076.9	6,993.8	18.7	19.5	109.29	-5,085.9	-42.0	4,567.2	4,535.2	32.01	142.693	
7,578.7	6,971.3	7,075.7	6,992.6	19.7	19.5	109.02	-5,085.9	-42.1	4,488.6	4,455.7	32.93	136.292	
7,600.0	6,971.1	7,075.4	6,992.3	19.9	19.5	108.94	-5,085.9	-42.1	4,467.4	4,434.2	33.18	134.623	
7,677.1	6,970.4	7,074.2	6,991.1	20.9	19.5	108.67	-5,085.9	-42.1	4,390.3	4,356.2	34.18	128.465	
7,700.0	6,970.2	7,073.8	6,990.7	21.2	19.5	108.59	-5,085.9	-42.1	4,367.5	4,333.1	34.47	126.709	
7,775.6	6,969.5	7,072.7	6,989.6	22.2	19.5	108.33	-5,085.9	-42.1	4,292.1	4,256.6	35.52	120.849	
7,800.0	6,969.3	7,072.3	6,989.2	22.6	19.5	108.24	-5,085.9	-42.1	4,267.7	4,231.8	35.85	119.027	
7,874.0	6,968.6	7,071.1	6,988.0	23.7	19.5	107.98	-5,085.9	-42.1	4,193.8	4,156.9	36.94	113.523	
7,900.0	6,968.4	7,070.7	6,987.6	24.1	19.5	107.89	-5,085.9	-42.1	4,167.8	4,130.5	37.32	111.664	
7,972.4	6,967.8	7,069.6	6,986.5	25.2	19.5	107.63	-5,085.9	-42.2	4,095.5	4,057.1	38.44	106.542	
8,000.0	6,967.5	7,069.2	6,986.1	25.6	19.5	107.53	-5,085.9	-42.2	4,068.0	4,029.1	38.87	104.667	
8,070.8	6,966.9	7,068.1	6,985.0	26.7	19.5	107.27	-5,085.9	-42.2	3,997.3	3,957.3	40.00	99.931	
8,100.0	6,966.6	7,067.6	6,984.5	27.2	19.5	107.17	-5,085.9	-42.2	3,968.2	3,927.7	40.47	98.058	
8,169.3	6,966.0	7,066.5	6,983.4	28.3	19.5	106.92	-5,085.9	-42.2	3,899.0	3,857.4	41.61	93.700	
8,200.0	6,965.7	7,066.0	6,982.9	28.8	19.5	106.80	-5,085.9	-42.2	3,868.4	3,826.3	42.12	91.842	
8,267.7	6,965.1	7,064.9	6,981.9	30.0	19.5	106.56	-5,085.9	-42.2	3,800.8	3,757.5	43.27	87.844	
8,300.0	6,964.8	7,064.4	6,981.3	30.5	19.5	106.44	-5,085.9	-42.3	3,768.6	3,724.8	43.82	86.009	
8,366.1	6,964.2	7,063.4	6,980.3	31.7	19.5	106.20	-5,086.0	-42.3	3,702.6	3,657.6	44.96	82.349	
8,400.0	6,963.9	7,062.9	6,979.8	32.2	19.5	106.07	-5,086.0	-42.3	3,668.8	3,623.2	45.55	80.544	
8,464.5	6,963.3	7,061.8	6,978.7	33.4	19.5	105.83	-5,086.0	-42.3	3,604.4	3,557.7	46.69	77.199	
8,500.0	6,963.0	7,061.3	6,978.2	34.0	19.5	105.70	-5,086.0	-42.3	3,569.0	3,521.7	47.32	75.429	
8,563.0	6,962.4	7,060.3	6,977.2	35.1	19.5	105.47	-5,086.0	-42.3	3,506.2	3,457.7	48.45	72.373	
8,600.0	6,962.0	7,059.7	6,976.6	35.8	19.5	105.33	-5,086.0	-42.3	3,469.2	3,420.1	49.11	70.641	
8,661.4	6,961.5	7,058.7	6,975.6	36.9	19.5	105.10	-5,086.0	-42.4	3,408.0	3,357.7	50.23	67.851	
8,700.0	6,961.1	7,058.1	6,975.0	37.6	19.5	104.95	-5,086.0	-42.4	3,369.5	3,318.5	50.93	66.159	
8,759.8	6,960.6	7,057.1	6,974.0	38.7	19.4	104.73	-5,086.0	-42.4	3,309.8	3,257.7	52.03	63.612	
8,800.0	6,960.2	7,056.5	6,973.4	39.4	19.4	104.57	-5,086.0	-42.4	3,269.7	3,216.9	52.77	61.961	
8,858.2	6,959.7	7,055.5	6,972.4	40.5	19.4	104.35	-5,086.0	-42.4	3,211.6	3,157.8	53.85	59.635	
8,900.0	6,959.3	7,054.8	6,971.8	41.2	19.4	104.19	-5,086.0	-42.4	3,170.0	3,115.3	54.63	58.025	
8,956.7	6,958.8	7,053.9	6,970.8	42.3	19.4	103.98	-5,086.0	-42.4	3,113.5	3,057.8	55.70	55.901	
9,000.0	6,958.4	7,053.2	6,970.1	43.1	19.4	103.81	-5,086.0	-42.4	3,070.3	3,013.8	56.51	54.332	
9,055.1	6,957.9	7,052.3	6,969.2	44.1	19.4	103.60	-5,086.0	-42.5	3,015.3	2,957.8	57.55	52.392	
9,100.0	6,957.5	7,051.6	6,968.5	44.9	19.4	103.43	-5,086.0	-42.5	2,970.6	2,912.2	58.40	50.863	
9,153.5	6,957.0	7,050.7	6,967.6	45.9	19.4	103.22	-5,086.1	-42.5	2,917.2	2,857.8	59.42	49.091	
9,200.0	6,956.6	7,050.0	6,966.9	46.8	19.4	103.04	-5,086.1	-42.5	2,870.9	2,810.6	60.31	47.601	
9,251.9	6,956.1	7,049.1	6,966.0	47.8	19.4	102.83	-5,086.1	-42.5	2,819.1	2,757.8	61.31	45.982	
9,300.0	6,955.7	7,048.3	6,965.3	48.7	19.4	102.65	-5,086.1	-42.5	2,771.2	2,709.0	62.23	44.531	
9,350.4	6,955.2	7,047.5	6,964.4	49.6	19.4	102.45	-5,086.1	-42.5	2,721.0	2,657.8	63.20	43.051	
9,400.0	6,954.8	7,046.7	6,963.6	50.6	19.4	102.25	-5,086.1	-42.6	2,671.6	2,607.4	64.16	41.638	
9,448.8	6,954.3	7,045.9	6,962.8	51.5	19.4	102.06	-5,086.1	-42.6	2,623.0	2,557.9	65.11	40.285	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - EXIST DD NEI C18-20D - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 usft
Survey Program: 289-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	6,953.9	7,045.1	6,962.0	52.5	19.4	101.86	-5,086.1	-42.6	2,572.0	2,505.9	66.11	38.908		
9,547.2	6,953.4	7,044.3	6,961.2	53.4	19.4	101.67	-5,086.1	-42.6	2,525.0	2,457.9	67.03	37.671		
9,600.0	6,952.9	7,043.4	6,960.3	54.4	19.4	101.46	-5,086.1	-42.6	2,472.4	2,404.4	68.06	36.329		
9,645.6	6,952.5	7,042.7	6,959.6	55.2	19.4	101.28	-5,086.1	-42.6	2,427.0	2,358.0	68.95	35.199		
9,700.0	6,952.0	7,041.8	6,958.7	56.3	19.4	101.06	-5,086.1	-42.6	2,372.9	2,302.9	70.02	33.891		
9,744.1	6,951.6	7,041.0	6,957.9	57.1	19.4	100.88	-5,086.1	-42.7	2,329.0	2,258.1	70.88	32.857		
9,800.0	6,951.1	7,040.1	6,957.0	58.2	19.4	100.66	-5,086.1	-42.7	2,273.4	2,201.4	71.98	31.582		
9,842.5	6,950.7	7,039.4	6,956.3	59.0	19.4	100.49	-5,086.1	-42.7	2,231.1	2,158.3	72.82	30.638		
9,900.0	6,950.2	7,038.4	6,955.3	60.1	19.4	100.25	-5,086.2	-42.7	2,173.9	2,100.0	73.96	29.394		
9,940.9	6,949.8	7,037.7	6,954.7	60.9	19.4	100.09	-5,086.2	-42.7	2,133.3	2,058.5	74.77	28.532		
10,000.0	6,949.3	7,036.8	6,953.7	62.0	19.4	99.85	-5,086.2	-42.7	2,074.5	1,998.6	75.94	27.319		
10,039.3	6,948.9	7,036.1	6,953.0	62.8	19.4	99.69	-5,086.2	-42.7	2,035.4	1,958.7	76.72	26.531		
10,100.0	6,948.4	7,035.1	6,952.0	64.0	19.4	99.44	-5,086.2	-42.8	1,975.2	1,897.3	77.92	25.348		
10,137.8	6,948.0	7,034.4	6,951.4	64.7	19.4	99.28	-5,086.2	-42.8	1,937.7	1,859.0	78.68	24.629		
10,200.0	6,947.5	7,033.4	6,950.3	65.9	19.4	99.03	-5,086.2	-42.8	1,875.9	1,796.0	79.91	23.474		
10,236.2	6,947.1	7,032.8	6,949.7	66.6	19.4	98.88	-5,086.2	-42.8	1,840.0	1,759.4	80.64	22.819		
10,300.0	6,946.6	7,031.7	6,948.6	67.8	19.4	98.61	-5,086.2	-42.8	1,776.7	1,694.8	81.91	21.692		
10,334.6	6,946.3	7,031.1	6,948.0	68.5	19.4	98.47	-5,086.2	-42.8	1,742.4	1,659.8	82.60	21.094		
10,400.0	6,945.7	7,030.0	6,946.9	69.8	19.4	98.20	-5,086.2	-42.9	1,677.6	1,593.7	83.91	19.994		
10,433.0	6,945.4	7,029.5	6,946.4	70.4	19.4	98.06	-5,086.2	-42.9	1,644.9	1,560.3	84.57	19.451		
10,500.0	6,944.7	7,028.3	6,945.2	71.7	19.4	97.78	-5,086.2	-42.9	1,578.6	1,492.7	85.91	18.376		
10,531.5	6,944.5	7,027.8	6,944.7	72.3	19.4	97.65	-5,086.2	-42.9	1,547.5	1,461.0	86.54	17.882		
10,600.0	6,943.8	7,026.6	6,943.5	73.7	19.4	97.36	-5,086.2	-42.9	1,479.8	1,391.9	87.91	16.833		
10,629.9	6,943.6	7,026.1	6,943.0	74.2	19.4	97.23	-5,086.3	-42.9	1,450.3	1,361.7	88.51	16.385		
10,700.0	6,942.9	7,024.9	6,941.8	75.6	19.4	96.93	-5,086.3	-42.9	1,381.1	1,291.2	89.92	15.359		
10,728.3	6,942.7	7,024.4	6,941.3	76.2	19.4	96.81	-5,086.3	-42.9	1,353.2	1,262.7	90.49	14.954		
10,800.0	6,942.0	7,022.0	6,938.9	77.6	19.4	96.22	-5,086.3	-43.0	1,282.6	1,190.6	91.97	13.946		
10,826.7	6,941.8	7,022.0	6,938.9	78.1	19.4	96.22	-5,086.3	-43.0	1,256.3	1,163.8	92.49	13.583		
10,900.0	6,941.1	7,021.4	6,938.4	79.5	19.4	96.08	-5,086.3	-43.0	1,184.4	1,090.4	93.93	12.608		
10,925.2	6,940.9	7,021.0	6,937.9	80.0	19.4	95.97	-5,086.3	-43.0	1,159.7	1,065.2	94.44	12.279		
11,000.0	6,940.2	7,019.7	6,936.6	81.5	19.4	95.65	-5,086.3	-43.0	1,086.4	990.5	95.94	11.324		
11,023.6	6,940.0	7,019.3	6,936.2	81.9	19.4	95.54	-5,086.3	-43.0	1,063.4	967.0	96.42	11.029		
11,100.0	6,939.3	7,017.9	6,934.8	83.4	19.4	95.21	-5,086.3	-43.1	988.9	891.0	97.95	10.096		
11,122.0	6,939.1	7,017.5	6,934.5	83.8	19.4	95.11	-5,086.3	-43.1	967.5	869.1	98.40	9.833		
11,200.0	6,938.4	7,016.2	6,933.1	85.4	19.4	94.77	-5,086.3	-43.1	892.0	792.0	99.96	8.923		
11,220.4	6,938.2	7,015.8	6,932.7	85.8	19.4	94.68	-5,086.3	-43.1	872.2	771.8	100.37	8.690		
11,300.0	6,937.4	7,014.4	6,931.3	87.3	19.4	94.34	-5,086.4	-43.1	795.7	693.8	101.97	7.804		
11,318.9	6,937.3	7,014.1	6,931.0	87.7	19.4	94.26	-5,086.4	-43.1	777.7	675.3	102.35	7.598		
11,400.0	6,936.5	7,012.7	6,929.6	89.3	19.4	93.90	-5,086.4	-43.2	700.6	596.6	103.98	6.738		
11,417.3	6,936.4	7,012.4	6,929.3	89.6	19.4	93.83	-5,086.4	-43.2	684.3	579.9	104.33	6.559		
11,500.0	6,935.6	7,010.9	6,927.9	91.3	19.4	93.47	-5,086.4	-43.2	607.0	501.0	105.98	5.727		
11,515.7	6,935.5	7,010.7	6,927.6	91.6	19.4	93.40	-5,086.4	-43.2	592.5	486.2	106.30	5.574		
11,600.0	6,934.7	7,009.2	6,926.1	93.2	19.4	93.03	-5,086.4	-43.2	515.8	407.8	107.99	4.776		
11,614.1	6,934.6	7,008.9	6,925.9	93.5	19.4	92.97	-5,086.4	-43.2	503.1	394.9	108.27	4.647		
11,700.0	6,933.8	7,007.5	6,924.4	95.2	19.4	92.60	-5,086.4	-43.2	428.5	318.5	109.99	3.896		
11,712.6	6,933.7	7,007.2	6,924.1	95.4	19.4	92.54	-5,086.4	-43.2	417.9	307.7	110.24	3.791		
11,800.0	6,932.9	7,005.7	6,922.6	97.1	19.4	92.16	-5,086.4	-43.3	348.2	236.2	111.98	3.109		
11,811.0	6,932.8	7,005.5	6,922.4	97.4	19.4	92.12	-5,086.4	-43.3	340.0	227.8	112.20	3.030		
11,900.0	6,932.0	7,004.0	6,920.9	99.1	19.4	91.73	-5,086.4	-43.3	280.7	166.7	113.98	2.463		
11,909.4	6,931.9	7,003.8	6,920.7	99.3	19.4	91.69	-5,086.4	-43.3	275.4	161.2	114.16	2.412		
12,000.0	6,931.0	7,002.2	6,919.2	101.1	19.4	91.30	-5,086.5	-43.3	237.4	121.5	115.97	2.047		
12,007.8	6,931.0	7,002.1	6,919.0	101.2	19.4	91.26	-5,086.5	-43.3	235.5	119.4	116.12	2.028		

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 289-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
12,062.2	6,930.5	7,001.2	6,918.1	102.3	19.4	91.03	-5,086.5	-43.4	229.2	112.0	117.20	1.955	CC, ES, SF
12,100.0	6,930.1	7,000.5	6,917.4	103.0	19.4	90.86	-5,086.5	-43.4	232.3	114.3	117.95	1.969	
12,106.3	6,930.1	7,000.4	6,917.3	103.2	19.4	90.84	-5,086.5	-43.4	233.4	115.3	118.08	1.976	
12,200.0	6,929.2	6,998.8	6,915.7	105.0	19.4	90.43	-5,086.5	-43.4	267.4	147.5	119.93	2.230	
12,204.7	6,929.2	6,998.7	6,915.6	105.1	19.4	90.41	-5,086.5	-43.4	269.9	149.8	120.03	2.248	
12,300.0	6,928.3	6,997.0	6,914.0	107.0	19.4	90.00	-5,086.5	-43.4	330.3	208.3	121.91	2.709	
12,303.1	6,928.3	6,997.0	6,913.9	107.1	19.4	89.98	-5,086.5	-43.4	332.5	210.5	121.97	2.726	
12,400.0	6,927.4	6,995.3	6,912.2	109.0	19.4	89.57	-5,086.5	-43.5	408.2	284.3	123.88	3.295	
12,401.5	6,927.4	6,995.3	6,912.2	109.0	19.4	89.56	-5,086.5	-43.5	409.5	285.6	123.91	3.305	
12,500.0	6,926.5	6,993.6	6,910.5	110.9	19.4	89.14	-5,086.5	-43.5	494.1	368.3	125.85	3.926	
12,598.4	6,925.6	6,991.9	6,908.8	112.9	19.4	88.71	-5,086.5	-43.5	583.1	455.3	127.78	4.563	
12,600.0	6,925.6	6,991.9	6,908.8	112.9	19.4	88.70	-5,086.5	-43.5	584.6	456.7	127.81	4.574	
12,696.8	6,924.7	6,990.2	6,907.1	114.8	19.4	88.29	-5,086.6	-43.6	674.7	545.0	129.70	5.202	
12,700.0	6,924.6	6,990.2	6,907.1	114.9	19.4	88.28	-5,086.6	-43.6	677.7	547.9	129.76	5.222	
12,795.2	6,923.8	6,988.5	6,905.4	116.8	19.4	87.87	-5,086.6	-43.6	768.0	636.4	131.62	5.835	
12,800.0	6,923.7	6,988.4	6,905.4	116.9	19.4	87.85	-5,086.6	-43.6	772.5	640.8	131.71	5.865	
12,893.7	6,922.9	6,986.8	6,903.7	118.7	19.4	87.45	-5,086.6	-43.6	862.4	728.9	133.53	6.458	
12,900.0	6,922.8	6,986.7	6,903.6	118.8	19.4	87.42	-5,086.6	-43.6	868.5	734.8	133.65	6.498	
12,992.1	6,922.0	6,985.1	6,902.1	120.6	19.4	87.03	-5,086.6	-43.6	957.6	822.2	135.44	7.071	
13,000.0	6,921.9	6,985.0	6,901.9	120.8	19.4	86.99	-5,086.6	-43.7	965.3	829.7	135.59	7.119	
13,090.5	6,921.1	6,983.5	6,900.4	122.6	19.4	86.61	-5,086.6	-43.7	1,053.4	916.1	137.33	7.671	
13,100.0	6,921.0	6,983.3	6,900.2	122.8	19.4	86.57	-5,086.6	-43.7	1,062.7	925.2	137.52	7.728	
13,188.9	6,920.2	6,981.8	6,898.7	124.5	19.3	86.19	-5,086.6	-43.7	1,149.7	1,010.5	139.23	8.258	
13,200.0	6,920.1	6,981.6	6,898.5	124.8	19.3	86.14	-5,086.6	-43.7	1,160.5	1,021.1	139.44	8.323	
13,287.4	6,919.3	6,980.1	6,897.0	126.5	19.3	85.77	-5,086.6	-43.7	1,246.3	1,105.2	141.11	8.832	
13,300.0	6,919.1	6,979.9	6,896.8	126.7	19.3	85.72	-5,086.6	-43.7	1,258.7	1,117.3	141.35	8.905	
13,385.8	6,918.4	6,978.4	6,895.3	128.4	19.3	85.35	-5,086.6	-43.8	1,343.1	1,200.2	142.99	9.394	
13,400.0	6,918.2	6,978.2	6,895.1	128.7	19.3	85.29	-5,086.6	-43.8	1,357.1	1,213.9	143.26	9.473	
13,484.2	6,917.5	6,976.7	6,893.7	130.4	19.3	84.94	-5,086.7	-43.8	1,440.2	1,295.4	144.86	9.942	
13,500.0	6,917.3	6,976.5	6,893.4	130.7	19.3	84.87	-5,086.7	-43.8	1,455.8	1,310.6	145.15	10.029	
13,582.6	6,916.6	6,975.1	6,892.0	132.3	19.3	84.52	-5,086.7	-43.8	1,537.4	1,390.7	146.72	10.479	
13,600.0	6,916.4	6,974.8	6,891.7	132.7	19.3	84.45	-5,086.7	-43.8	1,554.6	1,407.6	147.04	10.572	
13,681.1	6,915.6	6,973.4	6,890.3	134.3	19.3	84.11	-5,086.7	-43.9	1,634.8	1,486.3	148.57	11.004	
13,700.0	6,915.5	6,973.1	6,890.0	134.6	19.3	84.03	-5,086.7	-43.9	1,653.6	1,504.6	148.92	11.103	
13,779.5	6,914.7	6,971.7	6,888.6	136.2	19.3	83.70	-5,086.7	-43.9	1,732.3	1,581.9	150.41	11.517	
13,800.0	6,914.6	6,971.4	6,888.3	136.6	19.3	83.61	-5,086.7	-43.9	1,752.6	1,601.8	150.80	11.623	
13,877.9	6,913.8	6,970.0	6,887.0	138.2	19.3	83.29	-5,086.7	-43.9	1,829.9	1,677.7	152.25	12.019	
13,900.0	6,913.6	6,969.7	6,886.6	138.6	19.3	83.20	-5,086.7	-43.9	1,851.8	1,699.1	152.66	12.130	
13,976.3	6,912.9	6,968.4	6,885.3	140.1	19.3	82.88	-5,086.7	-44.0	1,927.6	1,773.5	154.08	12.511	
14,000.0	6,912.7	6,968.0	6,884.9	140.6	19.3	82.78	-5,086.7	-44.0	1,951.1	1,796.5	154.51	12.627	
14,074.8	6,912.0	6,966.7	6,883.6	142.0	19.3	82.47	-5,086.7	-44.0	2,025.3	1,869.5	155.83	12.997	
14,079.0	6,912.0	6,966.6	6,883.6	142.1	19.3	82.45	-5,086.7	-44.0	2,029.5	1,873.6	155.91	13.017	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - EXIST DD NEI C18-32D - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 289-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	172.70	-5,118.5	655.4	5,160.3				
98.4	98.4	83.7	83.7	0.1	0.1	172.70	-5,118.5	655.4	5,160.3	5,160.1	0.17	N/A	
100.0	100.0	85.3	85.3	0.1	0.1	172.70	-5,118.5	655.4	5,160.3	5,160.1	0.18	N/A	
196.8	196.8	183.1	183.1	0.3	0.2	172.70	-5,118.5	655.3	5,160.2	5,159.8	0.49	N/A	
200.0	200.0	186.3	186.3	0.3	0.2	172.70	-5,118.5	655.3	5,160.2	5,159.8	0.50	N/A	
295.3	295.3	282.5	282.5	0.5	0.3	172.71	-5,118.4	655.1	5,160.2	5,159.4	0.80	6,442.478	
300.0	300.0	287.3	287.3	0.5	0.3	172.71	-5,118.4	655.1	5,160.2	5,159.4	0.82	6,323.321	
393.7	393.7	382.0	382.0	0.8	0.5	172.71	-5,118.4	655.2	5,160.1	5,158.9	1.22	4,241.823	
400.0	400.0	388.3	388.3	0.8	0.5	172.71	-5,118.4	655.2	5,160.1	5,158.9	1.24	4,148.811	
492.1	492.1	486.1	486.1	1.0	0.7	172.72	-5,118.5	653.8	5,160.1	5,158.4	1.65	3,120.072	
500.0	500.0	510.5	510.4	1.0	0.7	172.73	-5,118.5	653.1	5,160.0	5,158.3	1.73	2,988.239	
590.5	590.5	635.0	634.8	1.2	1.0	172.79	-5,117.7	647.4	5,158.9	5,156.7	2.21	2,330.531	
600.0	600.0	635.0	634.8	1.2	1.0	172.79	-5,117.7	647.4	5,158.8	5,156.5	2.23	2,308.336	
689.0	689.0	796.9	796.2	1.4	1.4	172.93	-5,116.2	634.9	5,156.9	5,154.1	2.82	1,831.859	
700.0	700.0	810.0	809.3	1.4	1.4	172.94	-5,116.0	633.7	5,156.7	5,153.8	2.87	1,795.854	
787.4	787.4	886.3	885.1	1.6	1.7	173.03	-5,115.3	625.2	5,154.6	5,151.4	3.27	1,576.902	
800.0	800.0	897.2	895.9	1.7	1.7	173.05	-5,115.3	623.8	5,154.4	5,151.0	3.33	1,549.801	
885.8	885.8	1,030.8	1,028.0	1.9	2.1	173.27	-5,114.5	603.8	5,152.4	5,148.5	3.89	1,322.910	
900.0	900.0	1,064.9	1,061.6	1.9	2.2	173.33	-5,114.0	598.1	5,151.9	5,147.9	4.03	1,279.810	
984.2	984.2	1,114.8	1,110.7	2.1	2.4	173.43	-5,113.5	589.2	5,149.3	5,144.9	4.38	1,176.500	
1,000.0	1,000.0	1,123.8	1,119.6	2.1	2.5	173.45	-5,113.5	587.5	5,148.9	5,144.4	4.44	1,159.253	
1,082.7	1,082.7	1,195.0	1,189.2	2.3	2.7	173.61	-5,113.7	572.7	5,147.1	5,142.2	4.86	1,059.050	
1,100.0	1,100.0	1,195.0	1,189.2	2.3	2.7	173.61	-5,113.7	572.7	5,146.7	5,141.8	4.90	1,050.555	
1,181.1	1,181.1	1,272.0	1,264.1	2.5	3.1	173.81	-5,114.3	554.9	5,145.3	5,139.9	5.38	956.654	
1,200.0	1,200.0	1,297.9	1,289.2	2.6	3.2	173.88	-5,114.5	548.5	5,144.9	5,139.4	5.52	932.070	
1,279.5	1,279.5	1,405.0	1,392.4	2.7	3.8	137.71	-5,115.1	520.0	5,143.9	5,137.4	6.50	791.027	
1,300.0	1,300.0	1,432.1	1,418.4	2.8	3.9	137.81	-5,115.3	512.3	5,143.9	5,137.2	6.69	768.487	
1,300.8	1,300.8	1,433.1	1,419.4	2.8	3.9	137.81	-5,115.3	511.9	5,143.9	5,137.2	6.70	767.627	
1,377.9	1,377.8	1,494.8	1,478.2	3.0	4.3	138.03	-5,115.6	493.4	5,144.7	5,137.5	7.23	711.135	
1,400.0	1,399.8	1,509.7	1,492.3	3.0	4.4	138.08	-5,115.7	488.8	5,145.3	5,138.0	7.37	697.804	
1,476.4	1,475.9	1,560.6	1,540.6	3.2	4.7	138.24	-5,116.3	472.5	5,148.7	5,140.8	7.85	655.589	
1,500.0	1,499.5	1,580.0	1,558.9	3.2	4.8	138.31	-5,116.7	466.1	5,150.1	5,142.1	8.02	641.871	
1,574.8	1,573.7	1,634.4	1,610.2	3.4	5.2	138.48	-5,117.6	448.0	5,155.8	5,147.3	8.55	602.874	
1,600.0	1,598.7	1,654.2	1,628.8	3.5	5.3	138.54	-5,118.0	441.3	5,158.1	5,149.4	8.74	590.268	
1,673.2	1,671.1	1,790.3	1,756.5	3.7	6.2	139.11	-5,120.3	394.3	5,166.0	5,156.1	9.84	524.800	
1,700.0	1,697.5	1,837.0	1,799.9	3.7	6.6	139.31	-5,120.5	377.1	5,168.8	5,158.5	10.23	505.138	
1,771.6	1,767.9	1,883.4	1,842.8	4.0	6.9	139.45	-5,120.7	359.4	5,177.4	5,166.7	10.76	481.185	
1,800.1	1,795.7	1,896.7	1,855.1	4.0	7.1	139.48	-5,120.8	354.3	5,181.4	5,170.5	10.93	474.127	
1,870.1	1,864.2	1,929.2	1,884.9	4.3	7.3	139.66	-5,121.2	341.5	5,191.8	5,180.4	11.38	456.402	
1,900.0	1,893.4	1,966.0	1,918.7	4.4	7.6	139.88	-5,122.0	326.7	5,196.5	5,184.8	11.74	442.469	
1,968.5	1,960.4	2,222.0	2,149.9	4.6	9.8	141.42	-5,121.7	217.1	5,206.6	5,192.5	14.11	368.950	
2,000.0	1,991.3	2,245.0	2,170.3	4.7	10.0	141.57	-5,121.2	206.5	5,210.6	5,196.2	14.42	361.332	
2,066.9	2,056.7	2,281.3	2,202.5	5.0	10.4	141.80	-5,120.5	189.6	5,219.3	5,204.4	14.96	348.854	
2,100.0	2,089.1	2,299.2	2,218.3	5.1	10.6	141.91	-5,120.2	181.3	5,223.8	5,208.6	15.23	342.971	
2,165.3	2,153.0	2,351.0	2,264.1	5.3	11.1	142.25	-5,119.6	157.0	5,233.0	5,217.1	15.92	328.722	
2,200.0	2,186.9	2,358.8	2,270.9	5.5	11.1	142.30	-5,119.5	153.3	5,238.1	5,222.0	16.09	325.451	
2,263.8	2,249.3	2,479.0	2,377.1	5.7	12.2	143.06	-5,117.3	97.0	5,247.1	5,229.8	17.38	301.910	
2,300.0	2,284.7	2,479.0	2,377.1	5.8	12.2	143.06	-5,117.3	97.0	5,252.4	5,234.9	17.49	300.293	
2,362.2	2,345.5	2,521.6	2,414.8	6.1	12.6	143.33	-5,116.5	77.3	5,261.5	5,243.5	18.04	291.600	
2,400.0	2,382.5	2,536.7	2,428.3	6.2	12.7	143.42	-5,116.2	70.4	5,267.3	5,249.1	18.29	288.008	
2,460.6	2,441.8	2,561.1	2,450.0	6.5	13.0	143.57	-5,115.9	59.2	5,277.1	5,258.4	18.68	282.430	
2,500.0	2,480.3	2,608.0	2,491.8	6.6	13.4	143.86	-5,115.7	38.0	5,283.8	5,264.6	19.20	275.157	

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 HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - EXIST DD NEI C18-32D - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 289-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
2,559.0	2,538.1	2,608.0	2,491.8	6.9	13.4	143.86	-5,115.7	38.0	5,293.8	5,274.4	19.39	273.028	
2,600.0	2,578.1	2,759.0	2,625.7	7.0	14.8	144.80	-5,113.4	-31.8	5,300.5	5,279.6	20.89	253.690	
2,657.5	2,634.4	2,791.9	2,654.6	7.3	15.1	145.01	-5,112.6	-47.5	5,309.8	5,288.4	21.40	248.088	
2,700.0	2,675.9	2,816.1	2,675.7	7.5	15.4	145.16	-5,112.0	-59.2	5,316.9	5,295.1	21.78	244.148	
2,755.9	2,730.6	2,864.0	2,717.6	7.7	15.9	145.47	-5,111.1	-82.5	5,326.5	5,304.1	22.43	237.470	
2,800.0	2,773.8	2,864.0	2,717.6	7.9	15.9	145.47	-5,111.1	-82.5	5,334.3	5,311.7	22.57	236.345	
2,854.3	2,826.9	2,864.0	2,717.6	8.1	15.9	145.47	-5,111.1	-82.5	5,344.3	5,321.6	22.74	234.990	
2,857.4	2,829.9	2,864.0	2,717.6	8.1	15.9	145.47	-5,111.1	-82.5	5,344.9	5,322.2	22.75	234.915	
2,900.0	2,871.6	2,905.2	2,753.4	8.3	16.3	145.83	-5,110.5	-102.9	5,352.6	5,329.2	23.33	229.391	
2,952.7	2,923.5	2,924.1	2,769.8	8.4	16.5	146.05	-5,110.4	-112.4	5,361.9	5,338.2	23.69	226.323	
3,000.0	2,970.1	2,941.1	2,784.4	8.6	16.7	146.25	-5,110.3	-120.9	5,369.8	5,345.8	24.01	223.663	
3,051.2	3,020.7	2,993.0	2,829.1	8.7	17.3	146.66	-5,110.6	-147.4	5,378.2	5,353.5	24.69	217.793	
3,100.0	3,069.1	2,993.0	2,829.1	8.9	17.3	146.74	-5,110.6	-147.4	5,385.5	5,360.6	24.82	216.941	
3,149.6	3,118.3	2,993.0	2,829.1	9.0	17.3	146.82	-5,110.6	-147.4	5,392.6	5,367.6	24.95	216.170	
3,200.0	3,168.5	3,020.5	2,852.6	9.1	17.6	147.06	-5,110.9	-161.6	5,399.4	5,374.0	25.37	212.861	
3,248.0	3,216.3	3,044.0	2,872.7	9.2	17.8	147.27	-5,111.2	-173.8	5,405.5	5,379.7	25.73	210.120	
3,300.0	3,268.2	3,069.5	2,894.4	9.3	18.1	147.48	-5,111.7	-187.1	5,411.6	5,385.4	26.11	207.249	
3,346.4	3,314.6	3,092.4	2,913.9	9.4	18.4	147.67	-5,112.1	-199.1	5,416.6	5,390.1	26.45	204.817	
3,400.0	3,368.1	3,121.0	2,938.3	9.5	18.7	147.89	-5,112.8	-214.1	5,421.9	5,395.0	26.85	201.925	
3,444.9	3,413.0	3,378.0	3,159.3	9.6	21.4	149.32	-5,114.5	-345.2	5,425.1	5,395.6	29.50	183.897	
3,457.5	3,425.6	3,378.0	3,159.3	9.6	21.4	-174.17	-5,114.5	-345.2	5,425.7	5,396.2	29.53	183.718	
3,500.0	3,468.1	3,378.0	3,159.3	9.7	21.4	-174.17	-5,114.5	-345.2	5,427.8	5,398.2	29.61	183.318	
3,543.3	3,511.4	3,427.7	3,202.5	9.7	21.9	-173.91	-5,114.0	-369.7	5,429.9	5,399.8	30.16	180.059	
3,600.0	3,568.1	3,453.9	3,225.5	9.8	22.1	-173.78	-5,114.0	-382.3	5,433.2	5,402.6	30.51	178.067	
3,641.7	3,609.9	3,473.4	3,242.7	9.9	22.3	-173.68	-5,114.0	-391.5	5,435.8	5,405.0	30.78	176.623	
3,700.0	3,668.1	3,506.0	3,271.6	10.0	22.6	-173.52	-5,114.3	-406.6	5,439.7	5,408.5	31.20	174.377	
3,740.1	3,708.3	3,529.7	3,292.6	10.1	22.8	-173.41	-5,114.6	-417.4	5,442.6	5,411.1	31.48	172.903	
3,800.0	3,768.1	3,578.0	3,335.7	10.2	23.3	-173.18	-5,115.3	-439.4	5,447.1	5,415.1	32.01	170.167	
3,838.6	3,806.7	3,609.2	3,363.5	10.2	23.6	-173.04	-5,115.8	-453.5	5,450.1	5,417.7	32.35	168.450	
3,900.0	3,868.1	3,706.4	3,450.5	10.3	24.4	-172.58	-5,117.1	-497.0	5,454.9	5,421.6	33.30	163.802	
3,937.0	3,905.1	3,763.0	3,501.2	10.4	24.9	-172.32	-5,117.5	-522.0	5,457.5	5,423.7	33.85	161.206	
4,000.0	3,968.1	3,817.8	3,550.5	10.5	25.4	-172.07	-5,117.7	-546.0	5,462.0	5,427.6	34.44	158.604	
4,035.4	4,003.6	3,843.3	3,573.4	10.6	25.6	-171.96	-5,117.9	-557.1	5,464.7	5,429.9	34.72	157.386	
4,100.0	4,068.1	3,892.0	3,617.3	10.7	26.1	-171.74	-5,118.4	-578.2	5,469.7	5,434.4	35.26	155.135	
4,133.8	4,102.0	3,925.7	3,647.6	10.8	26.4	-171.59	-5,118.7	-592.9	5,472.4	5,436.8	35.62	153.625	
4,200.0	4,168.1	3,997.5	3,711.9	10.9	27.0	-171.25	-5,119.1	-624.9	5,477.7	5,441.3	36.38	150.552	
4,232.3	4,200.4	4,035.8	3,746.0	10.9	27.4	-171.07	-5,119.1	-642.4	5,480.3	5,443.5	36.80	148.917	
4,300.0	4,268.1	4,128.5	3,827.5	11.1	28.3	-170.62	-5,118.6	-686.5	5,485.6	5,447.8	37.84	144.956	
4,330.7	4,298.8	4,148.0	3,844.5	11.1	28.6	-170.52	-5,118.3	-696.1	5,488.0	5,449.9	38.10	144.057	
4,400.0	4,368.1	4,187.1	3,878.4	11.2	29.0	-170.32	-5,117.8	-715.4	5,493.8	5,455.1	38.63	142.204	
4,429.1	4,397.3	4,200.4	3,890.0	11.3	29.1	-170.25	-5,117.7	-722.1	5,496.3	5,457.5	38.83	141.558	
4,500.0	4,468.1	4,232.8	3,918.1	11.4	29.5	-170.08	-5,117.6	-738.1	5,502.9	5,463.6	39.30	140.024	
4,527.5	4,495.7	4,245.4	3,929.0	11.5	29.6	-170.02	-5,117.6	-744.4	5,505.6	5,466.2	39.48	139.441	
4,600.0	4,568.1	4,280.5	3,959.5	11.6	30.0	-169.84	-5,117.8	-761.9	5,513.2	5,473.2	39.99	137.874	
4,626.0	4,594.1	4,309.8	3,984.8	11.7	30.3	-169.69	-5,117.9	-776.5	5,516.0	5,475.6	40.34	136.752	
4,700.0	4,668.1	4,392.9	4,056.7	11.8	31.2	-169.26	-5,118.1	-818.3	5,523.9	5,482.6	41.32	133.675	
4,724.4	4,692.5	4,424.6	4,084.2	11.8	31.5	-169.09	-5,118.1	-834.2	5,526.6	5,484.9	41.68	132.591	
4,800.0	4,768.1	4,534.0	4,179.9	12.0	32.6	-168.56	-5,118.0	-887.0	5,534.5	5,491.7	42.87	129.092	
4,822.8	4,791.0	4,534.0	4,179.9	12.0	32.6	-168.56	-5,118.0	-887.0	5,536.9	5,494.0	42.92	129.003	
4,900.0	4,868.1	4,598.8	4,237.4	12.2	33.2	-168.25	-5,118.1	-916.9	5,545.2	5,501.6	43.64	127.073	
4,921.2	4,889.4	4,612.4	4,249.5	12.2	33.3	-168.19	-5,118.2	-923.2	5,547.6	5,503.8	43.80	126.658	
5,000.0	4,968.1	4,970.4	4,570.0	12.4	36.6	-166.56	-5,111.2	-1,082.2	5,553.5	5,506.5	46.98	118.207	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - EXIST DD NEI C18-32D - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 usft
Survey Program: 289-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,019.7	4,987.8	4,984.0	4,582.3	12.4	36.7	-166.50	-5,110.7	-1,088.2	5,554.8	5,507.7	47.13	117.850		
5,100.0	5,068.1	5,196.9	4,776.0	12.6	38.5	-165.60	-5,101.7	-1,176.1	5,560.5	5,511.5	48.94	113.609		
5,118.1	5,086.2	5,211.6	4,789.5	12.6	38.6	-165.54	-5,100.9	-1,181.7	5,561.4	5,512.3	49.08	113.302		
5,200.0	5,168.1	5,278.6	4,851.5	12.8	39.1	-165.28	-5,097.7	-1,206.9	5,565.7	5,515.9	49.73	111.925		
5,216.5	5,184.7	5,292.3	4,864.2	12.8	39.2	-165.23	-5,097.1	-1,211.9	5,566.6	5,516.7	49.86	111.649		
5,300.0	5,268.1	5,348.4	4,916.7	13.0	39.6	-165.03	-5,095.0	-1,231.7	5,571.4	5,521.0	50.38	110.580		
5,314.9	5,283.1	5,358.1	4,925.8	13.0	39.7	-164.99	-5,094.7	-1,235.0	5,572.3	5,521.8	50.47	110.401		
5,400.0	5,368.1	5,432.0	4,995.7	13.1	40.2	-164.75	-5,093.0	-1,258.8	5,577.8	5,526.7	51.10	109.158		
5,413.4	5,381.5	5,432.0	4,995.7	13.2	40.2	-164.75	-5,093.0	-1,258.8	5,578.6	5,527.5	51.13	109.114		
5,500.0	5,468.1	5,491.4	5,052.3	13.3	40.5	-164.57	-5,092.1	-1,277.0	5,584.7	5,533.1	51.64	108.155		
5,511.8	5,479.9	5,501.1	5,061.5	13.4	40.6	-164.54	-5,092.0	-1,280.0	5,585.6	5,533.8	51.71	108.008		
5,600.0	5,568.1	5,587.5	5,143.8	13.5	41.1	-164.27	-5,090.9	-1,306.4	5,592.0	5,539.7	52.36	106.793		
5,610.2	5,578.4	5,605.3	5,160.7	13.6	41.2	-164.22	-5,090.7	-1,311.7	5,592.8	5,540.3	52.48	106.579		
5,700.0	5,668.1	5,749.9	5,299.8	13.7	42.0	-163.83	-5,089.1	-1,351.2	5,598.8	5,545.4	53.35	104.935		
5,708.6	5,676.8	5,762.5	5,312.0	13.8	42.0	-163.79	-5,089.0	-1,354.3	5,599.3	5,545.9	53.43	104.802		
5,800.0	5,768.1	5,869.8	5,416.5	13.9	42.5	-163.55	-5,088.4	-1,378.7	5,604.8	5,550.8	54.05	103.705		
5,807.1	5,775.2	5,876.7	5,423.3	14.0	42.5	-163.54	-5,088.4	-1,380.1	5,605.3	5,551.2	54.09	103.637		
5,900.0	5,868.1	5,998.4	5,542.8	14.1	43.0	-163.32	-5,089.1	-1,402.7	5,610.8	5,556.1	54.67	102.627		
5,905.5	5,873.6	6,011.5	5,555.8	14.1	43.0	-163.30	-5,089.2	-1,404.8	5,611.1	5,556.4	54.72	102.544		
6,000.0	5,968.1	6,331.0	5,873.5	14.3	43.7	-162.99	-5,090.6	-1,437.1	5,614.2	5,558.6	55.55	101.606		
6,003.9	5,972.1	6,331.0	5,873.5	14.3	43.7	-162.99	-5,090.6	-1,437.1	5,614.2	5,558.7	55.56	101.045		
6,100.0	6,068.1	6,407.7	5,950.1	14.5	43.8	-162.96	-5,090.8	-1,440.4	5,615.7	5,559.8	55.85	100.546		
6,102.3	6,070.5	6,409.2	5,951.6	14.5	43.8	-162.96	-5,090.8	-1,440.5	5,615.7	5,559.9	55.86	100.535		
6,200.0	6,168.1	6,488.3	6,030.7	14.7	43.9	-162.93	-5,091.8	-1,442.9	5,617.8	5,561.7	56.15	100.056		
6,200.8	6,168.9	6,489.3	6,031.7	14.7	43.9	-162.93	-5,091.8	-1,443.0	5,617.8	5,561.7	56.15	100.052		
6,288.5	6,256.6	6,716.6	6,258.9	14.9	44.0	-162.93	-5,094.5	-1,443.9	5,619.3	5,562.8	56.49	99.481		
6,299.2	6,267.3	6,737.4	6,279.8	14.9	44.1	16.86	-5,094.4	-1,443.7	5,619.2	5,562.7	56.48	99.494		
6,300.0	6,268.1	6,739.0	6,281.3	14.9	44.1	16.86	-5,094.4	-1,443.7	5,619.2	5,562.7	56.48	99.490		
6,350.0	6,318.1	6,836.0	6,378.3	15.0	44.1	16.95	-5,093.3	-1,444.3	5,616.3	5,559.8	56.45	99.494		
6,397.6	6,365.3	6,887.0	6,429.3	15.1	44.2	17.12	-5,092.3	-1,445.1	5,610.2	5,554.1	56.15	99.911		
6,400.0	6,367.7	6,889.3	6,431.6	15.1	44.2	17.13	-5,092.2	-1,445.2	5,609.8	5,553.7	56.13	99.942		
6,450.0	6,416.8	6,937.6	6,479.9	15.1	44.2	17.41	-5,091.4	-1,445.7	5,600.1	5,544.5	55.56	100.801		
6,496.0	6,461.3	6,991.7	6,534.0	15.1	44.3	17.75	-5,090.4	-1,446.1	5,588.2	5,533.4	54.81	101.948		
6,500.0	6,465.1	6,999.9	6,542.2	15.1	44.3	17.79	-5,090.3	-1,446.1	5,587.1	5,532.3	54.74	102.058		
6,550.0	6,512.4	7,102.0	6,644.3	15.1	44.3	18.36	-5,087.6	-1,447.4	5,570.5	5,516.8	53.72	103.694		
6,594.5	6,553.4	7,102.0	6,644.3	15.1	44.3	18.84	-5,087.6	-1,447.4	5,553.2	5,500.6	52.56	105.651		
6,600.0	6,558.4	7,102.0	6,644.3	15.1	44.3	18.91	-5,087.6	-1,447.4	5,550.9	5,498.5	52.41	105.921		
6,650.0	6,603.0	7,153.4	6,695.6	15.1	44.4	19.68	-5,086.0	-1,448.3	5,528.2	5,477.3	50.93	108.555		
6,692.9	6,639.9	7,174.2	6,716.4	15.1	44.4	20.41	-5,085.5	-1,448.7	5,506.7	5,457.2	49.49	111.264		
6,700.0	6,645.9	7,177.6	6,719.8	15.1	44.4	20.54	-5,085.4	-1,448.8	5,502.9	5,453.7	49.24	111.751		
6,750.0	6,686.8	7,200.8	6,743.0	15.1	44.4	21.58	-5,084.9	-1,449.3	5,475.0	5,427.6	47.40	115.496		
6,791.3	6,719.1	7,230.0	6,772.2	15.1	44.5	22.62	-5,084.4	-1,450.0	5,450.1	5,404.3	45.80	118.995		
6,800.0	6,725.7	7,230.0	6,772.2	15.1	44.5	22.84	-5,084.4	-1,450.0	5,444.6	5,399.2	45.45	119.790		
6,850.0	6,762.3	7,252.4	6,794.6	15.1	44.5	24.33	-5,084.0	-1,450.5	5,411.8	5,368.4	43.42	124.637		
6,889.7	6,789.7	7,277.8	6,820.0	15.1	44.5	25.77	-5,083.5	-1,451.1	5,384.1	5,342.3	41.80	128.806		
6,900.0	6,796.5	7,284.1	6,826.3	15.1	44.5	26.17	-5,083.4	-1,451.3	5,376.7	5,335.3	41.38	129.926		
6,950.0	6,828.0	7,313.3	6,855.4	15.1	44.6	28.39	-5,082.9	-1,452.0	5,339.5	5,300.1	39.41	135.495		
6,988.2	6,850.2	7,333.8	6,875.9	15.1	44.6	30.40	-5,082.6	-1,452.6	5,309.8	5,271.8	38.01	139.686		
7,000.0	6,856.7	7,339.8	6,881.9	15.1	44.6	31.09	-5,082.5	-1,452.7	5,300.4	5,262.8	37.59	140.988		
7,050.0	6,882.5	7,364.1	6,906.2	15.2	44.6	34.39	-5,082.1	-1,453.4	5,259.5	5,223.4	36.07	145.814		
7,086.6	6,899.5	7,381.1	6,923.2	15.3	44.6	37.29	-5,081.8	-1,453.8	5,228.5	5,193.3	35.22	148.435		
7,100.0	6,905.3	7,386.8	6,929.0	15.4	44.6	38.47	-5,081.7	-1,454.0	5,217.0	5,182.0	34.98	149.130		

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - EXIST DD NEI C18-32D - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 usft
Survey Program: 289-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	
7,150.0	6,924.9	7,406.2	6,948.3	15.7	44.7	43.51	-5,081.4	-1,454.6	5,173.2	5,138.8	34.48	150.054		
7,185.0	6,936.7	7,417.8	6,959.9	15.9	44.7	47.73	-5,081.1	-1,455.0	5,141.9	5,107.4	34.52	148.946		
7,200.0	6,941.2	7,422.2	6,964.3	16.0	44.7	49.73	-5,081.1	-1,455.1	5,128.3	5,093.7	34.64	148.057		
7,250.0	6,954.2	7,434.6	6,976.7	16.3	44.7	57.35	-5,080.8	-1,455.5	5,082.5	5,047.1	35.41	143.537		
7,283.4	6,961.0	7,441.0	6,983.0	16.6	44.7	63.30	-5,080.7	-1,455.7	5,051.5	5,015.4	36.13	139.816		
7,300.0	6,963.8	7,443.5	6,985.6	16.7	44.7	66.48	-5,080.6	-1,455.8	5,036.1	4,999.6	36.48	138.032		
7,350.0	6,970.0	7,448.8	6,990.9	17.2	44.7	76.94	-5,080.5	-1,456.0	4,989.1	4,951.8	37.31	133.708		
7,381.9	6,972.1	7,450.3	6,992.4	17.5	44.7	84.07	-5,080.5	-1,456.0	4,959.1	4,921.7	37.45	132.435		
7,400.0	6,972.7	7,450.6	6,992.6	17.7	44.7	88.18	-5,080.5	-1,456.1	4,942.0	4,904.7	37.33	132.393		
7,420.0	6,972.8	7,450.3	6,992.3	17.9	44.7	92.69	-5,080.5	-1,456.0	4,923.2	4,886.1	37.04	132.899		
7,480.3	6,972.2	7,448.5	6,990.5	18.5	44.7	92.63	-5,080.5	-1,456.0	4,866.4	4,828.7	37.69	129.102		
7,500.0	6,972.0	7,447.9	6,990.0	18.7	44.7	92.61	-5,080.6	-1,456.0	4,847.8	4,809.9	37.91	127.890		
7,578.7	6,971.3	7,445.6	6,987.7	19.7	44.7	92.53	-5,080.6	-1,455.9	4,773.8	4,735.0	38.84	122.919		
7,600.0	6,971.1	7,445.0	6,987.0	19.9	44.7	92.51	-5,080.6	-1,455.9	4,753.9	4,714.8	39.09	121.617		
7,677.1	6,970.4	7,442.7	6,984.8	20.9	44.7	92.43	-5,080.7	-1,455.8	4,681.5	4,641.5	40.09	116.786		
7,700.0	6,970.2	7,442.0	6,984.1	21.2	44.7	92.41	-5,080.7	-1,455.8	4,660.1	4,619.8	40.38	115.402		
7,775.6	6,969.5	7,439.9	6,981.9	22.2	44.7	92.33	-5,080.7	-1,455.7	4,589.5	4,548.1	41.44	110.758		
7,800.0	6,969.3	7,439.2	6,981.2	22.6	44.7	92.31	-5,080.7	-1,455.7	4,566.7	4,524.9	41.78	109.308		
7,874.0	6,968.6	7,437.0	6,979.1	23.7	44.7	92.23	-5,080.8	-1,455.6	4,497.7	4,454.9	42.87	104.903		
7,900.0	6,968.4	7,436.3	6,978.4	24.1	44.7	92.21	-5,080.8	-1,455.6	4,473.5	4,430.3	43.26	103.410		
7,972.4	6,967.8	7,434.2	6,976.3	25.2	44.7	92.14	-5,080.8	-1,455.5	4,406.3	4,361.9	44.38	99.274		
8,000.0	6,967.5	7,433.4	6,975.5	25.6	44.7	92.11	-5,080.8	-1,455.5	4,380.7	4,335.9	44.81	97.755		
8,070.8	6,966.9	7,431.4	6,973.5	26.7	44.7	92.04	-5,080.9	-1,455.4	4,315.1	4,269.1	45.95	93.900		
8,100.0	6,966.6	7,430.6	6,972.7	27.2	44.7	92.01	-5,080.9	-1,455.4	4,288.1	4,241.7	46.42	92.369		
8,169.3	6,966.0	7,428.7	6,970.7	28.3	44.7	91.94	-5,080.9	-1,455.3	4,224.2	4,176.6	47.57	88.794		
8,200.0	6,965.7	7,427.8	6,969.9	28.8	44.7	91.91	-5,080.9	-1,455.3	4,195.9	4,147.8	48.08	87.264		
8,267.7	6,965.1	7,425.9	6,968.0	30.0	44.7	91.85	-5,081.0	-1,455.2	4,133.7	4,084.5	49.23	83.960		
8,300.0	6,964.8	7,425.0	6,967.1	30.5	44.7	91.82	-5,081.0	-1,455.2	4,104.1	4,054.3	49.78	82.438		
8,366.1	6,964.2	7,423.2	6,965.3	31.7	44.7	91.75	-5,081.0	-1,455.1	4,043.6	3,992.6	50.93	79.393		
8,400.0	6,963.9	7,422.2	6,964.3	32.2	44.7	91.72	-5,081.1	-1,455.1	4,012.6	3,961.1	51.52	77.887		
8,464.5	6,963.3	7,420.5	6,962.6	33.4	44.7	91.66	-5,081.1	-1,455.0	3,953.8	3,901.2	52.66	75.086		
8,500.0	6,963.0	7,419.5	6,961.6	34.0	44.7	91.62	-5,081.1	-1,455.0	3,921.6	3,868.3	53.28	73.600		
8,563.0	6,962.4	7,417.8	6,959.9	35.1	44.7	91.56	-5,081.1	-1,455.0	3,864.5	3,810.1	54.41	71.027		
8,600.0	6,962.0	7,416.8	6,958.9	35.8	44.7	91.53	-5,081.2	-1,454.9	3,831.0	3,775.9	55.07	69.565		
8,661.4	6,961.5	7,415.1	6,957.2	36.9	44.7	91.47	-5,081.2	-1,454.9	3,775.6	3,719.4	56.18	67.203		
8,700.0	6,961.1	7,414.1	6,956.1	37.6	44.7	91.43	-5,081.2	-1,454.8	3,740.9	3,684.0	56.88	65.768		
8,759.8	6,960.6	7,412.4	6,954.5	38.7	44.7	91.38	-5,081.2	-1,454.8	3,687.2	3,629.3	57.97	63.601		
8,800.0	6,960.2	7,411.4	6,953.5	39.4	44.7	91.34	-5,081.3	-1,454.8	3,651.3	3,592.6	58.71	62.194		
8,858.2	6,959.7	7,409.8	6,951.9	40.5	44.7	91.29	-5,081.3	-1,454.7	3,599.4	3,539.6	59.78	60.207		
8,900.0	6,959.3	7,408.7	6,950.8	41.2	44.7	91.25	-5,081.3	-1,454.7	3,562.2	3,501.7	60.55	58.829		
8,956.7	6,958.8	7,407.2	6,949.3	42.3	44.7	91.20	-5,081.3	-1,454.6	3,512.0	3,450.4	61.61	57.009		
9,000.0	6,958.4	7,406.0	6,948.1	43.1	44.7	91.16	-5,081.4	-1,454.6	3,473.8	3,411.4	62.41	55.661		
9,055.1	6,957.9	7,404.6	6,946.7	44.1	44.7	91.10	-5,081.4	-1,454.5	3,425.3	3,361.9	63.44	53.993		
9,100.0	6,957.5	7,403.4	6,945.5	44.9	44.7	91.06	-5,081.4	-1,454.5	3,386.0	3,321.7	64.28	52.676		
9,153.5	6,957.0	7,402.0	6,944.1	45.9	44.7	91.01	-5,081.4	-1,454.5	3,339.2	3,274.0	65.29	51.148		
9,200.0	6,956.6	7,400.8	6,942.9	46.8	44.6	90.97	-5,081.5	-1,454.4	3,298.8	3,232.7	66.16	49.862		
9,251.9	6,956.1	7,399.4	6,941.5	47.8	44.6	90.93	-5,081.5	-1,454.4	3,253.9	3,186.7	67.14	48.463		
9,300.0	6,955.7	7,398.2	6,940.3	48.7	44.6	90.88	-5,081.5	-1,454.4	3,212.5	3,144.4	68.05	47.208		
9,350.4	6,955.2	7,396.9	6,939.0	49.6	44.6	90.84	-5,081.5	-1,454.3	3,169.3	3,100.3	69.01	45.927		
9,400.0	6,954.8	7,395.6	6,937.7	50.6	44.6	90.79	-5,081.5	-1,454.3	3,126.9	3,057.0	69.95	44.703		
9,448.8	6,954.3	7,394.3	6,936.4	51.5	44.6	90.75	-5,081.6	-1,454.2	3,085.5	3,014.6	70.88	43.532		
9,500.0	6,953.9	7,393.0	6,935.1	52.5	44.6	90.70	-5,081.6	-1,454.2	3,042.2	2,970.4	71.85	42.339		

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - EXIST DD NEI C18-32D - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 289-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,547.2	6,953.4	7,391.8	6,933.9	53.4	44.6	90.66	-5,081.6	-1,454.2	3,002.5	2,929.8	72.76	41.269	
9,600.0	6,952.9	7,390.5	6,932.6	54.4	44.6	90.61	-5,081.6	-1,454.1	2,958.5	2,884.7	73.77	40.107	
9,645.6	6,952.5	7,389.3	6,931.4	55.2	44.6	90.57	-5,081.7	-1,454.1	2,920.6	2,846.0	74.64	39.129	
9,700.0	6,952.0	7,387.9	6,930.1	56.3	44.6	90.53	-5,081.7	-1,454.0	2,875.8	2,800.1	75.68	37.998	
9,744.1	6,951.6	7,386.8	6,928.9	57.1	44.6	90.49	-5,081.7	-1,454.0	2,839.7	2,763.2	76.53	37.105	
9,800.0	6,951.1	7,385.4	6,927.5	58.2	44.6	90.44	-5,081.7	-1,454.0	2,794.2	2,716.6	77.61	36.005	
9,842.5	6,950.7	7,384.4	6,926.5	59.0	44.6	90.40	-5,081.7	-1,453.9	2,759.9	2,681.5	78.43	35.192	
9,900.0	6,950.2	7,382.9	6,925.0	60.1	44.6	90.35	-5,081.8	-1,453.9	2,713.9	2,634.3	79.53	34.122	
9,940.9	6,949.8	7,381.9	6,924.0	60.9	44.6	90.32	-5,081.8	-1,453.9	2,681.4	2,601.1	80.32	33.382	
10,000.0	6,949.3	7,380.5	6,922.6	62.0	44.6	90.26	-5,081.8	-1,453.8	2,634.9	2,553.4	81.47	32.343	
10,039.3	6,948.9	7,379.5	6,921.6	62.8	44.6	90.23	-5,081.8	-1,453.8	2,604.2	2,522.0	82.23	31.671	
10,100.0	6,948.4	7,378.0	6,920.1	64.0	44.6	90.18	-5,081.9	-1,453.8	2,557.4	2,474.0	83.40	30.663	
10,137.8	6,948.0	7,377.1	6,919.2	64.7	44.6	90.15	-5,081.9	-1,453.7	2,528.5	2,444.4	84.13	30.053	
10,200.0	6,947.5	7,375.5	6,917.7	65.9	44.6	90.09	-5,081.9	-1,453.7	2,481.4	2,396.1	85.34	29.077	
10,236.2	6,947.1	7,374.7	6,916.8	66.6	44.6	90.06	-5,081.9	-1,453.7	2,454.4	2,368.3	86.04	28.524	
10,300.0	6,946.6	7,373.1	6,915.2	67.8	44.6	90.01	-5,081.9	-1,453.6	2,407.3	2,320.0	87.28	27.580	
10,334.6	6,946.3	7,372.3	6,914.4	68.5	44.6	89.98	-5,082.0	-1,453.6	2,382.0	2,294.1	87.96	27.082	
10,400.0	6,945.7	7,370.7	6,912.8	69.8	44.6	89.92	-5,082.0	-1,453.6	2,335.0	2,245.8	89.23	26.169	
10,433.0	6,945.4	7,369.9	6,912.0	70.4	44.6	89.90	-5,082.0	-1,453.5	2,311.6	2,221.8	89.87	25.721	
10,500.0	6,944.7	7,368.3	6,910.4	71.7	44.6	89.84	-5,082.0	-1,453.5	2,264.9	2,173.7	91.18	24.841	
10,531.5	6,944.5	7,367.5	6,909.7	72.3	44.6	89.81	-5,082.0	-1,453.5	2,243.3	2,151.5	91.79	24.439	
10,600.0	6,943.8	7,365.9	6,908.0	73.7	44.6	89.76	-5,082.1	-1,453.4	2,197.1	2,104.0	93.13	23.592	
10,629.9	6,943.6	7,365.2	6,907.3	74.2	44.6	89.73	-5,082.1	-1,453.4	2,177.3	2,083.6	93.71	23.234	
10,700.0	6,942.9	7,358.0	6,900.1	75.6	44.6	89.48	-5,082.2	-1,453.2	2,131.8	2,036.7	95.09	22.419	
10,728.3	6,942.7	7,358.0	6,900.1	76.2	44.6	89.48	-5,082.2	-1,453.2	2,113.8	2,018.2	95.64	22.101	
10,800.0	6,942.0	7,358.0	6,900.1	77.6	44.6	89.48	-5,082.2	-1,453.2	2,069.3	1,972.3	97.04	21.324	
10,826.7	6,941.8	7,358.0	6,900.1	78.1	44.6	89.48	-5,082.2	-1,453.2	2,053.1	1,955.5	97.56	21.044	
10,900.0	6,941.1	7,358.0	6,900.1	79.5	44.6	89.48	-5,082.2	-1,453.2	2,009.8	1,910.8	98.99	20.302	
10,925.2	6,940.9	7,358.0	6,900.1	80.0	44.6	89.48	-5,082.2	-1,453.2	1,995.4	1,895.9	99.49	20.057	
11,000.0	6,940.2	7,358.0	6,900.1	81.5	44.6	89.48	-5,082.2	-1,453.2	1,953.7	1,852.7	100.95	19.353	
11,023.6	6,940.0	7,358.0	6,900.1	81.9	44.6	89.48	-5,082.2	-1,453.2	1,940.9	1,839.5	101.41	19.139	
11,100.0	6,939.3	7,354.0	6,896.1	83.4	44.6	89.34	-5,082.3	-1,453.1	1,901.1	1,798.2	102.91	18.473	
11,122.0	6,939.1	7,353.4	6,895.5	83.8	44.6	89.32	-5,082.3	-1,453.1	1,890.0	1,786.7	103.34	18.289	
11,200.0	6,938.4	7,351.5	6,893.6	85.4	44.6	89.25	-5,082.3	-1,453.0	1,852.4	1,747.6	104.87	17.663	
11,220.4	6,938.2	7,351.0	6,893.1	85.8	44.6	89.24	-5,082.3	-1,453.0	1,843.0	1,737.7	105.28	17.506	
11,300.0	6,937.4	7,349.0	6,891.1	87.3	44.6	89.17	-5,082.3	-1,453.0	1,808.0	1,701.1	106.84	16.923	
11,318.9	6,937.3	7,348.5	6,890.7	87.7	44.6	89.15	-5,082.4	-1,453.0	1,800.1	1,692.9	107.21	16.791	
11,400.0	6,936.5	7,346.5	6,888.6	89.3	44.6	89.08	-5,082.4	-1,452.9	1,768.1	1,659.3	108.80	16.251	
11,417.3	6,936.4	7,346.1	6,888.2	89.6	44.6	89.06	-5,082.4	-1,452.9	1,761.7	1,652.5	109.14	16.141	
11,500.0	6,935.6	7,344.0	6,886.2	91.3	44.6	88.99	-5,082.4	-1,452.8	1,733.0	1,622.3	110.77	15.646	
11,515.7	6,935.5	7,343.6	6,885.8	91.6	44.6	88.98	-5,082.4	-1,452.8	1,728.0	1,616.9	111.08	15.557	
11,600.0	6,934.7	7,341.5	6,883.7	93.2	44.6	88.91	-5,082.5	-1,452.8	1,703.1	1,590.4	112.73	15.108	
11,614.1	6,934.6	7,341.2	6,883.3	93.5	44.6	88.89	-5,082.5	-1,452.8	1,699.4	1,586.3	113.01	15.037	
11,700.0	6,933.8	7,339.0	6,881.2	95.2	44.6	88.82	-5,082.5	-1,452.7	1,678.7	1,564.0	114.70	14.635	
11,712.6	6,933.7	7,338.7	6,880.9	95.4	44.6	88.81	-5,082.5	-1,452.7	1,676.0	1,561.1	114.95	14.581	
11,800.0	6,932.9	7,336.6	6,878.7	97.1	44.6	88.73	-5,082.6	-1,452.6	1,659.9	1,543.2	116.67	14.227	
11,811.0	6,932.8	7,336.3	6,878.4	97.4	44.6	88.72	-5,082.6	-1,452.6	1,658.2	1,541.3	116.88	14.186	
11,900.0	6,932.0	7,334.1	6,876.2	99.1	44.6	88.64	-5,082.6	-1,452.6	1,647.0	1,528.3	118.64	13.882	
11,909.4	6,931.9	7,333.8	6,876.0	99.3	44.6	88.64	-5,082.6	-1,452.6	1,646.1	1,527.2	118.82	13.853	
12,000.0	6,931.0	7,331.6	6,873.7	101.1	44.6	88.56	-5,082.6	-1,452.5	1,640.0	1,519.4	120.61	13.598	
12,007.8	6,931.0	7,331.4	6,873.5	101.2	44.6	88.55	-5,082.6	-1,452.5	1,639.8	1,519.0	120.76	13.579	
12,063.9	6,930.5	7,330.0	6,872.1	102.3	44.6	88.50	-5,082.7	-1,452.5	1,638.8	1,516.9	121.86	13.448 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 HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - EXIST DD NEI C18-32D - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 289-MWD												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
12,100.0	6,930.1	7,329.1	6,871.2	103.0	44.6	88.47	-5,082.7	-1,452.4	1,639.2	1,516.6	122.58	13.373	ES
12,106.3	6,930.1	7,328.9	6,871.0	103.2	44.6	88.46	-5,082.7	-1,452.4	1,639.3	1,516.6	122.70	13.361	
12,200.0	6,929.2	7,326.5	6,868.7	105.0	44.6	88.38	-5,082.7	-1,452.4	1,644.4	1,519.9	124.55	13.203	
12,204.7	6,929.2	7,326.4	6,868.6	105.1	44.6	88.38	-5,082.7	-1,452.4	1,644.8	1,520.2	124.64	13.197	
12,300.0	6,928.3	7,324.0	6,866.2	107.0	44.6	88.29	-5,082.8	-1,452.3	1,655.7	1,529.2	126.52	13.087	
12,303.1	6,928.3	7,324.0	6,866.1	107.1	44.6	88.29	-5,082.8	-1,452.3	1,656.2	1,529.6	126.58	13.084	
12,400.0	6,927.4	7,321.5	6,863.7	109.0	44.6	88.21	-5,082.8	-1,452.3	1,672.9	1,544.4	128.49	13.020	
12,401.5	6,927.4	7,321.5	6,863.6	109.0	44.6	88.21	-5,082.8	-1,452.3	1,673.2	1,544.7	128.52	13.019	
12,500.0	6,926.5	7,319.0	6,861.2	110.9	44.6	88.12	-5,082.9	-1,452.2	1,695.8	1,565.3	130.46	12.999	SF
12,598.4	6,925.6	7,316.5	6,858.7	112.9	44.6	88.03	-5,082.9	-1,452.1	1,723.7	1,591.3	132.40	13.019	
12,600.0	6,925.6	7,316.5	6,858.7	112.9	44.6	88.03	-5,082.9	-1,452.1	1,724.2	1,591.8	132.43	13.020	
12,696.8	6,924.7	7,314.1	6,856.2	114.8	44.6	87.95	-5,082.9	-1,452.1	1,756.7	1,622.4	134.34	13.077	
12,700.0	6,924.6	7,314.0	6,856.1	114.9	44.6	87.94	-5,082.9	-1,452.1	1,757.9	1,623.5	134.40	13.079	
12,795.2	6,923.8	7,311.6	6,853.7	116.8	44.6	87.86	-5,083.0	-1,452.0	1,794.5	1,658.2	136.28	13.168	
12,800.0	6,923.7	7,311.5	6,853.6	116.9	44.6	87.85	-5,083.0	-1,452.0	1,796.4	1,660.1	136.38	13.173	
12,893.7	6,922.9	7,309.1	6,851.3	118.7	44.5	87.77	-5,083.0	-1,451.9	1,836.8	1,698.6	138.22	13.289	
12,900.0	6,922.8	7,308.9	6,851.1	118.8	44.5	87.77	-5,083.0	-1,451.9	1,839.7	1,701.3	138.35	13.297	
12,992.1	6,922.0	7,306.6	6,848.8	120.6	44.5	87.69	-5,083.1	-1,451.9	1,883.3	1,743.1	140.16	13.436	
13,000.0	6,921.9	7,306.4	6,848.6	120.8	44.5	87.68	-5,083.1	-1,451.9	1,887.2	1,746.9	140.32	13.449	
13,090.5	6,921.1	7,304.1	6,846.3	122.6	44.5	87.60	-5,083.1	-1,451.8	1,933.6	1,791.5	142.11	13.607	
13,100.0	6,921.0	7,303.9	6,846.0	122.8	44.5	87.59	-5,083.1	-1,451.8	1,938.7	1,796.4	142.29	13.625	
13,188.9	6,920.2	7,301.6	6,843.8	124.5	44.5	87.51	-5,083.1	-1,451.7	1,987.6	1,843.6	144.05	13.798	
13,200.0	6,920.1	7,301.4	6,843.5	124.8	44.5	87.50	-5,083.1	-1,451.7	1,993.9	1,849.6	144.26	13.821	
13,287.4	6,919.3	7,299.2	6,841.3	126.5	44.5	87.42	-5,083.2	-1,451.7	2,044.9	1,898.9	145.99	14.007	
13,300.0	6,919.1	7,298.8	6,841.0	126.7	44.5	87.41	-5,083.2	-1,451.7	2,052.5	1,906.2	146.24	14.035	
13,385.8	6,918.4	7,296.7	6,838.8	128.4	44.5	87.34	-5,083.2	-1,451.6	2,105.2	1,957.3	147.93	14.231	
13,400.0	6,918.2	7,296.3	6,838.5	128.7	44.5	87.32	-5,083.2	-1,451.6	2,114.2	1,966.0	148.21	14.265	
13,484.2	6,917.5	7,294.2	6,836.3	130.4	44.5	87.25	-5,083.3	-1,451.6	2,168.4	2,018.5	149.87	14.468	
13,500.0	6,917.3	7,293.8	6,835.9	130.7	44.5	87.24	-5,083.3	-1,451.5	2,178.7	2,028.5	150.18	14.507	
13,582.6	6,916.6	7,291.7	6,833.8	132.3	44.5	87.16	-5,083.3	-1,451.5	2,234.0	2,082.2	151.81	14.716	
13,600.0	6,916.4	7,291.2	6,833.4	132.7	44.5	87.15	-5,083.3	-1,451.5	2,245.8	2,093.7	152.15	14.760	
13,681.1	6,915.6	7,289.2	6,831.3	134.3	44.5	87.07	-5,083.4	-1,451.4	2,302.0	2,148.3	153.75	14.972	
13,700.0	6,915.5	7,288.7	6,830.8	134.6	44.5	87.06	-5,083.4	-1,451.4	2,315.4	2,161.2	154.13	15.023	
13,779.5	6,914.7	7,286.7	6,828.8	136.2	44.5	86.99	-5,083.4	-1,451.4	2,372.2	2,216.5	155.69	15.236	
13,800.0	6,914.6	7,286.1	6,828.3	136.6	44.5	86.97	-5,083.4	-1,451.3	2,387.0	2,230.9	156.10	15.292	
13,877.9	6,913.8	7,284.1	6,826.3	138.2	44.5	86.90	-5,083.4	-1,451.3	2,444.2	2,286.6	157.63	15.506	
13,900.0	6,913.6	7,283.6	6,825.7	138.6	44.5	86.88	-5,083.5	-1,451.3	2,460.7	2,302.6	158.07	15.567	
13,976.3	6,912.9	7,281.6	6,823.8	140.1	44.5	86.81	-5,083.5	-1,451.2	2,518.1	2,358.5	159.57	15.780	
14,000.0	6,912.7	7,281.0	6,823.2	140.6	44.5	86.79	-5,083.5	-1,451.2	2,536.1	2,376.1	160.04	15.847	
14,074.8	6,912.0	7,279.1	6,821.3	142.0	44.5	86.72	-5,083.5	-1,451.2	2,593.6	2,432.2	161.45	16.064	
14,079.0	6,912.0	7,279.0	6,821.2	142.1	44.5	86.72	-5,083.5	-1,451.2	2,596.8	2,435.3	161.53	16.077	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - EXIST DD NEI C18-33D - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 351-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	172.18	-5,118.5	702.8	5,166.5				
98.4	98.4	84.2	84.2	0.1	0.1	172.18	-5,118.5	702.7	5,166.5	5,166.3	0.18	N/A	
100.0	100.0	85.9	85.9	0.1	0.1	172.18	-5,118.5	702.7	5,166.5	5,166.3	0.18	N/A	
196.8	196.8	185.4	185.4	0.3	0.2	172.19	-5,118.5	702.4	5,166.4	5,165.9	0.50	N/A	
200.0	200.0	188.7	188.7	0.3	0.2	172.19	-5,118.5	702.3	5,166.4	5,165.9	0.51	N/A	
295.3	295.3	286.6	286.6	0.5	0.3	172.19	-5,118.4	701.8	5,166.3	5,165.5	0.82	6,330.096	
300.0	300.0	291.5	291.5	0.5	0.3	172.19	-5,118.4	701.7	5,166.3	5,165.5	0.83	6,213.109	
367.4	367.4	351.0	351.0	0.7	0.3	172.20	-5,118.4	701.3	5,166.2	5,165.1	1.04	4,961.498	
393.7	393.7	351.0	351.0	0.8	0.3	172.20	-5,118.4	701.3	5,166.3	5,165.2	1.10	4,695.445	
400.0	400.0	351.0	351.0	0.8	0.3	172.20	-5,118.4	701.3	5,166.3	5,165.2	1.11	4,635.815	
492.1	492.1	429.1	429.1	1.0	0.5	172.21	-5,118.8	700.1	5,166.7	5,165.2	1.50	3,453.041	
500.0	500.0	433.7	433.6	1.0	0.5	172.21	-5,118.9	700.0	5,166.8	5,165.2	1.52	3,389.768	
590.5	590.5	479.0	479.0	1.2	0.6	172.23	-5,119.6	698.9	5,168.0	5,166.1	1.83	2,825.147	
600.0	600.0	479.0	479.0	1.2	0.6	172.23	-5,119.6	698.9	5,168.1	5,166.3	1.85	2,792.818	
689.0	689.0	535.5	535.4	1.4	0.8	172.25	-5,121.1	696.8	5,170.1	5,167.9	2.19	2,365.234	
700.0	700.0	541.1	541.0	1.4	0.8	172.26	-5,121.3	696.5	5,170.4	5,168.2	2.22	2,324.700	
787.4	787.4	607.0	606.7	1.6	0.9	172.30	-5,124.0	692.7	5,173.3	5,170.7	2.58	2,005.962	
800.0	800.0	607.0	606.7	1.7	0.9	172.30	-5,124.0	692.7	5,173.7	5,171.1	2.61	1,984.332	
885.8	885.8	627.0	626.7	1.9	1.0	172.32	-5,125.1	691.3	5,177.2	5,174.4	2.85	1,815.693	
900.0	900.0	632.1	631.7	1.9	1.0	172.32	-5,125.4	691.0	5,177.9	5,175.0	2.90	1,787.843	
984.2	984.2	649.0	648.6	2.1	1.0	172.34	-5,126.4	689.8	5,182.5	5,179.3	3.13	1,656.380	
1,000.0	1,000.0	649.0	648.6	2.1	1.0	172.34	-5,126.4	689.8	5,183.5	5,180.3	3.16	1,638.162	
1,082.7	1,082.7	705.8	705.1	2.3	1.2	172.39	-5,130.6	685.5	5,188.7	5,185.2	3.50	1,480.652	
1,100.0	1,100.0	731.0	730.1	2.3	1.3	172.41	-5,132.7	683.5	5,190.0	5,186.4	3.61	1,436.516	
1,181.1	1,181.1	731.0	730.1	2.5	1.3	172.41	-5,132.7	683.5	5,196.2	5,192.4	3.80	1,369.141	
1,200.0	1,200.0	731.0	730.1	2.6	1.3	172.41	-5,132.7	683.5	5,197.8	5,194.0	3.84	1,354.406	
1,279.5	1,279.5	795.7	794.2	2.7	1.5	135.88	-5,138.8	677.8	5,205.3	5,201.1	4.20	1,240.483	
1,300.0	1,300.0	805.3	803.7	2.8	1.5	135.86	-5,139.8	676.9	5,207.6	5,203.3	4.27	1,219.381	
1,377.9	1,377.8	859.0	856.8	3.0	1.7	135.81	-5,145.8	671.5	5,217.8	5,213.2	4.60	1,133.337	
1,400.0	1,399.8	859.0	856.8	3.0	1.7	135.76	-5,145.8	671.5	5,221.1	5,216.4	4.65	1,121.847	
1,476.4	1,475.9	859.0	856.8	3.2	1.7	135.58	-5,145.8	671.5	5,233.8	5,229.0	4.83	1,083.306	
1,500.0	1,499.5	859.0	856.8	3.2	1.7	135.52	-5,145.8	671.5	5,238.3	5,233.4	4.89	1,072.092	
1,574.8	1,573.7	923.9	920.8	3.4	1.9	135.45	-5,154.0	664.1	5,253.0	5,247.7	5.28	995.235	
1,600.0	1,598.7	934.0	930.7	3.5	2.0	135.40	-5,155.4	662.8	5,258.5	5,253.2	5.37	978.965	
1,673.2	1,671.1	987.0	982.6	3.7	2.2	135.30	-5,163.2	655.8	5,275.9	5,270.2	5.73	920.813	
1,700.0	1,697.5	987.0	982.6	3.7	2.2	135.21	-5,163.2	655.8	5,282.6	5,276.8	5.80	911.265	
1,771.6	1,767.9	987.0	982.6	4.0	2.2	134.92	-5,163.2	655.8	5,301.9	5,295.9	5.99	885.079	
1,800.1	1,795.7	987.0	982.6	4.0	2.2	134.80	-5,163.2	655.8	5,310.2	5,304.1	6.07	875.197	
1,870.1	1,864.2	1,050.5	1,044.6	4.3	2.4	135.02	-5,173.4	646.5	5,330.6	5,324.1	6.50	819.730	
1,900.0	1,893.4	1,064.4	1,058.2	4.4	2.5	135.07	-5,175.8	644.4	5,339.6	5,332.9	6.64	804.078	
1,968.5	1,960.4	1,116.0	1,108.3	4.6	2.7	135.26	-5,184.8	636.1	5,360.4	5,353.4	7.04	761.693	
2,000.0	1,991.3	1,116.0	1,108.3	4.7	2.7	135.26	-5,184.8	636.1	5,370.1	5,362.9	7.13	753.031	
2,066.9	2,056.7	1,116.0	1,108.3	5.0	2.7	135.26	-5,184.8	636.1	5,391.1	5,383.8	7.34	734.846	
2,100.0	2,089.1	1,152.3	1,143.4	5.1	2.9	135.39	-5,191.4	629.9	5,401.5	5,393.9	7.59	711.706	
2,165.3	2,153.0	1,179.0	1,169.2	5.3	3.1	135.49	-5,196.5	625.2	5,422.6	5,414.7	7.91	685.867	
2,200.0	2,186.9	1,193.1	1,182.8	5.5	3.1	135.55	-5,199.3	622.7	5,433.9	5,425.8	8.07	673.000	
2,263.8	2,249.3	1,244.0	1,231.8	5.7	3.4	135.74	-5,209.6	613.4	5,455.2	5,446.7	8.49	642.645	
2,300.0	2,284.7	1,244.0	1,231.8	5.8	3.4	135.74	-5,209.6	613.4	5,467.3	5,458.7	8.61	635.289	
2,362.2	2,345.5	1,268.8	1,255.6	6.1	3.5	135.84	-5,214.8	608.7	5,488.6	5,479.6	8.92	615.378	
2,400.0	2,382.5	1,294.9	1,280.6	6.2	3.7	135.94	-5,220.3	603.6	5,501.6	5,492.4	9.16	600.771	
2,460.6	2,441.8	1,336.6	1,320.5	6.5	3.9	136.11	-5,229.2	595.5	5,522.6	5,513.0	9.54	578.804	
2,500.0	2,480.3	1,373.0	1,355.3	6.6	4.1	136.25	-5,237.0	588.2	5,536.3	5,526.5	9.83	563.139	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 351-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,559.0	2,538.1	1,373.0	1,355.3	6.9	4.1	136.25	-5,237.0	588.2	5,557.2	5,547.2	10.03	554.081	
2,600.0	2,578.1	1,373.0	1,355.3	7.0	4.1	136.25	-5,237.0	588.2	5,572.0	5,561.8	10.17	548.030	
2,657.5	2,634.4	1,427.9	1,407.6	7.3	4.5	136.47	-5,249.2	576.6	5,592.6	5,581.9	10.63	526.351	
2,700.0	2,675.9	1,443.9	1,422.7	7.5	4.6	136.54	-5,252.9	573.0	5,608.2	5,597.3	10.85	517.038	
2,755.9	2,730.6	1,464.7	1,442.4	7.7	4.7	136.63	-5,257.7	568.2	5,628.9	5,617.8	11.14	505.339	
2,800.0	2,773.8	1,501.0	1,476.5	7.9	5.0	136.79	-5,266.5	559.5	5,645.6	5,634.2	11.47	492.401	
2,854.3	2,826.9	1,501.0	1,476.5	8.1	5.0	136.79	-5,266.5	559.5	5,666.2	5,654.6	11.65	486.301	
2,857.4	2,829.9	1,501.0	1,476.5	8.1	5.0	136.79	-5,266.5	559.5	5,667.4	5,655.7	11.66	485.968	
2,900.0	2,871.6	1,501.0	1,476.5	8.3	5.0	137.03	-5,266.5	559.5	5,683.7	5,671.9	11.78	482.384	
2,952.7	2,923.5	1,501.0	1,476.5	8.4	5.0	137.32	-5,266.5	559.5	5,703.7	5,691.8	11.90	479.132	
3,000.0	2,970.1	1,544.2	1,516.9	8.6	5.3	137.75	-5,277.4	548.9	5,720.9	5,708.6	12.24	467.444	
3,051.2	3,020.7	1,559.6	1,531.3	8.7	5.4	138.08	-5,281.4	545.1	5,739.4	5,727.0	12.43	461.871	
3,100.0	3,069.1	1,574.4	1,545.1	8.9	5.5	138.38	-5,285.3	541.4	5,756.7	5,744.1	12.60	456.723	
3,149.6	3,118.3	1,629.0	1,595.7	9.0	5.8	138.82	-5,300.5	527.9	5,774.4	5,761.4	12.98	444.845	
3,200.0	3,168.5	1,629.0	1,595.7	9.1	5.8	139.05	-5,300.5	527.9	5,791.3	5,778.3	13.07	442.966	
3,248.0	3,216.3	1,629.0	1,595.7	9.2	5.8	139.27	-5,300.5	527.9	5,807.3	5,794.1	13.15	441.514	
3,300.0	3,268.2	1,649.0	1,614.3	9.3	6.0	139.57	-5,306.2	522.9	5,824.2	5,810.9	13.34	436.726	
3,346.4	3,314.6	1,692.9	1,654.8	9.4	6.3	139.90	-5,318.7	511.9	5,838.9	5,825.3	13.62	428.761	
3,400.0	3,368.1	1,743.9	1,702.0	9.5	6.6	140.27	-5,333.3	499.2	5,855.1	5,841.2	13.94	419.924	
3,444.9	3,413.0	1,758.0	1,715.1	9.6	6.7	140.49	-5,337.3	495.6	5,868.2	5,854.2	14.07	417.140	
3,457.5	3,425.6	1,758.0	1,715.1	9.6	6.7	177.04	-5,337.3	495.6	5,871.9	5,857.8	14.10	416.452	
3,500.0	3,468.1	1,758.0	1,715.1	9.7	6.7	177.04	-5,337.3	495.6	5,884.3	5,870.1	14.17	415.168	
3,543.3	3,511.4	1,806.2	1,759.5	9.7	7.1	177.17	-5,351.3	483.2	5,896.7	5,882.2	14.52	406.151	
3,600.0	3,568.1	1,827.2	1,778.7	9.8	7.2	177.23	-5,357.6	477.5	5,913.6	5,898.8	14.74	401.169	
3,641.7	3,609.9	1,842.6	1,792.8	9.9	7.4	177.28	-5,362.2	473.2	5,926.2	5,911.3	14.90	397.614	
3,700.0	3,668.1	1,886.0	1,832.1	10.0	7.7	177.41	-5,375.7	460.9	5,944.1	5,928.9	15.25	389.759	
3,740.1	3,708.3	1,886.0	1,832.1	10.1	7.7	177.41	-5,375.7	460.9	5,956.6	5,941.2	15.33	388.590	
3,800.0	3,768.1	1,886.0	1,832.1	10.2	7.7	177.41	-5,375.7	460.9	5,975.5	5,960.1	15.44	386.897	
3,838.6	3,806.7	1,919.9	1,862.7	10.2	8.0	177.52	-5,386.4	450.9	5,987.8	5,972.1	15.73	380.687	
3,900.0	3,868.1	1,946.6	1,886.7	10.3	8.2	177.60	-5,395.0	443.0	6,007.7	5,991.7	16.01	375.178	
3,937.0	3,905.1	1,962.6	1,901.1	10.4	8.3	177.65	-5,400.2	438.3	6,019.9	6,003.7	16.18	371.963	
4,000.0	3,968.1	2,015.0	1,948.0	10.5	8.8	177.81	-5,417.5	422.7	6,041.0	6,024.4	16.63	363.281	
4,035.4	4,003.6	2,015.0	1,948.0	10.6	8.8	177.81	-5,417.5	422.7	6,052.8	6,036.1	16.70	362.464	
4,100.0	4,068.1	2,015.0	1,948.0	10.7	8.8	177.81	-5,417.5	422.7	6,074.9	6,058.1	16.83	361.021	
4,133.8	4,102.0	2,057.1	1,985.6	10.8	9.2	177.95	-5,431.7	409.8	6,086.5	6,069.3	17.17	354.551	
4,200.0	4,168.1	2,093.9	2,018.1	10.9	9.5	178.07	-5,444.1	398.2	6,109.4	6,091.9	17.53	348.415	
4,232.3	4,200.4	2,111.7	2,033.8	10.9	9.7	178.13	-5,450.2	392.5	6,120.7	6,103.0	17.71	345.538	
4,300.0	4,268.1	2,151.2	2,068.6	11.1	10.0	178.26	-5,463.8	379.4	6,144.7	6,126.5	18.11	339.383	
4,330.7	4,298.8	2,175.2	2,089.6	11.1	10.3	178.34	-5,472.0	371.5	6,155.6	6,137.2	18.33	335.820	
4,400.0	4,368.1	2,229.2	2,137.0	11.2	10.8	178.53	-5,490.6	353.4	6,180.3	6,161.5	18.84	328.124	
4,429.1	4,397.3	2,251.9	2,156.9	11.3	11.0	178.61	-5,498.5	345.8	6,190.8	6,171.7	19.05	325.021	
4,500.0	4,468.1	3,941.0	3,624.2	11.4	26.6	-174.40	-5,848.5	-395.7	6,210.7	6,178.5	32.22	192.775	
4,527.5	4,495.7	3,941.0	3,624.2	11.5	26.6	-174.40	-5,848.5	-395.7	6,214.4	6,182.1	32.27	192.550	
4,600.0	4,568.1	4,003.7	3,681.1	11.6	27.1	-174.16	-5,853.6	-421.5	6,224.1	6,191.2	32.88	189.299	
4,626.0	4,594.1	4,014.4	3,690.7	11.7	27.2	-174.12	-5,854.5	-426.0	6,227.8	6,194.8	33.01	188.660	
4,700.0	4,668.1	4,069.0	3,739.9	11.8	27.7	-173.91	-5,859.5	-449.3	6,238.7	6,205.1	33.56	185.908	
4,724.4	4,692.5	4,069.0	3,739.9	11.8	27.7	-173.91	-5,859.5	-449.3	6,242.3	6,208.7	33.61	185.733	
4,800.0	4,768.1	4,069.0	3,739.9	12.0	27.7	-173.91	-5,859.5	-449.3	6,254.1	6,220.3	33.77	185.215	
4,822.8	4,791.0	4,099.4	3,767.0	12.0	27.9	-173.79	-5,862.4	-462.6	6,257.7	6,223.6	34.06	183.713	
4,900.0	4,868.1	4,136.7	3,800.2	12.2	28.3	-173.64	-5,866.2	-479.2	6,270.4	6,235.8	34.53	181.611	
4,921.2	4,889.4	4,146.8	3,809.2	12.2	28.4	-173.60	-5,867.2	-483.9	6,274.0	6,239.3	34.65	181.049	
5,000.0	4,968.1	4,197.0	3,853.4	12.4	28.8	-173.39	-5,872.4	-507.1	6,287.6	6,252.4	35.22	178.509	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - EXIST DD NEI C18-33D - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 351-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
5,019.7	4,987.8	4,197.0	3,853.4	12.4	28.8	-173.39	-5,872.4	-507.1	6,291.1	6,255.8	35.26	178.398	
5,100.0	5,068.1	4,277.3	3,923.6	12.6	29.6	-173.05	-5,880.8	-545.1	6,305.4	6,269.3	36.13	174.538	
5,118.1	5,086.2	4,297.2	3,940.9	12.6	29.8	-172.97	-5,882.8	-554.6	6,308.7	6,272.3	36.34	173.625	
5,200.0	5,168.1	4,357.0	3,993.1	12.8	30.4	-172.71	-5,888.8	-583.4	6,323.4	6,286.4	37.01	170.871	
5,216.5	5,184.7	4,366.3	4,001.2	12.8	30.5	-172.67	-5,889.7	-587.8	6,326.5	6,289.4	37.12	170.445	
5,300.0	5,268.1	4,413.3	4,042.3	13.0	31.0	-172.47	-5,894.7	-610.0	6,342.1	6,304.5	37.68	168.335	
5,314.9	5,283.1	4,421.8	4,049.7	13.0	31.0	-172.44	-5,895.7	-614.0	6,345.0	6,307.2	37.78	167.964	
5,400.0	5,368.1	4,454.0	4,078.0	13.1	31.3	-172.31	-5,899.3	-629.0	6,361.6	6,323.4	38.22	166.455	
5,413.4	5,381.5	4,454.0	4,078.0	13.2	31.3	-172.31	-5,899.3	-629.0	6,364.3	6,326.1	38.25	166.401	
5,500.0	5,468.1	4,519.1	4,135.2	13.3	31.9	-172.04	-5,907.1	-658.9	6,381.8	6,342.9	38.92	163.993	
5,511.8	5,479.9	4,525.1	4,140.5	13.4	32.0	-172.02	-5,907.8	-661.7	6,384.2	6,345.3	38.98	163.762	
5,600.0	5,568.1	4,583.0	4,191.6	13.5	32.5	-171.79	-5,915.3	-687.9	6,402.9	6,363.2	39.60	161.674	
5,610.2	5,578.4	4,583.0	4,191.6	13.6	32.5	-171.79	-5,915.3	-687.9	6,405.0	6,365.4	39.63	161.639	
5,700.0	5,668.1	4,654.9	4,254.9	13.7	33.2	-171.51	-5,924.7	-720.7	6,424.5	6,384.1	40.38	159.100	
5,708.6	5,676.8	4,663.2	4,262.2	13.8	33.3	-171.47	-5,925.7	-724.5	6,426.3	6,385.9	40.46	158.820	
5,800.0	5,768.1	4,711.0	4,304.0	13.9	33.7	-171.28	-5,931.8	-746.8	6,446.4	6,405.4	41.03	157.114	
5,807.1	5,775.2	4,736.8	4,326.5	14.0	34.0	-171.18	-5,935.1	-759.0	6,447.9	6,406.7	41.26	156.268	
5,900.0	5,868.1	4,786.1	4,369.5	14.1	34.5	-170.97	-5,941.4	-782.5	6,468.9	6,427.0	41.87	154.481	
5,905.5	5,873.6	4,789.1	4,372.0	14.1	34.5	-170.96	-5,941.8	-783.9	6,470.1	6,428.2	41.91	154.378	
6,000.0	5,968.1	4,839.0	4,415.3	14.3	35.0	-170.76	-5,948.5	-807.9	6,492.2	6,449.6	42.53	152.649	
6,003.9	5,972.1	4,839.0	4,415.3	14.3	35.0	-170.76	-5,948.5	-807.9	6,493.1	6,450.6	42.54	152.640	
6,100.0	6,068.1	4,917.7	4,483.1	14.5	35.9	-170.43	-5,959.0	-846.3	6,516.0	6,472.6	43.42	150.061	
6,102.3	6,070.5	4,919.5	4,484.7	14.5	35.9	-170.42	-5,959.2	-847.2	6,516.6	6,473.2	43.44	150.002	
6,200.0	6,168.1	5,048.9	4,596.0	14.7	37.2	-169.88	-5,976.3	-911.0	6,540.2	6,495.5	44.73	146.199	
6,200.8	6,168.9	5,050.7	4,597.6	14.7	37.3	-169.87	-5,976.5	-911.8	6,540.4	6,495.6	44.75	146.151	
6,288.5	6,256.6	5,164.2	4,696.1	14.9	38.4	-169.41	-5,990.8	-966.2	6,561.0	6,515.2	45.82	143.193	
6,299.2	6,267.3	5,175.1	4,705.7	14.9	38.5	10.38	-5,992.2	-971.2	6,563.5	6,517.6	45.88	143.069	
6,300.0	6,268.1	5,175.9	4,706.4	14.9	38.5	10.38	-5,992.3	-971.6	6,563.6	6,517.7	45.89	143.044	
6,350.0	6,318.1	5,227.5	4,751.8	15.0	39.0	10.44	-5,999.1	-995.3	6,573.0	6,526.6	46.34	141.843	
6,397.6	6,365.3	5,279.5	4,797.8	15.1	39.4	10.56	-6,005.9	-1,018.6	6,578.7	6,532.1	46.55	141.311	
6,400.0	6,367.7	5,282.1	4,800.1	15.1	39.4	10.57	-6,006.2	-1,019.8	6,578.9	6,532.3	46.56	141.300	
6,450.0	6,416.8	5,337.1	4,848.8	15.1	39.9	10.74	-6,013.5	-1,044.2	6,581.4	6,534.9	46.55	141.399	
6,496.0	6,461.3	5,384.7	4,891.1	15.1	40.4	10.94	-6,019.8	-1,065.0	6,580.8	6,534.5	46.29	142.157	
6,500.0	6,465.1	5,388.6	4,894.6	15.1	40.4	10.96	-6,020.3	-1,066.8	6,580.6	6,534.3	46.26	142.252	
6,550.0	6,512.4	5,438.6	4,939.2	15.1	40.8	11.22	-6,026.9	-1,088.3	6,576.3	6,530.6	45.72	143.825	
6,594.5	6,553.4	7,160.3	6,598.1	15.1	48.4	15.79	-6,139.7	-1,447.9	6,564.5	6,514.8	49.67	132.153	
6,600.0	6,558.4	7,167.0	6,604.7	15.1	48.4	15.86	-6,139.6	-1,447.9	6,562.2	6,512.7	49.52	132.513	
6,650.0	6,603.0	7,226.3	6,664.0	15.1	48.4	16.49	-6,138.9	-1,448.2	6,539.8	6,491.8	48.02	136.195	
6,692.9	6,639.9	7,275.2	6,712.9	15.1	48.4	17.15	-6,138.2	-1,448.2	6,518.2	6,471.6	46.56	139.996	
6,700.0	6,645.9	7,279.0	6,716.7	15.1	48.4	17.26	-6,138.2	-1,448.2	6,514.4	6,468.1	46.30	140.690	
6,750.0	6,686.8	7,304.9	6,742.6	15.1	48.5	18.14	-6,137.9	-1,448.1	6,486.2	6,441.8	44.40	146.087	
6,791.3	6,719.1	7,323.9	6,761.6	15.1	48.5	18.99	-6,137.7	-1,448.0	6,460.9	6,418.2	42.72	151.250	
6,800.0	6,725.7	7,327.8	6,765.5	15.1	48.5	19.19	-6,137.7	-1,448.0	6,455.4	6,413.1	42.35	152.419	
6,850.0	6,762.3	7,349.5	6,787.2	15.1	48.5	20.45	-6,137.5	-1,447.9	6,422.2	6,382.0	40.21	159.700	
6,889.7	6,789.7	7,369.3	6,807.0	15.1	48.5	21.66	-6,137.4	-1,447.7	6,394.2	6,355.7	38.50	166.103	
6,900.0	6,796.5	7,369.3	6,807.0	15.1	48.5	21.98	-6,137.4	-1,447.7	6,386.7	6,348.6	38.05	167.838	
6,950.0	6,828.0	7,388.6	6,826.3	15.1	48.5	23.84	-6,137.4	-1,447.6	6,349.1	6,313.1	35.97	176.519	
6,988.2	6,850.2	7,407.0	6,844.7	15.1	48.5	25.56	-6,137.4	-1,447.4	6,319.0	6,284.5	34.53	183.011	
7,000.0	6,856.7	7,407.0	6,844.7	15.1	48.5	26.12	-6,137.4	-1,447.4	6,309.5	6,275.4	34.11	184.993	
7,050.0	6,882.5	7,407.0	6,844.7	15.2	48.5	28.83	-6,137.4	-1,447.4	6,268.2	6,235.5	32.66	191.949	
7,086.6	6,899.5	7,434.1	6,871.8	15.3	48.5	31.45	-6,137.5	-1,447.1	6,236.9	6,204.8	32.06	194.555	
7,100.0	6,905.3	7,437.9	6,875.6	15.4	48.5	32.48	-6,137.6	-1,447.1	6,225.2	6,193.3	31.95	194.849	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - EXIST DD NEI C18-33D - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 usft
Survey Program: 351-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
7,150.0	6,924.9	7,451.1	6,888.8	15.7	48.5	36.98	-6,137.6	-1,446.9	6,180.9	6,148.7	32.25	191.666		
7,185.0	6,936.7	7,459.0	6,896.7	15.9	48.5	40.88	-6,137.7	-1,446.9	6,149.1	6,115.9	33.21	185.132		
7,200.0	6,941.2	7,462.1	6,899.8	16.0	48.5	42.76	-6,137.7	-1,446.8	6,135.4	6,101.6	33.83	181.379		
7,250.0	6,954.2	7,471.0	6,908.7	16.3	48.5	50.22	-6,137.8	-1,446.7	6,088.9	6,052.2	36.69	165.936		
7,283.4	6,961.0	7,475.7	6,913.4	16.6	48.5	56.35	-6,137.8	-1,446.7	6,057.4	6,018.3	39.14	154.752		
7,300.0	6,963.8	7,477.7	6,915.4	16.7	48.5	59.76	-6,137.8	-1,446.7	6,041.7	6,001.3	40.41	149.508		
7,350.0	6,970.0	7,482.1	6,919.8	17.2	48.5	71.52	-6,137.9	-1,446.6	5,994.0	5,950.1	43.91	136.509		
7,381.9	6,972.1	7,483.7	6,921.4	17.5	48.5	80.00	-6,137.9	-1,446.6	5,963.4	5,918.1	45.32	131.576		
7,400.0	6,972.7	7,484.2	6,921.9	17.7	48.5	85.02	-6,137.9	-1,446.6	5,946.0	5,900.3	45.66	130.234		
7,420.0	6,972.8	7,484.4	6,922.1	17.9	48.5	90.62	-6,137.9	-1,446.6	5,926.8	5,881.2	45.58	130.041		
7,480.3	6,972.2	7,484.4	6,922.1	18.5	48.5	90.62	-6,137.9	-1,446.6	5,868.8	5,822.6	46.22	126.973		
7,500.0	6,972.0	7,484.4	6,922.1	18.7	48.5	90.62	-6,137.9	-1,446.6	5,849.9	5,803.4	46.43	125.990		
7,578.7	6,971.3	7,484.4	6,922.1	19.7	48.5	90.62	-6,137.9	-1,446.6	5,774.3	5,727.0	47.36	121.933		
7,600.0	6,971.1	7,484.4	6,922.1	19.9	48.5	90.62	-6,137.9	-1,446.6	5,753.9	5,706.3	47.61	120.864		
7,677.1	6,970.4	7,484.4	6,922.1	20.9	48.5	90.62	-6,137.9	-1,446.6	5,679.9	5,631.3	48.60	116.875		
7,700.0	6,970.2	7,484.4	6,922.1	21.2	48.5	90.62	-6,137.9	-1,446.6	5,658.1	5,609.2	48.89	115.726		
7,775.6	6,969.5	7,484.4	6,922.1	22.2	48.5	90.62	-6,137.9	-1,446.6	5,585.7	5,535.8	49.94	111.844		
7,800.0	6,969.3	7,484.4	6,922.1	22.6	48.5	90.62	-6,137.9	-1,446.6	5,562.4	5,512.1	50.28	110.625		
7,874.0	6,968.6	7,484.4	6,922.1	23.7	48.5	90.62	-6,137.9	-1,446.6	5,491.6	5,440.3	51.37	106.898		
7,900.0	6,968.4	7,484.4	6,922.1	24.1	48.5	90.62	-6,137.9	-1,446.6	5,466.8	5,415.1	51.76	105.626		
7,972.4	6,967.8	7,484.4	6,922.1	25.2	48.5	90.62	-6,137.9	-1,446.6	5,397.7	5,344.9	52.88	102.084		
8,000.0	6,967.5	7,484.4	6,922.1	25.6	48.5	90.62	-6,137.9	-1,446.6	5,371.4	5,318.1	53.30	100.774		
8,070.8	6,966.9	7,484.4	6,922.1	26.7	48.5	90.62	-6,137.9	-1,446.6	5,304.0	5,249.5	54.44	97.431		
8,100.0	6,966.6	7,484.4	6,922.1	27.2	48.5	90.62	-6,137.9	-1,446.6	5,276.2	5,221.3	54.91	96.096		
8,169.3	6,966.0	7,484.4	6,922.1	28.3	48.5	90.62	-6,137.9	-1,446.6	5,210.4	5,154.3	56.05	92.958		
8,200.0	6,965.7	7,484.4	6,922.1	28.8	48.5	90.62	-6,137.9	-1,446.6	5,181.2	5,124.7	56.56	91.608		
8,267.7	6,965.1	7,484.4	6,922.1	30.0	48.5	90.62	-6,137.9	-1,446.6	5,117.0	5,059.3	57.71	88.675		
8,300.0	6,964.8	7,484.4	6,922.1	30.5	48.5	90.62	-6,137.9	-1,446.6	5,086.4	5,028.1	58.25	87.316		
8,366.1	6,964.2	7,484.4	6,922.1	31.7	48.5	90.62	-6,137.9	-1,446.6	5,023.8	4,964.4	59.39	84.583		
8,400.0	6,963.9	7,484.4	6,922.1	32.2	48.5	90.62	-6,137.9	-1,446.6	4,991.7	4,931.8	59.98	83.223		
8,464.5	6,963.3	7,484.4	6,922.1	33.4	48.5	90.62	-6,137.9	-1,446.6	4,930.8	4,869.7	61.11	80.681		
8,500.0	6,963.0	7,484.4	6,922.1	34.0	48.5	90.62	-6,137.9	-1,446.6	4,897.3	4,835.6	61.74	79.325		
8,563.0	6,962.4	7,484.4	6,922.1	35.1	48.5	90.62	-6,137.9	-1,446.6	4,838.0	4,775.1	62.86	76.965		
8,600.0	6,962.0	7,484.4	6,922.1	35.8	48.5	90.62	-6,137.9	-1,446.6	4,803.1	4,739.6	63.52	75.617		
8,661.4	6,961.5	7,484.4	6,922.1	36.9	48.5	90.62	-6,137.9	-1,446.6	4,745.4	4,680.8	64.63	73.429		
8,700.0	6,961.1	7,484.4	6,922.1	37.6	48.5	90.62	-6,137.9	-1,446.6	4,709.2	4,643.9	65.32	72.092		
8,759.8	6,960.6	7,484.4	6,922.1	38.7	48.5	90.62	-6,137.9	-1,446.6	4,653.1	4,586.7	66.41	70.064		
8,800.0	6,960.2	7,484.4	6,922.1	39.4	48.5	90.62	-6,137.9	-1,446.6	4,615.5	4,548.3	67.14	68.740		
8,858.2	6,959.7	7,484.4	6,922.1	40.5	48.5	90.62	-6,137.9	-1,446.6	4,561.0	4,492.8	68.21	66.864		
8,900.0	6,959.3	7,484.4	6,922.1	41.2	48.5	90.62	-6,137.9	-1,446.6	4,522.0	4,453.1	68.98	65.555		
8,956.7	6,958.8	7,484.4	6,922.0	42.3	48.5	90.62	-6,137.9	-1,446.6	4,469.2	4,399.2	70.03	63.819		
9,000.0	6,958.4	7,484.4	6,922.0	43.1	48.5	90.62	-6,137.9	-1,446.6	4,428.9	4,358.1	70.83	62.527		
9,055.1	6,957.9	7,484.4	6,922.0	44.1	48.5	90.62	-6,137.9	-1,446.6	4,377.7	4,305.9	71.86	60.921		
9,100.0	6,957.5	7,484.4	6,922.0	44.9	48.5	90.62	-6,137.9	-1,446.6	4,336.1	4,263.4	72.70	59.647		
9,153.5	6,957.0	7,484.4	6,922.0	45.9	48.5	90.62	-6,137.9	-1,446.6	4,286.5	4,212.8	73.70	58.163		
9,200.0	6,956.6	7,484.4	6,922.0	46.8	48.5	90.62	-6,137.9	-1,446.6	4,243.6	4,169.0	74.57	56.908		
9,251.9	6,956.1	7,484.3	6,922.0	47.8	48.5	90.62	-6,137.9	-1,446.6	4,195.6	4,120.1	75.55	55.536		
9,300.0	6,955.7	7,484.3	6,922.0	48.7	48.5	90.62	-6,137.9	-1,446.6	4,151.4	4,074.9	76.45	54.300		
9,350.4	6,955.2	7,484.3	6,922.0	49.6	48.5	90.62	-6,137.9	-1,446.6	4,105.1	4,027.7	77.41	53.034		
9,400.0	6,954.8	7,484.3	6,922.0	50.6	48.5	90.62	-6,137.9	-1,446.6	4,059.6	3,981.2	78.34	51.817		
9,448.8	6,954.3	7,484.3	6,922.0	51.5	48.5	90.62	-6,137.9	-1,446.6	4,014.9	3,935.7	79.27	50.648		
9,500.0	6,953.9	7,484.3	6,922.0	52.5	48.5	90.62	-6,137.9	-1,446.6	3,968.2	3,888.0	80.24	49.452		

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 351-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,547.2	6,953.4	7,484.3	6,922.0	53.4	48.5	90.62	-6,137.9	-1,446.6	3,925.2	3,844.0	81.14	48.373	
9,600.0	6,952.9	7,484.3	6,922.0	54.4	48.5	90.62	-6,137.9	-1,446.6	3,877.2	3,795.1	82.15	47.197	
9,645.6	6,952.5	7,484.3	6,922.0	55.2	48.5	90.62	-6,137.9	-1,446.6	3,835.8	3,752.8	83.02	46.203	
9,700.0	6,952.0	7,484.3	6,922.0	56.3	48.5	90.62	-6,137.9	-1,446.6	3,786.7	3,702.6	84.06	45.047	
9,744.1	6,951.6	7,484.3	6,922.0	57.1	48.5	90.62	-6,137.9	-1,446.6	3,747.0	3,662.1	84.91	44.131	
9,800.0	6,951.1	7,484.3	6,922.0	58.2	48.5	90.62	-6,137.9	-1,446.6	3,696.7	3,610.7	85.98	42.995	
9,842.5	6,950.7	7,484.3	6,922.0	59.0	48.5	90.62	-6,137.9	-1,446.6	3,658.6	3,571.8	86.80	42.152	
9,900.0	6,950.2	7,484.3	6,922.0	60.1	48.5	90.62	-6,137.9	-1,446.6	3,607.2	3,519.3	87.90	41.037	
9,940.9	6,949.8	7,484.3	6,922.0	60.9	48.5	90.62	-6,137.9	-1,446.6	3,570.7	3,482.0	88.69	40.261	
10,000.0	6,949.3	7,484.3	6,922.0	62.0	48.5	90.62	-6,137.9	-1,446.6	3,518.2	3,428.4	89.83	39.167	
10,039.3	6,948.9	7,484.3	6,922.0	62.8	48.5	90.62	-6,137.9	-1,446.6	3,483.4	3,392.8	90.59	38.454	
10,100.0	6,948.4	7,484.3	6,922.0	64.0	48.5	90.62	-6,137.9	-1,446.6	3,429.9	3,338.1	91.76	37.380	
10,137.8	6,948.0	7,484.3	6,922.0	64.7	48.5	90.62	-6,137.9	-1,446.6	3,396.7	3,304.2	92.49	36.726	
10,200.0	6,947.5	7,484.3	6,922.0	65.9	48.5	90.62	-6,137.9	-1,446.6	3,342.2	3,248.5	93.69	35.672	
10,236.2	6,947.1	7,484.3	6,922.0	66.6	48.5	90.62	-6,137.9	-1,446.6	3,310.7	3,216.3	94.39	35.073	
10,300.0	6,946.6	7,484.3	6,922.0	67.8	48.5	90.62	-6,137.9	-1,446.6	3,255.3	3,159.6	95.63	34.040	
10,334.6	6,946.3	7,484.3	6,922.0	68.5	48.5	90.62	-6,137.9	-1,446.6	3,225.3	3,129.0	96.30	33.492	
10,400.0	6,945.7	7,484.3	6,922.0	69.8	48.5	90.62	-6,137.9	-1,446.6	3,169.1	3,071.5	97.57	32.480	
10,433.0	6,945.4	7,484.3	6,922.0	70.4	48.5	90.62	-6,137.9	-1,446.6	3,140.8	3,042.6	98.21	31.979	
10,500.0	6,944.7	7,484.3	6,922.0	71.7	48.5	90.62	-6,137.9	-1,446.6	3,083.7	2,984.2	99.52	30.988	
10,531.5	6,944.5	7,484.3	6,922.0	72.3	48.5	90.62	-6,137.9	-1,446.6	3,057.0	2,956.9	100.13	30.531	
10,600.0	6,943.8	7,484.3	6,922.0	73.7	48.5	90.62	-6,137.9	-1,446.6	2,999.3	2,897.8	101.46	29.561	
10,629.9	6,943.6	7,484.3	6,922.0	74.2	48.5	90.62	-6,137.9	-1,446.6	2,974.2	2,872.2	102.04	29.146	
10,700.0	6,942.9	7,484.3	6,922.0	75.6	48.5	90.62	-6,137.9	-1,446.6	2,915.8	2,812.4	103.41	28.197	
10,728.3	6,942.7	7,484.3	6,922.0	76.2	48.5	90.62	-6,137.9	-1,446.6	2,892.4	2,788.4	103.96	27.821	
10,800.0	6,942.0	7,484.3	6,922.0	77.6	48.5	90.62	-6,137.9	-1,446.6	2,833.4	2,728.1	105.36	26.892	
10,826.7	6,941.8	7,484.3	6,921.9	78.1	48.5	90.62	-6,137.9	-1,446.6	2,811.6	2,705.7	105.88	26.553	
10,900.0	6,941.1	7,484.3	6,921.9	79.5	48.5	90.62	-6,137.9	-1,446.6	2,752.2	2,644.9	107.31	25.646	
10,925.2	6,940.9	7,484.3	6,921.9	80.0	48.5	90.62	-6,137.9	-1,446.6	2,731.9	2,624.1	107.81	25.341	
11,000.0	6,940.2	7,484.2	6,921.9	81.5	48.5	90.62	-6,137.9	-1,446.6	2,672.2	2,563.0	109.27	24.455	
11,023.6	6,940.0	7,484.2	6,921.9	81.9	48.5	90.62	-6,137.9	-1,446.6	2,653.6	2,543.8	109.73	24.182	
11,100.0	6,939.3	7,484.2	6,921.9	83.4	48.5	90.62	-6,137.9	-1,446.6	2,593.7	2,482.4	111.23	23.319	
11,122.0	6,939.1	7,484.2	6,921.9	83.8	48.5	90.62	-6,137.9	-1,446.6	2,576.6	2,464.9	111.66	23.076	
11,200.0	6,938.4	7,484.2	6,921.9	85.4	48.5	90.62	-6,137.9	-1,446.6	2,516.6	2,403.4	113.18	22.235	
11,220.4	6,938.2	7,484.2	6,921.9	85.8	48.5	90.62	-6,137.9	-1,446.6	2,501.1	2,387.5	113.59	22.019	
11,300.0	6,937.4	7,484.2	6,921.9	87.3	48.5	90.62	-6,137.9	-1,446.6	2,441.2	2,326.1	115.14	21.202	
11,318.9	6,937.3	7,484.2	6,921.9	87.7	48.5	90.62	-6,137.9	-1,446.6	2,427.2	2,311.7	115.51	21.012	
11,400.0	6,936.5	7,484.2	6,921.9	89.3	48.5	90.62	-6,137.9	-1,446.6	2,367.7	2,250.6	117.11	20.218	
11,417.3	6,936.4	7,484.2	6,921.9	89.6	48.5	90.62	-6,137.9	-1,446.6	2,355.2	2,237.7	117.45	20.053	
11,500.0	6,935.6	7,484.2	6,921.9	91.3	48.5	90.62	-6,137.9	-1,446.6	2,296.1	2,177.1	119.07	19.284	
11,515.7	6,935.5	7,484.2	6,921.9	91.6	48.5	90.62	-6,137.9	-1,446.6	2,285.1	2,165.7	119.38	19.142	
11,600.0	6,934.7	7,484.2	6,921.9	93.2	48.5	90.62	-6,137.9	-1,446.6	2,226.8	2,105.7	121.03	18.398	
11,614.1	6,934.6	7,484.2	6,921.9	93.5	48.5	90.62	-6,137.9	-1,446.6	2,217.1	2,095.8	121.31	18.277	
11,700.0	6,933.8	7,484.2	6,921.9	95.2	48.5	90.62	-6,137.9	-1,446.6	2,159.8	2,036.8	123.00	17.560	
11,712.6	6,933.7	7,484.2	6,921.9	95.4	48.5	90.62	-6,137.9	-1,446.6	2,151.6	2,028.3	123.24	17.458	
11,800.0	6,932.9	7,484.2	6,921.9	97.1	48.5	90.62	-6,137.9	-1,446.6	2,095.5	1,970.5	124.96	16.769	
11,811.0	6,932.8	7,484.2	6,921.9	97.4	48.5	90.62	-6,137.9	-1,446.6	2,088.6	1,963.4	125.18	16.685	
11,900.0	6,932.0	7,484.2	6,921.9	99.1	48.5	90.62	-6,137.9	-1,446.6	2,034.1	1,907.1	126.93	16.025	
11,909.4	6,931.9	7,484.2	6,921.9	99.3	48.5	90.62	-6,137.9	-1,446.6	2,028.4	1,901.3	127.12	15.957	
12,000.0	6,931.0	7,484.2	6,921.8	101.1	48.5	90.62	-6,137.9	-1,446.6	1,975.8	1,846.9	128.90	15.328	
12,007.8	6,931.0	7,484.2	6,921.8	101.2	48.5	90.62	-6,137.9	-1,446.6	1,971.3	1,842.3	129.05	15.275	
12,100.0	6,930.1	7,484.1	6,921.8	103.0	48.5	90.62	-6,137.9	-1,446.6	1,920.9	1,790.1	130.87	14.678	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - EXIST DD NEI C18-33D - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 351-MWD												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
12,106.3	6,930.1	7,484.1	6,921.8	103.2	48.5	90.62	-6,137.9	-1,446.6	1,917.6	1,786.6	130.99	14.639	
12,200.0	6,929.2	7,484.1	6,921.8	105.0	48.5	90.62	-6,137.9	-1,446.6	1,869.8	1,737.0	132.84	14.076	
12,204.7	6,929.2	7,484.1	6,921.8	105.1	48.5	90.62	-6,137.9	-1,446.6	1,867.5	1,734.6	132.93	14.049	
12,300.0	6,928.3	7,484.1	6,921.8	107.0	48.5	90.62	-6,137.9	-1,446.6	1,822.8	1,688.0	134.81	13.521	
12,303.1	6,928.3	7,484.1	6,921.8	107.1	48.5	90.62	-6,137.9	-1,446.6	1,821.4	1,686.5	134.87	13.505	
12,400.0	6,927.4	7,484.1	6,921.8	109.0	48.5	90.62	-6,137.9	-1,446.6	1,780.1	1,643.3	136.78	13.014	
12,401.5	6,927.4	7,484.1	6,921.8	109.0	48.5	90.62	-6,137.9	-1,446.6	1,779.5	1,642.7	136.81	13.007	
12,500.0	6,926.5	7,484.1	6,921.8	110.9	48.5	90.62	-6,137.9	-1,446.6	1,742.2	1,603.4	138.75	12.556	
12,598.4	6,925.6	7,484.1	6,921.8	112.9	48.5	90.61	-6,137.9	-1,446.6	1,709.7	1,569.0	140.70	12.152	
12,600.0	6,925.6	7,484.1	6,921.8	112.9	48.5	90.61	-6,137.9	-1,446.6	1,709.2	1,568.5	140.73	12.145	
12,696.8	6,924.7	7,484.1	6,921.8	114.8	48.5	90.61	-6,137.9	-1,446.6	1,682.4	1,539.7	142.64	11.795	
12,700.0	6,924.6	7,484.1	6,921.8	114.9	48.5	90.61	-6,137.9	-1,446.6	1,681.6	1,538.9	142.70	11.784	
12,795.2	6,923.8	7,484.1	6,921.8	116.8	48.5	90.61	-6,137.9	-1,446.6	1,660.4	1,515.8	144.58	11.484	
12,800.0	6,923.7	7,484.1	6,921.8	116.9	48.5	90.61	-6,137.9	-1,446.6	1,659.5	1,514.8	144.68	11.471	
12,893.7	6,922.9	7,484.1	6,921.7	118.7	48.5	90.61	-6,137.9	-1,446.6	1,644.1	1,497.6	146.53	11.221	
12,900.0	6,922.8	7,484.1	6,921.7	118.8	48.5	90.61	-6,137.9	-1,446.6	1,643.3	1,496.6	146.65	11.205	
12,992.1	6,922.0	7,484.0	6,921.7	120.6	48.5	90.61	-6,137.9	-1,446.6	1,633.6	1,485.1	148.47	11.002	
13,000.0	6,921.9	7,484.0	6,921.7	120.8	48.5	90.61	-6,137.9	-1,446.6	1,633.0	1,484.3	148.63	10.987	
13,090.5	6,921.1	7,484.0	6,921.7	122.6	48.5	90.61	-6,137.9	-1,446.6	1,628.9	1,478.5	150.42	10.829	
13,100.0	6,921.0	7,484.0	6,921.7	122.8	48.5	90.61	-6,137.9	-1,446.6	1,628.8	1,478.2	150.60	10.815	
13,118.5	6,920.8	7,484.0	6,921.7	123.1	48.5	90.61	-6,137.9	-1,446.6	1,628.7	1,477.7	150.97	10.788 CC, ES	
13,188.9	6,920.2	7,484.0	6,921.7	124.5	48.5	90.61	-6,137.9	-1,446.6	1,630.2	1,477.8	152.36	10.699	
13,200.0	6,920.1	7,484.0	6,921.7	124.8	48.5	90.61	-6,137.9	-1,446.6	1,630.7	1,478.1	152.58	10.687	
13,287.4	6,919.3	7,484.0	6,921.7	126.5	48.5	90.61	-6,137.9	-1,446.6	1,637.4	1,483.1	154.31	10.611	
13,300.0	6,919.1	7,484.0	6,921.7	126.7	48.5	90.61	-6,137.9	-1,446.6	1,638.7	1,484.2	154.56	10.603	
13,385.8	6,918.4	7,484.0	6,921.7	128.4	48.5	90.61	-6,137.9	-1,446.6	1,650.4	1,494.2	156.25	10.562	
13,400.0	6,918.2	7,484.0	6,921.7	128.7	48.5	90.61	-6,137.9	-1,446.6	1,652.8	1,496.3	156.54	10.559	
13,484.2	6,917.5	7,484.0	6,921.7	130.4	48.5	90.61	-6,137.9	-1,446.6	1,669.2	1,511.0	158.20	10.551 SF	
13,500.0	6,917.3	7,484.0	6,921.7	130.7	48.5	90.61	-6,137.9	-1,446.6	1,672.7	1,514.2	158.51	10.553	
13,582.6	6,916.6	7,484.0	6,921.6	132.3	48.5	90.61	-6,137.9	-1,446.6	1,693.5	1,533.3	160.15	10.574	
13,600.0	6,916.4	7,483.9	6,921.6	132.7	48.5	90.61	-6,137.9	-1,446.6	1,698.3	1,537.8	160.49	10.582	
13,681.1	6,915.6	7,483.9	6,921.6	134.3	48.5	90.61	-6,137.9	-1,446.6	1,723.1	1,561.0	162.10	10.630	
13,700.0	6,915.5	7,483.9	6,921.6	134.6	48.5	90.61	-6,137.9	-1,446.6	1,729.3	1,566.9	162.47	10.644	
13,779.5	6,914.7	7,483.9	6,921.6	136.2	48.5	90.61	-6,137.9	-1,446.6	1,757.7	1,593.6	164.05	10.715	
13,800.0	6,914.6	7,483.9	6,921.6	136.6	48.5	90.61	-6,137.9	-1,446.6	1,765.5	1,601.0	164.45	10.736	
13,877.9	6,913.8	7,483.9	6,921.6	138.2	48.5	90.61	-6,137.9	-1,446.6	1,797.0	1,631.0	165.99	10.826	
13,900.0	6,913.6	7,483.9	6,921.6	138.6	48.5	90.61	-6,137.9	-1,446.6	1,806.4	1,640.0	166.43	10.854	
13,976.3	6,912.9	7,483.9	6,921.6	140.1	48.5	90.61	-6,137.9	-1,446.6	1,840.8	1,672.8	167.94	10.961	
14,000.0	6,912.7	7,483.9	6,921.6	140.6	48.5	90.61	-6,137.9	-1,446.6	1,851.9	1,683.5	168.41	10.996	
14,074.8	6,912.0	7,483.9	6,921.6	142.0	48.5	90.61	-6,137.9	-1,446.6	1,888.6	1,718.8	169.83	11.121	
14,079.0	6,912.0	7,483.9	6,921.6	142.1	48.5	90.61	-6,137.9	-1,446.6	1,890.8	1,720.8	169.91	11.128	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-INC												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.0	0.0	0.0	0.0	0.0	0.0	-172.48	-5,661.3	-747.4	5,710.6				
98.4	98.4	56.9	56.9	0.1	0.6	-172.48	-5,661.3	-747.4	5,710.4	5,709.7	0.69	8,317.160	
100.0	100.0	58.5	58.5	0.1	0.6	-172.48	-5,661.3	-747.4	5,710.4	5,709.7	0.70	8,103.235	
196.8	196.8	155.3	155.3	0.3	2.3	-172.48	-5,661.3	-747.4	5,710.4	5,707.8	2.64	2,162.182	
200.0	200.0	158.5	158.5	0.3	2.4	-172.48	-5,661.3	-747.4	5,710.4	5,707.7	2.72	2,098.333	
295.3	295.3	253.8	253.8	0.5	4.5	-172.48	-5,661.3	-747.4	5,710.4	5,705.4	5.02	1,137.552	
300.0	300.0	258.5	258.5	0.5	4.6	-172.48	-5,661.3	-747.4	5,710.4	5,705.3	5.13	1,113.391	
393.7	393.7	352.2	352.2	0.8	6.5	-172.48	-5,661.3	-747.4	5,710.4	5,703.2	7.27	785.562	
400.0	400.0	358.5	358.5	0.8	6.6	-172.48	-5,661.3	-747.4	5,710.4	5,703.0	7.41	770.422	
492.1	492.1	450.6	450.6	1.0	8.5	-172.48	-5,661.3	-747.4	5,710.4	5,700.9	9.49	601.470	
500.0	500.0	458.5	458.5	1.0	8.7	-172.48	-5,661.3	-747.4	5,710.4	5,700.8	9.67	590.432	
590.5	590.5	549.0	549.0	1.2	10.5	-172.48	-5,661.3	-747.4	5,710.4	5,698.7	11.71	487.678	
600.0	600.0	558.5	558.5	1.2	10.7	-172.48	-5,661.3	-747.4	5,710.4	5,698.5	11.92	478.990	
689.0	689.0	647.5	647.5	1.4	12.5	-172.48	-5,661.3	-747.4	5,710.4	5,696.5	13.92	410.235	
700.0	700.0	658.5	658.5	1.4	12.7	-172.48	-5,661.3	-747.4	5,710.4	5,696.3	14.17	403.071	
787.4	787.4	745.9	745.9	1.6	14.5	-172.48	-5,661.3	-747.4	5,710.4	5,694.3	16.13	354.078	
800.0	800.0	758.5	758.5	1.7	14.7	-172.48	-5,661.3	-747.4	5,710.4	5,694.0	16.41	347.983	
885.8	885.8	844.3	844.3	1.9	16.5	-172.48	-5,661.3	-747.4	5,710.4	5,692.1	18.33	311.475	
900.0	900.0	858.5	858.5	1.9	16.8	-172.48	-5,661.3	-747.4	5,710.4	5,691.8	18.65	306.171	
984.2	984.2	942.7	942.7	2.1	18.5	-172.48	-5,661.3	-747.4	5,710.4	5,689.9	20.54	278.038	
1,000.0	1,000.0	958.5	958.5	2.1	18.8	-172.48	-5,661.3	-747.4	5,710.4	5,689.5	20.89	273.344	
1,082.7	1,082.7	1,041.2	1,041.2	2.3	20.4	-172.48	-5,661.3	-747.4	5,710.4	5,687.7	22.74	251.094	
1,100.0	1,100.0	1,058.5	1,058.5	2.3	20.8	-172.48	-5,661.3	-747.4	5,710.4	5,687.3	23.13	246.883	
1,181.1	1,181.1	1,139.6	1,139.6	2.5	22.4	-172.48	-5,661.3	-747.4	5,710.4	5,685.5	24.95	228.916	
1,200.0	1,200.0	1,158.5	1,158.5	2.6	22.8	-172.48	-5,661.3	-747.4	5,710.4	5,685.1	25.37	225.099	
1,279.5	1,279.5	1,238.0	1,238.0	2.7	24.4	151.01	-5,661.3	-747.4	5,711.4	5,684.3	27.14	210.451	
1,300.0	1,300.0	1,258.5	1,258.5	2.8	24.8	151.01	-5,661.3	-747.4	5,712.0	5,684.4	27.59	207.019	
1,377.9	1,377.8	1,336.3	1,336.3	3.0	26.4	151.00	-5,661.3	-747.4	5,715.3	5,686.0	29.30	195.045	
1,400.0	1,399.8	1,358.3	1,358.3	3.0	26.8	150.99	-5,661.3	-747.4	5,716.5	5,686.8	29.78	191.946	
1,476.4	1,475.9	1,434.4	1,434.4	3.2	28.4	150.97	-5,661.3	-747.4	5,722.1	5,690.7	31.43	182.051	
1,500.0	1,499.5	1,458.0	1,458.0	3.2	28.8	150.96	-5,661.3	-747.4	5,724.2	5,692.2	31.94	179.240	
1,574.8	1,573.7	1,532.2	1,532.2	3.4	30.3	150.93	-5,661.3	-747.4	5,731.9	5,698.3	33.52	170.995	
1,600.0	1,598.7	1,557.2	1,557.2	3.5	30.8	150.91	-5,661.3	-747.4	5,734.8	5,700.8	34.05	168.435	
1,673.2	1,671.1	1,629.6	1,629.6	3.7	32.3	150.87	-5,661.3	-747.4	5,744.6	5,709.0	35.57	161.518	
1,700.0	1,697.5	1,656.0	1,656.0	3.7	32.8	150.85	-5,661.3	-747.4	5,748.5	5,712.4	36.11	159.182	
1,771.6	1,767.9	1,726.4	1,726.4	4.0	34.2	150.80	-5,661.3	-747.4	5,760.2	5,722.7	37.56	153.345	
1,800.1	1,795.7	1,754.2	1,754.2	4.0	34.8	150.78	-5,661.3	-747.4	5,765.3	5,727.2	38.13	151.200	
1,870.1	1,864.2	1,822.7	1,822.7	4.3	36.2	150.85	-5,661.3	-747.4	5,778.1	5,738.4	39.67	145.662	
1,900.0	1,893.4	1,851.9	1,851.9	4.4	36.8	150.88	-5,661.3	-747.4	5,783.5	5,743.2	40.32	143.425	
1,968.5	1,960.4	1,918.9	1,918.9	4.6	38.1	150.95	-5,661.3	-747.4	5,796.0	5,754.2	41.84	138.543	
2,000.0	1,991.3	1,949.8	1,949.8	4.7	38.7	150.98	-5,661.3	-747.4	5,801.8	5,759.3	42.53	136.422	
2,066.9	2,056.7	2,015.2	2,015.2	5.0	40.0	151.05	-5,661.3	-747.4	5,814.0	5,770.0	44.01	132.122	
2,100.0	2,089.1	2,047.6	2,047.6	5.1	40.7	151.08	-5,661.3	-747.4	5,820.1	5,775.3	44.74	130.091	
2,165.3	2,153.0	2,111.5	2,111.5	5.3	42.0	151.14	-5,661.3	-747.4	5,832.0	5,785.9	46.19	126.274	
2,200.0	2,186.9	2,145.4	2,145.4	5.5	42.7	151.18	-5,661.3	-747.4	5,838.4	5,791.4	46.95	124.345	
2,263.8	2,249.3	2,207.8	2,207.8	5.7	43.9	151.24	-5,661.3	-747.4	5,850.1	5,801.7	48.37	120.948	
2,300.0	2,284.7	2,243.2	2,243.2	5.8	44.6	151.28	-5,661.3	-747.4	5,856.7	5,807.5	49.17	119.106	
2,362.2	2,345.5	2,304.0	2,304.0	6.1	45.8	151.34	-5,661.3	-747.4	5,868.1	5,817.6	50.55	116.075	
2,400.0	2,382.5	2,341.0	2,341.0	6.2	46.6	151.37	-5,661.3	-747.4	5,875.0	5,823.6	51.39	114.313	
2,460.6	2,441.8	2,400.3	2,400.3	6.5	47.8	151.43	-5,661.3	-747.4	5,886.2	5,833.4	52.74	111.601	
2,500.0	2,480.3	2,438.8	2,438.8	6.6	48.6	151.47	-5,661.3	-747.4	5,893.4	5,839.8	53.62	109.912	
2,559.0	2,538.1	2,496.6	2,496.6	6.9	49.7	151.53	-5,661.3	-747.4	5,904.2	5,849.3	54.93	107.478	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-INC												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,600.0	2,578.1	2,536.6	2,536.6	7.0	50.5	151.56	-5,661.3	-747.4	5,911.8	5,855.9	55.85	105.858	
2,657.5	2,634.4	2,592.9	2,592.9	7.3	51.7	151.62	-5,661.3	-747.4	5,922.3	5,865.2	57.13	103.669	
2,700.0	2,675.9	2,634.4	2,634.4	7.5	52.5	151.66	-5,661.3	-747.4	5,930.1	5,872.1	58.07	102.112	
2,755.9	2,730.6	2,689.1	2,689.1	7.7	53.6	151.71	-5,661.3	-747.4	5,940.4	5,881.1	59.32	100.139	
2,800.0	2,773.8	2,732.3	2,732.3	7.9	54.5	151.75	-5,661.3	-747.4	5,948.5	5,888.2	60.31	98.641	
2,854.3	2,826.9	2,785.4	2,785.4	8.1	55.5	151.81	-5,661.3	-747.4	5,958.5	5,897.0	61.52	96.860	
2,857.4	2,829.9	2,788.4	2,788.4	8.1	55.6	151.81	-5,661.3	-747.4	5,959.1	5,897.5	61.58	96.763	
2,900.0	2,871.6	2,830.1	2,830.1	8.3	56.4	151.92	-5,661.3	-747.4	5,966.7	5,904.0	62.66	95.231	
2,952.7	2,923.5	2,882.0	2,882.0	8.4	57.5	152.05	-5,661.3	-747.4	5,975.3	5,911.3	63.95	93.433	
3,000.0	2,970.1	2,928.6	2,928.6	8.6	58.4	152.15	-5,661.3	-747.4	5,982.3	5,917.2	65.11	91.881	
3,051.2	3,020.7	2,979.2	2,979.2	8.7	59.4	152.25	-5,661.3	-747.4	5,989.1	5,922.8	66.35	90.265	
3,100.0	3,069.1	3,027.6	3,027.6	8.9	60.4	152.33	-5,661.3	-747.4	5,994.9	5,927.3	67.53	88.779	
3,149.6	3,118.3	3,076.8	3,076.8	9.0	61.4	152.40	-5,661.3	-747.4	6,000.0	5,931.3	68.71	87.329	
3,200.0	3,168.5	3,127.0	3,127.0	9.1	62.4	152.46	-5,661.3	-747.4	6,004.4	5,934.5	69.89	85.909	
3,248.0	3,216.3	3,174.8	3,174.8	9.2	63.4	152.51	-5,661.3	-747.4	6,007.8	5,936.8	71.01	84.609	
3,300.0	3,268.2	3,226.7	3,226.7	9.3	64.4	152.56	-5,661.3	-747.4	6,010.8	5,938.6	72.20	83.252	
3,346.4	3,314.6	3,273.1	3,273.1	9.4	65.3	152.58	-5,661.3	-747.4	6,012.7	5,939.5	73.25	82.088	
3,400.0	3,368.1	3,326.6	3,326.6	9.5	66.4	152.60	-5,661.3	-747.4	6,014.1	5,939.7	74.44	80.793	
3,444.9	3,413.0	3,371.5	3,371.5	9.6	67.3	152.61	-5,661.3	-747.4	6,014.6	5,939.2	75.42	79.750	
3,457.5	3,425.6	3,384.1	3,384.1	9.6	67.6	-170.89	-5,661.3	-747.4	6,014.6	5,938.9	75.70	79.456	
3,500.0	3,468.1	3,426.6	3,426.6	9.7	68.4	-170.89	-5,661.3	-747.4	6,014.6	5,938.0	76.63	78.490	
3,543.3	3,511.4	3,469.9	3,469.9	9.7	69.3	-170.89	-5,661.3	-747.4	6,014.6	5,937.1	77.59	77.522	
3,600.0	3,568.1	3,526.6	3,526.6	9.8	70.4	-170.89	-5,661.3	-747.4	6,014.6	5,935.8	78.84	76.289	
3,641.7	3,609.9	3,568.4	3,568.4	9.9	71.3	-170.89	-5,661.3	-747.4	6,014.6	5,934.9	79.76	75.407	
3,700.0	3,668.1	3,626.6	3,626.6	10.0	72.5	-170.89	-5,661.3	-747.4	6,014.6	5,933.6	81.05	74.208	
3,740.1	3,708.3	3,666.8	3,666.8	10.1	73.3	-170.89	-5,661.3	-747.4	6,014.6	5,932.7	81.94	73.403	
3,800.0	3,768.1	3,726.6	3,726.6	10.2	74.5	-170.89	-5,661.3	-747.4	6,014.6	5,931.4	83.26	72.236	
3,838.6	3,806.7	3,765.2	3,765.2	10.2	75.2	-170.89	-5,661.3	-747.4	6,014.6	5,930.5	84.12	71.502	
3,900.0	3,868.1	3,826.6	3,826.6	10.3	76.5	-170.89	-5,661.3	-747.4	6,014.6	5,929.2	85.48	70.365	
3,937.0	3,905.1	3,863.6	3,863.6	10.4	77.2	-170.89	-5,661.3	-747.4	6,014.6	5,928.3	86.30	69.696	
4,000.0	3,968.1	3,926.6	3,926.6	10.5	78.5	-170.89	-5,661.3	-747.4	6,014.6	5,926.9	87.69	68.587	
4,035.4	4,003.6	3,962.1	3,962.1	10.6	79.2	-170.89	-5,661.3	-747.4	6,014.6	5,926.2	88.48	67.979	
4,100.0	4,068.1	4,026.6	4,026.6	10.7	80.5	-170.89	-5,661.3	-747.4	6,014.6	5,924.7	89.91	66.897	
4,133.8	4,102.0	4,060.5	4,060.5	10.8	81.2	-170.89	-5,661.3	-747.4	6,014.6	5,924.0	90.66	66.343	
4,200.0	4,168.1	4,126.6	4,126.6	10.9	82.5	-170.89	-5,661.3	-747.4	6,014.6	5,922.5	92.13	65.287	
4,232.3	4,200.4	4,158.9	4,158.9	10.9	83.2	-170.89	-5,661.3	-747.4	6,014.6	5,921.8	92.84	64.784	
4,300.0	4,268.1	4,226.6	4,226.6	11.1	84.5	-170.89	-5,661.3	-747.4	6,014.6	5,920.3	94.34	63.753	
4,330.7	4,298.8	4,257.3	4,257.3	11.1	85.1	-170.89	-5,661.3	-747.4	6,014.6	5,919.6	95.02	63.296	
4,400.0	4,368.1	4,326.6	4,326.6	11.2	86.5	-170.89	-5,661.3	-747.4	6,014.6	5,918.1	96.56	62.288	
4,429.1	4,397.3	4,355.8	4,355.8	11.3	87.1	-170.89	-5,661.3	-747.4	6,014.6	5,917.4	97.21	61.874	
4,500.0	4,468.1	4,426.6	4,426.6	11.4	88.5	-170.89	-5,661.3	-747.4	6,014.6	5,915.9	98.78	60.889	
4,527.5	4,495.7	4,454.2	4,454.2	11.5	89.1	-170.89	-5,661.3	-747.4	6,014.6	5,915.2	99.39	60.514	
4,600.0	4,568.1	4,526.6	4,526.6	11.6	90.6	-170.89	-5,661.3	-747.4	6,014.6	5,913.6	101.00	59.551	
4,626.0	4,594.1	4,552.6	4,552.6	11.7	91.1	-170.89	-5,661.3	-747.4	6,014.6	5,913.1	101.58	59.213	
4,700.0	4,668.1	4,626.6	4,626.6	11.8	92.6	-170.89	-5,661.3	-747.4	6,014.6	5,911.4	103.22	58.270	
4,724.4	4,692.5	4,651.0	4,651.0	11.8	93.1	-170.89	-5,661.3	-747.4	6,014.6	5,910.9	103.76	57.965	
4,800.0	4,768.1	4,726.6	4,726.6	12.0	94.6	-170.89	-5,661.3	-747.4	6,014.6	5,909.2	105.44	57.042	
4,822.8	4,791.0	4,749.5	4,749.5	12.0	95.0	-170.89	-5,661.3	-747.4	6,014.6	5,908.7	105.95	56.769	
4,900.0	4,868.1	4,826.6	4,826.6	12.2	96.6	-170.89	-5,661.3	-747.4	6,014.6	5,907.0	107.66	55.865	
4,921.2	4,889.4	4,847.9	4,847.9	12.2	97.0	-170.89	-5,661.3	-747.4	6,014.6	5,906.5	108.14	55.621	
5,000.0	4,968.1	4,926.6	4,926.6	12.4	98.6	-170.89	-5,661.3	-747.4	6,014.6	5,904.8	109.89	54.736	
5,019.7	4,987.8	4,946.3	4,946.3	12.4	99.0	-170.89	-5,661.3	-747.4	6,014.6	5,904.3	110.32	54.519	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-INC												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,100.0	5,068.1	5,026.6	5,026.6	12.6	100.6	-170.89	-5,661.3	-747.4	6,014.6	5,902.5	112.11	53.650	
5,118.1	5,086.2	5,044.7	5,044.7	12.6	101.0	-170.89	-5,661.3	-747.4	6,014.6	5,902.1	112.51	53.459	
5,200.0	5,168.1	5,126.6	5,126.6	12.8	102.6	-170.89	-5,661.3	-747.4	6,014.6	5,900.3	114.33	52.607	
5,216.5	5,184.7	5,143.2	5,143.2	12.8	102.9	-170.89	-5,661.3	-747.4	6,014.6	5,899.9	114.70	52.439	
5,300.0	5,268.1	5,226.6	5,226.6	13.0	104.6	-170.89	-5,661.3	-747.4	6,014.6	5,898.1	116.55	51.604	
5,314.9	5,283.1	5,241.6	5,241.6	13.0	104.9	-170.89	-5,661.3	-747.4	6,014.6	5,897.8	116.89	51.457	
5,400.0	5,368.1	5,326.6	5,326.6	13.1	106.6	-170.89	-5,661.3	-747.4	6,014.6	5,895.9	118.78	50.637	
5,413.4	5,381.5	5,340.0	5,340.0	13.2	106.9	-170.89	-5,661.3	-747.4	6,014.6	5,895.6	119.08	50.511	
5,500.0	5,468.1	5,426.6	5,426.6	13.3	108.7	-170.89	-5,661.3	-747.4	6,014.6	5,893.6	121.00	49.707	
5,511.8	5,479.9	5,438.4	5,438.4	13.4	108.9	-170.89	-5,661.3	-747.4	6,014.6	5,893.4	121.27	49.599	
5,600.0	5,568.1	5,526.6	5,526.6	13.5	110.7	-170.89	-5,661.3	-747.4	6,014.6	5,891.4	123.23	48.809	
5,610.2	5,578.4	5,536.9	5,536.9	13.6	110.9	-170.89	-5,661.3	-747.4	6,014.6	5,891.2	123.46	48.719	
5,700.0	5,668.1	5,626.6	5,626.6	13.7	112.7	-170.89	-5,661.3	-747.4	6,014.6	5,889.2	125.45	47.943	
5,708.6	5,676.8	5,635.3	5,635.3	13.8	112.8	-170.89	-5,661.3	-747.4	6,014.6	5,889.0	125.65	47.870	
5,800.0	5,768.1	5,726.6	5,726.6	13.9	114.7	-170.89	-5,661.3	-747.4	6,014.6	5,887.0	127.68	47.108	
5,807.1	5,775.2	5,733.7	5,733.7	14.0	114.8	-170.89	-5,661.3	-747.4	6,014.6	5,886.8	127.84	47.050	
5,900.0	5,868.1	5,826.6	5,826.6	14.1	116.7	-170.89	-5,661.3	-747.4	6,014.6	5,884.7	129.90	46.300	
5,905.5	5,873.6	5,832.1	5,832.1	14.1	116.8	-170.89	-5,661.3	-747.4	6,014.6	5,884.6	130.03	46.257	
6,000.0	5,968.1	5,926.6	5,926.6	14.3	118.7	-170.89	-5,661.3	-747.4	6,014.6	5,882.5	132.13	45.520	
6,003.9	5,972.1	5,930.6	5,930.6	14.3	118.8	-170.89	-5,661.3	-747.4	6,014.6	5,882.4	132.22	45.490	
6,100.0	6,068.1	6,026.6	6,026.6	14.5	120.7	-170.89	-5,661.3	-747.4	6,014.6	5,880.3	134.36	44.766	
6,102.3	6,070.5	6,029.0	6,029.0	14.5	120.8	-170.89	-5,661.3	-747.4	6,014.6	5,880.2	134.41	44.749	
6,200.0	6,168.1	6,126.6	6,126.6	14.7	122.7	-170.89	-5,661.3	-747.4	6,014.6	5,878.1	136.58	44.036	
6,200.8	6,168.9	6,127.4	6,127.4	14.7	122.7	-170.89	-5,661.3	-747.4	6,014.6	5,878.0	136.60	44.031	
6,288.5	6,256.6	6,215.1	6,215.1	14.9	124.5	-170.89	-5,661.3	-747.4	6,014.6	5,876.1	138.55	43.410	
6,299.2	6,267.3	6,225.8	6,225.8	14.9	124.7	8.91	-5,661.3	-747.4	6,014.6	5,875.8	138.76	43.344	
6,300.0	6,268.1	6,226.6	6,226.6	14.9	124.7	8.91	-5,661.3	-747.4	6,014.6	5,875.8	138.78	43.339	
6,350.0	6,318.1	6,276.6	6,276.6	15.0	125.7	8.94	-5,661.3	-747.4	6,012.0	5,872.7	139.35	43.144	
6,397.6	6,365.3	6,323.8	6,323.8	15.1	126.7	9.02	-5,661.3	-747.4	6,006.4	5,867.2	139.27	43.128	
6,400.0	6,367.7	6,326.2	6,326.2	15.1	126.7	9.02	-5,661.3	-747.4	6,006.1	5,866.8	139.25	43.132	
6,450.0	6,416.8	6,375.3	6,375.3	15.1	127.7	9.16	-5,661.3	-747.4	5,996.7	5,858.3	138.47	43.306	
6,496.0	6,461.3	6,419.8	6,419.8	15.1	128.6	9.33	-5,661.3	-747.4	5,985.1	5,848.0	137.15	43.638	
6,500.0	6,465.1	6,423.6	6,423.6	15.1	128.7	9.35	-5,661.3	-747.4	5,984.0	5,847.0	137.01	43.674	
6,550.0	6,512.4	6,470.9	6,470.9	15.1	129.7	9.60	-5,661.3	-747.4	5,968.0	5,833.1	134.88	44.248	
6,594.5	6,553.4	6,511.9	6,511.9	15.1	130.5	9.87	-5,661.3	-747.4	5,951.0	5,818.6	132.41	44.944	
6,600.0	6,558.4	6,516.9	6,516.9	15.1	130.6	9.91	-5,661.3	-747.4	5,948.8	5,816.7	132.07	45.043	
6,650.0	6,603.0	6,561.5	6,561.5	15.1	131.5	10.30	-5,661.3	-747.4	5,926.4	5,797.8	128.61	46.079	
6,692.9	6,639.9	6,598.4	6,598.4	15.1	132.2	10.70	-5,661.3	-747.4	5,904.8	5,779.7	125.16	47.178	
6,700.0	6,645.9	6,604.4	6,604.4	15.1	132.3	10.78	-5,661.3	-747.4	5,901.0	5,776.5	124.55	47.381	
6,750.0	6,686.8	6,645.3	6,645.3	15.1	133.2	11.36	-5,661.3	-747.4	5,872.8	5,752.9	119.91	48.977	
6,791.3	6,719.1	6,677.6	6,677.6	15.1	133.8	11.93	-5,661.3	-747.4	5,847.3	5,731.6	115.70	50.539	
6,800.0	6,725.7	6,684.2	6,684.2	15.1	133.9	12.06	-5,661.3	-747.4	5,841.8	5,727.0	114.78	50.896	
6,850.0	6,762.3	6,720.8	6,720.8	15.1	134.7	12.92	-5,661.3	-747.4	5,808.2	5,698.9	109.25	53.163	
6,889.7	6,789.7	6,748.2	6,748.2	15.1	135.2	13.73	-5,661.3	-747.4	5,779.7	5,675.0	104.67	55.217	
6,900.0	6,796.5	6,755.0	6,755.0	15.1	135.4	13.97	-5,661.3	-747.4	5,772.1	5,668.7	103.48	55.782	
6,950.0	6,828.0	6,786.5	6,786.5	15.1	136.0	15.27	-5,661.3	-747.4	5,733.8	5,636.2	97.68	58.702	
6,988.2	6,850.2	6,808.7	6,808.7	15.1	136.4	16.47	-5,661.3	-747.4	5,703.2	5,609.7	93.44	61.034	
7,000.0	6,856.7	6,815.2	6,815.2	15.1	136.6	16.89	-5,661.3	-747.4	5,693.5	5,601.3	92.19	61.757	
7,050.0	6,882.5	6,841.0	6,841.0	15.2	137.1	18.97	-5,661.3	-747.4	5,651.2	5,563.7	87.55	64.547	
7,086.6	6,899.5	6,858.0	6,858.0	15.3	137.4	20.87	-5,661.3	-747.4	5,619.3	5,534.1	85.15	65.990	
7,100.0	6,905.3	6,863.8	6,863.8	15.4	137.6	21.66	-5,661.3	-747.4	5,607.3	5,522.8	84.58	66.295	
7,150.0	6,924.9	6,883.4	6,883.4	15.7	137.9	25.27	-5,661.3	-747.4	5,562.0	5,477.5	84.50	65.824	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-INC												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,185.0	6,936.7	6,895.2	6,895.2	15.9	138.2	28.58	-5,661.3	-747.4	5,529.5	5,442.5	87.01	63.551	
7,200.0	6,941.2	6,899.7	6,899.7	16.0	138.3	30.25	-5,661.3	-747.4	5,515.4	5,426.5	88.90	62.040	
7,250.0	6,954.2	6,912.7	6,912.7	16.3	138.5	37.37	-5,661.3	-747.4	5,467.9	5,368.3	99.50	54.952	
7,283.4	6,961.0	6,919.5	6,919.5	16.6	138.7	43.92	-5,661.3	-747.4	5,435.6	5,325.0	110.62	49.137	
7,300.0	6,963.8	6,922.3	6,922.3	16.7	138.7	47.86	-5,661.3	-747.4	5,419.5	5,302.3	117.26	46.219	
7,350.0	6,970.0	6,928.5	6,928.5	17.2	138.9	63.30	-5,661.3	-747.4	5,370.7	5,231.0	139.65	38.459	
7,381.9	6,972.1	6,930.6	6,930.6	17.5	138.9	76.01	-5,661.3	-747.4	5,339.3	5,187.7	151.59	35.222	
7,400.0	6,972.7	6,931.2	6,931.2	17.7	138.9	83.96	-5,661.3	-747.4	5,321.5	5,166.0	155.50	34.222	
7,420.0	6,972.8	6,931.3	6,931.3	17.9	138.9	92.91	-5,661.3	-747.4	5,301.8	5,145.4	156.45	33.888	
7,480.3	6,972.2	6,930.7	6,930.7	18.5	138.9	92.88	-5,661.3	-747.4	5,242.5	5,085.4	157.09	33.373	
7,500.0	6,972.0	6,930.5	6,930.5	18.7	138.9	92.87	-5,661.3	-747.4	5,223.1	5,065.8	157.30	33.205	
7,578.7	6,971.3	6,929.8	6,929.8	19.7	138.9	92.82	-5,661.3	-747.4	5,145.6	4,987.4	158.21	32.524	
7,600.0	6,971.1	6,929.6	6,929.6	19.9	138.9	92.81	-5,661.3	-747.4	5,124.7	4,966.2	158.46	32.341	
7,677.1	6,970.4	6,928.9	6,928.9	20.9	138.9	92.77	-5,661.3	-747.4	5,048.9	4,889.4	159.44	31.666	
7,700.0	6,970.2	6,928.7	6,928.7	21.2	138.9	92.76	-5,661.3	-747.4	5,026.4	4,866.7	159.73	31.468	
7,775.6	6,969.5	6,928.0	6,928.0	22.2	138.8	92.72	-5,661.3	-747.4	4,952.2	4,791.4	160.77	30.802	
7,800.0	6,969.3	6,927.8	6,927.8	22.6	138.8	92.70	-5,661.3	-747.4	4,928.2	4,767.1	161.11	30.589	
7,874.0	6,968.6	6,927.1	6,927.1	23.7	138.8	92.66	-5,661.3	-747.4	4,855.5	4,693.3	162.19	29.937	
7,900.0	6,968.4	6,926.9	6,926.9	24.1	138.8	92.65	-5,661.3	-747.4	4,830.0	4,667.4	162.57	29.710	
7,972.4	6,967.8	6,926.3	6,926.3	25.2	138.8	92.61	-5,661.3	-747.4	4,759.0	4,595.3	163.68	29.075	
8,000.0	6,967.5	6,926.0	6,926.0	25.6	138.8	92.59	-5,661.3	-747.4	4,731.9	4,567.8	164.10	28.835	
8,070.8	6,966.9	6,925.4	6,925.4	26.7	138.8	92.55	-5,661.3	-747.4	4,662.5	4,497.3	165.23	28.218	
8,100.0	6,966.6	6,925.1	6,925.1	27.2	138.8	92.54	-5,661.3	-747.4	4,633.9	4,468.2	165.69	27.967	
8,169.3	6,966.0	6,924.5	6,924.5	28.3	138.8	92.50	-5,661.3	-747.4	4,566.1	4,399.3	166.83	27.370	
8,200.0	6,965.7	6,924.2	6,924.2	28.8	138.8	92.48	-5,661.3	-747.4	4,536.0	4,368.7	167.33	27.108	
8,267.7	6,965.1	6,923.6	6,923.6	30.0	138.8	92.44	-5,661.3	-747.4	4,469.8	4,301.3	168.47	26.532	
8,300.0	6,964.8	6,923.3	6,923.3	30.5	138.7	92.43	-5,661.3	-747.4	4,438.2	4,269.2	169.01	26.259	
8,366.1	6,964.2	6,922.7	6,922.7	31.7	138.7	92.39	-5,661.3	-747.4	4,373.6	4,203.4	170.15	25.705	
8,400.0	6,963.9	6,922.4	6,922.4	32.2	138.7	92.37	-5,661.3	-747.4	4,340.5	4,169.8	170.73	25.423	
8,464.5	6,963.3	6,921.8	6,921.8	33.4	138.7	92.33	-5,661.3	-747.4	4,277.5	4,105.6	171.85	24.890	
8,500.0	6,963.0	6,921.5	6,921.5	34.0	138.7	92.31	-5,661.3	-747.4	4,242.9	4,070.4	172.47	24.600	
8,563.0	6,962.4	6,920.9	6,920.9	35.1	138.7	92.28	-5,661.3	-747.4	4,181.5	4,007.9	173.58	24.089	
8,600.0	6,962.0	6,920.5	6,920.5	35.8	138.7	92.26	-5,661.3	-747.4	4,145.4	3,971.1	174.24	23.781	
8,661.4	6,961.5	6,920.0	6,920.0	36.9	138.7	92.23	-5,661.3	-747.4	4,085.6	3,910.2	175.34	23.301	
8,700.0	6,961.1	6,919.6	6,919.6	37.6	138.7	92.20	-5,661.3	-747.4	4,048.0	3,872.0	176.03	22.996	
8,759.8	6,960.6	6,919.1	6,919.1	38.7	138.7	92.17	-5,661.3	-747.4	3,989.8	3,812.7	177.11	22.527	
8,800.0	6,960.2	6,918.7	6,918.7	39.4	138.7	92.15	-5,661.3	-747.4	3,950.7	3,772.9	177.84	22.216	
8,858.2	6,959.7	6,918.2	6,918.2	40.5	138.6	92.12	-5,661.3	-747.4	3,894.2	3,715.3	178.90	21.767	
8,900.0	6,959.3	6,917.8	6,917.8	41.2	138.6	92.09	-5,661.3	-747.4	3,853.6	3,674.0	179.66	21.450	
8,956.7	6,958.8	6,917.3	6,917.3	42.3	138.6	92.06	-5,661.3	-747.4	3,798.7	3,618.0	180.70	21.022	
9,000.0	6,958.4	6,916.9	6,916.9	43.1	138.6	92.04	-5,661.3	-747.4	3,756.7	3,575.2	181.50	20.698	
9,055.1	6,957.9	6,916.4	6,916.4	44.1	138.6	92.01	-5,661.3	-747.4	3,703.3	3,520.8	182.52	20.290	
9,100.0	6,957.5	6,916.0	6,916.0	44.9	138.6	91.98	-5,661.3	-747.4	3,659.9	3,476.5	183.35	19.962	
9,153.5	6,957.0	6,915.5	6,915.5	45.9	138.6	91.95	-5,661.3	-747.4	3,608.2	3,423.8	184.34	19.573	
9,200.0	6,956.6	6,915.1	6,915.1	46.8	138.6	91.93	-5,661.3	-747.4	3,563.3	3,378.1	185.21	19.240	
9,251.9	6,956.1	6,914.6	6,914.6	47.8	138.6	91.90	-5,661.3	-747.4	3,513.2	3,327.0	186.18	18.870	
9,300.0	6,955.7	6,914.2	6,914.2	48.7	138.6	91.87	-5,661.3	-747.4	3,466.8	3,279.8	187.07	18.532	
9,350.4	6,955.2	6,913.7	6,913.7	49.6	138.6	91.84	-5,661.3	-747.4	3,418.4	3,230.3	188.02	18.181	
9,400.0	6,954.8	6,913.3	6,913.3	50.6	138.5	91.81	-5,661.3	-747.4	3,370.6	3,181.7	188.95	17.839	
9,448.8	6,954.3	6,912.8	6,912.8	51.5	138.5	91.79	-5,661.3	-747.4	3,323.8	3,133.9	189.87	17.505	
9,500.0	6,953.9	6,912.4	6,912.4	52.5	138.5	91.76	-5,661.3	-747.4	3,274.6	3,083.8	190.84	17.159	
9,547.2	6,953.4	6,911.9	6,911.9	53.4	138.5	91.73	-5,661.3	-747.4	3,229.4	3,037.7	191.73	16.843	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-INC												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,600.0	6,952.9	6,911.4	6,911.4	54.4	138.5	91.70	-5,661.3	-747.4	3,178.9	2,986.2	192.73	16.494	
9,645.6	6,952.5	6,911.0	6,911.0	55.2	138.5	91.68	-5,661.3	-747.4	3,135.3	2,941.7	193.60	16.195	
9,700.0	6,952.0	6,910.5	6,910.5	56.3	138.5	91.65	-5,661.3	-747.4	3,083.4	2,888.8	194.63	15.843	
9,744.1	6,951.6	6,910.1	6,910.1	57.1	138.5	91.62	-5,661.3	-747.4	3,041.4	2,846.0	195.47	15.560	
9,800.0	6,951.1	6,909.6	6,909.6	58.2	138.5	91.59	-5,661.3	-747.4	2,988.3	2,791.7	196.53	15.205	
9,842.5	6,950.7	6,909.2	6,909.2	59.0	138.5	91.57	-5,661.3	-747.4	2,947.9	2,750.6	197.34	14.938	
9,900.0	6,950.2	6,908.7	6,908.7	60.1	138.5	91.54	-5,661.3	-747.4	2,893.4	2,695.0	198.44	14.581	
9,940.9	6,949.8	6,908.3	6,908.3	60.9	138.4	91.51	-5,661.3	-747.4	2,854.7	2,655.5	199.22	14.329	
10,000.0	6,949.3	6,907.8	6,907.8	62.0	138.4	91.48	-5,661.3	-747.4	2,798.9	2,598.6	200.35	13.970	
10,039.3	6,948.9	6,907.4	6,907.4	62.8	138.4	91.46	-5,661.3	-747.4	2,761.8	2,560.7	201.10	13.733	
10,100.0	6,948.4	6,906.9	6,906.9	64.0	138.4	91.42	-5,661.3	-747.4	2,704.8	2,502.6	202.27	13.373	
10,137.8	6,948.0	6,906.5	6,906.5	64.7	138.4	91.40	-5,661.3	-747.4	2,669.4	2,466.4	202.99	13.150	
10,200.0	6,947.5	6,906.0	6,906.0	65.9	138.4	91.37	-5,661.3	-747.4	2,611.2	2,407.0	204.18	12.788	
10,236.2	6,947.1	6,905.6	6,905.6	66.6	138.4	91.35	-5,661.3	-747.4	2,577.4	2,372.5	204.88	12.580	
10,300.0	6,946.6	6,905.1	6,905.1	67.8	138.4	91.31	-5,661.3	-747.4	2,518.0	2,311.9	206.11	12.217	
10,334.6	6,946.3	6,904.8	6,904.8	68.5	138.4	91.29	-5,661.3	-747.4	2,485.9	2,279.1	206.77	12.022	
10,400.0	6,945.7	6,904.2	6,904.2	69.8	138.4	91.26	-5,661.3	-747.4	2,425.4	2,217.3	208.03	11.659	
10,433.0	6,945.4	6,903.9	6,903.9	70.4	138.4	91.24	-5,661.3	-747.4	2,394.9	2,186.2	208.67	11.477	
10,500.0	6,944.7	6,903.2	6,903.2	71.7	138.3	91.20	-5,661.3	-747.4	2,333.3	2,123.4	209.96	11.113	
10,531.5	6,944.5	6,903.0	6,903.0	72.3	138.3	91.18	-5,661.3	-747.4	2,304.5	2,093.9	210.57	10.944	
10,600.0	6,943.8	6,902.3	6,902.3	73.7	138.3	91.14	-5,661.3	-747.4	2,242.0	2,030.1	211.89	10.581	
10,629.9	6,943.6	6,902.1	6,902.1	74.2	138.3	91.13	-5,661.3	-747.4	2,214.8	2,002.4	212.47	10.424	
10,700.0	6,942.9	6,901.4	6,901.4	75.6	138.3	91.09	-5,661.3	-747.4	2,151.4	1,937.6	213.83	10.062	
10,728.3	6,942.7	6,901.2	6,901.2	76.2	138.3	91.07	-5,661.3	-747.4	2,125.9	1,911.6	214.37	9.917	
10,800.0	6,942.0	6,900.5	6,900.5	77.6	138.3	91.03	-5,661.3	-747.4	2,061.8	1,846.0	215.76	9.556	
10,826.7	6,941.8	6,900.3	6,900.3	78.1	138.3	91.02	-5,661.3	-747.4	2,037.9	1,821.6	216.28	9.423	
10,900.0	6,941.1	6,899.6	6,899.6	79.5	138.3	90.98	-5,661.3	-747.4	1,973.1	1,755.4	217.70	9.063	
10,925.2	6,940.9	6,899.4	6,899.4	80.0	138.3	90.96	-5,661.3	-747.4	1,950.9	1,732.7	218.19	8.941	
11,000.0	6,940.2	6,898.7	6,898.7	81.5	138.3	90.92	-5,661.3	-747.4	1,885.5	1,665.8	219.64	8.584	
11,023.6	6,940.0	6,898.5	6,898.5	81.9	138.2	90.91	-5,661.3	-747.4	1,865.0	1,644.9	220.10	8.474	
11,100.0	6,939.3	6,897.8	6,897.8	83.4	138.2	90.86	-5,661.3	-747.4	1,799.2	1,577.6	221.58	8.120	
11,122.0	6,939.1	6,897.6	6,897.6	83.8	138.2	90.85	-5,661.3	-747.4	1,780.4	1,558.4	222.01	8.020	
11,200.0	6,938.4	6,896.9	6,896.9	85.4	138.2	90.81	-5,661.3	-747.4	1,714.4	1,490.9	223.52	7.670	
11,220.4	6,938.2	6,896.7	6,896.7	85.8	138.2	90.80	-5,661.3	-747.4	1,697.3	1,473.4	223.92	7.580	
11,300.0	6,937.4	6,895.9	6,895.9	87.3	138.2	90.75	-5,661.3	-747.4	1,631.4	1,405.9	225.46	7.236	
11,318.9	6,937.3	6,895.8	6,895.8	87.7	138.2	90.74	-5,661.3	-747.4	1,615.9	1,390.1	225.83	7.155	
11,400.0	6,936.5	6,895.0	6,895.0	89.3	138.2	90.70	-5,661.3	-747.4	1,550.3	1,322.9	227.41	6.817	
11,417.3	6,936.4	6,894.9	6,894.9	89.6	138.2	90.69	-5,661.3	-747.4	1,536.5	1,308.8	227.75	6.747	
11,500.0	6,935.6	6,894.1	6,894.1	91.3	138.2	90.64	-5,661.3	-747.4	1,471.6	1,242.2	229.36	6.416	
11,515.7	6,935.5	6,894.0	6,894.0	91.6	138.2	90.63	-5,661.3	-747.4	1,459.4	1,229.8	229.66	6.355	
11,600.0	6,934.7	6,893.2	6,893.2	93.2	138.1	90.58	-5,661.3	-747.4	1,395.6	1,164.3	231.30	6.034	
11,614.1	6,934.6	6,893.1	6,893.1	93.5	138.1	90.58	-5,661.3	-747.4	1,385.1	1,153.5	231.58	5.981	
11,700.0	6,933.8	6,892.3	6,892.3	95.2	138.1	90.53	-5,661.3	-747.4	1,322.8	1,089.5	233.25	5.671	
11,712.6	6,933.7	6,892.2	6,892.2	95.4	138.1	90.52	-5,661.3	-747.4	1,313.9	1,080.4	233.50	5.627	
11,800.0	6,932.9	6,891.4	6,891.4	97.1	138.1	90.47	-5,661.3	-747.4	1,253.7	1,018.5	235.20	5.330	
11,811.0	6,932.8	6,891.3	6,891.3	97.4	138.1	90.47	-5,661.3	-747.4	1,246.4	1,011.0	235.42	5.294	
11,900.0	6,932.0	6,890.5	6,890.5	99.1	138.1	90.42	-5,661.3	-747.4	1,189.1	951.9	237.15	5.014	
11,909.4	6,931.9	6,890.4	6,890.4	99.3	138.1	90.41	-5,661.3	-747.4	1,183.2	945.9	237.33	4.986	
12,000.0	6,931.0	6,889.5	6,889.5	101.1	138.1	90.36	-5,661.3	-747.4	1,129.6	890.5	239.10	4.724	
12,007.8	6,931.0	6,889.5	6,889.5	101.2	138.1	90.36	-5,661.3	-747.4	1,125.2	885.9	239.25	4.703	
12,100.0	6,930.1	6,888.6	6,888.6	103.0	138.1	90.30	-5,661.3	-747.4	1,076.2	835.1	241.05	4.464	
12,106.3	6,930.1	6,888.6	6,888.6	103.2	138.1	90.30	-5,661.3	-747.4	1,073.0	831.8	241.18	4.449	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-INC												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
12,200.0	6,929.2	6,887.7	6,887.7	105.0	138.0	90.25	-5,661.3	-747.4	1,029.7	786.7	243.01	4.237	
12,204.7	6,929.2	6,887.7	6,887.7	105.1	138.0	90.24	-5,661.3	-747.4	1,027.7	784.6	243.10	4.227	
12,300.0	6,928.3	6,886.8	6,886.8	107.0	138.0	90.19	-5,661.3	-747.4	991.1	746.1	244.96	4.046	
12,303.1	6,928.3	6,886.8	6,886.8	107.1	138.0	90.19	-5,661.3	-747.4	990.0	745.0	245.02	4.041	
12,400.0	6,927.4	6,885.9	6,885.9	109.0	138.0	90.13	-5,661.3	-747.4	961.4	714.5	246.91	3.894	
12,401.5	6,927.4	6,885.9	6,885.9	109.0	138.0	90.13	-5,661.3	-747.4	961.1	714.1	246.94	3.892	
12,500.0	6,926.5	6,885.0	6,885.0	110.9	138.0	90.08	-5,661.3	-747.4	941.5	692.6	248.87	3.783	
12,598.4	6,925.6	6,884.1	6,884.1	112.9	138.0	90.02	-5,661.3	-747.4	932.0	681.2	250.79	3.716	
12,600.0	6,925.6	6,884.1	6,884.1	112.9	138.0	90.02	-5,661.3	-747.4	932.0	681.1	250.82	3.716	
12,639.6	6,925.2	6,883.7	6,883.7	113.7	138.0	90.00	-5,661.3	-747.4	931.1	679.5	251.59	3.701 CC, ES	
12,696.8	6,924.7	6,883.2	6,883.2	114.8	137.9	89.97	-5,661.3	-747.4	932.9	680.2	252.71	3.691	
12,700.0	6,924.6	6,883.1	6,883.1	114.9	137.9	89.97	-5,661.3	-747.4	933.1	680.3	252.77	3.691 SF	
12,795.2	6,923.8	6,882.3	6,882.3	116.8	137.9	89.91	-5,661.3	-747.4	944.0	689.4	254.64	3.707	
12,800.0	6,923.7	6,882.2	6,882.2	116.9	137.9	89.91	-5,661.3	-747.4	944.8	690.1	254.73	3.709	
12,893.7	6,922.9	6,881.4	6,881.4	118.7	137.9	89.86	-5,661.3	-747.4	965.2	708.6	256.56	3.762	
12,900.0	6,922.8	6,881.3	6,881.3	118.8	137.9	89.85	-5,661.3	-747.4	966.8	710.2	256.69	3.767	
12,992.1	6,922.0	6,880.5	6,880.5	120.6	137.9	89.80	-5,661.3	-747.4	995.6	737.1	258.49	3.852	
13,000.0	6,921.9	6,880.4	6,880.4	120.8	137.9	89.80	-5,661.3	-747.4	998.4	739.8	258.64	3.860	
13,090.5	6,921.1	6,879.6	6,879.6	122.6	137.9	89.75	-5,661.3	-747.4	1,034.5	774.1	260.41	3.973	
13,100.0	6,921.0	6,879.5	6,879.5	122.8	137.9	89.74	-5,661.3	-747.4	1,038.7	778.1	260.60	3.986	
13,188.9	6,920.2	6,878.7	6,878.7	124.5	137.9	89.69	-5,661.3	-747.4	1,081.1	818.7	262.34	4.121	
13,200.0	6,920.1	6,878.6	6,878.6	124.8	137.8	89.68	-5,661.3	-747.4	1,086.7	824.2	262.55	4.139	
13,287.4	6,919.3	6,877.8	6,877.8	126.5	137.8	89.63	-5,661.3	-747.4	1,134.3	870.0	264.26	4.292	
13,300.0	6,919.1	6,877.6	6,877.6	126.7	137.8	89.63	-5,661.3	-747.4	1,141.5	877.0	264.51	4.316	
13,385.8	6,918.4	6,876.9	6,876.9	128.4	137.8	89.58	-5,661.3	-747.4	1,193.2	927.0	266.19	4.483	
13,400.0	6,918.2	6,876.7	6,876.7	128.7	137.8	89.57	-5,661.3	-747.4	1,202.1	935.7	266.47	4.511	
13,484.2	6,917.5	6,876.0	6,876.0	130.4	137.8	89.52	-5,661.3	-747.4	1,257.1	989.0	268.12	4.689	
13,500.0	6,917.3	6,875.8	6,875.8	130.7	137.8	89.51	-5,661.3	-747.4	1,267.8	999.3	268.43	4.723	
13,582.6	6,916.6	6,875.1	6,875.1	132.3	137.8	89.47	-5,661.3	-747.4	1,325.2	1,055.2	270.04	4.908	
13,600.0	6,916.4	6,874.9	6,874.9	132.7	137.8	89.46	-5,661.3	-747.4	1,337.6	1,067.3	270.38	4.947	
13,681.1	6,915.6	6,874.1	6,874.1	134.3	137.8	89.41	-5,661.3	-747.4	1,397.0	1,125.0	271.97	5.137	
13,700.0	6,915.5	6,874.0	6,874.0	134.6	137.8	89.40	-5,661.3	-747.4	1,411.2	1,138.8	272.34	5.182	
13,779.5	6,914.7	6,873.2	6,873.2	136.2	137.7	89.36	-5,661.3	-747.4	1,471.8	1,197.9	273.90	5.374	
13,800.0	6,914.6	6,873.1	6,873.1	136.6	137.7	89.35	-5,661.3	-747.4	1,487.8	1,213.5	274.30	5.424	
13,877.9	6,913.8	6,872.3	6,872.3	138.2	137.7	89.30	-5,661.3	-747.4	1,549.3	1,273.5	275.82	5.617	
13,900.0	6,913.6	6,872.1	6,872.1	138.6	137.7	89.29	-5,661.3	-747.4	1,567.0	1,290.7	276.26	5.672	
13,976.3	6,912.9	6,871.4	6,871.4	140.1	137.7	89.25	-5,661.3	-747.4	1,629.0	1,351.3	277.75	5.865	
14,000.0	6,912.7	6,871.2	6,871.2	140.6	137.7	89.23	-5,661.3	-747.4	1,648.5	1,370.3	278.21	5.925	
14,074.8	6,912.0	6,870.5	6,870.5	142.0	137.7	89.19	-5,661.3	-747.4	1,710.7	1,431.1	279.61	6.118	
14,079.0	6,912.0	6,870.5	6,870.5	142.1	137.7	89.19	-5,661.3	-747.4	1,714.2	1,434.5	279.69	6.129	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-INC												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.0	0.0	0.0	0.0	0.0	0.0	175.95	-7,165.9	507.6	7,183.9				
98.4	98.4	81.9	81.9	0.1	0.6	175.95	-7,165.9	507.6	7,183.9	7,183.2	0.67	N/A	
100.0	100.0	83.5	83.5	0.1	0.6	175.95	-7,165.9	507.6	7,183.9	7,183.2	0.69	N/A	
196.8	196.8	180.3	180.3	0.3	2.6	175.95	-7,165.9	507.6	7,183.9	7,180.9	2.96	2,426.928	
200.0	200.0	183.5	183.5	0.3	2.7	175.95	-7,165.9	507.6	7,183.9	7,180.8	3.04	2,360.643	
295.3	295.3	278.8	278.8	0.5	4.8	175.95	-7,165.9	507.6	7,183.9	7,178.6	5.30	1,356.606	
300.0	300.0	283.5	283.5	0.5	4.9	175.95	-7,165.9	507.6	7,183.9	7,178.4	5.40	1,329.250	
393.7	393.7	377.2	377.2	0.8	6.8	175.95	-7,165.9	507.6	7,183.9	7,176.3	7.53	953.422	
400.0	400.0	383.5	383.5	0.8	6.9	175.95	-7,165.9	507.6	7,183.9	7,176.2	7.68	935.689	
492.1	492.1	475.6	475.6	1.0	8.8	175.95	-7,165.9	507.6	7,183.9	7,174.1	9.76	736.390	
500.0	500.0	483.5	483.5	1.0	8.9	175.95	-7,165.9	507.6	7,183.9	7,173.9	9.93	723.236	
590.5	590.5	574.0	574.0	1.2	10.8	175.95	-7,165.9	507.6	7,183.9	7,171.9	11.97	600.230	
600.0	600.0	583.5	583.5	1.2	11.0	175.95	-7,165.9	507.6	7,183.9	7,171.7	12.18	589.767	
689.0	689.0	672.5	672.5	1.4	12.8	175.95	-7,165.9	507.6	7,183.9	7,169.7	14.18	506.707	
700.0	700.0	683.5	683.5	1.4	13.0	175.95	-7,165.9	507.6	7,183.9	7,169.4	14.42	498.018	
787.4	787.4	770.9	770.9	1.6	14.7	175.95	-7,165.9	507.6	7,183.9	7,167.5	16.38	438.461	
800.0	800.0	783.5	783.5	1.7	15.0	175.95	-7,165.9	507.6	7,183.9	7,167.2	16.67	431.031	
885.8	885.8	869.3	869.3	1.9	16.7	175.95	-7,165.9	507.6	7,183.9	7,165.3	18.59	386.448	
900.0	900.0	883.5	883.5	1.9	17.0	175.95	-7,165.9	507.6	7,183.9	7,164.9	18.91	379.957	
984.2	984.2	967.7	967.7	2.1	18.7	175.95	-7,165.9	507.6	7,183.9	7,163.1	20.79	345.483	
1,000.0	1,000.0	983.5	983.5	2.1	19.0	175.95	-7,165.9	507.6	7,183.9	7,162.7	21.15	339.721	
1,082.7	1,082.7	1,066.2	1,066.2	2.3	20.7	175.95	-7,165.9	507.6	7,183.9	7,160.9	23.00	312.380	
1,100.0	1,100.0	1,083.5	1,083.5	2.3	21.0	175.95	-7,165.9	507.6	7,183.9	7,160.5	23.38	307.199	
1,181.1	1,181.1	1,164.6	1,164.6	2.5	22.7	175.95	-7,165.9	507.6	7,183.9	7,158.6	25.20	285.072	
1,200.0	1,200.0	1,183.5	1,183.5	2.6	23.1	175.95	-7,165.9	507.6	7,183.9	7,158.2	25.62	280.366	
1,279.5	1,279.5	1,263.0	1,263.0	2.7	24.7	139.44	-7,165.9	507.6	7,184.7	7,157.3	27.39	262.264	
1,300.0	1,300.0	1,283.5	1,283.5	2.8	25.1	139.44	-7,165.9	507.6	7,185.2	7,157.3	27.85	258.008	
1,377.9	1,377.8	1,361.3	1,361.3	3.0	26.6	139.42	-7,165.9	507.6	7,188.0	7,158.5	29.57	243.115	
1,400.0	1,399.8	1,383.3	1,383.3	3.0	27.1	139.41	-7,165.9	507.6	7,189.2	7,159.1	30.05	239.247	
1,476.4	1,475.9	1,459.4	1,459.4	3.2	28.6	139.38	-7,165.9	507.6	7,194.0	7,162.3	31.71	226.852	
1,500.0	1,499.5	1,483.0	1,483.0	3.2	29.1	139.37	-7,165.9	507.6	7,195.8	7,163.6	32.22	223.316	
1,574.8	1,573.7	1,557.2	1,557.2	3.4	30.6	139.33	-7,165.9	507.6	7,202.5	7,168.6	33.83	212.902	
1,600.0	1,598.7	1,582.2	1,582.2	3.5	31.1	139.31	-7,165.9	507.6	7,205.1	7,170.7	34.37	209.655	
1,673.2	1,671.1	1,654.6	1,654.6	3.7	32.5	139.26	-7,165.9	507.6	7,213.5	7,177.6	35.92	200.834	
1,700.0	1,697.5	1,681.0	1,681.0	3.7	33.1	139.23	-7,165.9	507.6	7,217.0	7,180.5	36.48	197.839	
1,771.6	1,767.9	1,751.4	1,751.4	4.0	34.5	139.17	-7,165.9	507.6	7,227.1	7,189.2	37.98	190.312	
1,800.1	1,795.7	1,779.2	1,779.2	4.0	35.0	139.14	-7,165.9	507.6	7,231.5	7,193.0	38.56	187.530	
1,870.1	1,864.2	1,847.7	1,847.7	4.3	36.4	139.22	-7,165.9	507.6	7,242.7	7,202.5	40.12	180.538	
1,900.0	1,893.4	1,876.9	1,876.9	4.4	37.0	139.25	-7,165.9	507.6	7,247.4	7,206.6	40.78	177.710	
1,968.5	1,960.4	1,943.9	1,943.9	4.6	38.4	139.32	-7,165.9	507.6	7,258.3	7,216.0	42.31	171.539	
2,000.0	1,991.3	1,974.8	1,974.8	4.7	39.0	139.35	-7,165.9	507.6	7,263.3	7,220.3	43.02	168.855	
2,066.9	2,056.7	2,040.2	2,040.2	5.0	40.3	139.42	-7,165.9	507.6	7,274.0	7,229.5	44.51	163.412	
2,100.0	2,089.1	2,072.6	2,072.6	5.1	40.9	139.46	-7,165.9	507.6	7,279.3	7,234.0	45.26	160.844	
2,165.3	2,153.0	2,136.5	2,136.5	5.3	42.2	139.53	-7,165.9	507.6	7,289.7	7,243.0	46.73	156.010	
2,200.0	2,186.9	2,170.4	2,170.4	5.5	42.9	139.56	-7,165.9	507.6	7,295.2	7,247.7	47.50	153.568	
2,263.8	2,249.3	2,232.8	2,232.8	5.7	44.2	139.63	-7,165.9	507.6	7,305.4	7,256.5	48.94	149.267	
2,300.0	2,284.7	2,268.2	2,268.2	5.8	44.9	139.67	-7,165.9	507.6	7,311.2	7,261.5	49.76	146.934	
2,362.2	2,345.5	2,329.0	2,329.0	6.1	46.1	139.73	-7,165.9	507.6	7,321.2	7,270.0	51.16	143.095	
2,400.0	2,382.5	2,366.0	2,366.0	6.2	46.8	139.77	-7,165.9	507.6	7,327.2	7,275.2	52.02	140.863	
2,460.6	2,441.8	2,425.3	2,425.3	6.5	48.0	139.84	-7,165.9	507.6	7,336.9	7,283.6	53.39	137.427	
2,500.0	2,480.3	2,463.8	2,463.8	6.6	48.8	139.88	-7,165.9	507.6	7,343.3	7,289.0	54.28	135.289	
2,559.0	2,538.1	2,521.6	2,521.6	6.9	50.0	139.94	-7,165.9	507.6	7,352.7	7,297.1	55.62	132.206	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-INC												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,600.0	2,578.1	2,561.6	2,561.6	7.0	50.8	139.98	-7,165.9	507.6	7,359.3	7,302.8	56.54	130.154	
2,657.5	2,634.4	2,617.9	2,617.9	7.3	51.9	140.04	-7,165.9	507.6	7,368.6	7,310.7	57.85	127.382	
2,700.0	2,675.9	2,659.4	2,659.4	7.5	52.7	140.08	-7,165.9	507.6	7,375.4	7,316.6	58.81	125.411	
2,755.9	2,730.6	2,714.1	2,714.1	7.7	53.8	140.14	-7,165.9	507.6	7,384.4	7,324.3	60.08	122.913	
2,800.0	2,773.8	2,757.3	2,757.3	7.9	54.7	140.19	-7,165.9	507.6	7,391.5	7,330.4	61.08	121.015	
2,854.3	2,826.9	2,810.4	2,810.4	8.1	55.8	140.24	-7,165.9	507.6	7,400.3	7,337.9	62.31	118.761	
2,857.4	2,829.9	2,813.4	2,813.4	8.1	55.8	140.24	-7,165.9	507.6	7,400.7	7,338.4	62.38	118.638	
2,900.0	2,871.6	2,855.1	2,855.1	8.3	56.7	140.37	-7,165.9	507.6	7,407.4	7,344.0	63.43	116.776	
2,952.7	2,923.5	2,907.0	2,907.0	8.4	57.7	140.52	-7,165.9	507.6	7,414.9	7,350.2	64.71	114.596	
3,000.0	2,970.1	2,953.6	2,953.6	8.6	58.7	140.63	-7,165.9	507.6	7,421.1	7,355.2	65.84	112.710	
3,051.2	3,020.7	3,004.2	3,004.2	8.7	59.7	140.75	-7,165.9	507.6	7,427.0	7,360.0	67.06	110.749	
3,100.0	3,069.1	3,052.6	3,052.6	8.9	60.7	140.84	-7,165.9	507.6	7,432.1	7,363.9	68.22	108.943	
3,149.6	3,118.3	3,101.8	3,101.8	9.0	61.6	140.93	-7,165.9	507.6	7,436.6	7,367.2	69.38	107.182	
3,200.0	3,168.5	3,152.0	3,152.0	9.1	62.7	141.00	-7,165.9	507.6	7,440.4	7,369.9	70.56	105.454	
3,248.0	3,216.3	3,199.8	3,199.8	9.2	63.6	141.06	-7,165.9	507.6	7,443.5	7,371.8	71.66	103.874	
3,300.0	3,268.2	3,251.7	3,251.7	9.3	64.7	141.11	-7,165.9	507.6	7,446.1	7,373.2	72.84	102.223	
3,346.4	3,314.6	3,298.1	3,298.1	9.4	65.6	141.14	-7,165.9	507.6	7,447.8	7,373.9	73.88	100.807	
3,400.0	3,368.1	3,351.6	3,351.6	9.5	66.7	141.16	-7,165.9	507.6	7,449.0	7,373.9	75.07	99.230	
3,444.9	3,413.0	3,396.5	3,396.5	9.6	67.6	141.17	-7,165.9	507.6	7,449.4	7,373.4	76.04	97.961	
3,457.5	3,425.6	3,409.1	3,409.1	9.6	67.8	177.67	-7,165.9	507.6	7,449.4	7,373.1	76.32	97.603	
3,500.0	3,468.1	3,451.6	3,451.6	9.7	68.7	177.67	-7,165.9	507.6	7,449.4	7,372.2	77.25	96.429	
3,543.3	3,511.4	3,494.9	3,494.9	9.7	69.6	177.67	-7,165.9	507.6	7,449.4	7,371.2	78.21	95.253	
3,600.0	3,568.1	3,551.6	3,551.6	9.8	70.7	177.67	-7,165.9	507.6	7,449.4	7,370.0	79.46	93.756	
3,641.7	3,609.9	3,593.4	3,593.4	9.9	71.5	177.67	-7,165.9	507.6	7,449.4	7,369.1	80.37	92.684	
3,700.0	3,668.1	3,651.6	3,651.6	10.0	72.7	177.67	-7,165.9	507.6	7,449.4	7,367.8	81.66	91.226	
3,740.1	3,708.3	3,691.8	3,691.8	10.1	73.5	177.67	-7,165.9	507.6	7,449.4	7,366.9	82.54	90.248	
3,800.0	3,768.1	3,751.6	3,751.6	10.2	74.7	177.67	-7,165.9	507.6	7,449.4	7,365.6	83.86	88.827	
3,838.6	3,806.7	3,790.2	3,790.2	10.2	75.5	177.67	-7,165.9	507.6	7,449.4	7,364.7	84.72	87.935	
3,900.0	3,868.1	3,851.6	3,851.6	10.3	76.7	177.67	-7,165.9	507.6	7,449.4	7,363.4	86.07	86.550	
3,937.0	3,905.1	3,888.6	3,888.6	10.4	77.5	177.67	-7,165.9	507.6	7,449.4	7,362.5	86.89	85.737	
4,000.0	3,968.1	3,951.6	3,951.6	10.5	78.7	177.67	-7,165.9	507.6	7,449.4	7,361.2	88.28	84.386	
4,035.4	4,003.6	3,987.1	3,987.1	10.6	79.4	177.67	-7,165.9	507.6	7,449.4	7,360.4	89.06	83.644	
4,100.0	4,068.1	4,051.6	4,051.6	10.7	80.7	177.67	-7,165.9	507.6	7,449.4	7,358.9	90.49	82.326	
4,133.8	4,102.0	4,085.5	4,085.5	10.8	81.4	177.67	-7,165.9	507.6	7,449.4	7,358.2	91.24	81.650	
4,200.0	4,168.1	4,151.6	4,151.6	10.9	82.8	177.67	-7,165.9	507.6	7,449.4	7,356.7	92.70	80.363	
4,232.3	4,200.4	4,183.9	4,183.9	10.9	83.4	177.67	-7,165.9	507.6	7,449.4	7,356.0	93.41	79.749	
4,300.0	4,268.1	4,251.6	4,251.6	11.1	84.8	177.67	-7,165.9	507.6	7,449.4	7,354.5	94.91	78.490	
4,330.7	4,298.8	4,282.3	4,282.3	11.1	85.4	177.67	-7,165.9	507.6	7,449.4	7,353.8	95.59	77.933	
4,400.0	4,368.1	4,351.6	4,351.6	11.2	86.8	177.67	-7,165.9	507.6	7,449.4	7,352.3	97.12	76.702	
4,429.1	4,397.3	4,380.8	4,380.8	11.3	87.4	177.67	-7,165.9	507.6	7,449.4	7,351.7	97.77	76.197	
4,500.0	4,468.1	4,451.6	4,451.6	11.4	88.8	177.67	-7,165.9	507.6	7,449.4	7,350.1	99.33	74.994	
4,527.5	4,495.7	4,479.2	4,479.2	11.5	89.3	177.67	-7,165.9	507.6	7,449.4	7,349.5	99.94	74.536	
4,600.0	4,568.1	4,551.6	4,551.6	11.6	90.8	177.67	-7,165.9	507.6	7,449.4	7,347.9	101.55	73.358	
4,626.0	4,594.1	4,577.6	4,577.6	11.7	91.3	177.67	-7,165.9	507.6	7,449.4	7,347.3	102.12	72.945	
4,700.0	4,668.1	4,651.6	4,651.6	11.8	92.8	177.67	-7,165.9	507.6	7,449.4	7,345.7	103.76	71.793	
4,724.4	4,692.5	4,676.0	4,676.0	11.8	93.3	177.67	-7,165.9	507.6	7,449.4	7,345.1	104.30	71.420	
4,800.0	4,768.1	4,751.6	4,751.6	12.0	94.8	177.67	-7,165.9	507.6	7,449.4	7,343.5	105.98	70.292	
4,822.8	4,791.0	4,774.5	4,774.5	12.0	95.3	177.67	-7,165.9	507.6	7,449.4	7,342.9	106.48	69.958	
4,900.0	4,868.1	4,851.6	4,851.6	12.2	96.8	177.67	-7,165.9	507.6	7,449.4	7,341.2	108.20	68.852	
4,921.2	4,889.4	4,872.9	4,872.9	12.2	97.3	177.67	-7,165.9	507.6	7,449.4	7,340.8	108.67	68.553	
5,000.0	4,968.1	4,951.6	4,951.6	12.4	98.8	177.67	-7,165.9	507.6	7,449.4	7,339.0	110.41	67.469	
5,019.7	4,987.8	4,971.3	4,971.3	12.4	99.2	177.67	-7,165.9	507.6	7,449.4	7,338.6	110.85	67.203	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-INC												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,100.0	5,068.1	5,051.6	5,051.6	12.6	100.9	177.67	-7,165.9	507.6	7,449.4	7,336.8	112.63	66.140	
5,118.1	5,086.2	5,069.7	5,069.7	12.6	101.2	177.67	-7,165.9	507.6	7,449.4	7,336.4	113.03	65.905	
5,200.0	5,168.1	5,151.6	5,151.6	12.8	102.9	177.67	-7,165.9	507.6	7,449.4	7,334.6	114.85	64.863	
5,216.5	5,184.7	5,168.2	5,168.2	12.8	103.2	177.67	-7,165.9	507.6	7,449.4	7,334.2	115.22	64.656	
5,300.0	5,268.1	5,251.6	5,251.6	13.0	104.9	177.67	-7,165.9	507.6	7,449.4	7,332.4	117.07	63.633	
5,314.9	5,283.1	5,266.6	5,266.6	13.0	105.2	177.67	-7,165.9	507.6	7,449.4	7,332.0	117.40	63.453	
5,400.0	5,368.1	5,351.6	5,351.6	13.1	106.9	177.67	-7,165.9	507.6	7,449.4	7,330.1	119.29	62.449	
5,413.4	5,381.5	5,365.0	5,365.0	13.2	107.2	177.67	-7,165.9	507.6	7,449.4	7,329.8	119.58	62.294	
5,500.0	5,468.1	5,451.6	5,451.6	13.3	108.9	177.67	-7,165.9	507.6	7,449.4	7,327.9	121.51	61.308	
5,511.8	5,479.9	5,463.4	5,463.4	13.4	109.1	177.67	-7,165.9	507.6	7,449.4	7,327.7	121.77	61.176	
5,600.0	5,568.1	5,551.6	5,551.6	13.5	110.9	177.67	-7,165.9	507.6	7,449.4	7,325.7	123.73	60.208	
5,610.2	5,578.4	5,561.9	5,561.9	13.6	111.1	177.67	-7,165.9	507.6	7,449.4	7,325.5	123.96	60.097	
5,700.0	5,668.1	5,651.6	5,651.6	13.7	112.9	177.67	-7,165.9	507.6	7,449.4	7,323.5	125.95	59.146	
5,708.6	5,676.8	5,660.3	5,660.3	13.8	113.1	177.67	-7,165.9	507.6	7,449.4	7,323.3	126.14	59.056	
5,800.0	5,768.1	5,751.6	5,751.6	13.9	114.9	177.67	-7,165.9	507.6	7,449.4	7,321.3	128.17	58.121	
5,807.1	5,775.2	5,758.7	5,758.7	14.0	115.1	177.67	-7,165.9	507.6	7,449.4	7,321.1	128.33	58.049	
5,900.0	5,868.1	5,851.6	5,851.6	14.1	116.9	177.67	-7,165.9	507.6	7,449.4	7,319.0	130.39	57.130	
5,905.5	5,873.6	5,857.1	5,857.1	14.1	117.1	177.67	-7,165.9	507.6	7,449.4	7,318.9	130.52	57.077	
6,000.0	5,968.1	5,951.6	5,951.6	14.3	119.0	177.67	-7,165.9	507.6	7,449.4	7,316.8	132.62	56.173	
6,003.9	5,972.1	5,955.6	5,955.6	14.3	119.0	177.67	-7,165.9	507.6	7,449.4	7,316.7	132.70	56.136	
6,100.0	6,068.1	6,051.6	6,051.6	14.5	121.0	177.67	-7,165.9	507.6	7,449.4	7,314.6	134.84	55.246	
6,102.3	6,070.5	6,054.0	6,054.0	14.5	121.0	177.67	-7,165.9	507.6	7,449.4	7,314.5	134.89	55.225	
6,200.0	6,168.1	6,151.6	6,151.6	14.7	123.0	177.67	-7,165.9	507.6	7,449.4	7,312.4	137.06	54.350	
6,200.8	6,168.9	6,152.4	6,152.4	14.7	123.0	177.67	-7,165.9	507.6	7,449.4	7,312.3	137.08	54.343	
6,288.5	6,256.6	6,240.1	6,240.1	14.9	124.8	177.67	-7,165.9	507.6	7,449.4	7,310.4	139.03	53.581	
6,299.2	6,267.3	6,250.8	6,250.8	14.9	125.0	-2.54	-7,165.9	507.6	7,449.4	7,310.1	139.24	53.500	
6,300.0	6,268.1	6,251.6	6,251.6	14.9	125.0	-2.54	-7,165.9	507.6	7,449.3	7,310.1	139.25	53.495	
6,350.0	6,318.1	6,301.6	6,301.6	15.0	126.0	-2.55	-7,165.9	507.6	7,446.8	7,307.0	139.81	53.262	
6,397.6	6,365.3	6,348.8	6,348.8	15.1	126.9	-2.57	-7,165.9	507.6	7,441.1	7,301.4	139.71	53.261	
6,400.0	6,367.7	6,351.2	6,351.2	15.1	127.0	-2.57	-7,165.9	507.6	7,440.8	7,301.1	139.69	53.266	
6,450.0	6,416.8	6,400.3	6,400.3	15.1	128.0	-2.61	-7,165.9	507.6	7,431.3	7,292.4	138.87	53.514	
6,496.0	6,461.3	6,444.8	6,444.8	15.1	128.9	-2.66	-7,165.9	507.6	7,419.6	7,282.1	137.48	53.967	
6,500.0	6,465.1	6,448.6	6,448.6	15.1	129.0	-2.66	-7,165.9	507.6	7,418.4	7,281.1	137.34	54.017	
6,550.0	6,512.4	6,495.9	6,495.9	15.1	129.9	-2.73	-7,165.9	507.6	7,402.3	7,267.2	135.10	54.792	
6,594.5	6,553.4	6,536.9	6,536.9	15.1	130.7	-2.81	-7,165.9	507.6	7,385.1	7,252.6	132.51	55.732	
6,600.0	6,558.4	6,541.9	6,541.9	15.1	130.8	-2.82	-7,165.9	507.6	7,382.8	7,250.7	132.15	55.866	
6,650.0	6,603.0	6,586.5	6,586.5	15.1	131.7	-2.93	-7,165.9	507.6	7,360.2	7,231.7	128.51	57.274	
6,692.9	6,639.9	6,623.4	6,623.4	15.1	132.5	-3.05	-7,165.9	507.6	7,338.4	7,213.5	124.84	58.784	
6,700.0	6,645.9	6,629.4	6,629.4	15.1	132.6	-3.07	-7,165.9	507.6	7,334.5	7,210.3	124.18	59.064	
6,750.0	6,686.8	6,670.3	6,670.3	15.1	133.4	-3.23	-7,165.9	507.6	7,305.9	7,186.8	119.19	61.297	
6,791.3	6,719.1	6,702.6	6,702.6	15.1	134.1	-3.40	-7,165.9	507.6	7,280.2	7,165.6	114.59	63.535	
6,800.0	6,725.7	6,709.2	6,709.2	15.1	134.2	-3.43	-7,165.9	507.6	7,274.6	7,161.0	113.57	64.056	
6,850.0	6,762.3	6,745.8	6,745.8	15.1	134.9	-3.68	-7,165.9	507.6	7,240.6	7,133.2	107.35	67.450	
6,889.7	6,789.7	6,773.2	6,773.2	15.1	135.5	-3.92	-7,165.9	507.6	7,211.8	7,109.7	102.01	70.696	
6,900.0	6,796.5	6,780.0	6,780.0	15.1	135.6	-3.99	-7,165.9	507.6	7,204.1	7,103.5	100.58	71.624	
6,950.0	6,828.0	6,811.5	6,811.5	15.1	136.2	-4.37	-7,165.9	507.6	7,165.3	7,072.0	93.33	76.772	
6,988.2	6,850.2	6,833.7	6,833.7	15.1	136.7	-4.72	-7,165.9	507.6	7,134.3	7,046.8	87.52	81.514	
7,000.0	6,856.7	6,840.2	6,840.2	15.1	136.8	-4.85	-7,165.9	507.6	7,124.4	7,038.8	85.68	83.148	
7,050.0	6,882.5	6,866.0	6,866.0	15.2	137.3	-5.48	-7,165.9	507.6	7,081.7	7,003.9	77.76	91.072	
7,086.6	6,899.5	6,883.0	6,883.0	15.3	137.7	-6.06	-7,165.9	507.6	7,049.3	6,977.4	71.89	98.052	
7,100.0	6,905.3	6,888.8	6,888.8	15.4	137.8	-6.31	-7,165.9	507.6	7,037.2	6,967.5	69.76	100.884	
7,150.0	6,924.9	6,908.4	6,908.4	15.7	138.2	-7.48	-7,165.9	507.6	6,991.3	6,929.2	62.04	112.692	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-INC												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,185.0	6,936.7	6,920.2	6,920.2	15.9	138.4	-8.60	-7,165.9	507.6	6,958.3	6,901.1	57.20	121.657	
7,200.0	6,941.2	6,924.7	6,924.7	16.0	138.5	-9.19	-7,165.9	507.6	6,944.1	6,888.7	55.40	125.347	
7,250.0	6,954.2	6,937.7	6,937.7	16.3	138.8	-11.94	-7,165.9	507.6	6,895.9	6,844.1	51.76	133.234	
7,283.4	6,961.0	6,944.5	6,944.5	16.6	138.9	-14.91	-7,165.9	507.6	6,863.2	6,810.0	53.16	129.113	
7,300.0	6,963.8	6,947.3	6,947.3	16.7	139.0	-16.99	-7,165.9	507.6	6,846.9	6,791.0	55.87	122.548	
7,350.0	6,970.0	6,953.5	6,953.5	17.2	139.1	-28.74	-7,165.9	507.6	6,797.3	6,717.8	79.48	85.526	
7,381.9	6,972.1	6,955.6	6,955.6	17.5	139.1	-47.88	-7,165.9	507.6	6,765.6	6,647.7	117.86	57.404	
7,400.0	6,972.7	6,956.2	6,956.2	17.7	139.2	-68.96	-7,165.9	507.6	6,747.5	6,600.7	146.77	45.973	
7,420.0	6,972.8	6,956.3	6,956.3	17.9	139.2	-100.48	-7,165.9	507.6	6,727.5	6,573.3	154.20	43.630	
7,480.3	6,972.2	6,955.7	6,955.7	18.5	139.2	-100.39	-7,165.9	507.6	6,667.3	6,512.4	154.86	43.052	
7,500.0	6,972.0	6,955.5	6,955.5	18.7	139.1	-100.36	-7,165.9	507.6	6,647.6	6,492.5	155.08	42.865	
7,578.7	6,971.3	6,954.8	6,954.8	19.7	139.1	-100.24	-7,165.9	507.6	6,569.0	6,412.9	156.04	42.099	
7,600.0	6,971.1	6,954.6	6,954.6	19.9	139.1	-100.21	-7,165.9	507.6	6,547.7	6,391.4	156.29	41.894	
7,677.1	6,970.4	6,953.9	6,953.9	20.9	139.1	-100.09	-7,165.9	507.6	6,470.7	6,313.4	157.31	41.133	
7,700.0	6,970.2	6,953.7	6,953.7	21.2	139.1	-100.06	-7,165.9	507.6	6,447.9	6,290.2	157.61	40.909	
7,775.6	6,969.5	6,953.0	6,953.0	22.2	139.1	-99.94	-7,165.9	507.6	6,372.4	6,213.7	158.69	40.156	
7,800.0	6,969.3	6,952.8	6,952.8	22.6	139.1	-99.91	-7,165.9	507.6	6,348.0	6,188.9	159.04	39.915	
7,874.0	6,968.6	6,952.1	6,952.1	23.7	139.1	-99.80	-7,165.9	507.6	6,274.1	6,113.9	160.16	39.175	
7,900.0	6,968.4	6,951.9	6,951.9	24.1	139.1	-99.76	-7,165.9	507.6	6,248.1	6,087.6	160.55	38.918	
7,972.4	6,967.8	6,951.3	6,951.3	25.2	139.1	-99.65	-7,165.9	507.6	6,175.8	6,014.1	161.69	38.195	
8,000.0	6,967.5	6,951.0	6,951.0	25.6	139.1	-99.61	-7,165.9	507.6	6,148.3	5,986.1	162.13	37.922	
8,070.8	6,966.9	6,950.4	6,950.4	26.7	139.0	-99.50	-7,165.9	507.6	6,077.5	5,914.2	163.29	37.219	
8,100.0	6,966.6	6,950.1	6,950.1	27.2	139.0	-99.45	-7,165.9	507.6	6,048.4	5,884.7	163.77	36.933	
8,169.3	6,966.0	6,949.5	6,949.5	28.3	139.0	-99.35	-7,165.9	507.6	5,979.3	5,814.3	164.94	36.252	
8,200.0	6,965.7	6,949.2	6,949.2	28.8	139.0	-99.30	-7,165.9	507.6	5,948.6	5,783.1	165.45	35.953	
8,267.7	6,965.1	6,948.6	6,948.6	30.0	139.0	-99.20	-7,165.9	507.6	5,881.0	5,714.4	166.62	35.295	
8,300.0	6,964.8	6,948.3	6,948.3	30.5	139.0	-99.15	-7,165.9	507.6	5,848.7	5,681.6	167.18	34.984	
8,366.1	6,964.2	6,947.7	6,947.7	31.7	139.0	-99.05	-7,165.9	507.6	5,782.7	5,614.4	168.35	34.350	
8,400.0	6,963.9	6,947.4	6,947.4	32.2	139.0	-99.00	-7,165.9	507.6	5,748.9	5,580.0	168.94	34.029	
8,464.5	6,963.3	6,946.8	6,946.8	33.4	139.0	-98.90	-7,165.9	507.6	5,684.5	5,514.4	170.10	33.418	
8,500.0	6,963.0	6,946.5	6,946.5	34.0	139.0	-98.84	-7,165.9	507.6	5,649.1	5,478.3	170.73	33.087	
8,563.0	6,962.4	6,945.9	6,945.9	35.1	139.0	-98.75	-7,165.9	507.6	5,586.2	5,414.3	171.88	32.501	
8,600.0	6,962.0	6,945.5	6,945.5	35.8	138.9	-98.69	-7,165.9	507.6	5,549.3	5,376.7	172.55	32.160	
8,661.4	6,961.5	6,945.0	6,945.0	36.9	138.9	-98.60	-7,165.9	507.6	5,488.0	5,314.3	173.68	31.598	
8,700.0	6,961.1	6,944.6	6,944.6	37.6	138.9	-98.54	-7,165.9	507.6	5,449.4	5,275.1	174.39	31.249	
8,759.8	6,960.6	6,944.1	6,944.1	38.7	138.9	-98.45	-7,165.9	507.6	5,389.7	5,214.2	175.50	30.711	
8,800.0	6,960.2	6,943.7	6,943.7	39.4	138.9	-98.39	-7,165.9	507.6	5,349.6	5,173.4	176.24	30.354	
8,858.2	6,959.7	6,943.2	6,943.2	40.5	138.9	-98.30	-7,165.9	507.6	5,291.5	5,114.2	177.33	29.839	
8,900.0	6,959.3	6,942.8	6,942.8	41.2	138.9	-98.23	-7,165.9	507.6	5,249.8	5,071.7	178.11	29.475	
8,956.7	6,958.8	6,942.3	6,942.3	42.3	138.9	-98.14	-7,165.9	507.6	5,193.3	5,014.1	179.18	28.983	
9,000.0	6,958.4	6,941.9	6,941.9	43.1	138.9	-98.08	-7,165.9	507.6	5,150.0	4,970.0	180.00	28.612	
9,055.1	6,957.9	6,941.4	6,941.4	44.1	138.9	-97.99	-7,165.9	507.6	5,095.0	4,914.0	181.04	28.143	
9,100.0	6,957.5	6,941.0	6,941.0	44.9	138.9	-97.92	-7,165.9	507.6	5,050.2	4,868.3	181.90	27.765	
9,153.5	6,957.0	6,940.5	6,940.5	45.9	138.8	-97.84	-7,165.9	507.6	4,996.8	4,813.9	182.92	27.318	
9,200.0	6,956.6	6,940.1	6,940.1	46.8	138.8	-97.77	-7,165.9	507.6	4,950.5	4,766.7	183.80	26.934	
9,251.9	6,956.1	6,939.6	6,939.6	47.8	138.8	-97.69	-7,165.9	507.6	4,898.6	4,713.8	184.80	26.508	
9,300.0	6,955.7	6,939.2	6,939.2	48.7	138.8	-97.62	-7,165.9	507.6	4,850.7	4,665.0	185.72	26.118	
9,350.4	6,955.2	6,938.7	6,938.7	49.6	138.8	-97.54	-7,165.9	507.6	4,800.4	4,613.8	186.69	25.713	
9,400.0	6,954.8	6,938.3	6,938.3	50.6	138.8	-97.46	-7,165.9	507.6	4,750.9	4,563.3	187.65	25.319	
9,448.8	6,954.3	6,937.8	6,937.8	51.5	138.8	-97.39	-7,165.9	507.6	4,702.3	4,513.7	188.59	24.934	
9,500.0	6,953.9	6,937.4	6,937.4	52.5	138.8	-97.31	-7,165.9	507.6	4,651.2	4,461.6	189.58	24.534	
9,547.2	6,953.4	6,936.9	6,936.9	53.4	138.8	-97.23	-7,165.9	507.6	4,604.1	4,413.6	190.49	24.169	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-INC												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,600.0	6,952.9	6,936.4	6,936.4	54.4	138.8	-97.15	-7,165.9	507.6	4,551.4	4,359.9	191.52	23.765	
9,645.6	6,952.5	6,936.0	6,936.0	55.2	138.8	-97.08	-7,165.9	507.6	4,505.9	4,313.5	192.40	23.419	
9,700.0	6,952.0	6,935.5	6,935.5	56.3	138.7	-97.00	-7,165.9	507.6	4,451.7	4,258.3	193.46	23.011	
9,744.1	6,951.6	6,935.1	6,935.1	57.1	138.7	-96.93	-7,165.9	507.6	4,407.8	4,213.4	194.32	22.683	
9,800.0	6,951.1	6,934.6	6,934.6	58.2	138.7	-96.84	-7,165.9	507.6	4,352.0	4,156.6	195.41	22.271	
9,842.5	6,950.7	6,934.2	6,934.2	59.0	138.7	-96.78	-7,165.9	507.6	4,309.6	4,113.4	196.24	21.961	
9,900.0	6,950.2	6,933.7	6,933.7	60.1	138.7	-96.69	-7,165.9	507.6	4,252.3	4,054.9	197.37	21.545	
9,940.9	6,949.8	6,933.3	6,933.3	60.9	138.7	-96.62	-7,165.9	507.6	4,211.5	4,013.3	198.17	21.252	
10,000.0	6,949.3	6,932.8	6,932.8	62.0	138.7	-96.53	-7,165.9	507.6	4,152.6	3,953.3	199.32	20.833	
10,039.3	6,948.9	6,932.4	6,932.4	62.8	138.7	-96.47	-7,165.9	507.6	4,113.4	3,913.3	200.10	20.557	
10,100.0	6,948.4	6,931.9	6,931.9	64.0	138.7	-96.38	-7,165.9	507.6	4,052.9	3,851.7	201.29	20.135	
10,137.8	6,948.0	6,931.5	6,931.5	64.7	138.7	-96.32	-7,165.9	507.6	4,015.3	3,813.3	202.03	19.875	
10,200.0	6,947.5	6,931.0	6,931.0	65.9	138.7	-96.22	-7,165.9	507.6	3,953.3	3,750.0	203.25	19.450	
10,236.2	6,947.1	6,930.6	6,930.6	66.6	138.6	-96.17	-7,165.9	507.6	3,917.2	3,713.2	203.97	19.205	
10,300.0	6,946.6	6,930.1	6,930.1	67.8	138.6	-96.07	-7,165.9	507.6	3,853.6	3,648.4	205.22	18.778	
10,334.6	6,946.3	6,929.8	6,929.8	68.5	138.6	-96.01	-7,165.9	507.6	3,819.1	3,613.2	205.90	18.548	
10,400.0	6,945.7	6,929.2	6,929.2	69.8	138.6	-95.91	-7,165.9	507.6	3,754.0	3,546.8	207.19	18.118	
10,433.0	6,945.4	6,928.9	6,928.9	70.4	138.6	-95.86	-7,165.9	507.6	3,721.1	3,513.3	207.85	17.903	
10,500.0	6,944.7	6,928.2	6,928.2	71.7	138.6	-95.76	-7,165.9	507.6	3,654.4	3,445.3	209.17	17.471	
10,531.5	6,944.5	6,928.0	6,928.0	72.3	138.6	-95.71	-7,165.9	507.6	3,623.1	3,413.3	209.79	17.270	
10,600.0	6,943.8	6,927.3	6,927.3	73.7	138.6	-95.60	-7,165.9	507.6	3,554.8	3,343.7	211.14	16.836	
10,629.9	6,943.6	6,927.1	6,927.1	74.2	138.6	-95.55	-7,165.9	507.6	3,525.1	3,313.3	211.73	16.649	
10,700.0	6,942.9	6,926.4	6,926.4	75.6	138.6	-95.44	-7,165.9	507.6	3,455.3	3,242.2	213.12	16.213	
10,728.3	6,942.7	6,926.2	6,926.2	76.2	138.6	-95.40	-7,165.9	507.6	3,427.1	3,213.4	213.68	16.038	
10,800.0	6,942.0	6,925.5	6,925.5	77.6	138.5	-95.29	-7,165.9	507.6	3,355.8	3,140.7	215.10	15.601	
10,826.7	6,941.8	6,925.3	6,925.3	78.1	138.5	-95.24	-7,165.9	507.6	3,329.1	3,113.5	215.63	15.439	
10,900.0	6,941.1	6,924.6	6,924.6	79.5	138.5	-95.13	-7,165.9	507.6	3,256.3	3,039.2	217.08	15.000	
10,925.2	6,940.9	6,924.4	6,924.4	80.0	138.5	-95.09	-7,165.9	507.6	3,231.2	3,013.6	217.58	14.851	
11,000.0	6,940.2	6,923.7	6,923.7	81.5	138.5	-94.97	-7,165.9	507.6	3,156.8	2,937.7	219.06	14.411	
11,023.6	6,940.0	6,923.5	6,923.5	81.9	138.5	-94.94	-7,165.9	507.6	3,133.3	2,913.8	219.53	14.273	
11,100.0	6,939.3	6,922.8	6,922.8	83.4	138.5	-94.82	-7,165.9	507.6	3,057.4	2,836.3	221.04	13.831	
11,122.0	6,939.1	6,922.6	6,922.6	83.8	138.5	-94.78	-7,165.9	507.6	3,035.5	2,814.0	221.48	13.705	
11,200.0	6,938.4	6,921.9	6,921.9	85.4	138.5	-94.66	-7,165.9	507.6	2,958.0	2,734.9	223.03	13.263	
11,220.4	6,938.2	6,921.7	6,921.7	85.8	138.5	-94.63	-7,165.9	507.6	2,937.7	2,714.2	223.43	13.148	
11,300.0	6,937.4	6,920.9	6,920.9	87.3	138.5	-94.50	-7,165.9	507.6	2,858.6	2,633.6	225.01	12.704	
11,318.9	6,937.3	6,920.8	6,920.8	87.7	138.4	-94.47	-7,165.9	507.6	2,839.9	2,614.5	225.39	12.600	
11,400.0	6,936.5	6,920.0	6,920.0	89.3	138.4	-94.35	-7,165.9	507.6	2,759.3	2,532.3	227.00	12.156	
11,417.3	6,936.4	6,919.9	6,919.9	89.6	138.4	-94.32	-7,165.9	507.6	2,742.1	2,514.8	227.34	12.062	
11,500.0	6,935.6	6,919.1	6,919.1	91.3	138.4	-94.19	-7,165.9	507.6	2,660.1	2,431.1	228.98	11.617	
11,515.7	6,935.5	6,919.0	6,919.0	91.6	138.4	-94.16	-7,165.9	507.6	2,644.5	2,415.2	229.30	11.533	
11,600.0	6,934.7	6,918.2	6,918.2	93.2	138.4	-94.03	-7,165.9	507.6	2,560.9	2,329.9	230.97	11.087	
11,614.1	6,934.6	6,918.1	6,918.1	93.5	138.4	-94.01	-7,165.9	507.6	2,546.8	2,315.6	231.25	11.013	
11,700.0	6,933.8	6,917.3	6,917.3	95.2	138.4	-93.87	-7,165.9	507.6	2,461.7	2,228.8	232.96	10.567	
11,712.6	6,933.7	6,917.2	6,917.2	95.4	138.4	-93.85	-7,165.9	507.6	2,449.3	2,216.1	233.21	10.503	
11,800.0	6,932.9	6,916.4	6,916.4	97.1	138.4	-93.72	-7,165.9	507.6	2,362.7	2,127.7	234.94	10.056	
11,811.0	6,932.8	6,916.3	6,916.3	97.4	138.4	-93.70	-7,165.9	507.6	2,351.8	2,116.6	235.16	10.001	
11,900.0	6,932.0	6,915.5	6,915.5	99.1	138.3	-93.56	-7,165.9	507.6	2,263.7	2,026.8	236.93	9.554	
11,909.4	6,931.9	6,915.4	6,915.4	99.3	138.3	-93.54	-7,165.9	507.6	2,254.4	2,017.3	237.12	9.507	
12,000.0	6,931.0	6,914.5	6,914.5	101.1	138.3	-93.40	-7,165.9	507.6	2,164.8	1,925.9	238.92	9.061	
12,007.8	6,931.0	6,914.5	6,914.5	101.2	138.3	-93.39	-7,165.9	507.6	2,157.1	1,918.0	239.07	9.023	
12,100.0	6,930.1	6,913.6	6,913.6	103.0	138.3	-93.24	-7,165.9	507.6	2,066.0	1,825.1	240.90	8.576	
12,106.3	6,930.1	6,913.6	6,913.6	103.2	138.3	-93.23	-7,165.9	507.6	2,059.8	1,818.8	241.03	8.546	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-INC												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
12,200.0	6,929.2	6,912.7	6,912.7	105.0	138.3	-93.08	-7,165.9	507.6	1,967.4	1,724.5	242.89	8.100	
12,204.7	6,929.2	6,912.7	6,912.7	105.1	138.3	-93.08	-7,165.9	507.6	1,962.8	1,719.8	242.98	8.078	
12,300.0	6,928.3	6,911.8	6,911.8	107.0	138.3	-92.93	-7,165.9	507.6	1,868.9	1,624.0	244.87	7.632	
12,303.1	6,928.3	6,911.8	6,911.8	107.1	138.3	-92.92	-7,165.9	507.6	1,865.8	1,620.9	244.93	7.618	
12,400.0	6,927.4	6,910.9	6,910.9	109.0	138.2	-92.77	-7,165.9	507.6	1,770.5	1,523.7	246.86	7.172	
12,401.5	6,927.4	6,910.9	6,910.9	109.0	138.2	-92.76	-7,165.9	507.6	1,769.0	1,522.1	246.89	7.165	
12,500.0	6,926.5	6,910.0	6,910.0	110.9	138.2	-92.61	-7,165.9	507.6	1,672.4	1,423.5	248.84	6.721	
12,598.4	6,925.6	6,909.1	6,909.1	112.9	138.2	-92.45	-7,165.9	507.6	1,576.0	1,325.2	250.79	6.284	
12,600.0	6,925.6	6,909.1	6,909.1	112.9	138.2	-92.45	-7,165.9	507.6	1,574.5	1,323.6	250.83	6.277	
12,696.8	6,924.7	6,908.2	6,908.2	114.8	138.2	-92.30	-7,165.9	507.6	1,479.9	1,227.2	252.75	5.855	
12,700.0	6,924.6	6,908.1	6,908.1	114.9	138.2	-92.29	-7,165.9	507.6	1,476.8	1,224.0	252.81	5.842	
12,795.2	6,923.8	6,907.3	6,907.3	116.8	138.2	-92.14	-7,165.9	507.6	1,384.2	1,129.5	254.70	5.435	
12,800.0	6,923.7	6,907.2	6,907.2	116.9	138.2	-92.13	-7,165.9	507.6	1,379.5	1,124.8	254.79	5.414	
12,893.7	6,922.9	6,906.4	6,906.4	118.7	138.2	-91.98	-7,165.9	507.6	1,288.8	1,032.1	256.65	5.022	
12,900.0	6,922.8	6,906.3	6,906.3	118.8	138.2	-91.97	-7,165.9	507.6	1,282.7	1,025.9	256.77	4.995	
12,992.1	6,922.0	6,905.5	6,905.5	120.6	138.1	-91.83	-7,165.9	507.6	1,193.9	935.3	258.60	4.617	
13,000.0	6,921.9	6,905.4	6,905.4	120.8	138.1	-91.82	-7,165.9	507.6	1,186.3	927.5	258.75	4.585	
13,090.5	6,921.1	6,904.6	6,904.6	122.6	138.1	-91.67	-7,165.9	507.6	1,099.6	839.1	260.55	4.220	
13,100.0	6,921.0	6,904.5	6,904.5	122.8	138.1	-91.66	-7,165.9	507.6	1,090.6	829.8	260.73	4.183	
13,188.9	6,920.2	6,903.7	6,903.7	124.5	138.1	-91.51	-7,165.9	507.6	1,006.1	743.7	262.49	3.833	
13,200.0	6,920.1	6,903.6	6,903.6	124.8	138.1	-91.50	-7,165.9	507.6	995.7	733.0	262.71	3.790	
13,287.4	6,919.3	6,902.8	6,902.8	126.5	138.1	-91.36	-7,165.9	507.6	913.7	649.3	264.44	3.455	
13,300.0	6,919.1	6,902.6	6,902.6	126.7	138.1	-91.34	-7,165.9	507.6	902.0	637.3	264.69	3.408	
13,385.8	6,918.4	6,901.9	6,901.9	128.4	138.1	-91.20	-7,165.9	507.6	822.7	556.3	266.38	3.088	
13,400.0	6,918.2	6,901.7	6,901.7	128.7	138.1	-91.18	-7,165.9	507.6	809.7	543.0	266.66	3.036	
13,484.2	6,917.5	6,901.0	6,901.0	130.4	138.0	-91.05	-7,165.9	507.6	733.5	465.2	268.33	2.734	
13,500.0	6,917.3	6,900.8	6,900.8	130.7	138.0	-91.02	-7,165.9	507.6	719.5	450.8	268.64	2.678	
13,582.6	6,916.6	6,900.1	6,900.1	132.3	138.0	-90.89	-7,165.9	507.6	647.1	376.8	270.27	2.394	
13,600.0	6,916.4	6,899.9	6,899.9	132.7	138.0	-90.86	-7,165.9	507.6	632.2	361.6	270.61	2.336	
13,681.1	6,915.6	6,899.1	6,899.1	134.3	138.0	-90.73	-7,165.9	507.6	564.6	292.4	272.21	2.074	
13,700.0	6,915.5	6,899.0	6,899.0	134.6	138.0	-90.70	-7,165.9	507.6	549.4	276.8	272.59	2.015	
13,779.5	6,914.7	6,898.2	6,898.2	136.2	138.0	-90.57	-7,165.9	507.6	488.1	213.9	274.15	1.780	
13,800.0	6,914.6	6,898.1	6,898.1	136.6	138.0	-90.54	-7,165.9	507.6	473.1	198.6	274.56	1.723	
13,877.9	6,913.8	6,897.3	6,897.3	138.2	138.0	-90.42	-7,165.9	507.6	420.7	144.6	276.09	1.524	
13,900.0	6,913.6	6,897.1	6,897.1	138.6	138.0	-90.38	-7,165.9	507.6	407.3	130.8	276.53	1.473 Level 3	
13,976.3	6,912.9	6,896.4	6,896.4	140.1	138.0	-90.26	-7,165.9	507.6	367.6	89.6	278.03	1.322 Level 3	
14,000.0	6,912.7	6,896.2	6,896.2	140.6	138.0	-90.22	-7,165.9	507.6	357.7	79.2	278.49	1.285 Level 3	
14,074.8	6,912.0	6,895.5	6,895.5	142.0	137.9	-90.10	-7,165.9	507.6	335.7	55.8	279.90	1.199 Level 2	
14,079.0	6,912.0	6,895.5	6,895.5	142.1	137.9	-90.10	-7,165.9	507.6	334.9	54.9	279.98	1.196 Level 2, CC, ES, SF	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-INC												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.0	0.0	0.0	0.0	0.0	0.0	175.11	-5,573.9	476.9	5,594.3				
98.4	98.4	71.9	71.9	0.1	0.6	175.11	-5,573.9	476.9	5,594.2	5,593.5	0.70	8,006.457	
100.0	100.0	73.5	73.5	0.1	0.6	175.11	-5,573.9	476.9	5,594.2	5,593.5	0.71	7,838.402	
196.8	196.8	170.3	170.3	0.3	2.5	175.11	-5,573.9	476.9	5,594.2	5,591.4	2.83	1,979.644	
200.0	200.0	173.5	173.5	0.3	2.6	175.11	-5,573.9	476.9	5,594.2	5,591.3	2.91	1,923.848	
295.3	295.3	268.8	268.8	0.5	4.6	175.11	-5,573.9	476.9	5,594.2	5,589.1	5.18	1,079.177	
300.0	300.0	273.5	273.5	0.5	4.7	175.11	-5,573.9	476.9	5,594.2	5,589.0	5.29	1,056.954	
393.7	393.7	367.2	367.2	0.8	6.7	175.11	-5,573.9	476.9	5,594.2	5,586.8	7.43	753.160	
400.0	400.0	373.5	373.5	0.8	6.8	175.11	-5,573.9	476.9	5,594.2	5,586.7	7.57	738.950	
492.1	492.1	465.6	465.6	1.0	8.7	175.11	-5,573.9	476.9	5,594.2	5,584.6	9.65	579.697	
500.0	500.0	473.5	473.5	1.0	8.8	175.11	-5,573.9	476.9	5,594.2	5,584.4	9.83	569.229	
590.5	590.5	564.0	564.0	1.2	10.7	175.11	-5,573.9	476.9	5,594.2	5,582.4	11.86	471.517	
600.0	600.0	573.5	573.5	1.2	10.9	175.11	-5,573.9	476.9	5,594.2	5,582.2	12.08	463.226	
689.0	689.0	662.5	662.5	1.4	12.7	175.11	-5,573.9	476.9	5,594.2	5,580.2	14.07	397.487	
700.0	700.0	673.5	673.5	1.4	12.9	175.11	-5,573.9	476.9	5,594.2	5,579.9	14.32	390.621	
787.4	787.4	760.9	760.9	1.6	14.6	175.11	-5,573.9	476.9	5,594.2	5,578.0	16.28	343.601	
800.0	800.0	773.5	773.5	1.7	14.9	175.11	-5,573.9	476.9	5,594.2	5,577.7	16.56	337.742	
885.8	885.8	859.3	859.3	1.9	16.6	175.11	-5,573.9	476.9	5,594.2	5,575.8	18.49	302.608	
900.0	900.0	873.5	873.5	1.9	16.9	175.11	-5,573.9	476.9	5,594.2	5,575.4	18.80	297.498	
984.2	984.2	957.7	957.7	2.1	18.6	175.11	-5,573.9	476.9	5,594.2	5,573.6	20.69	270.368	
1,000.0	1,000.0	973.5	973.5	2.1	18.9	175.11	-5,573.9	476.9	5,594.2	5,573.2	21.04	265.837	
1,082.7	1,082.7	1,056.2	1,056.2	2.3	20.6	175.11	-5,573.9	476.9	5,594.2	5,571.3	22.89	244.344	
1,100.0	1,100.0	1,073.5	1,073.5	2.3	20.9	175.11	-5,573.9	476.9	5,594.2	5,571.0	23.28	240.274	
1,181.1	1,181.1	1,154.6	1,154.6	2.5	22.6	175.11	-5,573.9	476.9	5,594.2	5,569.1	25.10	222.896	
1,200.0	1,200.0	1,173.5	1,173.5	2.6	23.0	175.11	-5,573.9	476.9	5,594.2	5,568.7	25.52	219.201	
1,279.5	1,279.5	1,253.0	1,253.0	2.7	24.6	138.60	-5,573.9	476.9	5,595.1	5,567.8	27.29	205.000	
1,300.0	1,300.0	1,273.5	1,273.5	2.8	25.0	138.60	-5,573.9	476.9	5,595.6	5,567.8	27.75	201.663	
1,377.9	1,377.8	1,351.3	1,351.3	3.0	26.5	138.59	-5,573.9	476.9	5,598.4	5,568.9	29.47	189.998	
1,400.0	1,399.8	1,373.3	1,373.3	3.0	27.0	138.58	-5,573.9	476.9	5,599.5	5,569.5	29.95	186.971	
1,476.4	1,475.9	1,449.4	1,449.4	3.2	28.5	138.56	-5,573.9	476.9	5,604.2	5,572.6	31.61	177.277	
1,500.0	1,499.5	1,473.0	1,473.0	3.2	29.0	138.56	-5,573.9	476.9	5,606.0	5,573.9	32.12	174.514	
1,574.8	1,573.7	1,547.2	1,547.2	3.4	30.5	138.53	-5,573.9	476.9	5,612.6	5,578.9	33.73	166.384	
1,600.0	1,598.7	1,572.2	1,572.2	3.5	31.0	138.52	-5,573.9	476.9	5,615.2	5,580.9	34.27	163.851	
1,673.2	1,671.1	1,644.6	1,644.6	3.7	32.4	138.48	-5,573.9	476.9	5,623.6	5,587.7	35.82	156.977	
1,700.0	1,697.5	1,671.0	1,671.0	3.7	33.0	138.46	-5,573.9	476.9	5,627.0	5,590.6	36.39	154.645	
1,771.6	1,767.9	1,741.4	1,741.4	4.0	34.4	138.42	-5,573.9	476.9	5,637.0	5,599.1	37.89	148.790	
1,800.1	1,795.7	1,769.2	1,769.2	4.0	34.9	138.40	-5,573.9	476.9	5,641.4	5,602.9	38.47	146.628	
1,870.1	1,864.2	1,837.7	1,837.7	4.3	36.3	138.49	-5,573.9	476.9	5,652.4	5,612.3	40.03	141.204	
1,900.0	1,893.4	1,866.9	1,866.9	4.4	36.9	138.54	-5,573.9	476.9	5,657.1	5,616.4	40.70	139.010	
1,968.5	1,960.4	1,933.9	1,933.9	4.6	38.3	138.63	-5,573.9	476.9	5,667.9	5,625.6	42.23	134.224	
2,000.0	1,991.3	1,964.8	1,964.8	4.7	38.9	138.67	-5,573.9	476.9	5,672.8	5,629.9	42.93	132.142	
2,066.9	2,056.7	2,030.2	2,030.2	5.0	40.2	138.77	-5,573.9	476.9	5,683.4	5,639.0	44.43	127.922	
2,100.0	2,089.1	2,062.6	2,062.6	5.1	40.8	138.81	-5,573.9	476.9	5,688.6	5,643.4	45.17	125.931	
2,165.3	2,153.0	2,126.5	2,126.5	5.3	42.1	138.90	-5,573.9	476.9	5,698.9	5,652.3	46.64	122.185	
2,200.0	2,186.9	2,160.4	2,160.4	5.5	42.8	138.95	-5,573.9	476.9	5,704.4	5,657.0	47.42	120.291	
2,263.8	2,249.3	2,222.8	2,222.8	5.7	44.1	139.03	-5,573.9	476.9	5,714.5	5,665.7	48.86	116.958	
2,300.0	2,284.7	2,258.2	2,258.2	5.8	44.8	139.08	-5,573.9	476.9	5,720.3	5,670.6	49.68	115.151	
2,362.2	2,345.5	2,319.0	2,319.0	6.1	46.0	139.17	-5,573.9	476.9	5,730.1	5,679.1	51.08	112.176	
2,400.0	2,382.5	2,356.0	2,356.0	6.2	46.7	139.22	-5,573.9	476.9	5,736.1	5,684.2	51.94	110.448	
2,460.6	2,441.8	2,415.3	2,415.3	6.5	47.9	139.30	-5,573.9	476.9	5,745.8	5,692.5	53.31	107.787	
2,500.0	2,480.3	2,453.8	2,453.8	6.6	48.7	139.35	-5,573.9	476.9	5,752.1	5,697.9	54.20	106.131	
2,559.0	2,538.1	2,511.6	2,511.6	6.9	49.9	139.43	-5,573.9	476.9	5,761.5	5,705.9	55.54	103.744	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 usft
Survey Program: 0-INC													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
2,600.0	2,578.1	2,551.6	2,551.6	7.0	50.7	139.48	-5,573.9	476.9	5,768.0	5,711.5	56.46	102.155		
2,657.5	2,634.4	2,607.9	2,607.9	7.3	51.8	139.56	-5,573.9	476.9	5,777.2	5,719.4	57.77	100.009		
2,700.0	2,675.9	2,649.4	2,649.4	7.5	52.6	139.62	-5,573.9	476.9	5,784.0	5,725.2	58.73	98.483		
2,755.9	2,730.6	2,704.1	2,704.1	7.7	53.7	139.69	-5,573.9	476.9	5,792.9	5,732.9	60.00	96.550		
2,800.0	2,773.8	2,747.3	2,747.3	7.9	54.6	139.75	-5,573.9	476.9	5,800.0	5,739.0	61.00	95.082		
2,854.3	2,826.9	2,800.4	2,800.4	8.1	55.7	139.82	-5,573.9	476.9	5,808.7	5,746.4	62.23	93.337		
2,857.4	2,829.9	2,803.4	2,803.4	8.1	55.7	139.82	-5,573.9	476.9	5,809.2	5,746.9	62.30	93.242		
2,900.0	2,871.6	2,845.1	2,845.1	8.3	56.6	139.96	-5,573.9	476.9	5,815.8	5,752.4	63.35	91.801		
2,952.7	2,923.5	2,897.0	2,897.0	8.4	57.6	140.12	-5,573.9	476.9	5,823.3	5,758.6	64.62	90.112		
3,000.0	2,970.1	2,943.6	2,943.6	8.6	58.6	140.25	-5,573.9	476.9	5,829.4	5,763.6	65.76	88.648		
3,051.2	3,020.7	2,994.2	2,994.2	8.7	59.6	140.38	-5,573.9	476.9	5,835.3	5,768.3	66.98	87.124		
3,100.0	3,069.1	3,042.6	3,042.6	8.9	60.6	140.48	-5,573.9	476.9	5,840.3	5,772.2	68.13	85.718		
3,149.6	3,118.3	3,091.8	3,091.8	9.0	61.5	140.57	-5,573.9	476.9	5,844.8	5,775.5	69.30	84.345		
3,200.0	3,168.5	3,142.0	3,142.0	9.1	62.6	140.65	-5,573.9	476.9	5,848.6	5,778.2	70.47	82.996		
3,248.0	3,216.3	3,189.8	3,189.8	9.2	63.5	140.72	-5,573.9	476.9	5,851.6	5,780.1	71.57	81.761		
3,300.0	3,268.2	3,241.7	3,241.7	9.3	64.6	140.77	-5,573.9	476.9	5,854.2	5,781.5	72.75	80.468		
3,346.4	3,314.6	3,288.1	3,288.1	9.4	65.5	140.80	-5,573.9	476.9	5,855.9	5,782.1	73.79	79.357		
3,400.0	3,368.1	3,341.6	3,341.6	9.5	66.6	140.83	-5,573.9	476.9	5,857.1	5,782.2	74.98	78.118		
3,444.9	3,413.0	3,386.5	3,386.5	9.6	67.5	140.84	-5,573.9	476.9	5,857.6	5,781.6	75.95	77.119		
3,457.5	3,425.6	3,399.1	3,399.1	9.6	67.7	177.34	-5,573.9	476.9	5,857.6	5,781.3	76.23	76.837		
3,500.0	3,468.1	3,441.6	3,441.6	9.7	68.6	177.34	-5,573.9	476.9	5,857.6	5,780.4	77.16	75.912		
3,543.3	3,511.4	3,484.9	3,484.9	9.7	69.5	177.34	-5,573.9	476.9	5,857.6	5,779.5	78.12	74.985		
3,600.0	3,568.1	3,541.6	3,541.6	9.8	70.6	177.34	-5,573.9	476.9	5,857.6	5,778.2	79.37	73.806		
3,641.7	3,609.9	3,583.4	3,583.4	9.9	71.4	177.34	-5,573.9	476.9	5,857.6	5,777.3	80.28	72.960		
3,700.0	3,668.1	3,641.6	3,641.6	10.0	72.6	177.34	-5,573.9	476.9	5,857.6	5,776.0	81.57	71.812		
3,740.1	3,708.3	3,681.8	3,681.8	10.1	73.4	177.34	-5,573.9	476.9	5,857.6	5,775.1	82.45	71.041		
3,800.0	3,768.1	3,741.6	3,741.6	10.2	74.6	177.34	-5,573.9	476.9	5,857.6	5,773.8	83.77	69.922		
3,838.6	3,806.7	3,780.2	3,780.2	10.2	75.4	177.34	-5,573.9	476.9	5,857.6	5,773.0	84.62	69.218		
3,900.0	3,868.1	3,841.6	3,841.6	10.3	76.6	177.34	-5,573.9	476.9	5,857.6	5,771.6	85.98	68.127		
3,937.0	3,905.1	3,878.6	3,878.6	10.4	77.4	177.34	-5,573.9	476.9	5,857.6	5,770.8	86.80	67.486		
4,000.0	3,968.1	3,941.6	3,941.6	10.5	78.6	177.34	-5,573.9	476.9	5,857.6	5,769.4	88.19	66.422		
4,035.4	4,003.6	3,977.1	3,977.1	10.6	79.3	177.34	-5,573.9	476.9	5,857.6	5,768.6	88.97	65.838		
4,100.0	4,068.1	4,041.6	4,041.6	10.7	80.6	177.34	-5,573.9	476.9	5,857.6	5,767.2	90.40	64.799		
4,133.8	4,102.0	4,075.5	4,075.5	10.8	81.3	177.34	-5,573.9	476.9	5,857.6	5,766.4	91.14	64.267		
4,200.0	4,168.1	4,141.6	4,141.6	10.9	82.7	177.34	-5,573.9	476.9	5,857.6	5,765.0	92.61	63.252		
4,232.3	4,200.4	4,173.9	4,173.9	10.9	83.3	177.34	-5,573.9	476.9	5,857.6	5,764.3	93.32	62.769		
4,300.0	4,268.1	4,241.6	4,241.6	11.1	84.7	177.34	-5,573.9	476.9	5,857.6	5,762.8	94.82	61.777		
4,330.7	4,298.8	4,272.3	4,272.3	11.1	85.3	177.34	-5,573.9	476.9	5,857.6	5,762.1	95.50	61.338		
4,400.0	4,368.1	4,341.6	4,341.6	11.2	86.7	177.34	-5,573.9	476.9	5,857.6	5,760.6	97.03	60.369		
4,429.1	4,397.3	4,370.8	4,370.8	11.3	87.3	177.34	-5,573.9	476.9	5,857.6	5,759.9	97.67	59.971		
4,500.0	4,468.1	4,441.6	4,441.6	11.4	88.7	177.34	-5,573.9	476.9	5,857.6	5,758.3	99.24	59.023		
4,527.5	4,495.7	4,469.2	4,469.2	11.5	89.2	177.34	-5,573.9	476.9	5,857.6	5,757.7	99.85	58.662		
4,600.0	4,568.1	4,541.6	4,541.6	11.6	90.7	177.34	-5,573.9	476.9	5,857.6	5,756.1	101.46	57.735		
4,626.0	4,594.1	4,567.6	4,567.6	11.7	91.2	177.34	-5,573.9	476.9	5,857.6	5,755.5	102.03	57.409		
4,700.0	4,668.1	4,641.6	4,641.6	11.8	92.7	177.34	-5,573.9	476.9	5,857.6	5,753.9	103.67	56.501		
4,724.4	4,692.5	4,666.0	4,666.0	11.8	93.2	177.34	-5,573.9	476.9	5,857.6	5,753.4	104.21	56.208		
4,800.0	4,768.1	4,741.6	4,741.6	12.0	94.7	177.34	-5,573.9	476.9	5,857.6	5,751.7	105.89	55.319		
4,822.8	4,791.0	4,764.5	4,764.5	12.0	95.2	177.34	-5,573.9	476.9	5,857.6	5,751.2	106.39	55.056		
4,900.0	4,868.1	4,841.6	4,841.6	12.2	96.7	177.34	-5,573.9	476.9	5,857.6	5,749.5	108.10	54.185		
4,921.2	4,889.4	4,862.9	4,862.9	12.2	97.2	177.34	-5,573.9	476.9	5,857.6	5,749.0	108.57	53.950		
5,000.0	4,968.1	4,941.6	4,941.6	12.4	98.7	177.34	-5,573.9	476.9	5,857.6	5,747.3	110.32	53.096		
5,019.7	4,987.8	4,961.3	4,961.3	12.4	99.1	177.34	-5,573.9	476.9	5,857.6	5,746.8	110.76	52.887		

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-INC												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,100.0	5,068.1	5,041.6	5,041.6	12.6	100.8	177.34	-5,573.9	476.9	5,857.6	5,745.0	112.54	52.050	
5,118.1	5,086.2	5,059.7	5,059.7	12.6	101.1	177.34	-5,573.9	476.9	5,857.6	5,744.6	112.94	51.865	
5,200.0	5,168.1	5,141.6	5,141.6	12.8	102.8	177.34	-5,573.9	476.9	5,857.6	5,742.8	114.76	51.044	
5,216.5	5,184.7	5,158.2	5,158.2	12.8	103.1	177.34	-5,573.9	476.9	5,857.6	5,742.5	115.12	50.881	
5,300.0	5,268.1	5,241.6	5,241.6	13.0	104.8	177.34	-5,573.9	476.9	5,857.6	5,740.6	116.98	50.075	
5,314.9	5,283.1	5,256.6	5,256.6	13.0	105.1	177.34	-5,573.9	476.9	5,857.6	5,740.3	117.31	49.934	
5,400.0	5,368.1	5,341.6	5,341.6	13.1	106.8	177.34	-5,573.9	476.9	5,857.6	5,738.4	119.19	49.143	
5,413.4	5,381.5	5,355.0	5,355.0	13.2	107.1	177.34	-5,573.9	476.9	5,857.6	5,738.1	119.49	49.021	
5,500.0	5,468.1	5,441.6	5,441.6	13.3	108.8	177.34	-5,573.9	476.9	5,857.6	5,736.2	121.42	48.244	
5,511.8	5,479.9	5,453.4	5,453.4	13.4	109.0	177.34	-5,573.9	476.9	5,857.6	5,735.9	121.68	48.140	
5,600.0	5,568.1	5,541.6	5,541.6	13.5	110.8	177.34	-5,573.9	476.9	5,857.6	5,733.9	123.64	47.378	
5,610.2	5,578.4	5,551.9	5,551.9	13.6	111.0	177.34	-5,573.9	476.9	5,857.6	5,733.7	123.86	47.291	
5,700.0	5,668.1	5,641.6	5,641.6	13.7	112.8	177.34	-5,573.9	476.9	5,857.6	5,731.7	125.86	46.542	
5,708.6	5,676.8	5,650.3	5,650.3	13.8	113.0	177.34	-5,573.9	476.9	5,857.6	5,731.5	126.05	46.471	
5,800.0	5,768.1	5,741.6	5,741.6	13.9	114.8	177.34	-5,573.9	476.9	5,857.6	5,729.5	128.08	45.734	
5,807.1	5,775.2	5,748.7	5,748.7	14.0	115.0	177.34	-5,573.9	476.9	5,857.6	5,729.3	128.24	45.678	
5,900.0	5,868.1	5,841.6	5,841.6	14.1	116.8	177.34	-5,573.9	476.9	5,857.6	5,727.3	130.30	44.954	
5,905.5	5,873.6	5,847.1	5,847.1	14.1	117.0	177.34	-5,573.9	476.9	5,857.6	5,727.2	130.42	44.912	
6,000.0	5,968.1	5,941.6	5,941.6	14.3	118.9	177.34	-5,573.9	476.9	5,857.6	5,725.1	132.52	44.200	
6,003.9	5,972.1	5,945.6	5,945.6	14.3	118.9	177.34	-5,573.9	476.9	5,857.6	5,725.0	132.61	44.171	
6,100.0	6,068.1	6,041.6	6,041.6	14.5	120.9	177.34	-5,573.9	476.9	5,857.6	5,722.8	134.75	43.471	
6,102.3	6,070.5	6,044.0	6,044.0	14.5	120.9	177.34	-5,573.9	476.9	5,857.6	5,722.8	134.80	43.454	
6,200.0	6,168.1	6,141.6	6,141.6	14.7	122.9	177.34	-5,573.9	476.9	5,857.6	5,720.6	136.97	42.766	
6,200.8	6,168.9	6,142.4	6,142.4	14.7	122.9	177.34	-5,573.9	476.9	5,857.6	5,720.6	136.99	42.760	
6,288.5	6,256.6	6,230.1	6,230.1	14.9	124.7	177.34	-5,573.9	476.9	5,857.6	5,718.6	138.94	42.160	
6,299.2	6,267.3	6,240.8	6,240.8	14.9	124.9	-2.87	-5,573.9	476.9	5,857.5	5,718.4	139.15	42.096	
6,300.0	6,268.1	6,241.6	6,241.6	14.9	124.9	-2.87	-5,573.9	476.9	5,857.5	5,718.3	139.16	42.092	
6,350.0	6,318.1	6,291.6	6,291.6	15.0	125.9	-2.88	-5,573.9	476.9	5,854.9	5,715.2	139.72	41.904	
6,397.6	6,365.3	6,338.8	6,338.8	15.1	126.8	-2.91	-5,573.9	476.9	5,849.3	5,709.7	139.62	41.894	
6,400.0	6,367.7	6,341.2	6,341.2	15.1	126.9	-2.91	-5,573.9	476.9	5,848.9	5,709.3	139.60	41.898	
6,450.0	6,416.8	6,390.3	6,390.3	15.1	127.9	-2.95	-5,573.9	476.9	5,839.5	5,700.7	138.78	42.078	
6,496.0	6,461.3	6,434.8	6,434.8	15.1	128.8	-3.01	-5,573.9	476.9	5,827.7	5,690.3	137.40	42.415	
6,500.0	6,465.1	6,438.6	6,438.6	15.1	128.9	-3.01	-5,573.9	476.9	5,826.6	5,689.4	137.25	42.452	
6,550.0	6,512.4	6,485.9	6,485.9	15.1	129.8	-3.09	-5,573.9	476.9	5,810.4	5,675.4	135.02	43.035	
6,594.5	6,553.4	6,526.9	6,526.9	15.1	130.6	-3.19	-5,573.9	476.9	5,793.3	5,660.8	132.44	43.744	
6,600.0	6,558.4	6,531.9	6,531.9	15.1	130.7	-3.20	-5,573.9	476.9	5,791.0	5,658.9	132.08	43.845	
6,650.0	6,603.0	6,576.5	6,576.5	15.1	131.6	-3.33	-5,573.9	476.9	5,768.4	5,639.9	128.44	44.911	
6,692.9	6,639.9	6,613.4	6,613.4	15.1	132.4	-3.46	-5,573.9	476.9	5,746.5	5,621.8	124.78	46.055	
6,700.0	6,645.9	6,619.4	6,619.4	15.1	132.5	-3.48	-5,573.9	476.9	5,742.7	5,618.6	124.12	46.266	
6,750.0	6,686.8	6,660.3	6,660.3	15.1	133.3	-3.68	-5,573.9	476.9	5,714.1	5,595.0	119.15	47.959	
6,791.3	6,719.1	6,692.6	6,692.6	15.1	134.0	-3.87	-5,573.9	476.9	5,688.4	5,573.8	114.56	49.656	
6,800.0	6,725.7	6,699.2	6,699.2	15.1	134.1	-3.91	-5,573.9	476.9	5,682.8	5,569.2	113.54	50.051	
6,850.0	6,762.3	6,735.8	6,735.8	15.1	134.8	-4.20	-5,573.9	476.9	5,648.8	5,541.4	107.34	52.623	
6,889.7	6,789.7	6,763.2	6,763.2	15.1	135.4	-4.47	-5,573.9	476.9	5,620.0	5,517.9	102.03	55.080	
6,900.0	6,796.5	6,770.0	6,770.0	15.1	135.5	-4.55	-5,573.9	476.9	5,612.3	5,511.7	100.61	55.781	
6,950.0	6,828.0	6,801.5	6,801.5	15.1	136.1	-4.99	-5,573.9	476.9	5,573.5	5,480.1	93.41	59.666	
6,988.2	6,850.2	6,823.7	6,823.7	15.1	136.6	-5.41	-5,573.9	476.9	5,542.5	5,454.9	87.66	63.230	
7,000.0	6,856.7	6,830.2	6,830.2	15.1	136.7	-5.55	-5,573.9	476.9	5,532.7	5,446.9	85.84	64.454	
7,050.0	6,882.5	6,856.0	6,856.0	15.2	137.2	-6.28	-5,573.9	476.9	5,489.9	5,411.9	78.04	70.351	
7,086.6	6,899.5	6,873.0	6,873.0	15.3	137.6	-6.96	-5,573.9	476.9	5,457.6	5,385.3	72.31	75.474	
7,100.0	6,905.3	6,878.8	6,878.8	15.4	137.7	-7.25	-5,573.9	476.9	5,445.5	5,375.3	70.24	77.527	
7,150.0	6,924.9	6,898.4	6,898.4	15.7	138.1	-8.59	-5,573.9	476.9	5,399.6	5,336.7	62.90	85.847	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-INC												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,185.0	6,936.7	6,910.2	6,910.2	15.9	138.3	-9.89	-5,573.9	476.9	5,366.6	5,308.1	58.51	91.730	
7,200.0	6,941.2	6,914.7	6,914.7	16.0	138.4	-10.58	-5,573.9	476.9	5,352.4	5,295.4	56.97	93.945	
7,250.0	6,954.2	6,927.7	6,927.7	16.3	138.7	-13.74	-5,573.9	476.9	5,304.2	5,249.5	54.70	96.966	
7,283.4	6,961.0	6,934.5	6,934.5	16.6	138.8	-17.14	-5,573.9	476.9	5,271.5	5,214.0	57.55	91.602	
7,300.0	6,963.8	6,937.3	6,937.3	16.7	138.9	-19.49	-5,573.9	476.9	5,255.2	5,194.1	61.14	85.949	
7,350.0	6,970.0	6,943.5	6,943.5	17.2	139.0	-32.50	-5,573.9	476.9	5,205.7	5,118.1	87.63	59.408	
7,381.9	6,972.1	6,945.6	6,945.6	17.5	139.0	-52.14	-5,573.9	476.9	5,173.9	5,049.0	124.94	41.412	
7,400.0	6,972.7	6,946.2	6,946.2	17.7	139.1	-71.72	-5,573.9	476.9	5,155.9	5,006.8	149.10	34.580	
7,420.0	6,972.8	6,946.3	6,946.3	17.9	139.1	-99.02	-5,573.9	476.9	5,135.9	4,981.1	154.77	33.184	
7,480.3	6,972.2	6,945.7	6,945.7	18.5	139.0	-98.92	-5,573.9	476.9	5,075.7	4,920.2	155.44	32.654	
7,500.0	6,972.0	6,945.5	6,945.5	18.7	139.0	-98.89	-5,573.9	476.9	5,056.0	4,900.4	155.66	32.482	
7,578.7	6,971.3	6,944.8	6,944.8	19.7	139.0	-98.75	-5,573.9	476.9	4,977.4	4,820.8	156.61	31.781	
7,600.0	6,971.1	6,944.6	6,944.6	19.9	139.0	-98.71	-5,573.9	476.9	4,956.2	4,799.3	156.87	31.594	
7,677.1	6,970.4	6,943.9	6,943.9	20.9	139.0	-98.58	-5,573.9	476.9	4,879.2	4,721.3	157.89	30.902	
7,700.0	6,970.2	6,943.7	6,943.7	21.2	139.0	-98.54	-5,573.9	476.9	4,856.4	4,698.2	158.20	30.698	
7,775.6	6,969.5	6,943.0	6,943.0	22.2	139.0	-98.41	-5,573.9	476.9	4,780.9	4,621.7	159.28	30.017	
7,800.0	6,969.3	6,942.8	6,942.8	22.6	139.0	-98.37	-5,573.9	476.9	4,756.6	4,596.9	159.62	29.799	
7,874.0	6,968.6	6,942.1	6,942.1	23.7	139.0	-98.24	-5,573.9	476.9	4,682.7	4,522.0	160.74	29.131	
7,900.0	6,968.4	6,941.9	6,941.9	24.1	139.0	-98.20	-5,573.9	476.9	4,656.8	4,495.6	161.14	28.899	
7,972.4	6,967.8	6,941.3	6,941.3	25.2	139.0	-98.07	-5,573.9	476.9	4,584.5	4,422.2	162.28	28.250	
8,000.0	6,967.5	6,941.0	6,941.0	25.6	139.0	-98.03	-5,573.9	476.9	4,557.0	4,394.3	162.72	28.005	
8,070.8	6,966.9	6,940.4	6,940.4	26.7	138.9	-97.90	-5,573.9	476.9	4,486.3	4,322.4	163.88	27.375	
8,100.0	6,966.6	6,940.1	6,940.1	27.2	138.9	-97.85	-5,573.9	476.9	4,457.2	4,292.8	164.36	27.118	
8,169.3	6,966.0	6,939.5	6,939.5	28.3	138.9	-97.73	-5,573.9	476.9	4,388.1	4,222.5	165.53	26.509	
8,200.0	6,965.7	6,939.2	6,939.2	28.8	138.9	-97.68	-5,573.9	476.9	4,357.4	4,191.4	166.05	26.242	
8,267.7	6,965.1	6,938.6	6,938.6	30.0	138.9	-97.56	-5,573.9	476.9	4,289.9	4,122.7	167.22	25.654	
8,300.0	6,964.8	6,938.3	6,938.3	30.5	138.9	-97.51	-5,573.9	476.9	4,257.7	4,089.9	167.78	25.376	
8,366.1	6,964.2	6,937.7	6,937.7	31.7	138.9	-97.39	-5,573.9	476.9	4,191.7	4,022.7	168.95	24.811	
8,400.0	6,963.9	6,937.4	6,937.4	32.2	138.9	-97.33	-5,573.9	476.9	4,157.9	3,988.4	169.54	24.524	
8,464.5	6,963.3	6,936.8	6,936.8	33.4	138.9	-97.22	-5,573.9	476.9	4,093.5	3,922.8	170.70	23.981	
8,500.0	6,963.0	6,936.5	6,936.5	34.0	138.9	-97.16	-5,573.9	476.9	4,058.2	3,886.8	171.34	23.685	
8,563.0	6,962.4	6,935.9	6,935.9	35.1	138.9	-97.05	-5,573.9	476.9	3,995.4	3,822.9	172.48	23.164	
8,600.0	6,962.0	6,935.5	6,935.5	35.8	138.8	-96.99	-5,573.9	476.9	3,958.4	3,785.3	173.15	22.861	
8,661.4	6,961.5	6,935.0	6,935.0	36.9	138.8	-96.88	-5,573.9	476.9	3,897.2	3,722.9	174.28	22.361	
8,700.0	6,961.1	6,934.6	6,934.6	37.6	138.8	-96.81	-5,573.9	476.9	3,858.7	3,683.7	174.99	22.051	
8,759.8	6,960.6	6,934.1	6,934.1	38.7	138.8	-96.71	-5,573.9	476.9	3,799.1	3,623.0	176.10	21.573	
8,800.0	6,960.2	6,933.7	6,933.7	39.4	138.8	-96.64	-5,573.9	476.9	3,759.0	3,582.2	176.85	21.256	
8,858.2	6,959.7	6,933.2	6,933.2	40.5	138.8	-96.53	-5,573.9	476.9	3,700.9	3,523.0	177.94	20.799	
8,900.0	6,959.3	6,932.8	6,932.8	41.2	138.8	-96.46	-5,573.9	476.9	3,659.3	3,480.6	178.72	20.476	
8,956.7	6,958.8	6,932.3	6,932.3	42.3	138.8	-96.36	-5,573.9	476.9	3,602.8	3,423.1	179.79	20.040	
9,000.0	6,958.4	6,931.9	6,931.9	43.1	138.8	-96.29	-5,573.9	476.9	3,559.7	3,379.1	180.60	19.710	
9,055.1	6,957.9	6,931.4	6,931.4	44.1	138.8	-96.19	-5,573.9	476.9	3,504.8	3,323.1	181.65	19.294	
9,100.0	6,957.5	6,931.0	6,931.0	44.9	138.8	-96.11	-5,573.9	476.9	3,460.0	3,277.5	182.50	18.959	
9,153.5	6,957.0	6,930.5	6,930.5	45.9	138.7	-96.02	-5,573.9	476.9	3,406.7	3,223.2	183.52	18.563	
9,200.0	6,956.6	6,930.1	6,930.1	46.8	138.7	-95.94	-5,573.9	476.9	3,360.4	3,176.0	184.40	18.223	
9,251.9	6,956.1	6,929.6	6,929.6	47.8	138.7	-95.85	-5,573.9	476.9	3,308.6	3,123.2	185.40	17.846	
9,300.0	6,955.7	6,929.2	6,929.2	48.7	138.7	-95.76	-5,573.9	476.9	3,260.8	3,074.5	186.32	17.501	
9,350.4	6,955.2	6,928.7	6,928.7	49.6	138.7	-95.67	-5,573.9	476.9	3,210.6	3,023.3	187.29	17.143	
9,400.0	6,954.8	6,928.3	6,928.3	50.6	138.7	-95.59	-5,573.9	476.9	3,161.2	2,973.0	188.24	16.793	
9,448.8	6,954.3	6,927.8	6,927.8	51.5	138.7	-95.50	-5,573.9	476.9	3,112.6	2,923.4	189.18	16.453	
9,500.0	6,953.9	6,927.4	6,927.4	52.5	138.7	-95.41	-5,573.9	476.9	3,061.7	2,871.5	190.17	16.100	
9,547.2	6,953.4	6,926.9	6,926.9	53.4	138.7	-95.33	-5,573.9	476.9	3,014.7	2,823.6	191.08	15.777	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-INC												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,600.0	6,952.9	6,926.4	6,926.4	54.4	138.7	-95.24	-5,573.9	476.9	2,962.1	2,770.0	192.10	15.419	
9,645.6	6,952.5	6,926.0	6,926.0	55.2	138.7	-95.16	-5,573.9	476.9	2,916.7	2,723.7	192.99	15.113	
9,700.0	6,952.0	6,925.5	6,925.5	56.3	138.6	-95.06	-5,573.9	476.9	2,862.6	2,668.6	194.04	14.753	
9,744.1	6,951.6	6,925.1	6,925.1	57.1	138.6	-94.98	-5,573.9	476.9	2,818.8	2,623.9	194.90	14.463	
9,800.0	6,951.1	6,924.6	6,924.6	58.2	138.6	-94.88	-5,573.9	476.9	2,763.2	2,567.2	195.99	14.099	
9,842.5	6,950.7	6,924.2	6,924.2	59.0	138.6	-94.81	-5,573.9	476.9	2,720.9	2,524.1	196.82	13.825	
9,900.0	6,950.2	6,923.7	6,923.7	60.1	138.6	-94.71	-5,573.9	476.9	2,663.8	2,465.8	197.94	13.458	
9,940.9	6,949.8	6,923.3	6,923.3	60.9	138.6	-94.64	-5,573.9	476.9	2,623.1	2,424.4	198.74	13.199	
10,000.0	6,949.3	6,922.8	6,922.8	62.0	138.6	-94.53	-5,573.9	476.9	2,564.4	2,364.5	199.89	12.829	
10,039.3	6,948.9	6,922.4	6,922.4	62.8	138.6	-94.46	-5,573.9	476.9	2,525.3	2,324.7	200.66	12.585	
10,100.0	6,948.4	6,921.9	6,921.9	64.0	138.6	-94.36	-5,573.9	476.9	2,465.1	2,263.3	201.85	12.213	
10,137.8	6,948.0	6,921.5	6,921.5	64.7	138.6	-94.29	-5,573.9	476.9	2,427.6	2,225.0	202.59	11.983	
10,200.0	6,947.5	6,921.0	6,921.0	65.9	138.6	-94.18	-5,573.9	476.9	2,365.8	2,162.0	203.80	11.608	
10,236.2	6,947.1	6,920.6	6,920.6	66.6	138.5	-94.12	-5,573.9	476.9	2,329.9	2,125.4	204.51	11.392	
10,300.0	6,946.6	6,920.1	6,920.1	67.8	138.5	-94.00	-5,573.9	476.9	2,266.7	2,060.9	205.77	11.016	
10,334.6	6,946.3	6,919.8	6,919.8	68.5	138.5	-93.94	-5,573.9	476.9	2,232.3	2,025.9	206.44	10.813	
10,400.0	6,945.7	6,919.2	6,919.2	69.8	138.5	-93.83	-5,573.9	476.9	2,167.5	1,959.8	207.73	10.435	
10,433.0	6,945.4	6,918.9	6,918.9	70.4	138.5	-93.77	-5,573.9	476.9	2,134.8	1,926.4	208.38	10.245	
10,500.0	6,944.7	6,918.2	6,918.2	71.7	138.5	-93.65	-5,573.9	476.9	2,068.5	1,858.8	209.69	9.864	
10,531.5	6,944.5	6,918.0	6,918.0	72.3	138.5	-93.59	-5,573.9	476.9	2,037.3	1,827.0	210.31	9.687	
10,600.0	6,943.8	6,917.3	6,917.3	73.7	138.5	-93.47	-5,573.9	476.9	1,969.6	1,757.9	211.66	9.305	
10,629.9	6,943.6	6,917.1	6,917.1	74.2	138.5	-93.42	-5,573.9	476.9	1,940.0	1,727.8	212.25	9.140	
10,700.0	6,942.9	6,916.4	6,916.4	75.6	138.5	-93.29	-5,573.9	476.9	1,870.7	1,657.1	213.62	8.757	
10,728.3	6,942.7	6,916.2	6,916.2	76.2	138.5	-93.24	-5,573.9	476.9	1,842.8	1,628.6	214.18	8.604	
10,800.0	6,942.0	6,915.5	6,915.5	77.6	138.4	-93.12	-5,573.9	476.9	1,772.0	1,556.5	215.59	8.219	
10,826.7	6,941.8	6,915.3	6,915.3	78.1	138.4	-93.07	-5,573.9	476.9	1,745.7	1,529.6	216.12	8.077	
10,900.0	6,941.1	6,914.6	6,914.6	79.5	138.4	-92.94	-5,573.9	476.9	1,673.5	1,455.9	217.56	7.692	
10,925.2	6,940.9	6,914.4	6,914.4	80.0	138.4	-92.89	-5,573.9	476.9	1,648.7	1,430.7	218.06	7.561	
11,000.0	6,940.2	6,913.7	6,913.7	81.5	138.4	-92.76	-5,573.9	476.9	1,575.2	1,355.6	219.53	7.175	
11,023.6	6,940.0	6,913.5	6,913.5	81.9	138.4	-92.72	-5,573.9	476.9	1,552.0	1,332.0	219.99	7.055	
11,100.0	6,939.3	6,912.8	6,912.8	83.4	138.4	-92.58	-5,573.9	476.9	1,477.0	1,255.5	221.50	6.668	
11,122.0	6,939.1	6,912.6	6,912.6	83.8	138.4	-92.54	-5,573.9	476.9	1,455.4	1,233.5	221.93	6.558	
11,200.0	6,938.4	6,911.9	6,911.9	85.4	138.4	-92.41	-5,573.9	476.9	1,379.2	1,155.7	223.47	6.172	
11,220.4	6,938.2	6,911.7	6,911.7	85.8	138.4	-92.37	-5,573.9	476.9	1,359.2	1,135.3	223.87	6.071	
11,300.0	6,937.4	6,910.9	6,910.9	87.3	138.4	-92.23	-5,573.9	476.9	1,281.6	1,056.2	225.44	5.685	
11,318.9	6,937.3	6,910.8	6,910.8	87.7	138.3	-92.19	-5,573.9	476.9	1,263.2	1,037.4	225.81	5.594	
11,400.0	6,936.5	6,910.0	6,910.0	89.3	138.3	-92.05	-5,573.9	476.9	1,184.5	957.1	227.40	5.209	
11,417.3	6,936.4	6,909.9	6,909.9	89.6	138.3	-92.02	-5,573.9	476.9	1,167.7	940.0	227.75	5.127	
11,500.0	6,935.6	6,909.1	6,909.1	91.3	138.3	-91.87	-5,573.9	476.9	1,087.9	858.5	229.37	4.743	
11,515.7	6,935.5	6,909.0	6,909.0	91.6	138.3	-91.84	-5,573.9	476.9	1,072.7	843.1	229.68	4.671	
11,600.0	6,934.7	6,908.2	6,908.2	93.2	138.3	-91.69	-5,573.9	476.9	991.9	760.6	231.34	4.288	
11,614.1	6,934.6	6,908.1	6,908.1	93.5	138.3	-91.67	-5,573.9	476.9	978.4	746.8	231.62	4.224	
11,700.0	6,933.8	6,907.3	6,907.3	95.2	138.3	-91.52	-5,573.9	476.9	896.9	663.6	233.31	3.844	
11,712.6	6,933.7	6,907.2	6,907.2	95.4	138.3	-91.49	-5,573.9	476.9	885.0	651.5	233.56	3.789	
11,800.0	6,932.9	6,906.4	6,906.4	97.1	138.3	-91.34	-5,573.9	476.9	803.0	567.8	235.28	3.413	
11,811.0	6,932.8	6,906.3	6,906.3	97.4	138.3	-91.32	-5,573.9	476.9	792.8	557.3	235.49	3.367	
11,900.0	6,932.0	6,905.5	6,905.5	99.1	138.2	-91.16	-5,573.9	476.9	710.9	473.6	237.24	2.996	
11,909.4	6,931.9	6,905.4	6,905.4	99.3	138.2	-91.14	-5,573.9	476.9	702.3	464.9	237.43	2.958	
12,000.0	6,931.0	6,904.5	6,904.5	101.1	138.2	-90.98	-5,573.9	476.9	621.1	381.9	239.21	2.597	
12,007.8	6,931.0	6,904.5	6,904.5	101.2	138.2	-90.97	-5,573.9	476.9	614.2	374.8	239.36	2.566	
12,100.0	6,930.1	6,903.6	6,903.6	103.0	138.2	-90.80	-5,573.9	476.9	535.0	293.9	241.17	2.218	
12,106.3	6,930.1	6,903.6	6,903.6	103.2	138.2	-90.79	-5,573.9	476.9	529.8	288.5	241.29	2.196	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-INC												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
12,200.0	6,929.2	6,902.7	6,902.7	105.0	138.2	-90.62	-5,573.9	476.9	454.6	211.5	243.13	1.870	
12,204.7	6,929.2	6,902.7	6,902.7	105.1	138.2	-90.61	-5,573.9	476.9	451.1	207.8	243.23	1.855	
12,300.0	6,928.3	6,901.8	6,901.8	107.0	138.2	-90.44	-5,573.9	476.9	383.6	138.5	245.10	1.565	
12,303.1	6,928.3	6,901.8	6,901.8	107.1	138.2	-90.44	-5,573.9	476.9	381.6	136.4	245.16	1.557	
12,400.0	6,927.4	6,900.9	6,900.9	109.0	138.1	-90.26	-5,573.9	476.9	328.0	81.0	247.06	1.328 Level 3	
12,401.5	6,927.4	6,900.9	6,900.9	109.0	138.1	-90.26	-5,573.9	476.9	327.4	80.3	247.09	1.325 Level 3	
12,500.0	6,926.5	6,900.0	6,900.0	110.9	138.1	-90.09	-5,573.9	476.9	296.8	47.7	249.01	1.192 Level 2	
12,547.7	6,926.0	6,899.5	6,899.5	111.9	138.1	-90.00	-5,573.9	476.9	292.9	42.9	249.95	1.172 Level 2, CC, ES, SF	
12,598.4	6,925.6	6,899.1	6,899.1	112.9	138.1	-89.91	-5,573.9	476.9	297.2	46.3	250.94	1.185 Level 2	
12,600.0	6,925.6	6,899.1	6,899.1	112.9	138.1	-89.91	-5,573.9	476.9	297.5	46.5	250.97	1.185 Level 2	
12,696.8	6,924.7	6,898.2	6,898.2	114.8	138.1	-89.73	-5,573.9	476.9	328.6	75.8	252.86	1.300 Level 3	
12,700.0	6,924.6	6,898.1	6,898.1	114.9	138.1	-89.73	-5,573.9	476.9	330.1	77.2	252.93	1.305 Level 3	
12,795.2	6,923.8	6,897.3	6,897.3	116.8	138.1	-89.56	-5,573.9	476.9	383.5	128.7	254.79	1.505	
12,800.0	6,923.7	6,897.2	6,897.2	116.9	138.1	-89.55	-5,573.9	476.9	386.5	131.7	254.88	1.517	
12,893.7	6,922.9	6,896.4	6,896.4	118.7	138.1	-89.38	-5,573.9	476.9	453.3	196.5	256.71	1.766	
12,900.0	6,922.8	6,896.3	6,896.3	118.8	138.1	-89.37	-5,573.9	476.9	458.1	201.3	256.83	1.784	
12,992.1	6,922.0	6,895.5	6,895.5	120.6	138.0	-89.20	-5,573.9	476.9	532.2	273.6	258.63	2.058	
13,000.0	6,921.9	6,895.4	6,895.4	120.8	138.0	-89.19	-5,573.9	476.9	538.8	280.0	258.78	2.082	
13,090.5	6,921.1	6,894.6	6,894.6	122.6	138.0	-89.03	-5,573.9	476.9	616.7	356.2	260.55	2.367	
13,100.0	6,921.0	6,894.5	6,894.5	122.8	138.0	-89.01	-5,573.9	476.9	625.1	364.4	260.73	2.397	
13,188.9	6,920.2	6,893.7	6,893.7	124.5	138.0	-88.85	-5,573.9	476.9	704.9	442.4	262.46	2.686	
13,200.0	6,920.1	6,893.6	6,893.6	124.8	138.0	-88.83	-5,573.9	476.9	715.0	452.3	262.68	2.722	
13,287.4	6,919.3	6,892.8	6,892.8	126.5	138.0	-88.67	-5,573.9	476.9	795.5	531.1	264.38	3.009	
13,300.0	6,919.1	6,892.6	6,892.6	126.7	138.0	-88.65	-5,573.9	476.9	807.2	542.6	264.62	3.051	
13,385.8	6,918.4	6,891.9	6,891.9	128.4	138.0	-88.50	-5,573.9	476.9	887.7	621.4	266.29	3.334	
13,400.0	6,918.2	6,891.7	6,891.7	128.7	138.0	-88.47	-5,573.9	476.9	901.1	634.6	266.56	3.381	
13,484.2	6,917.5	6,891.0	6,891.0	130.4	137.9	-88.32	-5,573.9	476.9	981.2	713.0	268.20	3.658	
13,500.0	6,917.3	6,890.8	6,890.8	130.7	137.9	-88.29	-5,573.9	476.9	996.2	727.7	268.50	3.710	
13,582.6	6,916.6	6,890.1	6,890.1	132.3	137.9	-88.14	-5,573.9	476.9	1,075.5	805.4	270.10	3.982	
13,600.0	6,916.4	6,889.9	6,889.9	132.7	137.9	-88.11	-5,573.9	476.9	1,092.2	821.8	270.44	4.039	
13,681.1	6,915.6	6,889.1	6,889.1	134.3	137.9	-87.97	-5,573.9	476.9	1,170.5	898.5	272.01	4.303	
13,700.0	6,915.5	6,889.0	6,889.0	134.6	137.9	-87.93	-5,573.9	476.9	1,188.8	916.5	272.37	4.365	
13,779.5	6,914.7	6,888.2	6,888.2	136.2	137.9	-87.79	-5,573.9	476.9	1,266.0	992.1	273.91	4.622	
13,800.0	6,914.6	6,888.1	6,888.1	136.6	137.9	-87.75	-5,573.9	476.9	1,286.0	1,011.7	274.31	4.688	
13,877.9	6,913.8	6,887.3	6,887.3	138.2	137.9	-87.62	-5,573.9	476.9	1,362.0	1,086.2	275.81	4.938	
13,900.0	6,913.6	6,887.1	6,887.1	138.6	137.9	-87.58	-5,573.9	476.9	1,383.6	1,107.3	276.24	5.009	
13,976.3	6,912.9	6,886.4	6,886.4	140.1	137.9	-87.44	-5,573.9	476.9	1,458.3	1,180.5	277.71	5.251	
14,000.0	6,912.7	6,886.2	6,886.2	140.6	137.9	-87.40	-5,573.9	476.9	1,481.4	1,203.3	278.16	5.326	
14,074.8	6,912.0	6,885.5	6,885.5	142.0	137.8	-87.26	-5,573.9	476.9	1,554.8	1,275.3	279.54	5.562	
14,079.0	6,912.0	6,885.5	6,885.5	142.1	137.8	-87.25	-5,573.9	476.9	1,558.9	1,279.3	279.62	5.575	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												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
0.0	0.0	0.0	0.0	0.0	0.0	-179.62	-6,284.3	-41.8	6,284.5				
98.4	98.4	68.9	68.9	0.1	0.6	-179.62	-6,284.3	-41.8	6,284.4	6,283.7	0.70	8,963.873	
100.0	100.0	70.5	70.5	0.1	0.6	-179.62	-6,284.3	-41.8	6,284.4	6,283.7	0.72	8,768.641	
196.8	196.8	167.3	167.3	0.3	2.5	-179.62	-6,284.3	-41.8	6,284.4	6,281.6	2.79	2,254.572	
200.0	200.0	170.5	170.5	0.3	2.5	-179.62	-6,284.3	-41.8	6,284.4	6,281.6	2.87	2,190.430	
295.3	295.3	265.8	265.8	0.5	4.6	-179.62	-6,284.3	-41.8	6,284.4	6,279.3	5.15	1,220.117	
300.0	300.0	270.5	270.5	0.5	4.7	-179.62	-6,284.3	-41.8	6,284.4	6,279.2	5.26	1,194.833	
393.7	393.7	364.2	364.2	0.8	6.6	-179.62	-6,284.3	-41.8	6,284.4	6,277.0	7.40	849.730	
400.0	400.0	370.5	370.5	0.8	6.8	-179.62	-6,284.3	-41.8	6,284.4	6,276.9	7.54	833.629	
492.1	492.1	462.6	462.6	1.0	8.6	-179.62	-6,284.3	-41.8	6,284.4	6,274.8	9.62	653.341	
500.0	500.0	470.5	470.5	1.0	8.8	-179.62	-6,284.3	-41.8	6,284.4	6,274.6	9.80	641.505	
590.5	590.5	561.0	561.0	1.2	10.6	-179.62	-6,284.3	-41.8	6,284.4	6,272.6	11.83	531.082	
600.0	600.0	570.5	570.5	1.2	10.8	-179.62	-6,284.3	-41.8	6,284.4	6,272.4	12.05	521.719	
689.0	689.0	659.5	659.5	1.4	12.6	-179.62	-6,284.3	-41.8	6,284.4	6,270.4	14.04	447.509	
700.0	700.0	670.5	670.5	1.4	12.8	-179.62	-6,284.3	-41.8	6,284.4	6,270.1	14.29	439.762	
787.4	787.4	757.9	757.9	1.6	14.6	-179.62	-6,284.3	-41.8	6,284.4	6,268.2	16.25	386.724	
800.0	800.0	770.5	770.5	1.7	14.9	-179.62	-6,284.3	-41.8	6,284.4	6,267.9	16.53	380.117	
885.8	885.8	856.3	856.3	1.9	16.6	-179.62	-6,284.3	-41.8	6,284.4	6,266.0	18.46	340.508	
900.0	900.0	870.5	870.5	1.9	16.9	-179.62	-6,284.3	-41.8	6,284.4	6,265.6	18.77	334.748	
984.2	984.2	954.7	954.7	2.1	18.6	-179.62	-6,284.3	-41.8	6,284.4	6,263.8	20.66	304.175	
1,000.0	1,000.0	970.5	970.5	2.1	18.9	-179.62	-6,284.3	-41.8	6,284.4	6,263.4	21.01	299.069	
1,082.7	1,082.7	1,053.2	1,053.2	2.3	20.6	-179.62	-6,284.3	-41.8	6,284.4	6,261.6	22.86	274.857	
1,100.0	1,100.0	1,070.5	1,070.5	2.3	20.9	-179.62	-6,284.3	-41.8	6,284.4	6,261.2	23.25	270.273	
1,181.1	1,181.1	1,151.6	1,151.6	2.5	22.5	-179.62	-6,284.3	-41.8	6,284.4	6,259.4	25.07	250.700	
1,200.0	1,200.0	1,170.5	1,170.5	2.6	22.9	-179.62	-6,284.3	-41.8	6,284.4	6,258.9	25.49	246.540	
1,279.5	1,279.5	1,250.0	1,250.0	2.7	24.5	143.87	-6,284.3	-41.8	6,285.3	6,258.0	27.26	230.555	
1,300.0	1,300.0	1,270.5	1,270.5	2.8	24.9	143.87	-6,284.3	-41.8	6,285.8	6,258.1	27.72	226.802	
1,377.9	1,377.8	1,348.3	1,348.3	3.0	26.5	143.85	-6,284.3	-41.8	6,288.9	6,259.5	29.43	213.688	
1,400.0	1,399.8	1,370.3	1,370.3	3.0	26.9	143.85	-6,284.3	-41.8	6,290.1	6,260.1	29.91	210.289	
1,476.4	1,475.9	1,446.4	1,446.4	3.2	28.5	143.82	-6,284.3	-41.8	6,295.2	6,263.6	31.57	199.409	
1,500.0	1,499.5	1,470.0	1,470.0	3.2	28.9	143.81	-6,284.3	-41.8	6,297.1	6,265.0	32.08	196.310	
1,574.8	1,573.7	1,544.2	1,544.2	3.4	30.4	143.77	-6,284.3	-41.8	6,304.2	6,270.5	33.68	187.203	
1,600.0	1,598.7	1,569.2	1,569.2	3.5	30.9	143.76	-6,284.3	-41.8	6,307.0	6,272.8	34.21	184.368	
1,673.2	1,671.1	1,641.6	1,641.6	3.7	32.4	143.71	-6,284.3	-41.8	6,316.0	6,280.2	35.75	176.685	
1,700.0	1,697.5	1,668.0	1,668.0	3.7	32.9	143.69	-6,284.3	-41.8	6,319.6	6,283.3	36.30	174.083	
1,771.6	1,767.9	1,738.4	1,738.4	4.0	34.3	143.63	-6,284.3	-41.8	6,330.4	6,292.6	37.78	167.558	
1,800.1	1,795.7	1,766.2	1,766.2	4.0	34.9	143.61	-6,284.3	-41.8	6,335.1	6,296.8	38.36	165.152	
1,870.1	1,864.2	1,834.7	1,834.7	4.3	36.3	143.69	-6,284.3	-41.8	6,346.9	6,307.0	39.91	159.042	
1,900.0	1,893.4	1,863.9	1,863.9	4.4	36.9	143.72	-6,284.3	-41.8	6,352.0	6,311.4	40.57	156.572	
1,968.5	1,960.4	1,930.9	1,930.9	4.6	38.2	143.79	-6,284.3	-41.8	6,363.6	6,321.5	42.09	151.182	
2,000.0	1,991.3	1,961.8	1,961.8	4.7	38.8	143.83	-6,284.3	-41.8	6,368.9	6,326.1	42.79	148.839	
2,066.9	2,056.7	2,027.2	2,027.2	5.0	40.2	143.90	-6,284.3	-41.8	6,380.2	6,335.9	44.28	144.088	
2,100.0	2,089.1	2,059.6	2,059.6	5.1	40.8	143.94	-6,284.3	-41.8	6,385.8	6,340.8	45.02	141.846	
2,165.3	2,153.0	2,123.5	2,123.5	5.3	42.1	144.01	-6,284.3	-41.8	6,396.9	6,350.4	46.48	137.628	
2,200.0	2,186.9	2,157.4	2,157.4	5.5	42.8	144.05	-6,284.3	-41.8	6,402.8	6,355.5	47.25	135.496	
2,263.8	2,249.3	2,219.8	2,219.8	5.7	44.0	144.12	-6,284.3	-41.8	6,413.6	6,364.9	48.68	131.743	
2,300.0	2,284.7	2,255.2	2,255.2	5.8	44.7	144.15	-6,284.3	-41.8	6,419.7	6,370.2	49.49	129.708	
2,362.2	2,345.5	2,316.0	2,316.0	6.1	46.0	144.22	-6,284.3	-41.8	6,430.3	6,379.4	50.89	126.359	
2,400.0	2,382.5	2,353.0	2,353.0	6.2	46.7	144.26	-6,284.3	-41.8	6,436.7	6,385.0	51.74	124.412	
2,460.6	2,441.8	2,412.3	2,412.3	6.5	47.9	144.33	-6,284.3	-41.8	6,447.0	6,393.9	53.10	121.414	
2,500.0	2,480.3	2,450.8	2,450.8	6.6	48.7	144.37	-6,284.3	-41.8	6,453.7	6,399.7	53.98	119.549	
2,559.0	2,538.1	2,508.6	2,508.6	6.9	49.8	144.43	-6,284.3	-41.8	6,463.8	6,408.5	55.31	116.860	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-INC												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
2,600.0	2,578.1	2,548.6	2,548.6	7.0	50.6	144.48	-6,284.3	-41.8	6,470.8	6,414.5	56.23	115.070	
2,657.5	2,634.4	2,604.9	2,604.9	7.3	51.8	144.54	-6,284.3	-41.8	6,480.6	6,423.0	57.53	112.652	
2,700.0	2,675.9	2,646.4	2,646.4	7.5	52.6	144.58	-6,284.3	-41.8	6,487.8	6,429.3	58.48	110.932	
2,755.9	2,730.6	2,701.1	2,701.1	7.7	53.7	144.64	-6,284.3	-41.8	6,497.4	6,437.6	59.74	108.753	
2,800.0	2,773.8	2,744.3	2,744.3	7.9	54.6	144.69	-6,284.3	-41.8	6,504.9	6,444.2	60.74	107.098	
2,854.3	2,826.9	2,797.4	2,797.4	8.1	55.7	144.74	-6,284.3	-41.8	6,514.2	6,452.2	61.96	105.131	
2,857.4	2,829.9	2,800.4	2,800.4	8.1	55.7	144.75	-6,284.3	-41.8	6,514.7	6,452.7	62.03	105.024	
2,900.0	2,871.6	2,842.1	2,842.1	8.3	56.6	144.87	-6,284.3	-41.8	6,521.8	6,458.7	63.09	103.373	
2,952.7	2,923.5	2,894.0	2,894.0	8.4	57.6	145.01	-6,284.3	-41.8	6,529.8	6,465.4	64.37	101.438	
3,000.0	2,970.1	2,940.6	2,940.6	8.6	58.5	145.13	-6,284.3	-41.8	6,536.3	6,470.8	65.52	99.764	
3,051.2	3,020.7	2,991.2	2,991.2	8.7	59.6	145.24	-6,284.3	-41.8	6,542.6	6,475.9	66.75	98.024	
3,100.0	3,069.1	3,039.6	3,039.6	8.9	60.5	145.33	-6,284.3	-41.8	6,548.0	6,480.0	67.91	96.421	
3,149.6	3,118.3	3,088.8	3,088.8	9.0	61.5	145.42	-6,284.3	-41.8	6,552.7	6,483.6	69.08	94.857	
3,200.0	3,168.5	3,139.0	3,139.0	9.1	62.5	145.49	-6,284.3	-41.8	6,556.8	6,486.5	70.26	93.323	
3,248.0	3,216.3	3,186.8	3,186.8	9.2	63.5	145.54	-6,284.3	-41.8	6,560.0	6,488.6	71.37	91.921	
3,300.0	3,268.2	3,238.7	3,238.7	9.3	64.5	145.59	-6,284.3	-41.8	6,562.8	6,490.2	72.55	90.455	
3,346.4	3,314.6	3,285.1	3,285.1	9.4	65.5	145.62	-6,284.3	-41.8	6,564.6	6,491.0	73.60	89.198	
3,400.0	3,368.1	3,338.6	3,338.6	9.5	66.5	145.64	-6,284.3	-41.8	6,565.9	6,491.1	74.78	87.798	
3,444.9	3,413.0	3,383.5	3,383.5	9.6	67.4	145.65	-6,284.3	-41.8	6,566.3	6,490.5	75.76	86.670	
3,457.5	3,425.6	3,396.1	3,396.1	9.6	67.7	-177.84	-6,284.3	-41.8	6,566.3	6,490.3	76.04	86.352	
3,500.0	3,468.1	3,438.6	3,438.6	9.7	68.5	-177.84	-6,284.3	-41.8	6,566.3	6,489.4	76.97	85.309	
3,543.3	3,511.4	3,481.9	3,481.9	9.7	69.4	-177.84	-6,284.3	-41.8	6,566.3	6,488.4	77.93	84.263	
3,600.0	3,568.1	3,538.6	3,538.6	9.8	70.6	-177.84	-6,284.3	-41.8	6,566.3	6,487.2	79.18	82.932	
3,641.7	3,609.9	3,580.4	3,580.4	9.9	71.4	-177.84	-6,284.3	-41.8	6,566.3	6,486.2	80.10	81.979	
3,700.0	3,668.1	3,638.6	3,638.6	10.0	72.6	-177.84	-6,284.3	-41.8	6,566.3	6,484.9	81.38	80.683	
3,740.1	3,708.3	3,678.8	3,678.8	10.1	73.4	-177.84	-6,284.3	-41.8	6,566.3	6,484.1	82.27	79.814	
3,800.0	3,768.1	3,738.6	3,738.6	10.2	74.6	-177.84	-6,284.3	-41.8	6,566.3	6,482.7	83.59	78.552	
3,838.6	3,806.7	3,777.2	3,777.2	10.2	75.4	-177.84	-6,284.3	-41.8	6,566.3	6,481.9	84.44	77.759	
3,900.0	3,868.1	3,838.6	3,838.6	10.3	76.6	-177.84	-6,284.3	-41.8	6,566.3	6,480.5	85.80	76.529	
3,937.0	3,905.1	3,875.6	3,875.6	10.4	77.3	-177.84	-6,284.3	-41.8	6,566.3	6,479.7	86.62	75.807	
4,000.0	3,968.1	3,938.6	3,938.6	10.5	78.6	-177.84	-6,284.3	-41.8	6,566.3	6,478.3	88.01	74.607	
4,035.4	4,003.6	3,974.1	3,974.1	10.6	79.3	-177.84	-6,284.3	-41.8	6,566.3	6,477.5	88.80	73.949	
4,100.0	4,068.1	4,038.6	4,038.6	10.7	80.6	-177.84	-6,284.3	-41.8	6,566.3	6,476.1	90.22	72.778	
4,133.8	4,102.0	4,072.5	4,072.5	10.8	81.3	-177.84	-6,284.3	-41.8	6,566.3	6,475.4	90.97	72.179	
4,200.0	4,168.1	4,138.6	4,138.6	10.9	82.6	-177.84	-6,284.3	-41.8	6,566.3	6,473.9	92.44	71.036	
4,232.3	4,200.4	4,170.9	4,170.9	10.9	83.3	-177.84	-6,284.3	-41.8	6,566.3	6,473.2	93.15	70.491	
4,300.0	4,268.1	4,238.6	4,238.6	11.1	84.6	-177.84	-6,284.3	-41.8	6,566.3	6,471.7	94.65	69.374	
4,330.7	4,298.8	4,269.3	4,269.3	11.1	85.3	-177.84	-6,284.3	-41.8	6,566.3	6,471.0	95.33	68.880	
4,400.0	4,368.1	4,338.6	4,338.6	11.2	86.6	-177.84	-6,284.3	-41.8	6,566.3	6,469.5	96.87	67.788	
4,429.1	4,397.3	4,367.8	4,367.8	11.3	87.2	-177.84	-6,284.3	-41.8	6,566.3	6,468.8	97.51	67.340	
4,500.0	4,468.1	4,438.6	4,438.6	11.4	88.7	-177.84	-6,284.3	-41.8	6,566.3	6,467.3	99.08	66.272	
4,527.5	4,495.7	4,466.2	4,466.2	11.5	89.2	-177.84	-6,284.3	-41.8	6,566.3	6,466.6	99.69	65.867	
4,600.0	4,568.1	4,538.6	4,538.6	11.6	90.7	-177.84	-6,284.3	-41.8	6,566.3	6,465.0	101.30	64.822	
4,626.0	4,594.1	4,564.6	4,564.6	11.7	91.2	-177.84	-6,284.3	-41.8	6,566.3	6,464.5	101.87	64.456	
4,700.0	4,668.1	4,638.6	4,638.6	11.8	92.7	-177.84	-6,284.3	-41.8	6,566.3	6,462.8	103.51	63.434	
4,724.4	4,692.5	4,663.0	4,663.0	11.8	93.2	-177.84	-6,284.3	-41.8	6,566.3	6,462.3	104.06	63.104	
4,800.0	4,768.1	4,738.6	4,738.6	12.0	94.7	-177.84	-6,284.3	-41.8	6,566.3	6,460.6	105.73	62.103	
4,822.8	4,791.0	4,761.5	4,761.5	12.0	95.2	-177.84	-6,284.3	-41.8	6,566.3	6,460.1	106.24	61.807	
4,900.0	4,868.1	4,838.6	4,838.6	12.2	96.7	-177.84	-6,284.3	-41.8	6,566.3	6,458.4	107.95	60.827	
4,921.2	4,889.4	4,859.9	4,859.9	12.2	97.1	-177.84	-6,284.3	-41.8	6,566.3	6,457.9	108.42	60.563	
5,000.0	4,968.1	4,938.6	4,938.6	12.4	98.7	-177.84	-6,284.3	-41.8	6,566.3	6,456.2	110.17	59.602	
5,019.7	4,987.8	4,958.3	4,958.3	12.4	99.1	-177.84	-6,284.3	-41.8	6,566.3	6,455.7	110.61	59.366	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-INC												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,100.0	5,068.1	5,038.6	5,038.6	12.6	100.7	-177.84	-6,284.3	-41.8	6,566.3	6,453.9	112.39	58.425	
5,118.1	5,086.2	5,056.7	5,056.7	12.6	101.1	-177.84	-6,284.3	-41.8	6,566.3	6,453.5	112.79	58.216	
5,200.0	5,168.1	5,138.6	5,138.6	12.8	102.7	-177.84	-6,284.3	-41.8	6,566.3	6,451.7	114.61	57.293	
5,216.5	5,184.7	5,155.2	5,155.2	12.8	103.1	-177.84	-6,284.3	-41.8	6,566.3	6,451.4	114.98	57.110	
5,300.0	5,268.1	5,238.6	5,238.6	13.0	104.7	-177.84	-6,284.3	-41.8	6,566.3	6,449.5	116.83	56.204	
5,314.9	5,283.1	5,253.6	5,253.6	13.0	105.1	-177.84	-6,284.3	-41.8	6,566.3	6,449.2	117.16	56.044	
5,400.0	5,368.1	5,338.6	5,338.6	13.1	106.8	-177.84	-6,284.3	-41.8	6,566.3	6,447.3	119.05	55.155	
5,413.4	5,381.5	5,352.0	5,352.0	13.2	107.0	-177.84	-6,284.3	-41.8	6,566.3	6,447.0	119.35	55.018	
5,500.0	5,468.1	5,438.6	5,438.6	13.3	108.8	-177.84	-6,284.3	-41.8	6,566.3	6,445.1	121.27	54.144	
5,511.8	5,479.9	5,450.4	5,450.4	13.4	109.0	-177.84	-6,284.3	-41.8	6,566.3	6,444.8	121.54	54.028	
5,600.0	5,568.1	5,538.6	5,538.6	13.5	110.8	-177.84	-6,284.3	-41.8	6,566.3	6,442.8	123.50	53.170	
5,610.2	5,578.4	5,548.9	5,548.9	13.6	111.0	-177.84	-6,284.3	-41.8	6,566.3	6,442.6	123.72	53.072	
5,700.0	5,668.1	5,638.6	5,638.6	13.7	112.8	-177.84	-6,284.3	-41.8	6,566.3	6,440.6	125.72	52.230	
5,708.6	5,676.8	5,647.3	5,647.3	13.8	113.0	-177.84	-6,284.3	-41.8	6,566.3	6,440.4	125.91	52.150	
5,800.0	5,768.1	5,738.6	5,738.6	13.9	114.8	-177.84	-6,284.3	-41.8	6,566.3	6,438.4	127.94	51.322	
5,807.1	5,775.2	5,745.7	5,745.7	14.0	114.9	-177.84	-6,284.3	-41.8	6,566.3	6,438.2	128.10	51.259	
5,900.0	5,868.1	5,838.6	5,838.6	14.1	116.8	-177.84	-6,284.3	-41.8	6,566.3	6,436.2	130.17	50.446	
5,905.5	5,873.6	5,844.1	5,844.1	14.1	116.9	-177.84	-6,284.3	-41.8	6,566.3	6,436.0	130.29	50.398	
6,000.0	5,968.1	5,938.6	5,938.6	14.3	118.8	-177.84	-6,284.3	-41.8	6,566.3	6,433.9	132.39	49.598	
6,003.9	5,972.1	5,942.6	5,942.6	14.3	118.9	-177.84	-6,284.3	-41.8	6,566.3	6,433.9	132.48	49.565	
6,100.0	6,068.1	6,038.6	6,038.6	14.5	120.8	-177.84	-6,284.3	-41.8	6,566.3	6,431.7	134.62	48.778	
6,102.3	6,070.5	6,041.0	6,041.0	14.5	120.9	-177.84	-6,284.3	-41.8	6,566.3	6,431.7	134.67	48.760	
6,200.0	6,168.1	6,138.6	6,138.6	14.7	122.8	-177.84	-6,284.3	-41.8	6,566.3	6,429.5	136.84	47.985	
6,200.8	6,168.9	6,139.4	6,139.4	14.7	122.9	-177.84	-6,284.3	-41.8	6,566.3	6,429.5	136.86	47.979	
6,288.5	6,256.6	6,227.1	6,227.1	14.9	124.6	-177.84	-6,284.3	-41.8	6,566.3	6,427.5	138.81	47.305	
6,299.2	6,267.3	6,237.8	6,237.8	14.9	124.8	1.95	-6,284.3	-41.8	6,566.3	6,427.2	139.02	47.233	
6,300.0	6,268.1	6,238.6	6,238.6	14.9	124.9	1.95	-6,284.3	-41.8	6,566.2	6,427.2	139.03	47.228	
6,350.0	6,318.1	6,288.6	6,288.6	15.0	125.9	1.95	-6,284.3	-41.8	6,563.7	6,424.1	139.59	47.021	
6,397.6	6,365.3	6,335.8	6,335.8	15.1	126.8	1.97	-6,284.3	-41.8	6,558.0	6,418.5	139.49	47.015	
6,400.0	6,367.7	6,338.2	6,338.2	15.1	126.9	1.97	-6,284.3	-41.8	6,557.7	6,418.2	139.47	47.020	
6,450.0	6,416.8	6,387.3	6,387.3	15.1	127.8	2.00	-6,284.3	-41.8	6,548.2	6,409.6	138.64	47.231	
6,496.0	6,461.3	6,431.8	6,431.8	15.1	128.7	2.04	-6,284.3	-41.8	6,536.5	6,399.2	137.26	47.622	
6,500.0	6,465.1	6,435.6	6,435.6	15.1	128.8	2.04	-6,284.3	-41.8	6,535.3	6,398.2	137.11	47.665	
6,550.0	6,512.4	6,482.9	6,482.9	15.1	129.8	2.10	-6,284.3	-41.8	6,519.1	6,384.3	134.87	48.336	
6,594.5	6,553.4	6,523.9	6,523.9	15.1	130.6	2.16	-6,284.3	-41.8	6,502.0	6,369.7	132.29	49.151	
6,600.0	6,558.4	6,528.9	6,528.9	15.1	130.7	2.17	-6,284.3	-41.8	6,499.7	6,367.8	131.93	49.268	
6,650.0	6,603.0	6,573.5	6,573.5	15.1	131.6	2.25	-6,284.3	-41.8	6,477.1	6,348.8	128.28	50.492	
6,692.9	6,639.9	6,610.4	6,610.4	15.1	132.3	2.34	-6,284.3	-41.8	6,455.2	6,330.6	124.60	51.806	
6,700.0	6,645.9	6,616.4	6,616.4	15.1	132.5	2.36	-6,284.3	-41.8	6,451.4	6,327.4	123.95	52.049	
6,750.0	6,686.8	6,657.3	6,657.3	15.1	133.3	2.49	-6,284.3	-41.8	6,422.8	6,303.8	118.95	53.995	
6,791.3	6,719.1	6,689.6	6,689.6	15.1	133.9	2.62	-6,284.3	-41.8	6,397.0	6,282.7	114.34	55.948	
6,800.0	6,725.7	6,696.2	6,696.2	15.1	134.1	2.65	-6,284.3	-41.8	6,391.4	6,278.1	113.32	56.403	
6,850.0	6,762.3	6,732.8	6,732.8	15.1	134.8	2.84	-6,284.3	-41.8	6,357.4	6,250.3	107.08	59.371	
6,889.7	6,789.7	6,760.2	6,760.2	15.1	135.3	3.02	-6,284.3	-41.8	6,328.6	6,226.8	101.72	62.216	
6,900.0	6,796.5	6,767.0	6,767.0	15.1	135.5	3.08	-6,284.3	-41.8	6,320.9	6,220.6	100.28	63.031	
6,950.0	6,828.0	6,798.5	6,798.5	15.1	136.1	3.37	-6,284.3	-41.8	6,282.1	6,189.1	92.98	67.563	
6,988.2	6,850.2	6,820.7	6,820.7	15.1	136.6	3.65	-6,284.3	-41.8	6,251.1	6,164.0	87.11	71.759	
7,000.0	6,856.7	6,827.2	6,827.2	15.1	136.7	3.75	-6,284.3	-41.8	6,241.2	6,156.0	85.25	73.214	
7,050.0	6,882.5	6,853.0	6,853.0	15.2	137.2	4.24	-6,284.3	-41.8	6,198.4	6,121.3	77.18	80.316	
7,086.6	6,899.5	6,870.0	6,870.0	15.3	137.6	4.70	-6,284.3	-41.8	6,166.0	6,094.9	71.14	86.680	
7,100.0	6,905.3	6,875.8	6,875.8	15.4	137.7	4.89	-6,284.3	-41.8	6,153.9	6,085.0	68.91	89.300	
7,150.0	6,924.9	6,895.4	6,895.4	15.7	138.1	5.80	-6,284.3	-41.8	6,108.0	6,047.3	60.71	100.603	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-INC												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
7,185.0	6,936.7	6,907.2	6,907.2	15.9	138.3	6.68	-6,284.3	-41.8	6,075.0	6,019.8	55.28	109.900	
7,200.0	6,941.2	6,911.7	6,911.7	16.0	138.4	7.15	-6,284.3	-41.8	6,060.8	6,007.7	53.12	114.090	
7,250.0	6,954.2	6,924.7	6,924.7	16.3	138.7	9.32	-6,284.3	-41.8	6,012.5	5,965.0	47.55	126.459	
7,283.4	6,961.0	6,931.5	6,931.5	16.6	138.8	11.68	-6,284.3	-41.8	5,979.8	5,933.1	46.71	128.006	
7,300.0	6,963.8	6,934.3	6,934.3	16.7	138.9	13.35	-6,284.3	-41.8	5,963.5	5,915.5	47.98	124.284	
7,350.0	6,970.0	6,940.5	6,940.5	17.2	139.0	23.10	-6,284.3	-41.8	5,913.9	5,847.9	65.99	89.614	
7,381.9	6,972.1	6,942.6	6,942.6	17.5	139.0	40.71	-6,284.3	-41.8	5,882.2	5,778.6	103.57	56.794	
7,400.0	6,972.7	6,943.2	6,943.2	17.7	139.0	63.71	-6,284.3	-41.8	5,864.1	5,723.5	140.55	41.721	
7,420.0	6,972.8	6,943.3	6,943.3	17.9	139.0	103.36	-6,284.3	-41.8	5,844.1	5,691.3	152.77	38.253	
7,480.3	6,972.2	6,942.7	6,942.7	18.5	139.0	103.23	-6,284.3	-41.8	5,783.8	5,630.3	153.48	37.685	
7,500.0	6,972.0	6,942.5	6,942.5	18.7	139.0	103.19	-6,284.3	-41.8	5,764.1	5,610.4	153.70	37.501	
7,578.7	6,971.3	6,941.8	6,941.8	19.7	139.0	103.02	-6,284.3	-41.8	5,685.5	5,530.8	154.70	36.751	
7,600.0	6,971.1	6,941.6	6,941.6	19.9	139.0	102.97	-6,284.3	-41.8	5,664.2	5,509.2	154.97	36.550	
7,677.1	6,970.4	6,940.9	6,940.9	20.9	139.0	102.80	-6,284.3	-41.8	5,587.1	5,431.1	156.03	35.808	
7,700.0	6,970.2	6,940.7	6,940.7	21.2	139.0	102.75	-6,284.3	-41.8	5,564.3	5,408.0	156.34	35.591	
7,775.6	6,969.5	6,940.0	6,940.0	22.2	139.0	102.58	-6,284.3	-41.8	5,488.8	5,331.3	157.46	34.859	
7,800.0	6,969.3	6,939.8	6,939.8	22.6	139.0	102.53	-6,284.3	-41.8	5,464.4	5,306.6	157.81	34.625	
7,874.0	6,968.6	6,939.1	6,939.1	23.7	138.9	102.36	-6,284.3	-41.8	5,390.5	5,231.5	158.97	33.910	
7,900.0	6,968.4	6,938.9	6,938.9	24.1	138.9	102.31	-6,284.3	-41.8	5,364.5	5,205.1	159.37	33.661	
7,972.4	6,967.8	6,938.3	6,938.3	25.2	138.9	102.15	-6,284.3	-41.8	5,292.1	5,131.6	160.55	32.963	
8,000.0	6,967.5	6,938.0	6,938.0	25.6	138.9	102.09	-6,284.3	-41.8	5,264.6	5,103.6	160.99	32.701	
8,070.8	6,966.9	6,937.4	6,937.4	26.7	138.9	101.93	-6,284.3	-41.8	5,193.8	5,031.6	162.18	32.024	
8,100.0	6,966.6	6,937.1	6,937.1	27.2	138.9	101.87	-6,284.3	-41.8	5,164.7	5,002.0	162.67	31.748	
8,169.3	6,966.0	6,936.5	6,936.5	28.3	138.9	101.71	-6,284.3	-41.8	5,095.5	4,931.6	163.87	31.094	
8,200.0	6,965.7	6,936.2	6,936.2	28.8	138.9	101.64	-6,284.3	-41.8	5,064.8	4,900.4	164.40	30.807	
8,267.7	6,965.1	6,935.6	6,935.6	30.0	138.9	101.49	-6,284.3	-41.8	4,997.1	4,831.5	165.60	30.176	
8,300.0	6,964.8	6,935.3	6,935.3	30.5	138.9	101.42	-6,284.3	-41.8	4,964.9	4,798.7	166.17	29.878	
8,366.1	6,964.2	6,934.7	6,934.7	31.7	138.9	101.27	-6,284.3	-41.8	4,898.8	4,731.4	167.36	29.270	
8,400.0	6,963.9	6,934.4	6,934.4	32.2	138.9	101.20	-6,284.3	-41.8	4,865.0	4,697.0	167.97	28.963	
8,464.5	6,963.3	6,933.8	6,933.8	33.4	138.8	101.05	-6,284.3	-41.8	4,800.5	4,631.3	169.16	28.379	
8,500.0	6,963.0	6,933.5	6,933.5	34.0	138.8	100.98	-6,284.3	-41.8	4,765.1	4,595.3	169.81	28.062	
8,563.0	6,962.4	6,932.9	6,932.9	35.1	138.8	100.83	-6,284.3	-41.8	4,702.2	4,531.2	170.97	27.502	
8,600.0	6,962.0	6,932.5	6,932.5	35.8	138.8	100.75	-6,284.3	-41.8	4,665.2	4,493.5	171.66	27.177	
8,661.4	6,961.5	6,932.0	6,932.0	36.9	138.8	100.61	-6,284.3	-41.8	4,603.9	4,431.1	172.81	26.641	
8,700.0	6,961.1	6,931.6	6,931.6	37.6	138.8	100.53	-6,284.3	-41.8	4,565.3	4,391.8	173.54	26.307	
8,759.8	6,960.6	6,931.1	6,931.1	38.7	138.8	100.39	-6,284.3	-41.8	4,505.6	4,330.9	174.67	25.795	
8,800.0	6,960.2	6,930.7	6,930.7	39.4	138.8	100.30	-6,284.3	-41.8	4,465.4	4,290.0	175.43	25.454	
8,858.2	6,959.7	6,930.2	6,930.2	40.5	138.8	100.17	-6,284.3	-41.8	4,407.3	4,230.7	176.54	24.964	
8,900.0	6,959.3	6,929.8	6,929.8	41.2	138.8	100.08	-6,284.3	-41.8	4,365.6	4,188.2	177.34	24.617	
8,956.7	6,958.8	6,929.3	6,929.3	42.3	138.7	99.95	-6,284.3	-41.8	4,309.0	4,130.6	178.43	24.149	
9,000.0	6,958.4	6,928.9	6,928.9	43.1	138.7	99.85	-6,284.3	-41.8	4,265.7	4,086.5	179.26	23.796	
9,055.1	6,957.9	6,928.4	6,928.4	44.1	138.7	99.73	-6,284.3	-41.8	4,210.7	4,030.4	180.33	23.350	
9,100.0	6,957.5	6,928.0	6,928.0	44.9	138.7	99.63	-6,284.3	-41.8	4,165.9	3,984.7	181.20	22.990	
9,153.5	6,957.0	6,927.5	6,927.5	45.9	138.7	99.51	-6,284.3	-41.8	4,112.4	3,930.2	182.24	22.566	
9,200.0	6,956.6	6,927.1	6,927.1	46.8	138.7	99.40	-6,284.3	-41.8	4,066.0	3,882.9	183.14	22.201	
9,251.9	6,956.1	6,926.6	6,926.6	47.8	138.7	99.28	-6,284.3	-41.8	4,014.1	3,830.0	184.16	21.797	
9,300.0	6,955.7	6,926.2	6,926.2	48.7	138.7	99.18	-6,284.3	-41.8	3,966.2	3,781.1	185.10	21.427	
9,350.4	6,955.2	6,925.7	6,925.7	49.6	138.7	99.06	-6,284.3	-41.8	3,915.9	3,729.8	186.09	21.043	
9,400.0	6,954.8	6,925.3	6,925.3	50.6	138.7	98.95	-6,284.3	-41.8	3,866.3	3,679.3	187.06	20.669	
9,448.8	6,954.3	6,924.8	6,924.8	51.5	138.7	98.84	-6,284.3	-41.8	3,817.6	3,629.6	188.02	20.304	
9,500.0	6,953.9	6,924.4	6,924.4	52.5	138.7	98.72	-6,284.3	-41.8	3,766.5	3,577.5	189.03	19.926	
9,547.2	6,953.4	6,923.9	6,923.9	53.4	138.6	98.61	-6,284.3	-41.8	3,719.4	3,529.4	189.96	19.580	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - EXIST VERT FARR C #18-25 - Wellbore #1 - Design #1												Offset Site Error:	0.0 usft
Survey Program: 0-INC												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,600.0	6,952.9	6,923.4	6,923.4	54.4	138.6	98.49	-6,284.3	-41.8	3,666.7	3,475.7	191.00	19.197	
9,645.6	6,952.5	6,923.0	6,923.0	55.2	138.6	98.39	-6,284.3	-41.8	3,621.1	3,429.2	191.91	18.869	
9,700.0	6,952.0	6,922.5	6,922.5	56.3	138.6	98.27	-6,284.3	-41.8	3,566.9	3,373.9	192.98	18.483	
9,744.1	6,951.6	6,922.1	6,922.1	57.1	138.6	98.17	-6,284.3	-41.8	3,522.9	3,329.0	193.86	18.173	
9,800.0	6,951.1	6,921.6	6,921.6	58.2	138.6	98.04	-6,284.3	-41.8	3,467.1	3,272.1	194.97	17.783	
9,842.5	6,950.7	6,921.2	6,921.2	59.0	138.6	97.94	-6,284.3	-41.8	3,424.7	3,228.9	195.81	17.490	
9,900.0	6,950.2	6,920.7	6,920.7	60.1	138.6	97.81	-6,284.3	-41.8	3,367.3	3,170.4	196.96	17.097	
9,940.9	6,949.8	6,920.3	6,920.3	60.9	138.6	97.72	-6,284.3	-41.8	3,326.5	3,128.7	197.77	16.820	
10,000.0	6,949.3	6,919.8	6,919.8	62.0	138.6	97.58	-6,284.3	-41.8	3,267.5	3,068.6	198.95	16.424	
10,039.3	6,948.9	6,919.4	6,919.4	62.8	138.6	97.49	-6,284.3	-41.8	3,228.3	3,028.6	199.73	16.163	
10,100.0	6,948.4	6,918.9	6,918.9	64.0	138.5	97.35	-6,284.3	-41.8	3,167.8	2,966.9	200.94	15.765	
10,137.8	6,948.0	6,918.5	6,918.5	64.7	138.5	97.27	-6,284.3	-41.8	3,130.1	2,928.4	201.70	15.519	
10,200.0	6,947.5	6,918.0	6,918.0	65.9	138.5	97.12	-6,284.3	-41.8	3,068.1	2,865.1	202.94	15.118	
10,236.2	6,947.1	6,917.6	6,917.6	66.6	138.5	97.04	-6,284.3	-41.8	3,032.0	2,828.3	203.66	14.887	
10,300.0	6,946.6	6,917.1	6,917.1	67.8	138.5	96.89	-6,284.3	-41.8	2,968.3	2,763.4	204.94	14.484	
10,334.6	6,946.3	6,916.8	6,916.8	68.5	138.5	96.81	-6,284.3	-41.8	2,933.8	2,728.2	205.63	14.267	
10,400.0	6,945.7	6,916.2	6,916.2	69.8	138.5	96.66	-6,284.3	-41.8	2,868.6	2,661.7	206.94	13.862	
10,433.0	6,945.4	6,915.9	6,915.9	70.4	138.5	96.59	-6,284.3	-41.8	2,835.7	2,628.1	207.60	13.659	
10,500.0	6,944.7	6,915.2	6,915.2	71.7	138.5	96.43	-6,284.3	-41.8	2,768.9	2,560.0	208.94	13.252	
10,531.5	6,944.5	6,915.0	6,915.0	72.3	138.5	96.36	-6,284.3	-41.8	2,737.6	2,528.0	209.57	13.063	
10,600.0	6,943.8	6,914.3	6,914.3	73.7	138.4	96.20	-6,284.3	-41.8	2,669.3	2,458.3	210.95	12.654	
10,629.9	6,943.6	6,914.1	6,914.1	74.2	138.4	96.13	-6,284.3	-41.8	2,639.5	2,428.0	211.55	12.477	
10,700.0	6,942.9	6,913.4	6,913.4	75.6	138.4	95.97	-6,284.3	-41.8	2,569.7	2,356.7	212.95	12.067	
10,728.3	6,942.7	6,913.2	6,913.2	76.2	138.4	95.91	-6,284.3	-41.8	2,541.4	2,327.9	213.52	11.903	
10,800.0	6,942.0	6,912.5	6,912.5	77.6	138.4	95.74	-6,284.3	-41.8	2,470.1	2,255.1	214.95	11.491	
10,826.7	6,941.8	6,912.3	6,912.3	78.1	138.4	95.68	-6,284.3	-41.8	2,443.4	2,227.9	215.49	11.339	
10,900.0	6,941.1	6,911.6	6,911.6	79.5	138.4	95.51	-6,284.3	-41.8	2,370.5	2,153.5	216.96	10.926	
10,925.2	6,940.9	6,911.4	6,911.4	80.0	138.4	95.45	-6,284.3	-41.8	2,345.4	2,128.0	217.46	10.785	
11,000.0	6,940.2	6,910.7	6,910.7	81.5	138.4	95.28	-6,284.3	-41.8	2,271.0	2,052.0	218.96	10.371	
11,023.6	6,940.0	6,910.5	6,910.5	81.9	138.4	95.23	-6,284.3	-41.8	2,247.5	2,028.0	219.44	10.242	
11,100.0	6,939.3	6,909.8	6,909.8	83.4	138.4	95.05	-6,284.3	-41.8	2,171.5	1,950.5	220.97	9.827	
11,122.0	6,939.1	6,909.6	6,909.6	83.8	138.4	95.00	-6,284.3	-41.8	2,149.6	1,928.1	221.41	9.709	
11,200.0	6,938.4	6,908.9	6,908.9	85.4	138.3	94.82	-6,284.3	-41.8	2,072.0	1,849.1	222.97	9.293	
11,220.4	6,938.2	6,908.7	6,908.7	85.8	138.3	94.77	-6,284.3	-41.8	2,051.7	1,828.3	223.38	9.185	
11,300.0	6,937.4	6,907.9	6,907.9	87.3	138.3	94.58	-6,284.3	-41.8	1,972.6	1,747.7	224.97	8.768	
11,318.9	6,937.3	6,907.8	6,907.8	87.7	138.3	94.54	-6,284.3	-41.8	1,953.9	1,728.5	225.35	8.670	
11,400.0	6,936.5	6,907.0	6,907.0	89.3	138.3	94.35	-6,284.3	-41.8	1,873.3	1,646.3	226.98	8.253	
11,417.3	6,936.4	6,906.9	6,906.9	89.6	138.3	94.31	-6,284.3	-41.8	1,856.1	1,628.8	227.32	8.165	
11,500.0	6,935.6	6,906.1	6,906.1	91.3	138.3	94.12	-6,284.3	-41.8	1,774.1	1,545.1	228.98	7.748	
11,515.7	6,935.5	6,906.0	6,906.0	91.6	138.3	94.08	-6,284.3	-41.8	1,758.5	1,529.2	229.29	7.669	
11,600.0	6,934.7	6,905.2	6,905.2	93.2	138.3	93.89	-6,284.3	-41.8	1,674.9	1,443.9	230.98	7.251	
11,614.1	6,934.6	6,905.1	6,905.1	93.5	138.3	93.85	-6,284.3	-41.8	1,660.9	1,429.6	231.26	7.182	
11,700.0	6,933.8	6,904.3	6,904.3	95.2	138.2	93.65	-6,284.3	-41.8	1,575.9	1,342.9	232.98	6.764	
11,712.6	6,933.7	6,904.2	6,904.2	95.4	138.2	93.62	-6,284.3	-41.8	1,563.4	1,330.2	233.23	6.703	
11,800.0	6,932.9	6,903.4	6,903.4	97.1	138.2	93.42	-6,284.3	-41.8	1,477.0	1,242.0	234.97	6.286	
11,811.0	6,932.8	6,903.3	6,903.3	97.4	138.2	93.40	-6,284.3	-41.8	1,466.1	1,230.9	235.19	6.234	
11,900.0	6,932.0	6,902.5	6,902.5	99.1	138.2	93.19	-6,284.3	-41.8	1,378.2	1,141.2	236.97	5.816	
11,909.4	6,931.9	6,902.4	6,902.4	99.3	138.2	93.17	-6,284.3	-41.8	1,368.9	1,131.7	237.16	5.772	
12,000.0	6,931.0	6,901.5	6,901.5	101.1	138.2	92.95	-6,284.3	-41.8	1,279.6	1,040.7	238.96	5.355	
12,007.8	6,931.0	6,901.5	6,901.5	101.2	138.2	92.94	-6,284.3	-41.8	1,271.9	1,032.8	239.12	5.319	
12,100.0	6,930.1	6,900.6	6,900.6	103.0	138.2	92.72	-6,284.3	-41.8	1,181.3	940.3	240.95	4.903	
12,106.3	6,930.1	6,900.6	6,900.6	103.2	138.2	92.71	-6,284.3	-41.8	1,175.1	934.0	241.08	4.874	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-INC												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
12,200.0	6,929.2	6,899.7	6,899.7	105.0	138.2	92.49	-6,284.3	-41.8	1,083.3	840.3	242.94	4.459	
12,204.7	6,929.2	6,899.7	6,899.7	105.1	138.2	92.48	-6,284.3	-41.8	1,078.7	835.6	243.04	4.438	
12,300.0	6,928.3	6,898.8	6,898.8	107.0	138.1	92.25	-6,284.3	-41.8	985.6	740.7	244.93	4.024	
12,303.1	6,928.3	6,898.8	6,898.8	107.1	138.1	92.25	-6,284.3	-41.8	982.6	737.6	244.99	4.011	
12,400.0	6,927.4	6,897.9	6,897.9	109.0	138.1	92.02	-6,284.3	-41.8	888.5	641.6	246.91	3.599	
12,401.5	6,927.4	6,897.9	6,897.9	109.0	138.1	92.01	-6,284.3	-41.8	887.0	640.1	246.94	3.592	
12,500.0	6,926.5	6,897.0	6,897.0	110.9	138.1	91.78	-6,284.3	-41.8	792.1	543.2	248.90	3.183	
12,598.4	6,925.6	6,896.1	6,896.1	112.9	138.1	91.55	-6,284.3	-41.8	698.3	447.4	250.84	2.784	
12,600.0	6,925.6	6,896.1	6,896.1	112.9	138.1	91.55	-6,284.3	-41.8	696.8	445.9	250.87	2.777	
12,696.8	6,924.7	6,895.2	6,895.2	114.8	138.1	91.32	-6,284.3	-41.8	605.8	353.1	252.79	2.397	
12,700.0	6,924.6	6,895.1	6,895.1	114.9	138.1	91.32	-6,284.3	-41.8	602.9	350.0	252.85	2.384	
12,795.2	6,923.8	6,894.3	6,894.3	116.8	138.0	91.09	-6,284.3	-41.8	515.6	260.9	254.73	2.024	
12,800.0	6,923.7	6,894.2	6,894.2	116.9	138.0	91.08	-6,284.3	-41.8	511.3	256.5	254.82	2.007	
12,893.7	6,922.9	6,893.4	6,893.4	118.7	138.0	90.86	-6,284.3	-41.8	429.0	172.4	256.67	1.672	
12,900.0	6,922.8	6,893.3	6,893.3	118.8	138.0	90.85	-6,284.3	-41.8	423.6	166.8	256.79	1.650	
12,992.1	6,922.0	6,892.5	6,892.5	120.6	138.0	90.63	-6,284.3	-41.8	348.8	90.2	258.61	1.349	Level 3
13,000.0	6,921.9	6,892.4	6,892.4	120.8	138.0	90.61	-6,284.3	-41.8	342.7	84.0	258.76	1.325	Level 3
13,090.5	6,921.1	6,891.6	6,891.6	122.6	138.0	90.40	-6,284.3	-41.8	280.3	19.8	260.54	1.076	Level 2
13,100.0	6,921.0	6,891.5	6,891.5	122.8	138.0	90.38	-6,284.3	-41.8	274.7	14.0	260.72	1.054	Level 2
13,188.9	6,920.2	6,890.7	6,890.7	124.5	138.0	90.17	-6,284.3	-41.8	234.3	-28.1	262.47	0.893	Level 1
13,200.0	6,920.1	6,890.6	6,890.6	124.8	138.0	90.14	-6,284.3	-41.8	231.2	-31.5	262.68	0.880	Level 1
13,260.0	6,919.5	6,890.0	6,890.0	125.9	138.0	90.00	-6,284.3	-41.8	223.3	-40.6	263.86	0.846	Level 1, CC, ES, SF
13,287.4	6,919.3	6,889.8	6,889.8	126.5	138.0	89.94	-6,284.3	-41.8	224.9	-39.4	264.39	0.851	Level 1
13,300.0	6,919.1	6,889.6	6,889.6	126.7	138.0	89.91	-6,284.3	-41.8	226.8	-37.8	264.64	0.857	Level 1
13,385.8	6,918.4	6,888.9	6,888.9	128.4	137.9	89.70	-6,284.3	-41.8	256.3	-10.1	266.32	0.962	Level 1
13,400.0	6,918.2	6,888.7	6,888.7	128.7	137.9	89.67	-6,284.3	-41.8	263.5	-3.1	266.59	0.988	Level 1
13,484.2	6,917.5	6,888.0	6,888.0	130.4	137.9	89.47	-6,284.3	-41.8	316.4	48.2	268.23	1.180	Level 2
13,500.0	6,917.3	6,887.8	6,887.8	130.7	137.9	89.44	-6,284.3	-41.8	327.8	59.2	268.54	1.221	Level 2
13,582.6	6,916.6	6,887.1	6,887.1	132.3	137.9	89.24	-6,284.3	-41.8	392.3	122.2	270.15	1.452	Level 3
13,600.0	6,916.4	6,886.9	6,886.9	132.7	137.9	89.20	-6,284.3	-41.8	406.7	136.2	270.49	1.504	
13,681.1	6,915.6	6,886.1	6,886.1	134.3	137.9	89.01	-6,284.3	-41.8	476.6	204.5	272.06	1.752	
13,700.0	6,915.5	6,886.0	6,886.0	134.6	137.9	88.96	-6,284.3	-41.8	493.4	220.9	272.43	1.811	
13,779.5	6,914.7	6,885.2	6,885.2	136.2	137.9	88.78	-6,284.3	-41.8	565.4	291.4	273.97	2.064	
13,800.0	6,914.6	6,885.1	6,885.1	136.6	137.9	88.73	-6,284.3	-41.8	584.3	309.9	274.36	2.130	
13,877.9	6,913.8	6,884.3	6,884.3	138.2	137.8	88.55	-6,284.3	-41.8	657.0	381.1	275.87	2.381	
13,900.0	6,913.6	6,884.1	6,884.1	138.6	137.8	88.49	-6,284.3	-41.8	677.8	401.5	276.30	2.453	
13,976.3	6,912.9	6,883.4	6,883.4	140.1	137.8	88.31	-6,284.3	-41.8	750.3	472.5	277.77	2.701	
14,000.0	6,912.7	6,883.2	6,883.2	140.6	137.8	88.26	-6,284.3	-41.8	772.9	494.7	278.23	2.778	
14,074.8	6,912.0	6,882.5	6,882.5	142.0	137.8	88.08	-6,284.3	-41.8	844.7	565.1	279.60	3.021	
14,079.0	6,912.0	6,882.5	6,882.5	142.1	137.8	88.07	-6,284.3	-41.8	848.8	569.1	279.68	3.035	

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Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

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									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	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	-169.96	-4,222.3	-747.4	4,288.3				
98.4	98.4	48.9	48.9	0.1	0.0	-169.96	-4,222.3	-747.3	4,287.9	4,287.7	0.14	N/A	
100.0	100.0	50.9	50.9	0.1	0.1	-169.96	-4,222.3	-747.3	4,287.9	4,287.7	0.15	N/A	
196.8	196.8	153.5	153.5	0.3	0.1	-169.97	-4,222.0	-746.8	4,287.5	4,287.1	0.45	9,479.257	
200.0	200.0	156.4	156.4	0.3	0.1	-169.97	-4,222.0	-746.8	4,287.5	4,287.1	0.46	9,290.638	
295.3	295.3	244.8	244.8	0.5	0.2	-169.97	-4,221.7	-746.9	4,287.3	4,286.5	0.75	5,695.584	
300.0	300.0	249.1	249.1	0.5	0.2	-169.97	-4,221.7	-746.9	4,287.3	4,286.5	0.77	5,584.085	
393.7	393.7	340.1	340.1	0.8	0.3	-169.97	-4,221.6	-747.0	4,287.2	4,286.1	1.06	4,043.542	
400.0	400.0	346.8	346.8	0.8	0.3	-169.97	-4,221.6	-747.0	4,287.1	4,286.1	1.08	3,971.435	
492.1	492.1	443.1	443.1	1.0	0.4	-169.96	-4,221.4	-747.2	4,287.0	4,285.6	1.34	3,194.110	
500.0	500.0	451.3	451.3	1.0	0.4	-169.96	-4,221.3	-747.2	4,287.0	4,285.6	1.36	3,146.256	
590.5	590.5	545.6	545.6	1.2	0.4	-169.96	-4,221.1	-747.0	4,286.7	4,285.1	1.60	2,671.374	
600.0	600.0	555.4	555.4	1.2	0.4	-169.96	-4,221.1	-747.0	4,286.7	4,285.1	1.63	2,628.576	
689.0	689.0	645.2	645.2	1.4	0.5	-169.96	-4,220.8	-747.0	4,286.4	4,284.5	1.88	2,283.773	
700.0	700.0	655.9	655.9	1.4	0.5	-169.96	-4,220.7	-747.0	4,286.3	4,284.4	1.91	2,247.226	
787.4	787.4	736.8	736.8	1.6	0.5	-169.96	-4,220.5	-746.9	4,286.1	4,284.0	2.14	2,007.094	
800.0	800.0	747.8	747.8	1.7	0.5	-169.96	-4,220.5	-746.9	4,286.1	4,283.9	2.17	1,978.319	
849.5	849.5	791.0	791.0	1.8	0.5	-169.96	-4,220.5	-746.8	4,286.0	4,283.7	2.29	1,873.501	
885.8	885.8	824.9	824.9	1.9	0.5	-169.97	-4,220.5	-746.8	4,286.0	4,283.7	2.37	1,807.326	
900.0	900.0	838.4	838.4	1.9	0.5	-169.97	-4,220.5	-746.8	4,286.1	4,283.7	2.40	1,783.268	
984.2	984.2	919.8	919.8	2.1	0.5	-169.96	-4,220.6	-747.0	4,286.1	4,283.6	2.60	1,650.927	
1,000.0	1,000.0	935.5	935.5	2.1	0.5	-169.96	-4,220.6	-747.0	4,286.2	4,283.5	2.63	1,627.400	
1,082.7	1,082.7	1,017.9	1,017.9	2.3	0.5	-169.96	-4,220.7	-747.0	4,286.3	4,283.5	2.83	1,514.185	
1,100.0	1,100.0	1,035.0	1,035.0	2.3	0.5	-169.96	-4,220.7	-747.0	4,286.3	4,283.4	2.87	1,492.385	
1,181.1	1,181.1	1,118.3	1,118.3	2.5	0.5	-169.96	-4,220.8	-747.2	4,286.4	4,283.4	3.06	1,398.589	
1,200.0	1,200.0	1,140.8	1,140.8	2.6	0.5	-169.96	-4,220.8	-747.3	4,286.5	4,283.3	3.11	1,379.008	
1,279.5	1,279.5	1,221.4	1,221.4	2.7	0.5	153.53	-4,220.7	-747.2	4,287.4	4,284.1	3.29	1,301.824	
1,300.0	1,300.0	1,236.0	1,236.0	2.8	0.5	153.53	-4,220.8	-747.2	4,287.9	4,284.6	3.34	1,283.314	
1,377.9	1,377.8	1,300.0	1,300.0	3.0	0.6	153.51	-4,221.0	-747.1	4,291.6	4,288.1	3.53	1,216.420	
1,400.0	1,399.8	1,310.0	1,310.0	3.0	0.6	153.50	-4,221.1	-747.1	4,293.1	4,289.5	3.58	1,198.117	
1,476.4	1,475.9	1,382.6	1,382.6	3.2	0.6	153.48	-4,221.7	-747.0	4,299.4	4,295.6	3.79	1,133.456	
1,500.0	1,499.5	1,405.4	1,405.4	3.2	0.6	153.47	-4,221.9	-747.0	4,301.7	4,297.8	3.86	1,114.951	
1,574.8	1,573.7	1,482.0	1,482.0	3.4	0.6	153.45	-4,222.5	-747.2	4,310.1	4,306.1	4.07	1,059.999	
1,600.0	1,598.7	1,507.1	1,507.1	3.5	0.6	153.45	-4,222.7	-747.3	4,313.4	4,309.2	4.14	1,042.868	
1,673.2	1,671.1	1,576.1	1,576.1	3.7	0.6	153.41	-4,223.2	-747.5	4,323.9	4,319.6	4.35	994.843	
1,700.0	1,697.5	1,601.3	1,601.3	3.7	0.6	153.40	-4,223.4	-747.5	4,328.2	4,323.8	4.42	978.620	
1,771.6	1,767.9	1,670.5	1,670.5	4.0	0.7	153.37	-4,224.0	-747.7	4,340.8	4,336.2	4.64	935.914	
1,800.1	1,795.7	1,697.9	1,697.9	4.0	0.7	153.35	-4,224.2	-747.9	4,346.2	4,341.5	4.72	920.265	
1,870.1	1,864.2	1,772.2	1,772.2	4.3	0.7	153.45	-4,224.8	-748.4	4,359.9	4,355.0	4.92	885.361	
1,900.0	1,893.4	1,803.6	1,803.5	4.4	0.7	153.49	-4,224.9	-748.6	4,365.7	4,360.7	5.01	871.424	
1,968.5	1,960.4	1,867.0	1,867.0	4.6	0.7	153.57	-4,225.3	-749.1	4,379.0	4,373.8	5.21	840.268	
2,000.0	1,991.3	1,896.1	1,896.1	4.7	0.7	153.61	-4,225.5	-749.4	4,385.2	4,379.8	5.30	827.110	
2,066.9	2,056.7	1,981.9	1,981.8	5.0	0.8	153.73	-4,225.9	-750.2	4,398.1	4,392.6	5.50	799.544	
2,100.0	2,089.1	2,026.4	2,026.3	5.1	0.8	153.79	-4,225.9	-750.7	4,404.4	4,398.8	5.60	786.400	
2,165.3	2,153.0	2,111.4	2,111.4	5.3	0.8	153.91	-4,225.5	-751.9	4,416.5	4,410.7	5.80	761.693	
2,200.0	2,186.9	2,144.9	2,144.9	5.5	0.8	153.96	-4,225.3	-752.4	4,422.9	4,417.0	5.90	749.450	
2,263.8	2,249.3	2,206.5	2,206.4	5.7	0.8	154.04	-4,224.9	-753.2	4,434.6	4,428.5	6.09	727.740	
2,300.0	2,284.7	2,240.6	2,240.5	5.8	0.8	154.09	-4,224.7	-753.6	4,441.3	4,435.1	6.20	715.912	
2,362.2	2,345.5	2,300.0	2,299.9	6.1	0.9	154.17	-4,224.4	-754.5	4,452.8	4,446.4	6.39	696.310	
2,400.0	2,382.5	2,330.1	2,330.1	6.2	0.9	154.21	-4,224.2	-755.1	4,459.8	4,453.3	6.51	685.080	
2,460.6	2,441.8	2,379.7	2,379.6	6.5	0.9	154.29	-4,224.0	-756.2	4,471.2	4,464.5	6.70	667.683	
2,500.0	2,480.3	2,412.1	2,412.0	6.6	0.9	154.34	-4,223.9	-757.0	4,478.7	4,471.9	6.82	656.890	

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

Anticollision Report



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Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - FRY 18-1 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
2,559.0	2,538.1	2,461.6	2,461.4	6.9	0.9	154.41	-4,223.8	-758.3	4,490.0	4,483.0	7.00	641.224	
2,600.0	2,578.1	2,500.0	2,499.9	7.0	0.9	154.47	-4,223.7	-759.4	4,497.9	4,490.7	7.13	630.788	
2,657.5	2,634.4	2,552.7	2,552.6	7.3	0.9	154.55	-4,223.7	-760.9	4,509.0	4,501.7	7.31	616.779	
2,700.0	2,675.9	2,595.4	2,595.3	7.5	1.0	154.62	-4,223.6	-762.2	4,517.2	4,509.8	7.44	606.804	
2,755.9	2,730.6	2,648.0	2,647.8	7.7	1.0	154.70	-4,223.6	-763.9	4,528.1	4,520.4	7.62	594.267	
2,800.0	2,773.8	2,689.2	2,688.9	7.9	1.0	154.76	-4,223.5	-765.2	4,536.6	4,528.9	7.76	584.804	
2,854.3	2,826.9	2,745.0	2,744.8	8.1	1.0	154.84	-4,223.5	-766.8	4,547.2	4,539.3	7.93	573.493	
2,857.4	2,829.9	2,748.2	2,748.0	8.1	1.0	154.85	-4,223.5	-766.9	4,547.8	4,539.8	7.94	572.876	
2,900.0	2,871.6	2,793.3	2,793.0	8.3	1.0	154.98	-4,223.5	-768.1	4,555.8	4,547.7	8.05	566.150	
2,952.7	2,923.5	2,844.9	2,844.6	8.4	1.0	155.13	-4,223.4	-769.5	4,564.8	4,556.7	8.16	559.463	
3,000.0	2,970.1	2,890.8	2,890.5	8.6	1.1	155.25	-4,223.4	-770.6	4,572.2	4,564.0	8.26	553.569	
3,051.2	3,020.7	2,952.6	2,952.2	8.7	1.1	155.38	-4,223.3	-772.2	4,579.4	4,571.0	8.37	547.420	
3,100.0	3,069.1	3,010.9	3,010.6	8.9	1.1	155.49	-4,223.0	-773.7	4,585.4	4,576.9	8.47	541.627	
3,149.6	3,118.3	3,059.0	3,058.7	9.0	1.1	155.57	-4,222.8	-774.9	4,590.6	4,582.0	8.56	536.200	
3,200.0	3,168.5	3,111.8	3,111.4	9.1	1.1	155.65	-4,222.5	-776.0	4,595.1	4,586.5	8.66	530.689	
3,248.0	3,216.3	3,180.7	3,180.3	9.2	1.2	155.73	-4,222.0	-777.4	4,598.6	4,589.8	8.75	525.554	
3,300.0	3,268.2	3,236.3	3,235.9	9.3	1.2	155.78	-4,221.5	-778.6	4,601.3	4,592.5	8.85	520.176	
3,346.4	3,314.6	3,280.2	3,279.7	9.4	1.2	155.82	-4,221.0	-779.5	4,603.1	4,594.1	8.93	515.707	
3,400.0	3,368.1	3,330.9	3,330.5	9.5	1.2	155.86	-4,220.5	-780.7	4,604.2	4,595.2	9.02	510.525	
3,444.9	3,413.0	3,373.6	3,373.1	9.6	1.2	155.87	-4,220.1	-781.8	4,604.5	4,595.4	9.09	506.384	
3,457.5	3,425.6	3,385.5	3,385.1	9.6	1.2	-167.62	-4,220.0	-782.0	4,604.5	4,595.4	9.12	504.899	
3,500.0	3,468.1	3,426.8	3,426.4	9.7	1.2	-167.60	-4,219.6	-783.0	4,604.4	4,595.2	9.21	500.186	
3,543.3	3,511.4	3,469.4	3,468.9	9.7	1.2	-167.59	-4,219.2	-784.1	4,604.2	4,594.9	9.30	495.046	
3,600.0	3,568.1	3,524.9	3,524.4	9.8	1.3	-167.57	-4,218.7	-785.4	4,604.0	4,594.6	9.43	488.486	
3,641.7	3,609.9	3,565.5	3,565.0	9.9	1.3	-167.56	-4,218.4	-786.4	4,603.9	4,594.4	9.52	483.745	
3,700.0	3,668.1	3,624.0	3,623.4	10.0	1.3	-167.54	-4,217.9	-787.9	4,603.7	4,594.1	9.65	477.269	
3,740.1	3,708.3	3,666.0	3,665.4	10.1	1.3	-167.53	-4,217.5	-789.0	4,603.6	4,593.9	9.74	472.868	
3,800.0	3,768.1	3,724.3	3,723.8	10.2	1.3	-167.51	-4,217.0	-790.5	4,603.4	4,593.5	9.87	466.502	
3,838.6	3,806.7	3,758.7	3,758.1	10.2	1.3	-167.50	-4,216.7	-791.2	4,603.3	4,593.3	9.95	462.498	
3,900.0	3,868.1	3,814.4	3,813.9	10.3	1.4	-167.49	-4,216.5	-791.9	4,603.2	4,593.1	10.09	456.262	
3,937.0	3,905.1	3,849.9	3,849.3	10.4	1.4	-167.48	-4,216.4	-792.3	4,603.2	4,593.0	10.17	452.556	
3,983.4	3,951.5	3,894.3	3,893.8	10.5	1.4	-167.48	-4,216.2	-792.7	4,603.1	4,592.9	10.27	448.002	
4,000.0	3,968.1	3,900.0	3,899.4	10.5	1.4	-167.48	-4,216.2	-792.8	4,603.2	4,592.8	10.31	446.473	
4,035.4	4,003.6	3,934.9	3,934.3	10.6	1.4	-167.47	-4,216.2	-793.2	4,603.2	4,592.8	10.39	443.071	
4,100.0	4,068.1	3,983.7	3,983.1	10.7	1.4	-167.46	-4,216.2	-793.8	4,603.5	4,592.9	10.53	437.131	
4,133.8	4,102.0	4,019.0	4,018.4	10.8	1.4	-167.46	-4,216.4	-794.3	4,603.7	4,593.1	10.61	434.010	
4,200.0	4,168.1	4,112.5	4,111.9	10.9	1.5	-167.45	-4,216.3	-795.4	4,603.8	4,593.0	10.76	427.860	
4,220.1	4,188.2	4,130.3	4,129.7	10.9	1.5	-167.44	-4,216.3	-795.6	4,603.8	4,593.0	10.80	426.086	
4,232.3	4,200.4	4,141.1	4,140.5	10.9	1.5	-167.44	-4,216.2	-795.7	4,603.8	4,592.9	10.83	425.019	
4,300.0	4,268.1	4,201.3	4,200.7	11.1	1.5	-167.44	-4,216.2	-796.0	4,603.9	4,592.9	10.98	419.185	
4,330.7	4,298.8	4,232.7	4,232.1	11.1	1.5	-167.44	-4,216.3	-796.1	4,603.9	4,592.9	11.05	416.537	
4,400.0	4,368.1	4,304.0	4,303.4	11.2	1.5	-167.43	-4,216.3	-796.4	4,604.0	4,592.8	11.21	410.684	
4,429.1	4,397.3	4,336.4	4,335.8	11.3	1.5	-167.43	-4,216.3	-796.5	4,604.0	4,592.8	11.28	408.275	
4,500.0	4,468.1	4,413.2	4,412.6	11.4	1.5	-167.43	-4,216.2	-796.8	4,604.0	4,592.6	11.44	402.536	
4,527.5	4,495.7	4,439.5	4,438.9	11.5	1.6	-167.43	-4,216.2	-796.9	4,604.0	4,592.5	11.50	400.356	
4,600.0	4,568.1	4,512.3	4,511.7	11.6	1.6	-167.43	-4,216.2	-797.1	4,604.0	4,592.4	11.66	394.753	
4,626.0	4,594.1	4,546.8	4,546.2	11.7	1.6	-167.42	-4,216.1	-797.1	4,604.0	4,592.3	11.72	392.811	
4,700.0	4,668.1	4,640.3	4,639.7	11.8	1.6	-167.42	-4,215.7	-797.2	4,603.6	4,591.7	11.89	387.290	
4,724.4	4,692.5	4,669.3	4,668.7	11.8	1.6	-167.42	-4,215.4	-797.3	4,603.5	4,591.5	11.94	385.466	
4,800.0	4,768.1	4,745.7	4,745.1	12.0	1.6	-167.41	-4,214.7	-797.6	4,602.8	4,590.7	12.11	379.966	
4,822.8	4,791.0	4,766.7	4,766.1	12.0	1.6	-167.41	-4,214.5	-797.7	4,602.7	4,590.5	12.17	378.340	
4,900.0	4,868.1	4,838.0	4,837.4	12.2	1.6	-167.41	-4,214.0	-798.1	4,602.2	4,589.8	12.34	372.959	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
4,921.2	4,889.4	4,857.8	4,857.1	12.2	1.7	-167.41	-4,213.8	-798.2	4,602.0	4,589.6	12.39	371.503	
5,000.0	4,968.1	4,939.4	4,938.8	12.4	1.7	-167.40	-4,213.3	-798.2	4,601.6	4,589.0	12.57	366.173	
5,019.7	4,987.8	4,962.8	4,962.2	12.4	1.7	-167.40	-4,213.2	-798.2	4,601.5	4,588.9	12.61	364.848	
5,100.0	5,068.1	5,049.3	5,048.7	12.6	1.7	-167.41	-4,212.6	-797.8	4,600.8	4,588.0	12.80	359.531	
5,118.1	5,086.2	5,067.5	5,066.9	12.6	1.7	-167.41	-4,212.4	-797.7	4,600.7	4,587.8	12.84	358.351	
5,200.0	5,168.1	5,140.2	5,139.6	12.8	1.7	-167.41	-4,211.9	-797.5	4,600.0	4,587.0	13.03	353.153	
5,216.5	5,184.7	5,153.6	5,153.0	12.8	1.7	-167.41	-4,211.8	-797.4	4,599.9	4,586.8	13.06	352.128	
5,300.0	5,268.1	5,224.6	5,224.0	13.0	1.7	-167.41	-4,211.5	-797.2	4,599.6	4,586.3	13.25	347.065	
5,314.9	5,283.1	5,238.7	5,238.1	13.0	1.7	-167.41	-4,211.5	-797.1	4,599.5	4,586.2	13.29	346.178	
5,400.0	5,368.1	5,319.2	5,318.6	13.1	1.7	-167.42	-4,211.5	-796.2	4,599.3	4,585.8	13.48	341.202	
5,413.4	5,381.5	5,332.1	5,331.4	13.2	1.7	-167.43	-4,211.6	-796.0	4,599.3	4,585.8	13.51	340.423	
5,486.5	5,454.6	5,400.0	5,399.4	13.3	1.7	-167.44	-4,211.7	-794.8	4,599.2	4,585.5	13.68	336.237	
5,500.0	5,468.1	5,400.0	5,399.4	13.3	1.7	-167.44	-4,211.7	-794.8	4,599.2	4,585.5	13.71	335.528	
5,511.8	5,479.9	5,400.0	5,399.4	13.4	1.7	-167.44	-4,211.7	-794.8	4,599.2	4,585.5	13.73	334.911	
5,600.0	5,568.1	5,400.0	5,399.4	13.5	1.7	-167.44	-4,211.7	-794.8	4,600.5	4,586.6	13.92	330.444	
5,610.2	5,578.4	5,400.0	5,399.4	13.6	1.7	-167.44	-4,211.7	-794.8	4,600.7	4,586.8	13.94	329.941	
5,700.0	5,668.1	5,400.0	5,399.4	13.7	1.7	-167.44	-4,211.7	-794.8	4,604.0	4,589.8	14.14	325.660	
5,708.6	5,676.8	5,400.0	5,399.4	13.8	1.7	-167.44	-4,211.7	-794.8	4,604.4	4,590.2	14.16	325.260	
5,800.0	5,768.1	5,400.0	5,399.4	13.9	1.7	-167.44	-4,211.7	-794.8	4,609.6	4,595.3	14.35	321.164	
5,807.1	5,775.2	5,400.0	5,399.4	14.0	1.7	-167.44	-4,211.7	-794.8	4,610.1	4,595.7	14.37	320.856	
5,900.0	5,868.1	5,400.0	5,399.4	14.1	1.7	-167.44	-4,211.7	-794.8	4,617.4	4,602.9	14.57	316.942	
5,905.5	5,873.6	5,400.0	5,399.4	14.1	1.7	-167.44	-4,211.7	-794.8	4,617.9	4,603.3	14.58	316.717	
6,000.0	5,968.1	5,400.0	5,399.4	14.3	1.7	-167.44	-4,211.7	-794.8	4,627.4	4,612.6	14.78	312.982	
6,003.9	5,972.1	5,400.0	5,399.4	14.3	1.7	-167.44	-4,211.7	-794.8	4,627.8	4,613.0	14.79	312.832	
6,100.0	6,068.1	5,400.0	5,399.4	14.5	1.7	-167.44	-4,211.7	-794.8	4,639.5	4,624.5	15.00	309.273	
6,102.3	6,070.5	5,400.0	5,399.4	14.5	1.7	-167.44	-4,211.7	-794.8	4,639.8	4,624.8	15.01	309.189	
6,200.0	6,168.1	5,400.0	5,399.4	14.7	1.7	-167.44	-4,211.7	-794.8	4,653.7	4,638.5	15.22	305.804	
6,200.8	6,168.9	5,400.0	5,399.4	14.7	1.7	-167.44	-4,211.7	-794.8	4,653.8	4,638.6	15.22	305.778	
6,288.5	6,256.6	5,400.0	5,399.4	14.9	1.7	-167.44	-4,211.7	-794.8	4,668.0	4,652.6	15.41	302.925	
6,299.2	6,267.3	5,400.0	5,399.4	14.9	1.7	12.32	-4,211.7	-794.8	4,669.8	4,654.4	15.42	302.858	
6,300.0	6,268.1	5,400.0	5,399.4	14.9	1.7	12.32	-4,211.7	-794.8	4,669.9	4,654.5	15.42	302.846	
6,350.0	6,318.1	5,400.0	5,399.4	15.0	1.7	12.21	-4,211.7	-794.8	4,676.4	4,660.9	15.48	302.007	
6,397.6	6,365.3	5,400.0	5,399.4	15.1	1.7	12.15	-4,211.7	-794.8	4,679.9	4,664.3	15.56	300.763	
6,400.0	6,367.7	5,400.0	5,399.4	15.1	1.7	12.14	-4,211.7	-794.8	4,680.0	4,664.4	15.56	300.695	
6,450.0	6,416.8	5,400.0	5,399.4	15.1	1.7	12.13	-4,211.7	-794.8	4,680.7	4,665.1	15.64	299.243	
6,496.0	6,461.3	5,400.0	5,399.4	15.1	1.7	12.16	-4,211.7	-794.8	4,678.9	4,663.2	15.70	298.041	
6,500.0	6,465.1	5,400.0	5,399.4	15.1	1.7	12.17	-4,211.7	-794.8	4,678.6	4,662.9	15.70	297.950	
6,550.0	6,512.4	5,400.0	5,399.4	15.1	1.7	12.25	-4,211.7	-794.8	4,673.6	4,657.8	15.73	297.028	
6,594.5	6,553.4	5,400.0	5,399.4	15.1	1.7	12.37	-4,211.7	-794.8	4,666.7	4,651.0	15.73	296.620	
6,600.0	6,558.4	5,400.0	5,399.4	15.1	1.7	12.39	-4,211.7	-794.8	4,665.7	4,650.0	15.73	296.600	
6,650.0	6,603.0	5,400.0	5,399.4	15.1	1.7	12.58	-4,211.7	-794.8	4,655.0	4,639.3	15.69	296.720	
6,692.9	6,639.9	5,400.0	5,399.4	15.1	1.7	12.79	-4,211.7	-794.8	4,643.6	4,628.0	15.62	297.265	
6,700.0	6,645.9	5,400.0	5,399.4	15.1	1.7	12.83	-4,211.7	-794.8	4,641.5	4,625.9	15.61	297.398	
6,750.0	6,686.8	5,400.0	5,399.4	15.1	1.7	13.14	-4,211.7	-794.8	4,625.2	4,609.7	15.49	298.601	
6,791.3	6,719.1	5,400.0	5,399.4	15.1	1.7	13.44	-4,211.7	-794.8	4,609.7	4,594.4	15.37	299.935	
6,800.0	6,725.7	5,400.0	5,399.4	15.1	1.7	13.51	-4,211.7	-794.8	4,606.3	4,590.9	15.34	300.261	
6,850.0	6,762.3	5,400.0	5,399.4	15.1	1.7	13.97	-4,211.7	-794.8	4,584.7	4,569.5	15.17	302.269	
6,889.7	6,789.7	5,400.0	5,399.4	15.1	1.7	14.39	-4,211.7	-794.8	4,565.6	4,550.6	15.02	303.989	
6,900.0	6,796.5	5,400.0	5,399.4	15.1	1.7	14.51	-4,211.7	-794.8	4,560.5	4,545.5	14.98	304.467	
6,950.0	6,828.0	5,400.0	5,399.4	15.1	1.7	15.16	-4,211.7	-794.8	4,533.8	4,519.0	14.79	306.637	
6,988.2	6,850.2	5,400.0	5,399.4	15.1	1.7	15.73	-4,211.7	-794.8	4,511.8	4,497.1	14.65	307.967	
7,000.0	6,856.7	5,400.0	5,399.4	15.1	1.7	15.93	-4,211.7	-794.8	4,504.7	4,490.1	14.60	308.494	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - FRY 18-1 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
7,050.0	6,882.5	5,400.0	5,399.4	15.2	1.7	16.84	-4,211.7	-794.8	4,473.2	4,458.8	14.44	309.677	
7,086.6	6,899.5	5,400.0	5,399.4	15.3	1.7	17.62	-4,211.7	-794.8	4,448.8	4,434.5	14.36	309.859	
7,100.0	6,905.3	5,400.0	5,399.4	15.4	1.7	17.93	-4,211.7	-794.8	4,439.6	4,425.3	14.33	309.759	
7,150.0	6,924.9	5,400.0	5,399.4	15.7	1.7	19.23	-4,211.7	-794.8	4,403.8	4,389.6	14.29	308.275	
7,185.0	6,936.7	5,400.0	5,399.4	15.9	1.7	20.30	-4,211.7	-794.8	4,377.6	4,363.3	14.30	306.021	
7,200.0	6,941.2	5,400.0	5,399.4	16.0	1.7	20.81	-4,211.7	-794.8	4,366.1	4,351.8	14.33	304.771	
7,250.0	6,954.2	5,400.0	5,399.4	16.3	1.7	22.72	-4,211.7	-794.8	4,326.6	4,312.1	14.48	298.878	
7,283.4	6,961.0	5,400.0	5,399.4	16.6	1.7	24.25	-4,211.7	-794.8	4,299.2	4,284.5	14.65	293.438	
7,300.0	6,963.8	5,400.0	5,399.4	16.7	1.7	25.09	-4,211.7	-794.8	4,285.3	4,270.6	14.76	290.371	
7,350.0	6,970.0	5,400.0	5,399.4	17.2	1.7	28.05	-4,211.7	-794.8	4,242.5	4,227.4	15.19	279.216	
7,381.9	6,972.1	5,400.0	5,399.4	17.5	1.7	30.34	-4,211.7	-794.8	4,214.5	4,199.0	15.57	270.742	
7,400.0	6,972.7	5,400.0	5,399.4	17.7	1.7	31.81	-4,211.7	-794.8	4,198.4	4,182.6	15.81	265.565	
7,420.0	6,972.8	5,400.0	5,399.4	17.9	1.7	33.60	-4,211.7	-794.8	4,180.4	4,164.3	16.11	259.482	
7,480.3	6,972.2	5,400.0	5,399.4	18.5	1.7	33.60	-4,211.7	-794.8	4,125.9	4,109.4	16.51	249.902	
7,500.0	6,972.0	5,400.0	5,399.4	18.7	1.7	33.60	-4,211.7	-794.8	4,108.1	4,091.5	16.64	246.875	
7,578.7	6,971.3	5,400.0	5,399.4	19.7	1.7	33.60	-4,211.7	-794.8	4,037.3	4,020.1	17.22	234.521	
7,600.0	6,971.1	5,400.0	5,399.4	19.9	1.7	33.60	-4,211.7	-794.8	4,018.2	4,000.8	17.37	231.325	
7,677.1	6,970.4	5,400.0	5,399.4	20.9	1.7	33.60	-4,211.7	-794.8	3,949.2	3,931.2	17.99	219.555	
7,700.0	6,970.2	5,400.0	5,399.4	21.2	1.7	33.60	-4,211.7	-794.8	3,928.8	3,910.6	18.17	216.226	
7,775.6	6,969.5	5,400.0	5,399.4	22.2	1.7	33.60	-4,211.7	-794.8	3,861.5	3,842.7	18.82	205.149	
7,800.0	6,969.3	5,400.0	5,399.4	22.6	1.7	33.60	-4,211.7	-794.8	3,839.8	3,820.8	19.03	201.734	
7,874.0	6,968.6	5,400.0	5,399.4	23.7	1.7	33.60	-4,211.7	-794.8	3,774.4	3,754.7	19.71	191.458	
7,900.0	6,968.4	5,400.0	5,399.4	24.1	1.7	33.60	-4,211.7	-794.8	3,751.5	3,731.5	19.95	188.018	
7,972.4	6,967.8	5,400.0	5,399.4	25.2	1.7	33.60	-4,211.7	-794.8	3,687.9	3,667.2	20.65	178.581	
8,000.0	6,967.5	5,400.0	5,399.4	25.6	1.7	33.60	-4,211.7	-794.8	3,663.7	3,642.8	20.92	175.158	
8,070.8	6,966.9	5,400.0	5,399.4	26.7	1.7	33.60	-4,211.7	-794.8	3,602.0	3,580.3	21.63	166.554	
8,100.0	6,966.6	5,400.0	5,399.4	27.2	1.7	33.60	-4,211.7	-794.8	3,576.6	3,554.7	21.92	163.180	
8,169.3	6,966.0	5,400.0	5,399.4	28.3	1.7	33.60	-4,211.7	-794.8	3,516.7	3,494.0	22.63	155.372	
8,200.0	6,965.7	5,400.0	5,399.4	28.8	1.7	33.60	-4,211.7	-794.8	3,490.2	3,467.3	22.95	152.069	
8,267.7	6,965.1	5,400.0	5,399.4	30.0	1.7	33.60	-4,211.7	-794.8	3,432.1	3,408.4	23.67	145.005	
8,300.0	6,964.8	5,400.0	5,399.4	30.5	1.7	33.60	-4,211.7	-794.8	3,404.5	3,380.5	24.01	141.789	
8,366.1	6,964.2	5,400.0	5,399.4	31.7	1.7	33.60	-4,211.7	-794.8	3,348.3	3,323.6	24.73	135.412	
8,400.0	6,963.9	5,400.0	5,399.4	32.2	1.7	33.60	-4,211.7	-794.8	3,319.7	3,294.6	25.09	132.292	
8,464.5	6,963.3	5,400.0	5,399.4	33.4	1.7	33.60	-4,211.7	-794.8	3,265.3	3,239.5	25.80	126.542	
8,500.0	6,963.0	5,400.0	5,399.4	34.0	1.7	33.60	-4,211.7	-794.8	3,235.6	3,209.4	26.19	123.522	
8,563.0	6,962.4	5,400.0	5,399.4	35.1	1.7	33.60	-4,211.7	-794.8	3,183.2	3,156.3	26.90	118.341	
8,600.0	6,962.0	5,400.0	5,399.4	35.8	1.7	33.60	-4,211.7	-794.8	3,152.6	3,125.2	27.31	115.426	
8,661.4	6,961.5	5,400.0	5,399.4	36.9	1.7	33.60	-4,211.7	-794.8	3,102.0	3,074.0	28.01	110.758	
8,700.0	6,961.1	5,400.0	5,399.4	37.6	1.7	33.60	-4,211.7	-794.8	3,070.5	3,042.0	28.44	107.948	
8,759.8	6,960.6	5,400.0	5,399.4	38.7	1.7	33.60	-4,211.7	-794.8	3,021.9	2,992.8	29.13	103.743	
8,800.0	6,960.2	5,400.0	5,399.4	39.4	1.7	33.60	-4,211.7	-794.8	2,989.5	2,959.9	29.59	101.037	
8,858.2	6,959.7	5,400.0	5,399.4	40.5	1.7	33.60	-4,211.7	-794.8	2,942.9	2,912.6	30.26	97.250	
8,900.0	6,959.3	5,400.0	5,399.4	41.2	1.7	33.60	-4,211.7	-794.8	2,909.7	2,879.0	30.74	94.647	
8,956.7	6,958.8	5,400.0	5,399.4	42.3	1.7	33.60	-4,211.7	-794.8	2,865.1	2,833.7	31.40	91.237	
9,000.0	6,958.4	5,400.0	5,399.4	43.1	1.7	33.60	-4,211.7	-794.8	2,831.2	2,799.3	31.91	88.734	
9,055.1	6,957.9	5,400.0	5,399.4	44.1	1.7	33.60	-4,211.7	-794.8	2,788.5	2,756.0	32.55	85.663	
9,100.0	6,957.5	5,400.0	5,399.4	44.9	1.7	33.60	-4,211.7	-794.8	2,754.1	2,721.0	33.08	83.259	
9,153.5	6,957.0	5,400.0	5,399.4	45.9	1.7	33.60	-4,211.7	-794.8	2,713.4	2,679.7	33.71	80.493	
9,200.0	6,956.6	5,400.0	5,399.4	46.8	1.7	33.60	-4,211.7	-794.8	2,678.5	2,644.2	34.26	78.186	
9,251.9	6,956.1	5,400.0	5,399.4	47.8	1.7	33.60	-4,211.7	-794.8	2,639.8	2,605.0	34.87	75.697	
9,300.0	6,955.7	5,400.0	5,399.4	48.7	1.7	33.60	-4,211.7	-794.8	2,604.5	2,569.1	35.44	73.484	
9,350.4	6,955.2	5,400.0	5,399.4	49.6	1.7	33.60	-4,211.7	-794.8	2,567.9	2,531.9	36.04	71.246	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - FRY 18-1 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,400.0	6,954.8	5,400.0	5,399.4	50.6	1.7	33.60	-4,211.7	-794.8	2,532.4	2,495.7	36.63	69.125	
9,448.8	6,954.3	5,400.0	5,399.4	51.5	1.7	33.60	-4,211.7	-794.8	2,497.8	2,460.6	37.22	67.113	
9,500.0	6,953.9	5,400.0	5,399.4	52.5	1.7	33.60	-4,211.7	-794.8	2,462.1	2,424.3	37.83	65.083	
9,547.2	6,953.4	5,400.0	5,399.4	53.4	1.7	33.60	-4,211.7	-794.8	2,429.7	2,391.3	38.40	63.277	
9,600.0	6,952.9	5,400.0	5,399.4	54.4	1.7	33.60	-4,211.7	-794.8	2,394.0	2,355.0	39.03	61.336	
9,645.6	6,952.5	5,400.0	5,399.4	55.2	1.7	33.60	-4,211.7	-794.8	2,363.7	2,324.1	39.58	59.717	
9,700.0	6,952.0	5,400.0	5,399.4	56.3	1.7	33.60	-4,211.7	-794.8	2,328.2	2,288.0	40.24	57.864	
9,744.1	6,951.6	5,400.0	5,399.4	57.1	1.7	33.60	-4,211.7	-794.8	2,300.0	2,259.2	40.77	56.416	
9,800.0	6,951.1	5,400.0	5,399.4	58.2	1.7	33.60	-4,211.7	-794.8	2,264.9	2,223.5	41.44	54.649	
9,842.5	6,950.7	5,400.0	5,399.4	59.0	1.7	33.60	-4,211.7	-794.8	2,238.8	2,196.9	41.96	53.357	
9,900.0	6,950.2	5,400.0	5,399.4	60.1	1.7	33.60	-4,211.7	-794.8	2,204.4	2,161.7	42.66	51.677	
9,940.9	6,949.8	5,400.0	5,399.4	60.9	1.7	33.60	-4,211.7	-794.8	2,180.4	2,137.2	43.15	50.526	
10,000.0	6,949.3	5,400.0	5,399.4	62.0	1.7	33.60	-4,211.7	-794.8	2,146.7	2,102.9	43.87	48.932	
10,039.3	6,948.9	5,400.0	5,399.4	62.8	1.7	33.60	-4,211.7	-794.8	2,124.9	2,080.6	44.35	47.912	
10,100.0	6,948.4	5,400.0	5,399.4	64.0	1.7	33.60	-4,211.7	-794.8	2,092.3	2,047.2	45.09	46.404	
10,137.8	6,948.0	5,400.0	5,399.4	64.7	1.7	33.60	-4,211.7	-794.8	2,072.6	2,027.1	45.55	45.502	
10,200.0	6,947.5	5,400.0	5,399.4	65.9	1.7	33.60	-4,211.7	-794.8	2,041.3	1,995.0	46.31	44.080	
10,236.2	6,947.1	5,400.0	5,399.4	66.6	1.7	33.60	-4,211.7	-794.8	2,023.8	1,977.0	46.75	43.288	
10,300.0	6,946.6	5,400.0	5,399.4	67.8	1.7	33.60	-4,211.7	-794.8	1,994.1	1,946.5	47.53	41.952	
10,334.6	6,946.3	5,400.0	5,399.4	68.5	1.7	33.60	-4,211.7	-794.8	1,978.6	1,930.7	47.96	41.259	
10,400.0	6,945.7	5,400.0	5,399.4	69.8	1.7	33.60	-4,211.7	-794.8	1,950.8	1,902.0	48.76	40.011	
10,433.0	6,945.4	5,400.0	5,399.4	70.4	1.7	33.60	-4,211.7	-794.8	1,937.4	1,888.2	49.16	39.409	
10,500.0	6,944.7	5,400.0	5,399.4	71.7	1.7	33.60	-4,211.7	-794.8	1,911.8	1,861.8	49.98	38.249	
10,531.5	6,944.5	5,400.0	5,399.4	72.3	1.7	33.60	-4,211.7	-794.8	1,900.4	1,850.0	50.37	37.730	
10,600.0	6,943.8	5,400.0	5,399.4	73.7	1.7	33.60	-4,211.7	-794.8	1,877.3	1,826.0	51.21	36.658	
10,629.9	6,943.6	5,400.0	5,399.4	74.2	1.7	33.60	-4,211.7	-794.8	1,867.9	1,816.3	51.58	36.214	
10,700.0	6,942.9	5,400.0	5,399.4	75.6	1.7	33.60	-4,211.7	-794.8	1,847.5	1,795.1	52.44	35.231	
10,728.3	6,942.7	5,400.0	5,399.4	76.2	1.7	33.60	-4,211.7	-794.8	1,840.0	1,787.2	52.79	34.856	
10,800.0	6,942.0	5,400.0	5,399.4	77.6	1.7	33.60	-4,211.7	-794.8	1,822.8	1,769.1	53.67	33.962	
10,826.7	6,941.8	5,400.0	5,399.4	78.1	1.7	33.60	-4,211.7	-794.8	1,817.1	1,763.1	54.00	33.649	
10,900.0	6,941.1	5,400.0	5,399.4	79.5	1.7	33.60	-4,211.7	-794.8	1,803.3	1,748.4	54.90	32.844	
10,925.2	6,940.9	5,400.0	5,399.4	80.0	1.7	33.60	-4,211.7	-794.8	1,799.2	1,744.0	55.21	32.586	
11,000.0	6,940.2	5,400.0	5,399.4	81.5	1.7	33.60	-4,211.7	-794.8	1,789.2	1,733.0	56.14	31.871	
11,023.6	6,940.0	5,400.0	5,399.4	81.9	1.7	33.60	-4,211.7	-794.8	1,786.6	1,730.2	56.43	31.661	
11,100.0	6,939.3	5,400.0	5,399.4	83.4	1.7	33.60	-4,211.7	-794.8	1,780.6	1,723.2	57.37	31.035	
11,122.0	6,939.1	5,400.0	5,399.4	83.8	1.7	33.60	-4,211.7	-794.8	1,779.4	1,721.8	57.65	30.868	
11,200.0	6,938.4	5,400.0	5,399.4	85.4	1.7	33.60	-4,211.7	-794.8	1,777.6	1,718.9	58.61	30.329	
11,203.7	6,938.3	5,400.0	5,399.4	85.4	1.7	33.60	-4,211.7	-794.8	1,777.6	1,718.9	58.66	30.305 CC	
11,220.4	6,938.2	5,400.0	5,399.4	85.8	1.7	33.60	-4,211.7	-794.8	1,777.6	1,718.8	58.86	30.199 ES	
11,300.0	6,937.4	5,400.0	5,399.4	87.3	1.7	33.60	-4,211.7	-794.8	1,780.2	1,720.3	59.85	29.745	
11,318.9	6,937.3	5,400.0	5,399.4	87.7	1.7	33.60	-4,211.7	-794.8	1,781.3	1,721.2	60.08	29.648	
11,400.0	6,936.5	5,400.0	5,399.4	89.3	1.7	33.60	-4,211.7	-794.8	1,788.4	1,727.3	61.09	29.276	
11,417.3	6,936.4	5,400.0	5,399.4	89.6	1.7	33.60	-4,211.7	-794.8	1,790.3	1,729.0	61.30	29.206	
11,500.0	6,935.6	5,400.0	5,399.4	91.3	1.7	33.60	-4,211.7	-794.8	1,802.1	1,739.8	62.33	28.914	
11,515.7	6,935.5	5,400.0	5,399.4	91.6	1.7	33.60	-4,211.7	-794.8	1,804.7	1,742.2	62.52	28.866	
11,600.0	6,934.7	5,400.0	5,399.4	93.2	1.7	33.60	-4,211.7	-794.8	1,821.2	1,757.6	63.57	28.651	
11,614.1	6,934.6	5,400.0	5,399.4	93.5	1.7	33.60	-4,211.7	-794.8	1,824.3	1,760.6	63.74	28.621	
11,700.0	6,933.8	5,400.0	5,399.4	95.2	1.7	33.60	-4,211.7	-794.8	1,845.5	1,780.7	64.81	28.478	
11,712.6	6,933.7	5,400.0	5,399.4	95.4	1.7	33.60	-4,211.7	-794.8	1,849.0	1,784.0	64.96	28.462	
11,800.0	6,932.9	5,400.0	5,399.4	97.1	1.7	33.60	-4,211.7	-794.8	1,874.9	1,808.9	66.05	28.387	
11,811.0	6,932.8	5,400.0	5,399.4	97.4	1.7	33.60	-4,211.7	-794.8	1,878.4	1,812.3	66.18	28.382	
11,900.0	6,932.0	5,400.0	5,399.4	99.1	1.7	33.60	-4,211.7	-794.8	1,909.1	1,841.8	67.29	28.371 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 HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - FRY 18-1 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
11,909.4	6,931.9	5,400.0	5,399.4	99.3	1.7	33.60	-4,211.7	-794.8	1,912.5	1,845.1	67.41	28.373	
12,000.0	6,931.0	5,400.0	5,399.4	101.1	1.7	33.60	-4,211.7	-794.8	1,947.8	1,879.2	68.53	28.421	
12,007.8	6,931.0	5,400.0	5,399.4	101.2	1.7	33.60	-4,211.7	-794.8	1,951.0	1,882.4	68.63	28.427	
12,100.0	6,930.1	5,400.0	5,399.4	103.0	1.7	33.60	-4,211.7	-794.8	1,990.8	1,921.0	69.78	28.530	
12,106.3	6,930.1	5,400.0	5,399.4	103.2	1.7	33.60	-4,211.7	-794.8	1,993.6	1,923.7	69.86	28.539	
12,200.0	6,929.2	5,400.0	5,399.4	105.0	1.7	33.60	-4,211.7	-794.8	2,037.7	1,966.7	71.02	28.692	
12,204.7	6,929.2	5,400.0	5,399.4	105.1	1.7	33.60	-4,211.7	-794.8	2,040.0	1,969.0	71.08	28.700	
12,300.0	6,928.3	5,400.0	5,399.4	107.0	1.7	33.60	-4,211.7	-794.8	2,088.5	2,016.2	72.27	28.899	
12,303.1	6,928.3	5,400.0	5,399.4	107.1	1.7	33.60	-4,211.7	-794.8	2,090.1	2,017.8	72.31	28.906	
12,400.0	6,927.4	5,400.0	5,399.4	109.0	1.7	33.60	-4,211.7	-794.8	2,142.6	2,069.1	73.51	29.147	
12,401.5	6,927.4	5,400.0	5,399.4	109.0	1.7	33.60	-4,211.7	-794.8	2,143.5	2,070.0	73.53	29.151	
12,500.0	6,926.5	5,400.0	5,399.4	110.9	1.7	33.60	-4,211.7	-794.8	2,200.0	2,125.3	74.76	29.429	
12,598.4	6,925.6	5,400.0	5,399.4	112.9	1.7	33.60	-4,211.7	-794.8	2,259.4	2,183.4	75.98	29.735	
12,600.0	6,925.6	5,400.0	5,399.4	112.9	1.7	33.60	-4,211.7	-794.8	2,260.4	2,184.4	76.00	29.740	
12,696.8	6,924.7	5,400.0	5,399.4	114.8	1.7	33.60	-4,211.7	-794.8	2,321.5	2,244.3	77.21	30.066	
12,700.0	6,924.6	5,400.0	5,399.4	114.9	1.7	33.60	-4,211.7	-794.8	2,323.5	2,246.3	77.25	30.077	
12,795.2	6,923.8	5,400.0	5,399.4	116.8	1.7	33.60	-4,211.7	-794.8	2,386.0	2,307.5	78.44	30.418	
12,800.0	6,923.7	5,400.0	5,399.4	116.9	1.7	33.60	-4,211.7	-794.8	2,389.1	2,310.6	78.50	30.435	
12,893.7	6,922.9	5,400.0	5,399.4	118.7	1.7	33.60	-4,211.7	-794.8	2,452.7	2,373.0	79.67	30.787	
12,900.0	6,922.8	5,400.0	5,399.4	118.8	1.7	33.60	-4,211.7	-794.8	2,457.1	2,377.3	79.75	30.811	
12,992.1	6,922.0	5,400.0	5,399.4	120.6	1.7	33.60	-4,211.7	-794.8	2,521.5	2,440.6	80.90	31.170	
13,000.0	6,921.9	5,400.0	5,399.4	120.8	1.7	33.60	-4,211.7	-794.8	2,527.2	2,446.2	80.99	31.201	
13,090.5	6,921.1	5,400.0	5,399.4	122.6	1.7	33.60	-4,211.7	-794.8	2,592.3	2,510.2	82.13	31.565	
13,100.0	6,921.0	5,400.0	5,399.4	122.8	1.7	33.60	-4,211.7	-794.8	2,599.2	2,516.9	82.24	31.604	
13,188.9	6,920.2	5,400.0	5,399.4	124.5	1.7	33.60	-4,211.7	-794.8	2,664.8	2,581.4	83.35	31.969	
13,200.0	6,920.1	5,400.0	5,399.4	124.8	1.7	33.60	-4,211.7	-794.8	2,673.0	2,589.5	83.49	32.015	
13,287.4	6,919.3	5,400.0	5,399.4	126.5	1.7	33.60	-4,211.7	-794.8	2,738.9	2,654.3	84.58	32.381	
13,300.0	6,919.1	5,400.0	5,399.4	126.7	1.7	33.60	-4,211.7	-794.8	2,748.5	2,663.8	84.74	32.434	
13,385.8	6,918.4	5,400.0	5,399.4	128.4	1.7	33.60	-4,211.7	-794.8	2,814.5	2,728.7	85.81	32.798	
13,400.0	6,918.2	5,400.0	5,399.4	128.7	1.7	33.60	-4,211.7	-794.8	2,825.5	2,739.5	85.99	32.858	
13,484.2	6,917.5	5,400.0	5,399.4	130.4	1.7	33.60	-4,211.7	-794.8	2,891.5	2,804.4	87.04	33.219	
13,500.0	6,917.3	5,400.0	5,399.4	130.7	1.7	33.60	-4,211.7	-794.8	2,903.9	2,816.7	87.24	33.287	
13,582.6	6,916.6	5,400.0	5,399.4	132.3	1.7	33.60	-4,211.7	-794.8	2,969.7	2,881.4	88.27	33.642	
13,600.0	6,916.4	5,400.0	5,399.4	132.7	1.7	33.60	-4,211.7	-794.8	2,983.6	2,895.1	88.49	33.717	
13,681.1	6,915.6	5,400.0	5,399.4	134.3	1.7	33.60	-4,211.7	-794.8	3,049.1	2,959.6	89.50	34.067	
13,700.0	6,915.5	5,400.0	5,399.4	134.6	1.7	33.60	-4,211.7	-794.8	3,064.5	2,974.8	89.74	34.149	
13,779.5	6,914.7	5,400.0	5,399.4	136.2	1.7	33.60	-4,211.7	-794.8	3,129.6	3,038.9	90.74	34.492	
13,800.0	6,914.6	5,400.0	5,399.4	136.6	1.7	33.60	-4,211.7	-794.8	3,146.5	3,055.5	90.99	34.580	
13,877.9	6,913.8	5,400.0	5,399.4	138.2	1.7	33.60	-4,211.7	-794.8	3,211.1	3,119.2	91.97	34.916	
13,900.0	6,913.6	5,400.0	5,399.4	138.6	1.7	33.60	-4,211.7	-794.8	3,229.5	3,137.3	92.24	35.011	
13,976.3	6,912.9	5,400.0	5,399.4	140.1	1.7	33.60	-4,211.7	-794.8	3,293.5	3,200.3	93.20	35.339	
14,000.0	6,912.7	5,400.0	5,399.4	140.6	1.7	33.60	-4,211.7	-794.8	3,313.5	3,220.0	93.49	35.441	
14,074.8	6,912.0	5,400.0	5,399.4	142.0	1.7	33.60	-4,211.7	-794.8	3,376.8	3,282.4	94.40	35.772	
14,079.0	6,912.0	5,400.0	5,399.4	142.1	1.7	33.60	-4,211.7	-794.8	3,380.4	3,285.9	94.45	35.790	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - FRY 21-18 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	171.71	-2,910.8	423.9	2,941.6				
98.4	98.4	123.9	123.9	0.1	0.1	171.72	-2,909.6	423.3	2,940.6	2,940.4	0.19	N/A	
100.0	100.0	125.0	125.0	0.1	0.1	171.72	-2,909.6	423.3	2,940.5	2,940.3	0.19	N/A	
196.8	196.8	200.0	200.0	0.3	0.2	171.72	-2,908.9	423.3	2,939.6	2,939.1	0.50	5,835.465	
200.0	200.0	200.0	200.0	0.3	0.2	171.72	-2,908.9	423.3	2,939.6	2,939.1	0.51	5,754.547	
295.3	295.3	293.7	293.7	0.5	0.2	171.72	-2,908.5	423.2	2,939.2	2,938.4	0.77	3,800.977	
300.0	300.0	298.6	298.6	0.5	0.2	171.72	-2,908.5	423.2	2,939.1	2,938.4	0.79	3,737.415	
393.7	393.7	394.0	394.0	0.8	0.3	171.72	-2,908.0	423.1	2,938.6	2,937.6	1.05	2,810.178	
400.0	400.0	400.0	400.0	0.8	0.3	171.72	-2,907.9	423.1	2,938.6	2,937.5	1.06	2,764.611	
492.1	492.1	480.2	480.2	1.0	0.3	171.72	-2,907.6	423.1	2,938.3	2,937.0	1.29	2,282.951	
500.0	500.0	487.1	487.0	1.0	0.3	171.72	-2,907.6	423.1	2,938.3	2,937.0	1.31	2,249.453	
590.5	590.5	596.2	596.2	1.2	0.4	171.72	-2,907.3	422.8	2,937.9	2,936.4	1.55	1,893.783	
600.0	600.0	600.0	600.0	1.2	0.4	171.72	-2,907.2	422.8	2,937.9	2,936.3	1.57	1,866.329	
689.0	689.0	674.2	674.2	1.4	0.4	171.72	-2,906.9	423.0	2,937.5	2,935.7	1.79	1,639.182	
696.7	696.7	680.2	680.2	1.4	0.4	171.72	-2,906.9	423.0	2,937.5	2,935.7	1.81	1,622.173	
700.0	700.0	682.8	682.8	1.4	0.4	171.72	-2,906.9	423.0	2,937.5	2,935.7	1.82	1,614.953	
787.4	787.4	781.2	781.2	1.6	0.4	171.71	-2,906.8	423.4	2,937.5	2,935.5	2.03	1,445.930	
800.0	800.0	796.8	796.8	1.7	0.4	171.71	-2,906.7	423.4	2,937.4	2,935.4	2.06	1,424.400	
885.8	885.8	888.7	888.7	1.9	0.5	171.71	-2,906.2	423.4	2,937.0	2,934.7	2.30	1,276.110	
900.0	900.0	903.6	903.5	1.9	0.5	171.71	-2,906.1	423.5	2,936.9	2,934.5	2.34	1,254.564	
984.2	984.2	986.7	986.7	2.1	0.5	171.70	-2,905.5	423.6	2,936.3	2,933.7	2.57	1,141.380	
1,000.0	1,000.0	1,000.0	1,000.0	2.1	0.5	171.70	-2,905.4	423.6	2,936.2	2,933.6	2.61	1,122.880	
1,082.7	1,082.7	1,067.8	1,067.8	2.3	0.5	171.70	-2,905.2	423.7	2,935.9	2,933.1	2.80	1,047.214	
1,090.7	1,090.7	1,074.2	1,074.2	2.3	0.5	171.70	-2,905.2	423.7	2,935.9	2,933.1	2.82	1,040.502	
1,100.0	1,100.0	1,081.6	1,081.6	2.3	0.5	171.70	-2,905.2	423.7	2,935.9	2,933.1	2.84	1,032.766	
1,181.1	1,181.1	1,159.8	1,159.8	2.5	0.5	171.70	-2,905.3	423.9	2,936.1	2,933.0	3.04	965.203	
1,200.0	1,200.0	1,179.3	1,179.2	2.6	0.5	171.70	-2,905.3	424.0	2,936.1	2,933.0	3.09	950.296	
1,279.5	1,279.5	1,264.5	1,264.5	2.7	0.6	135.19	-2,905.3	424.5	2,936.9	2,933.6	3.32	885.191	
1,300.0	1,300.0	1,286.7	1,286.7	2.8	0.6	135.19	-2,905.3	424.6	2,937.4	2,934.0	3.37	871.036	
1,377.9	1,377.8	1,369.4	1,369.4	3.0	0.6	135.20	-2,905.0	425.0	2,939.9	2,936.3	3.57	824.543	
1,400.0	1,399.8	1,392.6	1,392.6	3.0	0.6	135.21	-2,905.0	425.0	2,940.9	2,937.2	3.62	812.526	
1,476.4	1,475.9	1,460.3	1,460.3	3.2	0.6	135.22	-2,904.9	424.9	2,945.2	2,941.4	3.80	774.727	
1,500.0	1,499.5	1,480.8	1,480.8	3.2	0.6	135.23	-2,904.9	424.9	2,946.9	2,943.1	3.86	763.830	
1,574.8	1,573.7	1,552.5	1,552.4	3.4	0.6	135.25	-2,904.9	425.0	2,953.3	2,949.2	4.06	727.613	
1,600.0	1,598.7	1,577.5	1,577.5	3.5	0.6	135.26	-2,905.0	425.1	2,955.8	2,951.6	4.13	715.840	
1,673.2	1,671.1	1,664.6	1,664.5	3.7	0.7	135.33	-2,904.9	425.3	2,963.7	2,959.4	4.34	682.760	
1,700.0	1,697.5	1,698.7	1,698.6	3.7	0.7	135.36	-2,904.7	425.5	2,966.8	2,962.4	4.42	671.737	
1,771.6	1,767.9	1,754.8	1,754.8	4.0	0.7	135.36	-2,904.5	425.7	2,976.1	2,971.5	4.62	643.582	
1,800.1	1,795.7	1,776.8	1,776.7	4.0	0.7	135.37	-2,904.5	425.7	2,980.3	2,975.6	4.71	633.111	
1,870.1	1,864.2	1,853.7	1,853.7	4.3	0.7	135.58	-2,904.6	425.8	2,990.8	2,985.9	4.91	608.957	
1,900.0	1,893.4	1,894.2	1,894.1	4.4	0.7	135.69	-2,904.4	425.9	2,995.2	2,990.2	5.00	599.200	
1,968.5	1,960.4	1,952.1	1,952.1	4.6	0.7	135.86	-2,904.1	425.8	3,005.2	3,000.0	5.21	576.723	
2,000.0	1,991.3	1,977.6	1,977.6	4.7	0.7	135.93	-2,904.1	425.7	3,009.9	3,004.6	5.31	567.127	
2,066.9	2,056.7	2,040.3	2,040.3	5.0	0.7	136.11	-2,904.2	425.3	3,020.0	3,014.5	5.52	547.153	
2,100.0	2,089.1	2,074.4	2,074.3	5.1	0.7	136.21	-2,904.2	425.2	3,025.0	3,019.4	5.63	537.560	
2,165.3	2,153.0	2,147.5	2,147.4	5.3	0.7	136.41	-2,904.0	425.1	3,034.8	3,029.0	5.85	518.987	
2,200.0	2,186.9	2,188.1	2,188.1	5.5	0.7	136.52	-2,903.8	425.0	3,040.0	3,034.0	5.97	509.554	
2,263.8	2,249.3	2,240.8	2,240.8	5.7	0.7	136.67	-2,903.6	424.8	3,049.4	3,043.2	6.18	493.495	
2,300.0	2,284.7	2,268.4	2,268.3	5.8	0.7	136.75	-2,903.6	424.6	3,054.9	3,048.6	6.30	484.921	
2,362.2	2,345.5	2,322.5	2,322.5	6.1	0.7	136.90	-2,903.7	424.4	3,064.5	3,058.0	6.51	470.567	
2,400.0	2,382.5	2,363.9	2,363.9	6.2	0.7	137.01	-2,903.8	424.1	3,070.4	3,063.7	6.64	462.121	
2,460.6	2,441.8	2,424.6	2,424.5	6.5	0.8	137.19	-2,903.9	423.5	3,079.7	3,072.9	6.86	449.199	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - FRY 21-18 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
2,500.0	2,480.3	2,459.6	2,459.5	6.6	0.8	137.29	-2,903.9	423.2	3,085.8	3,078.8	6.99	441.367	
2,559.0	2,538.1	2,514.0	2,513.9	6.9	0.8	137.43	-2,904.1	423.0	3,095.1	3,087.9	7.20	430.058	
2,600.0	2,578.1	2,556.1	2,556.0	7.0	0.8	137.55	-2,904.2	422.8	3,101.5	3,094.2	7.34	422.524	
2,657.5	2,634.4	2,613.9	2,613.9	7.3	0.8	137.71	-2,904.3	422.4	3,110.5	3,102.9	7.54	412.513	
2,700.0	2,675.9	2,654.2	2,654.2	7.5	0.8	137.82	-2,904.4	422.3	3,117.2	3,109.5	7.68	405.742	
2,755.9	2,730.6	2,708.8	2,708.7	7.7	0.8	137.96	-2,904.5	422.3	3,126.0	3,118.1	7.87	397.130	
2,800.0	2,773.8	2,759.9	2,759.8	7.9	0.8	138.09	-2,904.5	422.4	3,132.9	3,124.9	8.02	390.423	
2,854.3	2,826.9	2,817.8	2,817.8	8.1	0.8	138.23	-2,904.4	422.5	3,141.3	3,133.1	8.21	382.516	
2,857.4	2,829.9	2,820.6	2,820.5	8.1	0.8	138.24	-2,904.3	422.5	3,141.7	3,133.5	8.22	382.089	
2,900.0	2,871.6	2,859.2	2,859.1	8.3	0.8	138.42	-2,904.3	422.5	3,148.1	3,139.8	8.34	377.520	
2,952.7	2,923.5	2,909.3	2,909.2	8.4	0.8	138.64	-2,904.3	422.2	3,155.4	3,147.0	8.46	373.066	
3,000.0	2,970.1	2,966.0	2,965.9	8.6	0.8	138.83	-2,904.2	421.9	3,161.3	3,152.7	8.57	368.820	
3,051.2	3,020.7	3,018.6	3,018.6	8.7	0.8	139.00	-2,903.9	421.7	3,166.8	3,158.2	8.68	364.647	
3,100.0	3,069.1	3,058.4	3,058.4	8.9	0.8	139.13	-2,903.8	421.6	3,171.6	3,162.8	8.79	360.802	
3,149.6	3,118.3	3,100.0	3,099.9	9.0	0.9	139.25	-2,903.8	421.5	3,176.0	3,167.1	8.89	357.239	
3,200.0	3,168.5	3,156.1	3,156.0	9.1	0.9	139.36	-2,903.8	421.4	3,179.7	3,170.7	8.99	353.862	
3,248.0	3,216.3	3,210.1	3,210.1	9.2	0.9	139.45	-2,903.6	421.6	3,182.6	3,173.5	9.07	350.882	
3,300.0	3,268.2	3,264.7	3,264.7	9.3	0.9	139.52	-2,903.4	421.7	3,184.9	3,175.8	9.17	347.359	
3,346.4	3,314.6	3,300.0	3,299.9	9.4	0.9	139.56	-2,903.3	421.7	3,186.4	3,177.1	9.25	344.560	
3,400.0	3,368.1	3,351.1	3,351.1	9.5	0.9	139.59	-2,903.2	421.6	3,187.5	3,178.1	9.33	341.524	
3,444.9	3,413.0	3,385.6	3,385.6	9.6	0.9	139.60	-2,903.2	421.6	3,188.0	3,178.6	9.40	339.195	
3,457.5	3,425.6	3,400.0	3,399.9	9.6	0.9	176.11	-2,903.3	421.7	3,188.1	3,178.6	9.42	338.278	
3,500.0	3,468.1	3,436.8	3,436.7	9.7	0.9	176.11	-2,903.5	421.8	3,188.3	3,178.7	9.50	335.567	
3,543.3	3,511.4	3,480.5	3,480.4	9.7	0.9	176.11	-2,903.7	421.8	3,188.5	3,178.9	9.59	332.570	
3,600.0	3,568.1	3,548.3	3,548.2	9.8	0.9	176.11	-2,903.9	421.6	3,188.6	3,178.9	9.70	328.693	
3,641.7	3,609.9	3,600.0	3,599.9	9.9	0.9	176.11	-2,903.9	421.5	3,188.6	3,178.8	9.79	325.853	
3,686.8	3,654.9	3,638.5	3,638.4	10.0	0.9	176.12	-2,903.8	421.3	3,188.6	3,178.7	9.88	322.777	
3,700.0	3,668.1	3,649.3	3,649.3	10.0	0.9	176.12	-2,903.8	421.3	3,188.6	3,178.7	9.91	321.891	
3,740.1	3,708.3	3,682.4	3,682.3	10.1	0.9	176.12	-2,903.9	421.0	3,188.6	3,178.6	9.99	319.215	
3,800.0	3,768.1	3,733.6	3,733.5	10.2	0.9	176.13	-2,904.2	420.6	3,188.9	3,178.8	10.11	315.341	
3,838.6	3,806.7	3,767.3	3,767.2	10.2	0.9	176.13	-2,904.4	420.3	3,189.1	3,179.0	10.19	312.889	
3,900.0	3,868.1	3,831.3	3,831.3	10.3	0.9	176.14	-2,904.9	420.1	3,189.6	3,179.3	10.32	309.036	
3,937.0	3,905.1	3,879.6	3,879.5	10.4	0.9	176.15	-2,905.2	419.7	3,189.8	3,179.4	10.40	306.707	
4,000.0	3,968.1	3,940.3	3,940.2	10.5	0.9	176.15	-2,905.3	419.2	3,189.9	3,179.4	10.53	302.918	
4,035.4	4,003.6	3,970.4	3,970.4	10.6	1.0	176.16	-2,905.5	419.1	3,190.1	3,179.5	10.60	300.841	
4,100.0	4,068.1	4,032.3	4,032.3	10.7	1.0	176.16	-2,905.9	418.9	3,190.5	3,179.8	10.74	297.097	
4,133.8	4,102.0	4,069.0	4,068.9	10.8	1.0	176.16	-2,906.1	418.7	3,190.7	3,179.9	10.81	295.137	
4,200.0	4,168.1	4,144.5	4,144.4	10.9	1.0	176.18	-2,906.4	418.0	3,191.0	3,180.0	10.95	291.284	
4,232.3	4,200.4	4,182.7	4,182.7	10.9	1.0	176.18	-2,906.5	417.8	3,191.0	3,180.0	11.03	289.388	
4,300.0	4,268.1	4,246.7	4,246.6	11.1	1.0	176.19	-2,906.6	417.6	3,191.0	3,179.9	11.17	285.579	
4,330.7	4,298.8	4,273.6	4,273.6	11.1	1.0	176.19	-2,906.6	417.5	3,191.1	3,179.9	11.24	283.895	
4,400.0	4,368.1	4,342.2	4,342.1	11.2	1.0	176.20	-2,906.9	417.0	3,191.3	3,179.9	11.39	280.190	
4,429.1	4,397.3	4,373.5	4,373.4	11.3	1.0	176.20	-2,907.0	416.9	3,191.4	3,180.0	11.45	278.658	
4,500.0	4,468.1	4,457.8	4,457.8	11.4	1.0	176.20	-2,907.0	416.8	3,191.4	3,179.8	11.60	275.113	
4,527.5	4,495.7	4,492.3	4,492.2	11.5	1.0	176.20	-2,906.9	416.7	3,191.4	3,179.7	11.66	273.771	
4,600.0	4,568.1	4,552.9	4,552.8	11.6	1.1	176.21	-2,906.8	416.5	3,191.2	3,179.4	11.81	270.189	
4,605.8	4,573.9	4,557.5	4,557.4	11.6	1.1	176.21	-2,906.8	416.5	3,191.2	3,179.4	11.82	269.907	
4,626.0	4,594.1	4,573.6	4,573.5	11.7	1.1	176.21	-2,906.8	416.3	3,191.2	3,179.3	11.87	268.925	
4,700.0	4,668.1	4,648.2	4,648.1	11.8	1.1	176.22	-2,907.0	415.8	3,191.4	3,179.3	12.02	265.441	
4,724.4	4,692.5	4,676.9	4,676.8	11.8	1.1	176.22	-2,907.0	415.8	3,191.4	3,179.3	12.07	264.313	
4,800.0	4,768.1	4,752.5	4,752.5	12.0	1.1	176.22	-2,907.0	415.7	3,191.3	3,179.1	12.23	260.859	
4,813.5	4,781.6	4,765.2	4,765.1	12.0	1.1	176.22	-2,907.0	415.7	3,191.3	3,179.0	12.26	260.251	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - FRY 21-18 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
4,822.8	4,791.0	4,774.0	4,773.9	12.0	1.1	176.22	-2,907.0	415.6	3,191.3	3,179.0	12.28	259.831	
4,900.0	4,868.1	4,838.6	4,838.5	12.2	1.1	176.22	-2,907.1	415.5	3,191.4	3,179.0	12.44	256.482	
4,921.2	4,889.4	4,855.1	4,855.0	12.2	1.1	176.22	-2,907.2	415.5	3,191.5	3,179.1	12.49	255.585	
5,000.0	4,968.1	4,932.1	4,932.0	12.4	1.1	176.21	-2,907.7	416.2	3,192.1	3,179.5	12.66	252.234	
5,019.7	4,987.8	4,961.9	4,961.8	12.4	1.1	176.20	-2,907.8	416.6	3,192.2	3,179.5	12.70	251.338	
5,100.0	5,068.1	5,050.9	5,050.8	12.6	1.1	176.18	-2,907.8	417.8	3,192.2	3,179.4	12.88	247.777	
5,118.1	5,086.2	5,067.6	5,067.5	12.6	1.1	176.18	-2,907.7	418.0	3,192.2	3,179.3	12.92	246.993	
5,200.0	5,168.1	5,143.4	5,143.3	12.8	1.1	176.16	-2,907.8	419.2	3,192.4	3,179.3	13.11	243.519	
5,216.5	5,184.7	5,158.7	5,158.6	12.8	1.1	176.15	-2,907.8	419.5	3,192.4	3,179.3	13.15	242.829	
5,300.0	5,268.1	5,241.9	5,241.7	13.0	1.1	176.12	-2,908.0	421.4	3,192.7	3,179.4	13.34	239.388	
5,314.9	5,283.1	5,257.9	5,257.8	13.0	1.1	176.11	-2,908.0	421.8	3,192.8	3,179.4	13.37	238.775	
5,400.0	5,368.1	5,336.7	5,336.6	13.1	1.1	176.08	-2,908.1	423.7	3,193.0	3,179.4	13.56	235.403	
5,413.4	5,381.5	5,347.4	5,347.3	13.2	1.1	176.07	-2,908.1	424.0	3,193.1	3,179.5	13.59	234.889	
5,500.0	5,468.1	5,422.4	5,422.2	13.3	1.2	176.04	-2,908.6	425.7	3,193.8	3,180.0	13.79	231.616	
5,511.8	5,479.9	5,434.9	5,434.8	13.4	1.2	176.04	-2,908.7	426.0	3,193.9	3,180.1	13.82	231.170	
5,600.0	5,568.1	5,530.8	5,530.5	13.5	1.2	175.99	-2,909.3	428.6	3,194.6	3,180.6	14.02	227.873	
5,610.2	5,578.4	5,542.4	5,542.1	13.6	1.2	175.98	-2,909.3	429.0	3,194.6	3,180.6	14.04	227.493	
5,700.0	5,668.1	5,642.2	5,641.9	13.7	1.2	175.93	-2,909.6	431.8	3,195.0	3,180.8	14.25	224.208	
5,708.6	5,676.8	5,651.5	5,651.3	13.8	1.2	175.93	-2,909.6	432.1	3,195.1	3,180.8	14.27	223.895	
5,800.0	5,768.1	5,733.1	5,732.8	13.9	1.2	175.90	-2,909.7	434.0	3,195.3	3,180.9	14.48	220.710	
5,807.1	5,775.2	5,738.1	5,737.8	14.0	1.2	175.89	-2,909.7	434.1	3,195.4	3,180.9	14.49	220.473	
5,900.0	5,868.1	5,806.4	5,806.1	14.1	1.2	175.86	-2,910.3	435.9	3,196.4	3,181.7	14.70	217.421	
5,905.5	5,873.6	5,812.4	5,812.0	14.1	1.2	175.86	-2,910.4	436.0	3,196.5	3,181.8	14.71	217.239	
6,000.0	5,968.1	5,915.1	5,914.7	14.3	1.2	175.81	-2,911.5	439.1	3,197.7	3,182.7	14.93	214.142	
6,003.9	5,972.1	5,919.4	5,919.1	14.3	1.2	175.80	-2,911.5	439.3	3,197.7	3,182.8	14.94	214.014	
6,100.0	6,068.1	6,017.2	6,016.8	14.5	1.3	175.75	-2,912.3	442.5	3,198.7	3,183.5	15.16	210.957	
6,102.3	6,070.5	6,019.0	6,018.6	14.5	1.3	175.75	-2,912.3	442.6	3,198.7	3,183.6	15.17	210.885	
6,200.0	6,168.1	6,100.0	6,099.5	14.7	1.3	175.70	-2,913.4	445.2	3,200.2	3,184.8	15.39	207.943	
6,200.8	6,168.9	6,100.0	6,099.5	14.7	1.3	175.70	-2,913.4	445.2	3,200.2	3,184.8	15.39	207.922	
6,288.5	6,256.6	6,195.3	6,194.7	14.9	1.3	175.65	-2,914.7	448.1	3,201.7	3,186.1	15.59	205.304	
6,299.2	6,267.3	6,206.4	6,205.9	14.9	1.3	-4.57	-2,914.8	448.4	3,201.7	3,186.1	15.60	205.174	
6,300.0	6,268.1	6,207.2	6,206.7	14.9	1.3	-4.57	-2,914.9	448.5	3,201.7	3,186.1	15.61	205.157	
6,350.0	6,318.1	6,254.8	6,254.2	15.0	1.3	-4.60	-2,915.4	449.7	3,199.9	3,184.2	15.71	203.626	
6,397.6	6,365.3	6,300.0	6,299.4	15.1	1.3	-4.66	-2,916.1	450.6	3,195.0	3,179.1	15.88	201.224	
6,400.0	6,367.7	6,302.3	6,301.8	15.1	1.3	-4.66	-2,916.1	450.7	3,194.7	3,178.8	15.89	201.088	
6,450.0	6,416.8	6,353.7	6,353.1	15.1	1.3	-4.75	-2,916.8	451.7	3,186.0	3,169.9	16.09	198.061	
6,496.0	6,461.3	6,400.3	6,399.7	15.1	1.3	-4.87	-2,917.4	453.1	3,174.9	3,158.6	16.27	195.198	
6,500.0	6,465.1	6,404.4	6,403.7	15.1	1.3	-4.88	-2,917.4	453.2	3,173.8	3,157.5	16.28	194.953	
6,550.0	6,512.4	6,454.8	6,454.1	15.1	1.3	-5.05	-2,918.0	454.7	3,158.3	3,141.9	16.45	191.970	
6,594.5	6,553.4	6,498.5	6,497.9	15.1	1.4	-5.23	-2,918.5	455.8	3,141.7	3,125.2	16.58	189.526	
6,600.0	6,558.4	6,500.0	6,499.3	15.1	1.4	-5.25	-2,918.5	455.8	3,139.5	3,122.9	16.59	189.268	
6,650.0	6,603.0	6,543.2	6,542.6	15.1	1.4	-5.49	-2,919.0	456.8	3,117.5	3,100.9	16.68	186.874	
6,692.9	6,639.9	6,576.4	6,575.7	15.1	1.4	-5.73	-2,919.4	457.6	3,096.3	3,079.6	16.73	185.091	
6,700.0	6,645.9	6,581.8	6,581.1	15.1	1.4	-5.77	-2,919.5	457.7	3,092.6	3,075.9	16.73	184.816	
6,750.0	6,686.8	6,623.7	6,622.9	15.1	1.4	-6.13	-2,920.0	458.9	3,064.7	3,048.0	16.75	182.987	
6,791.3	6,719.1	6,660.4	6,659.6	15.1	1.4	-6.49	-2,920.5	459.9	3,039.6	3,022.8	16.74	181.612	
6,800.0	6,725.7	6,667.9	6,667.1	15.1	1.4	-6.58	-2,920.6	460.1	3,034.0	3,017.3	16.73	181.340	
6,850.0	6,762.3	6,710.6	6,709.9	15.1	1.4	-7.13	-2,921.1	461.3	3,000.6	2,983.9	16.68	179.851	
6,889.7	6,789.7	6,745.6	6,744.9	15.1	1.4	-7.66	-2,921.4	462.2	2,972.2	2,955.5	16.63	178.684	
6,900.0	6,796.5	6,754.3	6,753.5	15.1	1.4	-7.81	-2,921.4	462.4	2,964.6	2,948.0	16.62	178.389	
6,950.0	6,828.0	6,794.4	6,793.6	15.1	1.4	-8.66	-2,921.6	463.4	2,926.2	2,909.6	16.54	176.925	
6,988.2	6,850.2	6,813.9	6,813.1	15.1	1.4	-9.41	-2,921.7	463.8	2,895.4	2,878.9	16.46	175.888	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - FRY 21-18 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,000.0	6,856.7	6,819.1	6,818.3	15.1	1.4	-9.67	-2,921.7	463.9	2,885.6	2,869.2	16.44	175.512	
7,050.0	6,882.5	6,839.5	6,838.7	15.2	1.4	-10.95	-2,921.9	464.4	2,843.2	2,826.9	16.36	173.789	
7,086.6	6,899.5	6,853.0	6,852.2	15.3	1.4	-12.14	-2,922.0	464.7	2,811.1	2,794.8	16.33	172.128	
7,100.0	6,905.3	6,857.6	6,856.8	15.4	1.4	-12.64	-2,922.0	464.8	2,799.2	2,782.8	16.33	171.437	
7,150.0	6,924.9	6,873.4	6,872.6	15.7	1.4	-14.92	-2,922.2	465.1	2,753.6	2,737.3	16.38	168.068	
7,185.0	6,936.7	6,883.0	6,882.2	15.9	1.4	-17.07	-2,922.3	465.3	2,721.0	2,704.5	16.51	164.807	
7,200.0	6,941.2	6,886.7	6,885.9	16.0	1.4	-18.18	-2,922.4	465.4	2,706.9	2,690.3	16.59	163.156	
7,250.0	6,954.2	6,900.0	6,899.2	16.3	1.4	-23.16	-2,922.5	465.7	2,659.0	2,642.0	17.05	155.913	
7,283.4	6,961.0	6,904.1	6,903.2	16.6	1.4	-27.99	-2,922.6	465.8	2,626.6	2,609.0	17.56	149.543	
7,300.0	6,963.8	6,907.0	6,906.2	16.7	1.4	-31.17	-2,922.6	465.8	2,610.4	2,592.5	17.90	145.846	
7,350.0	6,970.0	6,913.7	6,912.9	17.2	1.4	-45.71	-2,922.7	466.0	2,561.2	2,542.0	19.19	133.432	
7,381.9	6,972.1	6,916.2	6,915.4	17.5	1.4	-61.00	-2,922.7	466.0	2,529.6	2,509.8	19.81	127.695	
7,400.0	6,972.7	6,917.0	6,916.2	17.7	1.4	-72.31	-2,922.8	466.0	2,511.6	2,491.9	19.69	127.573	
7,420.0	6,972.8	6,917.4	6,916.6	17.9	1.4	-86.39	-2,922.8	466.0	2,491.7	2,472.5	19.21	129.702	
7,480.3	6,972.2	6,917.7	6,916.8	18.5	1.4	-86.44	-2,922.8	466.1	2,431.8	2,411.9	19.85	122.483	
7,500.0	6,972.0	6,917.8	6,916.9	18.7	1.4	-86.46	-2,922.8	466.1	2,412.2	2,392.2	20.06	120.226	
7,578.7	6,971.3	6,918.1	6,917.3	19.7	1.4	-86.53	-2,922.8	466.1	2,334.0	2,313.0	20.99	111.217	
7,600.0	6,971.1	6,918.2	6,917.4	19.9	1.4	-86.55	-2,922.8	466.1	2,312.9	2,291.7	21.24	108.916	
7,677.1	6,970.4	6,918.5	6,917.7	20.9	1.4	-86.62	-2,922.8	466.1	2,236.3	2,214.1	22.22	100.623	
7,700.0	6,970.2	6,918.6	6,917.8	21.2	1.4	-86.65	-2,922.8	466.1	2,213.6	2,191.1	22.52	98.306	
7,775.6	6,969.5	6,919.0	6,918.1	22.2	1.4	-86.72	-2,922.8	466.1	2,138.6	2,115.1	23.56	90.756	
7,800.0	6,969.3	6,919.1	6,918.3	22.6	1.4	-86.74	-2,922.8	466.1	2,114.4	2,090.5	23.90	88.458	
7,874.0	6,968.6	6,919.4	6,918.6	23.7	1.4	-86.81	-2,922.8	466.1	2,041.1	2,016.1	24.99	81.670	
7,900.0	6,968.4	6,919.5	6,918.7	24.1	1.4	-86.83	-2,922.8	466.1	2,015.3	1,989.9	25.37	79.423	
7,972.4	6,967.8	6,919.8	6,919.0	25.2	1.4	-86.90	-2,922.8	466.1	1,943.6	1,917.1	26.49	73.368	
8,000.0	6,967.5	6,920.0	6,919.1	25.6	1.4	-86.92	-2,922.8	466.1	1,916.3	1,889.3	26.92	71.195	
8,070.8	6,966.9	6,920.3	6,919.4	26.7	1.4	-86.99	-2,922.8	466.1	1,846.2	1,818.1	28.05	65.817	
8,100.0	6,966.6	6,920.4	6,919.6	27.2	1.4	-87.02	-2,922.8	466.1	1,817.3	1,788.8	28.52	63.730	
8,169.3	6,966.0	6,920.7	6,919.9	28.3	1.4	-87.08	-2,922.8	466.1	1,748.9	1,719.2	29.66	58.967	
8,200.0	6,965.7	6,920.8	6,920.0	28.8	1.4	-87.11	-2,922.8	466.1	1,718.5	1,688.4	30.17	56.970	
8,267.7	6,965.1	6,921.1	6,920.3	30.0	1.4	-87.17	-2,922.8	466.1	1,651.7	1,620.4	31.31	52.754	
8,300.0	6,964.8	6,921.3	6,920.4	30.5	1.4	-87.20	-2,922.8	466.1	1,619.9	1,588.0	31.86	50.850	
8,366.1	6,964.2	6,921.6	6,920.7	31.7	1.4	-87.26	-2,922.8	466.1	1,554.7	1,521.7	33.00	47.118	
8,400.0	6,963.9	6,921.7	6,920.9	32.2	1.4	-87.30	-2,922.8	466.1	1,521.4	1,487.8	33.58	45.306	
8,464.5	6,963.3	6,922.0	6,921.2	33.4	1.4	-87.35	-2,922.8	466.2	1,458.0	1,423.2	34.71	42.000	
8,500.0	6,963.0	6,922.1	6,921.3	34.0	1.4	-87.39	-2,922.8	466.2	1,423.1	1,387.8	35.34	40.276	
8,563.0	6,962.4	6,922.4	6,921.6	35.1	1.4	-87.45	-2,922.8	466.2	1,361.4	1,324.9	36.46	37.344	
8,600.0	6,962.0	6,922.6	6,921.8	35.8	1.4	-87.48	-2,922.8	466.2	1,325.1	1,288.0	37.11	35.704	
8,661.4	6,961.5	6,922.9	6,922.0	36.9	1.4	-87.54	-2,922.8	466.2	1,265.1	1,226.9	38.22	33.101	
8,700.0	6,961.1	6,923.0	6,922.2	37.6	1.4	-87.57	-2,922.8	466.2	1,227.5	1,188.5	38.91	31.542	
8,759.8	6,960.6	6,923.3	6,922.5	38.7	1.4	-87.63	-2,922.8	466.2	1,169.2	1,129.2	40.00	29.228	
8,800.0	6,960.2	6,923.5	6,922.6	39.4	1.4	-87.66	-2,922.8	466.2	1,130.2	1,089.4	40.73	27.745	
8,858.2	6,959.7	6,923.7	6,922.9	40.5	1.4	-87.72	-2,922.8	466.2	1,073.7	1,031.9	41.80	25.686	
8,900.0	6,959.3	6,923.9	6,923.1	41.2	1.4	-87.76	-2,922.9	466.2	1,033.4	990.8	42.57	24.276	
8,956.7	6,958.8	6,924.1	6,923.3	42.3	1.4	-87.81	-2,922.9	466.2	978.9	935.2	43.62	22.442	
9,000.0	6,958.4	6,924.3	6,923.5	43.1	1.4	-87.85	-2,922.9	466.2	937.3	892.9	44.42	21.102	
9,055.1	6,957.9	6,924.6	6,923.7	44.1	1.4	-87.90	-2,922.9	466.2	884.8	839.3	45.44	19.469	
9,100.0	6,957.5	6,924.8	6,923.9	44.9	1.4	-87.94	-2,922.9	466.2	842.2	795.9	46.28	18.197	
9,153.5	6,957.0	6,925.0	6,924.2	45.9	1.4	-87.99	-2,922.9	466.2	791.7	744.4	47.28	16.744	
9,200.0	6,956.6	6,925.2	6,924.4	46.8	1.4	-88.03	-2,922.9	466.2	748.3	700.1	48.15	15.539	
9,251.9	6,956.1	6,925.4	6,924.6	47.8	1.4	-88.08	-2,922.9	466.2	700.1	651.0	49.13	14.250	
9,300.0	6,955.7	6,925.6	6,924.8	48.7	1.4	-88.12	-2,922.9	466.2	656.1	606.1	50.04	13.114	

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 HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,350.4	6,955.2	6,925.9	6,925.0	49.6	1.4	-88.17	-2,922.9	466.2	610.7	559.7	50.99	11.977	
9,400.0	6,954.8	6,926.1	6,925.3	50.6	1.4	-88.22	-2,922.9	466.2	566.7	514.8	51.93	10.914	
9,448.8	6,954.3	6,926.3	6,925.5	51.5	1.4	-88.26	-2,922.9	466.2	524.5	471.6	52.85	9.923	
9,500.0	6,953.9	6,926.5	6,925.7	52.5	1.4	-88.31	-2,922.9	466.3	481.5	427.7	53.82	8.945	
9,547.2	6,953.4	6,926.7	6,925.9	53.4	1.4	-88.35	-2,922.9	466.3	443.4	388.6	54.72	8.102	
9,600.0	6,952.9	6,927.0	6,926.1	54.4	1.4	-88.40	-2,922.9	466.3	403.1	347.3	55.73	7.233	
9,645.6	6,952.5	6,927.2	6,926.3	55.2	1.4	-88.44	-2,922.9	466.3	370.8	314.2	56.60	6.550	
9,700.0	6,952.0	6,927.4	6,926.6	56.3	1.4	-88.49	-2,922.9	466.3	336.3	278.7	57.64	5.835	
9,744.1	6,951.6	6,927.6	6,926.8	57.1	1.4	-88.53	-2,922.9	466.3	312.6	254.1	58.49	5.345	
9,800.0	6,951.1	6,927.8	6,927.0	58.2	1.4	-88.58	-2,922.9	466.3	289.4	229.9	59.56	4.859	
9,842.5	6,950.7	6,928.0	6,927.2	59.0	1.4	-88.62	-2,922.9	466.3	278.1	217.7	60.37	4.606	
9,896.8	6,950.2	6,928.2	6,927.4	60.0	1.4	-88.67	-2,922.9	466.3	272.8	211.3	61.42	4.441 CC	
9,900.0	6,950.2	6,928.3	6,927.4	60.1	1.4	-88.67	-2,922.9	466.3	272.8	211.3	61.48	4.437 ES, SF	
9,940.9	6,949.8	6,928.4	6,927.6	60.9	1.4	-88.71	-2,922.9	466.3	276.3	214.0	62.27	4.437	
10,000.0	6,949.3	6,928.7	6,927.9	62.0	1.4	-88.77	-2,922.9	466.3	291.6	228.2	63.41	4.600	
10,039.3	6,948.9	6,928.9	6,928.0	62.8	1.4	-88.80	-2,922.9	466.3	307.8	243.6	64.17	4.797	
10,100.0	6,948.4	6,929.1	6,928.3	64.0	1.4	-88.86	-2,922.9	466.3	340.1	274.8	65.34	5.206	
10,137.8	6,948.0	6,929.3	6,928.5	64.7	1.4	-88.89	-2,922.9	466.3	364.0	297.9	66.07	5.509	
10,200.0	6,947.5	6,929.6	6,928.7	65.9	1.4	-88.95	-2,922.9	466.3	407.9	340.6	67.27	6.063	
10,236.2	6,947.1	6,929.7	6,928.9	66.6	1.4	-88.98	-2,922.9	466.3	435.4	367.5	67.97	6.406	
10,300.0	6,946.6	6,930.0	6,929.2	67.8	1.4	-89.04	-2,922.9	466.3	486.8	417.6	69.21	7.034	
10,334.6	6,946.3	6,930.1	6,929.3	68.5	1.4	-89.07	-2,922.9	466.3	515.9	446.0	69.88	7.382	
10,400.0	6,945.7	6,930.4	6,929.6	69.8	1.4	-89.13	-2,922.9	466.3	572.4	501.2	71.15	8.045	
10,433.0	6,945.4	6,930.6	6,929.7	70.4	1.4	-89.16	-2,922.9	466.3	601.7	529.9	71.79	8.380	
10,500.0	6,944.7	6,930.9	6,930.0	71.7	1.4	-89.22	-2,922.9	466.4	662.0	588.9	73.09	9.057	
10,531.5	6,944.5	6,931.0	6,930.2	72.3	1.4	-89.25	-2,922.9	466.4	690.8	617.1	73.71	9.373	
10,600.0	6,943.8	6,931.3	6,930.5	73.7	1.4	-89.31	-2,923.0	466.4	754.3	679.2	75.04	10.051	
10,629.9	6,943.6	6,931.4	6,930.6	74.2	1.4	-89.34	-2,923.0	466.4	782.2	706.6	75.62	10.344	
10,700.0	6,942.9	6,931.7	6,930.9	75.6	1.4	-89.40	-2,923.0	466.4	848.3	771.3	76.99	11.018	
10,728.3	6,942.7	6,931.9	6,931.0	76.2	1.4	-89.43	-2,923.0	466.4	875.1	797.6	77.54	11.286	
10,800.0	6,942.0	6,932.2	6,931.3	77.6	1.4	-89.49	-2,923.0	466.4	943.5	864.6	78.94	11.952	
10,826.7	6,941.8	6,932.3	6,931.5	78.1	1.4	-89.52	-2,923.0	466.4	969.1	889.7	79.46	12.196	
10,900.0	6,941.1	6,932.6	6,931.8	79.5	1.4	-89.58	-2,923.0	466.4	1,039.6	958.7	80.89	12.852	
10,925.2	6,940.9	6,932.7	6,931.9	80.0	1.4	-89.61	-2,923.0	466.4	1,063.9	982.6	81.39	13.073	
11,000.0	6,940.2	6,933.0	6,932.2	81.5	1.4	-89.68	-2,923.0	466.4	1,136.4	1,053.6	82.85	13.717	
11,023.6	6,940.0	6,933.1	6,932.3	81.9	1.4	-89.70	-2,923.0	466.4	1,159.4	1,076.0	83.31	13.916	
11,100.0	6,939.3	6,933.5	6,932.6	83.4	1.4	-89.77	-2,923.0	466.4	1,233.7	1,148.9	84.80	14.548	
11,122.0	6,939.1	6,933.6	6,932.7	83.8	1.4	-89.79	-2,923.0	466.4	1,255.2	1,170.0	85.24	14.727	
11,200.0	6,938.4	6,933.9	6,933.1	85.4	1.4	-89.86	-2,923.0	466.4	1,331.4	1,244.7	86.76	15.346	
11,220.4	6,938.2	6,934.0	6,933.2	85.8	1.4	-89.87	-2,923.0	466.4	1,351.5	1,264.3	87.16	15.505	
11,300.0	6,937.4	6,934.3	6,933.5	87.3	1.4	-89.95	-2,923.0	466.4	1,429.5	1,340.8	88.72	16.112	
11,318.9	6,937.3	6,934.4	6,933.6	87.7	1.4	-89.96	-2,923.0	466.4	1,448.0	1,358.9	89.09	16.253	
11,400.0	6,936.5	6,934.8	6,933.9	89.3	1.4	-90.04	-2,923.0	466.4	1,527.8	1,437.1	90.68	16.847	
11,417.3	6,936.4	6,934.8	6,934.0	89.6	1.4	-90.05	-2,923.0	466.4	1,544.8	1,453.8	91.02	16.971	
11,500.0	6,935.6	6,935.2	6,934.4	91.3	1.4	-90.13	-2,923.0	466.5	1,626.2	1,533.6	92.65	17.553	
11,515.7	6,935.5	6,935.3	6,934.4	91.6	1.4	-90.14	-2,923.0	466.5	1,641.7	1,548.8	92.96	17.662	
11,600.0	6,934.7	6,935.6	6,934.8	93.2	1.4	-90.22	-2,923.0	466.5	1,724.9	1,630.3	94.61	18.232	
11,614.1	6,934.6	6,935.7	6,934.9	93.5	1.4	-90.23	-2,923.0	466.5	1,738.9	1,644.0	94.89	18.326	
11,700.0	6,933.8	6,936.1	6,935.2	95.2	1.4	-90.31	-2,923.0	466.5	1,823.7	1,727.1	96.57	18.884	
11,712.6	6,933.7	6,936.1	6,935.3	95.4	1.4	-90.32	-2,923.0	466.5	1,836.2	1,739.3	96.82	18.964	
11,800.0	6,932.9	6,936.5	6,935.7	97.1	1.4	-90.40	-2,923.0	466.5	1,922.7	1,824.1	98.54	19.511	
11,811.0	6,932.8	6,936.5	6,935.7	97.4	1.4	-90.41	-2,923.0	466.5	1,933.5	1,834.8	98.76	19.579	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - FRY 21-18 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
11,900.0	6,932.0	6,936.9	6,936.1	99.1	1.4	-90.49	-2,923.0	466.5	2,021.7	1,921.2	100.51	20.115	
11,909.4	6,931.9	6,937.0	6,936.1	99.3	1.4	-90.50	-2,923.0	466.5	2,031.0	1,930.3	100.69	20.171	
12,000.0	6,931.0	6,937.4	6,936.5	101.1	1.5	-90.58	-2,923.0	466.5	2,120.8	2,018.3	102.47	20.696	
12,007.8	6,931.0	6,937.4	6,936.6	101.2	1.5	-90.58	-2,923.0	466.5	2,128.6	2,026.0	102.63	20.741	
12,100.0	6,930.1	6,937.8	6,937.0	103.0	1.5	-90.67	-2,923.0	466.5	2,220.0	2,115.6	104.44	21.256	
12,106.3	6,930.1	6,937.8	6,937.0	103.2	1.5	-90.67	-2,923.0	466.5	2,226.2	2,121.7	104.57	21.290	
12,200.0	6,929.2	6,938.2	6,937.4	105.0	1.5	-90.76	-2,923.0	466.5	2,319.3	2,212.9	106.41	21.796	
12,204.7	6,929.2	6,938.2	6,937.4	105.1	1.5	-90.76	-2,923.0	466.5	2,324.0	2,217.5	106.50	21.821	
12,300.0	6,928.3	6,938.6	6,937.8	107.0	1.5	-90.85	-2,923.1	466.5	2,418.6	2,310.2	108.38	22.316	
12,303.1	6,928.3	6,938.7	6,937.8	107.1	1.5	-90.85	-2,923.1	466.5	2,421.7	2,313.3	108.44	22.332	
12,400.0	6,927.4	6,939.1	6,938.2	109.0	1.5	-90.94	-2,923.1	466.5	2,518.0	2,407.7	110.35	22.818	
12,401.5	6,927.4	6,939.1	6,938.3	109.0	1.5	-90.94	-2,923.1	466.5	2,519.6	2,409.2	110.38	22.826	
12,500.0	6,926.5	6,939.5	6,938.7	110.9	1.5	-91.02	-2,923.1	466.6	2,617.4	2,505.1	112.32	23.303	
12,598.4	6,925.6	6,939.9	6,939.1	112.9	1.5	-91.11	-2,923.1	466.6	2,715.3	2,601.1	114.26	23.764	
12,600.0	6,925.6	6,939.9	6,939.1	112.9	1.5	-91.11	-2,923.1	466.6	2,716.9	2,602.6	114.29	23.772	
12,696.8	6,924.7	6,940.4	6,939.5	114.8	1.5	-91.20	-2,923.1	466.6	2,813.3	2,697.1	116.20	24.210	
12,700.0	6,924.6	6,940.4	6,939.5	114.9	1.5	-91.20	-2,923.1	466.6	2,816.4	2,700.2	116.26	24.225	
12,795.2	6,923.8	6,940.8	6,939.9	116.8	1.5	-91.29	-2,923.1	466.6	2,911.2	2,793.1	118.14	24.642	
12,800.0	6,923.7	6,940.8	6,940.0	116.9	1.5	-91.29	-2,923.1	466.6	2,916.0	2,797.7	118.24	24.662	
12,893.7	6,922.9	6,941.2	6,940.4	118.7	1.5	-91.38	-2,923.1	466.6	3,009.3	2,889.2	120.08	25.060	
12,900.0	6,922.8	6,941.2	6,940.4	118.8	1.5	-91.38	-2,923.1	466.6	3,015.6	2,895.3	120.21	25.086	
12,992.1	6,922.0	6,941.6	6,940.8	120.6	1.5	-91.46	-2,923.1	466.6	3,107.3	2,985.3	122.02	25.465	
13,000.0	6,921.9	6,941.7	6,940.8	120.8	1.5	-91.47	-2,923.1	466.6	3,115.2	2,993.0	122.18	25.496	
13,090.5	6,921.1	6,942.0	6,941.2	122.6	1.5	-91.55	-2,923.1	466.6	3,205.3	3,081.4	123.97	25.857	
13,100.0	6,921.0	6,942.1	6,941.3	122.8	1.5	-91.56	-2,923.1	466.6	3,214.8	3,090.6	124.15	25.894	
13,188.9	6,920.2	6,942.5	6,941.6	124.5	1.5	-91.64	-2,923.1	466.6	3,303.4	3,177.5	125.91	26.237	
13,200.0	6,920.1	6,942.5	6,941.7	124.8	1.5	-91.65	-2,923.1	466.6	3,314.4	3,188.3	126.13	26.279	
13,287.4	6,919.3	6,942.9	6,942.1	126.5	1.5	-91.73	-2,923.1	466.6	3,401.5	3,273.7	127.85	26.606	
13,300.0	6,919.1	6,942.9	6,942.1	126.7	1.5	-91.74	-2,923.1	466.6	3,414.1	3,286.0	128.10	26.652	
13,385.8	6,918.4	6,943.3	6,942.5	128.4	1.5	-91.81	-2,923.1	466.7	3,499.6	3,369.8	129.79	26.963	
13,400.0	6,918.2	6,943.4	6,942.5	128.7	1.5	-91.83	-2,923.1	466.7	3,513.8	3,383.7	130.07	27.014	
13,484.2	6,917.5	6,943.7	6,942.9	130.4	1.5	-91.90	-2,923.1	466.7	3,597.8	3,466.0	131.73	27.311	
13,500.0	6,917.3	6,943.8	6,943.0	130.7	1.5	-91.91	-2,923.1	466.7	3,613.5	3,481.4	132.05	27.366	
13,582.6	6,916.6	6,944.2	6,943.3	132.3	1.5	-91.99	-2,923.1	466.7	3,695.9	3,562.2	133.68	27.648	
13,600.0	6,916.4	6,944.2	6,943.4	132.7	1.5	-92.00	-2,923.1	466.7	3,713.2	3,579.2	134.02	27.707	
13,681.1	6,915.6	6,944.6	6,943.7	134.3	1.5	-92.08	-2,923.1	466.7	3,794.1	3,658.5	135.62	27.976	
13,700.0	6,915.5	6,944.7	6,943.8	134.6	1.5	-92.09	-2,923.1	466.7	3,813.0	3,677.0	135.99	28.038	
13,779.5	6,914.7	6,945.0	6,944.2	136.2	1.5	-92.16	-2,923.1	466.7	3,892.3	3,754.7	137.56	28.295	
13,800.0	6,914.6	6,945.1	6,944.3	136.6	1.5	-92.18	-2,923.1	466.7	3,912.7	3,774.7	137.97	28.360	
13,877.9	6,913.8	6,945.4	6,944.6	138.2	1.5	-92.25	-2,923.1	466.7	3,990.4	3,850.9	139.50	28.605	
13,900.0	6,913.6	6,945.5	6,944.7	138.6	1.5	-92.27	-2,923.1	466.7	4,012.5	3,872.5	139.94	28.673	
13,976.3	6,912.9	6,945.8	6,945.0	140.1	1.5	-92.34	-2,923.2	466.7	4,088.6	3,947.2	141.45	28.906	
14,000.0	6,912.7	6,945.9	6,945.1	140.6	1.5	-92.36	-2,923.2	466.7	4,112.2	3,970.3	141.91	28.977	
14,074.8	6,912.0	6,946.3	6,945.4	142.0	1.5	-92.42	-2,923.2	466.7	4,186.8	4,043.5	143.33	29.212	
14,079.0	6,912.0	6,946.3	6,945.4	142.1	1.5	-92.42	-2,923.2	466.7	4,191.0	4,047.6	143.40	29.225	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 644-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	171.02	-2,910.8	460.1	2,947.0				
98.4	98.4	85.6	85.6	0.1	0.1	171.02	-2,910.7	460.1	2,946.9	2,946.7	0.18	N/A	
100.0	100.0	87.2	87.2	0.1	0.1	171.02	-2,910.7	460.1	2,946.9	2,946.7	0.19	N/A	
196.8	196.8	189.7	189.7	0.3	0.2	171.02	-2,910.5	460.1	2,946.6	2,946.1	0.51	5,742.737	
200.0	200.0	193.0	193.0	0.3	0.2	171.02	-2,910.5	460.1	2,946.6	2,946.1	0.52	5,626.897	
295.3	295.3	293.8	293.8	0.5	0.3	171.01	-2,910.0	460.2	2,946.2	2,945.3	0.84	3,494.458	
300.0	300.0	298.8	298.8	0.5	0.3	171.01	-2,910.0	460.2	2,946.2	2,945.3	0.86	3,429.978	
393.7	393.7	397.8	397.8	0.8	0.4	171.01	-2,909.3	460.2	2,945.6	2,944.4	1.17	2,510.923	
400.0	400.0	404.5	404.5	0.8	0.4	171.01	-2,909.3	460.2	2,945.5	2,944.3	1.19	2,466.472	
492.1	492.1	501.9	501.9	1.0	0.5	171.01	-2,908.4	460.3	2,944.7	2,943.2	1.50	1,959.124	
500.0	500.0	510.3	510.3	1.0	0.5	171.01	-2,908.3	460.3	2,944.7	2,943.1	1.53	1,925.257	
590.5	590.5	606.0	606.0	1.2	0.6	171.00	-2,907.3	460.4	2,943.7	2,941.9	1.83	1,605.896	
600.0	600.0	616.0	616.0	1.2	0.6	171.00	-2,907.2	460.4	2,943.6	2,941.8	1.86	1,578.554	
689.0	689.0	677.2	677.1	1.4	0.7	171.00	-2,906.6	460.5	2,942.9	2,940.7	2.16	1,362.262	
700.0	700.0	683.0	683.0	1.4	0.8	171.00	-2,906.6	460.5	2,942.9	2,940.7	2.20	1,339.643	
701.1	701.1	683.6	683.6	1.4	0.8	171.00	-2,906.6	460.5	2,942.9	2,940.7	2.20	1,337.469	
787.4	787.4	738.0	738.0	1.6	0.9	170.99	-2,907.0	461.0	2,943.5	2,941.0	2.50	1,175.820	
800.0	800.0	738.0	738.0	1.7	0.9	170.99	-2,907.0	461.0	2,943.7	2,941.1	2.53	1,162.731	
885.8	885.8	780.3	780.3	1.9	0.9	170.98	-2,907.9	461.6	2,945.6	2,942.8	2.81	1,050.050	
900.0	900.0	787.6	787.6	1.9	1.0	170.98	-2,908.1	461.7	2,946.1	2,943.2	2.85	1,033.343	
984.2	984.2	830.0	829.9	2.1	1.0	170.97	-2,909.7	462.4	2,949.4	2,946.2	3.12	944.929	
1,000.0	1,000.0	830.0	829.9	2.1	1.0	170.97	-2,909.7	462.4	2,950.1	2,947.0	3.16	934.576	
1,082.7	1,082.7	884.9	884.7	2.3	1.2	170.95	-2,912.4	463.7	2,954.6	2,951.2	3.46	855.036	
1,100.0	1,100.0	894.3	894.2	2.3	1.2	170.95	-2,913.0	464.0	2,955.7	2,952.2	3.51	841.103	
1,181.1	1,181.1	941.4	941.1	2.5	1.3	170.93	-2,916.0	465.7	2,961.4	2,957.6	3.80	779.931	
1,200.0	1,200.0	953.8	953.5	2.6	1.3	170.92	-2,916.9	466.2	2,962.8	2,958.9	3.87	766.141	
1,279.5	1,279.5	1,021.0	1,020.4	2.7	1.5	134.28	-2,922.1	469.4	2,970.1	2,965.9	4.20	707.214	
1,300.0	1,300.0	1,021.0	1,020.4	2.8	1.5	134.25	-2,922.1	469.4	2,972.3	2,968.1	4.25	699.936	
1,377.9	1,377.8	1,060.7	1,059.9	3.0	1.6	134.10	-2,925.5	471.7	2,982.3	2,977.8	4.52	660.288	
1,400.0	1,399.8	1,072.3	1,071.4	3.0	1.6	134.05	-2,926.6	472.4	2,985.6	2,981.0	4.59	649.963	
1,476.4	1,475.9	1,116.0	1,114.8	3.2	1.7	133.87	-2,931.0	475.4	2,998.4	2,993.5	4.87	615.501	
1,500.0	1,499.5	1,116.0	1,114.8	3.2	1.7	133.81	-2,931.0	475.4	3,002.8	2,997.9	4.93	609.565	
1,574.8	1,573.7	1,170.8	1,169.1	3.4	1.9	133.61	-2,937.1	479.6	3,018.1	3,012.9	5.24	576.185	
1,600.0	1,598.7	1,185.9	1,184.0	3.5	1.9	133.54	-2,938.9	480.9	3,023.7	3,018.4	5.33	566.806	
1,673.2	1,671.1	1,229.8	1,227.4	3.7	2.1	133.31	-2,944.3	484.8	3,041.3	3,035.6	5.63	540.586	
1,700.0	1,697.5	1,246.0	1,243.3	3.7	2.1	133.22	-2,946.4	486.3	3,048.2	3,042.4	5.73	531.678	
1,771.6	1,767.9	1,306.0	1,302.5	4.0	2.3	133.00	-2,954.5	492.2	3,067.9	3,061.8	6.07	505.165	
1,800.1	1,795.7	1,306.0	1,302.5	4.0	2.3	132.87	-2,954.5	492.2	3,076.1	3,070.0	6.15	500.185	
1,870.1	1,864.2	1,368.6	1,364.1	4.3	2.5	132.97	-2,963.4	498.4	3,096.9	3,090.4	6.50	476.554	
1,900.0	1,893.4	1,395.5	1,390.7	4.4	2.6	133.01	-2,967.2	501.0	3,105.8	3,099.2	6.65	467.153	
1,968.5	1,960.4	1,436.6	1,431.1	4.6	2.7	133.07	-2,973.3	505.0	3,126.5	3,119.5	6.96	449.527	
2,000.0	1,991.3	1,454.8	1,449.1	4.7	2.8	133.10	-2,976.0	506.8	3,136.2	3,129.1	7.09	442.095	
2,066.9	2,056.7	1,494.0	1,487.5	5.0	2.9	133.15	-2,982.2	511.0	3,157.1	3,149.7	7.40	426.885	
2,100.0	2,089.1	1,519.2	1,512.2	5.1	3.0	133.18	-2,986.2	513.8	3,167.6	3,160.0	7.57	418.581	
2,165.3	2,153.0	1,570.3	1,562.3	5.3	3.2	133.24	-2,994.5	519.9	3,188.5	3,180.6	7.91	403.031	
2,200.0	2,186.9	1,600.2	1,591.5	5.5	3.4	133.27	-2,999.4	523.7	3,199.7	3,191.6	8.10	394.998	
2,263.8	2,249.3	1,669.5	1,659.3	5.7	3.6	133.34	-3,010.6	532.5	3,220.2	3,211.7	8.48	379.532	
2,300.0	2,284.7	1,701.9	1,691.1	5.8	3.8	133.37	-3,015.9	536.7	3,231.8	3,223.1	8.69	372.026	
2,362.2	2,345.5	1,751.4	1,739.5	6.1	3.9	133.41	-3,023.9	543.2	3,251.8	3,242.8	9.02	360.356	
2,400.0	2,382.5	1,777.0	1,764.5	6.2	4.0	133.43	-3,028.1	546.6	3,264.1	3,254.8	9.22	354.088	
2,460.6	2,441.8	1,830.2	1,816.4	6.5	4.3	133.47	-3,036.9	553.8	3,283.8	3,274.3	9.57	343.007	
2,500.0	2,480.3	1,861.7	1,847.3	6.6	4.4	133.50	-3,042.2	558.0	3,296.7	3,287.0	9.79	336.615	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - FRY 21-6I - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 usft
Survey Program: 644-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
2,559.0	2,538.1	2,014.1	1,996.7	6.9	5.0	133.64	-3,065.3	577.0	3,314.7	3,304.3	10.38	319.251		
2,600.0	2,578.1	2,047.0	2,029.0	7.0	5.1	133.67	-3,070.0	580.7	3,327.1	3,316.5	10.60	313.757		
2,657.5	2,634.4	2,104.9	2,085.9	7.3	5.3	133.74	-3,078.5	586.9	3,344.5	3,333.5	10.95	305.518		
2,700.0	2,675.9	2,151.7	2,131.9	7.5	5.5	133.80	-3,085.3	591.8	3,357.3	3,346.1	11.21	299.467		
2,755.9	2,730.6	2,186.4	2,166.1	7.7	5.6	133.84	-3,090.3	595.4	3,374.3	3,362.8	11.50	293.522		
2,800.0	2,773.8	2,212.8	2,192.1	7.9	5.7	133.87	-3,094.3	598.2	3,387.8	3,376.1	11.72	289.107		
2,854.3	2,826.9	2,249.0	2,227.6	8.1	5.8	133.92	-3,100.0	602.1	3,404.9	3,392.9	12.00	283.676		
2,857.4	2,829.9	2,249.0	2,227.6	8.1	5.8	133.92	-3,100.0	602.1	3,405.8	3,393.8	12.01	283.504		
2,900.0	2,871.6	2,274.1	2,252.2	8.3	5.9	134.14	-3,104.0	604.9	3,419.2	3,406.9	12.23	279.673		
2,952.7	2,923.5	2,307.6	2,285.0	8.4	6.1	134.41	-3,109.5	608.7	3,435.3	3,422.8	12.47	275.539		
3,000.0	2,970.1	2,344.0	2,320.7	8.6	6.2	134.64	-3,115.7	613.0	3,449.4	3,436.7	12.70	271.563		
3,051.2	3,020.7	2,395.4	2,370.9	8.7	6.5	134.86	-3,124.4	619.3	3,464.2	3,451.2	12.98	266.866		
3,100.0	3,069.1	2,437.0	2,411.6	8.9	6.6	135.06	-3,131.2	624.6	3,477.6	3,464.4	13.23	262.938		
3,149.6	3,118.3	2,478.5	2,452.2	9.0	6.8	135.23	-3,138.2	629.8	3,490.7	3,477.2	13.46	259.323		
3,200.0	3,168.5	2,510.5	2,483.5	9.1	6.9	135.41	-3,143.7	633.7	3,503.7	3,490.0	13.67	256.302		
3,248.0	3,216.3	2,544.9	2,517.0	9.2	7.1	135.56	-3,149.8	637.8	3,515.6	3,501.8	13.87	253.463		
3,300.0	3,268.2	2,591.8	2,562.9	9.3	7.3	135.70	-3,158.3	643.4	3,528.1	3,514.0	14.12	249.928		
3,346.4	3,314.6	2,634.0	2,604.0	9.4	7.5	135.80	-3,165.9	648.6	3,538.7	3,524.4	14.33	247.008		
3,400.0	3,368.1	2,683.6	2,652.5	9.5	7.7	135.91	-3,174.9	654.5	3,550.3	3,535.7	14.57	243.708		
3,444.9	3,413.0	2,721.0	2,689.0	9.6	7.9	135.99	-3,181.7	658.9	3,559.5	3,544.8	14.75	241.332		
3,457.5	3,425.6	2,721.0	2,689.0	9.6	7.9	172.53	-3,181.7	658.9	3,562.1	3,547.3	14.77	241.188		
3,500.0	3,468.1	2,760.1	2,727.1	9.7	8.0	172.47	-3,188.9	663.6	3,570.6	3,555.6	14.96	238.692		
3,543.3	3,511.4	2,788.3	2,754.6	9.7	8.2	172.42	-3,194.3	667.3	3,579.5	3,564.3	15.13	236.657		
3,600.0	3,568.1	2,832.5	2,797.5	9.8	8.4	172.34	-3,202.7	673.5	3,591.3	3,575.9	15.37	233.728		
3,641.7	3,609.9	2,879.5	2,843.2	9.9	8.6	172.25	-3,211.6	680.0	3,600.0	3,584.4	15.59	230.952		
3,700.0	3,668.1	2,937.1	2,899.2	10.0	8.8	172.15	-3,222.6	687.7	3,612.1	3,596.2	15.87	227.573		
3,740.1	3,708.3	2,972.3	2,933.5	10.1	9.0	172.09	-3,229.3	692.3	3,620.5	3,604.4	16.05	225.519		
3,800.0	3,768.1	3,120.3	3,077.9	10.2	9.6	171.87	-3,256.1	710.0	3,632.2	3,615.6	16.59	218.911		
3,838.6	3,806.7	3,144.3	3,101.4	10.2	9.7	171.84	-3,260.3	712.7	3,639.5	3,622.7	16.73	217.482		
3,900.0	3,868.1	3,191.0	3,147.0	10.3	9.9	171.76	-3,268.5	718.5	3,651.3	3,634.3	16.98	214.972		
3,937.0	3,905.1	3,343.8	3,296.8	10.4	10.5	171.56	-3,293.2	735.3	3,657.8	3,640.3	17.47	209.345		
4,000.0	3,968.1	3,406.5	3,358.6	10.5	10.8	171.49	-3,302.4	740.9	3,667.8	3,650.0	17.76	206.536		
4,035.4	4,003.6	3,426.7	3,378.5	10.6	10.8	171.47	-3,305.4	743.0	3,673.6	3,655.7	17.88	205.429		
4,100.0	4,068.1	3,475.0	3,425.9	10.7	11.0	171.40	-3,312.9	748.4	3,684.5	3,666.4	18.14	203.130		
4,133.8	4,102.0	3,498.1	3,448.5	10.8	11.1	171.36	-3,316.5	751.2	3,690.4	3,672.1	18.27	201.997		
4,200.0	4,168.1	3,593.9	3,542.7	10.9	11.5	171.24	-3,331.1	761.6	3,701.4	3,682.7	18.66	198.328		
4,232.3	4,200.4	3,627.1	3,575.3	10.9	11.6	171.19	-3,336.0	765.1	3,706.7	3,687.9	18.81	197.008		
4,300.0	4,268.1	3,759.0	3,705.1	11.1	12.1	171.02	-3,354.7	779.3	3,717.4	3,698.1	19.30	192.588		
4,330.7	4,298.8	3,786.8	3,732.4	11.1	12.2	170.98	-3,358.3	782.5	3,721.9	3,702.4	19.44	191.460		
4,400.0	4,368.1	3,835.4	3,780.3	11.2	12.4	170.91	-3,364.7	788.0	3,732.3	3,712.6	19.71	189.357		
4,429.1	4,397.3	3,853.0	3,797.6	11.3	12.5	170.89	-3,367.1	790.0	3,736.8	3,717.0	19.82	188.569		
4,500.0	4,468.1	3,853.0	3,797.6	11.4	12.5	170.89	-3,367.1	790.0	3,748.5	3,728.5	19.96	187.825		
4,527.5	4,495.7	3,888.8	3,832.8	11.5	12.6	170.83	-3,372.3	794.5	3,752.9	3,732.8	20.13	186.475		
4,600.0	4,568.1	3,913.9	3,857.3	11.6	12.7	170.78	-3,376.2	798.2	3,765.8	3,745.4	20.35	185.061		
4,626.0	4,594.1	3,949.0	3,891.4	11.7	12.9	170.71	-3,382.0	804.2	3,770.9	3,750.4	20.51	183.848		
4,700.0	4,668.1	3,949.0	3,891.4	11.8	12.9	170.71	-3,382.0	804.2	3,785.0	3,764.4	20.66	183.213		
4,724.4	4,692.5	3,966.0	3,907.9	11.8	13.0	170.67	-3,384.9	807.3	3,789.9	3,769.2	20.77	182.506		
4,800.0	4,768.1	4,024.9	3,964.8	12.0	13.2	170.53	-3,395.3	817.8	3,805.4	3,784.3	21.12	180.197		
4,822.8	4,791.0	4,043.0	3,982.4	12.0	13.3	170.49	-3,398.5	821.0	3,810.1	3,788.9	21.23	179.506		
4,900.0	4,868.1	4,105.6	4,043.0	12.2	13.6	170.36	-3,409.9	831.7	3,826.3	3,804.7	21.59	177.257		
4,921.2	4,889.4	4,123.0	4,059.8	12.2	13.7	170.32	-3,413.0	834.6	3,830.8	3,809.1	21.69	176.649		
5,000.0	4,968.1	4,326.0	4,257.5	12.4	14.6	169.96	-3,448.0	864.8	3,846.3	3,823.9	22.46	171.264		

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 HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - FRY 21-6I - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 644-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,019.7	4,987.8	4,326.0	4,257.5	12.4	14.6	169.96	-3,448.0	864.8	3,849.9	3,827.4	22.50	171.119	
5,100.0	5,068.1	4,382.1	4,312.4	12.6	14.9	169.88	-3,457.2	872.2	3,864.8	3,842.0	22.83	169.312	
5,118.1	5,086.2	4,391.2	4,321.2	12.6	14.9	169.86	-3,458.7	873.4	3,868.3	3,845.4	22.89	168.994	
5,200.0	5,168.1	4,479.6	4,407.4	12.8	15.3	169.72	-3,474.0	885.6	3,884.4	3,861.1	23.32	166.596	
5,216.5	5,184.7	4,515.0	4,442.0	12.8	15.5	169.67	-3,480.0	890.1	3,887.5	3,864.0	23.45	165.750	
5,300.0	5,268.1	4,569.5	4,495.3	13.0	15.7	169.59	-3,489.1	897.3	3,903.3	3,879.6	23.78	164.112	
5,314.9	5,283.1	4,579.0	4,504.5	13.0	15.7	169.57	-3,490.7	898.6	3,906.2	3,882.4	23.84	163.831	
5,400.0	5,368.1	4,706.9	4,629.4	13.1	16.3	169.37	-3,512.3	916.5	3,922.8	3,898.4	24.39	160.807	
5,413.4	5,381.5	4,721.5	4,643.6	13.2	16.4	169.35	-3,514.6	918.5	3,925.2	3,900.7	24.46	160.447	
5,500.0	5,468.1	4,883.2	4,801.7	13.3	17.0	169.08	-3,539.3	941.6	3,940.9	3,915.8	25.11	156.913	
5,511.8	5,479.9	4,891.0	4,809.4	13.4	17.1	169.07	-3,540.4	942.7	3,942.8	3,917.6	25.16	156.695	
5,600.0	5,568.1	4,957.3	4,874.4	13.5	17.3	168.96	-3,549.8	952.0	3,957.6	3,932.0	25.54	154.964	
5,610.2	5,578.4	4,964.2	4,881.1	13.6	17.4	168.95	-3,550.8	953.0	3,959.3	3,933.7	25.58	154.782	
5,700.0	5,668.1	5,113.2	5,027.3	13.7	18.0	168.72	-3,571.2	973.1	3,973.6	3,947.5	26.19	151.712	
5,708.6	5,676.8	5,118.0	5,032.1	13.8	18.0	168.71	-3,571.9	973.8	3,975.0	3,948.8	26.22	151.582	
5,800.0	5,768.1	5,173.0	5,086.0	13.9	18.2	168.63	-3,579.6	980.7	3,989.9	3,963.3	26.57	150.184	
5,807.1	5,775.2	5,173.2	5,086.3	14.0	18.2	168.63	-3,579.6	980.8	3,991.1	3,964.5	26.58	150.142	
5,900.0	5,868.1	5,310.3	5,221.1	14.1	18.7	168.46	-3,598.5	997.0	4,005.8	3,978.6	27.15	147.563	
5,905.5	5,873.6	5,314.7	5,225.4	14.1	18.8	168.45	-3,599.1	997.5	4,006.6	3,979.4	27.17	147.471	
6,000.0	5,968.1	5,458.8	5,367.4	14.3	19.3	168.30	-3,618.8	1,012.1	4,021.4	3,993.7	27.74	144.992	
6,003.9	5,972.1	5,464.5	5,373.0	14.3	19.3	168.30	-3,619.5	1,012.7	4,022.0	3,994.2	27.76	144.896	
6,100.0	6,068.1	5,886.8	5,792.5	14.5	20.4	168.08	-3,658.4	1,036.4	4,030.9	4,002.0	28.86	139.653	
6,102.3	6,070.5	5,890.1	5,795.9	14.5	20.5	168.08	-3,658.6	1,036.5	4,031.0	4,002.2	28.87	139.606	
6,200.0	6,168.1	6,268.8	6,174.2	14.7	21.1	168.07	-3,669.6	1,039.4	4,034.2	4,004.5	29.73	135.693	
6,200.8	6,168.9	6,269.5	6,175.0	14.7	21.1	168.07	-3,669.6	1,039.4	4,034.2	4,004.5	29.73	135.680	
6,288.5	6,256.6	6,341.9	6,247.3	14.9	21.1	168.07	-3,669.2	1,039.4	4,033.8	4,003.8	30.04	134.300	
6,299.2	6,267.3	6,349.8	6,255.2	14.9	21.1	-12.15	-3,669.2	1,039.4	4,033.7	4,003.6	30.10	134.005	
6,300.0	6,268.1	6,350.4	6,255.8	14.9	21.1	-12.15	-3,669.2	1,039.4	4,033.7	4,003.6	30.10	133.990	
6,350.0	6,318.1	6,387.2	6,292.6	15.0	21.2	-12.19	-3,669.2	1,039.5	4,031.2	4,001.0	30.23	133.351	
6,397.6	6,365.3	6,427.6	6,333.1	15.1	21.2	-12.30	-3,669.3	1,039.7	4,025.9	3,995.6	30.24	133.141	
6,400.0	6,367.7	6,429.8	6,335.3	15.1	21.2	-12.31	-3,669.3	1,039.7	4,025.5	3,995.3	30.24	133.139	
6,450.0	6,416.8	6,475.3	6,380.8	15.1	21.3	-12.49	-3,669.5	1,039.7	4,016.5	3,986.3	30.12	133.365	
6,496.0	6,461.3	6,518.0	6,423.4	15.1	21.4	-12.73	-3,669.8	1,039.5	4,005.2	3,975.3	29.90	133.969	
6,500.0	6,465.1	6,521.7	6,427.2	15.1	21.4	-12.75	-3,669.8	1,039.5	4,004.1	3,974.2	29.87	134.037	
6,550.0	6,512.4	6,568.5	6,473.9	15.1	21.4	-13.09	-3,670.1	1,039.3	3,988.5	3,959.0	29.51	135.150	
6,594.5	6,553.4	6,605.5	6,511.0	15.1	21.5	-13.47	-3,670.3	1,039.1	3,972.0	3,942.9	29.09	136.544	
6,600.0	6,558.4	6,609.6	6,515.0	15.1	21.5	-13.52	-3,670.4	1,039.1	3,969.8	3,940.7	29.03	136.745	
6,650.0	6,603.0	6,645.2	6,550.6	15.1	21.5	-14.04	-3,670.7	1,038.8	3,948.0	3,919.5	28.44	138.813	
6,692.9	6,639.9	6,674.7	6,580.2	15.1	21.6	-14.57	-3,671.0	1,038.6	3,927.0	3,899.1	27.87	140.929	
6,700.0	6,645.9	6,686.0	6,591.4	15.1	21.6	-14.68	-3,671.2	1,038.5	3,923.3	3,895.6	27.77	141.257	
6,750.0	6,686.8	6,721.6	6,627.0	15.1	21.6	-15.45	-3,671.7	1,038.2	3,895.9	3,868.8	27.03	144.111	
6,791.3	6,719.1	6,756.4	6,661.9	15.1	21.7	-16.23	-3,672.1	1,038.0	3,871.1	3,844.7	26.40	146.641	
6,800.0	6,725.7	6,763.6	6,669.0	15.1	21.7	-16.41	-3,672.2	1,037.9	3,865.6	3,839.4	26.26	147.189	
6,850.0	6,762.3	6,797.6	6,703.0	15.1	21.7	-17.56	-3,672.6	1,037.6	3,832.8	3,807.3	25.47	150.462	
6,889.7	6,789.7	6,820.5	6,726.0	15.1	21.8	-18.63	-3,672.9	1,037.5	3,805.0	3,780.1	24.86	153.031	
6,900.0	6,796.5	6,826.3	6,731.7	15.1	21.8	-18.93	-3,673.0	1,037.4	3,797.6	3,772.9	24.71	153.660	
6,950.0	6,828.0	6,852.8	6,758.2	15.1	21.8	-20.61	-3,673.4	1,037.2	3,760.2	3,736.1	24.05	156.338	
6,988.2	6,850.2	6,873.0	6,778.4	15.1	21.8	-22.16	-3,673.7	1,037.0	3,730.2	3,706.6	23.66	157.668	
7,000.0	6,856.7	6,873.0	6,778.4	15.1	21.8	-22.65	-3,673.7	1,037.0	3,720.8	3,697.2	23.56	157.951	
7,050.0	6,882.5	6,899.2	6,804.6	15.2	21.9	-25.26	-3,674.2	1,036.8	3,679.5	3,656.1	23.37	157.423	
7,086.6	6,899.5	6,913.8	6,819.2	15.3	21.9	-27.57	-3,674.5	1,036.7	3,648.2	3,624.7	23.50	155.274	
7,100.0	6,905.3	6,918.8	6,824.2	15.4	21.9	-28.52	-3,674.6	1,036.6	3,636.6	3,613.0	23.60	154.059	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 644-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,150.0	6,924.9	6,935.9	6,841.3	15.7	21.9	-32.70	-3,675.0	1,036.4	3,592.2	3,567.8	24.43	147.070	
7,185.0	6,936.7	6,946.3	6,851.7	15.9	21.9	-36.36	-3,675.2	1,036.3	3,560.4	3,535.0	25.44	139.946	
7,200.0	6,941.2	6,950.4	6,855.7	16.0	22.0	-38.15	-3,675.3	1,036.2	3,546.6	3,520.6	25.99	136.439	
7,250.0	6,954.2	6,967.0	6,872.4	16.3	22.0	-45.48	-3,675.7	1,036.0	3,500.0	3,471.6	28.46	122.968	
7,283.4	6,961.0	6,968.9	6,874.3	16.6	22.0	-51.37	-3,675.7	1,036.0	3,468.4	3,438.0	30.46	113.864	
7,300.0	6,963.8	6,972.2	6,877.6	16.7	22.0	-54.81	-3,675.8	1,035.9	3,452.7	3,421.1	31.56	109.383	
7,350.0	6,970.0	6,979.8	6,885.2	17.2	22.0	-66.99	-3,676.0	1,035.8	3,404.7	3,369.8	34.89	97.586	
7,381.9	6,972.1	6,982.7	6,888.1	17.5	22.0	-76.01	-3,676.0	1,035.8	3,374.0	3,337.4	36.57	92.260	
7,400.0	6,972.7	6,983.8	6,889.1	17.7	22.0	-81.45	-3,676.1	1,035.8	3,356.4	3,319.2	37.20	90.222	
7,420.0	6,972.8	6,984.4	6,889.7	17.9	22.0	-87.54	-3,676.1	1,035.8	3,337.1	3,299.6	37.56	88.839	
7,480.3	6,972.2	6,985.3	6,890.6	18.5	22.0	-87.60	-3,676.1	1,035.7	3,278.8	3,240.6	38.21	85.811	
7,500.0	6,972.0	6,985.5	6,890.9	18.7	22.0	-87.62	-3,676.1	1,035.7	3,259.8	3,221.3	38.42	84.845	
7,578.7	6,971.3	6,986.7	6,892.1	19.7	22.0	-87.70	-3,676.1	1,035.7	3,183.8	3,144.5	39.35	80.917	
7,600.0	6,971.1	6,987.0	6,892.4	19.9	22.0	-87.72	-3,676.1	1,035.7	3,163.3	3,123.7	39.60	79.887	
7,677.1	6,970.4	6,988.1	6,893.5	20.9	22.0	-87.80	-3,676.2	1,035.7	3,089.0	3,048.4	40.59	76.103	
7,700.0	6,970.2	6,988.5	6,893.8	21.2	22.0	-87.82	-3,676.2	1,035.7	3,067.1	3,026.2	40.88	75.018	
7,775.6	6,969.5	6,989.6	6,894.9	22.2	22.0	-87.90	-3,676.2	1,035.7	2,994.5	2,952.5	41.93	71.408	
7,800.0	6,969.3	6,989.9	6,895.3	22.6	22.0	-87.92	-3,676.2	1,035.7	2,971.1	2,928.8	42.27	70.280	
7,874.0	6,968.6	6,991.0	6,896.4	23.7	22.0	-87.99	-3,676.2	1,035.7	2,900.2	2,856.8	43.37	66.876	
7,900.0	6,968.4	6,991.4	6,896.7	24.1	22.0	-88.02	-3,676.2	1,035.7	2,875.3	2,831.6	43.75	65.721	
7,972.4	6,967.8	6,992.4	6,897.8	25.2	22.0	-88.09	-3,676.3	1,035.7	2,806.2	2,761.3	44.87	62.539	
8,000.0	6,967.5	6,992.8	6,898.2	25.6	22.0	-88.12	-3,676.3	1,035.7	2,779.9	2,734.6	45.30	61.370	
8,070.8	6,966.9	6,993.8	6,899.2	26.7	22.0	-88.18	-3,676.3	1,035.6	2,712.5	2,666.1	46.43	58.416	
8,100.0	6,966.6	6,994.2	6,899.6	27.2	22.0	-88.21	-3,676.3	1,035.6	2,684.8	2,637.9	46.90	57.243	
8,169.3	6,966.0	6,995.2	6,900.5	28.3	22.0	-88.28	-3,676.3	1,035.6	2,619.1	2,571.1	48.05	54.511	
8,200.0	6,965.7	6,995.6	6,901.0	28.8	22.0	-88.31	-3,676.3	1,035.6	2,590.1	2,541.5	48.56	53.342	
8,267.7	6,965.1	6,996.6	6,901.9	30.0	22.0	-88.37	-3,676.4	1,035.6	2,526.2	2,476.5	49.70	50.825	
8,300.0	6,964.8	6,997.0	6,902.4	30.5	22.0	-88.40	-3,676.4	1,035.6	2,495.8	2,445.5	50.25	49.667	
8,366.1	6,964.2	6,997.9	6,903.3	31.7	22.0	-88.46	-3,676.4	1,035.6	2,433.7	2,382.3	51.39	47.353	
8,400.0	6,963.9	6,998.4	6,903.7	32.2	22.0	-88.50	-3,676.4	1,035.6	2,401.9	2,349.9	51.98	46.209	
8,464.5	6,963.3	6,999.3	6,904.6	33.4	22.0	-88.56	-3,676.4	1,035.6	2,341.6	2,288.5	53.11	44.086	
8,500.0	6,963.0	6,999.8	6,905.1	34.0	22.0	-88.59	-3,676.4	1,035.6	2,308.6	2,254.8	53.74	42.960	
8,563.0	6,962.4	7,000.6	6,906.0	35.1	22.0	-88.65	-3,676.5	1,035.6	2,250.1	2,195.2	54.86	41.015	
8,600.0	6,962.0	7,001.1	6,906.5	35.8	22.0	-88.68	-3,676.5	1,035.6	2,215.8	2,160.3	55.52	39.910	
8,661.4	6,961.5	7,002.0	6,907.3	36.9	22.0	-88.74	-3,676.5	1,035.6	2,159.2	2,102.6	56.63	38.129	
8,700.0	6,961.1	7,002.5	6,907.8	37.6	22.0	-88.77	-3,676.5	1,035.6	2,123.7	2,066.4	57.32	37.047	
8,759.8	6,960.6	7,003.3	6,908.6	38.7	22.0	-88.83	-3,676.5	1,035.5	2,069.0	2,010.6	58.41	35.419	
8,800.0	6,960.2	7,003.8	6,909.2	39.4	22.0	-88.86	-3,676.5	1,035.5	2,032.4	1,973.2	59.15	34.361	
8,858.2	6,959.7	7,004.6	6,910.0	40.5	22.0	-88.92	-3,676.5	1,035.5	1,979.5	1,919.3	60.22	32.873	
8,900.0	6,959.3	7,005.1	6,910.5	41.2	22.0	-88.96	-3,676.6	1,035.5	1,941.9	1,880.9	60.98	31.842	
8,956.7	6,958.8	7,005.9	6,911.3	42.3	22.0	-89.01	-3,676.6	1,035.5	1,891.0	1,829.0	62.03	30.483	
9,000.0	6,958.4	7,006.5	6,911.8	43.1	22.0	-89.05	-3,676.6	1,035.5	1,852.3	1,789.5	62.84	29.478	
9,055.1	6,957.9	7,007.2	6,912.6	44.1	22.0	-89.09	-3,676.6	1,035.5	1,803.5	1,739.6	63.86	28.239	
9,100.0	6,957.5	7,007.8	6,913.1	44.9	22.0	-89.13	-3,676.6	1,035.5	1,763.9	1,699.2	64.70	27.263	
9,153.5	6,957.0	7,008.5	6,913.8	45.9	22.0	-89.18	-3,676.6	1,035.5	1,717.1	1,651.4	65.70	26.134	
9,200.0	6,956.6	7,009.1	6,914.4	46.8	22.0	-89.22	-3,676.7	1,035.5	1,676.8	1,610.2	66.58	25.187	
9,251.9	6,956.1	7,009.8	6,915.1	47.8	22.0	-89.27	-3,676.7	1,035.5	1,632.1	1,564.6	67.55	24.161	
9,300.0	6,955.7	7,010.4	6,915.7	48.7	22.0	-89.31	-3,676.7	1,035.5	1,591.2	1,522.8	68.46	23.243	
9,350.4	6,955.2	7,011.0	6,916.4	49.6	22.0	-89.35	-3,676.7	1,035.5	1,548.8	1,479.4	69.41	22.312	
9,400.0	6,954.8	7,011.7	6,917.0	50.6	22.0	-89.40	-3,676.7	1,035.5	1,507.4	1,437.1	70.35	21.427	
9,448.8	6,954.3	7,012.3	6,917.7	51.5	22.0	-89.44	-3,676.7	1,035.5	1,467.3	1,396.0	71.28	20.585	
9,500.0	6,953.9	7,012.9	6,918.3	52.5	22.0	-89.48	-3,676.7	1,035.5	1,425.7	1,353.4	72.25	19.732	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 644-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,547.2	6,953.4	7,013.5	6,918.9	53.4	22.0	-89.53	-3,676.8	1,035.4	1,387.9	1,314.8	73.15	18.973	
9,600.0	6,952.9	7,014.2	6,919.6	54.4	22.0	-89.57	-3,676.8	1,035.4	1,346.4	1,272.3	74.16	18.156	
9,645.6	6,952.5	7,014.8	6,920.1	55.2	22.0	-89.61	-3,676.8	1,035.4	1,311.2	1,236.2	75.03	17.475	
9,700.0	6,952.0	7,015.5	6,920.8	56.3	22.0	-89.66	-3,676.8	1,035.4	1,270.1	1,194.0	76.07	16.696	
9,744.1	6,951.6	7,016.0	6,921.4	57.1	22.0	-89.69	-3,676.8	1,035.4	1,237.5	1,160.6	76.92	16.090	
9,800.0	6,951.1	7,016.7	6,922.1	58.2	22.0	-89.74	-3,676.8	1,035.4	1,197.3	1,119.3	77.99	15.352	
9,842.5	6,950.7	7,017.2	6,922.6	59.0	22.0	-89.78	-3,676.8	1,035.4	1,167.5	1,088.7	78.80	14.815	
9,900.0	6,950.2	7,018.0	6,923.3	60.1	22.0	-89.82	-3,676.8	1,035.4	1,128.6	1,048.7	79.91	14.123	
9,940.9	6,949.8	7,018.5	6,923.8	60.9	22.1	-89.86	-3,676.9	1,035.4	1,101.9	1,021.2	80.70	13.654	
10,000.0	6,949.3	7,019.2	6,924.5	62.0	22.1	-89.91	-3,676.9	1,035.4	1,064.9	983.0	81.84	13.012	
10,039.3	6,948.9	7,019.7	6,925.0	62.8	22.1	-89.94	-3,676.9	1,035.4	1,041.4	958.8	82.60	12.608	
10,100.0	6,948.4	7,020.4	6,925.8	64.0	22.1	-89.99	-3,676.9	1,035.4	1,007.1	923.3	83.77	12.023	
10,137.8	6,948.0	7,020.9	6,926.2	64.7	22.1	-90.02	-3,676.9	1,035.4	987.0	902.5	84.50	11.681	
10,200.0	6,947.5	7,021.6	6,927.0	65.9	22.1	-90.07	-3,676.9	1,035.4	956.3	870.6	85.70	11.159	
10,236.2	6,947.1	7,022.1	6,927.4	66.6	22.1	-90.10	-3,676.9	1,035.4	939.9	853.5	86.40	10.878	
10,300.0	6,946.6	7,022.8	6,928.2	67.8	22.1	-90.16	-3,677.0	1,035.4	913.7	826.0	87.64	10.425	
10,334.6	6,946.3	7,023.2	6,928.6	68.5	22.1	-90.18	-3,677.0	1,035.4	901.0	812.7	88.31	10.203	
10,400.0	6,945.7	7,024.0	6,929.4	69.8	22.1	-90.24	-3,677.0	1,035.4	880.4	790.8	89.58	9.828	
10,433.0	6,945.4	7,024.4	6,929.8	70.4	22.1	-90.26	-3,677.0	1,035.4	871.6	781.4	90.22	9.661	
10,500.0	6,944.7	7,025.2	6,930.6	71.7	22.1	-90.32	-3,677.0	1,035.3	857.5	766.0	91.52	9.369	
10,531.5	6,944.5	7,025.6	6,930.9	72.3	22.1	-90.34	-3,677.0	1,035.3	852.6	760.5	92.13	9.254	
10,600.0	6,943.8	7,026.4	6,931.7	73.7	22.1	-90.40	-3,677.0	1,035.3	845.9	752.4	93.47	9.050	
10,629.9	6,943.6	7,026.7	6,932.1	74.2	22.1	-90.42	-3,677.0	1,035.3	844.7	750.6	94.05	8.981	
10,648.8	6,943.4	7,027.0	6,932.3	74.6	22.1	-90.44	-3,677.0	1,035.3	844.5	750.1	94.42	8.944 CC, ES	
10,700.0	6,942.9	7,027.6	6,932.9	75.6	22.1	-90.48	-3,677.1	1,035.3	846.0	750.6	95.41	8.867	
10,728.3	6,942.7	7,027.9	6,933.2	76.2	22.1	-90.50	-3,677.1	1,035.3	848.2	752.3	95.97	8.839	
10,800.0	6,942.0	7,028.7	6,934.1	77.6	22.1	-90.56	-3,677.1	1,035.3	857.9	760.6	97.36	8.811 SF	
10,826.7	6,941.8	7,029.0	6,934.4	78.1	22.1	-90.58	-3,677.1	1,035.3	863.0	765.2	97.89	8.817	
10,900.0	6,941.1	7,029.9	6,935.2	79.5	22.1	-90.63	-3,677.1	1,035.3	881.1	781.7	99.32	8.871	
10,925.2	6,940.9	7,030.2	6,935.5	80.0	22.1	-90.65	-3,677.1	1,035.3	888.6	788.8	99.81	8.903	
11,000.0	6,940.2	7,031.0	6,936.4	81.5	22.1	-90.71	-3,677.1	1,035.3	914.6	813.3	101.27	9.031	
11,023.6	6,940.0	7,031.3	6,936.6	81.9	22.1	-90.73	-3,677.1	1,035.3	923.9	822.2	101.73	9.082	
11,100.0	6,939.3	7,032.2	6,937.5	83.4	22.1	-90.79	-3,677.2	1,035.3	957.5	854.2	103.22	9.276	
11,122.0	6,939.1	7,032.4	6,937.8	83.8	22.1	-90.81	-3,677.2	1,035.3	968.0	864.4	103.66	9.339	
11,200.0	6,938.4	7,033.3	6,938.6	85.4	22.1	-90.87	-3,677.2	1,035.3	1,008.5	903.3	105.18	9.588	
11,220.4	6,938.2	7,033.5	6,938.9	85.8	22.1	-90.88	-3,677.2	1,035.3	1,019.8	914.2	105.58	9.659	
11,300.0	6,937.4	7,034.4	6,939.8	87.3	22.1	-90.94	-3,677.2	1,035.3	1,066.4	959.3	107.14	9.953	
11,318.9	6,937.3	7,034.6	6,940.0	87.7	22.1	-90.96	-3,677.2	1,035.3	1,078.0	970.5	107.51	10.027	
11,400.0	6,936.5	7,035.5	6,940.9	89.3	22.1	-91.02	-3,677.2	1,035.3	1,130.2	1,021.1	109.10	10.360	
11,417.3	6,936.4	7,035.7	6,941.1	89.6	22.1	-91.03	-3,677.2	1,035.3	1,141.8	1,032.4	109.44	10.434	
11,500.0	6,935.6	7,036.6	6,942.0	91.3	22.1	-91.09	-3,677.3	1,035.3	1,199.0	1,088.0	111.06	10.796	
11,515.7	6,935.5	7,036.8	6,942.2	91.6	22.1	-91.10	-3,677.3	1,035.3	1,210.2	1,098.9	111.37	10.867	
11,600.0	6,934.7	7,037.7	6,943.1	93.2	22.1	-91.17	-3,677.3	1,035.3	1,272.0	1,158.9	113.02	11.254	
11,614.1	6,934.6	7,037.9	6,943.2	93.5	22.1	-91.18	-3,677.3	1,035.3	1,282.6	1,169.3	113.30	11.321	
11,700.0	6,933.8	7,038.8	6,944.2	95.2	22.1	-91.24	-3,677.3	1,035.3	1,348.4	1,233.4	114.98	11.727	
11,712.6	6,933.7	7,039.0	6,944.3	95.4	22.1	-91.25	-3,677.3	1,035.3	1,358.2	1,243.0	115.23	11.787	
11,800.0	6,932.9	7,039.9	6,945.3	97.1	22.1	-91.31	-3,677.3	1,035.2	1,427.7	1,310.8	116.94	12.208	
11,811.0	6,932.8	7,040.0	6,945.4	97.4	22.1	-91.32	-3,677.3	1,035.2	1,436.6	1,319.4	117.16	12.262	
11,900.0	6,932.0	7,041.0	6,946.3	99.1	22.1	-91.39	-3,677.4	1,035.2	1,509.5	1,390.6	118.91	12.695	
11,909.4	6,931.9	7,041.1	6,946.5	99.3	22.1	-91.39	-3,677.4	1,035.2	1,517.3	1,398.2	119.09	12.741	
12,000.0	6,931.0	7,042.1	6,947.4	101.1	22.1	-91.46	-3,677.4	1,035.2	1,593.3	1,472.5	120.87	13.182	
12,007.8	6,931.0	7,042.2	6,947.5	101.2	22.1	-91.47	-3,677.4	1,035.2	1,600.0	1,479.0	121.03	13.220	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - FRY 21-6I - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 644-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
12,100.0	6,930.1	7,043.1	6,948.5	103.0	22.1	-91.53	-3,677.4	1,035.2	1,679.0	1,556.1	122.84	13.668	
12,106.3	6,930.1	7,043.2	6,948.6	103.2	22.1	-91.54	-3,677.4	1,035.2	1,684.4	1,561.4	122.96	13.699	
12,200.0	6,929.2	7,044.2	6,949.5	105.0	22.1	-91.60	-3,677.4	1,035.2	1,766.1	1,641.3	124.80	14.151	
12,204.7	6,929.2	7,044.2	6,949.6	105.1	22.1	-91.61	-3,677.4	1,035.2	1,770.2	1,645.3	124.89	14.174	
12,300.0	6,928.3	7,045.2	6,950.6	107.0	22.1	-91.67	-3,677.4	1,035.2	1,854.5	1,727.8	126.77	14.629	
12,303.1	6,928.3	7,045.3	6,950.6	107.1	22.1	-91.68	-3,677.4	1,035.2	1,857.3	1,730.5	126.83	14.644	
12,400.0	6,927.4	7,046.3	6,951.6	109.0	22.1	-91.75	-3,677.5	1,035.2	1,944.1	1,815.4	128.74	15.102	
12,401.5	6,927.4	7,046.3	6,951.7	109.0	22.1	-91.75	-3,677.5	1,035.2	1,945.5	1,816.7	128.77	15.109	
12,500.0	6,926.5	7,047.3	6,952.7	110.9	22.1	-91.82	-3,677.5	1,035.2	2,034.6	1,903.9	130.70	15.567	
12,598.4	6,925.6	7,048.3	6,953.7	112.9	22.1	-91.88	-3,677.5	1,035.2	2,124.5	1,991.9	132.64	16.018	
12,600.0	6,925.6	7,048.4	6,953.7	112.9	22.1	-91.89	-3,677.5	1,035.2	2,126.0	1,993.3	132.67	16.025	
12,696.8	6,924.7	7,049.3	6,954.7	114.8	22.1	-91.95	-3,677.5	1,035.2	2,215.2	2,080.6	134.58	16.461	
12,700.0	6,924.6	7,049.4	6,954.7	114.9	22.1	-91.95	-3,677.5	1,035.2	2,218.1	2,083.5	134.64	16.475	
12,795.2	6,923.8	7,050.3	6,955.7	116.8	22.1	-92.02	-3,677.5	1,035.2	2,306.5	2,170.0	136.51	16.896	
12,800.0	6,923.7	7,050.4	6,955.7	116.9	22.1	-92.02	-3,677.6	1,035.2	2,310.9	2,174.3	136.61	16.916	
12,893.7	6,922.9	7,051.3	6,956.7	118.7	22.1	-92.09	-3,677.6	1,035.2	2,398.3	2,259.9	138.45	17.323	
12,900.0	6,922.8	7,051.4	6,956.7	118.8	22.1	-92.09	-3,677.6	1,035.2	2,404.3	2,265.7	138.58	17.350	
12,992.1	6,922.0	7,052.3	6,957.7	120.6	22.1	-92.15	-3,677.6	1,035.2	2,490.7	2,350.3	140.39	17.741	
13,000.0	6,921.9	7,052.4	6,957.8	120.8	22.1	-92.16	-3,677.6	1,035.2	2,498.1	2,357.6	140.54	17.775	
13,090.5	6,921.1	7,053.3	6,958.7	122.6	22.1	-92.22	-3,677.6	1,035.2	2,583.5	2,441.2	142.33	18.152	
13,100.0	6,921.0	7,053.4	6,958.7	122.8	22.1	-92.23	-3,677.6	1,035.2	2,592.5	2,449.9	142.51	18.191	
13,188.9	6,920.2	7,054.3	6,959.6	124.5	22.1	-92.29	-3,677.6	1,035.2	2,676.7	2,532.4	144.27	18.554	
13,200.0	6,920.1	7,054.4	6,959.7	124.8	22.1	-92.29	-3,677.6	1,035.2	2,687.2	2,542.7	144.48	18.599	
13,287.4	6,919.3	7,062.0	6,967.3	126.5	22.1	-92.81	-3,677.8	1,035.1	2,770.3	2,624.1	146.16	18.954	
13,300.0	6,919.1	7,062.0	6,967.3	126.7	22.1	-92.81	-3,677.8	1,035.1	2,782.3	2,635.9	146.41	19.004	
13,385.8	6,918.4	7,062.0	6,967.3	128.4	22.1	-92.81	-3,677.8	1,035.1	2,864.2	2,716.1	148.10	19.339	
13,400.0	6,918.2	7,062.0	6,967.3	128.7	22.1	-92.81	-3,677.8	1,035.1	2,877.7	2,729.4	148.38	19.394	
13,484.2	6,917.5	7,062.0	6,967.3	130.4	22.1	-92.81	-3,677.8	1,035.1	2,958.4	2,808.3	150.05	19.716	
13,500.0	6,917.3	7,062.0	6,967.3	130.7	22.1	-92.81	-3,677.8	1,035.1	2,973.5	2,823.1	150.36	19.776	
13,582.6	6,916.6	7,062.0	6,967.3	132.3	22.1	-92.81	-3,677.8	1,035.1	3,052.8	2,900.8	151.99	20.085	
13,600.0	6,916.4	7,062.0	6,967.3	132.7	22.1	-92.81	-3,677.8	1,035.1	3,069.5	2,917.1	152.34	20.149	
13,681.1	6,915.6	7,062.0	6,967.3	134.3	22.1	-92.81	-3,677.8	1,035.1	3,147.5	2,993.6	153.94	20.446	
13,700.0	6,915.5	7,062.0	6,967.3	134.6	22.1	-92.81	-3,677.8	1,035.1	3,165.7	3,011.4	154.31	20.515	
13,779.5	6,914.7	7,062.0	6,967.3	136.2	22.1	-92.81	-3,677.8	1,035.1	3,242.4	3,086.5	155.89	20.800	
13,800.0	6,914.6	7,062.0	6,967.3	136.6	22.1	-92.81	-3,677.8	1,035.1	3,262.2	3,105.9	156.29	20.873	
13,877.9	6,913.8	7,062.0	6,967.3	138.2	22.1	-92.81	-3,677.8	1,035.1	3,337.5	3,179.7	157.83	21.146	
13,900.0	6,913.6	7,062.0	6,967.3	138.6	22.1	-92.81	-3,677.8	1,035.1	3,358.9	3,200.6	158.27	21.223	
13,976.3	6,912.9	7,062.0	6,967.3	140.1	22.1	-92.81	-3,677.8	1,035.1	3,432.8	3,273.1	159.78	21.485	
14,000.0	6,912.7	7,062.0	6,967.3	140.6	22.1	-92.81	-3,677.8	1,035.1	3,455.8	3,295.5	160.25	21.565	
14,074.8	6,912.0	7,062.0	6,967.3	142.0	22.1	-92.81	-3,677.8	1,035.1	3,528.3	3,366.7	161.66	21.825	
14,079.0	6,912.0	7,062.0	6,967.3	142.1	22.1	-92.81	-3,677.8	1,035.1	3,532.4	3,370.6	161.74	21.839	

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Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - FRY 22-18 - 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		Highside Toolface (°)	Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		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	174.33	-4,240.5	421.1	4,261.4					
98.4	98.4	76.1	76.1	0.1	0.0	174.33	-4,240.5	420.9	4,261.4	4,261.2	0.14	N/A		
100.0	100.0	77.7	77.7	0.1	0.0	174.33	-4,240.5	420.9	4,261.4	4,261.2	0.15	N/A		
196.8	196.8	195.3	195.3	0.3	0.2	174.34	-4,240.3	420.3	4,261.2	4,260.7	0.51	8,370.793		
200.0	200.0	199.3	199.3	0.3	0.2	174.34	-4,240.3	420.3	4,261.1	4,260.6	0.52	8,168.738		
287.7	287.7	264.2	264.2	0.5	0.2	174.34	-4,240.2	420.0	4,260.9	4,260.1	0.76	5,631.646		
295.3	295.3	269.8	269.8	0.5	0.2	174.34	-4,240.2	419.9	4,260.9	4,260.1	0.78	5,484.701		
300.0	300.0	273.3	273.3	0.5	0.2	174.34	-4,240.2	419.9	4,260.9	4,260.1	0.79	5,397.016		
393.7	393.7	353.8	353.8	0.8	0.3	174.35	-4,240.4	419.6	4,261.2	4,260.1	1.04	4,097.348		
400.0	400.0	359.7	359.7	0.8	0.3	174.35	-4,240.5	419.5	4,261.2	4,260.1	1.06	4,031.302		
492.1	492.1	475.0	475.0	1.0	0.3	174.35	-4,240.7	419.7	4,261.5	4,260.2	1.29	3,306.674		
500.0	500.0	487.1	487.1	1.0	0.3	174.35	-4,240.7	419.7	4,261.4	4,260.1	1.31	3,259.524		
590.5	590.5	587.8	587.8	1.2	0.4	174.35	-4,240.3	419.6	4,261.1	4,259.5	1.55	2,745.084		
600.0	600.0	597.9	597.9	1.2	0.4	174.35	-4,240.3	419.5	4,261.0	4,259.4	1.58	2,699.584		
689.0	689.0	675.0	675.0	1.4	0.4	174.36	-4,240.0	419.0	4,260.7	4,258.9	1.82	2,339.134		
700.0	700.0	684.5	684.5	1.4	0.4	174.36	-4,240.0	418.9	4,260.7	4,258.8	1.85	2,301.064		
749.3	749.3	725.8	725.8	1.6	0.4	174.36	-4,240.0	418.6	4,260.6	4,258.6	1.98	2,149.679		
787.4	787.4	757.2	757.1	1.6	0.4	174.36	-4,240.1	418.4	4,260.7	4,258.6	2.08	2,047.439		
800.0	800.0	767.5	767.5	1.7	0.4	174.37	-4,240.1	418.3	4,260.7	4,258.6	2.11	2,015.750		
885.8	885.8	859.4	859.4	1.9	0.5	174.37	-4,240.3	418.1	4,260.9	4,258.6	2.32	1,836.363		
900.0	900.0	877.5	877.5	1.9	0.5	174.37	-4,240.3	418.1	4,260.9	4,258.6	2.35	1,811.520		
984.2	984.2	986.0	986.0	2.1	0.5	174.37	-4,240.0	418.1	4,260.6	4,258.1	2.57	1,657.737		
1,000.0	1,000.0	1,000.0	1,000.0	2.1	0.5	174.37	-4,239.9	418.1	4,260.5	4,257.9	2.61	1,632.214		
1,082.7	1,082.7	1,078.7	1,078.7	2.3	0.5	174.37	-4,239.5	417.7	4,260.1	4,257.3	2.83	1,504.874		
1,100.0	1,100.0	1,094.3	1,094.3	2.3	0.5	174.37	-4,239.5	417.6	4,260.0	4,257.1	2.88	1,480.860		
1,181.1	1,181.1	1,159.2	1,159.2	2.5	0.6	174.38	-4,239.3	417.1	4,259.8	4,256.7	3.08	1,381.484		
1,188.9	1,188.9	1,165.4	1,165.4	2.5	0.6	174.38	-4,239.3	417.1	4,259.8	4,256.7	3.10	1,372.687		
1,200.0	1,200.0	1,174.2	1,174.2	2.6	0.6	174.38	-4,239.4	417.0	4,259.8	4,256.7	3.13	1,360.293		
1,279.5	1,279.5	1,259.6	1,259.6	2.7	0.6	137.88	-4,239.5	416.7	4,260.7	4,257.4	3.30	1,289.212		
1,300.0	1,300.0	1,285.6	1,285.6	2.8	0.6	137.88	-4,239.4	416.7	4,261.2	4,257.8	3.35	1,271.241		
1,377.9	1,377.8	1,375.4	1,375.4	3.0	0.6	137.89	-4,239.1	416.6	4,263.7	4,260.1	3.54	1,202.782		
1,400.0	1,399.8	1,400.0	1,400.0	3.0	0.6	137.89	-4,239.0	416.4	4,264.6	4,261.0	3.60	1,184.728		
1,476.4	1,475.9	1,462.8	1,462.8	3.2	0.6	137.89	-4,238.8	416.0	4,269.0	4,265.2	3.80	1,122.216		
1,500.0	1,499.5	1,482.2	1,482.1	3.2	0.6	137.88	-4,238.7	415.9	4,270.8	4,266.9	3.87	1,104.264		
1,574.8	1,573.7	1,593.8	1,593.7	3.4	0.7	137.92	-4,238.2	415.7	4,277.0	4,272.9	4.08	1,047.797		
1,600.0	1,598.7	1,619.7	1,619.7	3.5	0.7	137.92	-4,238.0	415.7	4,279.3	4,275.1	4.15	1,030.654		
1,673.2	1,671.1	1,686.2	1,686.1	3.7	0.7	137.91	-4,237.4	415.3	4,286.8	4,282.5	4.36	982.453		
1,700.0	1,697.5	1,700.0	1,700.0	3.7	0.7	137.89	-4,237.2	415.1	4,290.0	4,285.6	4.44	966.719		
1,771.6	1,767.9	1,765.0	1,765.0	4.0	0.7	137.88	-4,236.8	414.7	4,299.5	4,294.8	4.66	921.953		
1,800.1	1,795.7	1,787.2	1,787.2	4.0	0.7	137.86	-4,236.8	414.6	4,303.7	4,299.0	4.75	905.659		
1,870.1	1,864.2	1,884.7	1,884.7	4.3	0.8	138.04	-4,236.2	414.7	4,314.2	4,309.2	4.98	866.108		
1,900.0	1,893.4	1,914.7	1,914.7	4.4	0.8	138.10	-4,235.8	414.9	4,318.6	4,313.5	5.08	850.887		
1,968.5	1,960.4	1,964.4	1,964.4	4.6	0.8	138.19	-4,235.4	415.1	4,328.7	4,323.4	5.29	817.735		
2,000.0	1,991.3	2,000.0	2,000.0	4.7	0.8	138.25	-4,235.2	415.2	4,333.5	4,328.1	5.40	802.996		
2,066.9	2,056.7	2,043.0	2,042.9	5.0	0.8	138.33	-4,235.1	415.5	4,343.7	4,338.1	5.61	774.124		
2,100.0	2,089.1	2,071.8	2,071.8	5.1	0.8	138.38	-4,235.0	415.7	4,348.9	4,343.2	5.72	759.958		
2,165.3	2,153.0	2,155.6	2,155.6	5.3	0.8	138.52	-4,234.7	416.6	4,359.0	4,353.1	5.95	733.081		
2,200.0	2,186.9	2,200.0	2,199.9	5.5	0.9	138.59	-4,234.3	417.1	4,364.2	4,358.1	6.06	719.722		
2,263.8	2,249.3	2,247.5	2,247.5	5.7	0.9	138.67	-4,233.9	417.5	4,373.7	4,367.5	6.28	696.908		
2,300.0	2,284.7	2,271.3	2,271.3	5.8	0.9	138.71	-4,233.8	417.7	4,379.3	4,372.9	6.40	684.698		
2,362.2	2,345.5	2,329.0	2,329.0	6.1	0.9	138.81	-4,233.7	418.1	4,389.1	4,382.5	6.61	664.141		
2,400.0	2,382.5	2,388.2	2,388.2	6.2	0.9	138.91	-4,233.5	418.7	4,394.9	4,388.2	6.74	651.707		

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

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Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
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Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - FRY 22-18 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
2,460.6	2,441.8	2,444.8	2,444.7	6.5	0.9	139.01	-4,233.0	419.3	4,404.1	4,397.2	6.95	633.322	
2,500.0	2,480.3	2,477.9	2,477.8	6.6	0.9	139.06	-4,232.8	419.5	4,410.1	4,403.1	7.09	622.046	
2,559.0	2,538.1	2,541.2	2,541.1	6.9	0.9	139.17	-4,232.5	419.6	4,419.2	4,411.9	7.30	605.348	
2,600.0	2,578.1	2,592.7	2,592.6	7.0	0.9	139.26	-4,232.1	419.8	4,425.4	4,418.0	7.45	594.070	
2,657.5	2,634.4	2,649.3	2,649.2	7.3	1.0	139.36	-4,231.6	420.0	4,434.1	4,426.4	7.65	579.473	
2,700.0	2,675.9	2,689.7	2,689.7	7.5	1.0	139.43	-4,231.3	419.9	4,440.5	4,432.7	7.80	569.222	
2,755.9	2,730.6	2,735.4	2,735.3	7.7	1.0	139.52	-4,231.0	419.7	4,449.0	4,441.0	8.00	556.285	
2,800.0	2,773.8	2,770.0	2,769.9	7.9	1.0	139.58	-4,230.8	419.7	4,455.8	4,447.7	8.15	546.543	
2,854.3	2,826.9	2,825.0	2,824.9	8.1	1.0	139.67	-4,230.6	419.8	4,464.3	4,455.9	8.35	534.773	
2,857.4	2,829.9	2,829.7	2,829.6	8.1	1.0	139.68	-4,230.5	419.8	4,464.8	4,456.4	8.36	534.102	
2,900.0	2,871.6	2,895.8	2,895.8	8.3	1.0	139.87	-4,230.0	419.9	4,471.0	4,462.5	8.49	526.455	
2,952.7	2,923.5	2,933.8	2,933.7	8.4	1.0	140.02	-4,229.7	419.9	4,478.0	4,469.4	8.62	519.624	
3,000.0	2,970.1	2,965.7	2,965.6	8.6	1.0	140.14	-4,229.5	419.9	4,483.8	4,475.1	8.73	513.667	
3,051.2	3,020.7	3,000.6	3,000.5	8.7	1.1	140.26	-4,229.4	419.8	4,489.6	4,480.8	8.84	507.751	
3,100.0	3,069.1	3,060.7	3,060.6	8.9	1.1	140.39	-4,229.3	419.8	4,494.6	4,485.6	8.95	502.050	
3,149.6	3,118.3	3,118.9	3,118.8	9.0	1.1	140.49	-4,229.0	419.9	4,498.8	4,489.7	9.06	496.699	
3,200.0	3,168.5	3,172.6	3,172.5	9.1	1.1	140.58	-4,228.7	419.8	4,502.3	4,493.2	9.17	491.190	
3,248.0	3,216.3	3,215.7	3,215.6	9.2	1.1	140.65	-4,228.4	419.6	4,505.1	4,495.8	9.26	486.579	
3,300.0	3,268.2	3,252.3	3,252.2	9.3	1.1	140.70	-4,228.3	419.4	4,507.5	4,498.1	9.35	481.834	
3,346.4	3,314.6	3,285.0	3,285.0	9.4	1.1	140.74	-4,228.3	419.3	4,509.1	4,499.7	9.43	478.030	
3,400.0	3,368.1	3,345.0	3,344.9	9.5	1.1	140.77	-4,228.4	419.1	4,510.4	4,500.9	9.52	473.612	
3,444.9	3,413.0	3,400.0	3,399.9	9.6	1.1	140.78	-4,228.3	419.0	4,510.8	4,501.2	9.59	470.199	
3,457.5	3,425.6	3,414.5	3,414.4	9.6	1.1	177.28	-4,228.3	419.0	4,510.8	4,501.1	9.62	468.824	
3,500.0	3,468.1	3,448.9	3,448.8	9.7	1.1	177.29	-4,228.2	418.9	4,510.7	4,501.0	9.70	465.012	
3,522.1	3,490.3	3,466.8	3,466.8	9.7	1.1	177.29	-4,228.2	418.8	4,510.7	4,500.9	9.74	462.871	
3,543.3	3,511.4	3,484.0	3,483.9	9.7	1.1	177.29	-4,228.2	418.7	4,510.7	4,500.9	9.79	460.843	
3,600.0	3,568.1	3,548.8	3,548.7	9.8	1.1	177.30	-4,228.3	418.1	4,510.7	4,500.8	9.91	455.276	
3,641.7	3,609.9	3,603.4	3,603.3	9.9	1.2	177.30	-4,228.2	417.8	4,510.6	4,500.6	10.00	451.124	
3,700.0	3,668.1	3,671.9	3,671.9	10.0	1.2	177.31	-4,227.9	417.2	4,510.3	4,500.2	10.13	445.303	
3,740.1	3,708.3	3,716.2	3,716.1	10.1	1.2	177.32	-4,227.6	416.5	4,510.1	4,499.9	10.22	441.386	
3,800.0	3,768.1	3,776.0	3,775.8	10.2	1.2	177.33	-4,227.2	415.8	4,509.7	4,499.3	10.35	435.742	
3,838.6	3,806.7	3,812.6	3,812.5	10.2	1.2	177.33	-4,227.0	415.5	4,509.4	4,499.0	10.43	432.188	
3,900.0	3,868.1	3,865.9	3,865.8	10.3	1.2	177.34	-4,226.7	414.9	4,509.1	4,498.5	10.57	426.742	
3,937.0	3,905.1	3,900.0	3,899.9	10.4	1.2	177.34	-4,226.6	414.4	4,508.9	4,498.3	10.65	423.498	
4,000.0	3,968.1	3,968.9	3,968.8	10.5	1.3	177.35	-4,226.3	413.5	4,508.6	4,497.8	10.79	417.989	
4,035.4	4,003.6	4,009.5	4,009.4	10.6	1.3	177.36	-4,226.1	413.2	4,508.4	4,497.5	10.87	414.899	
4,100.0	4,068.1	4,086.0	4,085.9	10.7	1.3	177.37	-4,225.6	412.4	4,507.9	4,496.9	11.01	409.271	
4,133.8	4,102.0	4,100.0	4,099.9	10.8	1.3	177.37	-4,225.4	412.1	4,507.6	4,496.6	11.09	406.625	
4,200.0	4,168.1	4,149.6	4,149.5	10.9	1.3	177.38	-4,225.2	411.3	4,507.3	4,496.1	11.22	401.585	
4,211.0	4,179.2	4,155.8	4,155.7	10.9	1.3	177.38	-4,225.2	411.2	4,507.3	4,496.1	11.25	400.766	
4,232.3	4,200.4	4,167.8	4,167.6	10.9	1.3	177.38	-4,225.2	411.0	4,507.3	4,496.1	11.29	399.203	
4,300.0	4,268.1	4,215.0	4,214.8	11.1	1.3	177.39	-4,225.5	410.3	4,507.7	4,496.3	11.43	394.287	
4,330.7	4,298.8	4,259.4	4,259.2	11.1	1.3	177.40	-4,225.8	409.7	4,507.8	4,496.3	11.50	391.999	
4,400.0	4,368.1	4,356.5	4,356.4	11.2	1.4	177.41	-4,225.9	408.7	4,507.9	4,496.2	11.65	386.813	
4,429.1	4,397.3	4,396.5	4,396.3	11.3	1.4	177.42	-4,225.7	408.1	4,507.8	4,496.0	11.72	384.632	
4,500.0	4,468.1	4,468.7	4,468.5	11.4	1.4	177.44	-4,225.4	407.0	4,507.4	4,495.5	11.88	379.482	
4,527.5	4,495.7	4,496.4	4,496.2	11.5	1.4	177.44	-4,225.3	406.5	4,507.2	4,495.3	11.94	377.511	
4,600.0	4,568.1	4,568.0	4,567.8	11.6	1.4	177.46	-4,225.0	405.2	4,506.9	4,494.8	12.10	372.446	
4,626.0	4,594.1	4,593.6	4,593.4	11.7	1.4	177.46	-4,224.9	404.7	4,506.7	4,494.6	12.16	370.658	
4,700.0	4,668.1	4,654.7	4,654.5	11.8	1.4	177.48	-4,224.7	403.6	4,506.5	4,494.1	12.32	365.778	
4,724.4	4,692.5	4,674.5	4,674.3	11.8	1.5	177.48	-4,224.7	403.2	4,506.4	4,494.0	12.37	364.199	
4,755.2	4,723.3	4,700.0	4,699.8	11.9	1.5	177.49	-4,224.7	402.7	4,506.4	4,494.0	12.44	362.228	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - FRY 22-18 - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
4,800.0	4,768.1	4,745.0	4,744.8	12.0	1.5	177.50	-4,224.7	402.0	4,506.4	4,493.9	12.54	359.377		
4,822.8	4,791.0	4,768.3	4,768.1	12.0	1.5	177.50	-4,224.7	401.7	4,506.4	4,493.8	12.59	357.934		
4,900.0	4,868.1	4,900.0	4,899.8	12.2	1.5	177.50	-4,223.9	401.5	4,505.9	4,493.2	12.76	353.025		
4,921.2	4,889.4	4,928.1	4,927.9	12.2	1.5	177.50	-4,223.5	401.8	4,505.6	4,492.8	12.81	351.607		
5,000.0	4,968.1	4,987.5	4,987.3	12.4	1.5	177.50	-4,222.8	401.8	4,504.7	4,491.7	12.99	346.762		
5,019.7	4,987.8	5,004.9	5,004.7	12.4	1.5	177.50	-4,222.6	401.7	4,504.5	4,491.5	13.04	345.550		
5,100.0	5,068.1	5,122.0	5,121.8	12.6	1.6	177.51	-4,221.1	401.3	4,503.4	4,490.2	13.24	340.244		
5,118.1	5,086.2	5,142.7	5,142.4	12.6	1.6	177.51	-4,220.7	401.2	4,503.1	4,489.8	13.28	339.101		
5,200.0	5,168.1	5,227.4	5,227.1	12.8	1.6	177.52	-4,219.2	400.4	4,501.6	4,488.1	13.47	334.083		
5,216.5	5,184.7	5,241.7	5,241.5	12.8	1.6	177.52	-4,218.9	400.3	4,501.3	4,487.8	13.51	333.108		
5,300.0	5,268.1	5,312.5	5,312.2	13.0	1.6	177.52	-4,217.8	399.7	4,499.9	4,486.2	13.71	328.287		
5,314.9	5,283.1	5,323.9	5,323.6	13.0	1.6	177.52	-4,217.6	399.7	4,499.7	4,485.9	13.74	327.451		
5,400.0	5,368.1	5,400.0	5,399.7	13.1	1.6	177.52	-4,216.7	399.6	4,498.7	4,484.7	13.94	322.715		
5,413.4	5,381.5	5,400.0	5,399.7	13.2	1.6	177.52	-4,216.7	399.6	4,498.5	4,484.6	13.97	322.058		
5,500.0	5,468.1	5,492.7	5,492.4	13.3	1.7	177.52	-4,215.8	400.0	4,497.7	4,483.5	14.18	317.256		
5,511.8	5,479.9	5,500.0	5,499.7	13.4	1.7	177.52	-4,215.7	400.0	4,497.5	4,483.3	14.20	316.645		
5,600.0	5,568.1	5,573.3	5,573.0	13.5	1.7	177.52	-4,215.1	400.2	4,496.8	4,482.4	14.41	312.073		
5,610.2	5,578.4	5,581.4	5,581.1	13.6	1.7	177.52	-4,215.0	400.2	4,496.7	4,482.3	14.43	311.554		
5,691.5	5,659.6	5,636.4	5,636.1	13.7	1.7	177.52	-4,214.9	400.2	4,496.5	4,481.9	14.61	307.744		
5,700.0	5,668.1	5,641.8	5,641.5	13.7	1.7	177.51	-4,214.9	400.3	4,496.5	4,481.9	14.63	307.362		
5,708.6	5,676.8	5,647.3	5,647.0	13.8	1.7	177.51	-4,214.9	400.3	4,496.5	4,481.8	14.65	306.974		
5,800.0	5,768.1	5,712.1	5,711.8	13.9	1.7	177.51	-4,215.2	400.9	4,497.0	4,482.1	14.84	302.950		
5,807.1	5,775.2	5,722.9	5,722.6	14.0	1.7	177.51	-4,215.2	401.0	4,497.0	4,482.1	14.86	302.632		
5,900.0	5,868.1	5,835.5	5,835.2	14.1	1.7	177.48	-4,215.5	402.9	4,497.2	4,482.2	15.07	298.515		
5,905.5	5,873.6	5,840.1	5,839.8	14.1	1.7	177.48	-4,215.5	403.0	4,497.3	4,482.2	15.08	298.276		
6,000.0	5,968.1	5,919.3	5,919.0	14.3	1.7	177.47	-4,215.8	404.0	4,497.6	4,482.3	15.28	294.268		
6,003.9	5,972.1	5,922.5	5,922.2	14.3	1.7	177.47	-4,215.8	404.1	4,497.6	4,482.4	15.29	294.108		
6,100.0	6,068.1	6,004.2	6,003.8	14.5	1.7	177.46	-4,216.4	404.8	4,498.4	4,482.9	15.50	290.251		
6,102.3	6,070.5	6,009.1	6,008.7	14.5	1.7	177.46	-4,216.4	404.9	4,498.4	4,482.9	15.50	290.161		
6,200.0	6,168.1	6,153.7	6,153.4	14.7	1.7	177.46	-4,216.6	404.6	4,498.4	4,482.7	15.71	286.273		
6,200.8	6,168.9	6,154.5	6,154.1	14.7	1.7	177.46	-4,216.6	404.6	4,498.4	4,482.7	15.72	286.241		
6,288.5	6,256.6	6,233.4	6,233.1	14.9	1.7	177.46	-4,216.5	404.7	4,498.3	4,482.4	15.91	282.736		
6,293.3	6,261.5	6,237.3	6,236.9	14.9	1.7	-2.75	-4,216.5	404.7	4,498.3	4,482.4	15.91	282.707		
6,299.2	6,267.3	6,241.9	6,241.6	14.9	1.7	-2.75	-4,216.5	404.7	4,498.2	4,482.3	15.92	282.545		
6,300.0	6,268.1	6,242.6	6,242.2	14.9	1.7	-2.75	-4,216.5	404.7	4,498.2	4,482.3	15.92	282.522		
6,350.0	6,318.1	6,282.3	6,281.9	15.0	1.7	-2.76	-4,216.6	404.9	4,495.8	4,479.8	16.02	280.692		
6,397.6	6,365.3	6,334.6	6,334.2	15.1	1.7	-2.79	-4,216.7	405.1	4,490.3	4,474.1	16.15	278.034		
6,400.0	6,367.7	6,337.8	6,337.5	15.1	1.7	-2.79	-4,216.7	405.2	4,489.9	4,473.7	16.16	277.881		
6,450.0	6,416.8	6,400.0	6,399.6	15.1	1.7	-2.85	-4,216.7	405.7	4,480.4	4,464.1	16.32	274.481		
6,496.0	6,461.3	6,435.4	6,435.1	15.1	1.7	-2.91	-4,216.6	406.1	4,468.7	4,452.2	16.47	271.339		
6,500.0	6,465.1	6,438.2	6,437.8	15.1	1.7	-2.91	-4,216.6	406.2	4,467.5	4,451.0	16.48	271.074		
6,550.0	6,512.4	6,472.7	6,472.4	15.1	1.7	-3.00	-4,216.7	406.5	4,451.4	4,434.8	16.62	267.900		
6,594.5	6,553.4	6,500.0	6,499.6	15.1	1.7	-3.09	-4,216.8	406.8	4,434.5	4,417.8	16.71	265.415		
6,600.0	6,558.4	6,500.0	6,499.6	15.1	1.7	-3.10	-4,216.8	406.8	4,432.2	4,415.5	16.72	265.164		
6,650.0	6,603.0	6,532.0	6,531.6	15.1	1.7	-3.22	-4,217.0	407.1	4,410.0	4,393.2	16.78	262.882		
6,692.9	6,639.9	6,554.2	6,553.9	15.1	1.7	-3.35	-4,217.3	407.4	4,388.6	4,371.9	16.79	261.344		
6,700.0	6,645.9	6,557.9	6,557.5	15.1	1.7	-3.37	-4,217.4	407.4	4,384.9	4,368.1	16.79	261.122		
6,750.0	6,686.8	6,600.0	6,599.6	15.1	1.7	-3.57	-4,218.1	408.0	4,357.1	4,340.3	16.78	259.589		
6,791.3	6,719.1	6,600.0	6,599.6	15.1	1.7	-3.73	-4,218.1	408.0	4,331.9	4,315.2	16.72	259.122		
6,800.0	6,725.7	6,609.8	6,609.4	15.1	1.7	-3.77	-4,218.3	408.1	4,326.4	4,309.7	16.71	258.923		
6,850.0	6,762.3	6,643.5	6,643.1	15.1	1.7	-4.05	-4,219.0	408.7	4,293.3	4,276.6	16.63	258.232		
6,889.7	6,789.7	6,668.8	6,668.4	15.1	1.7	-4.32	-4,219.6	409.1	4,265.1	4,248.5	16.54	257.837		

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 HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - FRY 22-18 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
6,900.0	6,796.5	6,675.1	6,674.7	15.1	1.7	-4.40	-4,219.7	409.2	4,257.6	4,241.1	16.52	257.759	
6,950.0	6,828.0	6,815.0	6,814.6	15.1	1.7	-5.03	-4,221.1	411.6	4,219.2	4,202.7	16.55	254.927	
6,988.2	6,850.2	6,831.6	6,831.2	15.1	1.7	-5.45	-4,221.1	411.8	4,188.2	4,171.7	16.45	254.591	
7,000.0	6,856.7	6,836.5	6,836.1	15.1	1.7	-5.60	-4,221.1	411.8	4,178.3	4,161.9	16.42	254.446	
7,050.0	6,882.5	6,855.9	6,855.4	15.2	1.7	-6.34	-4,221.1	412.0	4,135.6	4,119.3	16.30	253.737	
7,086.6	6,899.5	6,868.7	6,868.2	15.3	1.7	-7.02	-4,221.1	412.1	4,103.2	4,087.0	16.23	252.879	
7,100.0	6,905.3	6,873.0	6,872.6	15.4	1.7	-7.31	-4,221.1	412.1	4,091.2	4,075.0	16.20	252.498	
7,150.0	6,924.9	6,900.0	6,899.6	15.7	1.7	-8.74	-4,221.2	412.4	4,045.3	4,029.2	16.18	249.973	
7,185.0	6,936.7	6,900.0	6,899.6	15.9	1.7	-9.99	-4,221.2	412.4	4,012.4	3,996.2	16.19	247.815	
7,200.0	6,941.2	6,900.6	6,900.2	16.0	1.7	-10.65	-4,221.2	412.4	3,998.2	3,982.0	16.21	246.614	
7,250.0	6,954.2	6,915.6	6,915.2	16.3	1.7	-13.84	-4,221.2	412.5	3,950.1	3,933.6	16.44	240.215	
7,283.4	6,961.0	6,923.5	6,923.0	16.6	1.7	-17.25	-4,221.3	412.5	3,917.4	3,900.6	16.77	233.569	
7,300.0	6,963.8	6,926.7	6,926.3	16.7	1.7	-19.60	-4,221.3	412.5	3,901.1	3,884.1	17.02	229.255	
7,350.0	6,970.0	6,933.8	6,933.4	17.2	1.7	-32.35	-4,221.3	412.6	3,851.6	3,833.2	18.39	209.494	
7,381.9	6,972.1	6,936.3	6,935.9	17.5	1.7	-51.06	-4,221.3	412.6	3,819.9	3,800.1	19.78	193.098	
7,400.0	6,972.7	6,937.0	6,936.6	17.7	1.7	-69.44	-4,221.3	412.6	3,801.8	3,781.9	19.92	190.900	
7,420.0	6,972.8	6,937.2	6,936.8	17.9	1.7	-95.56	-4,221.3	412.6	3,781.9	3,762.6	19.26	196.321	
7,480.3	6,972.2	6,936.8	6,936.4	18.5	1.7	-95.45	-4,221.3	412.6	3,721.6	3,701.7	19.90	186.997	
7,500.0	6,972.0	6,936.7	6,936.2	18.7	1.7	-95.42	-4,221.3	412.6	3,702.0	3,681.9	20.11	184.079	
7,578.7	6,971.3	6,936.1	6,935.7	19.7	1.7	-95.28	-4,221.3	412.6	3,623.4	3,602.4	21.03	172.311	
7,600.0	6,971.1	6,936.0	6,935.5	19.9	1.7	-95.24	-4,221.3	412.6	3,602.2	3,580.9	21.28	169.304	
7,677.1	6,970.4	6,935.4	6,935.0	20.9	1.7	-95.10	-4,221.3	412.6	3,525.2	3,502.9	22.26	158.352	
7,700.0	6,970.2	6,935.3	6,934.8	21.2	1.7	-95.07	-4,221.3	412.6	3,502.4	3,479.8	22.55	155.292	
7,775.6	6,969.5	6,934.7	6,934.3	22.2	1.7	-94.93	-4,221.3	412.6	3,427.0	3,403.4	23.60	145.225	
7,800.0	6,969.3	6,934.6	6,934.1	22.6	1.7	-94.89	-4,221.3	412.6	3,402.6	3,378.6	23.94	142.158	
7,874.0	6,968.6	6,934.1	6,933.6	23.7	1.7	-94.76	-4,221.3	412.6	3,328.7	3,303.7	25.02	133.035	
7,900.0	6,968.4	6,933.9	6,933.5	24.1	1.7	-94.72	-4,221.3	412.6	3,302.8	3,277.4	25.40	130.015	
7,972.4	6,967.8	6,933.4	6,933.0	25.2	1.7	-94.59	-4,221.3	412.6	3,230.6	3,204.0	26.52	121.824	
8,000.0	6,967.5	6,933.2	6,932.8	25.6	1.7	-94.55	-4,221.3	412.6	3,203.0	3,176.1	26.94	118.883	
8,070.8	6,966.9	6,932.7	6,932.3	26.7	1.7	-94.43	-4,221.3	412.6	3,132.4	3,104.3	28.08	111.569	
8,100.0	6,966.6	6,932.5	6,932.1	27.2	1.7	-94.38	-4,221.3	412.6	3,103.3	3,074.8	28.54	108.728	
8,169.3	6,966.0	6,932.1	6,931.6	28.3	1.7	-94.26	-4,221.3	412.6	3,034.2	3,004.5	29.68	102.218	
8,200.0	6,965.7	6,931.9	6,931.4	28.8	1.7	-94.21	-4,221.3	412.6	3,003.6	2,973.4	30.19	99.488	
8,267.7	6,965.1	6,931.4	6,931.0	30.0	1.7	-94.09	-4,221.3	412.6	2,936.1	2,904.7	31.33	93.701	
8,300.0	6,964.8	6,931.2	6,930.8	30.5	1.7	-94.04	-4,221.3	412.6	2,903.9	2,872.0	31.88	91.087	
8,366.1	6,964.2	6,930.8	6,930.3	31.7	1.7	-93.93	-4,221.3	412.6	2,837.9	2,804.9	33.02	85.944	
8,400.0	6,963.9	6,930.5	6,930.1	32.2	1.7	-93.87	-4,221.3	412.6	2,804.2	2,770.6	33.61	83.445	
8,464.5	6,963.3	6,930.1	6,929.7	33.4	1.7	-93.76	-4,221.3	412.6	2,739.8	2,705.1	34.74	78.872	
8,500.0	6,963.0	6,929.9	6,929.4	34.0	1.7	-93.71	-4,221.3	412.6	2,704.5	2,669.1	35.36	76.486	
8,563.0	6,962.4	6,929.5	6,929.0	35.1	1.7	-93.60	-4,221.3	412.6	2,641.7	2,605.3	36.48	72.416	
8,600.0	6,962.0	6,929.2	6,928.8	35.8	1.7	-93.54	-4,221.3	412.6	2,604.9	2,567.7	37.14	70.137	
8,661.4	6,961.5	6,928.8	6,928.4	36.9	1.7	-93.44	-4,221.3	412.6	2,543.7	2,505.4	38.25	66.509	
8,700.0	6,961.1	6,928.6	6,928.1	37.6	1.7	-93.38	-4,221.3	412.6	2,505.2	2,466.3	38.94	64.334	
8,759.8	6,960.6	6,928.2	6,927.8	38.7	1.7	-93.28	-4,221.3	412.6	2,445.7	2,405.6	40.03	61.095	
8,800.0	6,960.2	6,927.9	6,927.5	39.4	1.7	-93.21	-4,221.3	412.6	2,405.7	2,364.9	40.76	59.018	
8,858.2	6,959.7	6,927.6	6,927.1	40.5	1.7	-93.12	-4,221.3	412.6	2,347.7	2,305.8	41.83	56.122	
8,900.0	6,959.3	6,927.3	6,926.9	41.2	1.7	-93.05	-4,221.3	412.6	2,306.1	2,263.5	42.60	54.136	
8,956.7	6,958.8	6,926.9	6,926.5	42.3	1.7	-92.96	-4,221.3	412.6	2,249.7	2,206.1	43.65	51.543	
9,000.0	6,958.4	6,926.7	6,926.2	43.1	1.7	-92.89	-4,221.3	412.5	2,206.6	2,162.2	44.45	49.643	
9,055.1	6,957.9	6,926.3	6,925.9	44.1	1.7	-92.80	-4,221.3	412.5	2,151.8	2,106.3	45.48	47.317	
9,100.0	6,957.5	6,926.0	6,925.6	44.9	1.7	-92.73	-4,221.3	412.5	2,107.2	2,060.8	46.31	45.498	
9,153.5	6,957.0	6,925.7	6,925.3	45.9	1.7	-92.64	-4,221.3	412.5	2,053.9	2,006.6	47.32	43.408	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - FRY 22-18 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,200.0	6,956.6	6,925.4	6,925.0	46.8	1.7	-92.57	-4,221.3	412.5	2,007.7	1,959.6	48.19	41.665	
9,251.9	6,956.1	6,925.1	6,924.6	47.8	1.7	-92.49	-4,221.3	412.5	1,956.1	1,907.0	49.17	39.785	
9,300.0	6,955.7	6,924.8	6,924.3	48.7	1.7	-92.41	-4,221.3	412.5	1,908.4	1,858.3	50.07	38.113	
9,350.4	6,955.2	6,924.5	6,924.0	49.6	1.7	-92.33	-4,221.3	412.5	1,858.4	1,807.4	51.03	36.420	
9,400.0	6,954.8	6,924.2	6,923.7	50.6	1.7	-92.25	-4,221.3	412.5	1,809.1	1,757.2	51.97	34.814	
9,448.8	6,954.3	6,923.9	6,923.4	51.5	1.7	-92.18	-4,221.3	412.5	1,760.7	1,707.8	52.89	33.288	
9,500.0	6,953.9	6,923.5	6,923.1	52.5	1.7	-92.10	-4,221.3	412.5	1,709.9	1,656.1	53.87	31.744	
9,547.2	6,953.4	6,923.3	6,922.8	53.4	1.7	-92.02	-4,221.3	412.5	1,663.1	1,608.4	54.77	30.367	
9,600.0	6,952.9	6,922.9	6,922.5	54.4	1.7	-91.94	-4,221.3	412.5	1,610.9	1,555.1	55.77	28.882	
9,645.6	6,952.5	6,922.7	6,922.2	55.2	1.7	-91.87	-4,221.3	412.5	1,565.7	1,509.0	56.65	27.638	
9,700.0	6,952.0	6,922.3	6,921.9	56.3	1.7	-91.79	-4,221.3	412.5	1,511.9	1,454.2	57.69	26.208	
9,744.1	6,951.6	6,922.1	6,921.6	57.1	1.7	-91.72	-4,221.3	412.5	1,468.3	1,409.8	58.53	25.085	
9,800.0	6,951.1	6,921.7	6,921.3	58.2	1.7	-91.63	-4,221.3	412.5	1,413.1	1,353.5	59.61	23.706	
9,842.5	6,950.7	6,921.5	6,921.0	59.0	1.7	-91.57	-4,221.3	412.5	1,371.1	1,310.7	60.43	22.691	
9,900.0	6,950.2	6,921.1	6,920.7	60.1	1.7	-91.48	-4,221.3	412.5	1,314.4	1,252.9	61.53	21.361	
9,940.9	6,949.8	6,920.9	6,920.4	60.9	1.7	-91.42	-4,221.3	412.5	1,274.1	1,211.8	62.32	20.444	
10,000.0	6,949.3	6,920.5	6,920.1	62.0	1.7	-91.33	-4,221.3	412.5	1,216.0	1,152.5	63.46	19.161	
10,039.3	6,948.9	6,920.3	6,919.9	62.8	1.7	-91.27	-4,221.3	412.5	1,177.3	1,113.1	64.22	18.332	
10,100.0	6,948.4	6,919.9	6,919.5	64.0	1.7	-91.18	-4,221.3	412.5	1,117.9	1,052.5	65.40	17.094	
10,137.8	6,948.0	6,919.7	6,919.3	64.7	1.7	-91.12	-4,221.3	412.5	1,080.9	1,014.7	66.13	16.345	
10,200.0	6,947.5	6,919.3	6,918.9	65.9	1.7	-91.02	-4,221.2	412.5	1,020.1	952.7	67.33	15.150	
10,236.2	6,947.1	6,919.1	6,918.7	66.6	1.7	-90.97	-4,221.2	412.5	984.8	916.8	68.03	14.475	
10,300.0	6,946.6	6,918.8	6,918.3	67.8	1.7	-90.88	-4,221.2	412.5	922.8	853.5	69.27	13.321	
10,334.6	6,946.3	6,918.6	6,918.1	68.5	1.7	-90.82	-4,221.2	412.5	889.2	819.3	69.95	12.713	
10,400.0	6,945.7	6,918.2	6,917.7	69.8	1.7	-90.73	-4,221.2	412.5	826.1	754.9	71.22	11.600	
10,433.0	6,945.4	6,918.0	6,917.5	70.4	1.7	-90.68	-4,221.2	412.5	794.3	722.5	71.86	11.054	
10,500.0	6,944.7	6,917.6	6,917.2	71.7	1.7	-90.58	-4,221.2	412.5	730.3	657.2	73.16	9.982	
10,531.5	6,944.5	6,917.4	6,917.0	72.3	1.7	-90.53	-4,221.2	412.5	700.4	626.7	73.78	9.494	
10,600.0	6,943.8	6,917.0	6,916.6	73.7	1.7	-90.43	-4,221.2	412.5	635.9	560.8	75.11	8.466	
10,629.9	6,943.6	6,916.9	6,916.4	74.2	1.7	-90.39	-4,221.2	412.5	608.0	532.3	75.69	8.032	
10,700.0	6,942.9	6,916.5	6,916.0	75.6	1.7	-90.29	-4,221.2	412.5	543.4	466.3	77.06	7.051	
10,728.3	6,942.7	6,916.3	6,915.9	76.2	1.7	-90.24	-4,221.2	412.5	517.7	440.1	77.62	6.670	
10,800.0	6,942.0	6,915.9	6,915.4	77.6	1.7	-90.14	-4,221.2	412.5	454.1	375.1	79.02	5.747	
10,826.7	6,941.8	6,915.7	6,915.3	78.1	1.7	-90.10	-4,221.2	412.5	431.0	351.5	79.54	5.419	
10,900.0	6,941.1	6,915.3	6,914.9	79.5	1.7	-90.00	-4,221.2	412.5	370.4	289.4	80.97	4.574	
10,925.2	6,940.9	6,915.2	6,914.7	80.0	1.7	-89.96	-4,221.2	412.5	350.6	269.2	81.46	4.304	
11,000.0	6,940.2	6,914.8	6,914.3	81.5	1.7	-89.85	-4,221.2	412.5	296.8	213.9	82.93	3.580	
11,023.6	6,940.0	6,914.6	6,914.2	81.9	1.7	-89.82	-4,221.2	412.5	281.9	198.5	83.39	3.380	
11,100.0	6,939.3	6,914.2	6,913.8	83.4	1.7	-89.71	-4,221.2	412.5	243.0	158.1	84.89	2.863	
11,122.0	6,939.1	6,914.1	6,913.6	83.8	1.7	-89.68	-4,221.2	412.5	235.3	149.9	85.32	2.758	
11,195.3	6,938.4	6,913.7	6,913.2	85.3	1.7	-89.57	-4,221.2	412.5	223.6	136.8	86.75	2.577 CC	
11,200.0	6,938.4	6,913.6	6,913.2	85.4	1.7	-89.57	-4,221.2	412.5	223.6	136.8	86.84	2.575 ES, SF	
11,220.4	6,938.2	6,913.5	6,913.1	85.8	1.7	-89.54	-4,221.2	412.4	225.0	137.7	87.25	2.579	
11,300.0	6,937.4	6,913.1	6,912.7	87.3	1.7	-89.43	-4,221.2	412.4	246.9	158.1	88.81	2.780	
11,318.9	6,937.3	6,913.0	6,912.6	87.7	1.7	-89.40	-4,221.2	412.4	255.4	166.3	89.18	2.864	
11,400.0	6,936.5	6,912.5	6,912.1	89.3	1.7	-89.29	-4,221.2	412.4	303.1	212.4	90.77	3.340	
11,417.3	6,936.4	6,912.5	6,912.0	89.6	1.7	-89.26	-4,221.2	412.4	315.1	224.0	91.11	3.458	
11,500.0	6,935.6	6,912.0	6,911.6	91.3	1.7	-89.15	-4,221.2	412.4	377.9	285.2	92.73	4.075	
11,515.7	6,935.5	6,911.9	6,911.5	91.6	1.7	-89.12	-4,221.2	412.4	390.7	297.7	93.04	4.199	
11,600.0	6,934.7	6,911.5	6,911.0	93.2	1.7	-89.01	-4,221.2	412.4	462.3	367.6	94.69	4.882	
11,614.1	6,934.6	6,911.4	6,910.9	93.5	1.7	-88.99	-4,221.2	412.4	474.8	379.8	94.97	4.999	
11,700.0	6,933.8	6,910.9	6,910.5	95.2	1.7	-88.87	-4,221.2	412.4	552.0	455.3	96.66	5.711	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - FRY 22-18 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
11,712.6	6,933.7	6,910.9	6,910.4	95.4	1.7	-88.85	-4,221.2	412.4	563.5	466.6	96.91	5.815	
11,800.0	6,932.9	6,910.4	6,910.0	97.1	1.7	-88.73	-4,221.2	412.4	644.7	546.1	98.62	6.537	
11,811.0	6,932.8	6,910.3	6,909.9	97.4	1.7	-88.72	-4,221.2	412.4	655.0	556.2	98.84	6.627	
11,900.0	6,932.0	6,909.9	6,909.4	99.1	1.7	-88.60	-4,221.2	412.4	739.3	638.7	100.59	7.350	
11,909.4	6,931.9	6,909.8	6,909.4	99.3	1.7	-88.58	-4,221.2	412.4	748.3	647.5	100.78	7.425	
12,000.0	6,931.0	6,909.3	6,908.9	101.1	1.7	-88.46	-4,221.2	412.4	835.2	732.6	102.56	8.143	
12,007.8	6,931.0	6,909.3	6,908.9	101.2	1.7	-88.45	-4,221.2	412.4	842.7	740.0	102.71	8.205	
12,100.0	6,930.1	6,908.8	6,908.4	103.0	1.7	-88.32	-4,221.2	412.4	931.9	827.4	104.52	8.916	
12,106.3	6,930.1	6,908.8	6,908.3	103.2	1.7	-88.32	-4,221.2	412.4	938.0	833.3	104.65	8.963	
12,200.0	6,929.2	6,908.3	6,907.8	105.0	1.7	-88.19	-4,221.2	412.4	1,029.3	922.8	106.49	9.665	
12,204.7	6,929.2	6,908.3	6,907.8	105.1	1.7	-88.18	-4,221.2	412.4	1,033.9	927.3	106.58	9.700	
12,300.0	6,928.3	6,907.8	6,907.3	107.0	1.7	-88.06	-4,221.2	412.4	1,127.1	1,018.6	108.46	10.392	
12,303.1	6,928.3	6,907.7	6,907.3	107.1	1.7	-88.05	-4,221.2	412.4	1,130.1	1,021.6	108.52	10.414	
12,400.0	6,927.4	6,907.2	6,906.8	109.0	1.7	-87.92	-4,221.2	412.4	1,225.3	1,114.8	110.43	11.096	
12,401.5	6,927.4	6,907.2	6,906.8	109.0	1.7	-87.92	-4,221.2	412.4	1,226.8	1,116.3	110.46	11.106	
12,500.0	6,926.5	6,906.7	6,906.3	110.9	1.7	-87.79	-4,221.2	412.4	1,323.7	1,211.3	112.40	11.777	
12,598.4	6,925.6	6,906.2	6,905.8	112.9	1.7	-87.66	-4,221.2	412.4	1,420.8	1,306.5	114.33	12.427	
12,600.0	6,925.6	6,906.2	6,905.8	112.9	1.7	-87.66	-4,221.2	412.4	1,422.4	1,308.0	114.36	12.437	
12,696.8	6,924.7	6,905.7	6,905.3	114.8	1.7	-87.54	-4,221.2	412.4	1,518.1	1,401.8	116.27	13.056	
12,700.0	6,924.6	6,905.7	6,905.3	114.9	1.7	-87.53	-4,221.2	412.4	1,521.2	1,404.9	116.33	13.076	
12,795.2	6,923.8	6,905.2	6,904.8	116.8	1.7	-87.41	-4,221.2	412.4	1,615.5	1,497.3	118.21	13.667	
12,800.0	6,923.7	6,905.2	6,904.8	116.9	1.7	-87.40	-4,221.2	412.4	1,620.2	1,501.9	118.30	13.696	
12,893.7	6,922.9	6,904.7	6,904.3	118.7	1.7	-87.28	-4,221.2	412.4	1,713.0	1,592.9	120.14	14.258	
12,900.0	6,922.8	6,904.7	6,904.3	118.8	1.7	-87.27	-4,221.2	412.4	1,719.3	1,599.0	120.27	14.295	
12,992.1	6,922.0	6,904.2	6,903.8	120.6	1.7	-87.15	-4,221.2	412.4	1,810.6	1,688.6	122.08	14.831	
13,000.0	6,921.9	6,904.2	6,903.8	120.8	1.7	-87.14	-4,221.2	412.4	1,818.5	1,696.2	122.24	14.877	
13,090.5	6,921.1	6,903.8	6,903.3	122.6	1.7	-87.03	-4,221.2	412.4	1,908.3	1,784.3	124.02	15.388	
13,100.0	6,921.0	6,903.7	6,903.3	122.8	1.7	-87.02	-4,221.2	412.4	1,917.8	1,793.5	124.20	15.440	
13,188.9	6,920.2	6,903.3	6,902.8	124.5	1.7	-86.90	-4,221.2	412.4	2,006.1	1,880.2	125.95	15.927	
13,200.0	6,920.1	6,903.2	6,902.8	124.8	1.7	-86.89	-4,221.2	412.4	2,017.1	1,890.9	126.17	15.987	
13,287.4	6,919.3	6,900.0	6,899.6	126.5	1.7	-86.07	-4,221.2	412.4	2,104.0	1,976.1	127.84	16.458	
13,300.0	6,919.1	6,900.0	6,899.6	126.7	1.7	-86.07	-4,221.2	412.4	2,116.5	1,988.4	128.09	16.524	
13,385.8	6,918.4	6,900.0	6,899.6	128.4	1.7	-86.07	-4,221.2	412.4	2,201.9	2,072.1	129.78	16.965	
13,400.0	6,918.2	6,900.0	6,899.6	128.7	1.7	-86.07	-4,221.2	412.4	2,216.0	2,085.9	130.06	17.038	
13,484.2	6,917.5	6,900.0	6,899.6	130.4	1.7	-86.07	-4,221.2	412.4	2,299.8	2,168.1	131.73	17.459	
13,500.0	6,917.3	6,900.0	6,899.6	130.7	1.7	-86.06	-4,221.2	412.4	2,315.5	2,183.4	132.04	17.536	
13,582.6	6,916.6	6,900.0	6,899.6	132.3	1.7	-86.06	-4,221.2	412.4	2,397.8	2,264.1	133.67	17.938	
13,600.0	6,916.4	6,900.0	6,899.6	132.7	1.7	-86.06	-4,221.2	412.4	2,415.0	2,281.0	134.01	18.021	
13,681.1	6,915.6	6,900.0	6,899.6	134.3	1.7	-86.06	-4,221.2	412.4	2,495.8	2,360.2	135.61	18.403	
13,700.0	6,915.5	6,900.0	6,899.6	134.6	1.7	-86.06	-4,221.2	412.4	2,514.6	2,378.6	135.99	18.491	
13,779.5	6,914.7	6,900.0	6,899.6	136.2	1.7	-86.06	-4,221.2	412.4	2,593.8	2,456.3	137.56	18.856	
13,800.0	6,914.6	6,900.0	6,899.6	136.6	1.7	-86.06	-4,221.2	412.4	2,614.2	2,476.3	137.96	18.949	
13,877.9	6,913.8	6,899.9	6,899.5	138.2	1.7	-86.04	-4,221.2	412.4	2,691.9	2,552.4	139.50	19.296	
13,900.0	6,913.6	6,899.8	6,899.3	138.6	1.7	-86.00	-4,221.2	412.3	2,713.9	2,574.0	139.93	19.394	
13,976.3	6,912.9	6,899.3	6,898.8	140.1	1.7	-85.87	-4,221.2	412.3	2,790.0	2,648.6	141.43	19.727	
14,000.0	6,912.7	6,899.1	6,898.7	140.6	1.7	-85.83	-4,221.2	412.3	2,813.6	2,671.7	141.89	19.829	
14,074.8	6,912.0	6,898.6	6,898.1	142.0	1.7	-85.70	-4,221.2	412.3	2,888.1	2,744.8	143.30	20.155	
14,079.0	6,912.0	6,898.5	6,898.1	142.1	1.7	-85.69	-4,221.2	412.3	2,892.3	2,748.9	143.37	20.173	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - FRY 5 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-177.56	-3,657.6	-156.2	3,661.2				
98.4	98.4	62.4	62.4	0.1	0.0	-177.55	-3,657.6	-156.2	3,661.0	3,660.8	0.14	N/A	
100.0	100.0	64.0	64.0	0.1	0.1	-177.55	-3,657.6	-156.2	3,661.0	3,660.8	0.15	N/A	
162.9	162.9	125.4	125.4	0.2	0.1	-177.55	-3,657.6	-156.5	3,660.9	3,660.6	0.35	N/A	
196.8	196.8	156.5	156.5	0.3	0.2	-177.55	-3,657.6	-156.6	3,660.9	3,660.5	0.47	7,725.063	
200.0	200.0	159.3	159.3	0.3	0.2	-177.55	-3,657.6	-156.7	3,660.9	3,660.5	0.49	7,546.653	
295.3	295.3	286.4	286.4	0.5	0.3	-177.53	-3,657.3	-157.7	3,660.9	3,660.0	0.82	4,474.467	
300.0	300.0	294.4	294.4	0.5	0.3	-177.53	-3,657.3	-157.8	3,660.8	3,660.0	0.83	4,387.020	
393.7	393.7	386.6	386.6	0.8	0.4	-177.52	-3,656.4	-158.6	3,660.0	3,658.9	1.11	3,287.904	
400.0	400.0	392.6	392.6	0.8	0.4	-177.52	-3,656.4	-158.7	3,659.9	3,658.8	1.13	3,233.664	
492.1	492.1	522.7	522.7	1.0	0.4	-177.51	-3,654.6	-159.1	3,658.7	3,657.3	1.41	2,591.600	
500.0	500.0	531.8	531.7	1.0	0.4	-177.51	-3,654.4	-159.1	3,658.5	3,657.1	1.43	2,550.298	
590.5	590.5	628.5	628.5	1.2	0.5	-177.51	-3,652.4	-158.9	3,656.7	3,655.0	1.69	2,162.291	
600.0	600.0	637.2	637.1	1.2	0.5	-177.51	-3,652.3	-158.9	3,656.5	3,654.8	1.72	2,129.874	
689.0	689.0	724.0	724.0	1.4	0.5	-177.51	-3,650.6	-158.5	3,654.7	3,652.8	1.96	1,864.894	
700.0	700.0	737.1	737.0	1.4	0.5	-177.51	-3,650.3	-158.5	3,654.5	3,652.5	1.99	1,835.983	
787.4	787.4	835.1	835.0	1.6	0.6	-177.53	-3,648.2	-157.6	3,652.6	3,650.3	2.23	1,637.175	
800.0	800.0	848.1	848.0	1.7	0.6	-177.53	-3,647.9	-157.5	3,652.3	3,650.0	2.26	1,612.497	
885.8	885.8	931.9	931.8	1.9	0.6	-177.53	-3,645.9	-157.0	3,650.3	3,647.8	2.49	1,463.924	
900.0	900.0	944.7	944.6	1.9	0.6	-177.53	-3,645.6	-157.0	3,649.9	3,647.4	2.53	1,442.353	
984.2	984.2	1,025.5	1,025.3	2.1	0.7	-177.55	-3,643.9	-156.2	3,648.1	3,645.4	2.75	1,325.551	
1,000.0	1,000.0	1,043.0	1,042.8	2.1	0.7	-177.55	-3,643.6	-156.1	3,647.8	3,645.0	2.79	1,305.466	
1,082.7	1,082.7	1,135.5	1,135.3	2.3	0.7	-177.56	-3,641.4	-155.0	3,645.9	3,642.8	3.02	1,209.194	
1,100.0	1,100.0	1,155.1	1,154.9	2.3	0.7	-177.56	-3,641.0	-154.8	3,645.4	3,642.4	3.06	1,190.778	
1,181.1	1,181.1	1,246.0	1,245.8	2.5	0.8	-177.58	-3,638.6	-153.9	3,643.3	3,640.0	3.28	1,111.559	
1,200.0	1,200.0	1,267.0	1,266.8	2.6	0.8	-177.58	-3,638.0	-153.7	3,642.7	3,639.4	3.33	1,094.597	
1,279.5	1,279.5	1,346.8	1,346.5	2.7	0.8	145.94	-3,635.7	-153.3	3,641.3	3,637.8	3.55	1,026.375	
1,298.2	1,298.2	1,364.3	1,364.0	2.8	0.8	145.94	-3,635.2	-153.3	3,641.3	3,637.7	3.60	1,012.608	
1,300.0	1,300.0	1,366.0	1,365.7	2.8	0.8	145.94	-3,635.1	-153.3	3,641.3	3,637.7	3.60	1,011.279	
1,377.9	1,377.8	1,438.7	1,438.4	3.0	0.8	145.96	-3,633.1	-153.1	3,642.2	3,638.4	3.80	957.708	
1,400.0	1,399.8	1,459.2	1,458.9	3.0	0.9	145.97	-3,632.6	-153.1	3,642.9	3,639.0	3.86	943.661	
1,476.4	1,475.9	1,535.3	1,534.9	3.2	0.9	145.99	-3,630.6	-153.1	3,646.1	3,642.1	4.07	896.923	
1,500.0	1,499.5	1,561.0	1,560.6	3.2	0.9	145.99	-3,629.9	-153.1	3,647.5	3,643.3	4.13	883.338	
1,574.8	1,573.7	1,644.2	1,643.8	3.4	0.9	146.03	-3,627.5	-153.4	3,652.7	3,648.3	4.34	842.017	
1,600.0	1,598.7	1,672.8	1,672.4	3.5	0.9	146.04	-3,626.7	-153.6	3,654.7	3,650.3	4.41	829.097	
1,673.2	1,671.1	1,742.1	1,741.6	3.7	1.0	146.06	-3,624.5	-154.1	3,661.8	3,657.2	4.62	793.371	
1,700.0	1,697.5	1,764.9	1,764.4	3.7	1.0	146.07	-3,623.9	-154.3	3,664.8	3,660.1	4.69	781.353	
1,771.6	1,767.9	1,820.6	1,820.2	4.0	1.0	146.06	-3,622.3	-154.7	3,674.0	3,669.1	4.90	749.737	
1,800.1	1,795.7	1,839.9	1,839.5	4.0	1.0	146.05	-3,621.9	-154.8	3,678.1	3,673.1	4.98	738.138	
1,870.1	1,864.2	1,900.0	1,899.5	4.3	1.0	146.17	-3,620.7	-155.4	3,689.0	3,683.8	5.20	709.925	
1,900.0	1,893.4	1,910.0	1,909.5	4.4	1.0	146.19	-3,620.6	-155.5	3,693.7	3,688.4	5.28	699.485	
1,968.5	1,960.4	1,972.0	1,971.5	4.6	1.0	146.32	-3,619.7	-156.3	3,704.7	3,699.2	5.50	674.086	
2,000.0	1,991.3	2,000.6	2,000.1	4.7	1.1	146.38	-3,619.3	-156.7	3,709.8	3,704.2	5.59	663.323	
2,066.9	2,056.7	2,070.2	2,069.7	5.0	1.1	146.52	-3,618.3	-157.7	3,720.6	3,714.8	5.80	641.162	
2,100.0	2,089.1	2,100.0	2,099.5	5.1	1.1	146.58	-3,617.9	-158.1	3,725.9	3,720.0	5.91	630.584	
2,165.3	2,153.0	2,158.2	2,157.6	5.3	1.1	146.69	-3,617.1	-158.9	3,736.5	3,730.4	6.12	610.864	
2,200.0	2,186.9	2,187.0	2,186.5	5.5	1.1	146.75	-3,616.8	-159.3	3,742.2	3,736.0	6.23	600.991	
2,263.8	2,249.3	2,237.0	2,236.5	5.7	1.1	146.85	-3,616.3	-159.9	3,752.9	3,746.4	6.43	583.665	
2,300.0	2,284.7	2,264.8	2,264.3	5.8	1.1	146.91	-3,616.1	-160.4	3,759.0	3,752.5	6.54	574.358	
2,362.2	2,345.5	2,313.9	2,313.3	6.1	1.2	147.01	-3,615.9	-161.3	3,769.8	3,763.0	6.74	558.991	
2,400.0	2,382.5	2,346.2	2,345.7	6.2	1.2	147.07	-3,615.8	-161.9	3,776.4	3,769.5	6.86	550.135	
2,460.6	2,441.8	2,400.0	2,399.4	6.5	1.2	147.18	-3,615.8	-162.9	3,787.1	3,780.0	7.06	536.446	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - FRY 5 - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT													Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
2,500.0	2,480.3	2,427.9	2,427.4	6.6	1.2	147.24	-3,615.9	-163.4	3,794.1	3,786.9	7.18	528.116		
2,559.0	2,538.1	2,472.4	2,471.8	6.9	1.2	147.33	-3,616.1	-164.2	3,804.8	3,797.5	7.37	516.153		
2,600.0	2,578.1	2,500.0	2,499.4	7.0	1.2	147.38	-3,616.3	-164.8	3,812.4	3,804.9	7.50	508.184		
2,657.5	2,634.4	2,549.2	2,548.6	7.3	1.2	147.48	-3,616.7	-165.9	3,823.2	3,815.5	7.69	497.460		
2,700.0	2,675.9	2,583.2	2,582.5	7.5	1.2	147.55	-3,617.1	-166.5	3,831.3	3,823.5	7.82	489.867		
2,755.9	2,730.6	2,641.0	2,640.4	7.7	1.2	147.66	-3,617.9	-167.6	3,842.0	3,834.0	8.00	480.242		
2,800.0	2,773.8	2,693.0	2,692.3	7.9	1.2	147.77	-3,618.5	-168.7	3,850.3	3,842.2	8.14	472.971		
2,854.3	2,826.9	2,737.4	2,736.7	8.1	1.2	147.85	-3,618.9	-169.7	3,860.6	3,852.3	8.31	464.382		
2,857.4	2,829.9	2,739.7	2,739.1	8.1	1.2	147.86	-3,618.9	-169.7	3,861.2	3,852.9	8.32	463.915		
2,900.0	2,871.6	2,772.7	2,772.1	8.3	1.2	148.01	-3,619.4	-170.4	3,869.1	3,860.7	8.43	458.777		
2,952.7	2,923.5	2,821.4	2,820.7	8.4	1.2	148.19	-3,620.1	-171.4	3,878.3	3,869.7	8.55	453.726		
3,000.0	2,970.1	2,879.0	2,878.3	8.6	1.3	148.36	-3,620.9	-172.6	3,885.8	3,877.1	8.65	449.207		
3,051.2	3,020.7	2,931.3	2,930.6	8.7	1.3	148.52	-3,621.5	-173.8	3,893.0	3,884.2	8.75	444.692		
3,100.0	3,069.1	2,976.3	2,975.6	8.9	1.3	148.64	-3,622.0	-174.7	3,899.2	3,890.4	8.85	440.443		
3,149.6	3,118.3	3,019.3	3,018.6	9.0	1.3	148.75	-3,622.6	-175.5	3,904.9	3,895.9	8.95	436.447		
3,200.0	3,168.5	3,059.9	3,059.2	9.1	1.3	148.84	-3,623.2	-176.2	3,910.0	3,901.0	9.04	432.411		
3,248.0	3,216.3	3,100.0	3,099.2	9.2	1.3	148.92	-3,624.0	-177.0	3,914.3	3,905.2	9.13	428.885		
3,300.0	3,268.2	3,163.6	3,162.8	9.3	1.3	149.01	-3,625.1	-178.2	3,918.1	3,908.9	9.22	425.028		
3,346.4	3,314.6	3,218.7	3,217.9	9.4	1.3	149.06	-3,625.9	-178.9	3,920.7	3,911.4	9.29	421.836		
3,400.0	3,368.1	3,275.1	3,274.3	9.5	1.3	149.11	-3,626.6	-179.6	3,922.9	3,913.5	9.38	418.134		
3,444.9	3,413.0	3,319.6	3,318.8	9.6	1.3	149.13	-3,627.2	-180.2	3,924.0	3,914.5	9.45	415.219		
3,457.5	3,425.6	3,331.2	3,330.3	9.6	1.3	-174.36	-3,627.4	-180.4	3,924.2	3,914.7	9.48	414.079		
3,500.0	3,468.1	3,370.2	3,369.4	9.7	1.3	-174.35	-3,627.9	-180.9	3,924.8	3,915.3	9.56	410.709		
3,543.3	3,511.4	3,414.5	3,413.7	9.7	1.3	-174.35	-3,628.6	-181.4	3,925.5	3,915.9	9.65	406.985		
3,600.0	3,568.1	3,489.8	3,489.0	9.8	1.4	-174.34	-3,629.5	-182.1	3,926.3	3,916.5	9.76	402.126		
3,641.7	3,609.9	3,529.9	3,529.1	9.9	1.4	-174.33	-3,629.9	-182.4	3,926.7	3,916.8	9.85	398.636		
3,700.0	3,668.1	3,581.2	3,580.3	10.0	1.4	-174.33	-3,630.4	-182.9	3,927.4	3,917.4	9.97	393.890		
3,740.1	3,708.3	3,619.1	3,618.2	10.1	1.4	-174.32	-3,630.9	-183.3	3,927.9	3,917.9	10.05	390.682		
3,800.0	3,768.1	3,680.1	3,679.2	10.2	1.4	-174.32	-3,631.7	-183.5	3,928.7	3,918.5	10.18	386.014		
3,838.6	3,806.7	3,723.0	3,722.1	10.2	1.4	-174.32	-3,632.3	-183.4	3,929.2	3,918.9	10.26	383.003		
3,900.0	3,868.1	3,797.1	3,796.2	10.3	1.4	-174.33	-3,633.0	-183.2	3,929.8	3,919.5	10.39	378.235		
3,937.0	3,905.1	3,828.0	3,827.1	10.4	1.4	-174.33	-3,633.3	-183.1	3,930.2	3,919.7	10.47	375.451		
4,000.0	3,968.1	3,878.9	3,878.0	10.5	1.4	-174.33	-3,633.9	-183.1	3,930.9	3,920.3	10.60	370.828		
4,035.4	4,003.6	3,911.8	3,910.9	10.6	1.4	-174.33	-3,634.4	-183.1	3,931.4	3,920.8	10.68	368.257		
4,100.0	4,068.1	3,993.1	3,992.2	10.7	1.4	-174.33	-3,635.4	-182.9	3,932.2	3,921.4	10.82	363.568		
4,133.8	4,102.0	4,029.6	4,028.7	10.8	1.4	-174.34	-3,635.8	-182.7	3,932.5	3,921.6	10.89	361.151		
4,200.0	4,168.1	4,098.7	4,097.8	10.9	1.4	-174.34	-3,636.4	-182.6	3,933.1	3,922.1	11.03	356.528		
4,232.3	4,200.4	4,136.0	4,135.1	10.9	1.4	-174.34	-3,636.7	-182.6	3,933.3	3,922.2	11.10	354.279		
4,300.0	4,268.1	4,214.9	4,214.0	11.1	1.4	-174.34	-3,637.1	-182.5	3,933.7	3,922.5	11.25	349.642		
4,330.7	4,298.8	4,251.4	4,250.5	11.1	1.4	-174.34	-3,637.3	-182.4	3,933.8	3,922.5	11.32	347.572		
4,400.0	4,368.1	4,332.0	4,331.1	11.2	1.4	-174.35	-3,637.4	-182.0	3,933.9	3,922.5	11.47	343.018		
4,429.1	4,397.3	4,364.9	4,364.0	11.3	1.4	-174.35	-3,637.4	-182.0	3,933.9	3,922.4	11.53	341.153		
4,500.0	4,468.1	4,433.2	4,432.3	11.4	1.4	-174.35	-3,637.3	-181.9	3,933.8	3,922.1	11.68	336.793		
4,510.4	4,478.5	4,441.9	4,441.0	11.4	1.4	-174.35	-3,637.3	-181.9	3,933.8	3,922.1	11.70	336.172		
4,527.5	4,495.7	4,456.3	4,455.4	11.5	1.4	-174.35	-3,637.3	-181.9	3,933.8	3,922.1	11.74	335.155		
4,600.0	4,568.1	4,522.6	4,521.7	11.6	1.4	-174.35	-3,637.4	-182.0	3,934.0	3,922.1	11.89	330.903		
4,626.0	4,594.1	4,551.8	4,550.9	11.7	1.4	-174.35	-3,637.5	-181.9	3,934.0	3,922.1	11.94	329.370		
4,700.0	4,668.1	4,645.9	4,645.0	11.8	1.4	-174.35	-3,637.5	-181.7	3,934.0	3,921.9	12.10	325.089		
4,724.4	4,692.5	4,681.9	4,681.0	11.8	1.4	-174.35	-3,637.3	-181.9	3,933.9	3,921.7	12.15	323.702		
4,800.0	4,768.1	4,782.7	4,781.8	12.0	1.5	-174.33	-3,636.1	-183.6	3,933.1	3,920.8	12.32	319.120		
4,822.8	4,791.0	4,815.9	4,815.0	12.0	1.5	-174.31	-3,635.5	-184.4	3,932.8	3,920.4	12.38	317.717		
4,900.0	4,868.1	4,927.7	4,926.7	12.2	1.5	-174.27	-3,632.9	-187.3	3,931.1	3,918.6	12.56	313.010		

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - FRY 5 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
4,921.2	4,889.4	4,949.8	4,948.8	12.2	1.5	-174.26	-3,632.3	-187.8	3,930.6	3,918.0	12.61	311.763	
5,000.0	4,968.1	5,038.0	5,036.9	12.4	1.5	-174.23	-3,629.8	-189.8	3,928.6	3,915.8	12.79	307.193	
5,019.7	4,987.8	5,062.5	5,061.4	12.4	1.5	-174.22	-3,629.1	-190.3	3,928.1	3,915.2	12.83	306.053	
5,100.0	5,068.1	5,140.8	5,139.6	12.6	1.5	-174.20	-3,626.7	-191.5	3,925.7	3,912.7	13.02	301.560	
5,118.1	5,086.2	5,155.5	5,154.3	12.6	1.5	-174.19	-3,626.3	-191.7	3,925.2	3,912.2	13.06	300.577	
5,200.0	5,168.1	5,200.0	5,198.8	12.8	1.6	-174.18	-3,625.1	-192.3	3,923.3	3,910.0	13.24	296.318	
5,216.5	5,184.7	5,227.7	5,226.6	12.8	1.6	-174.18	-3,624.4	-192.7	3,922.9	3,909.6	13.28	295.401	
5,300.0	5,268.1	5,280.9	5,279.7	13.0	1.6	-174.16	-3,623.5	-193.4	3,921.5	3,908.0	13.47	291.229	
5,314.9	5,283.1	5,300.0	5,298.8	13.0	1.6	-174.16	-3,623.2	-193.6	3,921.3	3,907.8	13.50	290.464	
5,400.0	5,368.1	5,370.0	5,368.8	13.1	1.6	-174.15	-3,622.5	-194.3	3,920.5	3,906.8	13.69	286.323	
5,413.4	5,381.5	5,383.4	5,382.2	13.2	1.6	-174.15	-3,622.3	-194.3	3,920.3	3,906.6	13.72	285.673	
5,500.0	5,468.1	5,482.4	5,481.2	13.3	1.6	-174.15	-3,621.3	-194.0	3,919.4	3,905.5	13.92	281.504	
5,511.8	5,479.9	5,496.3	5,495.1	13.4	1.6	-174.16	-3,621.1	-193.8	3,919.2	3,905.3	13.95	280.941	
5,600.0	5,568.1	5,610.5	5,609.2	13.5	1.6	-174.19	-3,619.4	-191.1	3,917.7	3,903.6	14.16	276.662	
5,610.2	5,578.4	5,620.1	5,618.8	13.6	1.6	-174.19	-3,619.2	-190.9	3,917.5	3,903.3	14.18	276.185	
5,700.0	5,668.1	5,705.1	5,703.8	13.7	1.6	-174.23	-3,617.9	-188.1	3,915.8	3,901.4	14.39	272.074	
5,708.6	5,676.8	5,714.1	5,712.8	13.8	1.6	-174.24	-3,617.8	-187.8	3,915.6	3,901.2	14.41	271.681	
5,800.0	5,768.1	5,811.9	5,810.5	13.9	1.6	-174.29	-3,616.2	-183.8	3,913.9	3,899.2	14.63	267.587	
5,807.1	5,775.2	5,821.0	5,819.5	14.0	1.6	-174.30	-3,616.1	-183.5	3,913.7	3,899.1	14.64	267.267	
5,900.0	5,868.1	5,935.1	5,933.5	14.1	1.7	-174.36	-3,613.8	-179.0	3,911.5	3,896.6	14.87	263.133	
5,905.5	5,873.6	5,941.3	5,939.7	14.1	1.7	-174.36	-3,613.7	-178.8	3,911.3	3,896.5	14.88	262.892	
6,000.0	5,968.1	6,042.7	6,041.0	14.3	1.7	-174.41	-3,611.1	-175.6	3,908.7	3,893.6	15.10	258.825	
6,003.9	5,972.1	6,046.6	6,045.0	14.3	1.7	-174.41	-3,611.0	-175.5	3,908.6	3,893.5	15.11	258.659	
6,100.0	6,068.1	6,137.5	6,135.8	14.5	1.7	-174.44	-3,608.7	-173.0	3,905.9	3,890.6	15.34	254.686	
6,102.3	6,070.5	6,139.6	6,137.9	14.5	1.7	-174.44	-3,608.7	-173.0	3,905.9	3,890.5	15.34	254.591	
6,200.0	6,168.1	6,243.2	6,241.5	14.7	1.7	-174.48	-3,606.2	-170.0	3,903.3	3,887.7	15.57	250.641	
6,200.8	6,168.9	6,244.4	6,242.6	14.7	1.7	-174.48	-3,606.2	-169.9	3,903.3	3,887.7	15.58	250.609	
6,288.5	6,256.6	6,357.0	6,355.1	14.9	1.7	-174.52	-3,602.9	-166.7	3,900.4	3,884.6	15.79	247.036	
6,299.2	6,267.3	6,369.1	6,367.2	14.9	1.7	5.27	-3,602.5	-166.4	3,900.0	3,884.2	15.80	246.762	
6,300.0	6,268.1	6,370.0	6,368.1	14.9	1.7	5.27	-3,602.4	-166.4	3,899.9	3,884.1	15.81	246.734	
6,350.0	6,318.1	6,420.7	6,418.8	15.0	1.7	5.29	-3,600.7	-165.3	3,895.6	3,879.7	15.92	244.635	
6,397.6	6,365.3	6,462.6	6,460.7	15.1	1.7	5.34	-3,599.3	-164.4	3,888.3	3,872.2	16.08	241.864	
6,400.0	6,367.7	6,464.7	6,462.8	15.1	1.7	5.34	-3,599.3	-164.4	3,887.9	3,871.8	16.08	241.712	
6,450.0	6,416.8	6,510.2	6,508.3	15.1	1.7	5.43	-3,597.8	-163.5	3,876.8	3,860.5	16.26	238.357	
6,496.0	6,461.3	6,559.8	6,557.8	15.1	1.8	5.54	-3,596.2	-162.5	3,863.6	3,847.2	16.43	235.130	
6,500.0	6,465.1	6,564.0	6,562.0	15.1	1.8	5.55	-3,596.1	-162.4	3,862.4	3,845.9	16.45	234.855	
6,550.0	6,512.4	6,620.1	6,618.1	15.1	1.8	5.71	-3,594.2	-161.3	3,844.5	3,827.9	16.61	231.446	
6,594.5	6,553.4	6,675.2	6,673.1	15.1	1.8	5.90	-3,592.1	-160.3	3,825.9	3,809.1	16.74	228.537	
6,600.0	6,558.4	6,681.9	6,679.8	15.1	1.8	5.93	-3,591.8	-160.1	3,823.3	3,806.6	16.75	228.192	
6,650.0	6,603.0	6,743.4	6,741.2	15.1	1.8	6.20	-3,589.2	-159.0	3,798.9	3,782.0	16.87	225.207	
6,692.9	6,639.9	6,794.6	6,792.3	15.1	1.8	6.49	-3,586.8	-158.1	3,775.4	3,758.4	16.94	222.898	
6,700.0	6,645.9	6,802.0	6,799.8	15.1	1.8	6.54	-3,586.5	-158.0	3,771.2	3,754.3	16.95	222.553	
6,750.0	6,686.8	6,842.3	6,840.0	15.1	1.8	6.95	-3,584.5	-157.4	3,740.7	3,723.7	16.97	220.465	
6,791.3	6,719.1	6,873.8	6,871.5	15.1	1.8	7.36	-3,582.9	-157.0	3,713.4	3,696.5	16.96	218.990	
6,800.0	6,725.7	6,880.2	6,877.9	15.1	1.8	7.45	-3,582.6	-157.0	3,707.5	3,690.5	16.95	218.712	
6,850.0	6,762.3	6,927.0	6,924.6	15.1	1.8	8.10	-3,580.2	-156.6	3,671.7	3,654.8	16.92	217.035	
6,889.7	6,789.7	6,971.9	6,969.4	15.1	1.8	8.76	-3,577.6	-156.4	3,641.5	3,624.6	16.89	215.637	
6,900.0	6,796.5	6,982.9	6,980.4	15.1	1.9	8.96	-3,576.9	-156.3	3,633.5	3,616.6	16.88	215.301	
6,950.0	6,828.0	6,950.0	6,949.6	15.1	1.8	9.91	-3,576.0	-156.3	3,593.0	3,576.3	16.69	215.227	
6,988.2	6,850.2	7,000.0	6,997.5	15.1	1.9	10.77	-3,575.9	-156.2	3,560.9	3,544.3	16.67	213.628	
7,000.0	6,856.7	7,000.0	6,997.5	15.1	1.9	11.06	-3,575.9	-156.2	3,550.8	3,534.2	16.63	213.482	
7,050.0	6,882.5	7,000.0	6,997.5	15.2	1.9	12.55	-3,575.9	-156.2	3,507.0	3,490.5	16.51	212.363	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - FRY 5 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,086.6	6,899.5	7,000.0	6,997.5	15.3	1.9	13.93	-3,575.9	-156.2	3,474.1	3,457.6	16.45	211.131	
7,100.0	6,905.3	7,000.0	6,997.5	15.4	1.9	14.52	-3,575.9	-156.2	3,461.9	3,445.4	16.44	210.564	
7,150.0	6,924.9	7,000.0	6,997.5	15.7	1.9	17.25	-3,575.9	-156.2	3,415.5	3,399.0	16.46	207.563	
7,185.0	6,936.7	7,000.0	6,997.5	15.9	1.9	19.87	-3,575.9	-156.2	3,382.3	3,365.8	16.55	204.317	
7,200.0	6,941.2	7,000.0	6,997.5	16.0	1.9	21.24	-3,575.9	-156.2	3,368.0	3,351.4	16.63	202.573	
7,250.0	6,954.2	7,000.0	6,997.5	16.3	1.9	27.47	-3,575.9	-156.2	3,319.7	3,302.6	17.07	194.424	
7,283.4	6,961.0	7,000.0	6,997.5	16.6	1.9	33.89	-3,575.9	-156.2	3,286.9	3,269.3	17.62	186.538	
7,300.0	6,963.8	7,000.0	6,997.5	16.7	1.9	38.12	-3,575.9	-156.2	3,270.7	3,252.7	17.98	181.954	
7,350.0	6,970.0	7,000.0	6,997.5	17.2	1.9	57.81	-3,575.9	-156.2	3,221.2	3,202.1	19.17	168.017	
7,381.9	6,972.1	7,000.0	6,997.5	17.5	1.9	77.50	-3,575.9	-156.2	3,189.6	3,170.3	19.26	165.588	
7,400.0	6,972.7	7,000.0	6,997.5	17.7	1.9	90.49	-3,575.9	-156.2	3,171.6	3,152.3	19.21	165.079	
7,420.0	6,972.8	7,000.0	6,997.5	17.9	1.9	104.62	-3,575.9	-156.2	3,151.7	3,131.7	19.97	157.803	
7,480.3	6,972.2	7,000.0	6,997.5	18.5	1.9	104.62	-3,575.9	-156.2	3,091.8	3,071.2	20.60	150.068	
7,500.0	6,972.0	7,000.0	6,997.5	18.7	1.9	104.62	-3,575.9	-156.2	3,072.2	3,051.4	20.81	147.644	
7,578.7	6,971.3	7,000.0	6,997.5	19.7	1.9	104.62	-3,575.9	-156.2	2,994.0	2,972.3	21.71	137.905	
7,600.0	6,971.1	7,000.0	6,997.5	19.9	1.9	104.62	-3,575.9	-156.2	2,972.9	2,951.0	21.95	135.410	
7,677.1	6,970.4	7,000.0	6,997.5	20.9	1.9	104.62	-3,575.9	-156.2	2,896.4	2,873.4	22.92	126.358	
7,700.0	6,970.2	7,000.0	6,997.5	21.2	1.9	104.62	-3,575.9	-156.2	2,873.7	2,850.5	23.21	123.822	
7,775.6	6,969.5	7,000.0	6,997.5	22.2	1.9	104.62	-3,575.9	-156.2	2,798.7	2,774.5	24.23	115.504	
7,800.0	6,969.3	7,000.0	6,997.5	22.6	1.9	104.62	-3,575.9	-156.2	2,774.5	2,749.9	24.56	112.964	
7,874.0	6,968.6	7,000.0	6,997.5	23.7	1.9	104.62	-3,575.9	-156.2	2,701.1	2,675.5	25.62	105.420	
7,900.0	6,968.4	7,000.0	6,997.5	24.1	1.9	104.62	-3,575.9	-156.2	2,675.4	2,649.4	26.00	102.916	
7,972.4	6,967.8	7,000.0	6,997.5	25.2	1.9	104.62	-3,575.9	-156.2	2,603.6	2,576.5	27.08	96.132	
8,000.0	6,967.5	7,000.0	6,997.5	25.6	1.9	104.62	-3,575.9	-156.2	2,576.3	2,548.8	27.50	93.690	
8,070.8	6,966.9	7,000.0	6,997.5	26.7	1.9	104.62	-3,575.9	-156.2	2,506.2	2,477.6	28.60	87.620	
8,100.0	6,966.6	7,000.0	6,997.5	27.2	1.9	104.62	-3,575.9	-156.2	2,477.3	2,448.3	29.06	85.256	
8,169.3	6,966.0	7,000.0	6,997.5	28.3	1.9	104.62	-3,575.9	-156.2	2,408.8	2,378.6	30.17	79.841	
8,200.0	6,965.7	7,000.0	6,997.5	28.8	1.9	104.62	-3,575.9	-156.2	2,378.4	2,347.8	30.66	77.565	
8,267.7	6,965.1	7,000.0	6,997.5	30.0	1.9	104.62	-3,575.9	-156.2	2,311.5	2,279.7	31.78	72.741	
8,300.0	6,964.8	7,000.0	6,997.5	30.5	1.9	104.62	-3,575.9	-156.2	2,279.6	2,247.3	32.31	70.557	
8,366.1	6,964.2	7,000.0	6,997.5	31.7	1.9	104.62	-3,575.9	-156.2	2,214.3	2,180.9	33.42	66.260	
8,400.0	6,963.9	7,000.0	6,997.5	32.2	1.9	104.62	-3,575.9	-156.2	2,180.9	2,146.9	33.99	64.168	
8,464.5	6,963.3	7,000.0	6,997.5	33.4	1.9	104.62	-3,575.9	-156.2	2,117.3	2,082.2	35.09	60.339	
8,500.0	6,963.0	7,000.0	6,997.5	34.0	1.9	104.62	-3,575.9	-156.2	2,082.4	2,046.7	35.69	58.338	
8,563.0	6,962.4	7,000.0	6,997.5	35.1	1.9	104.62	-3,575.9	-156.2	2,020.4	1,983.6	36.79	54.923	
8,600.0	6,962.0	7,000.0	6,997.5	35.8	1.9	104.62	-3,575.9	-156.2	1,983.9	1,946.5	37.43	53.009	
8,661.4	6,961.5	7,000.0	6,997.5	36.9	1.9	104.62	-3,575.9	-156.2	1,923.6	1,885.1	38.50	49.961	
8,700.0	6,961.1	7,000.0	6,997.5	37.6	1.9	104.62	-3,575.9	-156.2	1,885.7	1,846.5	39.18	48.131	
8,759.8	6,960.6	7,000.0	6,997.5	38.7	1.9	104.62	-3,575.9	-156.2	1,827.0	1,786.7	40.24	45.406	
8,800.0	6,960.2	7,000.0	6,997.5	39.4	1.9	104.62	-3,575.9	-156.2	1,787.6	1,746.7	40.95	43.656	
8,858.2	6,959.7	7,000.0	6,997.5	40.5	1.9	104.62	-3,575.9	-156.2	1,730.6	1,688.6	41.99	41.217	
8,900.0	6,959.3	7,000.0	6,997.5	41.2	1.9	104.62	-3,575.9	-156.2	1,689.8	1,647.0	42.73	39.543	
8,956.7	6,958.8	7,000.0	6,997.5	42.3	1.9	104.62	-3,575.9	-156.2	1,634.4	1,590.7	43.75	37.357	
9,000.0	6,958.4	7,000.0	6,997.5	43.1	1.9	104.62	-3,575.9	-156.2	1,592.2	1,547.7	44.53	35.755	
9,055.1	6,957.9	7,000.0	6,997.5	44.1	1.9	104.62	-3,575.9	-156.2	1,538.6	1,493.0	45.53	33.793	
9,100.0	6,957.5	7,000.0	6,997.5	44.9	1.9	104.62	-3,575.9	-156.2	1,494.9	1,448.6	46.34	32.259	
9,153.5	6,957.0	7,000.0	6,997.5	45.9	1.9	104.62	-3,575.9	-156.2	1,443.0	1,395.7	47.32	30.498	
9,200.0	6,956.6	7,000.0	6,997.5	46.8	1.9	104.62	-3,575.9	-156.2	1,398.1	1,349.9	48.16	29.029	
9,251.9	6,956.1	7,005.2	7,002.7	47.8	1.9	105.43	-3,575.6	-156.2	1,347.9	1,298.9	49.06	27.476	
9,300.0	6,955.7	7,001.2	6,998.6	48.7	1.9	104.80	-3,575.8	-156.2	1,301.7	1,251.7	49.98	26.044	
9,350.4	6,955.2	6,997.0	6,994.4	49.6	1.9	104.16	-3,576.1	-156.3	1,253.3	1,202.4	50.95	24.599	
9,400.0	6,954.8	6,992.9	6,990.4	50.6	1.9	103.52	-3,576.3	-156.3	1,205.8	1,153.9	51.91	23.231	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - FRY 5 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,448.8	6,954.3	6,988.9	6,986.4	51.5	1.9	102.91	-3,576.6	-156.3	1,159.3	1,106.5	52.85	21.935	
9,500.0	6,953.9	6,984.8	6,982.3	52.5	1.9	102.26	-3,576.8	-156.3	1,110.7	1,056.9	53.84	20.629	
9,547.2	6,953.4	6,981.1	6,978.6	53.4	1.8	101.68	-3,577.1	-156.3	1,066.1	1,011.3	54.76	19.468	
9,600.0	6,952.9	6,977.0	6,974.5	54.4	1.8	101.03	-3,577.3	-156.4	1,016.5	960.7	55.79	18.221	
9,645.6	6,952.5	6,973.5	6,971.0	55.2	1.8	100.47	-3,577.5	-156.4	973.8	917.1	56.68	17.182	
9,700.0	6,952.0	6,969.4	6,966.9	56.3	1.8	99.81	-3,577.8	-156.4	923.3	865.6	57.73	15.993	
9,744.1	6,951.6	6,966.1	6,963.6	57.1	1.8	99.29	-3,577.9	-156.4	882.8	824.2	58.59	15.066	
9,800.0	6,951.1	6,962.0	6,959.5	58.2	1.8	98.62	-3,578.2	-156.4	831.8	772.1	59.68	13.936	
9,842.5	6,950.7	6,958.9	6,956.4	59.0	1.8	98.13	-3,578.4	-156.4	793.5	732.9	60.52	13.112	
9,900.0	6,950.2	6,954.7	6,952.3	60.1	1.8	97.46	-3,578.6	-156.5	742.3	680.7	61.64	12.043	
9,940.9	6,949.8	6,951.8	6,949.4	60.9	1.8	96.99	-3,578.8	-156.5	706.5	644.1	62.44	11.315	
10,000.0	6,949.3	6,947.7	6,945.2	62.0	1.8	96.31	-3,579.0	-156.5	655.9	592.3	63.59	10.313	
10,039.3	6,948.9	6,945.0	6,942.5	62.8	1.8	95.87	-3,579.2	-156.5	622.9	558.6	64.36	9.678	
10,100.0	6,948.4	6,940.8	6,938.4	64.0	1.8	95.20	-3,579.4	-156.6	573.7	508.2	65.55	8.753	
10,137.8	6,948.0	6,938.3	6,935.8	64.7	1.8	94.78	-3,579.5	-156.6	544.2	477.9	66.28	8.210	
10,200.0	6,947.5	6,934.1	6,931.7	65.9	1.8	94.10	-3,579.8	-156.6	498.1	430.6	67.50	7.379	
10,236.2	6,947.1	6,931.7	6,929.3	66.6	1.8	93.71	-3,579.9	-156.6	472.9	404.7	68.21	6.933	
10,300.0	6,946.6	6,927.6	6,925.1	67.8	1.8	93.03	-3,580.1	-156.6	432.3	362.9	69.45	6.225	
10,334.6	6,946.3	6,925.3	6,922.9	68.5	1.8	92.67	-3,580.2	-156.7	412.8	342.6	70.13	5.886	
10,400.0	6,945.7	6,921.2	6,918.8	69.8	1.8	91.98	-3,580.5	-156.7	381.6	310.2	71.40	5.345	
10,433.0	6,945.4	6,919.1	6,916.7	70.4	1.8	91.64	-3,580.6	-156.7	369.3	297.3	72.04	5.126	
10,500.0	6,944.7	6,915.0	6,912.6	71.7	1.8	90.96	-3,580.8	-156.7	352.6	279.3	73.34	4.807	
10,531.5	6,944.5	6,913.0	6,910.6	72.3	1.8	90.64	-3,580.9	-156.7	348.9	274.9	73.95	4.718	
10,557.1	6,944.2	6,911.5	6,909.1	72.8	1.8	90.39	-3,581.0	-156.7	348.0	273.5	74.45	4.674 CC, ES	
10,600.0	6,943.8	6,908.9	6,906.5	73.7	1.8	89.96	-3,581.1	-156.8	350.6	275.3	75.28	4.657 SF	
10,629.9	6,943.6	6,907.1	6,904.7	74.2	1.8	89.67	-3,581.2	-156.8	355.5	279.6	75.86	4.686	
10,700.0	6,942.9	6,902.9	6,900.6	75.6	1.8	88.99	-3,581.4	-156.8	376.1	298.9	77.22	4.871	
10,728.3	6,942.7	6,900.0	6,897.6	76.2	1.8	88.50	-3,581.6	-156.8	387.7	309.9	77.76	4.986	
10,800.0	6,942.0	6,897.1	6,894.8	77.6	1.8	88.03	-3,581.7	-156.8	424.1	345.0	79.14	5.359	
10,826.7	6,941.8	6,895.6	6,893.2	78.1	1.8	87.78	-3,581.8	-156.9	440.0	360.3	79.66	5.523	
10,900.0	6,941.1	6,891.4	6,889.0	79.5	1.8	87.08	-3,582.0	-156.9	488.1	407.1	81.06	6.022	
10,925.2	6,940.9	6,889.9	6,887.5	80.0	1.8	86.85	-3,582.1	-156.9	506.1	424.5	81.54	6.207	
11,000.0	6,940.2	6,885.6	6,883.2	81.5	1.8	86.14	-3,582.3	-156.9	562.7	479.7	82.96	6.782	
11,023.6	6,940.0	6,884.2	6,881.9	81.9	1.8	85.92	-3,582.4	-157.0	581.4	497.9	83.41	6.970	
11,100.0	6,939.3	6,879.8	6,877.5	83.4	1.8	85.20	-3,582.6	-157.0	644.1	559.2	84.85	7.590	
11,122.0	6,939.1	6,878.6	6,876.2	83.8	1.8	84.99	-3,582.7	-157.0	662.7	577.4	85.27	7.772	
11,200.0	6,938.4	6,874.1	6,871.7	85.4	1.8	84.27	-3,582.9	-157.0	730.1	643.3	86.73	8.418	
11,220.4	6,938.2	6,872.9	6,870.6	85.8	1.8	84.08	-3,582.9	-157.1	748.1	661.0	87.11	8.587	
11,300.0	6,937.4	6,868.4	6,866.0	87.3	1.8	83.34	-3,583.2	-157.1	819.2	730.6	88.59	9.247	
11,318.9	6,937.3	6,867.3	6,865.0	87.7	1.8	83.16	-3,583.2	-157.1	836.3	747.4	88.94	9.403	
11,400.0	6,936.5	6,862.7	6,860.3	89.3	1.8	82.42	-3,583.5	-157.2	910.6	820.1	90.43	10.069	
11,417.3	6,936.4	6,861.7	6,859.3	89.6	1.8	82.26	-3,583.5	-157.2	926.6	835.8	90.75	10.210	
11,500.0	6,935.6	6,857.0	6,854.6	91.3	1.8	81.50	-3,583.7	-157.2	1,003.6	911.3	92.26	10.878	
11,515.7	6,935.5	6,856.1	6,853.7	91.6	1.8	81.36	-3,583.8	-157.2	1,018.3	925.8	92.54	11.004	
11,600.0	6,934.7	6,851.3	6,849.0	93.2	1.8	80.59	-3,584.0	-157.3	1,097.7	1,003.7	94.06	11.671	
11,614.1	6,934.6	6,850.5	6,848.2	93.5	1.8	80.46	-3,584.1	-157.3	1,111.1	1,016.8	94.31	11.781	
11,700.0	6,933.8	6,845.6	6,843.3	95.2	1.8	79.69	-3,584.3	-157.4	1,192.8	1,097.0	95.84	12.446	
11,712.6	6,933.7	6,844.9	6,842.6	95.4	1.8	79.58	-3,584.3	-157.4	1,204.9	1,108.8	96.06	12.542	
11,800.0	6,932.9	6,840.0	6,837.7	97.1	1.8	78.80	-3,584.6	-157.4	1,288.7	1,191.1	97.60	13.204	
11,811.0	6,932.8	6,839.3	6,837.0	97.4	1.8	78.70	-3,584.6	-157.4	1,299.2	1,201.4	97.79	13.286	
11,900.0	6,932.0	6,834.3	6,832.0	99.1	1.8	77.91	-3,584.9	-157.5	1,385.0	1,285.7	99.33	13.944	
11,909.4	6,931.9	6,833.8	6,831.5	99.3	1.8	77.83	-3,584.9	-157.5	1,394.2	1,294.7	99.49	14.013	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - FRY 5 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
12,000.0	6,931.0	6,828.7	6,826.4	101.1	1.8	77.04	-3,585.2	-157.6	1,481.9	1,380.8	101.04	14.667	
12,007.8	6,931.0	6,828.3	6,826.0	101.2	1.8	76.97	-3,585.2	-157.6	1,489.5	1,388.3	101.17	14.723	
12,100.0	6,930.1	6,823.1	6,820.8	103.0	1.8	76.17	-3,585.4	-157.6	1,579.1	1,476.4	102.72	15.373	
12,106.3	6,930.1	6,822.7	6,820.5	103.2	1.8	76.11	-3,585.5	-157.7	1,585.2	1,482.4	102.82	15.417	
12,200.0	6,929.2	6,817.5	6,815.2	105.0	1.8	75.31	-3,585.7	-157.7	1,676.6	1,572.2	104.38	16.063	
12,204.7	6,929.2	6,817.2	6,815.0	105.1	1.8	75.27	-3,585.7	-157.7	1,681.2	1,576.8	104.45	16.095	
12,300.0	6,928.3	6,811.9	6,809.6	107.0	1.8	74.46	-3,586.0	-157.8	1,774.4	1,668.4	106.00	16.739	
12,303.1	6,928.3	6,811.7	6,809.5	107.1	1.8	74.43	-3,586.0	-157.8	1,777.5	1,671.4	106.06	16.760	
12,400.0	6,927.4	6,806.3	6,804.1	109.0	1.8	73.62	-3,586.3	-157.9	1,872.4	1,764.8	107.61	17.400	
12,401.5	6,927.4	6,806.2	6,804.0	109.0	1.8	73.60	-3,586.3	-157.9	1,873.9	1,766.3	107.63	17.410	
12,500.0	6,926.5	6,800.0	6,797.8	110.9	1.8	72.67	-3,586.6	-158.0	1,970.6	1,861.4	109.14	18.056	
12,598.4	6,925.6	6,800.0	6,797.8	112.9	1.8	72.67	-3,586.6	-158.0	2,067.4	1,956.4	111.00	18.625	
12,600.0	6,925.6	6,800.0	6,797.8	112.9	1.8	72.67	-3,586.6	-158.0	2,068.9	1,957.9	111.03	18.634	
12,696.8	6,924.7	6,791.0	6,788.7	114.8	1.8	71.34	-3,587.0	-158.1	2,164.3	2,052.0	112.28	19.276	
12,700.0	6,924.6	6,790.8	6,788.6	114.9	1.8	71.32	-3,587.0	-158.1	2,167.4	2,055.1	112.33	19.296	
12,795.2	6,923.8	6,786.2	6,784.0	116.8	1.8	70.65	-3,587.3	-158.2	2,261.3	2,147.5	113.80	19.871	
12,800.0	6,923.7	6,786.0	6,783.8	116.9	1.8	70.62	-3,587.3	-158.2	2,266.0	2,152.1	113.87	19.900	
12,893.7	6,922.9	6,781.5	6,779.3	118.7	1.8	69.97	-3,587.5	-158.3	2,358.5	2,243.2	115.30	20.454	
12,900.0	6,922.8	6,781.2	6,779.0	118.8	1.8	69.93	-3,587.5	-158.3	2,364.7	2,249.3	115.40	20.492	
12,992.1	6,922.0	6,776.9	6,774.7	120.6	1.8	69.31	-3,587.7	-158.4	2,455.7	2,338.9	116.79	21.027	
13,000.0	6,921.9	6,776.5	6,774.3	120.8	1.8	69.25	-3,587.7	-158.4	2,463.5	2,346.6	116.91	21.072	
13,090.5	6,921.1	6,772.3	6,770.1	122.6	1.8	68.66	-3,587.9	-158.5	2,553.0	2,434.8	118.26	21.588	
13,100.0	6,921.0	6,771.9	6,769.7	122.8	1.8	68.60	-3,587.9	-158.5	2,562.4	2,444.0	118.40	21.642	
13,188.9	6,920.2	6,767.8	6,765.6	124.5	1.8	68.03	-3,588.1	-158.5	2,650.4	2,530.7	119.71	22.140	
13,200.0	6,920.1	6,767.3	6,765.1	124.8	1.8	67.95	-3,588.1	-158.5	2,661.3	2,541.5	119.87	22.201	
13,287.4	6,919.3	6,763.4	6,761.2	126.5	1.8	67.41	-3,588.3	-158.6	2,747.9	2,626.7	121.15	22.682	
13,300.0	6,919.1	6,762.8	6,760.6	126.7	1.8	67.33	-3,588.4	-158.6	2,760.4	2,639.0	121.33	22.751	
13,385.8	6,918.4	6,759.0	6,756.8	128.4	1.8	66.80	-3,588.5	-158.7	2,845.4	2,722.8	122.57	23.214	
13,400.0	6,918.2	6,758.3	6,756.1	128.7	1.8	66.71	-3,588.6	-158.7	2,859.4	2,736.7	122.77	23.290	
13,484.2	6,917.5	6,754.6	6,752.4	130.4	1.8	66.21	-3,588.7	-158.8	2,942.9	2,819.0	123.98	23.738	
13,500.0	6,917.3	6,753.9	6,751.7	130.7	1.8	66.11	-3,588.8	-158.8	2,958.6	2,834.4	124.20	23.821	
13,582.6	6,916.6	6,750.3	6,748.2	132.3	1.8	65.63	-3,588.9	-158.8	3,040.6	2,915.2	125.37	24.253	
13,600.0	6,916.4	6,749.6	6,747.4	132.7	1.8	65.53	-3,589.0	-158.9	3,057.8	2,932.2	125.61	24.343	
13,681.1	6,915.6	6,746.1	6,743.9	134.3	1.8	65.06	-3,589.1	-158.9	3,138.2	3,011.5	126.75	24.760	
13,700.0	6,915.5	6,745.3	6,743.1	134.6	1.8	64.95	-3,589.2	-158.9	3,157.0	3,030.0	127.01	24.856	
13,779.5	6,914.7	6,741.9	6,739.8	136.2	1.8	64.51	-3,589.3	-159.0	3,235.9	3,107.8	128.11	25.259	
13,800.0	6,914.6	6,741.1	6,738.9	136.6	1.8	64.39	-3,589.3	-159.0	3,256.3	3,127.9	128.39	25.362	
13,877.9	6,913.8	6,737.8	6,735.6	138.2	1.8	63.96	-3,589.5	-159.1	3,333.6	3,204.2	129.46	25.750	
13,900.0	6,913.6	6,736.9	6,734.7	138.6	1.8	63.84	-3,589.5	-159.1	3,355.6	3,225.8	129.76	25.859	
13,976.3	6,912.9	6,733.7	6,731.6	140.1	1.8	63.43	-3,589.7	-159.1	3,431.4	3,300.6	130.80	26.234	
14,000.0	6,912.7	6,732.8	6,730.6	140.6	1.8	63.31	-3,589.7	-159.2	3,454.9	3,323.8	131.12	26.349	
14,074.8	6,912.0	6,729.7	6,727.6	142.0	1.8	62.91	-3,589.8	-159.2	3,529.2	3,397.1	132.07	26.722	
14,079.0	6,912.0	6,729.6	6,727.4	142.1	1.8	62.89	-3,589.9	-159.2	3,533.4	3,401.2	132.13	26.743	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - FRY PM C 18-4 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-166.56	-2,859.8	-683.2	2,940.6				
98.4	98.4	52.4	52.4	0.1	0.0	-166.56	-2,859.8	-683.3	2,940.3	2,940.1	0.14	N/A	
100.0	100.0	54.0	54.0	0.1	0.0	-166.56	-2,859.8	-683.3	2,940.3	2,940.1	0.14	N/A	
196.8	196.8	154.4	154.4	0.3	0.2	-166.55	-2,859.7	-683.7	2,940.3	2,939.9	0.47	6,190.659	
200.0	200.0	157.9	157.9	0.3	0.2	-166.55	-2,859.7	-683.8	2,940.3	2,939.8	0.49	6,039.959	
295.3	295.3	258.7	258.7	0.5	0.3	-166.54	-2,859.3	-684.6	2,940.1	2,939.3	0.81	3,630.452	
300.0	300.0	263.5	263.5	0.5	0.3	-166.54	-2,859.3	-684.6	2,940.1	2,939.3	0.82	3,565.090	
393.7	393.7	356.5	356.5	0.8	0.4	-166.52	-2,858.8	-685.5	2,939.9	2,938.7	1.11	2,659.030	
400.0	400.0	362.6	362.6	0.8	0.4	-166.51	-2,858.8	-685.6	2,939.8	2,938.7	1.12	2,615.628	
492.1	492.1	453.4	453.4	1.0	0.4	-166.50	-2,858.4	-686.5	2,939.6	2,938.3	1.39	2,117.620	
500.0	500.0	461.3	461.3	1.0	0.4	-166.49	-2,858.3	-686.6	2,939.6	2,938.2	1.41	2,084.063	
590.5	590.5	556.7	556.7	1.2	0.5	-166.47	-2,857.9	-687.5	2,939.4	2,937.7	1.67	1,763.438	
600.0	600.0	567.1	567.0	1.2	0.5	-166.47	-2,857.8	-687.5	2,939.4	2,937.7	1.69	1,735.604	
689.0	689.0	656.4	656.4	1.4	0.5	-166.46	-2,857.2	-688.2	2,939.0	2,937.0	1.94	1,515.349	
700.0	700.0	666.9	666.9	1.4	0.5	-166.46	-2,857.2	-688.3	2,938.9	2,937.0	1.97	1,492.153	
787.4	787.4	756.8	756.7	1.6	0.6	-166.44	-2,856.7	-688.8	2,938.6	2,936.4	2.21	1,330.384	
800.0	800.0	770.3	770.3	1.7	0.6	-166.44	-2,856.6	-688.9	2,938.5	2,936.3	2.24	1,309.874	
885.8	885.8	857.6	857.6	1.9	0.6	-166.43	-2,856.0	-689.2	2,938.1	2,935.6	2.48	1,186.114	
900.0	900.0	871.7	871.7	1.9	0.6	-166.43	-2,856.0	-689.2	2,938.0	2,935.5	2.52	1,167.942	
984.2	984.2	952.2	952.1	2.1	0.7	-166.42	-2,855.5	-689.5	2,937.6	2,934.8	2.74	1,072.026	
1,000.0	1,000.0	966.9	966.9	2.1	0.7	-166.42	-2,855.4	-689.6	2,937.5	2,934.7	2.78	1,055.964	
1,082.7	1,082.7	1,049.5	1,049.5	2.3	0.7	-166.41	-2,855.0	-690.1	2,937.2	2,934.2	3.00	978.325	
1,100.0	1,100.0	1,067.6	1,067.6	2.3	0.7	-166.41	-2,854.9	-690.2	2,937.1	2,934.1	3.05	963.377	
1,181.1	1,181.1	1,149.3	1,149.2	2.5	0.8	-166.40	-2,854.4	-690.5	2,936.8	2,933.5	3.27	899.279	
1,200.0	1,200.0	1,167.9	1,167.8	2.6	0.8	-166.40	-2,854.3	-690.5	2,936.7	2,933.4	3.32	885.578	
1,212.8	1,212.8	1,180.5	1,180.4	2.6	0.8	-157.10	-2,854.3	-690.6	2,936.7	2,933.4	3.30	890.093	
1,279.5	1,279.5	1,248.9	1,248.9	2.7	0.8	157.11	-2,853.9	-690.9	2,937.4	2,933.9	3.47	845.787	
1,300.0	1,300.0	1,270.3	1,270.3	2.8	0.8	157.11	-2,853.8	-691.0	2,937.9	2,934.3	3.53	833.069	
1,377.9	1,377.8	1,346.0	1,346.0	3.0	0.8	157.12	-2,853.3	-691.3	2,941.0	2,937.2	3.73	788.483	
1,400.0	1,399.8	1,366.5	1,366.5	3.0	0.8	157.12	-2,853.2	-691.4	2,942.2	2,938.4	3.79	776.898	
1,476.4	1,475.9	1,439.3	1,439.3	3.2	0.9	157.13	-2,852.9	-691.5	2,947.8	2,943.8	3.99	738.774	
1,500.0	1,499.5	1,462.3	1,462.3	3.2	0.9	157.13	-2,852.9	-691.5	2,950.0	2,945.9	4.05	727.837	
1,574.8	1,573.7	1,535.7	1,535.7	3.4	0.9	157.14	-2,852.7	-691.5	2,957.9	2,953.6	4.26	694.859	
1,600.0	1,598.7	1,560.7	1,560.6	3.5	0.9	157.14	-2,852.6	-691.5	2,961.0	2,956.6	4.32	684.650	
1,673.2	1,671.1	1,632.2	1,632.2	3.7	0.9	157.14	-2,852.5	-691.3	2,971.1	2,966.6	4.53	656.127	
1,700.0	1,697.5	1,657.9	1,657.9	3.7	0.9	157.14	-2,852.5	-691.3	2,975.2	2,970.6	4.60	646.565	
1,771.6	1,767.9	1,730.0	1,730.0	4.0	1.0	157.14	-2,852.4	-691.3	2,987.4	2,982.6	4.81	621.323	
1,800.1	1,795.7	1,760.8	1,760.7	4.0	1.0	157.15	-2,852.3	-691.3	2,992.7	2,987.8	4.89	611.979	
1,870.1	1,864.2	1,831.6	1,831.6	4.3	1.0	157.26	-2,852.0	-691.1	3,005.9	3,000.8	5.09	590.702	
1,900.0	1,893.4	1,859.8	1,859.7	4.4	1.0	157.30	-2,852.0	-691.0	3,011.5	3,006.3	5.17	582.275	
1,968.5	1,960.4	1,926.8	1,926.8	4.6	1.0	157.40	-2,851.8	-690.8	3,024.5	3,019.1	5.37	563.071	
2,000.0	1,991.3	1,959.7	1,959.7	4.7	1.0	157.45	-2,851.7	-690.6	3,030.4	3,025.0	5.46	554.906	
2,066.9	2,056.7	2,024.3	2,024.2	5.0	1.0	157.54	-2,851.5	-690.4	3,043.0	3,037.4	5.65	538.227	
2,100.0	2,089.1	2,052.6	2,052.5	5.1	1.0	157.59	-2,851.4	-690.2	3,049.3	3,043.5	5.75	530.272	
2,165.3	2,153.0	2,109.6	2,109.5	5.3	1.0	157.67	-2,851.4	-689.9	3,061.8	3,055.9	5.94	515.477	
2,200.0	2,186.9	2,143.4	2,143.4	5.5	1.0	157.71	-2,851.5	-689.7	3,068.5	3,062.4	6.04	507.936	
2,263.8	2,249.3	2,205.4	2,205.3	5.7	1.0	157.80	-2,851.6	-689.2	3,080.8	3,074.5	6.23	494.551	
2,300.0	2,284.7	2,239.1	2,239.0	5.8	1.1	157.84	-2,851.6	-688.9	3,087.8	3,081.4	6.34	487.403	
2,362.2	2,345.5	2,297.0	2,296.9	6.1	1.1	157.92	-2,851.8	-688.4	3,099.8	3,093.3	6.52	475.535	
2,400.0	2,382.5	2,328.5	2,328.4	6.2	1.1	157.96	-2,852.0	-688.1	3,107.2	3,100.6	6.63	468.725	
2,460.6	2,441.8	2,378.4	2,378.3	6.5	1.1	158.02	-2,852.4	-687.5	3,119.2	3,112.4	6.81	458.158	
2,500.0	2,480.3	2,400.0	2,399.9	6.6	1.1	158.04	-2,852.6	-687.2	3,127.1	3,120.2	6.92	451.754	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - FRY PM C 18-4 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,559.0	2,538.1	2,449.9	2,449.8	6.9	1.1	158.10	-2,853.3	-686.6	3,139.2	3,132.1	7.10	442.213	
2,600.0	2,578.1	2,478.1	2,478.0	7.0	1.1	158.13	-2,853.9	-686.2	3,147.8	3,140.5	7.22	435.971	
2,657.5	2,634.4	2,524.2	2,524.1	7.3	1.1	158.18	-2,855.0	-685.6	3,160.0	3,152.6	7.39	427.464	
2,700.0	2,675.9	2,564.3	2,564.2	7.5	1.1	158.22	-2,856.0	-685.1	3,169.1	3,161.6	7.52	421.406	
2,755.9	2,730.6	2,617.1	2,616.9	7.7	1.1	158.28	-2,857.4	-684.5	3,181.1	3,173.4	7.69	413.739	
2,800.0	2,773.8	2,659.0	2,658.8	7.9	1.1	158.33	-2,858.4	-684.0	3,190.6	3,182.8	7.82	408.017	
2,854.3	2,826.9	2,713.7	2,713.5	8.1	1.1	158.39	-2,859.9	-683.4	3,202.3	3,194.4	7.98	401.194	
2,857.4	2,829.9	2,717.4	2,717.2	8.1	1.1	158.39	-2,860.0	-683.3	3,203.0	3,195.0	7.99	400.821	
2,900.0	2,871.6	2,770.0	2,769.8	8.3	1.1	158.51	-2,861.2	-682.7	3,211.8	3,203.7	8.09	396.800	
2,952.7	2,923.5	2,827.4	2,827.2	8.4	1.1	158.64	-2,862.4	-682.0	3,221.7	3,213.5	8.20	392.818	
3,000.0	2,970.1	2,873.0	2,872.8	8.6	1.1	158.73	-2,863.3	-681.5	3,229.9	3,221.6	8.30	389.295	
3,051.2	3,020.7	2,924.7	2,924.4	8.7	1.1	158.83	-2,864.3	-680.9	3,237.9	3,229.5	8.40	385.624	
3,100.0	3,069.1	2,976.6	2,976.4	8.9	1.1	158.91	-2,865.3	-680.4	3,244.7	3,236.2	8.49	382.094	
3,149.6	3,118.3	3,029.6	3,029.4	9.0	1.1	158.98	-2,866.2	-680.0	3,250.7	3,242.1	8.58	378.687	
3,200.0	3,168.5	3,083.7	3,083.4	9.1	1.1	159.04	-2,867.0	-679.6	3,256.0	3,247.3	8.68	375.211	
3,248.0	3,216.3	3,130.9	3,130.6	9.2	1.2	159.09	-2,867.7	-679.3	3,260.3	3,251.5	8.76	372.072	
3,300.0	3,268.2	3,179.8	3,179.5	9.3	1.2	159.13	-2,868.5	-679.0	3,264.1	3,255.2	8.85	368.671	
3,346.4	3,314.6	3,224.1	3,223.8	9.4	1.2	159.15	-2,869.2	-678.9	3,266.7	3,257.8	8.93	365.783	
3,400.0	3,368.1	3,275.8	3,275.5	9.5	1.2	159.17	-2,870.0	-678.7	3,269.0	3,260.0	9.02	362.411	
3,444.9	3,413.0	3,320.0	3,319.7	9.6	1.2	159.18	-2,870.7	-678.7	3,270.2	3,261.1	9.09	359.686	
3,457.5	3,425.6	3,332.7	3,332.4	9.6	1.2	-164.32	-2,870.9	-678.7	3,270.4	3,261.3	9.12	358.701	
3,500.0	3,468.1	3,375.7	3,375.4	9.7	1.2	-164.32	-2,871.5	-678.8	3,271.0	3,261.8	9.20	355.446	
3,543.3	3,511.4	3,416.6	3,416.3	9.7	1.2	-164.32	-2,872.1	-678.8	3,271.7	3,262.4	9.30	351.906	
3,600.0	3,568.1	3,465.5	3,465.2	9.8	1.2	-164.32	-2,872.9	-679.1	3,272.6	3,263.2	9.42	347.420	
3,641.7	3,609.9	3,501.8	3,501.5	9.9	1.2	-164.32	-2,873.5	-679.4	3,273.4	3,263.9	9.51	344.180	
3,700.0	3,668.1	3,562.6	3,562.2	10.0	1.2	-164.31	-2,874.5	-680.1	3,274.5	3,264.9	9.64	339.692	
3,740.1	3,708.3	3,600.0	3,599.7	10.1	1.2	-164.30	-2,875.1	-680.7	3,275.2	3,265.5	9.73	336.676	
3,800.0	3,768.1	3,656.7	3,656.3	10.2	1.2	-164.29	-2,876.0	-681.6	3,276.4	3,266.5	9.86	332.269	
3,838.6	3,806.7	3,690.8	3,690.4	10.2	1.2	-164.29	-2,876.6	-682.1	3,277.2	3,267.3	9.95	329.496	
3,900.0	3,868.1	3,756.0	3,755.6	10.3	1.3	-164.27	-2,877.7	-683.3	3,278.5	3,268.5	10.08	325.122	
3,937.0	3,905.1	3,796.7	3,796.3	10.4	1.3	-164.26	-2,878.3	-684.0	3,279.3	3,269.1	10.17	322.518	
4,000.0	3,968.1	3,852.6	3,852.2	10.5	1.3	-164.25	-2,879.2	-685.1	3,280.6	3,270.3	10.31	318.253	
4,035.4	4,003.6	3,883.7	3,883.3	10.6	1.3	-164.24	-2,879.8	-685.7	3,281.4	3,271.0	10.39	315.902	
4,100.0	4,068.1	3,966.0	3,965.6	10.7	1.3	-164.22	-2,881.2	-687.1	3,282.8	3,272.2	10.54	311.571	
4,133.8	4,102.0	4,014.5	4,014.0	10.8	1.3	-164.22	-2,881.9	-687.5	3,283.3	3,272.7	10.61	309.315	
4,200.0	4,168.1	4,108.0	4,107.5	10.9	1.3	-164.23	-2,882.8	-687.2	3,283.9	3,273.1	10.76	305.066	
4,232.3	4,200.4	4,149.5	4,149.0	10.9	1.3	-164.24	-2,883.1	-686.8	3,284.0	3,273.2	10.84	302.980	
4,300.0	4,268.1	4,226.3	4,225.8	11.1	1.3	-164.26	-2,883.4	-685.6	3,284.0	3,273.0	10.99	298.715	
4,329.4	4,297.5	4,253.5	4,253.0	11.1	1.3	-164.27	-2,883.5	-685.2	3,284.0	3,272.9	11.06	296.921	
4,330.7	4,298.8	4,254.7	4,254.2	11.1	1.3	-164.27	-2,883.5	-685.2	3,284.0	3,272.9	11.06	296.839	
4,400.0	4,368.1	4,322.6	4,322.1	11.2	1.3	-164.28	-2,883.9	-684.2	3,284.0	3,272.8	11.22	292.686	
4,429.1	4,397.3	4,354.9	4,354.4	11.3	1.3	-164.29	-2,884.0	-683.7	3,284.0	3,272.7	11.29	290.952	
4,500.0	4,468.1	4,431.7	4,431.2	11.4	1.4	-164.31	-2,884.2	-682.5	3,283.9	3,272.5	11.45	286.824	
4,527.5	4,495.7	4,460.6	4,460.1	11.5	1.4	-164.32	-2,884.3	-682.1	3,283.8	3,272.3	11.51	285.249	
4,600.0	4,568.1	4,526.9	4,526.4	11.6	1.4	-164.34	-2,884.3	-681.2	3,283.7	3,272.0	11.68	281.232	
4,612.2	4,580.3	4,536.4	4,535.8	11.6	1.4	-164.34	-2,884.4	-681.0	3,283.7	3,272.0	11.70	280.574	
4,626.0	4,594.1	4,547.0	4,546.5	11.7	1.4	-164.34	-2,884.4	-680.9	3,283.7	3,271.9	11.73	279.837	
4,700.0	4,668.1	4,606.3	4,605.8	11.8	1.4	-164.36	-2,884.8	-680.2	3,283.9	3,272.0	11.90	275.962	
4,724.4	4,692.5	4,635.1	4,634.6	11.8	1.4	-164.36	-2,885.1	-679.8	3,284.0	3,272.1	11.96	274.664	
4,800.0	4,768.1	4,718.9	4,718.3	12.0	1.4	-164.39	-2,885.6	-678.6	3,284.2	3,272.1	12.13	270.728	
4,822.8	4,791.0	4,739.8	4,739.2	12.0	1.4	-164.39	-2,885.8	-678.2	3,284.3	3,272.1	12.18	269.574	
4,900.0	4,868.1	4,809.5	4,809.0	12.2	1.4	-164.41	-2,886.3	-677.1	3,284.5	3,272.1	12.36	265.757	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - FRY PM C 18-4 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,921.2	4,889.4	4,827.2	4,826.6	12.2	1.4	-164.42	-2,886.5	-676.8	3,284.6	3,272.2	12.41	264.729	
5,000.0	4,968.1	4,900.0	4,899.4	12.4	1.4	-164.45	-2,887.5	-675.4	3,285.2	3,272.6	12.59	260.981	
5,019.7	4,987.8	4,900.0	4,899.4	12.4	1.4	-164.45	-2,887.5	-675.4	3,285.4	3,272.8	12.63	260.127	
5,100.0	5,068.1	4,961.0	4,960.4	12.6	1.5	-164.48	-2,888.8	-674.1	3,286.6	3,273.8	12.81	256.507	
5,118.1	5,086.2	4,973.1	4,972.5	12.6	1.5	-164.48	-2,889.1	-673.8	3,287.0	3,274.1	12.85	255.717	
5,200.0	5,168.1	5,042.0	5,041.4	12.8	1.5	-164.52	-2,891.3	-672.2	3,289.0	3,275.9	13.04	252.172	
5,216.5	5,184.7	5,058.7	5,058.0	12.8	1.5	-164.53	-2,891.8	-671.8	3,289.4	3,276.3	13.08	251.457	
5,300.0	5,268.1	5,142.9	5,142.2	13.0	1.5	-164.57	-2,894.5	-669.9	3,291.5	3,278.2	13.28	247.917	
5,314.9	5,283.1	5,158.0	5,157.3	13.0	1.5	-164.58	-2,895.0	-669.6	3,291.8	3,278.5	13.31	247.294	
5,400.0	5,368.1	5,250.4	5,249.6	13.1	1.5	-164.62	-2,897.6	-668.3	3,293.9	3,280.4	13.51	243.784	
5,413.4	5,381.5	5,265.9	5,265.1	13.2	1.5	-164.62	-2,898.0	-668.2	3,294.2	3,280.6	13.54	243.234	
5,500.0	5,468.1	5,388.3	5,387.5	13.3	1.5	-164.64	-2,900.4	-667.3	3,295.7	3,281.9	13.75	239.641	
5,511.8	5,479.9	5,404.8	5,404.0	13.4	1.5	-164.65	-2,900.6	-667.3	3,295.8	3,282.0	13.78	239.153	
5,600.0	5,568.1	5,508.3	5,507.5	13.5	1.6	-164.65	-2,901.5	-667.0	3,296.5	3,282.5	13.99	235.633	
5,610.2	5,578.4	5,527.0	5,526.1	13.6	1.6	-164.66	-2,901.6	-667.0	3,296.5	3,282.5	14.01	235.245	
5,700.0	5,668.1	5,688.1	5,687.3	13.7	1.6	-164.68	-2,900.7	-665.0	3,295.7	3,281.5	14.22	231.746	
5,708.6	5,676.8	5,702.0	5,701.1	13.8	1.6	-164.69	-2,900.5	-664.7	3,295.6	3,281.3	14.24	231.404	
5,800.0	5,768.1	5,795.0	5,794.1	13.9	1.6	-164.72	-2,899.1	-662.4	3,293.6	3,279.2	14.45	227.938	
5,807.1	5,775.2	5,802.3	5,801.4	14.0	1.6	-164.72	-2,899.0	-662.2	3,293.5	3,279.0	14.47	227.673	
5,900.0	5,868.1	5,900.0	5,899.0	14.1	1.6	-164.77	-2,897.5	-659.4	3,291.4	3,276.7	14.68	224.234	
5,905.5	5,873.6	5,900.0	5,899.0	14.1	1.6	-164.77	-2,897.5	-659.4	3,291.3	3,276.6	14.69	224.043	
6,000.0	5,968.1	5,983.8	5,982.8	14.3	1.6	-164.80	-2,896.4	-656.8	3,289.3	3,274.4	14.91	220.683	
6,003.9	5,972.1	5,987.0	5,986.0	14.3	1.6	-164.80	-2,896.3	-656.7	3,289.2	3,274.3	14.91	220.547	
6,100.0	6,068.1	6,057.6	6,056.6	14.5	1.7	-164.84	-2,895.9	-654.6	3,287.9	3,272.8	15.13	217.291	
6,102.3	6,070.5	6,059.3	6,058.3	14.5	1.7	-164.84	-2,895.9	-654.5	3,287.9	3,272.7	15.14	217.213	
6,200.0	6,168.1	6,140.3	6,139.2	14.7	1.7	-164.89	-2,896.1	-651.8	3,287.2	3,271.9	15.36	214.017	
6,200.8	6,168.9	6,141.1	6,140.0	14.7	1.7	-164.89	-2,896.1	-651.8	3,287.2	3,271.9	15.36	213.992	
6,288.5	6,256.6	6,230.4	6,229.2	14.9	1.7	-164.95	-2,896.6	-648.4	3,286.8	3,271.3	15.57	211.166	
6,299.2	6,267.3	6,242.2	6,241.0	14.9	1.7	14.84	-2,896.7	-647.9	3,286.7	3,271.1	15.58	211.022	
6,300.0	6,268.1	6,243.1	6,241.9	14.9	1.7	14.84	-2,896.7	-647.8	3,286.7	3,271.1	15.58	211.006	
6,350.0	6,318.1	6,298.0	6,296.7	15.0	1.7	14.87	-2,896.9	-645.5	3,283.9	3,268.2	15.66	209.685	
6,397.6	6,365.3	6,331.3	6,330.1	15.1	1.7	14.98	-2,897.2	-644.0	3,278.2	3,262.4	15.78	207.741	
6,400.0	6,367.7	6,333.0	6,331.7	15.1	1.7	14.98	-2,897.2	-643.9	3,277.8	3,262.0	15.79	207.631	
6,450.0	6,416.8	6,366.9	6,365.6	15.1	1.7	15.18	-2,897.6	-642.3	3,268.7	3,252.7	15.93	205.139	
6,496.0	6,461.3	6,400.0	6,398.7	15.1	1.7	15.43	-2,898.2	-640.7	3,257.5	3,241.4	16.07	202.701	
6,500.0	6,465.1	6,400.0	6,398.7	15.1	1.7	15.46	-2,898.2	-640.7	3,256.4	3,240.3	16.08	202.506	
6,550.0	6,512.4	6,433.4	6,432.0	15.1	1.7	15.82	-2,898.9	-639.1	3,241.2	3,225.0	16.21	199.944	
6,594.5	6,553.4	6,462.1	6,460.7	15.1	1.7	16.23	-2,899.7	-637.7	3,225.1	3,208.8	16.30	197.810	
6,600.0	6,558.4	6,465.6	6,464.2	15.1	1.7	16.29	-2,899.8	-637.5	3,223.0	3,206.7	16.31	197.557	
6,650.0	6,603.0	6,500.0	6,498.5	15.1	1.8	16.87	-2,900.9	-635.8	3,201.9	3,185.5	16.39	195.365	
6,692.9	6,639.9	6,538.3	6,536.7	15.1	1.8	17.49	-2,902.2	-633.9	3,181.5	3,165.1	16.44	193.530	
6,700.0	6,645.9	6,545.3	6,543.7	15.1	1.8	17.61	-2,902.4	-633.5	3,177.9	3,161.5	16.45	193.234	
6,750.0	6,686.8	6,593.2	6,591.6	15.1	1.8	18.52	-2,904.0	-630.7	3,151.0	3,134.5	16.48	191.195	
6,791.3	6,719.1	6,638.1	6,636.3	15.1	1.8	19.44	-2,905.5	-627.8	3,126.6	3,110.1	16.50	189.439	
6,800.0	6,725.7	6,647.5	6,645.7	15.1	1.8	19.65	-2,905.8	-627.2	3,121.2	3,104.7	16.51	189.075	
6,850.0	6,762.3	6,699.9	6,697.9	15.1	1.8	21.05	-2,907.3	-623.4	3,088.7	3,072.2	16.53	186.885	
6,889.7	6,789.7	6,733.0	6,730.9	15.1	1.8	22.35	-2,908.2	-620.8	3,061.1	3,044.5	16.54	185.084	
6,900.0	6,796.5	6,741.2	6,739.0	15.1	1.8	22.72	-2,908.4	-620.1	3,053.7	3,037.2	16.54	184.613	
6,950.0	6,828.0	6,779.3	6,777.0	15.1	1.8	24.77	-2,909.5	-616.9	3,016.4	2,999.8	16.58	181.984	
6,988.2	6,850.2	6,804.8	6,802.4	15.1	1.8	26.64	-2,910.1	-614.7	2,986.5	2,969.9	16.64	179.519	
7,000.0	6,856.7	6,810.9	6,808.5	15.1	1.8	27.27	-2,910.3	-614.1	2,977.1	2,960.4	16.65	178.825	
7,050.0	6,882.5	6,835.3	6,832.8	15.2	1.9	30.33	-2,911.0	-611.9	2,935.9	2,919.1	16.78	174.914	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - FRY PM C 18-4 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,086.6	6,899.5	6,851.5	6,848.9	15.3	1.9	33.05	-2,911.5	-610.4	2,904.8	2,887.8	16.95	171.382	
7,100.0	6,905.3	6,857.0	6,854.4	15.4	1.9	34.17	-2,911.6	-609.9	2,893.2	2,876.1	17.02	169.953	
7,150.0	6,924.9	6,876.0	6,873.3	15.7	1.9	39.01	-2,912.2	-608.2	2,849.1	2,831.7	17.39	163.861	
7,185.0	6,936.7	6,887.6	6,884.9	15.9	1.9	43.15	-2,912.5	-607.1	2,817.5	2,799.7	17.72	158.989	
7,200.0	6,941.2	6,892.2	6,889.4	16.0	1.9	45.15	-2,912.7	-606.7	2,803.8	2,785.9	17.88	156.848	
7,250.0	6,954.2	6,907.2	6,904.3	16.3	1.9	52.98	-2,913.1	-605.3	2,757.6	2,739.2	18.44	149.514	
7,283.4	6,961.0	6,916.7	6,913.8	16.6	1.9	59.32	-2,913.4	-604.4	2,726.3	2,707.5	18.81	144.945	
7,300.0	6,963.8	6,920.7	6,917.7	16.7	1.9	62.78	-2,913.5	-604.0	2,710.7	2,691.7	18.96	142.999	
7,350.0	6,970.0	6,929.9	6,926.9	17.2	1.9	74.33	-2,913.8	-603.1	2,663.3	2,644.1	19.23	138.472	
7,381.9	6,972.1	6,933.5	6,930.5	17.5	1.9	82.30	-2,913.9	-602.8	2,633.0	2,613.7	19.31	136.384	
7,400.0	6,972.7	6,934.9	6,931.9	17.7	1.9	86.90	-2,914.0	-602.7	2,615.7	2,596.3	19.37	135.023	
7,420.0	6,972.8	6,935.7	6,932.7	17.9	1.9	91.93	-2,914.0	-602.6	2,596.7	2,577.2	19.55	132.820	
7,480.3	6,972.2	6,937.1	6,934.0	18.5	1.9	92.03	-2,914.0	-602.5	2,539.4	2,519.2	20.20	125.733	
7,500.0	6,972.0	6,937.5	6,934.5	18.7	1.9	92.06	-2,914.0	-602.4	2,520.7	2,500.2	20.41	123.517	
7,578.7	6,971.3	6,939.3	6,936.3	19.7	1.9	92.19	-2,914.1	-602.3	2,446.1	2,424.8	21.33	114.658	
7,600.0	6,971.1	6,939.8	6,936.8	19.9	1.9	92.23	-2,914.1	-602.2	2,426.0	2,404.4	21.58	112.396	
7,677.1	6,970.4	6,941.5	6,938.5	20.9	1.9	92.35	-2,914.1	-602.1	2,353.2	2,330.7	22.58	104.230	
7,700.0	6,970.2	6,942.0	6,939.0	21.2	1.9	92.39	-2,914.2	-602.0	2,331.8	2,308.9	22.87	101.950	
7,775.6	6,969.5	6,943.7	6,940.7	22.2	1.9	92.51	-2,914.2	-601.9	2,260.9	2,237.0	23.92	94.508	
7,800.0	6,969.3	6,944.2	6,941.2	22.6	1.9	92.55	-2,914.2	-601.8	2,238.0	2,213.8	24.26	92.244	
7,874.0	6,968.6	6,945.9	6,942.8	23.7	1.9	92.66	-2,914.3	-601.7	2,169.0	2,143.7	25.35	85.549	
7,900.0	6,968.4	6,946.4	6,943.3	24.1	1.9	92.70	-2,914.3	-601.6	2,144.9	2,119.1	25.74	83.335	
7,972.4	6,967.8	6,948.0	6,944.9	25.2	1.9	92.81	-2,914.3	-601.5	2,077.8	2,050.9	26.86	77.363	
8,000.0	6,967.5	6,948.5	6,945.5	25.6	1.9	92.86	-2,914.3	-601.4	2,052.3	2,025.1	27.28	75.222	
8,070.8	6,966.9	6,950.0	6,946.9	26.7	1.9	92.96	-2,914.4	-601.3	1,987.2	1,958.8	28.42	69.923	
8,100.0	6,966.6	6,950.6	6,947.6	27.2	1.9	93.01	-2,914.4	-601.2	1,960.6	1,931.7	28.89	67.868	
8,169.3	6,966.0	6,952.1	6,949.0	28.3	1.9	93.11	-2,914.4	-601.1	1,897.5	1,867.4	30.03	63.180	
8,200.0	6,965.7	6,952.7	6,949.6	28.8	1.9	93.15	-2,914.5	-601.0	1,869.6	1,839.1	30.54	61.218	
8,267.7	6,965.1	6,954.1	6,951.0	30.0	1.9	93.25	-2,914.5	-600.9	1,808.6	1,776.9	31.69	57.078	
8,300.0	6,964.8	6,954.7	6,951.6	30.5	1.9	93.30	-2,914.5	-600.8	1,779.6	1,747.4	32.23	55.211	
8,366.1	6,964.2	6,956.0	6,952.9	31.7	1.9	93.40	-2,914.6	-600.7	1,720.7	1,687.4	33.37	51.558	
8,400.0	6,963.9	6,956.7	6,953.6	32.2	1.9	93.44	-2,914.6	-600.6	1,690.8	1,656.8	33.96	49.788	
8,464.5	6,963.3	6,958.0	6,954.9	33.4	1.9	93.54	-2,914.6	-600.5	1,634.1	1,599.0	35.09	46.566	
8,500.0	6,963.0	6,958.7	6,955.6	34.0	1.9	93.59	-2,914.6	-600.5	1,603.2	1,567.5	35.71	44.890	
8,563.0	6,962.4	6,959.9	6,956.8	35.1	1.9	93.67	-2,914.7	-600.3	1,548.9	1,512.0	36.83	42.049	
8,600.0	6,962.0	6,960.6	6,957.5	35.8	1.9	93.72	-2,914.7	-600.3	1,517.2	1,479.7	37.49	40.466	
8,661.4	6,961.5	6,961.8	6,958.6	36.9	1.9	93.81	-2,914.7	-600.2	1,465.3	1,426.7	38.60	37.962	
8,700.0	6,961.1	6,962.5	6,959.4	37.6	1.9	93.86	-2,914.7	-600.1	1,433.0	1,393.7	39.29	36.470	
8,759.8	6,960.6	6,963.6	6,960.5	38.7	1.9	93.94	-2,914.8	-600.0	1,383.7	1,343.3	40.38	34.265	
8,800.0	6,960.2	6,964.4	6,961.2	39.4	1.9	94.00	-2,914.8	-599.9	1,351.0	1,309.9	41.11	32.862	
8,858.2	6,959.7	6,965.5	6,962.3	40.5	1.9	94.07	-2,914.8	-599.8	1,304.4	1,262.2	42.18	30.924	
8,900.0	6,959.3	6,966.2	6,963.1	41.2	1.9	94.13	-2,914.8	-599.8	1,271.5	1,228.6	42.94	29.609	
8,956.7	6,958.8	6,967.2	6,964.1	42.3	1.9	94.20	-2,914.9	-599.7	1,227.8	1,183.8	43.99	27.911	
9,000.0	6,958.4	6,968.0	6,964.9	43.1	1.9	94.26	-2,914.9	-599.6	1,195.2	1,150.4	44.79	26.683	
9,055.1	6,957.9	6,969.0	6,965.8	44.1	1.9	94.33	-2,914.9	-599.5	1,154.6	1,108.8	45.81	25.202	
9,100.0	6,957.5	6,969.8	6,966.6	44.9	1.9	94.39	-2,914.9	-599.4	1,122.5	1,075.8	46.65	24.063	
9,153.5	6,957.0	6,970.8	6,967.6	45.9	1.9	94.46	-2,914.9	-599.3	1,085.4	1,037.7	47.65	22.779	
9,200.0	6,956.6	6,971.6	6,968.4	46.8	1.9	94.51	-2,915.0	-599.3	1,054.3	1,005.8	48.52	21.731	
9,251.9	6,956.1	6,972.5	6,969.3	47.8	1.9	94.58	-2,915.0	-599.2	1,021.0	971.5	49.49	20.629	
9,300.0	6,955.7	6,973.3	6,970.1	48.7	1.9	94.64	-2,915.0	-599.1	991.5	941.1	50.39	19.676	
9,350.4	6,955.2	6,974.2	6,971.0	49.6	1.9	94.70	-2,915.0	-599.0	962.3	911.0	51.34	18.743	
9,400.0	6,954.8	6,975.0	6,971.8	50.6	1.9	94.76	-2,915.1	-598.9	935.3	883.0	52.28	17.890	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - FRY PM C 18-4 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,448.8	6,954.3	6,975.8	6,972.6	51.5	1.9	94.82	-2,915.1	-598.9	910.5	857.3	53.20	17.115	
9,500.0	6,953.9	6,976.7	6,973.5	52.5	1.9	94.88	-2,915.1	-598.8	886.7	832.6	54.17	16.370	
9,547.2	6,953.4	6,977.5	6,974.3	53.4	1.9	94.94	-2,915.1	-598.7	866.9	811.8	55.06	15.743	
9,600.0	6,952.9	6,978.3	6,975.1	54.4	1.9	95.00	-2,915.1	-598.6	847.3	791.2	56.07	15.112	
9,645.6	6,952.5	6,979.1	6,975.9	55.2	1.9	95.06	-2,915.2	-598.6	832.6	775.7	56.93	14.624	
9,700.0	6,952.0	6,980.0	6,976.7	56.3	1.9	95.12	-2,915.2	-598.5	818.2	760.2	57.97	14.114	
9,744.1	6,951.6	6,980.7	6,977.5	57.1	1.9	95.17	-2,915.2	-598.4	809.0	750.1	58.81	13.756	
9,800.0	6,951.1	6,981.6	6,978.3	58.2	1.9	95.24	-2,915.2	-598.3	800.6	740.7	59.88	13.371	
9,842.5	6,950.7	6,982.2	6,979.0	59.0	1.9	95.28	-2,915.2	-598.3	796.8	736.1	60.69	13.130	
9,892.3	6,950.3	6,983.0	6,979.8	60.0	1.9	95.34	-2,915.3	-598.2	795.3	733.6	61.64	12.902 CC	
9,900.0	6,950.2	6,983.2	6,979.9	60.1	1.9	95.35	-2,915.3	-598.2	795.3	733.5	61.79	12.872 ES	
9,940.9	6,949.8	6,983.8	6,980.6	60.9	1.9	95.40	-2,915.3	-598.1	796.8	734.2	62.57	12.733	
10,000.0	6,949.3	6,984.7	6,981.5	62.0	1.9	95.46	-2,915.3	-598.0	802.5	738.8	63.70	12.598	
10,039.3	6,948.9	6,985.3	6,982.1	62.8	1.9	95.51	-2,915.3	-598.0	808.8	744.3	64.46	12.547	
10,100.0	6,948.4	6,986.3	6,983.0	64.0	1.9	95.57	-2,915.3	-597.9	821.9	756.3	65.62	12.525 SF	
10,137.8	6,948.0	6,986.8	6,983.6	64.7	1.9	95.61	-2,915.4	-597.8	832.3	765.9	66.35	12.544	
10,200.0	6,947.5	6,987.8	6,984.5	65.9	1.9	95.68	-2,915.4	-597.8	852.7	785.2	67.54	12.625	
10,236.2	6,947.1	6,988.3	6,985.1	66.6	1.9	95.72	-2,915.4	-597.7	866.4	798.2	68.24	12.697	
10,300.0	6,946.6	6,989.3	6,986.0	67.8	1.9	95.79	-2,915.4	-597.6	893.7	824.2	69.47	12.865	
10,334.6	6,946.3	6,989.8	6,986.5	68.5	1.9	95.83	-2,915.4	-597.6	910.0	839.9	70.14	12.975	
10,400.0	6,945.7	6,990.7	6,987.5	69.8	1.9	95.90	-2,915.5	-597.5	943.5	872.1	71.40	13.215	
10,433.0	6,945.4	6,991.2	6,987.9	70.4	1.9	95.93	-2,915.5	-597.4	961.7	889.7	72.03	13.351	
10,500.0	6,944.7	6,992.2	6,988.9	71.7	1.9	96.00	-2,915.5	-597.3	1,000.9	927.5	73.32	13.650	
10,531.5	6,944.5	6,992.6	6,989.4	72.3	1.9	96.03	-2,915.5	-597.3	1,020.3	946.3	73.93	13.800	
10,600.0	6,943.8	6,993.6	6,990.3	73.7	1.9	96.10	-2,915.5	-597.2	1,064.5	989.3	75.26	14.146	
10,629.9	6,943.6	6,994.0	6,990.8	74.2	1.9	96.13	-2,915.5	-597.2	1,084.6	1,008.8	75.83	14.303	
10,700.0	6,942.9	6,995.0	6,991.7	75.6	1.9	96.20	-2,915.6	-597.1	1,133.5	1,056.3	77.19	14.684	
10,728.3	6,942.7	6,995.4	6,992.1	76.2	1.9	96.23	-2,915.6	-597.0	1,153.8	1,076.1	77.74	14.843	
10,800.0	6,942.0	6,996.4	6,993.1	77.6	1.9	96.31	-2,915.6	-596.9	1,206.8	1,127.6	79.12	15.252	
10,826.7	6,941.8	7,000.0	6,996.7	78.1	1.9	96.56	-2,915.7	-596.6	1,227.0	1,147.4	79.62	15.410	
10,900.0	6,941.1	7,000.0	6,996.7	79.5	1.9	96.56	-2,915.7	-596.6	1,283.7	1,202.6	81.05	15.838	
10,925.2	6,940.9	7,000.0	6,996.7	80.0	1.9	96.56	-2,915.7	-596.6	1,303.5	1,222.0	81.54	15.987	
11,000.0	6,940.2	7,000.0	6,996.7	81.5	1.9	96.56	-2,915.7	-596.6	1,363.6	1,280.6	82.99	16.430	
11,023.6	6,940.0	7,000.0	6,996.7	81.9	1.9	96.56	-2,915.7	-596.6	1,382.8	1,299.3	83.45	16.570	
11,100.0	6,939.3	7,000.0	6,996.7	83.4	1.9	96.56	-2,915.7	-596.6	1,445.9	1,361.0	84.94	17.024	
11,122.0	6,939.1	7,000.0	6,996.7	83.8	1.9	96.56	-2,915.7	-596.6	1,464.4	1,379.0	85.37	17.154	
11,200.0	6,938.4	7,000.0	6,996.7	85.4	1.9	96.56	-2,915.7	-596.6	1,530.4	1,443.6	86.88	17.615	
11,220.4	6,938.2	7,000.0	6,996.7	85.8	1.9	96.56	-2,915.7	-596.6	1,548.0	1,460.7	87.28	17.735	
11,300.0	6,937.4	7,000.0	6,996.7	87.3	1.9	96.56	-2,915.7	-596.6	1,616.7	1,527.9	88.83	18.199	
11,318.9	6,937.3	7,000.0	6,996.7	87.7	1.9	96.56	-2,915.7	-596.6	1,633.2	1,544.0	89.20	18.309	
11,400.0	6,936.5	7,000.0	6,996.7	89.3	1.9	96.56	-2,915.7	-596.6	1,704.5	1,613.7	90.78	18.775	
11,417.3	6,936.4	7,000.0	6,996.7	89.6	1.9	96.56	-2,915.7	-596.6	1,719.8	1,628.7	91.12	18.874	
11,500.0	6,935.6	7,000.0	6,996.7	91.3	1.9	96.56	-2,915.7	-596.6	1,793.5	1,700.8	92.74	19.340	
11,515.7	6,935.5	7,000.0	6,996.7	91.6	1.9	96.56	-2,915.7	-596.6	1,807.6	1,714.6	93.04	19.428	
11,600.0	6,934.7	7,000.0	6,996.7	93.2	1.9	96.56	-2,915.7	-596.6	1,883.7	1,789.0	94.69	19.894	
11,614.1	6,934.6	7,000.0	6,996.7	93.5	1.9	96.56	-2,915.7	-596.6	1,896.5	1,801.6	94.96	19.971	
11,700.0	6,933.8	7,000.0	6,996.7	95.2	1.9	96.56	-2,915.7	-596.6	1,974.8	1,878.1	96.64	20.434	
11,712.6	6,933.7	7,000.0	6,996.7	95.4	1.9	96.56	-2,915.7	-596.6	1,986.3	1,889.4	96.89	20.501	
11,800.0	6,932.9	7,000.0	6,996.7	97.1	1.9	96.56	-2,915.7	-596.6	2,066.7	1,968.1	98.60	20.961	
11,811.0	6,932.8	7,000.0	6,996.7	97.4	1.9	96.56	-2,915.7	-596.6	2,076.9	1,978.0	98.81	21.018	
11,900.0	6,932.0	7,000.0	6,996.7	99.1	1.9	96.56	-2,915.7	-596.6	2,159.3	2,058.8	100.55	21.474	
11,909.4	6,931.9	7,000.0	6,996.7	99.3	1.9	96.56	-2,915.7	-596.6	2,168.1	2,067.4	100.74	21.522	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - FRY PM C 18-4 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
12,000.0	6,931.0	7,000.0	6,996.7	101.1	1.9	96.56	-2,915.7	-596.6	2,252.6	2,150.1	102.51	21.974	
12,007.8	6,931.0	7,000.0	6,996.7	101.2	1.9	96.56	-2,915.7	-596.6	2,260.0	2,157.3	102.67	22.013	
12,100.0	6,930.1	7,000.0	6,996.7	103.0	1.9	96.56	-2,915.7	-596.6	2,346.4	2,242.0	104.47	22.460	
12,106.3	6,930.1	7,000.0	6,996.7	103.2	1.9	96.56	-2,915.7	-596.6	2,352.3	2,247.7	104.59	22.490	
12,200.0	6,929.2	7,000.0	6,996.7	105.0	1.9	96.56	-2,915.7	-596.6	2,440.8	2,334.3	106.43	22.933	
12,204.7	6,929.2	7,000.0	6,996.7	105.1	1.9	96.56	-2,915.7	-596.6	2,445.2	2,338.7	106.52	22.955	
12,300.0	6,928.3	7,000.0	6,996.7	107.0	1.9	96.56	-2,915.7	-596.6	2,535.5	2,427.1	108.39	23.393	
12,303.1	6,928.3	7,000.0	6,996.7	107.1	1.9	96.56	-2,915.7	-596.6	2,538.5	2,430.0	108.45	23.407	
12,400.0	6,927.4	7,000.0	6,996.7	109.0	1.9	96.56	-2,915.7	-596.6	2,630.6	2,520.3	110.35	23.839	
12,401.5	6,927.4	7,000.0	6,996.7	109.0	1.9	96.56	-2,915.7	-596.6	2,632.1	2,521.7	110.38	23.846	
12,500.0	6,926.5	7,000.0	6,996.7	110.9	1.9	96.56	-2,915.7	-596.6	2,726.1	2,613.8	112.31	24.273	
12,598.4	6,925.6	7,000.0	6,996.7	112.9	1.9	96.56	-2,915.7	-596.6	2,820.4	2,706.1	114.24	24.688	
12,600.0	6,925.6	7,000.0	6,996.7	112.9	1.9	96.56	-2,915.7	-596.6	2,821.9	2,707.7	114.27	24.695	
12,696.8	6,924.7	7,000.0	6,996.7	114.8	1.9	96.56	-2,915.7	-596.6	2,915.0	2,798.8	116.17	25.091	
12,700.0	6,924.6	7,000.0	6,996.7	114.9	1.9	96.56	-2,915.7	-596.6	2,918.0	2,801.8	116.24	25.104	
12,795.2	6,923.8	7,000.0	6,996.7	116.8	1.9	96.56	-2,915.7	-596.6	3,009.8	2,891.7	118.11	25.483	
12,800.0	6,923.7	7,000.0	6,996.7	116.9	1.9	96.56	-2,915.7	-596.6	3,014.3	2,896.1	118.20	25.502	
12,893.7	6,922.9	7,000.0	6,996.7	118.7	1.9	96.56	-2,915.7	-596.6	3,104.8	2,984.8	120.04	25.865	
12,900.0	6,922.8	7,000.0	6,996.7	118.8	1.9	96.56	-2,915.7	-596.6	3,110.9	2,990.7	120.16	25.889	
12,992.1	6,922.0	7,000.0	6,996.7	120.6	1.9	96.56	-2,915.7	-596.6	3,200.0	3,078.1	121.97	26.236	
13,000.0	6,921.9	7,000.0	6,996.7	120.8	1.9	96.56	-2,915.7	-596.6	3,207.7	3,085.6	122.13	26.265	
13,090.5	6,921.1	7,000.0	6,996.7	122.6	1.9	96.56	-2,915.7	-596.6	3,295.5	3,171.6	123.91	26.596	
13,100.0	6,921.0	7,000.0	6,996.7	122.8	1.9	96.56	-2,915.7	-596.6	3,304.7	3,180.6	124.09	26.630	
13,188.9	6,920.2	7,000.0	6,996.7	124.5	1.9	96.56	-2,915.7	-596.6	3,391.1	3,265.2	125.84	26.947	
13,200.0	6,920.1	7,000.0	6,996.7	124.8	1.9	96.56	-2,915.7	-596.6	3,401.8	3,275.7	126.06	26.986	
13,287.4	6,919.3	7,000.0	6,996.7	126.5	1.9	96.56	-2,915.7	-596.6	3,486.8	3,359.0	127.78	27.288	
13,300.0	6,919.1	7,000.0	6,996.7	126.7	1.9	96.56	-2,915.7	-596.6	3,499.1	3,371.1	128.03	27.331	
13,385.8	6,918.4	7,000.0	6,996.7	128.4	1.9	96.56	-2,915.7	-596.6	3,582.7	3,453.0	129.71	27.620	
13,400.0	6,918.2	7,000.0	6,996.7	128.7	1.9	96.56	-2,915.7	-596.6	3,596.6	3,466.6	129.99	27.667	
13,484.2	6,917.5	7,000.0	6,996.7	130.4	1.9	96.56	-2,915.7	-596.6	3,678.8	3,547.1	131.65	27.943	
13,500.0	6,917.3	7,000.0	6,996.7	130.7	1.9	96.56	-2,915.7	-596.6	3,694.2	3,562.2	131.96	27.994	
13,582.6	6,916.6	7,000.0	6,996.7	132.3	1.9	96.56	-2,915.7	-596.6	3,774.9	3,641.3	133.59	28.258	
13,600.0	6,916.4	7,000.0	6,996.7	132.7	1.9	96.56	-2,915.7	-596.6	3,791.9	3,657.9	133.93	28.313	
13,681.1	6,915.6	7,000.0	6,996.7	134.3	1.9	96.56	-2,915.7	-596.6	3,871.2	3,735.7	135.52	28.565	
13,700.0	6,915.5	7,000.0	6,996.7	134.6	1.9	96.56	-2,915.7	-596.6	3,889.7	3,753.8	135.90	28.623	
13,779.5	6,914.7	7,000.0	6,996.7	136.2	1.9	96.56	-2,915.7	-596.6	3,967.6	3,830.1	137.46	28.863	
13,800.0	6,914.6	7,000.0	6,996.7	136.6	1.9	96.56	-2,915.7	-596.6	3,987.6	3,849.8	137.86	28.924	
13,877.9	6,913.8	7,000.0	6,996.7	138.2	1.9	96.56	-2,915.7	-596.6	4,064.0	3,924.6	139.40	29.154	
13,900.0	6,913.6	7,000.0	6,996.7	138.6	1.9	96.55	-2,915.7	-596.6	4,085.7	3,945.8	139.83	29.218	
13,976.3	6,912.9	7,000.0	6,996.7	140.1	1.9	96.55	-2,915.7	-596.6	4,160.6	4,019.3	141.34	29.438	
14,000.0	6,912.7	7,000.0	6,996.7	140.6	1.9	96.55	-2,915.7	-596.6	4,183.8	4,042.0	141.80	29.505	
14,074.8	6,912.0	7,000.0	6,996.7	142.0	1.9	96.55	-2,915.7	-596.6	4,257.3	4,114.0	143.21	29.727	
14,079.0	6,912.0	7,000.0	6,996.7	142.1	1.9	96.55	-2,915.7	-596.6	4,261.4	4,118.1	143.29	29.739	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 600-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	-102.32	-193.1	-883.9	905.0				
98.4	98.4	74.6	74.6	0.1	0.1	-102.32	-193.0	-883.9	904.7	904.6	0.17	5,206.709 CC	
100.0	100.0	76.2	76.2	0.1	0.1	-102.32	-193.0	-883.9	904.7	904.6	0.18	5,106.314	
196.8	196.8	172.7	172.7	0.3	0.2	-102.31	-192.9	-884.0	904.8	904.3	0.50	1,823.775	
200.0	200.0	175.8	175.8	0.3	0.2	-102.31	-192.9	-884.0	904.8	904.3	0.51	1,786.428	
295.3	295.3	270.7	270.7	0.5	0.3	-102.30	-192.7	-884.1	904.9	904.1	0.82	1,103.215	
300.0	300.0	275.5	275.5	0.5	0.3	-102.30	-192.7	-884.1	904.9	904.1	0.84	1,082.684	
393.7	393.7	368.8	368.8	0.8	0.4	-102.28	-192.5	-884.3	905.0	903.9	1.14	790.864	
400.0	400.0	375.1	375.1	0.8	0.4	-102.28	-192.4	-884.3	905.0	903.9	1.17	776.790	
492.1	492.1	466.9	466.9	1.0	0.5	-102.25	-192.1	-884.6	905.2	903.7	1.47	616.424	
500.0	500.0	474.7	474.7	1.0	0.5	-102.25	-192.1	-884.6	905.2	903.7	1.49	605.737	
590.5	590.5	564.9	564.9	1.2	0.6	-102.22	-191.7	-884.9	905.4	903.6	1.79	505.088	
600.0	600.0	574.3	574.3	1.2	0.6	-102.22	-191.6	-884.9	905.4	903.6	1.82	496.482	
689.0	689.0	660.5	660.5	1.4	0.8	-102.19	-191.2	-885.3	905.7	903.6	2.18	415.017 ES	
700.0	700.0	671.0	671.0	1.4	0.8	-102.18	-191.1	-885.4	905.8	903.6	2.23	406.155	
787.4	787.4	756.2	756.2	1.6	1.0	-102.15	-190.8	-886.1	906.5	903.9	2.60	348.233	
800.0	800.0	768.6	768.6	1.7	1.0	-102.15	-190.8	-886.2	906.6	903.9	2.66	341.285	
885.8	885.8	852.9	852.8	1.9	1.2	-102.14	-190.8	-887.1	907.4	904.4	3.02	300.191	
900.0	900.0	866.7	866.7	1.9	1.2	-102.13	-190.8	-887.2	907.5	904.5	3.08	294.318	
984.2	984.2	948.4	948.4	2.1	1.4	-102.12	-190.8	-888.2	908.6	905.1	3.45	263.520	
1,000.0	1,000.0	963.5	963.5	2.1	1.4	-102.12	-190.8	-888.4	908.8	905.3	3.52	258.453	
1,082.7	1,082.7	1,045.2	1,045.2	2.3	1.6	-102.12	-191.1	-889.6	910.0	906.2	3.87	234.919	
1,100.0	1,100.0	1,062.7	1,062.6	2.3	1.6	-102.13	-191.2	-889.9	910.3	906.4	3.95	230.541	
1,181.1	1,181.1	1,143.5	1,143.4	2.5	1.8	-102.16	-191.9	-891.0	911.5	907.2	4.30	212.207	
1,200.0	1,200.0	1,162.1	1,162.0	2.6	1.8	-102.17	-192.2	-891.2	911.8	907.5	4.38	208.380	
1,279.5	1,279.5	1,241.3	1,241.2	2.7	2.0	-138.74	-193.2	-892.3	914.0	909.2	4.71	194.014	
1,300.0	1,300.0	1,261.8	1,261.8	2.8	2.0	-138.76	-193.4	-892.6	914.8	910.0	4.80	190.660	
1,377.9	1,377.8	1,339.7	1,339.7	3.0	2.2	-138.91	-194.4	-893.7	918.9	913.7	5.13	179.193	
1,400.0	1,399.8	1,361.6	1,361.5	3.0	2.2	-138.96	-194.6	-894.0	920.3	915.1	5.22	176.282	
1,476.4	1,475.9	1,439.3	1,439.2	3.2	2.4	-139.18	-195.5	-895.0	926.3	920.8	5.55	166.987	
1,500.0	1,499.5	1,463.9	1,463.8	3.2	2.4	-139.27	-195.8	-895.3	928.4	922.8	5.65	164.368	
1,574.8	1,573.7	1,539.1	1,539.0	3.4	2.6	-139.56	-196.5	-896.1	936.0	930.0	5.97	156.800	
1,600.0	1,598.7	1,563.7	1,563.6	3.5	2.6	-139.66	-196.7	-896.3	938.9	932.8	6.08	154.547	
1,673.2	1,671.1	1,634.9	1,634.7	3.7	2.8	-139.98	-197.1	-897.2	948.4	942.0	6.39	148.415	
1,700.0	1,697.5	1,660.8	1,660.7	3.7	2.8	-140.10	-197.2	-897.5	952.3	945.8	6.50	146.415	
1,771.6	1,767.9	1,730.1	1,729.9	4.0	3.0	-140.45	-197.5	-898.5	963.6	956.8	6.82	141.331	
1,800.1	1,795.7	1,757.5	1,757.3	4.0	3.1	-140.60	-197.5	-898.9	968.5	961.6	6.94	139.540	
1,870.1	1,864.2	1,824.8	1,824.7	4.3	3.2	-141.11	-197.5	-900.0	981.0	973.8	7.27	135.022	
1,900.0	1,893.4	1,853.6	1,853.4	4.4	3.3	-141.32	-197.5	-900.5	986.4	979.0	7.40	133.238	
1,968.5	1,960.4	1,919.5	1,919.4	4.6	3.4	-141.79	-197.3	-901.8	998.8	991.1	7.73	129.252	
2,000.0	1,991.3	1,949.9	1,949.7	4.7	3.5	-142.00	-197.2	-902.4	1,004.6	996.7	7.87	127.567	
2,066.9	2,056.7	2,014.5	2,014.3	5.0	3.6	-142.43	-196.8	-903.7	1,016.9	1,008.7	8.20	124.085	
2,100.0	2,089.1	2,046.8	2,046.6	5.1	3.7	-142.64	-196.6	-904.4	1,023.0	1,014.6	8.35	122.442	
2,165.3	2,153.0	2,110.5	2,110.3	5.3	3.8	-143.05	-196.2	-905.8	1,035.1	1,026.4	8.67	119.344	
2,200.0	2,186.9	2,144.3	2,144.1	5.5	3.9	-143.26	-195.9	-906.5	1,041.6	1,032.7	8.84	117.799	
2,263.8	2,249.3	2,206.5	2,206.3	5.7	4.0	-143.65	-195.6	-907.8	1,053.5	1,044.3	9.15	115.071	
2,300.0	2,284.7	2,241.9	2,241.6	5.8	4.1	-143.87	-195.3	-908.6	1,060.3	1,050.9	9.33	113.613	
2,362.2	2,345.5	2,302.5	2,302.3	6.1	4.2	-144.23	-195.0	-909.9	1,071.9	1,062.3	9.64	111.209	
2,400.0	2,382.5	2,339.4	2,339.1	6.2	4.3	-144.45	-194.8	-910.6	1,079.1	1,069.2	9.82	109.830	
2,460.6	2,441.8	2,398.5	2,398.3	6.5	4.4	-144.79	-194.4	-911.9	1,090.5	1,080.4	10.12	107.707	
2,500.0	2,480.3	2,436.9	2,436.7	6.6	4.5	-145.02	-194.2	-912.7	1,098.0	1,087.7	10.32	106.403	
2,559.0	2,538.1	2,494.5	2,494.2	6.9	4.6	-145.34	-193.9	-914.0	1,109.2	1,098.6	10.61	104.525	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 600-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,600.0	2,578.1	2,534.7	2,534.4	7.0	4.7	-145.56	-193.7	-914.8	1,117.0	1,106.2	10.81	103.289	
2,657.5	2,634.4	2,591.1	2,590.7	7.3	4.8	-145.87	-193.4	-916.0	1,128.0	1,116.9	11.10	101.621	
2,700.0	2,675.9	2,632.8	2,632.5	7.5	4.9	-146.09	-193.1	-916.9	1,136.1	1,124.8	11.31	100.449	
2,755.9	2,730.6	2,687.6	2,687.3	7.7	5.0	-146.38	-192.8	-918.0	1,146.8	1,135.2	11.59	98.965	
2,800.0	2,773.8	2,730.9	2,730.6	7.9	5.1	-146.60	-192.5	-918.9	1,155.3	1,143.5	11.81	97.850	
2,854.3	2,826.9	2,784.3	2,783.9	8.1	5.2	-146.87	-192.1	-920.1	1,165.7	1,153.6	12.08	96.529	
2,857.4	2,829.9	2,787.2	2,786.9	8.1	5.2	-146.88	-192.1	-920.1	1,166.3	1,154.2	12.09	96.457	
2,900.0	2,871.6	2,829.2	2,828.8	8.3	5.3	-147.17	-191.8	-921.0	1,174.2	1,161.9	12.30	95.449	
2,952.7	2,923.5	2,881.2	2,880.9	8.4	5.4	-147.49	-191.4	-922.1	1,183.3	1,170.7	12.54	94.334	
3,000.0	2,970.1	2,928.0	2,927.6	8.6	5.5	-147.74	-191.0	-923.0	1,190.7	1,177.9	12.76	93.321	
3,051.2	3,020.7	2,978.9	2,978.4	8.7	5.6	-147.98	-190.5	-924.1	1,198.0	1,185.0	12.99	92.256	
3,100.0	3,069.1	3,029.4	3,029.0	8.9	5.7	-148.18	-190.1	-925.0	1,204.3	1,191.1	13.21	91.196	
3,149.6	3,118.3	3,082.4	3,081.9	9.0	5.8	-148.35	-189.6	-925.9	1,209.8	1,196.4	13.42	90.124	
3,200.0	3,168.5	3,136.3	3,135.9	9.1	6.0	-148.50	-189.2	-926.6	1,214.5	1,200.8	13.64	89.010	
3,248.0	3,216.3	3,187.9	3,187.4	9.2	6.1	-148.61	-188.7	-927.2	1,218.1	1,204.3	13.85	87.973	
3,300.0	3,268.2	3,243.7	3,243.3	9.3	6.2	-148.71	-188.3	-927.5	1,221.1	1,207.0	14.06	86.825	
3,346.4	3,314.6	3,293.7	3,293.2	9.4	6.3	-148.76	-187.9	-927.7	1,222.9	1,208.7	14.25	85.821	
3,400.0	3,368.1	3,351.3	3,350.9	9.5	6.4	-148.80	-187.4	-927.6	1,224.1	1,209.6	14.46	84.637	
3,444.9	3,413.0	3,399.7	3,399.2	9.6	6.5	-148.80	-187.0	-927.4	1,224.3	1,209.6	14.63	83.656	
3,457.5	3,425.6	3,413.2	3,412.8	9.6	6.5	-112.29	-186.9	-927.4	1,224.2	1,209.5	14.68	83.413	
3,500.0	3,468.1	3,459.0	3,458.6	9.7	6.6	-112.28	-186.6	-927.0	1,223.8	1,208.9	14.85	82.414	
3,543.3	3,511.4	3,500.0	3,499.5	9.7	6.7	-112.28	-186.3	-926.6	1,223.2	1,208.2	15.02	81.442	
3,600.0	3,568.1	3,560.3	3,559.8	9.8	6.8	-112.27	-185.8	-925.9	1,222.5	1,207.2	15.26	80.127	
3,641.7	3,609.9	3,600.9	3,600.4	9.9	6.9	-112.26	-185.5	-925.5	1,222.0	1,206.6	15.42	79.226	
3,700.0	3,668.1	3,657.6	3,657.2	10.0	7.0	-112.25	-185.0	-925.0	1,221.3	1,205.7	15.66	78.003	
3,740.1	3,708.3	3,696.7	3,696.2	10.1	7.1	-112.24	-184.7	-924.8	1,221.0	1,205.1	15.82	77.181	
3,800.0	3,768.1	3,755.0	3,754.5	10.2	7.2	-112.22	-184.2	-924.4	1,220.4	1,204.4	16.06	75.991	
3,838.6	3,806.7	3,792.5	3,792.0	10.2	7.3	-112.21	-183.8	-924.3	1,220.1	1,203.9	16.22	75.243	
3,900.0	3,868.1	3,852.3	3,851.8	10.3	7.5	-112.19	-183.2	-924.1	1,219.7	1,203.3	16.46	74.085	
3,937.0	3,905.1	3,888.3	3,887.8	10.4	7.5	-112.17	-182.9	-924.0	1,219.5	1,202.9	16.61	73.404	
4,000.0	3,968.1	3,949.6	3,949.2	10.5	7.7	-112.15	-182.2	-924.0	1,219.2	1,202.4	16.87	72.276	
4,035.4	4,003.6	3,984.1	3,983.6	10.6	7.7	-112.13	-181.9	-924.0	1,219.1	1,202.1	17.01	71.658	
4,100.0	4,068.1	4,049.7	4,049.2	10.7	7.9	-112.10	-181.1	-924.1	1,218.9	1,201.7	17.28	70.526	
4,133.8	4,102.0	4,084.5	4,084.0	10.8	7.9	-112.08	-180.7	-924.1	1,218.8	1,201.4	17.43	69.937	
4,200.0	4,168.1	4,152.5	4,152.0	10.9	8.1	-112.03	-179.6	-924.2	1,218.4	1,200.7	17.71	68.809	
4,232.3	4,200.4	4,185.7	4,185.2	10.9	8.2	-112.01	-179.1	-924.1	1,218.2	1,200.4	17.84	68.268	
4,300.0	4,268.1	4,255.4	4,254.9	11.1	8.3	-111.95	-177.8	-924.1	1,217.7	1,199.6	18.13	67.155	
4,330.7	4,298.8	4,287.0	4,286.5	11.1	8.4	-111.93	-177.2	-924.0	1,217.4	1,199.2	18.26	66.659	
4,400.0	4,368.1	4,358.3	4,357.7	11.2	8.5	-111.86	-175.7	-923.9	1,216.8	1,198.2	18.56	65.561	
4,429.1	4,397.3	4,388.2	4,387.7	11.3	8.6	-111.83	-175.0	-923.8	1,216.4	1,197.8	18.68	65.107	
4,500.0	4,468.1	4,461.1	4,460.6	11.4	8.7	-111.76	-173.2	-923.5	1,215.6	1,196.6	18.99	64.022	
4,527.5	4,495.7	4,489.5	4,488.9	11.5	8.8	-111.73	-172.5	-923.4	1,215.2	1,196.1	19.10	63.607	
4,600.0	4,568.1	4,565.6	4,565.0	11.6	9.0	-111.65	-170.5	-923.0	1,214.1	1,194.7	19.42	62.531	
4,626.0	4,594.1	4,593.0	4,592.4	11.7	9.0	-111.62	-169.8	-922.7	1,213.6	1,194.1	19.53	62.150	
4,700.0	4,668.1	4,671.1	4,670.4	11.8	9.2	-111.56	-168.0	-921.8	1,212.2	1,192.3	19.85	61.080	
4,724.4	4,692.5	4,696.8	4,696.1	11.8	9.2	-111.55	-167.5	-921.4	1,211.7	1,191.7	19.95	60.732	
4,800.0	4,768.1	4,776.5	4,775.8	12.0	9.4	-111.50	-165.9	-920.0	1,209.8	1,189.6	20.28	59.668	
4,822.8	4,791.0	4,800.6	4,799.9	12.0	9.4	-111.49	-165.4	-919.5	1,209.2	1,188.9	20.37	59.351	
4,900.0	4,868.1	4,881.9	4,881.2	12.2	9.6	-111.47	-164.1	-917.5	1,207.0	1,186.3	20.71	58.293	
4,921.2	4,889.4	4,904.3	4,903.6	12.2	9.7	-111.46	-163.8	-916.9	1,206.4	1,185.6	20.80	58.005	
5,000.0	4,968.1	4,987.4	4,986.6	12.4	9.8	-111.46	-162.7	-914.4	1,203.8	1,182.6	21.14	56.953	
5,019.7	4,987.8	5,000.0	4,999.2	12.4	9.9	-111.46	-162.5	-913.9	1,203.1	1,181.9	21.20	56.740	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 600-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	5,068.1	5,085.2	5,084.4	12.6	10.0	-111.46	-161.6	-911.2	1,200.3	1,178.8	21.55	55.709	
5,118.1	5,086.2	5,102.8	5,101.9	12.6	10.1	-111.47	-161.4	-910.6	1,199.7	1,178.1	21.62	55.490	
5,200.0	5,168.1	5,182.1	5,181.2	12.8	10.2	-111.47	-160.6	-908.3	1,197.2	1,175.2	21.96	54.527	
5,216.5	5,184.7	5,198.1	5,197.2	12.8	10.3	-111.47	-160.5	-907.8	1,196.7	1,174.6	22.02	54.337	
5,300.0	5,268.1	5,279.0	5,278.0	13.0	10.4	-111.48	-159.7	-905.6	1,194.2	1,171.9	22.36	53.399	
5,314.9	5,283.1	5,293.5	5,292.5	13.0	10.5	-111.48	-159.6	-905.2	1,193.8	1,171.4	22.43	53.235	
5,400.0	5,368.1	5,375.9	5,374.9	13.1	10.6	-111.49	-158.9	-903.1	1,191.6	1,168.8	22.77	52.321	
5,413.4	5,381.5	5,388.8	5,387.9	13.2	10.7	-111.49	-158.8	-902.8	1,191.2	1,168.4	22.83	52.181	
5,500.0	5,468.1	5,472.8	5,471.8	13.3	10.8	-111.49	-158.2	-900.9	1,189.2	1,166.0	23.18	51.291	
5,511.8	5,479.9	5,484.2	5,483.2	13.4	10.9	-111.50	-158.1	-900.6	1,188.9	1,165.7	23.23	51.173	
5,600.0	5,568.1	5,570.6	5,569.6	13.5	11.0	-111.50	-157.6	-898.8	1,187.0	1,163.4	23.60	50.302	
5,610.2	5,578.4	5,580.7	5,579.7	13.6	11.1	-111.51	-157.6	-898.6	1,186.8	1,163.1	23.64	50.202	
5,700.0	5,668.1	5,668.9	5,667.8	13.7	11.2	-111.52	-157.2	-896.8	1,184.9	1,160.9	24.01	49.350	
5,708.6	5,676.8	5,677.4	5,676.3	13.8	11.3	-111.52	-157.2	-896.6	1,184.8	1,160.7	24.05	49.269	
5,800.0	5,768.1	5,767.1	5,766.0	13.9	11.4	-111.55	-157.1	-894.9	1,183.1	1,158.6	24.43	48.436	
5,807.1	5,775.2	5,774.1	5,773.0	14.0	11.5	-111.55	-157.1	-894.7	1,182.9	1,158.5	24.45	48.372	
5,900.0	5,868.1	5,865.3	5,864.3	14.1	11.6	-111.59	-157.2	-893.0	1,181.3	1,156.5	24.84	47.557	
5,905.5	5,873.6	5,870.7	5,869.7	14.1	11.7	-111.59	-157.2	-892.9	1,181.2	1,156.4	24.86	47.510	
6,000.0	5,968.1	5,963.6	5,962.5	14.3	11.8	-111.63	-157.5	-891.2	1,179.7	1,154.5	25.25	46.713	
6,003.9	5,972.1	5,967.4	5,966.3	14.3	11.8	-111.64	-157.5	-891.1	1,179.7	1,154.4	25.27	46.680	
6,100.0	6,068.1	6,063.0	6,061.9	14.5	12.0	-111.69	-158.0	-889.4	1,178.3	1,152.6	25.67	45.893	
6,102.3	6,070.5	6,065.3	6,064.2	14.5	12.1	-111.69	-158.0	-889.4	1,178.2	1,152.5	25.68	45.874	
6,200.0	6,168.1	6,163.1	6,161.9	14.7	12.3	-111.74	-158.5	-887.7	1,176.8	1,150.7	26.10	45.096	
6,200.8	6,168.9	6,163.8	6,162.7	14.7	12.3	-111.74	-158.5	-887.6	1,176.8	1,150.7	26.10	45.090	
6,288.5	6,256.6	6,251.6	6,250.5	14.9	12.4	-111.79	-158.9	-886.1	1,175.5	1,149.0	26.47	44.410	
6,299.2	6,267.3	6,262.4	6,261.2	14.9	12.5	-111.79	-158.9	-885.9	1,175.3	1,148.8	26.51	44.330	
6,300.0	6,268.1	6,263.2	6,262.0	14.9	12.5	68.01	-158.9	-885.9	1,175.3	1,148.8	26.52	44.324	
6,350.0	6,318.1	6,313.1	6,312.0	15.0	12.6	68.23	-159.2	-885.0	1,173.6	1,146.9	26.68	43.994	
6,397.6	6,365.3	6,360.5	6,359.3	15.1	12.7	68.67	-159.4	-884.2	1,170.8	1,144.0	26.81	43.670	
6,400.0	6,367.7	6,362.8	6,361.7	15.1	12.7	68.70	-159.4	-884.1	1,170.6	1,143.8	26.82	43.653	
6,450.0	6,416.8	6,412.0	6,410.8	15.1	12.8	69.42	-159.6	-883.2	1,166.4	1,139.5	26.94	43.296	
6,496.0	6,461.3	6,456.6	6,455.4	15.1	12.9	70.29	-159.8	-882.5	1,161.5	1,134.5	27.04	42.950	
6,500.0	6,465.1	6,460.4	6,459.2	15.1	12.9	70.38	-159.8	-882.4	1,161.1	1,134.0	27.05	42.919	
6,550.0	6,512.4	6,508.1	6,506.9	15.1	13.0	71.57	-160.0	-881.5	1,154.7	1,127.6	27.16	42.515	
6,594.5	6,553.4	6,550.8	6,549.6	15.1	13.1	72.83	-160.1	-880.7	1,148.3	1,121.0	27.26	42.121	
6,600.0	6,558.4	6,556.0	6,554.8	15.1	13.1	73.00	-160.1	-880.6	1,147.5	1,120.2	27.27	42.070	
6,650.0	6,603.0	6,602.3	6,601.1	15.1	13.2	74.63	-160.2	-879.7	1,139.5	1,112.1	27.40	41.591	
6,692.9	6,639.9	6,640.7	6,639.4	15.1	13.3	76.16	-160.3	-878.9	1,132.2	1,104.6	27.51	41.154	
6,700.0	6,645.9	6,646.9	6,645.7	15.1	13.3	76.42	-160.3	-878.8	1,130.9	1,103.4	27.53	41.080	
6,750.0	6,686.8	6,689.4	6,688.2	15.1	13.4	78.33	-160.3	-877.8	1,122.1	1,094.4	27.68	40.542	
6,791.3	6,719.1	6,722.9	6,721.6	15.1	13.4	79.97	-160.3	-877.0	1,114.8	1,087.0	27.81	40.082	
6,800.0	6,725.7	6,729.7	6,728.5	15.1	13.4	80.32	-160.3	-876.9	1,113.3	1,085.4	27.84	39.987	
6,850.0	6,762.3	6,767.6	6,766.3	15.1	13.5	82.34	-160.2	-876.0	1,104.7	1,076.7	28.02	39.428	
6,889.7	6,789.7	6,795.8	6,794.6	15.1	13.6	83.92	-160.2	-875.2	1,098.3	1,070.2	28.17	38.985	
6,900.0	6,796.5	6,802.8	6,801.6	15.1	13.6	84.32	-160.2	-875.1	1,096.8	1,068.6	28.21	38.877	
6,950.0	6,828.0	6,835.3	6,834.0	15.1	13.7	86.22	-160.1	-874.2	1,089.7	1,061.2	28.42	38.345	
6,988.2	6,850.2	6,858.1	6,856.8	15.1	13.7	87.58	-160.0	-873.6	1,085.0	1,056.4	28.59	37.953	
7,000.0	6,856.7	6,864.8	6,863.5	15.1	13.7	87.98	-160.0	-873.4	1,083.7	1,055.1	28.64	37.842	
7,050.0	6,882.5	6,891.3	6,890.0	15.2	13.8	89.55	-159.9	-872.6	1,079.3	1,050.4	28.88	37.373	
7,086.6	6,899.5	6,908.6	6,907.3	15.3	13.8	90.54	-159.8	-872.1	1,077.1	1,048.0	29.07	37.048	
7,100.0	6,905.3	6,914.5	6,913.2	15.4	13.8	90.87	-159.8	-872.0	1,076.5	1,047.4	29.14	36.941	
7,144.6	6,922.9	6,932.5	6,931.2	15.6	13.9	91.82	-159.7	-871.4	1,075.7	1,046.3	29.40	36.584	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 600-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,150.0	6,924.9	6,934.5	6,933.2	15.7	13.9	91.92	-159.7	-871.4	1,075.7	1,046.3	29.43	36.545	
7,185.0	6,936.7	6,946.4	6,945.1	15.9	13.9	92.46	-159.6	-871.0	1,076.4	1,046.7	29.67	36.282	
7,200.0	6,941.2	6,951.0	6,949.7	16.0	13.9	92.65	-159.6	-870.9	1,077.0	1,047.3	29.77	36.184	
7,250.0	6,954.2	6,964.1	6,962.8	16.3	13.9	93.03	-159.5	-870.5	1,080.6	1,050.5	30.14	35.857	
7,283.4	6,961.0	6,970.9	6,969.6	16.6	14.0	93.09	-159.5	-870.3	1,084.3	1,053.9	30.41	35.652	
7,300.0	6,963.8	6,973.7	6,972.4	16.7	14.0	93.05	-159.5	-870.2	1,086.6	1,056.0	30.55	35.566	
7,350.0	6,970.0	6,979.7	6,978.4	17.2	14.0	92.69	-159.4	-870.0	1,094.9	1,063.9	31.01	35.314	
7,381.9	6,972.1	6,981.7	6,980.3	17.5	14.0	92.26	-159.4	-870.0	1,101.5	1,070.1	31.32	35.172	
7,400.0	6,972.7	6,982.1	6,980.8	17.7	14.0	91.95	-159.4	-869.9	1,105.6	1,074.1	31.49	35.108	
7,420.0	6,972.8	6,982.1	6,980.8	17.9	14.0	91.54	-159.4	-869.9	1,110.5	1,078.8	31.69	35.041	
7,480.3	6,972.2	6,981.2	6,979.8	18.5	14.0	91.49	-159.4	-870.0	1,127.3	1,095.0	32.33	34.865	
7,500.0	6,972.0	6,980.9	6,979.5	18.7	14.0	91.48	-159.4	-870.0	1,133.5	1,100.9	32.54	34.829	
7,578.7	6,971.3	6,979.6	6,978.3	19.7	14.0	91.41	-159.4	-870.0	1,161.0	1,127.6	33.47	34.693	
7,600.0	6,971.1	6,979.3	6,978.0	19.9	14.0	91.40	-159.4	-870.0	1,169.3	1,135.6	33.72	34.681	
7,677.1	6,970.4	6,978.1	6,976.8	20.9	14.0	91.33	-159.4	-870.1	1,201.9	1,167.2	34.70	34.631 SF	
7,700.0	6,970.2	6,977.8	6,976.4	21.2	14.0	91.31	-159.4	-870.1	1,212.3	1,177.3	35.00	34.639	
7,775.6	6,969.5	6,976.6	6,975.3	22.2	14.0	91.25	-159.5	-870.1	1,249.1	1,213.1	36.04	34.655	
7,800.0	6,969.3	6,976.2	6,974.9	22.6	14.0	91.23	-159.5	-870.1	1,261.8	1,225.4	36.38	34.680	
7,874.0	6,968.6	6,975.1	6,973.8	23.7	14.0	91.17	-159.5	-870.2	1,302.1	1,264.7	37.47	34.749	
7,900.0	6,968.4	6,974.7	6,973.4	24.1	14.0	91.15	-159.5	-870.2	1,317.0	1,279.1	37.85	34.791	
7,972.4	6,967.8	6,973.6	6,972.3	25.2	14.0	91.09	-159.5	-870.2	1,360.2	1,321.2	38.97	34.903	
8,000.0	6,967.5	6,973.2	6,971.8	25.6	14.0	91.07	-159.5	-870.2	1,377.3	1,337.9	39.40	34.960	
8,070.8	6,966.9	6,972.1	6,970.8	26.7	14.0	91.01	-159.5	-870.3	1,422.7	1,382.2	40.53	35.102	
8,100.0	6,966.6	6,971.7	6,970.3	27.2	14.0	90.99	-159.5	-870.3	1,442.0	1,401.0	41.00	35.173	
8,169.3	6,966.0	6,970.6	6,969.3	28.3	14.0	90.93	-159.5	-870.3	1,489.1	1,447.0	42.14	35.338	
8,200.0	6,965.7	6,970.1	6,968.8	28.8	14.0	90.91	-159.5	-870.3	1,510.5	1,467.9	42.65	35.420	
8,267.7	6,965.1	6,969.1	6,967.8	30.0	14.0	90.85	-159.5	-870.3	1,558.9	1,515.1	43.79	35.599	
8,300.0	6,964.8	6,968.6	6,967.3	30.5	14.0	90.83	-159.5	-870.4	1,582.5	1,538.1	44.34	35.692	
8,366.1	6,964.2	6,967.6	6,966.3	31.7	14.0	90.77	-159.5	-870.4	1,631.6	1,586.2	45.48	35.879	
8,400.0	6,963.9	6,967.1	6,965.8	32.2	14.0	90.75	-159.5	-870.4	1,657.3	1,611.2	46.06	35.980	
8,464.5	6,963.3	6,966.2	6,964.8	33.4	13.9	90.69	-159.5	-870.4	1,706.9	1,659.8	47.19	36.170	
8,500.0	6,963.0	6,965.6	6,964.3	34.0	13.9	90.67	-159.5	-870.5	1,734.6	1,686.8	47.81	36.279	
8,563.0	6,962.4	6,964.7	6,963.4	35.1	13.9	90.62	-159.5	-870.5	1,784.5	1,735.6	48.93	36.468	
8,600.0	6,962.0	6,964.2	6,962.8	35.8	13.9	90.59	-159.5	-870.5	1,814.2	1,764.6	49.59	36.583	
8,661.4	6,961.5	6,963.2	6,961.9	36.9	13.9	90.54	-159.5	-870.5	1,864.0	1,813.4	50.70	36.768	
8,700.0	6,961.1	6,962.7	6,961.3	37.6	13.9	90.51	-159.5	-870.5	1,895.7	1,844.3	51.39	36.888	
8,759.8	6,960.6	6,961.8	6,960.5	38.7	13.9	90.46	-159.5	-870.6	1,945.3	1,892.8	52.48	37.068	
8,800.0	6,960.2	6,961.2	6,959.9	39.4	13.9	90.43	-159.5	-870.6	1,978.9	1,925.7	53.21	37.191	
8,858.2	6,959.7	6,960.3	6,959.0	40.5	13.9	90.38	-159.5	-870.6	2,028.1	1,973.8	54.28	37.365	
8,900.0	6,959.3	6,959.7	6,958.4	41.2	13.9	90.35	-159.6	-870.6	2,063.6	2,008.6	55.04	37.491	
8,956.7	6,958.8	6,958.9	6,957.6	42.3	13.9	90.31	-159.6	-870.7	2,112.2	2,056.1	56.09	37.657	
9,000.0	6,958.4	6,958.3	6,956.9	43.1	13.9	90.27	-159.6	-870.7	2,149.6	2,092.7	56.89	37.785	
9,055.1	6,957.9	6,957.5	6,956.1	44.1	13.9	90.23	-159.6	-870.7	2,197.5	2,139.6	57.92	37.944	
9,100.0	6,957.5	6,956.8	6,955.5	44.9	13.9	90.19	-159.6	-870.7	2,236.8	2,178.1	58.75	38.073	
9,153.5	6,957.0	6,956.0	6,954.7	45.9	13.9	90.15	-159.6	-870.7	2,283.9	2,224.1	59.75	38.223	
9,200.0	6,956.6	6,955.3	6,954.0	46.8	13.9	90.12	-159.6	-870.8	2,325.0	2,264.4	60.62	38.354	
9,251.9	6,956.1	6,954.6	6,953.3	47.8	13.9	90.08	-159.6	-870.8	2,371.2	2,309.6	61.60	38.496	
9,300.0	6,955.7	6,953.9	6,952.6	48.7	13.9	90.04	-159.6	-870.8	2,414.1	2,351.6	62.50	38.626	
9,350.4	6,955.2	6,953.2	6,951.9	49.6	13.9	90.00	-159.6	-870.8	2,459.4	2,395.9	63.45	38.760	
9,400.0	6,954.8	6,952.5	6,951.1	50.6	13.9	89.96	-159.6	-870.9	2,504.1	2,439.7	64.39	38.891	
9,448.8	6,954.3	6,951.8	6,950.4	51.5	13.9	89.92	-159.6	-870.9	2,548.2	2,482.9	65.31	39.016	
9,500.0	6,953.9	6,951.0	6,949.7	52.5	13.9	89.88	-159.6	-870.9	2,594.8	2,528.5	66.28	39.147	

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 HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - HONEBEIN 13-7U - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 600-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,547.2	6,953.4	6,950.3	6,949.0	53.4	13.9	89.85	-159.6	-870.9	2,637.8	2,570.6	67.18	39.264	
9,600.0	6,952.9	6,949.6	6,948.3	54.4	13.9	89.81	-159.6	-870.9	2,686.1	2,617.9	68.18	39.394	
9,645.6	6,952.5	6,948.9	6,947.6	55.2	13.9	89.77	-159.6	-871.0	2,728.0	2,658.9	69.06	39.504	
9,700.0	6,952.0	6,948.2	6,946.9	56.3	13.9	89.73	-159.6	-871.0	2,778.0	2,707.9	70.09	39.634	
9,744.1	6,951.6	6,947.5	6,946.2	57.1	13.9	89.70	-159.6	-871.0	2,818.7	2,747.8	70.94	39.736	
9,800.0	6,951.1	6,946.8	6,945.4	58.2	13.9	89.66	-159.6	-871.0	2,870.5	2,798.5	72.01	39.865	
9,842.5	6,950.7	6,946.2	6,944.8	59.0	13.9	89.62	-159.6	-871.0	2,910.0	2,837.1	72.82	39.961	
9,900.0	6,950.2	6,945.3	6,944.0	60.1	13.9	89.58	-159.6	-871.1	2,963.5	2,889.6	73.92	40.088	
9,940.9	6,949.8	6,944.8	6,943.4	60.9	13.9	89.55	-159.6	-871.1	3,001.7	2,926.9	74.71	40.177	
10,000.0	6,949.3	6,943.9	6,942.6	62.0	13.9	89.51	-159.6	-871.1	3,056.9	2,981.0	75.85	40.304	
10,039.3	6,948.9	6,943.4	6,942.1	62.8	13.9	89.48	-159.6	-871.1	3,093.8	3,017.1	76.60	40.386	
10,100.0	6,948.4	6,942.5	6,941.2	64.0	13.9	89.43	-159.6	-871.1	3,150.7	3,072.9	77.77	40.512	
10,137.8	6,948.0	6,942.0	6,940.7	64.7	13.9	89.40	-159.6	-871.2	3,186.2	3,107.7	78.50	40.588	
10,200.0	6,947.5	6,941.1	6,939.8	65.9	13.9	89.36	-159.7	-871.2	3,244.9	3,165.2	79.70	40.713	
10,236.2	6,947.1	6,940.6	6,939.3	66.6	13.9	89.33	-159.7	-871.2	3,279.1	3,198.7	80.40	40.783	
10,300.0	6,946.6	6,939.7	6,938.4	67.8	13.9	89.28	-159.7	-871.2	3,339.4	3,257.8	81.63	40.907	
10,334.6	6,946.3	6,939.3	6,938.0	68.5	13.9	89.26	-159.7	-871.2	3,372.2	3,289.9	82.31	40.972	
10,400.0	6,945.7	6,938.4	6,937.0	69.8	13.9	89.21	-159.7	-871.3	3,434.2	3,350.7	83.57	41.094	
10,433.0	6,945.4	6,937.9	6,936.6	70.4	13.9	89.18	-159.7	-871.3	3,465.6	3,381.4	84.21	41.154	
10,500.0	6,944.7	6,937.0	6,935.7	71.7	13.9	89.13	-159.7	-871.3	3,529.3	3,443.8	85.51	41.274	
10,531.5	6,944.5	6,936.5	6,935.2	72.3	13.9	89.11	-159.7	-871.3	3,559.3	3,473.2	86.12	41.330	
10,600.0	6,943.8	6,935.6	6,934.3	73.7	13.9	89.06	-159.7	-871.4	3,624.7	3,537.3	87.45	41.449	
10,629.9	6,943.6	6,935.2	6,933.9	74.2	13.9	89.04	-159.7	-871.4	3,653.3	3,565.2	88.03	41.500	
10,700.0	6,942.9	6,934.2	6,932.9	75.6	13.9	88.99	-159.7	-871.4	3,720.3	3,630.9	89.39	41.617	
10,728.3	6,942.7	6,933.8	6,932.5	76.2	13.9	88.97	-159.7	-871.4	3,747.5	3,657.5	89.94	41.664	
10,800.0	6,942.0	6,932.9	6,931.6	77.6	13.9	88.91	-159.7	-871.4	3,816.2	3,724.8	91.34	41.780	
10,826.7	6,941.8	6,932.5	6,931.2	78.1	13.9	88.90	-159.7	-871.4	3,841.8	3,750.0	91.86	41.823	
10,900.0	6,941.1	6,931.5	6,930.2	79.5	13.9	88.84	-159.7	-871.5	3,912.2	3,818.9	93.29	41.938	
10,925.2	6,940.9	6,931.2	6,929.9	80.0	13.9	88.82	-159.7	-871.5	3,936.4	3,842.7	93.78	41.977	
11,000.0	6,940.2	6,930.2	6,928.8	81.5	13.9	88.77	-159.7	-871.5	4,008.5	3,913.2	95.23	42.090	
11,023.6	6,940.0	6,929.8	6,928.5	81.9	13.9	88.75	-159.7	-871.5	4,031.2	3,935.5	95.70	42.125	
11,100.0	6,939.3	6,928.8	6,927.5	83.4	13.9	88.70	-159.7	-871.6	4,104.9	4,007.7	97.19	42.238	
11,122.0	6,939.1	6,928.5	6,927.2	83.8	13.9	88.68	-159.7	-871.6	4,126.1	4,028.5	97.62	42.269	
11,200.0	6,938.4	6,927.5	6,926.2	85.4	13.9	88.63	-159.7	-871.6	4,201.5	4,102.3	99.14	42.380	
11,220.4	6,938.2	6,927.2	6,925.9	85.8	13.9	88.61	-159.7	-871.6	4,221.2	4,121.7	99.54	42.409	
11,300.0	6,937.4	6,926.1	6,924.8	87.3	13.9	88.55	-159.7	-871.6	4,298.2	4,197.1	101.09	42.518	
11,318.9	6,937.3	6,925.9	6,924.6	87.7	13.9	88.54	-159.7	-871.6	4,316.5	4,215.0	101.46	42.544	
11,400.0	6,936.5	6,924.8	6,923.5	89.3	13.9	88.48	-159.7	-871.7	4,395.1	4,292.1	103.05	42.652	
11,417.3	6,936.4	6,924.6	6,923.3	89.6	13.9	88.47	-159.7	-871.7	4,411.9	4,308.5	103.38	42.675	
11,500.0	6,935.6	6,923.5	6,922.2	91.3	13.9	88.41	-159.7	-871.7	4,492.1	4,387.1	105.00	42.782	
11,515.7	6,935.5	6,923.3	6,922.0	91.6	13.9	88.40	-159.7	-871.7	4,507.4	4,402.1	105.31	42.802	
11,600.0	6,934.7	6,922.1	6,920.8	93.2	13.9	88.34	-159.7	-871.8	4,589.3	4,482.3	106.96	42.908	
11,614.1	6,934.6	6,922.0	6,920.7	93.5	13.9	88.33	-159.7	-871.8	4,603.0	4,495.8	107.23	42.925	
11,700.0	6,933.8	6,920.8	6,919.5	95.2	13.9	88.27	-159.8	-871.8	4,686.6	4,577.6	108.92	43.029	
11,712.6	6,933.7	6,920.7	6,919.4	95.4	13.9	88.26	-159.8	-871.8	4,698.8	4,589.6	109.16	43.044	
11,800.0	6,932.9	6,919.5	6,918.2	97.1	13.8	88.20	-159.8	-871.8	4,783.9	4,673.1	110.87	43.148	
11,811.0	6,932.8	6,919.4	6,918.1	97.4	13.8	88.19	-159.8	-871.8	4,794.7	4,683.6	111.09	43.160	
11,900.0	6,932.0	6,918.2	6,916.9	99.1	13.8	88.13	-159.8	-871.9	4,881.4	4,768.6	112.83	43.262	
11,909.4	6,931.9	6,918.1	6,916.8	99.3	13.8	88.12	-159.8	-871.9	4,890.6	4,777.6	113.02	43.273	
12,000.0	6,931.0	6,916.9	6,915.6	101.1	13.8	88.06	-159.8	-871.9	4,979.0	4,864.2	114.79	43.374	
12,007.8	6,931.0	6,916.8	6,915.5	101.2	13.8	88.06	-159.8	-871.9	4,986.7	4,871.7	114.95	43.382	
12,100.0	6,930.1	6,915.6	6,914.3	103.0	13.8	87.99	-159.8	-871.9	5,076.7	4,959.9	116.75	43.482	

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 HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 600-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
12,106.3	6,930.1	6,915.5	6,914.2	103.2	13.8	87.99	-159.8	-871.9	5,082.8	4,966.0	116.88	43.489	
12,200.0	6,929.2	6,914.3	6,913.0	105.0	13.8	87.92	-159.8	-872.0	5,174.5	5,055.8	118.72	43.587	
12,204.7	6,929.2	6,914.2	6,912.9	105.1	13.8	87.92	-159.8	-872.0	5,179.1	5,060.3	118.81	43.592	
12,300.0	6,928.3	6,913.0	6,911.7	107.0	13.8	87.85	-159.8	-872.0	5,272.3	5,151.7	120.68	43.690	
12,303.1	6,928.3	6,913.0	6,911.7	107.1	13.8	87.85	-159.8	-872.0	5,275.4	5,154.6	120.74	43.693	
12,400.0	6,927.4	6,911.7	6,910.4	109.0	13.8	87.79	-159.8	-872.1	5,370.3	5,247.6	122.64	43.789	
12,401.5	6,927.4	6,911.7	6,910.4	109.0	13.8	87.78	-159.8	-872.1	5,371.8	5,249.1	122.67	43.790	
12,500.0	6,926.5	6,910.5	6,909.2	110.9	13.8	87.72	-159.8	-872.1	5,468.3	5,343.7	124.60	43.886	
12,598.4	6,925.6	6,909.2	6,907.9	112.9	13.8	87.65	-159.8	-872.1	5,564.8	5,438.2	126.53	43.978	
12,600.0	6,925.6	6,909.2	6,907.9	112.9	13.8	87.65	-159.8	-872.1	5,566.3	5,439.8	126.57	43.980	
12,696.8	6,924.7	6,908.0	6,906.7	114.8	13.8	87.58	-159.8	-872.2	5,661.4	5,532.9	128.47	44.069	
12,700.0	6,924.6	6,907.9	6,906.6	114.9	13.8	87.58	-159.8	-872.2	5,664.5	5,536.0	128.53	44.071	
12,795.2	6,923.8	6,906.7	6,905.4	116.8	13.8	87.52	-159.8	-872.2	5,758.0	5,627.6	130.40	44.157	
12,800.0	6,923.7	6,906.6	6,905.4	116.9	13.8	87.51	-159.8	-872.2	5,762.7	5,632.2	130.49	44.161	
12,893.7	6,922.9	6,905.5	6,904.2	118.7	13.8	87.45	-159.8	-872.2	5,854.7	5,722.4	132.33	44.242	
12,900.0	6,922.8	6,905.4	6,904.1	118.8	13.8	87.45	-159.8	-872.2	5,861.0	5,728.5	132.46	44.248	
12,992.1	6,922.0	6,904.2	6,902.9	120.6	13.8	87.38	-159.8	-872.3	5,951.5	5,817.3	134.27	44.326	
13,000.0	6,921.9	6,904.1	6,902.8	120.8	13.8	87.38	-159.8	-872.3	5,959.3	5,824.9	134.42	44.332	
13,090.5	6,921.1	6,903.0	6,901.7	122.6	13.8	87.32	-159.8	-872.3	6,048.3	5,912.1	136.20	44.407	
13,100.0	6,921.0	6,902.9	6,901.6	122.8	13.8	87.31	-159.8	-872.3	6,057.7	5,921.3	136.39	44.415	
13,188.9	6,920.2	6,901.8	6,900.5	124.5	13.8	87.25	-159.8	-872.3	6,145.2	6,007.1	138.14	44.487	
13,200.0	6,920.1	6,901.6	6,900.3	124.8	13.8	87.25	-159.8	-872.3	6,156.1	6,017.8	138.35	44.496	
13,287.4	6,919.3	6,900.6	6,899.3	126.5	13.8	87.19	-159.8	-872.4	6,242.2	6,102.1	140.07	44.564	
13,300.0	6,919.1	6,900.4	6,899.1	126.7	13.8	87.18	-159.8	-872.4	6,254.6	6,114.3	140.32	44.574	
13,385.8	6,918.4	6,899.3	6,898.0	128.4	13.8	87.12	-159.8	-872.4	6,339.1	6,197.1	142.00	44.640	
13,400.0	6,918.2	6,899.2	6,897.9	128.7	13.8	87.11	-159.8	-872.4	6,353.1	6,210.8	142.28	44.651	
13,484.2	6,917.5	6,898.1	6,896.8	130.4	13.8	87.06	-159.9	-872.4	6,436.1	6,292.2	143.94	44.714	
13,500.0	6,917.3	6,897.9	6,896.6	130.7	13.8	87.05	-159.9	-872.5	6,451.7	6,307.4	144.25	44.726	
13,582.6	6,916.6	6,896.9	6,895.6	132.3	13.8	86.99	-159.9	-872.5	6,533.2	6,387.3	145.87	44.787	
13,600.0	6,916.4	6,896.7	6,895.4	132.7	13.8	86.98	-159.9	-872.5	6,550.3	6,404.1	146.21	44.799	
13,681.1	6,915.6	6,895.7	6,894.4	134.3	13.8	86.93	-159.9	-872.5	6,630.3	6,482.5	147.81	44.857	
13,700.0	6,915.5	6,895.5	6,894.2	134.6	13.8	86.92	-159.9	-872.5	6,649.0	6,500.8	148.18	44.871	
13,779.5	6,914.7	6,894.5	6,893.2	136.2	13.8	86.87	-159.9	-872.6	6,727.4	6,577.7	149.74	44.926	
13,800.0	6,914.6	6,894.3	6,893.0	136.6	13.8	86.85	-159.9	-872.6	6,747.7	6,597.5	150.15	44.941	
13,877.9	6,913.8	6,893.3	6,892.0	138.2	13.8	86.80	-159.9	-872.6	6,824.6	6,672.9	151.68	44.994	
13,900.0	6,913.6	6,893.0	6,891.7	138.6	13.8	86.79	-159.9	-872.6	6,846.4	6,694.3	152.11	45.009	
13,976.3	6,912.9	6,892.1	6,890.8	140.1	13.8	86.74	-159.9	-872.6	6,921.8	6,768.2	153.61	45.060	
14,000.0	6,912.7	6,891.8	6,890.5	140.6	13.8	86.72	-159.9	-872.6	6,945.2	6,791.1	154.08	45.076	
14,074.8	6,912.0	6,890.9	6,889.6	142.0	13.8	86.67	-159.9	-872.7	7,019.0	6,863.6	155.49	45.143	
14,079.0	6,912.0	6,890.9	6,889.6	142.1	13.8	86.67	-159.9	-872.7	7,023.2	6,867.6	155.56	45.146	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

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	-90.00	0.0	-119.9	120.0				
98.4	98.4	94.4	94.4	0.1	0.1	-90.00	0.0	-119.9	119.9	119.7	0.19	640.353	
100.0	100.0	96.0	96.0	0.1	0.1	-90.00	0.0	-119.9	119.9	119.7	0.19	629.258	
196.8	196.8	192.8	192.8	0.3	0.3	-90.00	0.0	-119.9	119.9	119.3	0.62	193.129	
200.0	200.0	196.0	196.0	0.3	0.3	-90.00	0.0	-119.9	119.9	119.3	0.63	188.822	
295.3	295.3	291.3	291.3	0.5	0.5	-90.00	0.0	-119.9	119.9	118.8	1.06	112.762	
300.0	300.0	296.0	296.0	0.5	0.5	-90.00	0.0	-119.9	119.9	118.8	1.08	110.554	
393.7	393.7	389.7	389.7	0.8	0.7	-90.00	0.0	-119.9	119.9	118.4	1.51	79.627	
400.0	400.0	396.0	396.0	0.8	0.8	-90.00	0.0	-119.9	119.9	118.4	1.53	78.157	
492.1	492.1	488.1	488.1	1.0	1.0	-90.00	0.0	-119.9	119.9	117.9	1.95	61.543	
500.0	500.0	496.0	496.0	1.0	1.0	-90.00	0.0	-119.9	119.9	117.9	1.98	60.445	
590.5	590.5	586.5	586.5	1.2	1.2	-90.00	0.0	-119.9	119.9	117.5	2.39	50.153	
600.0	600.0	596.0	596.0	1.2	1.2	-90.00	0.0	-119.9	119.9	117.5	2.43	49.277	
689.0	689.0	685.0	685.0	1.4	1.4	-90.00	0.0	-119.9	119.9	117.1	2.83	42.320	
700.0	700.0	696.0	696.0	1.4	1.4	-90.00	0.0	-119.9	119.9	117.0	2.88	41.592	
787.4	787.4	783.4	783.4	1.6	1.6	-90.00	0.0	-119.9	119.9	116.6	3.28	36.604	
800.0	800.0	796.0	796.0	1.7	1.7	-90.00	0.0	-119.9	119.9	116.6	3.33	35.981	
885.8	885.8	881.8	881.8	1.9	1.9	-90.00	0.0	-119.9	119.9	116.2	3.72	32.248	
900.0	900.0	896.0	896.0	1.9	1.9	-90.00	0.0	-119.9	119.9	116.1	3.78	31.704	
984.2	984.2	980.2	980.2	2.1	2.1	-90.00	0.0	-119.9	119.9	115.7	4.16	28.818	
1,000.0	1,000.0	996.0	996.0	2.1	2.1	-90.00	0.0	-119.9	119.9	115.7	4.23	28.336 CC, ES	
1,082.7	1,082.7	1,075.6	1,075.6	2.3	2.3	-89.90	0.2	-120.9	120.9	116.3	4.59	26.352	
1,100.0	1,100.0	1,092.2	1,092.2	2.3	2.3	-89.85	0.3	-121.3	121.4	116.7	4.66	26.037	
1,181.1	1,181.1	1,170.0	1,169.9	2.5	2.5	-89.49	1.1	-124.8	125.0	120.0	5.01	24.963	
1,200.0	1,200.0	1,188.0	1,187.9	2.6	2.5	-89.38	1.4	-125.9	126.2	121.1	5.09	24.796	
1,279.5	1,279.5	1,263.9	1,263.5	2.7	2.7	-125.61	2.7	-131.7	133.0	127.5	5.43	24.497	
1,300.0	1,300.0	1,283.4	1,282.9	2.8	2.7	-125.62	3.1	-133.6	135.2	129.7	5.51	24.523	
1,377.9	1,377.8	1,357.0	1,356.1	3.0	2.9	-125.93	4.9	-141.6	145.9	140.1	5.85	24.958	
1,400.0	1,399.8	1,377.7	1,376.7	3.0	3.0	-126.08	5.5	-144.2	149.5	143.6	5.94	25.170	
1,476.4	1,475.9	1,448.9	1,447.1	3.2	3.2	-126.76	7.7	-154.1	164.0	157.7	6.27	26.151	
1,500.0	1,499.5	1,470.7	1,468.6	3.2	3.2	-127.01	8.5	-157.5	169.1	162.7	6.37	26.533	
1,574.8	1,573.7	1,539.1	1,535.9	3.4	3.4	-127.85	11.1	-169.2	187.1	180.4	6.70	27.922	
1,600.0	1,598.7	1,561.9	1,558.3	3.5	3.5	-128.15	12.1	-173.5	193.8	187.0	6.81	28.458	
1,673.2	1,671.1	1,627.3	1,622.3	3.7	3.7	-129.00	15.0	-186.6	215.2	208.0	7.14	30.140	
1,700.0	1,697.5	1,650.9	1,645.3	3.7	3.8	-129.31	16.2	-191.7	223.7	216.4	7.26	30.813	
1,771.6	1,767.9	1,713.2	1,705.8	4.0	4.0	-130.08	19.4	-206.1	248.2	240.6	7.59	32.685	
1,800.1	1,795.7	1,737.7	1,729.6	4.0	4.1	-130.38	20.7	-212.0	258.6	250.9	7.73	33.468	
1,870.1	1,864.2	1,802.4	1,792.1	4.3	4.4	-131.49	24.3	-228.1	284.8	276.7	8.08	35.250	
1,900.0	1,893.4	1,830.1	1,818.9	4.4	4.5	-131.90	25.9	-234.9	296.0	287.8	8.23	35.972	
1,968.5	1,960.4	1,893.4	1,880.2	4.6	4.8	-132.75	29.4	-250.6	321.8	313.2	8.59	37.474	
2,000.0	1,991.3	1,922.5	1,908.3	4.7	4.9	-133.09	31.0	-257.9	333.6	324.9	8.75	38.119	
2,066.9	2,056.7	1,984.4	1,968.2	5.0	5.2	-133.75	34.5	-273.2	358.8	349.7	9.11	39.379	
2,100.0	2,089.1	2,015.0	1,997.8	5.1	5.4	-134.04	36.2	-280.8	371.3	362.0	9.29	39.969	
2,165.3	2,153.0	2,075.4	2,056.2	5.3	5.7	-134.56	39.5	-295.7	396.0	386.3	9.65	41.030	
2,200.0	2,186.9	2,107.5	2,087.2	5.5	5.8	-134.81	41.3	-303.7	409.0	399.2	9.84	41.560	
2,263.8	2,249.3	2,166.5	2,144.3	5.7	6.1	-135.23	44.6	-318.3	433.2	422.9	10.20	42.455	
2,300.0	2,284.7	2,199.9	2,176.7	5.8	6.3	-135.45	46.5	-326.6	446.9	436.4	10.41	42.937	
2,362.2	2,345.5	2,257.5	2,232.3	6.1	6.6	-135.80	49.7	-340.9	470.4	459.6	10.77	43.695	
2,400.0	2,382.5	2,292.4	2,266.1	6.2	6.7	-136.00	51.6	-349.5	484.7	473.7	10.98	44.132	
2,460.6	2,441.8	2,348.5	2,320.3	6.5	7.0	-136.28	54.8	-363.4	507.7	496.3	11.34	44.779	
2,500.0	2,480.3	2,384.9	2,355.5	6.6	7.2	-136.46	56.8	-372.4	522.6	511.0	11.57	45.177	
2,559.0	2,538.1	2,439.5	2,408.4	6.9	7.5	-136.70	59.8	-386.0	545.0	533.0	11.92	45.730	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,600.0	2,578.1	2,477.4	2,445.0	7.0	7.7	-136.86	61.9	-395.3	560.5	548.3	12.16	46.095	
2,657.5	2,634.4	2,530.5	2,496.4	7.3	8.0	-137.07	64.9	-408.5	582.3	569.8	12.50	46.571	
2,700.0	2,675.9	2,569.8	2,534.4	7.5	8.2	-137.21	67.1	-418.3	598.4	585.6	12.76	46.905	
2,755.9	2,730.6	2,621.5	2,584.4	7.7	8.4	-137.39	70.0	-431.1	619.6	606.5	13.10	47.316	
2,800.0	2,773.8	2,662.3	2,623.9	7.9	8.6	-137.52	72.3	-441.2	636.3	623.0	13.36	47.623	
2,854.3	2,826.9	2,712.5	2,672.5	8.1	8.9	-137.67	75.1	-453.6	657.0	643.3	13.69	47.981	
2,857.4	2,829.9	2,715.3	2,675.2	8.1	8.9	-137.68	75.2	-454.3	658.1	644.4	13.71	48.000	
2,900.0	2,871.6	2,754.9	2,713.4	8.3	9.1	-138.01	77.4	-464.1	674.1	660.1	13.98	48.214	
2,952.7	2,923.5	2,804.0	2,760.9	8.4	9.4	-138.34	80.1	-476.3	693.2	678.9	14.29	48.494	
3,000.0	2,970.1	2,848.3	2,803.7	8.6	9.6	-138.57	82.6	-487.3	709.8	695.2	14.58	48.692	
3,051.2	3,020.7	2,896.4	2,850.3	8.7	9.9	-138.77	85.3	-499.2	727.1	712.3	14.87	48.885	
3,100.0	3,069.1	2,942.6	2,894.9	8.9	10.1	-138.90	87.9	-510.6	743.1	727.9	15.16	49.021	
3,149.6	3,118.3	2,989.6	2,940.4	9.0	10.4	-138.99	90.5	-522.3	758.6	743.2	15.44	49.148	
3,200.0	3,168.5	3,037.6	2,986.9	9.1	10.6	-139.02	93.2	-534.2	773.9	758.1	15.72	49.235	
3,248.0	3,216.3	3,083.5	3,031.2	9.2	10.9	-139.01	95.7	-545.5	787.8	771.8	15.97	49.313	
3,300.0	3,268.2	3,133.3	3,079.4	9.3	11.1	-138.96	98.5	-557.9	802.2	785.9	16.25	49.360	
3,346.4	3,314.6	3,178.0	3,122.6	9.4	11.4	-138.87	101.0	-569.0	814.5	798.0	16.49	49.400	
3,400.0	3,368.1	3,229.6	3,172.5	9.5	11.6	-138.73	103.9	-581.7	828.0	811.2	16.76	49.414	
3,444.9	3,413.0	3,272.9	3,214.5	9.6	11.9	-138.57	106.3	-592.5	838.8	821.8	16.97	49.422	
3,457.5	3,425.6	3,285.1	3,226.2	9.6	11.9	-102.02	107.0	-595.5	841.7	824.7	17.04	49.404	
3,500.0	3,468.1	3,326.3	3,266.0	9.7	12.2	-101.71	109.3	-605.7	851.6	834.4	17.24	49.409	
3,543.3	3,511.4	3,368.1	3,306.5	9.7	12.4	-101.41	111.6	-616.1	861.7	844.2	17.44	49.400	
3,600.0	3,568.1	3,423.0	3,359.6	9.8	12.7	-101.03	114.6	-629.7	874.9	857.2	17.71	49.393	
3,641.7	3,609.9	3,463.3	3,398.6	9.9	12.9	-100.76	116.9	-639.7	884.7	866.8	17.91	49.389	
3,700.0	3,668.1	3,519.7	3,453.1	10.0	13.2	-100.38	120.0	-653.6	898.4	880.2	18.19	49.388	
3,740.1	3,708.3	3,558.5	3,490.7	10.1	13.4	-100.13	122.2	-663.3	907.8	889.4	18.38	49.388	
3,800.0	3,768.1	3,616.4	3,546.7	10.2	13.7	-99.77	125.4	-677.6	921.9	903.2	18.66	49.393	
3,838.6	3,806.7	3,653.7	3,582.8	10.2	13.9	-99.54	127.5	-686.8	931.0	912.2	18.85	49.396	
3,900.0	3,868.1	3,713.1	3,640.2	10.3	14.2	-99.18	130.8	-701.6	945.5	926.4	19.14	49.405	
3,937.0	3,905.1	3,748.9	3,674.8	10.4	14.4	-98.97	132.8	-710.4	954.3	935.0	19.31	49.410	
4,000.0	3,968.1	3,809.9	3,733.8	10.5	14.8	-98.63	136.2	-725.5	969.3	949.6	19.61	49.423	
4,035.4	4,003.6	3,844.1	3,766.9	10.6	14.9	-98.43	138.1	-734.0	977.7	957.9	19.78	49.431	
4,100.0	4,068.1	3,906.6	3,827.3	10.7	15.3	-98.10	141.6	-749.5	993.1	973.0	20.08	49.447	
4,133.8	4,102.0	3,939.3	3,859.0	10.8	15.5	-97.92	143.4	-757.6	1,001.1	980.9	20.24	49.455	
4,200.0	4,168.1	4,003.3	3,920.9	10.9	15.8	-97.59	147.0	-773.5	1,016.9	996.4	20.55	49.474	
4,232.3	4,200.4	4,034.5	3,951.1	10.9	16.0	-97.43	148.7	-781.2	1,024.7	1,004.0	20.71	49.484	
4,300.0	4,268.1	4,100.0	4,014.4	11.1	16.3	-97.11	152.4	-797.4	1,040.9	1,019.9	21.03	49.505	
4,330.7	4,298.8	4,129.7	4,043.1	11.1	16.5	-96.96	154.0	-804.8	1,048.3	1,027.1	21.17	49.515	
4,400.0	4,368.1	4,196.7	4,108.0	11.2	16.8	-96.65	157.8	-821.4	1,064.9	1,043.4	21.50	49.539	
4,429.1	4,397.3	4,224.9	4,135.2	11.3	17.0	-96.52	159.3	-828.4	1,071.9	1,050.3	21.63	49.548	
4,500.0	4,468.1	4,293.5	4,201.5	11.4	17.4	-96.21	163.2	-845.4	1,089.0	1,067.0	21.97	49.574	
4,527.5	4,495.7	4,320.1	4,227.3	11.5	17.5	-96.09	164.6	-852.0	1,095.7	1,073.6	22.10	49.584	
4,600.0	4,568.1	4,390.2	4,295.1	11.6	17.9	-95.78	168.5	-869.3	1,113.1	1,090.7	22.44	49.611	
4,626.0	4,594.1	4,415.3	4,319.4	11.7	18.0	-95.68	169.9	-875.6	1,119.4	1,096.9	22.56	49.620	
4,700.0	4,668.1	4,486.9	4,388.6	11.8	18.4	-95.38	173.9	-893.3	1,137.3	1,114.4	22.91	49.648	
4,724.4	4,692.5	4,510.5	4,411.4	11.8	18.5	-95.28	175.2	-899.2	1,143.3	1,120.2	23.02	49.658	
4,800.0	4,768.1	4,583.6	4,482.2	12.0	18.9	-94.99	179.3	-917.3	1,161.6	1,138.2	23.38	49.687	
4,822.8	4,791.0	4,605.7	4,503.5	12.0	19.1	-94.91	180.6	-922.7	1,167.1	1,143.7	23.49	49.696	
4,900.0	4,868.1	4,680.3	4,575.7	12.2	19.5	-94.62	184.7	-941.2	1,185.9	1,162.0	23.85	49.726	
4,921.2	4,889.4	4,700.9	4,595.6	12.2	19.6	-94.54	185.9	-946.3	1,191.1	1,167.1	23.95	49.734	
5,000.0	4,968.1	4,777.1	4,669.3	12.4	20.0	-94.27	190.1	-965.2	1,210.2	1,185.9	24.32	49.765	
5,019.7	4,987.8	4,796.1	4,687.7	12.4	20.1	-94.20	191.2	-969.9	1,215.0	1,190.6	24.41	49.772	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

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	5,068.1	4,873.8	4,762.8	12.6	20.5	-93.92	195.5	-989.2	1,234.6	1,209.8	24.79	49.804	
5,118.1	5,086.2	4,891.3	4,779.7	12.6	20.6	-93.86	196.5	-993.5	1,239.0	1,214.2	24.88	49.810	
5,200.0	5,168.1	4,970.5	4,856.4	12.8	21.0	-93.59	200.9	-1,013.1	1,259.0	1,233.8	25.26	49.842	
5,216.5	5,184.7	4,986.5	4,871.8	12.8	21.1	-93.54	201.8	-1,017.1	1,263.1	1,237.7	25.34	49.848	
5,300.0	5,268.1	5,067.2	4,949.9	13.0	21.6	-93.28	206.3	-1,037.1	1,283.5	1,257.8	25.73	49.880	
5,314.9	5,283.1	5,081.7	4,963.9	13.0	21.7	-93.23	207.1	-1,040.7	1,287.2	1,261.4	25.80	49.886	
5,400.0	5,368.1	5,163.9	5,043.5	13.1	22.1	-92.97	211.7	-1,061.1	1,308.0	1,281.8	26.20	49.918	
5,413.4	5,381.5	5,176.9	5,056.0	13.2	22.2	-92.93	212.4	-1,064.3	1,311.3	1,285.0	26.27	49.923	
5,500.0	5,468.1	5,260.7	5,137.0	13.3	22.6	-92.68	217.1	-1,085.1	1,332.5	1,305.9	26.67	49.955	
5,511.8	5,479.9	5,272.1	5,148.1	13.4	22.7	-92.64	217.7	-1,087.9	1,335.4	1,308.7	26.73	49.959	
5,600.0	5,568.1	5,357.4	5,230.6	13.5	23.2	-92.39	222.4	-1,109.0	1,357.1	1,330.0	27.15	49.992	
5,610.2	5,578.4	5,367.3	5,240.1	13.6	23.2	-92.37	223.0	-1,111.5	1,359.6	1,332.4	27.19	49.995	
5,700.0	5,668.1	5,454.1	5,324.1	13.7	23.7	-92.12	227.8	-1,133.0	1,381.7	1,354.1	27.62	50.027	
5,708.6	5,676.8	5,462.5	5,332.2	13.8	23.7	-92.10	228.3	-1,135.1	1,383.8	1,356.2	27.66	50.030	
5,800.0	5,768.1	5,550.8	5,417.7	13.9	24.2	-91.86	233.2	-1,157.0	1,406.3	1,378.2	28.09	50.062	
5,807.1	5,775.2	5,557.7	5,424.3	14.0	24.2	-91.84	233.6	-1,158.7	1,408.1	1,379.9	28.12	50.065	
5,900.0	5,868.1	5,647.9	5,511.5	14.1	24.7	-91.60	238.6	-1,181.0	1,431.0	1,402.4	28.57	50.095	
5,905.5	5,873.6	5,658.2	5,521.5	14.1	24.8	-91.58	239.2	-1,183.5	1,432.3	1,403.7	28.60	50.076	
6,000.0	5,968.1	5,838.7	5,697.6	14.3	25.5	-91.18	247.9	-1,222.2	1,452.5	1,423.3	29.21	49.726	
6,003.9	5,972.1	5,846.3	5,705.1	14.3	25.5	-91.17	248.2	-1,223.6	1,453.2	1,424.0	29.23	49.709	
6,100.0	6,068.1	6,034.6	5,891.0	14.5	26.0	-90.90	254.6	-1,251.9	1,467.6	1,437.8	29.82	49.223	
6,102.3	6,070.5	6,039.2	5,895.6	14.5	26.0	-90.89	254.7	-1,252.4	1,467.9	1,438.0	29.83	49.209	
6,200.0	6,168.1	6,233.7	6,089.4	14.7	26.4	-90.74	258.4	-1,268.7	1,476.0	1,445.6	30.38	48.585	
6,200.8	6,168.9	6,235.3	6,090.9	14.7	26.4	-90.74	258.4	-1,268.8	1,476.1	1,445.7	30.38	48.579	
6,288.5	6,256.6	6,397.0	6,252.6	14.9	26.6	-90.71	259.2	-1,272.5	1,477.9	1,447.1	30.83	47.942	
6,299.2	6,267.3	6,407.7	6,263.3	14.9	26.6	89.09	259.2	-1,272.5	1,477.9	1,447.1	30.85	47.910	
6,300.0	6,268.1	6,408.5	6,264.1	14.9	26.6	89.09	259.2	-1,272.5	1,477.9	1,447.1	30.85	47.906	
6,350.0	6,318.1	6,457.1	6,312.7	15.0	26.7	89.13	257.8	-1,272.5	1,477.9	1,446.9	30.99	47.692	
6,397.6	6,365.3	6,503.3	6,358.7	15.1	26.7	89.18	253.5	-1,272.5	1,477.9	1,446.8	31.08	47.544	
6,400.0	6,367.7	6,505.6	6,361.0	15.1	26.7	89.18	253.2	-1,272.5	1,477.9	1,446.8	31.09	47.538	
6,450.0	6,416.8	6,554.2	6,408.9	15.1	26.7	89.23	245.3	-1,272.5	1,477.8	1,446.7	31.15	47.437	
6,496.0	6,461.3	6,599.0	6,452.6	15.1	26.8	89.29	235.2	-1,272.6	1,477.8	1,446.6	31.19	47.384	
6,500.0	6,465.1	6,602.9	6,456.3	15.1	26.8	89.29	234.2	-1,272.6	1,477.8	1,446.6	31.19	47.380	
6,550.0	6,512.4	6,651.7	6,502.9	15.1	26.8	89.35	219.8	-1,272.6	1,477.8	1,446.6	31.20	47.360	
6,594.5	6,553.4	6,695.1	6,543.5	15.1	26.8	89.41	204.3	-1,272.7	1,477.8	1,446.6	31.20	47.364	
6,600.0	6,558.4	6,700.5	6,548.5	15.1	26.8	89.41	202.2	-1,272.7	1,477.8	1,446.6	31.20	47.365	
6,650.0	6,603.0	6,750.0	6,593.3	15.1	26.8	89.48	181.3	-1,272.8	1,477.8	1,446.6	31.19	47.382	
6,692.9	6,639.9	6,791.7	6,629.9	15.1	26.8	89.54	161.4	-1,272.9	1,477.8	1,446.6	31.18	47.395	
6,700.0	6,645.9	6,798.7	6,635.9	15.1	26.8	89.55	157.8	-1,272.9	1,477.8	1,446.6	31.18	47.397	
6,750.0	6,686.8	6,847.9	6,677.2	15.1	26.8	89.62	131.1	-1,273.0	1,477.8	1,446.6	31.18	47.394	
6,791.3	6,719.1	6,888.7	6,710.0	15.1	26.8	89.68	106.9	-1,273.1	1,477.7	1,446.5	31.20	47.361	
6,800.0	6,725.7	6,897.2	6,716.8	15.1	26.8	89.69	101.6	-1,273.1	1,477.7	1,446.5	31.21	47.354	
6,850.0	6,762.3	6,946.7	6,754.2	15.1	26.8	89.77	69.3	-1,273.2	1,477.7	1,446.5	31.27	47.263	
6,889.7	6,789.7	6,986.1	6,782.5	15.1	26.8	89.83	41.8	-1,273.3	1,477.7	1,446.4	31.35	47.135	
6,900.0	6,796.5	6,996.3	6,789.5	15.1	26.8	89.84	34.4	-1,273.3	1,477.7	1,446.4	31.37	47.101	
6,950.0	6,828.0	7,046.1	6,822.4	15.1	26.8	89.92	-2.9	-1,273.5	1,477.7	1,446.2	31.54	46.855	
6,988.2	6,850.2	7,084.1	6,845.7	15.1	26.8	89.98	-33.0	-1,273.6	1,477.7	1,446.0	31.71	46.594	
6,999.5	6,856.5	7,095.5	6,852.3	15.1	26.8	89.99	-42.2	-1,273.6	1,477.7	1,446.0	31.77	46.516	
7,000.0	6,856.7	7,096.0	6,852.6	15.1	26.8	90.00	-42.6	-1,273.6	1,477.7	1,445.9	31.77	46.513	
7,050.0	6,882.5	7,146.0	6,880.1	15.2	26.8	90.07	-84.3	-1,273.8	1,477.7	1,445.6	32.08	46.066	
7,086.6	6,899.5	7,182.7	6,898.4	15.3	26.8	90.13	-116.2	-1,273.9	1,477.7	1,445.4	32.36	45.659	
7,100.0	6,905.3	7,196.1	6,904.7	15.4	26.9	90.15	-128.1	-1,273.9	1,477.7	1,445.3	32.47	45.510	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-MWMD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,150.0	6,924.9	7,246.4	6,926.2	15.7	26.9	90.22	-173.5	-1,274.1	1,477.7	1,444.8	32.95	44.847	
7,185.0	6,936.7	7,281.8	6,939.4	15.9	27.0	90.28	-206.3	-1,274.2	1,477.7	1,444.4	33.35	44.312	
7,200.0	6,941.2	7,296.9	6,944.5	16.0	27.0	90.30	-220.5	-1,274.3	1,477.7	1,444.2	33.52	44.085	
7,250.0	6,954.2	7,347.4	6,959.5	16.3	27.1	90.37	-268.8	-1,274.4	1,477.8	1,443.6	34.18	43.233	
7,283.4	6,961.0	7,381.4	6,967.7	16.6	27.2	90.42	-301.7	-1,274.6	1,477.8	1,443.1	34.68	42.610	
7,300.0	6,963.8	7,398.2	6,971.1	16.7	27.2	90.45	-318.1	-1,274.6	1,477.8	1,442.8	34.93	42.307	
7,350.0	6,970.0	7,449.0	6,979.2	17.2	27.4	90.52	-368.3	-1,274.8	1,477.8	1,442.0	35.76	41.324	
7,381.9	6,972.1	7,481.5	6,982.5	17.5	27.5	90.56	-400.6	-1,274.9	1,477.8	1,441.5	36.34	40.666	
7,400.0	6,972.7	7,500.0	6,983.7	17.7	27.5	90.58	-419.1	-1,275.0	1,477.8	1,441.1	36.67	40.301	
7,420.0	6,972.8	7,520.4	6,984.5	17.9	27.6	90.61	-439.5	-1,275.1	1,477.8	1,440.7	37.05	39.882	
7,480.3	6,972.2	7,581.2	6,984.5	18.5	27.9	90.63	-500.3	-1,275.3	1,477.8	1,439.5	38.29	38.596	
7,500.0	6,972.0	7,600.9	6,984.4	18.7	28.0	90.63	-520.0	-1,275.4	1,477.8	1,439.1	38.70	38.190	
7,578.7	6,971.3	7,679.6	6,984.0	19.7	28.5	90.65	-598.7	-1,275.6	1,477.8	1,437.4	40.45	36.530	
7,600.0	6,971.1	7,700.9	6,983.9	19.9	28.6	90.65	-620.0	-1,275.7	1,477.8	1,436.9	40.93	36.105	
7,677.1	6,970.4	7,778.0	6,983.5	20.9	29.2	90.66	-697.1	-1,276.0	1,477.8	1,435.0	42.81	34.522	
7,700.0	6,970.2	7,800.9	6,983.4	21.2	29.4	90.67	-720.0	-1,276.1	1,477.8	1,434.5	43.36	34.079	
7,775.6	6,969.5	7,876.4	6,983.1	22.2	30.1	90.68	-795.5	-1,276.4	1,477.8	1,432.5	45.37	32.575	
7,800.0	6,969.3	7,900.9	6,982.9	22.6	30.3	90.68	-820.0	-1,276.5	1,477.8	1,431.8	46.02	32.116	
7,874.0	6,968.6	7,974.9	6,982.6	23.7	31.0	90.69	-894.0	-1,276.7	1,477.8	1,429.7	48.11	30.718	
7,900.0	6,968.4	8,000.9	6,982.4	24.1	31.3	90.70	-920.0	-1,276.8	1,477.8	1,429.0	48.85	30.255	
7,972.4	6,967.8	8,073.3	6,982.1	25.2	32.1	90.71	-992.4	-1,277.1	1,477.8	1,426.8	51.01	28.974	
8,000.0	6,967.5	8,100.9	6,982.0	25.6	32.4	90.72	-1,020.0	-1,277.2	1,477.8	1,426.0	51.83	28.514	
8,070.8	6,966.9	8,171.7	6,981.6	26.7	33.3	90.73	-1,090.8	-1,277.5	1,477.8	1,423.8	54.03	27.352	
8,100.0	6,966.6	8,200.9	6,981.5	27.2	33.6	90.73	-1,119.9	-1,277.6	1,477.8	1,422.9	54.94	26.901	
8,169.3	6,966.0	8,270.1	6,981.1	28.3	34.5	90.74	-1,189.2	-1,277.8	1,477.9	1,420.7	57.16	25.853	
8,200.0	6,965.7	8,300.9	6,981.0	28.8	34.9	90.75	-1,219.9	-1,277.9	1,477.9	1,419.7	58.15	25.414	
8,267.7	6,965.1	8,368.6	6,980.6	30.0	35.8	90.76	-1,287.6	-1,278.2	1,477.9	1,417.5	60.39	24.472	
8,300.0	6,964.8	8,400.9	6,980.5	30.5	36.3	90.76	-1,319.9	-1,278.3	1,477.9	1,416.4	61.46	24.047	
8,366.1	6,964.2	8,467.0	6,980.2	31.7	37.2	90.77	-1,386.1	-1,278.5	1,477.9	1,414.2	63.69	23.203	
8,400.0	6,963.9	8,500.9	6,980.0	32.2	37.7	90.78	-1,419.9	-1,278.7	1,477.9	1,413.0	64.84	22.793	
8,464.5	6,963.3	8,565.4	6,979.7	33.4	38.6	90.79	-1,484.5	-1,278.9	1,477.9	1,410.8	67.06	22.037	
8,500.0	6,963.0	8,600.9	6,979.5	34.0	39.2	90.80	-1,519.9	-1,279.0	1,477.9	1,409.6	68.28	21.643	
8,563.0	6,962.4	8,663.8	6,979.2	35.1	40.1	90.81	-1,582.9	-1,279.3	1,477.9	1,407.4	70.49	20.966	
8,600.0	6,962.0	8,700.9	6,979.0	35.8	40.7	90.81	-1,619.9	-1,279.4	1,477.9	1,406.1	71.79	20.588	
8,661.4	6,961.5	8,762.3	6,978.7	36.9	41.6	90.82	-1,681.3	-1,279.6	1,477.9	1,403.9	73.96	19.981	
8,700.0	6,961.1	8,800.8	6,978.5	37.6	42.2	90.83	-1,719.9	-1,279.8	1,477.9	1,402.6	75.33	19.618	
8,759.8	6,960.6	8,860.7	6,978.2	38.7	43.2	90.84	-1,779.7	-1,280.0	1,477.9	1,400.4	77.48	19.074	
8,800.0	6,960.2	8,900.8	6,978.0	39.4	43.8	90.85	-1,819.9	-1,280.1	1,477.9	1,399.0	78.93	18.725	
8,858.2	6,959.7	8,959.1	6,977.7	40.5	44.8	90.85	-1,878.2	-1,280.3	1,477.9	1,396.9	81.04	18.237	
8,900.0	6,959.3	9,000.8	6,977.5	41.2	45.5	90.86	-1,919.9	-1,280.5	1,477.9	1,395.4	82.55	17.903	
8,956.7	6,958.8	9,057.5	6,977.3	42.3	46.4	90.87	-1,976.6	-1,280.7	1,477.9	1,393.3	84.62	17.465	
9,000.0	6,958.4	9,100.8	6,977.1	43.1	47.1	90.88	-2,019.9	-1,280.9	1,477.9	1,391.7	86.21	17.144	
9,055.1	6,957.9	9,155.9	6,976.8	44.1	48.0	90.89	-2,075.0	-1,281.1	1,477.9	1,389.7	88.24	16.749	
9,100.0	6,957.5	9,200.8	6,976.6	44.9	48.8	90.89	-2,119.9	-1,281.2	1,477.9	1,388.0	89.89	16.441	
9,153.5	6,957.0	9,254.4	6,976.3	45.9	49.7	90.90	-2,173.4	-1,281.4	1,477.9	1,386.1	91.88	16.086	
9,200.0	6,956.6	9,300.8	6,976.1	46.8	50.5	90.91	-2,219.9	-1,281.6	1,478.0	1,384.3	93.60	15.789	
9,251.9	6,956.1	9,352.8	6,975.8	47.8	51.4	90.92	-2,271.8	-1,281.8	1,478.0	1,382.4	95.54	15.469	
9,300.0	6,955.7	9,400.8	6,975.6	48.7	52.2	90.93	-2,319.9	-1,282.0	1,478.0	1,380.6	97.34	15.184	
9,350.4	6,955.2	9,451.2	6,975.3	49.6	53.1	90.93	-2,370.3	-1,282.2	1,478.0	1,378.7	99.22	14.895	
9,400.0	6,954.8	9,500.8	6,975.1	50.6	54.0	90.94	-2,419.9	-1,282.3	1,478.0	1,376.9	101.09	14.621	
9,448.8	6,954.3	9,549.6	6,974.8	51.5	54.8	90.95	-2,468.7	-1,282.5	1,478.0	1,375.1	102.92	14.360	
9,500.0	6,953.9	9,600.8	6,974.6	52.5	55.7	90.96	-2,519.9	-1,282.7	1,478.0	1,373.1	104.85	14.096	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - HONEBEIN 7G-203 - ORIGINAL WELLBORE - PROPOSAL #2												Offset Site Error:	0.0 usft
Survey Program: 0-MWMD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,547.2	6,953.4	9,648.1	6,974.4	53.4	56.6	90.97	-2,567.1	-1,282.9	1,478.0	1,371.4	106.64	13.860	
9,600.0	6,952.9	9,700.8	6,974.1	54.4	57.5	90.98	-2,619.9	-1,283.1	1,478.0	1,369.4	108.64	13.605	
9,645.6	6,952.5	9,746.5	6,973.9	55.2	58.3	90.98	-2,665.5	-1,283.3	1,478.0	1,367.6	110.37	13.391	
9,700.0	6,952.0	9,800.8	6,973.6	56.3	59.3	90.99	-2,719.9	-1,283.5	1,478.0	1,365.6	112.43	13.146	
9,744.1	6,951.6	9,844.9	6,973.4	57.1	60.1	91.00	-2,764.0	-1,283.6	1,478.0	1,363.9	114.11	12.952	
9,800.0	6,951.1	9,900.8	6,973.1	58.2	61.1	91.01	-2,819.9	-1,283.8	1,478.0	1,361.8	116.24	12.715	
9,842.5	6,950.7	9,943.3	6,972.9	59.0	61.9	91.01	-2,862.4	-1,284.0	1,478.0	1,360.2	117.87	12.540	
9,900.0	6,950.2	10,000.8	6,972.6	60.1	62.9	91.02	-2,919.9	-1,284.2	1,478.0	1,358.0	120.06	12.311	
9,940.9	6,949.8	10,041.7	6,972.4	60.9	63.7	91.03	-2,960.8	-1,284.3	1,478.0	1,356.4	121.63	12.152	
10,000.0	6,949.3	10,100.8	6,972.1	62.0	64.7	91.04	-3,019.9	-1,284.6	1,478.1	1,354.2	123.89	11.930	
10,039.3	6,948.9	10,140.2	6,971.9	62.8	65.5	91.05	-3,059.2	-1,284.7	1,478.1	1,352.7	125.40	11.786	
10,100.0	6,948.4	10,200.8	6,971.6	64.0	66.6	91.06	-3,119.9	-1,284.9	1,478.1	1,350.3	127.73	11.572	
10,137.8	6,948.0	10,238.6	6,971.5	64.7	67.3	91.06	-3,157.6	-1,285.1	1,478.1	1,348.9	129.19	11.441	
10,200.0	6,947.5	10,300.8	6,971.2	65.9	68.4	91.07	-3,219.9	-1,285.3	1,478.1	1,346.5	131.58	11.233	
10,236.2	6,947.1	10,337.0	6,971.0	66.6	69.1	91.08	-3,256.1	-1,285.4	1,478.1	1,345.1	132.98	11.115	
10,300.0	6,946.6	10,400.8	6,970.7	67.8	70.3	91.09	-3,319.9	-1,285.7	1,478.1	1,342.7	135.44	10.914	
10,334.6	6,946.3	10,435.4	6,970.5	68.5	70.9	91.09	-3,354.5	-1,285.8	1,478.1	1,341.3	136.77	10.807	
10,400.0	6,945.7	10,500.8	6,970.2	69.8	72.1	91.11	-3,419.8	-1,286.0	1,478.1	1,338.8	139.30	10.611	
10,433.0	6,945.4	10,533.9	6,970.0	70.4	72.7	91.11	-3,452.9	-1,286.2	1,478.1	1,337.5	140.58	10.515	
10,500.0	6,944.7	10,600.8	6,969.7	71.7	74.0	91.12	-3,519.8	-1,286.4	1,478.1	1,335.0	143.17	10.324	
10,531.5	6,944.5	10,632.3	6,969.5	72.3	74.6	91.13	-3,551.3	-1,286.5	1,478.1	1,333.7	144.39	10.237	
10,600.0	6,943.8	10,700.8	6,969.2	73.7	75.9	91.14	-3,619.8	-1,286.8	1,478.1	1,331.1	147.04	10.052	
10,629.9	6,943.6	10,730.7	6,969.0	74.2	76.4	91.14	-3,649.7	-1,286.9	1,478.1	1,329.9	148.20	9.974	
10,700.0	6,942.9	10,800.8	6,968.7	75.6	77.7	91.15	-3,719.8	-1,287.2	1,478.2	1,327.2	150.92	9.794	
10,728.3	6,942.7	10,829.1	6,968.5	76.2	78.3	91.16	-3,748.2	-1,287.3	1,478.2	1,326.1	152.02	9.723	
10,800.0	6,942.0	10,900.8	6,968.2	77.6	79.6	91.17	-3,819.8	-1,287.5	1,478.2	1,323.4	154.81	9.548	
10,826.7	6,941.8	10,927.5	6,968.1	78.1	80.1	91.17	-3,846.6	-1,287.6	1,478.2	1,322.3	155.85	9.485	
10,900.0	6,941.1	11,000.8	6,967.7	79.5	81.5	91.19	-3,919.8	-1,287.9	1,478.2	1,319.5	158.70	9.314	
10,925.2	6,940.9	11,026.0	6,967.6	80.0	82.0	91.19	-3,945.0	-1,288.0	1,478.2	1,318.5	159.68	9.257	
11,000.0	6,940.2	11,100.8	6,967.2	81.5	83.4	91.20	-4,019.8	-1,288.3	1,478.2	1,315.6	162.60	9.091	
11,023.6	6,940.0	11,124.4	6,967.1	81.9	83.8	91.21	-4,043.4	-1,288.4	1,478.2	1,314.7	163.52	9.040	
11,100.0	6,939.3	11,200.8	6,966.7	83.4	85.3	91.22	-4,119.8	-1,288.6	1,478.2	1,311.7	166.49	8.879	
11,122.0	6,939.1	11,222.8	6,966.6	83.8	85.7	91.22	-4,141.8	-1,288.7	1,478.2	1,310.9	167.35	8.833	
11,200.0	6,938.4	11,300.8	6,966.2	85.4	87.2	91.24	-4,219.8	-1,289.0	1,478.2	1,307.8	170.40	8.675	
11,220.4	6,938.2	11,321.2	6,966.1	85.8	87.6	91.24	-4,240.3	-1,289.1	1,478.2	1,307.0	171.20	8.635	
11,300.0	6,937.4	11,400.8	6,965.7	87.3	89.1	91.25	-4,319.8	-1,289.4	1,478.3	1,304.0	174.30	8.481	
11,318.9	6,937.3	11,419.7	6,965.6	87.7	89.5	91.25	-4,338.7	-1,289.5	1,478.3	1,303.2	175.04	8.445	
11,400.0	6,936.5	11,500.8	6,965.2	89.3	91.0	91.27	-4,419.8	-1,289.8	1,478.3	1,300.1	178.21	8.295	
11,417.3	6,936.4	11,518.1	6,965.1	89.6	91.3	91.27	-4,437.1	-1,289.8	1,478.3	1,299.4	178.89	8.264	
11,500.0	6,935.6	11,600.8	6,964.7	91.3	92.9	91.28	-4,519.8	-1,290.1	1,478.3	1,296.2	182.13	8.117	
11,515.7	6,935.5	11,616.5	6,964.7	91.6	93.2	91.29	-4,535.5	-1,290.2	1,478.3	1,295.6	182.74	8.090	
11,600.0	6,934.7	11,700.8	6,964.2	93.2	94.8	91.30	-4,619.8	-1,290.5	1,478.3	1,292.3	186.04	7.946	
11,614.1	6,934.6	11,714.9	6,964.2	93.5	95.1	91.30	-4,633.9	-1,290.5	1,478.3	1,291.7	186.60	7.923	
11,700.0	6,933.8	11,800.8	6,963.8	95.2	96.8	91.32	-4,719.8	-1,290.9	1,478.3	1,288.4	189.96	7.782	
11,712.6	6,933.7	11,813.4	6,963.7	95.4	97.0	91.32	-4,732.4	-1,290.9	1,478.3	1,287.9	190.45	7.762	
11,800.0	6,932.9	11,900.8	6,963.3	97.1	98.7	91.33	-4,819.8	-1,291.2	1,478.4	1,284.5	193.88	7.625	
11,811.0	6,932.8	11,911.8	6,963.2	97.4	98.9	91.33	-4,830.8	-1,291.3	1,478.4	1,284.0	194.31	7.608	
11,900.0	6,932.0	12,000.8	6,962.8	99.1	100.6	91.35	-4,919.8	-1,291.6	1,478.4	1,280.6	197.80	7.474	
11,909.4	6,931.9	12,010.2	6,962.7	99.3	100.8	91.35	-4,929.2	-1,291.6	1,478.4	1,280.2	198.17	7.460	
12,000.0	6,931.0	12,100.8	6,962.3	101.1	102.5	91.37	-5,019.8	-1,292.0	1,478.4	1,276.7	201.73	7.329	
12,007.8	6,931.0	12,108.6	6,962.2	101.2	102.7	91.37	-5,027.6	-1,292.0	1,478.4	1,276.4	202.04	7.317	
12,100.0	6,930.1	12,200.8	6,961.8	103.0	104.5	91.38	-5,119.8	-1,292.4	1,478.4	1,272.8	205.66	7.189	

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 HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - HONEBEIN 7G-203 - ORIGINAL WELLBORE - PROPOSAL #2												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
12,106.3	6,930.1	12,207.0	6,961.7	103.2	104.6	91.38	-5,126.0	-1,292.4	1,478.4	1,272.5	205.90	7.180	
12,200.0	6,929.2	12,300.8	6,961.3	105.0	106.4	91.40	-5,219.8	-1,292.7	1,478.4	1,268.9	209.59	7.054	
12,204.7	6,929.2	12,305.5	6,961.3	105.1	106.5	91.40	-5,224.5	-1,292.7	1,478.4	1,268.7	209.77	7.048	
12,300.0	6,928.3	12,400.8	6,960.8	107.0	108.3	91.41	-5,319.8	-1,293.1	1,478.5	1,264.9	213.52	6.924	
12,303.1	6,928.3	12,403.9	6,960.8	107.1	108.4	91.41	-5,322.9	-1,293.1	1,478.5	1,264.8	213.64	6.920	
12,400.0	6,927.4	12,500.8	6,960.3	109.0	110.3	91.43	-5,419.8	-1,293.5	1,478.5	1,261.0	217.45	6.799	
12,401.5	6,927.4	12,502.3	6,960.3	109.0	110.3	91.43	-5,421.3	-1,293.5	1,478.5	1,261.0	217.51	6.797	
12,500.0	6,926.5	12,600.8	6,959.8	110.9	112.2	91.45	-5,519.8	-1,293.8	1,478.5	1,257.1	221.39	6.678	
12,598.4	6,925.6	12,699.2	6,959.3	112.9	114.1	91.46	-5,618.2	-1,294.2	1,478.5	1,253.3	225.26	6.564	
12,600.0	6,925.6	12,700.8	6,959.3	112.9	114.1	91.46	-5,619.8	-1,294.2	1,478.5	1,253.2	225.32	6.562	
12,696.8	6,924.7	12,797.6	6,958.8	114.8	116.0	91.48	-5,716.6	-1,294.6	1,478.5	1,249.4	229.14	6.453	
12,700.0	6,924.6	12,800.8	6,958.8	114.9	116.1	91.48	-5,719.7	-1,294.6	1,478.6	1,249.3	229.26	6.449	
12,795.2	6,923.8	12,896.0	6,958.3	116.8	117.9	91.49	-5,815.0	-1,294.9	1,478.6	1,245.6	233.01	6.345	
12,800.0	6,923.7	12,900.7	6,958.3	116.9	118.0	91.50	-5,819.7	-1,295.0	1,478.6	1,245.4	233.20	6.340	
12,893.7	6,922.9	12,994.4	6,957.8	118.7	119.9	91.51	-5,913.4	-1,295.3	1,478.6	1,241.7	236.89	6.242	
12,900.0	6,922.8	13,000.7	6,957.8	118.8	120.0	91.51	-5,919.7	-1,295.3	1,478.6	1,241.5	237.14	6.235	
12,992.1	6,922.0	13,092.8	6,957.4	120.6	121.8	91.53	-6,011.8	-1,295.7	1,478.6	1,237.8	240.77	6.141	
13,000.0	6,921.9	13,100.7	6,957.3	120.8	121.9	91.53	-6,019.7	-1,295.7	1,478.6	1,237.5	241.08	6.133	
13,090.5	6,921.1	13,191.3	6,956.9	122.6	123.7	91.54	-6,110.3	-1,296.0	1,478.6	1,234.0	244.65	6.044	
13,100.0	6,921.0	13,200.7	6,956.8	122.8	123.9	91.54	-6,119.7	-1,296.1	1,478.6	1,233.6	245.03	6.035	
13,188.9	6,920.2	13,289.7	6,956.4	124.5	125.6	91.56	-6,208.7	-1,296.4	1,478.7	1,230.1	248.53	5.950	
13,200.0	6,920.1	13,300.7	6,956.3	124.8	125.8	91.56	-6,219.7	-1,296.5	1,478.7	1,229.7	248.97	5.939	
13,287.4	6,919.3	13,388.1	6,955.9	126.5	127.5	91.57	-6,307.1	-1,296.8	1,478.7	1,226.3	252.42	5.858	
13,300.0	6,919.1	13,400.7	6,955.8	126.7	127.8	91.58	-6,319.7	-1,296.8	1,478.7	1,225.8	252.91	5.847	
13,385.8	6,918.4	13,486.5	6,955.4	128.4	129.4	91.59	-6,405.5	-1,297.1	1,478.7	1,222.4	256.30	5.769	
13,400.0	6,918.2	13,500.7	6,955.3	128.7	129.7	91.59	-6,419.7	-1,297.2	1,478.7	1,221.9	256.86	5.757	
13,484.2	6,917.5	13,585.0	6,954.9	130.4	131.4	91.61	-6,503.9	-1,297.5	1,478.7	1,218.6	260.19	5.683	
13,500.0	6,917.3	13,600.7	6,954.8	130.7	131.7	91.61	-6,519.7	-1,297.6	1,478.7	1,217.9	260.81	5.670	
13,582.6	6,916.6	13,683.4	6,954.4	132.3	133.3	91.62	-6,602.4	-1,297.9	1,478.8	1,214.7	264.07	5.600	
13,600.0	6,916.4	13,700.7	6,954.3	132.7	133.6	91.63	-6,619.7	-1,297.9	1,478.8	1,214.0	264.76	5.585	
13,681.1	6,915.6	13,781.8	6,953.9	134.3	135.2	91.64	-6,700.8	-1,298.3	1,478.8	1,210.8	267.96	5.519	
13,700.0	6,915.5	13,800.7	6,953.8	134.6	135.6	91.64	-6,719.7	-1,298.3	1,478.8	1,210.1	268.71	5.503	
13,779.5	6,914.7	13,880.2	6,953.4	136.2	137.1	91.65	-6,799.2	-1,298.6	1,478.8	1,207.0	271.85	5.440	
13,800.0	6,914.6	13,900.7	6,953.3	136.6	137.5	91.66	-6,819.7	-1,298.7	1,478.8	1,206.2	272.66	5.424	
13,877.9	6,913.8	13,978.6	6,953.0	138.2	139.1	91.67	-6,897.6	-1,299.0	1,478.8	1,203.1	275.73	5.363	
13,900.0	6,913.6	14,000.7	6,952.8	138.6	139.5	91.67	-6,919.7	-1,299.1	1,478.9	1,202.2	276.61	5.346	
13,976.3	6,912.9	14,077.1	6,952.5	140.1	141.0	91.69	-6,996.0	-1,299.4	1,478.9	1,199.3	279.62	5.289	
14,000.0	6,912.7	14,100.7	6,952.3	140.6	141.5	91.69	-7,019.7	-1,299.4	1,478.9	1,198.3	280.56	5.271	
14,038.9	6,912.4	14,139.6	6,952.2	141.3	142.2	91.70	-7,058.6	-1,299.6	1,478.9	1,196.9	282.03	5.244	
14,074.8	6,912.0	14,170.4	6,952.0	142.0	142.8	91.70	-7,089.4	-1,299.7	1,478.9	1,195.6	283.29	5.221	
14,079.0	6,912.0	14,170.4	6,952.0	142.1	142.8	91.70	-7,089.4	-1,299.7	1,478.9	1,195.6	283.37	5.219 SF	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

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	-90.00	0.0	-89.2	89.3				
98.4	98.4	95.4	95.4	0.1	0.1	-90.00	0.0	-89.2	89.2	89.0	0.19	474.080	
100.0	100.0	97.0	97.0	0.1	0.1	-90.00	0.0	-89.2	89.2	89.0	0.19	465.908	
196.8	196.8	193.8	193.8	0.3	0.3	-90.00	0.0	-89.2	89.2	88.6	0.62	143.206	
200.0	200.0	197.0	197.0	0.3	0.3	-90.00	0.0	-89.2	89.2	88.6	0.64	140.023	
295.3	295.3	292.3	292.3	0.5	0.5	-90.00	0.0	-89.2	89.2	88.2	1.07	83.739	
300.0	300.0	297.0	297.0	0.5	0.5	-90.00	0.0	-89.2	89.2	88.1	1.09	82.103	
393.7	393.7	390.7	390.7	0.8	0.8	-90.00	0.0	-89.2	89.2	87.7	1.51	59.169	
400.0	400.0	397.0	397.0	0.8	0.8	-90.00	0.0	-89.2	89.2	87.7	1.54	58.078	
492.1	492.1	489.1	489.1	1.0	1.0	-90.00	0.0	-89.2	89.2	87.3	1.95	45.747	
500.0	500.0	497.0	497.0	1.0	1.0	-90.00	0.0	-89.2	89.2	87.2	1.99	44.931	
590.5	590.5	587.5	587.5	1.2	1.2	-90.00	0.0	-89.2	89.2	86.8	2.39	37.288	
600.0	600.0	597.0	597.0	1.2	1.2	-90.00	0.0	-89.2	89.2	86.8	2.44	36.637	
689.0	689.0	686.0	686.0	1.4	1.4	-90.00	0.0	-89.2	89.2	86.4	2.84	31.469	
700.0	700.0	697.0	697.0	1.4	1.4	-90.00	0.0	-89.2	89.2	86.3	2.88	30.928	
787.4	787.4	784.4	784.4	1.6	1.6	-90.00	0.0	-89.2	89.2	85.9	3.28	27.221	
800.0	800.0	797.0	797.0	1.7	1.7	-90.00	0.0	-89.2	89.2	85.9	3.33	26.759	
885.8	885.8	882.8	882.8	1.9	1.9	-90.00	0.0	-89.2	89.2	85.5	3.72	23.984	
900.0	900.0	897.0	897.0	1.9	1.9	-90.00	0.0	-89.2	89.2	85.4	3.78	23.580	
984.2	984.2	981.2	981.2	2.1	2.1	-90.00	0.0	-89.2	89.2	85.1	4.16	21.434	
1,000.0	1,000.0	997.0	997.0	2.1	2.1	-90.00	0.0	-89.2	89.2	85.0	4.23	21.076	
1,082.7	1,082.7	1,079.7	1,079.7	2.3	2.3	-90.00	0.0	-89.2	89.2	84.6	4.61	19.375	
1,100.0	1,100.0	1,097.0	1,097.0	2.3	2.3	-90.00	0.0	-89.2	89.2	84.5	4.68	19.053 CC, ES	
1,181.1	1,181.1	1,175.8	1,175.8	2.5	2.5	-89.83	0.3	-90.2	90.2	85.2	5.04	17.918	
1,200.0	1,200.0	1,194.1	1,194.1	2.6	2.5	-89.73	0.4	-90.7	90.8	85.6	5.12	17.737	
1,279.5	1,279.5	1,271.2	1,271.1	2.7	2.7	-126.11	1.4	-94.1	95.0	89.5	5.46	17.407	
1,300.0	1,300.0	1,290.9	1,290.8	2.8	2.8	-126.19	1.7	-95.3	96.6	91.0	5.54	17.426	
1,377.9	1,377.8	1,365.9	1,365.5	3.0	2.9	-126.79	3.4	-101.1	104.8	98.9	5.87	17.841	
1,400.0	1,399.8	1,387.0	1,386.5	3.0	3.0	-127.03	3.9	-103.0	107.7	101.7	5.97	18.049	
1,476.4	1,475.9	1,459.6	1,458.7	3.2	3.1	-128.05	6.2	-110.9	119.8	113.5	6.30	19.024	
1,500.0	1,499.5	1,481.9	1,480.8	3.2	3.2	-128.40	6.9	-113.7	124.1	117.7	6.40	19.406	
1,574.8	1,573.7	1,551.9	1,550.0	3.4	3.4	-129.53	9.7	-123.4	139.9	133.2	6.72	20.806	
1,600.0	1,598.7	1,575.3	1,573.1	3.5	3.4	-129.91	10.7	-127.1	145.9	139.1	6.83	21.348	
1,673.2	1,671.1	1,642.4	1,639.2	3.7	3.6	-130.98	14.0	-138.5	165.2	158.0	7.16	23.059	
1,700.0	1,697.5	1,666.7	1,663.0	3.7	3.7	-131.34	15.2	-143.0	172.9	165.6	7.28	23.745	
1,771.6	1,767.9	1,732.7	1,727.6	4.0	3.9	-132.31	18.9	-156.0	195.3	187.7	7.62	25.642	
1,800.1	1,795.7	1,759.5	1,753.8	4.0	4.0	-132.71	20.5	-161.4	204.6	196.8	7.75	26.404	
1,870.1	1,864.2	1,825.4	1,818.3	4.3	4.3	-133.95	24.2	-174.5	227.8	219.7	8.10	28.126	
1,900.0	1,893.4	1,853.6	1,845.8	4.4	4.4	-134.40	25.8	-180.2	237.7	229.4	8.25	28.824	
1,968.5	1,960.4	1,918.0	1,908.9	4.6	4.6	-135.31	29.5	-193.1	260.5	251.9	8.60	30.294	
2,000.0	1,991.3	1,947.7	1,937.9	4.7	4.7	-135.68	31.1	-199.0	271.0	262.2	8.76	30.930	
2,066.9	2,056.7	2,010.7	1,999.5	5.0	5.0	-136.37	34.7	-211.6	293.3	284.2	9.12	32.172	
2,100.0	2,089.1	2,041.9	2,030.0	5.1	5.1	-136.68	36.5	-217.9	304.3	295.0	9.29	32.746	
2,165.3	2,153.0	2,103.4	2,090.2	5.3	5.3	-137.22	40.0	-230.2	326.2	316.5	9.65	33.809	
2,200.0	2,186.9	2,136.0	2,122.1	5.5	5.5	-137.48	41.8	-236.7	337.8	327.9	9.84	34.335	
2,263.8	2,249.3	2,196.0	2,180.8	5.7	5.7	-137.91	45.2	-248.7	359.1	348.9	10.19	35.240	
2,300.0	2,284.7	2,230.2	2,214.2	5.8	5.8	-138.13	47.2	-255.5	371.3	360.9	10.39	35.723	
2,362.2	2,345.5	2,288.7	2,271.5	6.1	6.1	-138.49	50.5	-267.2	392.1	381.4	10.74	36.498	
2,400.0	2,382.5	2,324.3	2,306.3	6.2	6.2	-138.68	52.5	-274.4	404.8	393.8	10.96	36.942	
2,460.6	2,441.8	2,381.4	2,362.1	6.5	6.5	-138.97	55.7	-285.8	425.1	413.8	11.30	37.608	
2,500.0	2,480.3	2,418.4	2,398.4	6.6	6.6	-139.15	57.8	-293.2	438.3	426.8	11.53	38.018	
2,559.0	2,538.1	2,474.0	2,452.7	6.9	6.9	-139.39	61.0	-304.3	458.2	446.3	11.87	38.592	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,600.0	2,578.1	2,512.6	2,490.4	7.0	7.0	-139.55	63.2	-312.0	471.9	459.8	12.11	38.971	
2,657.5	2,634.4	2,566.7	2,543.4	7.3	7.3	-139.75	66.3	-322.9	491.2	478.8	12.45	39.469	
2,700.0	2,675.9	2,606.7	2,582.5	7.5	7.4	-139.89	68.5	-330.9	505.5	492.8	12.69	39.821	
2,755.9	2,730.6	2,659.4	2,634.0	7.7	7.7	-140.07	71.5	-341.4	524.3	511.3	13.02	40.254	
2,800.0	2,773.8	2,700.9	2,674.6	7.9	7.8	-140.19	73.9	-349.7	539.1	525.8	13.29	40.580	
2,854.3	2,826.9	2,752.0	2,724.7	8.1	8.1	-140.34	76.8	-360.0	557.4	543.8	13.61	40.959	
2,857.4	2,829.9	2,754.9	2,727.4	8.1	8.1	-140.35	76.9	-360.5	558.4	544.8	13.63	40.980	
2,900.0	2,871.6	2,795.1	2,766.8	8.3	8.3	-140.63	79.2	-368.6	572.5	558.6	13.89	41.224	
2,952.7	2,923.5	2,845.1	2,815.7	8.4	8.5	-140.90	82.1	-378.6	589.3	575.1	14.19	41.525	
3,000.0	2,970.1	2,890.1	2,859.7	8.6	8.7	-141.08	84.6	-387.6	603.8	589.3	14.46	41.741	
3,051.2	3,020.7	2,939.0	2,907.6	8.7	8.9	-141.21	87.4	-397.4	618.8	604.0	14.75	41.944	
3,100.0	3,069.1	2,985.9	2,953.4	8.9	9.1	-141.28	90.0	-406.7	632.4	617.4	15.03	42.090	
3,149.6	3,118.3	3,033.7	3,000.1	9.0	9.3	-141.29	92.8	-416.3	645.7	630.4	15.29	42.217	
3,200.0	3,168.5	3,082.3	3,047.7	9.1	9.5	-141.26	95.5	-426.0	658.5	642.9	15.57	42.303	
3,248.0	3,216.3	3,128.9	3,093.3	9.2	9.7	-141.17	98.2	-435.4	670.1	654.3	15.81	42.371	
3,300.0	3,268.2	3,179.4	3,142.6	9.3	9.9	-141.04	101.0	-445.5	682.0	665.9	16.08	42.405	
3,346.4	3,314.6	3,224.6	3,186.9	9.4	10.1	-140.87	103.6	-454.5	692.0	675.7	16.31	42.427	
3,400.0	3,368.1	3,276.8	3,238.0	9.5	10.4	-140.63	106.6	-465.0	702.8	686.3	16.57	42.417	
3,444.9	3,413.0	3,320.7	3,280.9	9.6	10.6	-140.40	109.0	-473.7	711.4	694.6	16.78	42.400	
3,457.5	3,425.6	3,333.0	3,292.9	9.6	10.6	-103.82	109.7	-476.2	713.7	696.9	16.84	42.384	
3,500.0	3,468.1	3,374.6	3,333.6	9.7	10.8	-103.48	112.1	-484.5	721.4	704.4	17.04	42.349	
3,543.3	3,511.4	3,417.0	3,375.0	9.7	11.0	-103.13	114.5	-493.0	729.4	712.1	17.24	42.302	
3,600.0	3,568.1	3,472.4	3,429.3	9.8	11.3	-102.69	117.7	-504.1	739.7	722.2	17.51	42.247	
3,641.7	3,609.9	3,513.2	3,469.2	9.9	11.4	-102.37	120.0	-512.3	747.4	729.7	17.71	42.209	
3,700.0	3,668.1	3,570.2	3,525.0	10.0	11.7	-101.94	123.2	-523.7	758.2	740.2	17.98	42.162	
3,740.1	3,708.3	3,609.5	3,563.4	10.1	11.9	-101.65	125.4	-531.5	765.6	747.4	18.17	42.132	
3,800.0	3,768.1	3,668.0	3,620.6	10.2	12.1	-101.23	128.8	-543.2	776.7	758.3	18.45	42.093	
3,838.6	3,806.7	3,705.8	3,657.5	10.2	12.3	-100.97	130.9	-550.8	783.9	765.3	18.63	42.069	
3,900.0	3,868.1	3,765.9	3,716.3	10.3	12.6	-100.55	134.3	-562.8	795.4	776.5	18.92	42.036	
3,937.0	3,905.1	3,802.0	3,751.7	10.4	12.7	-100.31	136.4	-570.1	802.3	783.2	19.09	42.017	
4,000.0	3,968.1	3,863.7	3,812.0	10.5	13.0	-99.91	139.9	-582.4	814.1	794.7	19.39	41.989	
4,035.4	4,003.6	3,898.3	3,845.9	10.6	13.2	-99.68	141.8	-589.3	820.8	801.3	19.55	41.975	
4,100.0	4,068.1	3,961.5	3,907.6	10.7	13.5	-99.29	145.4	-602.0	833.0	813.1	19.86	41.953	
4,133.8	4,102.0	3,994.6	3,940.0	10.8	13.6	-99.08	147.3	-608.6	839.4	819.4	20.01	41.942	
4,200.0	4,168.1	4,059.3	4,003.3	10.9	13.9	-98.69	151.0	-621.5	851.9	831.6	20.32	41.924	
4,232.3	4,200.4	4,090.9	4,034.2	10.9	14.0	-98.51	152.7	-627.8	858.1	837.6	20.47	41.916	
4,300.0	4,268.1	4,157.1	4,099.0	11.1	14.3	-98.13	156.5	-641.1	871.0	850.2	20.79	41.903	
4,330.7	4,298.8	4,187.1	4,128.4	11.1	14.5	-97.96	158.2	-647.1	876.8	855.9	20.93	41.897	
4,400.0	4,368.1	4,254.9	4,194.7	11.2	14.8	-97.59	162.1	-660.7	890.1	868.8	21.25	41.887	
4,429.1	4,397.3	4,283.4	4,222.5	11.3	14.9	-97.43	163.7	-666.4	895.7	874.3	21.38	41.884	
4,500.0	4,468.1	4,352.7	4,290.3	11.4	15.2	-97.07	167.6	-680.2	909.3	887.6	21.71	41.877	
4,527.5	4,495.7	4,379.7	4,316.7	11.5	15.4	-96.93	169.1	-685.6	914.6	892.7	21.84	41.875	
4,600.0	4,568.1	4,450.5	4,386.0	11.6	15.7	-96.57	173.2	-699.8	928.5	906.4	22.18	41.871	
4,626.0	4,594.1	4,476.0	4,410.9	11.7	15.8	-96.44	174.6	-704.9	933.5	911.3	22.30	41.870	
4,700.0	4,668.1	4,548.4	4,481.7	11.8	16.1	-96.09	178.7	-719.4	947.9	925.2	22.64	41.869	
4,724.4	4,692.5	4,572.2	4,505.0	11.8	16.2	-95.98	180.1	-724.2	952.6	929.8	22.75	41.869	
4,800.0	4,768.1	4,646.2	4,577.4	12.0	16.6	-95.63	184.3	-739.0	967.2	944.1	23.10	41.871	
4,822.8	4,791.0	4,668.5	4,599.2	12.0	16.7	-95.53	185.5	-743.4	971.7	948.5	23.21	41.871	
4,900.0	4,868.1	4,744.0	4,673.0	12.2	17.0	-95.19	189.8	-758.5	986.7	963.1	23.56	41.875	
4,921.2	4,889.4	4,764.8	4,693.4	12.2	17.1	-95.10	191.0	-762.7	990.8	967.2	23.66	41.876	
5,000.0	4,968.1	4,841.8	4,768.7	12.4	17.5	-94.77	195.4	-778.1	1,006.2	982.1	24.02	41.881	
5,019.7	4,987.8	4,861.0	4,787.5	12.4	17.5	-94.69	196.5	-782.0	1,010.0	985.9	24.12	41.882	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

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	5,068.1	4,939.6	4,864.4	12.6	17.9	-94.36	200.9	-797.7	1,025.7	1,001.2	24.49	41.889	
5,118.1	5,086.2	4,957.3	4,881.7	12.6	18.0	-94.29	201.9	-801.2	1,029.3	1,004.7	24.57	41.891	
5,200.0	5,168.1	5,037.4	4,960.1	12.8	18.4	-93.97	206.5	-817.2	1,045.3	1,020.4	24.95	41.900	
5,216.5	5,184.7	5,053.6	4,975.9	12.8	18.4	-93.91	207.4	-820.5	1,048.6	1,023.5	25.02	41.901	
5,300.0	5,268.1	5,135.2	5,055.7	13.0	18.8	-93.59	212.0	-836.8	1,065.0	1,039.5	25.41	41.911	
5,314.9	5,283.1	5,149.9	5,070.0	13.0	18.9	-93.54	212.8	-839.7	1,067.9	1,042.4	25.48	41.913	
5,400.0	5,368.1	5,233.1	5,151.4	13.1	19.2	-93.23	217.6	-856.4	1,084.6	1,058.8	25.87	41.924	
5,413.4	5,381.5	5,246.1	5,164.2	13.2	19.3	-93.18	218.3	-859.0	1,087.3	1,061.3	25.93	41.925	
5,500.0	5,468.1	5,330.9	5,247.1	13.3	19.7	-92.87	223.1	-876.0	1,104.4	1,078.0	26.33	41.937	
5,511.8	5,479.9	5,342.4	5,258.4	13.4	19.7	-92.83	223.8	-878.3	1,106.7	1,080.3	26.39	41.939	
5,600.0	5,568.1	5,428.7	5,342.8	13.5	20.1	-92.54	228.7	-895.5	1,124.1	1,097.3	26.80	41.952	
5,610.2	5,578.4	5,438.7	5,352.5	13.6	20.2	-92.50	229.2	-897.5	1,126.1	1,099.3	26.84	41.953	
5,700.0	5,668.1	5,526.5	5,438.4	13.7	20.6	-92.21	234.2	-915.1	1,143.9	1,116.7	27.26	41.967	
5,708.6	5,676.8	5,535.0	5,446.7	13.8	20.6	-92.18	234.7	-916.8	1,145.6	1,118.3	27.30	41.968	
5,800.0	5,768.1	5,624.3	5,534.1	13.9	21.0	-91.89	239.8	-934.7	1,163.8	1,136.0	27.72	41.983	
5,807.1	5,775.2	5,631.2	5,540.9	14.0	21.1	-91.87	240.2	-936.1	1,165.2	1,137.4	27.75	41.984	
5,900.0	5,868.1	5,722.1	5,629.8	14.1	21.5	-91.59	245.3	-954.2	1,183.6	1,155.4	28.18	41.999	
5,905.5	5,873.6	5,727.5	5,635.0	14.1	21.5	-91.57	245.6	-955.3	1,184.7	1,156.5	28.21	41.999	
6,000.0	5,968.1	5,880.9	5,785.8	14.3	22.0	-91.17	253.2	-982.2	1,201.2	1,172.5	28.74	41.794	
6,003.9	5,972.1	5,887.4	5,792.2	14.3	22.1	-91.15	253.5	-983.2	1,201.8	1,173.0	28.76	41.783	
6,100.0	6,068.1	6,047.2	5,950.8	14.5	22.4	-90.87	259.0	-1,002.6	1,213.4	1,184.1	29.27	41.453	
6,102.3	6,070.5	6,051.2	5,954.7	14.5	22.5	-90.87	259.1	-1,002.9	1,213.6	1,184.3	29.28	41.443	
6,200.0	6,168.1	6,215.5	6,118.6	14.7	22.8	-90.72	262.2	-1,013.7	1,220.0	1,190.2	29.78	40.972	
6,200.8	6,168.9	6,216.8	6,120.0	14.7	22.8	-90.71	262.2	-1,013.8	1,220.1	1,190.3	29.78	40.968	
6,288.5	6,256.6	6,350.5	6,253.6	14.9	22.9	-90.68	262.8	-1,015.9	1,221.3	1,191.1	30.18	40.464	
6,299.2	6,267.3	6,361.2	6,264.3	14.9	22.9	89.11	262.8	-1,015.9	1,221.3	1,191.1	30.21	40.431	
6,300.0	6,268.1	6,362.0	6,265.1	14.9	22.9	89.11	262.8	-1,015.9	1,221.3	1,191.1	30.21	40.428	
6,350.0	6,318.1	6,411.9	6,315.1	15.0	23.0	89.23	262.8	-1,015.9	1,221.3	1,190.9	30.36	40.228	
6,397.6	6,365.3	6,459.1	6,362.2	15.1	23.1	89.50	262.7	-1,015.9	1,221.2	1,190.7	30.47	40.077	
6,400.0	6,367.7	6,461.4	6,364.5	15.1	23.1	89.51	262.7	-1,015.9	1,221.2	1,190.7	30.48	40.071	
6,450.0	6,416.8	6,510.4	6,413.5	15.1	23.1	89.84	260.2	-1,015.9	1,221.2	1,190.6	30.56	39.963	
6,475.3	6,441.3	6,535.4	6,438.3	15.1	23.1	90.00	257.6	-1,015.9	1,221.2	1,190.6	30.58	39.930	
6,496.0	6,461.3	6,556.0	6,458.7	15.1	23.2	90.14	254.9	-1,016.0	1,221.2	1,190.6	30.60	39.906	
6,500.0	6,465.1	6,559.9	6,462.6	15.1	23.2	90.16	254.3	-1,016.0	1,221.2	1,190.6	30.60	39.903	
6,550.0	6,512.4	6,609.9	6,511.7	15.1	23.2	90.49	244.9	-1,016.0	1,221.2	1,190.6	30.62	39.879	
6,594.5	6,553.4	6,654.8	6,555.1	15.1	23.2	90.78	233.5	-1,016.0	1,221.3	1,190.7	30.62	39.881	
6,600.0	6,558.4	6,660.4	6,560.5	15.1	23.2	90.81	231.9	-1,016.0	1,221.3	1,190.7	30.62	39.883	
6,650.0	6,603.0	6,711.4	6,608.7	15.1	23.2	91.14	215.4	-1,016.1	1,221.4	1,190.8	30.61	39.904	
6,692.9	6,639.9	6,755.6	6,649.5	15.1	23.2	91.41	198.3	-1,016.2	1,221.5	1,190.9	30.59	39.927	
6,700.0	6,645.9	6,762.9	6,656.1	15.1	23.2	91.46	195.3	-1,016.2	1,221.6	1,191.0	30.59	39.931	
6,750.0	6,686.8	6,815.0	6,702.5	15.1	23.2	91.77	171.5	-1,016.3	1,221.8	1,191.2	30.58	39.951	
6,791.3	6,719.1	6,858.4	6,739.7	15.1	23.2	92.03	149.1	-1,016.3	1,221.9	1,191.4	30.59	39.949	
6,800.0	6,725.7	6,867.6	6,747.4	15.1	23.2	92.08	144.1	-1,016.4	1,222.0	1,191.4	30.59	39.947	
6,850.0	6,762.3	6,920.7	6,790.6	15.1	23.2	92.38	113.2	-1,016.5	1,222.2	1,191.6	30.63	39.903	
6,889.7	6,789.7	6,963.4	6,823.5	15.1	23.2	92.61	86.1	-1,016.6	1,222.4	1,191.8	30.69	39.828	
6,900.0	6,796.5	6,974.4	6,831.8	15.1	23.2	92.66	78.8	-1,016.6	1,222.5	1,191.8	30.71	39.805	
6,950.0	6,828.0	7,028.6	6,870.6	15.1	23.2	92.94	41.0	-1,016.7	1,222.8	1,191.9	30.85	39.636	
6,988.2	6,850.2	7,070.4	6,898.6	15.1	23.2	93.14	10.0	-1,016.9	1,223.0	1,192.0	31.00	39.448	
7,000.0	6,856.7	7,083.4	6,906.9	15.1	23.2	93.20	0.0	-1,016.9	1,223.1	1,192.0	31.06	39.384	
7,050.0	6,882.5	7,138.6	6,940.2	15.2	23.2	93.45	-44.0	-1,017.0	1,223.4	1,192.1	31.34	39.036	
7,086.6	6,899.5	7,179.3	6,962.5	15.3	23.3	93.61	-78.1	-1,017.2	1,223.6	1,192.0	31.60	38.716	
7,100.0	6,905.3	7,194.3	6,970.2	15.4	23.3	93.67	-90.9	-1,017.2	1,223.7	1,192.0	31.71	38.593	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-MWMD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,150.0	6,924.9	7,250.4	6,996.7	15.7	23.3	93.88	-140.4	-1,017.4	1,224.0	1,191.8	32.17	38.044	
7,185.0	6,936.7	7,290.0	7,013.0	15.9	23.4	94.02	-176.5	-1,017.5	1,224.2	1,191.6	32.57	37.591	
7,200.0	6,941.2	7,307.0	7,019.4	16.0	23.4	94.07	-192.2	-1,017.6	1,224.3	1,191.5	32.74	37.394	
7,250.0	6,954.2	7,364.0	7,038.0	16.3	23.5	94.24	-246.0	-1,017.8	1,224.5	1,191.1	33.41	36.654	
7,283.4	6,961.0	7,402.3	7,048.1	16.6	23.6	94.34	-282.9	-1,017.9	1,224.7	1,190.8	33.91	36.116	
7,300.0	6,963.8	7,421.2	7,052.4	16.7	23.7	94.38	-301.4	-1,018.0	1,224.8	1,190.6	34.17	35.840	
7,350.0	6,970.0	7,478.8	7,062.3	17.2	23.9	94.50	-358.1	-1,018.2	1,224.9	1,189.9	35.03	34.968	
7,381.9	6,972.1	7,515.7	7,066.3	17.5	24.1	94.56	-394.7	-1,018.3	1,225.1	1,189.4	35.63	34.385	
7,400.0	6,972.7	7,536.6	7,067.7	17.7	24.2	94.59	-415.7	-1,018.4	1,225.1	1,189.1	35.97	34.055	
7,420.0	6,972.8	7,559.8	7,068.5	17.9	24.3	94.62	-438.8	-1,018.5	1,225.2	1,188.8	36.37	33.683	
7,480.3	6,972.2	7,622.7	7,068.4	18.5	24.7	94.64	-501.8	-1,018.7	1,225.2	1,187.6	37.62	32.570	
7,500.0	6,972.0	7,642.4	7,068.3	18.7	24.8	94.65	-521.5	-1,018.8	1,225.2	1,187.2	38.01	32.230	
7,578.7	6,971.3	7,721.2	7,067.8	19.7	25.4	94.66	-600.2	-1,019.1	1,225.2	1,185.5	39.71	30.854	
7,600.0	6,971.1	7,742.4	7,067.7	19.9	25.6	94.66	-621.5	-1,019.2	1,225.2	1,185.0	40.19	30.488	
7,677.1	6,970.4	7,819.6	7,067.2	20.9	26.2	94.67	-698.6	-1,019.5	1,225.2	1,183.2	42.04	29.144	
7,700.0	6,970.2	7,842.4	7,067.0	21.2	26.5	94.67	-721.5	-1,019.5	1,225.2	1,182.6	42.62	28.746	
7,775.6	6,969.5	7,918.0	7,066.6	22.2	27.2	94.68	-797.0	-1,019.8	1,225.3	1,180.6	44.65	27.444	
7,800.0	6,969.3	7,942.4	7,066.4	22.6	27.5	94.69	-821.4	-1,019.9	1,225.3	1,179.9	45.32	27.038	
7,874.0	6,968.6	8,016.4	7,065.9	23.7	28.3	94.69	-895.4	-1,020.2	1,225.3	1,177.9	47.42	25.839	
7,900.0	6,968.4	8,042.4	7,065.8	24.1	28.6	94.70	-921.4	-1,020.3	1,225.3	1,177.1	48.17	25.435	
7,972.4	6,967.8	8,114.9	7,065.3	25.2	29.5	94.71	-993.9	-1,020.5	1,225.3	1,175.0	50.33	24.344	
8,000.0	6,967.5	8,142.4	7,065.1	25.6	29.8	94.71	-1,021.4	-1,020.6	1,225.3	1,174.1	51.17	23.947	
8,070.8	6,966.9	8,213.3	7,064.7	26.7	30.7	94.72	-1,092.3	-1,020.9	1,225.3	1,172.0	53.36	22.962	
8,100.0	6,966.6	8,242.4	7,064.5	27.2	31.1	94.72	-1,121.4	-1,021.0	1,225.3	1,171.1	54.28	22.575	
8,169.3	6,966.0	8,311.7	7,064.1	28.3	32.1	94.73	-1,190.7	-1,021.3	1,225.4	1,168.9	56.49	21.690	
8,200.0	6,965.7	8,342.4	7,063.9	28.8	32.5	94.74	-1,221.4	-1,021.4	1,225.4	1,167.9	57.49	21.316	
8,267.7	6,965.1	8,410.1	7,063.5	30.0	33.4	94.75	-1,289.1	-1,021.6	1,225.4	1,165.7	59.70	20.524	
8,300.0	6,964.8	8,442.4	7,063.3	30.5	33.9	94.75	-1,321.4	-1,021.7	1,225.4	1,164.6	60.77	20.163	
8,366.1	6,964.2	8,508.5	7,062.8	31.7	34.9	94.76	-1,387.5	-1,022.0	1,225.4	1,162.4	62.99	19.455	
8,400.0	6,963.9	8,542.4	7,062.6	32.2	35.4	94.76	-1,421.4	-1,022.1	1,225.4	1,161.3	64.13	19.108	
8,464.5	6,963.3	8,607.0	7,062.2	33.4	36.4	94.77	-1,486.0	-1,022.3	1,225.4	1,159.1	66.33	18.475	
8,500.0	6,963.0	8,642.4	7,062.0	34.0	36.9	94.78	-1,521.4	-1,022.5	1,225.4	1,157.9	67.54	18.143	
8,563.0	6,962.4	8,705.4	7,061.6	35.1	37.9	94.78	-1,584.4	-1,022.7	1,225.5	1,155.7	69.72	17.576	
8,600.0	6,962.0	8,742.4	7,061.4	35.8	38.5	94.79	-1,621.4	-1,022.8	1,225.5	1,154.5	71.01	17.258	
8,661.4	6,961.5	8,803.8	7,061.0	36.9	39.5	94.80	-1,682.8	-1,023.1	1,225.5	1,152.3	73.16	16.751	
8,700.0	6,961.1	8,842.4	7,060.7	37.6	40.1	94.80	-1,721.4	-1,023.2	1,225.5	1,151.0	74.52	16.446	
8,759.8	6,960.6	8,902.2	7,060.4	38.7	41.0	94.81	-1,781.2	-1,023.4	1,225.5	1,148.9	76.63	15.992	
8,800.0	6,960.2	8,942.4	7,060.1	39.4	41.7	94.82	-1,821.4	-1,023.6	1,225.5	1,147.5	78.06	15.699	
8,858.2	6,959.7	9,000.7	7,059.7	40.5	42.7	94.82	-1,879.7	-1,023.8	1,225.5	1,145.4	80.14	15.292	
8,900.0	6,959.3	9,042.4	7,059.5	41.2	43.3	94.83	-1,921.4	-1,023.9	1,225.5	1,143.9	81.64	15.012	
8,956.7	6,958.8	9,099.1	7,059.1	42.3	44.3	94.84	-1,978.1	-1,024.2	1,225.6	1,141.9	83.68	14.646	
9,000.0	6,958.4	9,142.4	7,058.9	43.1	45.0	94.84	-2,021.4	-1,024.3	1,225.6	1,140.3	85.24	14.377	
9,055.1	6,957.9	9,197.5	7,058.5	44.1	45.9	94.85	-2,076.5	-1,024.5	1,225.6	1,138.3	87.24	14.049	
9,100.0	6,957.5	9,242.4	7,058.2	44.9	46.7	94.86	-2,121.4	-1,024.7	1,225.6	1,136.7	88.87	13.791	
9,153.5	6,957.0	9,295.9	7,057.9	45.9	47.6	94.86	-2,174.9	-1,024.9	1,225.6	1,134.8	90.82	13.494	
9,200.0	6,956.6	9,342.4	7,057.6	46.8	48.4	94.87	-2,221.4	-1,025.1	1,225.6	1,133.1	92.52	13.247	
9,251.9	6,956.1	9,394.4	7,057.3	47.8	49.3	94.88	-2,273.3	-1,025.2	1,225.6	1,131.2	94.43	12.980	
9,300.0	6,955.7	9,442.4	7,057.0	48.7	50.1	94.88	-2,321.4	-1,025.4	1,225.7	1,129.5	96.19	12.742	
9,350.4	6,955.2	9,492.8	7,056.7	49.6	51.0	94.89	-2,371.8	-1,025.6	1,225.7	1,127.6	98.05	12.501	
9,400.0	6,954.8	9,542.4	7,056.3	50.6	51.9	94.89	-2,421.4	-1,025.8	1,225.7	1,125.8	99.88	12.271	
9,448.8	6,954.3	9,591.2	7,056.0	51.5	52.7	94.90	-2,470.2	-1,026.0	1,225.7	1,124.0	101.69	12.054	
9,500.0	6,953.9	9,642.4	7,055.7	52.5	53.6	94.91	-2,521.4	-1,026.2	1,225.7	1,122.1	103.58	11.833	

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 HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - HONEBEIN 7G-323 - ORIGINAL WELLBORE - PROPOSAL #2												Offset Site Error:	0.0 usft
Survey Program: 0-MWMD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,547.2	6,953.4	9,689.6	7,055.4	53.4	54.5	94.91	-2,568.6	-1,026.3	1,225.7	1,120.4	105.34	11.636	
9,600.0	6,952.9	9,742.4	7,055.1	54.4	55.4	94.92	-2,621.4	-1,026.5	1,225.7	1,118.4	107.30	11.423	
9,645.6	6,952.5	9,788.1	7,054.8	55.2	56.2	94.93	-2,667.0	-1,026.7	1,225.8	1,116.8	109.00	11.245	
9,700.0	6,952.0	9,842.4	7,054.5	56.3	57.2	94.93	-2,721.4	-1,026.9	1,225.8	1,114.7	111.03	11.040	
9,744.1	6,951.6	9,886.5	7,054.2	57.1	57.9	94.94	-2,765.4	-1,027.1	1,225.8	1,113.1	112.68	10.879	
9,800.0	6,951.1	9,942.4	7,053.8	58.2	58.9	94.95	-2,821.4	-1,027.3	1,225.8	1,111.0	114.77	10.680	
9,842.5	6,950.7	9,984.9	7,053.6	59.0	59.7	94.95	-2,863.9	-1,027.4	1,225.8	1,109.4	116.36	10.534	
9,900.0	6,950.2	10,042.4	7,053.2	60.1	60.7	94.96	-2,921.4	-1,027.6	1,225.8	1,107.3	118.52	10.343	
9,940.9	6,949.8	10,083.3	7,052.9	60.9	61.5	94.97	-2,962.3	-1,027.8	1,225.8	1,105.8	120.06	10.210	
10,000.0	6,949.3	10,142.4	7,052.6	62.0	62.5	94.97	-3,021.4	-1,028.0	1,225.9	1,103.6	122.28	10.025	
10,039.3	6,948.9	10,181.7	7,052.3	62.8	63.2	94.98	-3,060.7	-1,028.1	1,225.9	1,102.1	123.76	9.905	
10,100.0	6,948.4	10,242.4	7,051.9	64.0	64.3	94.99	-3,121.4	-1,028.4	1,225.9	1,099.8	126.05	9.726	
10,137.8	6,948.0	10,280.2	7,051.7	64.7	65.0	94.99	-3,159.1	-1,028.5	1,225.9	1,098.4	127.47	9.617	
10,200.0	6,947.5	10,342.4	7,051.3	65.9	66.1	95.00	-3,221.3	-1,028.7	1,225.9	1,096.1	129.82	9.443	
10,236.2	6,947.1	10,378.6	7,051.1	66.6	66.8	95.00	-3,257.5	-1,028.9	1,225.9	1,094.7	131.19	9.345	
10,300.0	6,946.6	10,442.4	7,050.7	67.8	68.0	95.01	-3,321.3	-1,029.1	1,226.0	1,092.3	133.60	9.176	
10,334.6	6,946.3	10,477.0	7,050.5	68.5	68.6	95.02	-3,356.0	-1,029.2	1,226.0	1,091.0	134.91	9.087	
10,400.0	6,945.7	10,542.4	7,050.1	69.8	69.8	95.03	-3,421.3	-1,029.5	1,226.0	1,088.6	137.39	8.923	
10,433.0	6,945.4	10,575.4	7,049.9	70.4	70.4	95.03	-3,454.4	-1,029.6	1,226.0	1,087.3	138.65	8.843	
10,500.0	6,944.7	10,642.4	7,049.4	71.7	71.6	95.04	-3,521.3	-1,029.9	1,226.0	1,084.8	141.19	8.684	
10,531.5	6,944.5	10,673.9	7,049.2	72.3	72.2	95.04	-3,552.8	-1,030.0	1,226.0	1,083.6	142.38	8.611	
10,600.0	6,943.8	10,742.4	7,048.8	73.7	73.4	95.05	-3,621.3	-1,030.2	1,226.0	1,081.1	144.98	8.456	
10,629.9	6,943.6	10,772.3	7,048.6	74.2	74.0	95.06	-3,651.2	-1,030.3	1,226.1	1,079.9	146.12	8.391	
10,700.0	6,942.9	10,842.4	7,048.2	75.6	75.3	95.07	-3,721.3	-1,030.6	1,226.1	1,077.3	148.79	8.240	
10,728.3	6,942.7	10,870.7	7,048.0	76.2	75.8	95.07	-3,749.6	-1,030.7	1,226.1	1,076.2	149.87	8.181	
10,800.0	6,942.0	10,942.4	7,047.5	77.6	77.1	95.08	-3,821.3	-1,031.0	1,226.1	1,073.5	152.60	8.035	
10,826.7	6,941.8	10,969.1	7,047.4	78.1	77.6	95.08	-3,848.1	-1,031.1	1,226.1	1,072.5	153.62	7.982	
10,900.0	6,941.1	11,042.4	7,046.9	79.5	79.0	95.09	-3,921.3	-1,031.3	1,226.1	1,069.7	156.41	7.839	
10,925.2	6,940.9	11,067.6	7,046.8	80.0	79.4	95.10	-3,946.5	-1,031.4	1,226.2	1,068.8	157.37	7.791	
11,000.0	6,940.2	11,142.4	7,046.3	81.5	80.8	95.11	-4,021.3	-1,031.7	1,226.2	1,065.9	160.23	7.653	
11,023.6	6,940.0	11,166.0	7,046.1	81.9	81.3	95.11	-4,044.9	-1,031.8	1,226.2	1,065.1	161.13	7.610	
11,100.0	6,939.3	11,242.4	7,045.7	83.4	82.7	95.12	-4,121.3	-1,032.1	1,226.2	1,062.2	164.05	7.475	
11,122.0	6,939.1	11,264.4	7,045.5	83.8	83.1	95.12	-4,143.3	-1,032.2	1,226.2	1,061.3	164.89	7.437	
11,200.0	6,938.4	11,342.4	7,045.0	85.4	84.5	95.13	-4,221.3	-1,032.4	1,226.2	1,058.4	167.87	7.305	
11,220.4	6,938.2	11,362.8	7,044.9	85.8	84.9	95.13	-4,241.8	-1,032.5	1,226.3	1,057.6	168.65	7.271	
11,300.0	6,937.4	11,442.4	7,044.4	87.3	86.4	95.14	-4,321.3	-1,032.8	1,226.3	1,054.6	171.70	7.142	
11,318.9	6,937.3	11,461.3	7,044.3	87.7	86.7	95.15	-4,340.2	-1,032.9	1,226.3	1,053.9	172.42	7.112	
11,400.0	6,936.5	11,542.4	7,043.8	89.3	88.2	95.16	-4,421.3	-1,033.2	1,226.3	1,050.8	175.53	6.986	
11,417.3	6,936.4	11,559.7	7,043.7	89.6	88.6	95.16	-4,438.6	-1,033.2	1,226.3	1,050.1	176.19	6.960	
11,500.0	6,935.6	11,642.4	7,043.1	91.3	90.1	95.17	-4,521.3	-1,033.6	1,226.3	1,047.0	179.36	6.837	
11,515.7	6,935.5	11,658.1	7,043.0	91.6	90.4	95.17	-4,537.0	-1,033.6	1,226.4	1,046.4	179.96	6.814	
11,600.0	6,934.7	11,742.4	7,042.5	93.2	92.0	95.18	-4,621.3	-1,033.9	1,226.4	1,043.2	183.19	6.694	
11,614.1	6,934.6	11,756.5	7,042.4	93.5	92.2	95.19	-4,635.4	-1,034.0	1,226.4	1,042.6	183.74	6.675	
11,700.0	6,933.8	11,842.4	7,041.9	95.2	93.8	95.20	-4,721.3	-1,034.3	1,226.4	1,039.4	187.03	6.557	
11,712.6	6,933.7	11,854.9	7,041.8	95.4	94.1	95.20	-4,733.9	-1,034.3	1,226.4	1,038.9	187.51	6.540	
11,800.0	6,932.9	11,942.4	7,041.3	97.1	95.7	95.21	-4,821.3	-1,034.7	1,226.5	1,035.6	190.87	6.426	
11,811.0	6,932.8	11,953.4	7,041.2	97.4	95.9	95.21	-4,832.3	-1,034.7	1,226.5	1,035.2	191.29	6.411	
11,900.0	6,932.0	12,042.4	7,040.6	99.1	97.6	95.22	-4,921.3	-1,035.0	1,226.5	1,031.8	194.71	6.299	
11,909.4	6,931.9	12,051.8	7,040.6	99.3	97.8	95.23	-4,930.7	-1,035.1	1,226.5	1,031.4	195.07	6.287	
12,000.0	6,931.0	12,142.4	7,040.0	101.1	99.4	95.24	-5,021.3	-1,035.4	1,226.5	1,028.0	198.56	6.177	
12,007.8	6,931.0	12,150.2	7,040.0	101.2	99.6	95.24	-5,029.1	-1,035.4	1,226.5	1,027.7	198.86	6.168	
12,100.0	6,930.1	12,242.4	7,039.4	103.0	101.3	95.25	-5,121.3	-1,035.8	1,226.6	1,024.2	202.40	6.060	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - HONEBEIN 7G-323 - ORIGINAL WELLBORE - PROPOSAL #2												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
12,106.3	6,930.1	12,248.6	7,039.3	103.2	101.4	95.25	-5,127.5	-1,035.8	1,226.6	1,023.9	202.64	6.053	
12,200.0	6,929.2	12,342.4	7,038.7	105.0	103.2	95.26	-5,221.3	-1,036.2	1,226.6	1,020.3	206.25	5.947	
12,204.7	6,929.2	12,347.1	7,038.7	105.1	103.3	95.26	-5,226.0	-1,036.2	1,226.6	1,020.2	206.43	5.942	
12,300.0	6,928.3	12,442.4	7,038.1	107.0	105.1	95.28	-5,321.3	-1,036.5	1,226.6	1,016.5	210.10	5.835	
12,303.1	6,928.3	12,445.5	7,038.1	107.1	105.1	95.28	-5,324.4	-1,036.5	1,226.6	1,016.4	210.22	5.835	
12,400.0	6,927.4	12,542.4	7,037.5	109.0	107.0	95.29	-5,421.3	-1,036.9	1,226.7	1,012.7	213.95	5.734	
12,401.5	6,927.4	12,543.9	7,037.5	109.0	107.0	95.29	-5,422.8	-1,036.9	1,226.7	1,012.7	214.01	5.732	
12,500.0	6,926.5	12,642.4	7,036.9	110.9	108.8	95.30	-5,521.2	-1,037.3	1,226.7	1,008.9	217.80	5.632	
12,598.4	6,925.6	12,740.8	7,036.2	112.9	110.7	95.32	-5,619.6	-1,037.6	1,226.7	1,005.2	221.59	5.536	
12,600.0	6,925.6	12,742.4	7,036.2	112.9	110.7	95.32	-5,621.2	-1,037.6	1,226.7	1,005.1	221.65	5.535	
12,696.8	6,924.7	12,839.2	7,035.6	114.8	112.5	95.33	-5,718.1	-1,038.0	1,226.8	1,001.4	225.38	5.443	
12,700.0	6,924.6	12,842.4	7,035.6	114.9	112.6	95.33	-5,721.2	-1,038.0	1,226.8	1,001.3	225.50	5.440	
12,795.2	6,923.8	12,937.6	7,035.0	116.8	114.4	95.34	-5,816.5	-1,038.4	1,226.8	997.6	229.18	5.353	
12,800.0	6,923.7	12,942.4	7,035.0	116.9	114.5	95.34	-5,821.2	-1,038.4	1,226.8	997.5	229.36	5.349	
12,893.7	6,922.9	13,036.0	7,034.4	118.7	116.3	95.36	-5,914.9	-1,038.7	1,226.9	993.9	232.97	5.266	
12,900.0	6,922.8	13,042.4	7,034.3	118.8	116.4	95.36	-5,921.2	-1,038.8	1,226.9	993.6	233.22	5.261	
12,992.1	6,922.0	13,134.5	7,033.8	120.6	118.1	95.37	-6,013.3	-1,039.1	1,226.9	990.1	236.77	5.182	
13,000.0	6,921.9	13,142.4	7,033.7	120.8	118.3	95.37	-6,021.2	-1,039.1	1,226.9	989.8	237.07	5.175	
13,090.5	6,921.1	13,232.9	7,033.1	122.6	120.0	95.38	-6,111.7	-1,039.5	1,226.9	986.4	240.57	5.100	
13,100.0	6,921.0	13,242.4	7,033.1	122.8	120.1	95.38	-6,121.2	-1,039.5	1,226.9	986.0	240.93	5.092	
13,188.9	6,920.2	13,331.3	7,032.5	124.5	121.8	95.40	-6,210.2	-1,039.8	1,227.0	982.6	244.36	5.021	
13,200.0	6,920.1	13,342.3	7,032.5	124.8	122.0	95.40	-6,221.2	-1,039.9	1,227.0	982.2	244.79	5.012	
13,287.4	6,919.3	13,429.7	7,031.9	126.5	123.7	95.41	-6,308.6	-1,040.2	1,227.0	978.8	248.16	4.944	
13,300.0	6,919.1	13,442.3	7,031.8	126.7	123.9	95.41	-6,321.2	-1,040.2	1,227.0	978.4	248.65	4.935	
13,385.8	6,918.4	13,528.1	7,031.3	128.4	125.5	95.42	-6,407.0	-1,040.6	1,227.1	975.1	251.96	4.870	
13,400.0	6,918.2	13,542.3	7,031.2	128.7	125.8	95.42	-6,421.2	-1,040.6	1,227.1	974.5	252.51	4.859	
13,484.2	6,917.5	13,626.6	7,030.7	130.4	127.4	95.43	-6,505.4	-1,040.9	1,227.1	971.3	255.76	4.798	
13,500.0	6,917.3	13,642.3	7,030.6	130.7	127.7	95.44	-6,521.2	-1,041.0	1,227.1	970.7	256.37	4.786	
13,582.6	6,916.6	13,725.0	7,030.1	132.3	129.3	95.45	-6,603.9	-1,041.3	1,227.1	967.6	259.57	4.728	
13,600.0	6,916.4	13,742.3	7,029.9	132.7	129.6	95.45	-6,621.2	-1,041.4	1,227.1	966.9	260.24	4.715	
13,681.1	6,915.6	13,823.4	7,029.4	134.3	131.1	95.46	-6,702.3	-1,041.7	1,227.2	963.8	263.37	4.660	
13,700.0	6,915.5	13,842.3	7,029.3	134.6	131.5	95.46	-6,721.2	-1,041.7	1,227.2	963.1	264.10	4.647	
13,779.5	6,914.7	13,921.8	7,028.8	136.2	133.0	95.47	-6,800.7	-1,042.0	1,227.2	960.0	267.17	4.593	
13,800.0	6,914.6	13,942.3	7,028.7	136.6	133.4	95.48	-6,821.2	-1,042.1	1,227.2	959.3	267.96	4.580	
13,877.9	6,913.8	14,020.3	7,028.2	138.2	134.9	95.49	-6,899.1	-1,042.4	1,227.3	956.3	270.97	4.529	
13,900.0	6,913.6	14,042.3	7,028.1	138.6	135.3	95.49	-6,921.2	-1,042.5	1,227.3	955.4	271.83	4.515	
13,976.3	6,912.9	14,118.7	7,027.6	140.1	136.7	95.50	-6,997.5	-1,042.8	1,227.3	952.5	274.78	4.466	
14,000.0	6,912.7	14,142.3	7,027.4	140.6	137.2	95.50	-7,021.2	-1,042.9	1,227.3	951.6	275.69	4.452	
14,038.2	6,912.4	14,180.6	7,027.2	141.3	137.9	95.51	-7,059.4	-1,043.0	1,227.3	950.2	277.14	4.429	
14,074.8	6,912.0	14,210.5	7,027.0	142.0	138.5	95.51	-7,089.4	-1,043.1	1,227.4	949.0	278.40	4.409	
14,079.0	6,912.0	14,210.5	7,027.0	142.1	138.5	95.51	-7,089.4	-1,043.1	1,227.4	948.9	278.47	4.408 SF	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

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	-90.00	0.0	-61.3	61.4				
98.4	98.4	96.4	96.4	0.1	0.1	-90.00	0.0	-61.3	61.3	61.2	0.19	324.255	
100.0	100.0	98.0	98.0	0.1	0.1	-90.00	0.0	-61.3	61.3	61.1	0.19	318.694	
196.8	196.8	194.8	194.8	0.3	0.3	-90.00	0.0	-61.3	61.3	60.7	0.63	98.100	
200.0	200.0	198.0	198.0	0.3	0.3	-90.00	0.0	-61.3	61.3	60.7	0.64	95.928	
295.3	295.3	293.3	293.3	0.5	0.5	-90.00	0.0	-61.3	61.3	60.3	1.07	57.450	
300.0	300.0	298.0	298.0	0.5	0.5	-90.00	0.0	-61.3	61.3	60.3	1.09	56.329	
393.7	393.7	391.7	391.7	0.8	0.8	-90.00	0.0	-61.3	61.3	59.8	1.51	40.618	
400.0	400.0	398.0	398.0	0.8	0.8	-90.00	0.0	-61.3	61.3	59.8	1.54	39.871	
492.1	492.1	490.1	490.1	1.0	1.0	-90.00	0.0	-61.3	61.3	59.4	1.95	31.415	
500.0	500.0	498.0	498.0	1.0	1.0	-90.00	0.0	-61.3	61.3	59.4	1.99	30.855	
590.5	590.5	588.5	588.5	1.2	1.2	-90.00	0.0	-61.3	61.3	58.9	2.40	25.611	
600.0	600.0	598.0	598.0	1.2	1.2	-90.00	0.0	-61.3	61.3	58.9	2.44	25.165	
689.0	689.0	687.0	687.0	1.4	1.4	-90.00	0.0	-61.3	61.3	58.5	2.84	21.618	
700.0	700.0	698.0	698.0	1.4	1.4	-90.00	0.0	-61.3	61.3	58.5	2.89	21.247	
787.4	787.4	785.4	785.4	1.6	1.6	-90.00	0.0	-61.3	61.3	58.1	3.28	18.702	
800.0	800.0	798.0	798.0	1.7	1.7	-90.00	0.0	-61.3	61.3	58.0	3.34	18.384	
885.8	885.8	883.8	883.8	1.9	1.9	-90.00	0.0	-61.3	61.3	57.6	3.72	16.479	
900.0	900.0	898.0	898.0	1.9	1.9	-90.00	0.0	-61.3	61.3	57.6	3.79	16.201	
984.2	984.2	982.2	982.2	2.1	2.1	-90.00	0.0	-61.3	61.3	57.2	4.16	14.728	
1,000.0	1,000.0	998.0	998.0	2.1	2.1	-90.00	0.0	-61.3	61.3	57.1	4.24	14.482	
1,082.7	1,082.7	1,080.7	1,080.7	2.3	2.3	-90.00	0.0	-61.3	61.3	56.7	4.61	13.314	
1,100.0	1,100.0	1,098.0	1,098.0	2.3	2.3	-90.00	0.0	-61.3	61.3	56.7	4.69	13.093	
1,181.1	1,181.1	1,179.1	1,179.1	2.5	2.5	-90.00	0.0	-61.3	61.3	56.3	5.05	12.147	
1,200.0	1,200.0	1,198.0	1,198.0	2.6	2.6	-90.00	0.0	-61.3	61.3	56.2	5.13	11.946 CC, ES	
1,279.5	1,279.5	1,276.2	1,276.2	2.7	2.7	-126.74	0.6	-62.2	62.8	57.4	5.48	11.462	
1,300.0	1,300.0	1,296.3	1,296.3	2.8	2.8	-126.86	0.9	-62.7	63.7	58.1	5.57	11.437	
1,377.9	1,377.8	1,372.6	1,372.5	3.0	2.9	-127.48	3.0	-65.6	68.9	63.0	5.91	11.672	
1,400.0	1,399.8	1,394.2	1,394.0	3.0	3.0	-127.69	3.8	-66.7	71.0	65.0	6.00	11.823	
1,476.4	1,475.9	1,468.5	1,468.1	3.2	3.2	-128.47	7.4	-71.5	79.7	73.4	6.33	12.592	
1,500.0	1,499.5	1,491.3	1,490.8	3.2	3.2	-128.72	8.7	-73.3	83.0	76.6	6.44	12.903	
1,574.8	1,573.7	1,563.4	1,562.4	3.4	3.4	-129.45	13.5	-80.0	95.2	88.5	6.77	14.071	
1,600.0	1,598.7	1,587.5	1,586.3	3.5	3.4	-129.68	15.3	-82.6	99.9	93.1	6.88	14.527	
1,673.2	1,671.1	1,657.1	1,655.1	3.7	3.6	-130.28	21.3	-90.9	115.3	108.1	7.22	15.981	
1,700.0	1,697.5	1,682.3	1,680.0	3.7	3.7	-130.47	23.7	-94.2	121.6	114.3	7.34	16.566	
1,771.6	1,767.9	1,749.2	1,745.9	4.0	3.9	-130.90	30.7	-103.9	140.0	132.3	7.69	18.208	
1,800.1	1,795.7	1,775.6	1,771.7	4.0	4.0	-131.04	33.7	-108.1	147.9	140.1	7.83	18.905	
1,870.1	1,864.2	1,841.5	1,836.3	4.3	4.2	-131.50	41.7	-119.1	168.3	160.1	8.19	20.539	
1,900.0	1,893.4	1,870.2	1,864.2	4.4	4.3	-131.66	45.1	-123.9	177.0	168.7	8.35	21.193	
1,968.5	1,960.4	1,935.7	1,928.3	4.6	4.5	-131.98	53.1	-135.0	197.1	188.3	8.73	22.567	
2,000.0	1,991.3	1,965.8	1,957.8	4.7	4.6	-132.10	56.8	-140.1	206.3	197.4	8.91	23.160	
2,066.9	2,056.7	2,029.8	2,020.4	5.0	4.9	-132.33	64.5	-150.9	225.8	216.5	9.29	24.316	
2,100.0	2,089.1	2,061.4	2,051.3	5.1	5.0	-132.43	68.4	-156.2	235.5	226.0	9.48	24.844	
2,165.3	2,153.0	2,123.9	2,112.4	5.3	5.2	-132.60	76.0	-166.7	254.6	244.7	9.86	25.813	
2,200.0	2,186.9	2,157.0	2,144.8	5.5	5.3	-132.68	80.0	-172.3	264.7	254.7	10.07	26.292	
2,263.8	2,249.3	2,218.0	2,204.5	5.7	5.6	-132.82	87.4	-182.6	283.4	272.9	10.45	27.110	
2,300.0	2,284.7	2,252.6	2,238.4	5.8	5.7	-132.89	91.6	-188.4	294.0	283.3	10.67	27.544	
2,362.2	2,345.5	2,312.1	2,296.6	6.1	6.0	-132.99	98.9	-198.5	312.2	301.1	11.06	28.236	
2,400.0	2,382.5	2,348.3	2,331.9	6.2	6.1	-133.05	103.3	-204.6	323.2	311.9	11.29	28.630	
2,460.6	2,441.8	2,406.2	2,388.6	6.5	6.3	-133.14	110.3	-214.3	341.0	329.3	11.67	29.220	
2,500.0	2,480.3	2,443.9	2,425.5	6.6	6.5	-133.19	114.9	-220.7	352.5	340.6	11.92	29.579	
2,559.0	2,538.1	2,500.4	2,480.7	6.9	6.7	-133.26	121.8	-230.2	369.7	357.5	12.29	30.083	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,600.0	2,578.1	2,539.5	2,519.0	7.0	6.9	-133.31	126.5	-236.8	381.7	369.2	12.55	30.411	
2,657.5	2,634.4	2,594.5	2,572.7	7.3	7.1	-133.37	133.2	-246.1	398.5	385.6	12.92	30.844	
2,700.0	2,675.9	2,635.1	2,612.5	7.5	7.3	-133.41	138.1	-252.9	411.0	397.8	13.20	31.146	
2,755.9	2,730.6	2,688.6	2,664.8	7.7	7.5	-133.46	144.6	-261.9	427.3	413.8	13.56	31.519	
2,800.0	2,773.8	2,730.8	2,706.1	7.9	7.7	-133.50	149.8	-269.1	440.2	426.4	13.84	31.797	
2,854.3	2,826.9	2,782.7	2,756.9	8.1	7.9	-133.54	156.1	-277.8	456.1	441.9	14.20	32.121	
2,857.4	2,829.9	2,785.6	2,759.7	8.1	7.9	-133.55	156.4	-278.3	457.0	442.8	14.22	32.139	
2,900.0	2,871.6	2,826.5	2,799.7	8.3	8.1	-133.73	161.4	-285.2	469.3	454.8	14.50	32.358	
2,952.7	2,923.5	2,877.1	2,849.2	8.4	8.3	-133.88	167.6	-293.7	483.9	469.0	14.83	32.627	
3,000.0	2,970.1	2,922.7	2,893.8	8.6	8.5	-133.93	173.1	-301.4	496.4	481.3	15.12	32.821	
3,051.2	3,020.7	2,972.2	2,942.2	8.7	8.7	-133.91	179.1	-309.8	509.4	493.9	15.43	33.006	
3,100.0	3,069.1	3,019.5	2,988.5	8.9	8.9	-133.82	184.9	-317.7	521.2	505.4	15.73	33.141	
3,149.6	3,118.3	3,067.6	3,035.6	9.0	9.1	-133.67	190.7	-325.9	532.6	516.6	16.01	33.261	
3,200.0	3,168.5	3,116.7	3,083.6	9.1	9.3	-133.45	196.7	-334.1	543.7	527.4	16.30	33.347	
3,248.0	3,216.3	3,163.5	3,129.3	9.2	9.6	-133.19	202.4	-342.0	553.7	537.1	16.57	33.419	
3,300.0	3,268.2	3,214.2	3,179.0	9.3	9.8	-132.84	208.5	-350.6	563.9	547.1	16.85	33.466	
3,346.4	3,314.6	3,259.6	3,223.4	9.4	10.0	-132.48	214.1	-358.2	572.6	555.5	17.09	33.503	
3,400.0	3,368.1	3,312.0	3,274.6	9.5	10.2	-132.01	220.4	-367.0	582.0	564.7	17.36	33.518	
3,444.9	3,413.0	3,355.9	3,317.5	9.6	10.4	-131.56	225.8	-374.4	589.5	571.9	17.58	33.526	
3,457.5	3,425.6	3,368.2	3,329.5	9.6	10.4	-94.93	227.3	-376.5	591.5	573.9	17.65	33.520	
3,500.0	3,468.1	3,409.8	3,370.2	9.7	10.6	-94.38	232.3	-383.5	598.3	580.4	17.85	33.517	
3,543.3	3,511.4	3,458.5	3,418.0	9.7	10.8	-93.77	238.1	-391.5	605.1	587.0	18.07	33.488	
3,600.0	3,568.1	3,525.4	3,483.7	9.8	11.0	-93.03	245.2	-401.5	613.2	594.8	18.35	33.425	
3,641.7	3,609.9	3,574.9	3,532.5	9.9	11.2	-92.56	250.0	-408.0	618.5	600.0	18.54	33.369	
3,700.0	3,668.1	3,644.5	3,601.5	10.0	11.4	-91.99	255.8	-416.1	625.1	606.3	18.80	33.257	
3,740.1	3,708.3	3,692.7	3,649.3	10.1	11.5	-91.66	259.2	-420.8	629.0	610.0	18.97	33.152	
3,800.0	3,768.1	3,765.0	3,721.2	10.2	11.7	-91.26	263.5	-426.8	633.8	614.6	19.23	32.966	
3,838.6	3,806.7	3,811.7	3,767.8	10.2	11.8	-91.06	265.7	-429.8	636.3	616.9	19.39	32.819	
3,900.0	3,868.1	3,886.4	3,842.3	10.3	11.9	-90.82	268.3	-433.4	639.2	619.6	19.64	32.552	
3,937.0	3,905.1	3,931.4	3,887.3	10.4	12.0	-90.72	269.3	-434.8	640.4	620.6	19.78	32.370	
4,000.0	3,968.1	4,008.2	3,964.1	10.5	12.1	-90.65	270.1	-435.9	641.3	621.2	20.03	32.018	
4,035.4	4,003.6	4,045.7	4,001.6	10.6	12.2	-90.65	270.1	-435.9	641.3	621.1	20.16	31.814	
4,100.0	4,068.1	4,110.3	4,066.1	10.7	12.3	-90.65	270.1	-435.9	641.3	620.9	20.39	31.453	
4,133.8	4,102.0	4,144.1	4,100.0	10.8	12.3	-90.65	270.1	-435.9	641.3	620.8	20.51	31.260	
4,200.0	4,168.1	4,210.3	4,166.1	10.9	12.4	-90.65	270.1	-435.9	641.3	620.5	20.76	30.889	
4,232.3	4,200.4	4,242.5	4,198.4	10.9	12.5	-90.65	270.1	-435.9	641.3	620.4	20.88	30.710	
4,300.0	4,268.1	4,310.3	4,266.1	11.1	12.6	-90.65	270.1	-435.9	641.3	620.1	21.14	30.341	
4,330.7	4,298.8	4,341.0	4,296.8	11.1	12.6	-90.65	270.1	-435.9	641.3	620.0	21.25	30.175	
4,400.0	4,368.1	4,410.3	4,366.1	11.2	12.7	-90.65	270.1	-435.9	641.3	619.8	21.51	29.807	
4,429.1	4,397.3	4,439.4	4,395.3	11.3	12.8	-90.65	270.1	-435.9	641.3	619.7	21.63	29.655	
4,500.0	4,468.1	4,510.3	4,466.1	11.4	12.9	-90.65	270.1	-435.9	641.3	619.4	21.89	29.289	
4,527.5	4,495.7	4,537.8	4,493.7	11.5	12.9	-90.65	270.1	-435.9	641.3	619.3	22.00	29.149	
4,600.0	4,568.1	4,610.3	4,566.1	11.6	13.1	-90.65	270.1	-435.9	641.3	619.0	22.28	28.785	
4,626.0	4,594.1	4,636.2	4,592.1	11.7	13.1	-90.65	270.1	-435.9	641.3	618.9	22.38	28.656	
4,700.0	4,668.1	4,710.3	4,666.1	11.8	13.2	-90.65	270.1	-435.9	641.3	618.6	22.66	28.295	
4,724.4	4,692.5	4,734.7	4,690.5	11.8	13.3	-90.65	270.1	-435.9	641.3	618.5	22.76	28.178	
4,800.0	4,768.1	4,810.3	4,766.1	12.0	13.4	-90.65	270.1	-435.9	641.3	618.2	23.05	27.819	
4,822.8	4,791.0	4,833.1	4,789.0	12.0	13.4	-90.65	270.1	-435.9	641.3	618.1	23.14	27.712	
4,900.0	4,868.1	4,910.3	4,866.1	12.2	13.6	-90.65	270.1	-435.9	641.3	617.8	23.44	27.356	
4,921.2	4,889.4	4,931.5	4,887.4	12.2	13.6	-90.65	270.1	-435.9	641.3	617.8	23.53	27.259	
5,000.0	4,968.1	5,010.3	4,966.1	12.4	13.7	-90.65	270.1	-435.9	641.3	617.4	23.83	26.906	
5,019.7	4,987.8	5,029.9	4,985.8	12.4	13.8	-90.65	270.1	-435.9	641.3	617.4	23.91	26.818	

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 HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

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
5,100.0	5,068.1	5,110.3	5,066.1	12.6	13.9	-90.65	270.1	-435.9	641.3	617.1	24.23	26.468	
5,118.1	5,086.2	5,128.4	5,084.2	12.6	14.0	-90.65	270.1	-435.9	641.3	617.0	24.30	26.390	
5,200.0	5,168.1	5,210.3	5,166.1	12.8	14.1	-90.65	270.1	-435.9	641.3	616.7	24.63	26.042	
5,216.5	5,184.7	5,226.8	5,182.7	12.8	14.1	-90.65	270.1	-435.9	641.3	616.6	24.69	25.973	
5,300.0	5,268.1	5,310.3	5,266.1	13.0	14.3	-90.65	270.1	-435.9	641.3	616.3	25.02	25.628	
5,314.9	5,283.1	5,325.2	5,281.1	13.0	14.3	-90.65	270.1	-435.9	641.3	616.2	25.08	25.567	
5,400.0	5,368.1	5,410.3	5,366.1	13.1	14.5	-90.65	270.1	-435.9	641.3	615.9	25.42	25.225	
5,413.4	5,381.5	5,423.6	5,379.5	13.2	14.5	-90.65	270.1	-435.9	641.3	615.8	25.48	25.172	
5,500.0	5,468.1	5,510.3	5,466.1	13.3	14.6	-90.65	270.1	-435.9	641.3	615.5	25.82	24.833	
5,511.8	5,479.9	5,522.1	5,477.9	13.4	14.7	-90.65	270.1	-435.9	641.3	615.4	25.87	24.787	
5,600.0	5,568.1	5,610.3	5,566.1	13.5	14.8	-90.65	270.1	-435.9	641.3	615.1	26.23	24.451	
5,610.2	5,578.4	5,620.5	5,576.4	13.6	14.8	-90.65	270.1	-435.9	641.3	615.0	26.27	24.413	
5,700.0	5,668.1	5,710.3	5,666.1	13.7	15.0	-90.65	270.1	-435.9	641.3	614.7	26.63	24.080	
5,708.6	5,676.8	5,718.9	5,674.8	13.8	15.0	-90.65	270.1	-435.9	641.3	614.6	26.67	24.048	
5,800.0	5,768.1	5,810.3	5,766.1	13.9	15.2	-90.65	270.1	-435.9	641.3	614.2	27.04	23.719	
5,807.1	5,775.2	5,817.3	5,773.2	14.0	15.2	-90.65	270.1	-435.9	641.3	614.2	27.07	23.693	
5,900.0	5,868.1	5,910.3	5,866.1	14.1	15.4	-90.65	270.1	-435.9	641.3	613.8	27.44	23.367	
5,905.5	5,873.6	5,915.8	5,871.6	14.1	15.4	-90.65	270.1	-435.9	641.3	613.8	27.47	23.348	
6,000.0	5,968.1	6,010.3	5,966.1	14.3	15.5	-90.65	270.1	-435.9	641.3	613.4	27.85	23.024	
6,003.9	5,972.1	6,014.2	5,970.1	14.3	15.6	-90.65	270.1	-435.9	641.3	613.4	27.87	23.011	
6,100.0	6,068.1	6,110.3	6,066.1	14.5	15.7	-90.65	270.1	-435.9	641.3	613.0	28.26	22.690	
6,102.3	6,070.5	6,112.6	6,068.5	14.5	15.7	-90.65	270.1	-435.9	641.3	613.0	28.27	22.682	
6,200.0	6,168.1	6,210.3	6,166.1	14.7	15.9	-90.65	270.1	-435.9	641.3	612.6	28.67	22.365	
6,200.8	6,168.9	6,211.0	6,166.9	14.7	15.9	-90.65	270.1	-435.9	641.3	612.6	28.68	22.362	
6,288.5	6,256.6	6,298.7	6,254.6	14.9	16.1	-90.65	270.1	-435.9	641.3	612.2	29.04	22.084	
6,299.2	6,267.3	6,309.3	6,265.2	14.9	16.1	89.14	270.0	-435.9	641.3	612.2	29.07	22.059	
6,300.0	6,268.1	6,310.1	6,266.0	14.9	16.1	89.14	270.0	-435.9	641.3	612.2	29.07	22.057	
6,350.0	6,318.1	6,359.4	6,315.3	15.0	16.2	89.15	267.6	-436.0	641.3	612.1	29.22	21.947	
6,397.6	6,365.3	6,406.4	6,361.9	15.1	16.2	89.16	262.1	-436.0	641.3	612.0	29.31	21.876	
6,400.0	6,367.7	6,408.8	6,364.2	15.1	16.2	89.16	261.8	-436.0	641.3	612.0	29.32	21.873	
6,450.0	6,416.8	6,458.1	6,412.7	15.1	16.3	89.17	252.6	-436.0	641.3	611.9	29.38	21.825	
6,496.0	6,461.3	6,503.6	6,456.7	15.1	16.3	89.19	241.2	-436.0	641.3	611.9	29.41	21.802	
6,500.0	6,465.1	6,507.5	6,460.5	15.1	16.3	89.19	240.1	-436.1	641.3	611.9	29.42	21.801	
6,550.0	6,512.4	6,556.9	6,507.3	15.1	16.3	89.22	224.3	-436.1	641.3	611.8	29.42	21.794	
6,594.5	6,553.4	6,600.8	6,547.9	15.1	16.3	89.24	207.6	-436.2	641.3	611.8	29.42	21.799	
6,600.0	6,558.4	6,606.3	6,552.9	15.1	16.3	89.24	205.4	-436.2	641.3	611.9	29.42	21.800	
6,650.0	6,603.0	6,655.7	6,597.1	15.1	16.3	89.27	183.3	-436.3	641.3	611.9	29.40	21.812	
6,692.9	6,639.9	6,698.2	6,633.8	15.1	16.3	89.30	161.9	-436.3	641.3	611.9	29.39	21.821	
6,700.0	6,645.9	6,705.2	6,639.7	15.1	16.3	89.31	158.2	-436.4	641.3	611.9	29.39	21.822	
6,750.0	6,686.8	6,754.7	6,680.5	15.1	16.3	89.35	130.2	-436.5	641.3	611.9	29.39	21.822	
6,791.3	6,719.1	6,795.6	6,712.7	15.1	16.3	89.38	105.0	-436.5	641.2	611.8	29.41	21.807	
6,800.0	6,725.7	6,804.2	6,719.3	15.1	16.3	89.39	99.5	-436.6	641.2	611.8	29.41	21.802	
6,850.0	6,762.3	6,853.7	6,755.9	15.1	16.3	89.43	66.1	-436.7	641.2	611.8	29.48	21.755	
6,889.7	6,789.7	6,893.1	6,783.3	15.1	16.2	89.47	37.8	-436.8	641.2	611.7	29.56	21.690	
6,900.0	6,796.5	6,903.3	6,790.1	15.1	16.2	89.48	30.3	-436.8	641.2	611.6	29.59	21.672	
6,950.0	6,828.0	6,952.9	6,821.8	15.1	16.2	89.53	-7.9	-437.0	641.2	611.5	29.76	21.544	
6,988.2	6,850.2	6,990.8	6,844.2	15.1	16.3	89.57	-38.5	-437.1	641.2	611.3	29.95	21.409	
7,000.0	6,856.7	7,002.5	6,850.8	15.1	16.3	89.58	-48.2	-437.1	641.2	611.2	30.01	21.366	
7,050.0	6,882.5	7,052.2	6,876.9	15.2	16.3	89.63	-90.4	-437.3	641.2	610.9	30.34	21.136	
7,086.6	6,899.5	7,088.6	6,894.2	15.3	16.3	89.67	-122.5	-437.4	641.2	610.6	30.64	20.927	
7,100.0	6,905.3	7,102.0	6,900.1	15.4	16.4	89.69	-134.4	-437.4	641.2	610.5	30.75	20.850	
7,150.0	6,924.9	7,151.7	6,920.2	15.7	16.5	89.74	-179.9	-437.6	641.2	610.0	31.26	20.512	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-MWDD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,185.0	6,936.7	7,186.6	6,932.4	15.9	16.6	89.78	-212.6	-437.7	641.2	609.5	31.68	20.240	
7,200.0	6,941.2	7,201.6	6,937.1	16.0	16.7	89.80	-226.8	-437.8	641.2	609.4	31.86	20.125	
7,250.0	6,954.2	7,251.4	6,950.7	16.3	17.0	89.86	-274.8	-437.9	641.2	608.7	32.56	19.696	
7,283.4	6,961.0	7,284.8	6,957.9	16.6	17.2	89.90	-307.4	-438.1	641.2	608.1	33.08	19.384	
7,300.0	6,963.8	7,301.3	6,960.9	16.7	17.3	89.92	-323.6	-438.1	641.2	607.9	33.34	19.233	
7,350.0	6,970.0	7,351.3	6,967.8	17.2	17.8	89.98	-373.1	-438.3	641.2	607.0	34.21	18.744	
7,357.8	6,970.6	7,359.0	6,968.5	17.3	17.8	89.99	-380.8	-438.3	641.2	606.9	34.35	18.664	
7,381.9	6,972.1	7,383.2	6,970.3	17.5	18.1	90.02	-404.8	-438.4	641.2	606.4	34.81	18.420	
7,400.0	6,972.7	7,401.3	6,971.1	17.7	18.2	90.04	-423.0	-438.5	641.2	606.1	35.15	18.241	
7,420.0	6,972.8	7,421.3	6,971.5	17.9	18.4	90.06	-442.9	-438.6	641.2	605.7	35.55	18.036	
7,480.3	6,972.2	7,481.6	6,971.3	18.5	19.1	90.09	-503.3	-438.8	641.2	604.4	36.83	17.408	
7,500.0	6,972.0	7,501.3	6,971.2	18.7	19.3	90.10	-523.0	-438.8	641.2	604.0	37.26	17.211	
7,578.7	6,971.3	7,580.0	6,970.8	19.7	20.2	90.13	-601.7	-439.1	641.2	602.1	39.11	16.396	
7,600.0	6,971.1	7,601.3	6,970.7	19.9	20.4	90.14	-623.0	-439.2	641.2	601.6	39.61	16.188	
7,677.1	6,970.4	7,678.5	6,970.4	20.9	21.4	90.18	-700.1	-439.5	641.2	599.6	41.60	15.416	
7,700.0	6,970.2	7,701.3	6,970.3	21.2	21.7	90.18	-723.0	-439.6	641.2	599.0	42.18	15.201	
7,775.6	6,969.5	7,776.9	6,970.0	22.2	22.7	90.22	-798.5	-439.9	641.2	596.9	44.27	14.483	
7,800.0	6,969.3	7,801.3	6,969.9	22.6	23.1	90.23	-823.0	-440.0	641.2	596.3	44.95	14.265	
7,874.0	6,968.6	7,875.3	6,969.5	23.7	24.1	90.26	-897.0	-440.2	641.2	594.1	47.12	13.609	
7,900.0	6,968.4	7,901.3	6,969.4	24.1	24.5	90.27	-923.0	-440.3	641.2	593.3	47.88	13.393	
7,972.4	6,967.8	7,973.7	6,969.1	25.2	25.6	90.30	-995.4	-440.6	641.2	591.1	50.09	12.801	
8,000.0	6,967.5	8,001.3	6,969.0	25.6	26.0	90.31	-1,023.0	-440.7	641.2	590.3	50.94	12.588	
8,070.8	6,966.9	8,072.1	6,968.7	26.7	27.1	90.34	-1,093.8	-440.9	641.2	588.0	53.18	12.057	
8,100.0	6,966.6	8,101.3	6,968.5	27.2	27.5	90.35	-1,123.0	-441.1	641.2	587.1	54.11	11.851	
8,169.3	6,966.0	8,170.6	6,968.2	28.3	28.6	90.38	-1,192.2	-441.3	641.2	584.9	56.37	11.376	
8,200.0	6,965.7	8,201.3	6,968.1	28.8	29.1	90.40	-1,223.0	-441.4	641.2	583.9	57.37	11.178	
8,267.7	6,965.1	8,269.0	6,967.8	30.0	30.2	90.42	-1,290.6	-441.7	641.2	581.6	59.63	10.754	
8,300.0	6,964.8	8,301.3	6,967.7	30.5	30.8	90.44	-1,322.9	-441.8	641.2	580.5	60.71	10.563	
8,366.1	6,964.2	8,367.4	6,967.4	31.7	31.9	90.47	-1,389.1	-442.0	641.2	578.3	62.96	10.185	
8,400.0	6,963.9	8,401.3	6,967.2	32.2	32.4	90.48	-1,422.9	-442.2	641.2	577.1	64.11	10.002	
8,464.5	6,963.3	8,465.8	6,966.9	33.4	33.5	90.51	-1,487.5	-442.4	641.2	574.9	66.34	9.666	
8,500.0	6,963.0	8,501.3	6,966.8	34.0	34.1	90.52	-1,522.9	-442.5	641.2	573.7	67.57	9.491	
8,563.0	6,962.4	8,564.3	6,966.5	35.1	35.2	90.55	-1,585.9	-442.7	641.3	571.5	69.77	9.190	
8,600.0	6,962.0	8,601.3	6,966.4	35.8	35.8	90.56	-1,622.9	-442.9	641.3	570.2	71.07	9.023	
8,661.4	6,961.5	8,662.7	6,966.1	36.9	36.9	90.59	-1,684.3	-443.1	641.3	568.0	73.25	8.754	
8,700.0	6,961.1	8,701.3	6,965.9	37.6	37.5	90.61	-1,722.9	-443.3	641.3	566.6	74.62	8.594	
8,759.8	6,960.6	8,761.1	6,965.7	38.7	38.6	90.63	-1,782.8	-443.5	641.3	564.5	76.76	8.354	
8,800.0	6,960.2	8,801.3	6,965.5	39.4	39.3	90.65	-1,822.9	-443.6	641.3	563.1	78.20	8.201	
8,858.2	6,959.7	8,859.5	6,965.2	40.5	40.3	90.67	-1,881.2	-443.8	641.3	561.0	80.30	7.986	
8,900.0	6,959.3	8,901.3	6,965.0	41.2	41.1	90.69	-1,922.9	-444.0	641.3	559.5	81.81	7.839	
8,956.7	6,958.8	8,958.0	6,964.8	42.3	42.1	90.71	-1,979.6	-444.2	641.3	557.4	83.87	7.646	
9,000.0	6,958.4	9,001.3	6,964.6	43.1	42.8	90.73	-2,022.9	-444.4	641.3	555.8	85.45	7.505	
9,055.1	6,957.9	9,056.4	6,964.4	44.1	43.8	90.75	-2,078.0	-444.6	641.3	553.8	87.46	7.332	
9,100.0	6,957.5	9,101.3	6,964.2	44.9	44.6	90.77	-2,122.9	-444.7	641.3	552.2	89.11	7.197	
9,153.5	6,957.0	9,154.8	6,963.9	45.9	45.6	90.80	-2,176.4	-444.9	641.3	550.2	91.08	7.041	
9,200.0	6,956.6	9,201.3	6,963.7	46.8	46.4	90.82	-2,222.9	-445.1	641.3	548.5	92.79	6.912	
9,251.9	6,956.1	9,253.2	6,963.5	47.8	47.3	90.84	-2,274.9	-445.3	641.3	546.6	94.71	6.771	
9,300.0	6,955.7	9,301.3	6,963.3	48.7	48.2	90.86	-2,322.9	-445.5	641.3	544.8	96.48	6.647	
9,350.4	6,955.2	9,351.7	6,963.1	49.6	49.1	90.88	-2,373.3	-445.6	641.3	543.0	98.36	6.520	
9,400.0	6,954.8	9,401.3	6,962.8	50.6	50.0	90.90	-2,422.9	-445.8	641.3	541.1	100.20	6.400	
9,448.8	6,954.3	9,450.1	6,962.6	51.5	50.9	90.92	-2,471.7	-446.0	641.3	539.3	102.02	6.286	
9,500.0	6,953.9	9,501.3	6,962.4	52.5	51.9	90.94	-2,522.9	-446.2	641.3	537.4	103.93	6.171	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

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	
9,547.2	6,953.4	9,548.5	6,962.2	53.4	52.7	90.96	-2,570.1	-446.4	641.3	535.6	105.70	6.068	
9,600.0	6,952.9	9,601.3	6,962.0	54.4	53.7	90.98	-2,622.9	-446.6	641.3	533.7	107.67	5.957	
9,645.6	6,952.5	9,646.9	6,961.8	55.2	54.5	91.00	-2,668.6	-446.7	641.3	532.0	109.38	5.863	
9,700.0	6,952.0	9,701.3	6,961.5	56.3	55.5	91.03	-2,722.9	-446.9	641.4	529.9	111.42	5.756	
9,744.1	6,951.6	9,745.4	6,961.3	57.1	56.3	91.04	-2,767.0	-447.1	641.4	528.3	113.08	5.672	
9,800.0	6,951.1	9,801.3	6,961.1	58.2	57.4	91.07	-2,822.9	-447.3	641.4	526.2	115.19	5.568	
9,842.5	6,950.7	9,843.8	6,960.9	59.0	58.1	91.09	-2,865.4	-447.4	641.4	524.6	116.79	5.492	
9,900.0	6,950.2	9,901.3	6,960.6	60.1	59.2	91.11	-2,922.9	-447.7	641.4	522.4	118.96	5.392	
9,940.9	6,949.8	9,942.2	6,960.4	60.9	60.0	91.13	-2,963.8	-447.8	641.4	520.9	120.51	5.322	
10,000.0	6,949.3	10,001.3	6,960.2	62.0	61.1	91.15	-3,022.9	-448.0	641.4	518.6	122.74	5.226	
10,039.3	6,948.9	10,040.6	6,960.0	62.8	61.8	91.17	-3,062.2	-448.2	641.4	517.2	124.23	5.163	
10,100.0	6,948.4	10,101.3	6,959.7	64.0	62.9	91.19	-3,122.9	-448.4	641.4	514.9	126.53	5.069	
10,137.8	6,948.0	10,139.0	6,959.6	64.7	63.6	91.21	-3,160.7	-448.5	641.4	513.4	127.96	5.012	
10,200.0	6,947.5	10,201.3	6,959.3	65.9	64.8	91.23	-3,222.9	-448.8	641.4	511.1	130.33	4.922	
10,236.2	6,947.1	10,237.5	6,959.1	66.6	65.4	91.25	-3,259.1	-448.9	641.4	509.7	131.70	4.870	
10,300.0	6,946.6	10,301.3	6,958.9	67.8	66.6	91.28	-3,322.9	-449.1	641.4	507.3	134.13	4.782	
10,334.6	6,946.3	10,335.9	6,958.7	68.5	67.3	91.29	-3,357.5	-449.3	641.4	506.0	135.45	4.736	
10,400.0	6,945.7	10,401.3	6,958.4	69.8	68.5	91.32	-3,422.9	-449.5	641.4	503.5	137.94	4.650	
10,433.0	6,945.4	10,434.3	6,958.3	70.4	69.1	91.33	-3,455.9	-449.6	641.4	502.3	139.20	4.608	
10,500.0	6,944.7	10,501.3	6,958.0	71.7	70.4	91.36	-3,522.9	-449.9	641.5	499.7	141.75	4.525	
10,531.5	6,944.5	10,532.7	6,957.8	72.3	70.9	91.37	-3,554.4	-450.0	641.5	498.5	142.95	4.487	
10,600.0	6,943.8	10,601.3	6,957.5	73.7	72.2	91.40	-3,622.9	-450.2	641.5	495.9	145.57	4.407	
10,629.9	6,943.6	10,631.2	6,957.4	74.2	72.8	91.42	-3,652.8	-450.3	641.5	494.8	146.71	4.372	
10,700.0	6,942.9	10,701.3	6,957.1	75.6	74.1	91.44	-3,722.9	-450.6	641.5	492.1	149.39	4.294	
10,728.3	6,942.7	10,729.6	6,957.0	76.2	74.6	91.46	-3,751.2	-450.7	641.5	491.0	150.47	4.263	
10,800.0	6,942.0	10,801.3	6,956.6	77.6	76.0	91.49	-3,822.9	-451.0	641.5	488.3	153.22	4.187	
10,826.7	6,941.8	10,828.0	6,956.5	78.1	76.5	91.50	-3,849.6	-451.1	641.5	487.3	154.24	4.159	
10,900.0	6,941.1	10,901.3	6,956.2	79.5	77.9	91.53	-3,922.9	-451.3	641.5	484.5	157.05	4.085	
10,925.2	6,940.9	10,926.4	6,956.1	80.0	78.3	91.54	-3,948.0	-451.4	641.5	483.5	158.01	4.060	
11,000.0	6,940.2	11,001.3	6,955.8	81.5	79.7	91.57	-4,022.9	-451.7	641.5	480.7	160.88	3.988	
11,023.6	6,940.0	11,024.9	6,955.7	81.9	80.2	91.58	-4,046.5	-451.8	641.5	479.8	161.79	3.965	
11,100.0	6,939.3	11,101.3	6,955.3	83.4	81.6	91.61	-4,122.9	-452.1	641.6	476.8	164.72	3.895	
11,122.0	6,939.1	11,123.3	6,955.2	83.8	82.0	91.62	-4,144.9	-452.1	641.6	476.0	165.57	3.875	
11,200.0	6,938.4	11,201.3	6,954.9	85.4	83.5	91.65	-4,222.9	-452.4	641.6	473.0	168.56	3.806	
11,220.4	6,938.2	11,221.7	6,954.8	85.8	83.9	91.66	-4,243.3	-452.5	641.6	472.2	169.35	3.789	
11,300.0	6,937.4	11,301.3	6,954.4	87.3	85.4	91.70	-4,322.9	-452.8	641.6	469.2	172.40	3.721	
11,318.9	6,937.3	11,320.1	6,954.3	87.7	85.7	91.70	-4,341.7	-452.9	641.6	468.5	173.13	3.706	
11,400.0	6,936.5	11,401.3	6,954.0	89.3	87.3	91.74	-4,422.9	-453.2	641.6	465.4	176.25	3.640	
11,417.3	6,936.4	11,418.6	6,953.9	89.6	87.6	91.74	-4,440.2	-453.2	641.6	464.7	176.92	3.627	
11,500.0	6,935.6	11,501.3	6,953.5	91.3	89.2	91.78	-4,522.9	-453.5	641.6	461.5	180.10	3.563	
11,515.7	6,935.5	11,517.0	6,953.5	91.6	89.5	91.79	-4,538.6	-453.6	641.6	460.9	180.70	3.551	
11,600.0	6,934.7	11,601.3	6,953.1	93.2	91.0	91.82	-4,622.9	-453.9	641.7	457.7	183.95	3.488	
11,614.1	6,934.6	11,615.4	6,953.0	93.5	91.3	91.83	-4,637.0	-453.9	641.7	457.2	184.50	3.478	
11,700.0	6,933.8	11,701.3	6,952.6	95.2	92.9	91.86	-4,722.9	-454.3	641.7	453.9	187.80	3.417	
11,712.6	6,933.7	11,713.8	6,952.6	95.4	93.2	91.87	-4,735.4	-454.3	641.7	453.4	188.29	3.408	
11,800.0	6,932.9	11,801.3	6,952.2	97.1	94.8	91.90	-4,822.9	-454.6	641.7	450.0	191.66	3.348	
11,811.0	6,932.8	11,812.3	6,952.1	97.4	95.0	91.91	-4,833.9	-454.7	641.7	449.6	192.08	3.341	
11,900.0	6,932.0	11,901.3	6,951.8	99.1	96.7	91.95	-4,922.8	-455.0	641.7	446.2	195.51	3.282	
11,909.4	6,931.9	11,910.7	6,951.7	99.3	96.9	91.95	-4,932.3	-455.0	641.7	445.8	195.88	3.276	
12,000.0	6,931.0	12,001.3	6,951.3	101.1	98.6	91.99	-5,022.8	-455.4	641.7	442.4	199.37	3.219	
12,007.8	6,931.0	12,009.1	6,951.3	101.2	98.8	91.99	-5,030.7	-455.4	641.7	442.1	199.68	3.214	
12,100.0	6,930.1	12,101.3	6,950.9	103.0	100.5	92.03	-5,122.8	-455.7	641.8	438.5	203.23	3.158	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
12,106.3	6,930.1	12,107.5	6,950.8	103.2	100.6	92.03	-5,129.1	-455.8	641.8	438.3	203.47	3.154	
12,200.0	6,929.2	12,201.3	6,950.4	105.0	102.4	92.07	-5,222.8	-456.1	641.8	434.7	207.09	3.099	
12,204.7	6,929.2	12,206.0	6,950.4	105.1	102.5	92.07	-5,227.5	-456.1	641.8	434.5	207.28	3.096	
12,300.0	6,928.3	12,301.3	6,950.0	107.0	104.3	92.11	-5,322.8	-456.5	641.8	430.9	210.96	3.042	
12,303.1	6,928.3	12,304.4	6,950.0	107.1	104.4	92.11	-5,326.0	-456.5	641.8	430.7	211.08	3.041	
12,400.0	6,927.4	12,401.2	6,949.5	109.0	106.2	92.15	-5,422.8	-456.8	641.8	427.0	214.82	2.988	
12,401.5	6,927.4	12,402.8	6,949.5	109.0	106.2	92.16	-5,424.4	-456.8	641.8	427.0	214.88	2.987	
12,500.0	6,926.5	12,501.2	6,949.1	110.9	108.1	92.20	-5,522.8	-457.2	641.9	423.2	218.69	2.935	
12,598.4	6,925.6	12,599.6	6,948.6	112.9	110.0	92.24	-5,621.2	-457.6	641.9	419.4	222.49	2.885	
12,600.0	6,925.6	12,601.2	6,948.6	112.9	110.0	92.24	-5,622.8	-457.6	641.9	419.3	222.55	2.884	
12,696.8	6,924.7	12,698.1	6,948.2	114.8	111.8	92.28	-5,719.7	-457.9	641.9	415.6	226.30	2.837	
12,700.0	6,924.6	12,701.2	6,948.2	114.9	111.9	92.28	-5,722.8	-457.9	641.9	415.5	226.42	2.835	
12,795.2	6,923.8	12,796.5	6,947.7	116.8	113.7	92.32	-5,818.1	-458.3	641.9	411.8	230.10	2.790	
12,800.0	6,923.7	12,801.2	6,947.7	116.9	113.8	92.32	-5,822.8	-458.3	641.9	411.6	230.29	2.788	
12,893.7	6,922.9	12,894.9	6,947.3	118.7	115.6	92.36	-5,916.5	-458.6	642.0	408.0	233.91	2.744	
12,900.0	6,922.8	12,901.2	6,947.3	118.8	115.7	92.36	-5,922.8	-458.7	642.0	407.8	234.16	2.742	
12,992.1	6,922.0	12,993.3	6,946.9	120.6	117.4	92.40	-6,014.9	-459.0	642.0	404.3	237.72	2.701	
13,000.0	6,921.9	13,001.2	6,946.8	120.8	117.6	92.40	-6,022.8	-459.0	642.0	404.0	238.03	2.697	
13,090.5	6,921.1	13,091.8	6,946.4	122.6	119.3	92.44	-6,113.3	-459.4	642.0	400.5	241.53	2.658	
13,100.0	6,921.0	13,101.2	6,946.4	122.8	119.5	92.45	-6,122.8	-459.4	642.0	400.1	241.90	2.654	
13,188.9	6,920.2	13,190.2	6,946.0	124.5	121.2	92.48	-6,211.8	-459.7	642.0	396.7	245.34	2.617	
13,200.0	6,920.1	13,201.2	6,945.9	124.8	121.4	92.49	-6,222.8	-459.8	642.0	396.3	245.77	2.612	
13,287.4	6,919.3	13,288.6	6,945.5	126.5	123.1	92.52	-6,310.2	-460.1	642.1	392.9	249.15	2.577	
13,300.0	6,919.1	13,301.2	6,945.5	126.7	123.3	92.53	-6,322.8	-460.1	642.1	392.4	249.64	2.572	
13,385.8	6,918.4	13,387.0	6,945.1	128.4	124.9	92.57	-6,408.6	-460.5	642.1	389.1	252.96	2.538	
13,400.0	6,918.2	13,401.2	6,945.0	128.7	125.2	92.57	-6,422.8	-460.5	642.1	388.6	253.51	2.533	
13,484.2	6,917.5	13,485.5	6,944.7	130.4	126.8	92.61	-6,507.0	-460.8	642.1	385.3	256.78	2.501	
13,500.0	6,917.3	13,501.2	6,944.6	130.7	127.1	92.61	-6,522.8	-460.9	642.1	384.7	257.39	2.495	
13,582.6	6,916.6	13,583.9	6,944.2	132.3	128.7	92.65	-6,605.5	-461.2	642.2	381.6	260.59	2.464	
13,600.0	6,916.4	13,601.2	6,944.1	132.7	129.0	92.65	-6,622.8	-461.2	642.2	380.9	261.26	2.458	
13,681.1	6,915.6	13,682.3	6,943.8	134.3	130.6	92.69	-6,703.9	-461.5	642.2	377.8	264.40	2.429	
13,700.0	6,915.5	13,701.2	6,943.7	134.6	130.9	92.70	-6,722.8	-461.6	642.2	377.1	265.13	2.422	
13,779.5	6,914.7	13,780.7	6,943.3	136.2	132.4	92.73	-6,802.3	-461.9	642.2	374.0	268.22	2.394	
13,800.0	6,914.6	13,801.2	6,943.2	136.6	132.8	92.74	-6,822.8	-462.0	642.2	373.2	269.01	2.387	
13,877.9	6,913.8	13,879.2	6,942.9	138.2	134.3	92.77	-6,900.7	-462.3	642.2	370.2	272.03	2.361	
13,900.0	6,913.6	13,901.2	6,942.8	138.6	134.7	92.78	-6,922.8	-462.3	642.2	369.4	272.88	2.354	
13,976.3	6,912.9	13,977.6	6,942.4	140.1	136.2	92.81	-6,999.1	-462.6	642.3	366.4	275.84	2.328	
14,000.0	6,912.7	14,001.2	6,942.3	140.6	136.6	92.82	-7,022.8	-462.7	642.3	365.5	276.76	2.321	
14,032.8	6,912.4	14,034.1	6,942.2	141.2	137.3	92.83	-7,055.6	-462.8	642.3	364.3	278.01	2.310	
14,074.8	6,912.0	14,075.1	6,942.0	142.0	138.0	92.85	-7,096.7	-463.0	642.3	362.7	279.58	2.297	
14,079.0	6,912.0	14,075.1	6,942.0	142.1	138.0	92.85	-7,096.7	-463.0	642.3	362.7	279.66	2.297 SF	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	1.0	1.0	0.0	0.0	90.00	0.0	30.7	30.7				
98.4	98.4	99.4	99.4	0.1	0.1	90.00	0.0	30.7	30.7	30.5	0.19	159.666	
100.0	100.0	101.0	101.0	0.1	0.1	90.00	0.0	30.7	30.7	30.5	0.20	155.951	
196.8	196.8	197.8	197.8	0.3	0.3	90.00	0.0	30.7	30.7	30.0	0.63	48.527	
200.0	200.0	201.0	201.0	0.3	0.3	90.00	0.0	30.7	30.7	30.0	0.65	47.463	
295.3	295.3	296.3	296.3	0.5	0.5	90.00	0.0	30.7	30.7	29.6	1.07	28.545	
300.0	300.0	301.0	301.0	0.5	0.5	90.00	0.0	30.7	30.7	29.6	1.10	27.991	
393.7	393.7	394.7	394.7	0.8	0.8	90.00	0.0	30.7	30.7	29.2	1.52	20.219	
400.0	400.0	401.0	401.0	0.8	0.8	90.00	0.0	30.7	30.7	29.1	1.55	19.848	
492.1	492.1	493.1	493.1	1.0	1.0	90.00	0.0	30.7	30.7	28.7	1.96	15.653	
500.0	500.0	501.0	501.0	1.0	1.0	90.00	0.0	30.7	30.7	28.7	1.99	15.375	
590.5	590.5	591.5	591.5	1.2	1.2	90.00	0.0	30.7	30.7	28.3	2.40	12.770	
600.0	600.0	601.0	601.0	1.2	1.2	90.00	0.0	30.7	30.7	28.2	2.44	12.548	
689.0	689.0	690.0	690.0	1.4	1.4	90.00	0.0	30.7	30.7	27.8	2.84	10.783	
700.0	700.0	701.0	701.0	1.4	1.4	90.00	0.0	30.7	30.7	27.8	2.89	10.599	
787.4	787.4	788.4	788.4	1.6	1.6	90.00	0.0	30.7	30.7	27.4	3.29	9.332	
800.0	800.0	801.0	801.0	1.7	1.7	90.00	0.0	30.7	30.7	27.3	3.34	9.174	
885.8	885.8	886.8	886.8	1.9	1.9	90.00	0.0	30.7	30.7	26.9	3.73	8.225	
900.0	900.0	901.0	901.0	1.9	1.9	90.00	0.0	30.7	30.7	26.9	3.79	8.086	
984.2	984.2	985.2	985.2	2.1	2.1	90.00	0.0	30.7	30.7	26.5	4.17	7.352	
1,000.0	1,000.0	1,001.0	1,001.0	2.1	2.1	90.00	0.0	30.7	30.7	26.4	4.24	7.230	
1,082.7	1,082.7	1,083.7	1,083.7	2.3	2.3	90.00	0.0	30.7	30.7	26.1	4.61	6.647	
1,093.9	1,093.9	1,094.9	1,094.9	2.3	2.3	90.00	0.0	30.7	30.7	26.0	4.66	6.575 CC	
1,100.0	1,100.0	1,101.0	1,101.0	2.3	2.3	90.00	0.0	30.7	30.7	26.0	4.69	6.537 ES	
1,181.1	1,181.1	1,181.3	1,181.3	2.5	2.5	89.04	0.5	31.7	31.7	26.7	5.05	6.280	
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	88.57	0.8	32.2	32.2	27.1	5.13	6.283	
1,279.5	1,279.5	1,278.6	1,278.5	2.7	2.7	50.69	2.6	35.6	35.1	29.6	5.47	6.403	
1,300.0	1,300.0	1,298.9	1,298.7	2.8	2.8	50.57	3.2	36.8	35.9	30.3	5.56	6.450	
1,377.9	1,377.8	1,375.8	1,375.4	3.0	3.0	50.86	6.1	42.4	39.3	33.5	5.90	6.674	
1,400.0	1,399.8	1,397.6	1,397.0	3.0	3.0	51.13	7.1	44.4	40.4	34.4	5.99	6.750	
1,476.4	1,475.9	1,472.8	1,471.8	3.2	3.2	52.52	11.2	52.2	44.6	38.2	6.32	7.046	
1,500.0	1,499.5	1,496.1	1,494.8	3.2	3.2	53.08	12.6	54.9	45.9	39.5	6.43	7.151	
1,574.8	1,573.7	1,569.6	1,567.5	3.4	3.4	55.11	17.7	64.8	50.7	44.0	6.77	7.501	
1,600.0	1,598.7	1,594.4	1,591.9	3.5	3.5	55.86	19.6	68.4	52.5	45.6	6.88	7.631	
1,673.2	1,671.1	1,666.2	1,662.5	3.7	3.7	58.16	25.7	80.2	58.0	50.8	7.24	8.017	
1,700.0	1,697.5	1,692.4	1,688.2	3.7	3.8	59.03	28.1	84.8	60.2	52.9	7.37	8.168	
1,771.6	1,767.9	1,763.6	1,757.8	4.0	4.0	61.77	34.9	98.0	66.0	58.2	7.77	8.493	
1,800.1	1,795.7	1,791.9	1,785.5	4.0	4.1	63.10	37.6	103.2	68.1	60.1	7.93	8.583	
1,870.1	1,864.2	1,861.6	1,853.7	4.3	4.4	66.37	44.3	116.1	73.3	64.9	8.37	8.750	
1,900.0	1,893.4	1,891.4	1,882.8	4.4	4.5	67.63	47.2	121.6	75.5	67.0	8.56	8.819	
1,968.5	1,960.4	1,959.6	1,949.5	4.6	4.7	70.25	53.7	134.1	80.9	71.8	9.03	8.958	
2,000.0	1,991.3	1,990.9	1,980.2	4.7	4.9	71.33	56.7	139.9	83.4	74.1	9.24	9.020	
2,066.9	2,056.7	2,057.6	2,045.4	5.0	5.1	73.44	63.1	152.2	88.8	79.1	9.72	9.133	
2,100.0	2,089.1	2,090.5	2,077.6	5.1	5.3	74.39	66.2	158.3	91.5	81.5	9.96	9.187	
2,165.3	2,153.0	2,155.6	2,141.2	5.3	5.5	76.11	72.5	170.3	96.9	86.5	10.45	9.280	
2,200.0	2,186.9	2,190.1	2,175.0	5.5	5.6	76.95	75.8	176.7	99.9	89.1	10.71	9.326	
2,263.8	2,249.3	2,253.5	2,237.1	5.7	5.9	78.36	81.9	188.4	105.3	94.1	11.20	9.402	
2,300.0	2,284.7	2,289.6	2,272.3	5.8	6.1	79.10	85.3	195.0	108.4	96.9	11.48	9.443	
2,362.2	2,345.5	2,351.5	2,332.9	6.1	6.3	80.28	91.3	206.5	113.7	101.8	11.97	9.505	
2,400.0	2,382.5	2,389.2	2,369.7	6.2	6.5	80.94	94.9	213.4	117.0	104.7	12.26	9.541	
2,460.6	2,441.8	2,449.5	2,428.8	6.5	6.7	81.93	100.6	224.6	122.3	109.6	12.75	9.592	
2,500.0	2,480.3	2,488.7	2,467.1	6.6	6.9	82.53	104.4	231.8	125.8	112.7	13.07	9.624	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,559.0	2,538.1	2,547.5	2,524.6	6.9	7.1	83.37	110.0	242.6	131.0	117.4	13.55	9.667	
2,600.0	2,578.1	2,588.3	2,564.5	7.0	7.3	83.91	113.9	250.2	134.6	120.7	13.88	9.695	
2,657.5	2,634.4	2,645.5	2,620.5	7.3	7.5	84.62	119.4	260.7	139.7	125.3	14.36	9.732	
2,700.0	2,675.9	2,687.9	2,661.9	7.5	7.7	85.12	123.5	268.5	143.5	128.8	14.71	9.757	
2,755.9	2,730.6	2,743.5	2,716.3	7.7	8.0	85.73	128.8	278.8	148.5	133.3	15.17	9.788	
2,800.0	2,773.8	2,787.4	2,759.3	7.9	8.2	86.18	133.0	286.9	152.5	136.9	15.54	9.811	
2,854.3	2,826.9	2,841.5	2,812.2	8.1	8.4	86.71	138.2	296.9	157.3	141.3	15.99	9.837	
2,857.4	2,829.9	2,844.5	2,815.1	8.1	8.4	86.74	138.5	297.4	157.6	141.6	16.02	9.839	
2,900.0	2,871.6	2,887.0	2,856.7	8.3	8.6	87.10	142.5	305.3	161.5	145.1	16.35	9.873	
2,952.7	2,923.5	2,939.5	2,908.0	8.4	8.8	87.22	147.6	315.0	166.3	149.6	16.73	9.941	
3,000.0	2,970.1	2,986.5	2,954.1	8.6	9.0	87.05	152.1	323.7	170.7	153.6	17.05	10.007	
3,051.2	3,020.7	3,037.5	3,003.9	8.7	9.2	86.59	157.0	333.1	175.4	158.0	17.38	10.094	
3,100.0	3,069.1	3,086.0	3,051.3	8.9	9.4	85.91	161.6	342.0	180.1	162.4	17.68	10.184	
3,149.6	3,118.3	3,135.3	3,099.5	9.0	9.7	85.00	166.3	351.1	184.9	166.9	17.96	10.294	
3,200.0	3,168.5	3,185.3	3,148.4	9.1	9.9	83.87	171.1	360.3	189.9	171.7	18.23	10.418	
3,248.0	3,216.3	3,232.8	3,194.9	9.2	10.1	82.62	175.7	369.1	194.9	176.4	18.46	10.560	
3,300.0	3,268.2	3,284.2	3,245.2	9.3	10.3	81.09	180.6	378.6	200.5	181.9	18.68	10.733	
3,346.4	3,314.6	3,330.0	3,290.0	9.4	10.5	79.59	185.0	387.0	205.9	187.0	18.86	10.916	
3,400.0	3,368.1	3,382.6	3,341.5	9.5	10.8	77.73	190.0	396.8	212.4	193.3	19.04	11.155	
3,444.9	3,413.0	3,426.6	3,384.5	9.6	10.9	76.08	194.2	404.9	218.2	199.1	19.16	11.387	
3,457.5	3,425.6	3,438.9	3,396.5	9.6	11.0	112.11	195.4	407.1	219.9	200.7	19.18	11.465	
3,500.0	3,468.1	3,480.5	3,437.2	9.7	11.2	110.42	199.4	414.8	225.8	206.5	19.28	11.711	
3,543.3	3,511.4	3,522.9	3,478.7	9.7	11.4	108.79	203.5	422.6	232.0	212.7	19.39	11.966	
3,600.0	3,568.1	3,578.3	3,532.9	9.8	11.6	106.78	208.8	432.9	240.4	220.9	19.53	12.309	
3,641.7	3,609.9	3,619.2	3,572.8	9.9	11.8	105.39	212.7	440.4	246.8	227.2	19.64	12.567	
3,700.0	3,668.1	3,676.2	3,628.6	10.0	12.1	103.56	218.1	450.9	255.9	236.1	19.79	12.933	
3,740.1	3,708.3	3,715.4	3,667.0	10.1	12.2	102.38	221.9	458.2	262.3	242.4	19.89	13.187	
3,800.0	3,768.1	3,774.0	3,724.3	10.2	12.5	100.72	227.5	469.0	272.1	252.0	20.05	13.569	
3,838.6	3,806.7	3,811.7	3,761.2	10.2	12.7	99.70	231.1	475.9	278.5	258.3	20.16	13.816	
3,900.0	3,868.1	3,871.8	3,819.9	10.3	12.9	98.19	236.9	487.0	288.8	268.5	20.33	14.209	
3,937.0	3,905.1	3,908.0	3,855.3	10.4	13.1	97.32	240.3	493.7	295.2	274.7	20.43	14.445	
4,000.0	3,968.1	3,969.6	3,915.6	10.5	13.4	95.93	246.2	505.1	306.1	285.5	20.62	14.845	
4,035.4	4,003.6	4,004.3	3,949.5	10.6	13.5	95.19	249.6	511.5	312.3	291.6	20.73	15.069	
4,100.0	4,068.1	4,067.4	4,011.3	10.7	13.8	93.92	255.6	523.1	323.8	302.9	20.93	15.473	
4,133.8	4,102.0	4,104.0	4,047.1	10.8	13.9	93.24	259.0	529.7	329.7	308.7	21.03	15.679	
4,200.0	4,168.1	4,176.4	4,118.3	10.9	14.2	92.09	265.1	541.5	340.2	319.0	21.22	16.033	
4,232.3	4,200.4	4,212.0	4,153.4	10.9	14.3	91.60	267.8	546.7	344.9	323.6	21.32	16.177	
4,300.0	4,268.1	4,287.0	4,227.6	11.1	14.5	90.74	272.9	556.4	353.6	332.0	21.54	16.418	
4,330.7	4,298.8	4,321.2	4,261.5	11.1	14.6	90.40	274.9	560.3	357.0	335.4	21.64	16.501	
4,400.0	4,368.1	4,398.8	4,338.7	11.2	14.8	89.79	278.7	567.7	363.7	341.8	21.87	16.625	
4,429.1	4,397.3	4,431.5	4,371.2	11.3	14.8	89.58	280.1	570.2	366.0	344.0	21.97	16.654	
4,500.0	4,468.1	4,511.4	4,450.9	11.4	15.0	89.19	282.6	575.1	370.3	348.1	22.23	16.661	
4,527.5	4,495.7	4,542.5	4,482.0	11.5	15.0	89.09	283.3	576.5	371.5	349.2	22.32	16.642	
4,600.0	4,568.1	4,624.5	4,563.9	11.6	15.2	88.92	284.4	578.7	373.5	350.9	22.59	16.531	
4,626.0	4,594.1	4,653.9	4,593.3	11.7	15.2	88.90	284.6	578.9	373.7	351.0	22.69	16.471	
4,700.0	4,668.1	4,729.7	4,669.1	11.8	15.3	88.90	284.6	579.0	373.7	350.8	22.96	16.274	
4,724.4	4,692.5	4,754.1	4,693.5	11.8	15.3	88.90	284.6	579.0	373.7	350.7	23.06	16.209	
4,800.0	4,768.1	4,829.7	4,769.1	12.0	15.5	88.90	284.6	579.0	373.7	350.4	23.34	16.010	
4,822.8	4,791.0	4,852.5	4,792.0	12.0	15.5	88.90	284.6	579.0	373.7	350.3	23.43	15.951	
4,900.0	4,868.1	4,929.7	4,869.1	12.2	15.6	88.90	284.6	579.0	373.7	350.0	23.73	15.753	
4,921.2	4,889.4	4,950.9	4,890.4	12.2	15.6	88.90	284.6	579.0	373.7	349.9	23.81	15.699	
5,000.0	4,968.1	5,029.7	4,969.1	12.4	15.7	88.90	284.6	579.0	373.7	349.6	24.11	15.502	

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 HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,019.7	4,987.8	5,049.3	4,988.8	12.4	15.8	88.90	284.6	579.0	373.7	349.6	24.18	15.454	
5,100.0	5,068.1	5,129.7	5,069.1	12.6	15.9	88.90	284.6	579.0	373.7	349.2	24.49	15.258	
5,118.1	5,086.2	5,147.8	5,087.2	12.6	15.9	88.90	284.6	579.0	373.7	349.2	24.56	15.214	
5,200.0	5,168.1	5,229.7	5,169.1	12.8	16.1	88.90	284.6	579.0	373.7	348.9	24.88	15.020	
5,216.5	5,184.7	5,246.2	5,185.7	12.8	16.1	88.90	284.6	579.0	373.7	348.8	24.95	14.981	
5,300.0	5,268.1	5,329.7	5,269.1	13.0	16.2	88.90	284.6	579.0	373.7	348.5	25.27	14.788	
5,314.9	5,283.1	5,344.6	5,284.1	13.0	16.2	88.90	284.6	579.0	373.7	348.4	25.33	14.754	
5,400.0	5,368.1	5,429.7	5,369.1	13.1	16.4	88.90	284.6	579.0	373.7	348.1	25.66	14.562	
5,413.4	5,381.5	5,443.0	5,382.5	13.2	16.4	88.90	284.6	579.0	373.7	348.0	25.72	14.533	
5,500.0	5,468.1	5,529.7	5,469.1	13.3	16.5	88.90	284.6	579.0	373.7	347.7	26.06	14.342	
5,511.8	5,479.9	5,541.5	5,480.9	13.4	16.5	88.90	284.6	579.0	373.7	347.6	26.11	14.317	
5,600.0	5,568.1	5,629.7	5,569.1	13.5	16.7	88.90	284.6	579.0	373.7	347.3	26.45	14.128	
5,610.2	5,578.4	5,639.9	5,579.4	13.6	16.7	88.90	284.6	579.0	373.7	347.2	26.49	14.106	
5,700.0	5,668.1	5,729.7	5,669.1	13.7	16.8	88.90	284.6	579.0	373.7	346.9	26.85	13.919	
5,708.6	5,676.8	5,738.3	5,677.8	13.8	16.9	88.90	284.6	579.0	373.7	346.9	26.89	13.901	
5,800.0	5,768.1	5,829.7	5,769.1	13.9	17.0	88.90	284.6	579.0	373.7	346.5	27.25	13.715	
5,807.1	5,775.2	5,836.7	5,776.2	14.0	17.0	88.90	284.6	579.0	373.7	346.5	27.28	13.701	
5,900.0	5,868.1	5,929.7	5,869.1	14.1	17.2	88.90	284.6	579.0	373.7	346.1	27.65	13.517	
5,905.5	5,873.6	5,935.2	5,874.6	14.1	17.2	88.90	284.6	579.0	373.7	346.1	27.67	13.506	
6,000.0	5,968.1	6,029.7	5,969.1	14.3	17.3	88.90	284.6	579.0	373.7	345.7	28.05	13.323	
6,003.9	5,972.1	6,033.6	5,973.1	14.3	17.3	88.90	284.6	579.0	373.7	345.7	28.07	13.315	
6,100.0	6,068.1	6,129.7	6,069.1	14.5	17.5	88.90	284.6	579.0	373.7	345.3	28.46	13.134	
6,102.3	6,070.5	6,132.0	6,071.5	14.5	17.5	88.90	284.6	579.0	373.7	345.3	28.47	13.130	
6,200.0	6,168.1	6,229.7	6,169.1	14.7	17.7	88.90	284.6	579.0	373.7	344.9	28.86	12.950	
6,200.8	6,168.9	6,230.4	6,169.9	14.7	17.7	88.90	284.6	579.0	373.7	344.9	28.86	12.949	
6,288.5	6,256.6	6,318.1	6,257.6	14.9	17.8	88.90	284.6	579.0	373.7	344.5	29.22	12.791	
6,299.2	6,267.3	6,328.9	6,268.3	14.9	17.8	-91.33	284.6	579.0	373.7	344.5	29.27	12.767	
6,300.0	6,268.1	6,329.7	6,269.1	14.9	17.8	-91.33	284.6	579.0	373.7	344.5	29.28	12.766	
6,350.0	6,318.1	6,379.9	6,319.3	15.0	17.9	-91.68	284.4	579.0	373.8	344.4	29.41	12.709	
6,397.6	6,365.3	6,428.3	6,367.6	15.1	18.0	-92.11	281.4	579.0	373.9	344.4	29.49	12.678	
6,400.0	6,367.7	6,430.7	6,370.0	15.1	18.0	-92.13	281.2	579.0	373.9	344.4	29.50	12.676	
6,450.0	6,416.8	6,481.7	6,420.6	15.1	18.0	-92.57	274.4	578.9	374.0	344.5	29.54	12.660	
6,496.0	6,461.3	6,528.8	6,466.8	15.1	18.0	-92.96	265.0	578.9	374.1	344.6	29.56	12.658	
6,500.0	6,465.1	6,532.9	6,470.7	15.1	18.0	-93.00	264.1	578.9	374.2	344.6	29.56	12.658	
6,550.0	6,512.4	6,584.3	6,520.2	15.1	18.0	-93.41	250.0	578.8	374.3	344.8	29.55	12.667	
6,594.5	6,553.4	6,630.3	6,563.4	15.1	18.0	-93.77	234.6	578.8	374.5	344.9	29.53	12.681	
6,600.0	6,558.4	6,636.0	6,568.7	15.1	18.0	-93.81	232.4	578.8	374.5	344.9	29.53	12.683	
6,650.0	6,603.0	6,687.8	6,616.0	15.1	18.0	-94.19	211.3	578.7	374.6	345.2	29.49	12.703	
6,692.9	6,639.9	6,732.4	6,655.5	15.1	18.0	-94.50	190.4	578.6	374.8	345.3	29.47	12.719	
6,700.0	6,645.9	6,739.8	6,661.9	15.1	18.0	-94.55	186.7	578.6	374.8	345.4	29.46	12.722	
6,750.0	6,686.8	6,792.0	6,705.9	15.1	18.0	-94.88	158.7	578.5	375.0	345.6	29.45	12.736	
6,791.3	6,719.1	6,835.3	6,740.8	15.1	18.0	-95.14	133.2	578.4	375.2	345.7	29.45	12.738	
6,800.0	6,725.7	6,844.4	6,748.0	15.1	18.0	-95.19	127.5	578.4	375.2	345.7	29.45	12.739	
6,850.0	6,762.3	6,896.9	6,787.7	15.1	18.0	-95.48	93.2	578.3	375.4	345.9	29.50	12.726	
6,889.7	6,789.7	6,938.8	6,817.6	15.1	18.0	-95.69	63.9	578.2	375.5	345.9	29.57	12.699	
6,900.0	6,796.5	6,949.6	6,825.0	15.1	18.0	-95.74	56.0	578.1	375.5	345.9	29.59	12.692	
6,950.0	6,828.0	7,002.4	6,859.5	15.1	17.9	-95.96	16.0	578.0	375.7	345.9	29.74	12.632	
6,988.2	6,850.2	7,042.8	6,883.8	15.1	18.0	-96.12	-16.2	577.9	375.8	345.9	29.91	12.564	
7,000.0	6,856.7	7,055.3	6,891.0	15.1	18.0	-96.16	-26.5	577.8	375.8	345.8	29.97	12.541	
7,050.0	6,882.5	7,108.3	6,919.3	15.2	18.0	-96.33	-71.2	577.7	375.9	345.7	30.27	12.421	
7,086.6	6,899.5	7,147.2	6,938.0	15.3	18.0	-96.43	-105.3	577.5	376.0	345.5	30.55	12.309	
7,100.0	6,905.3	7,161.4	6,944.3	15.4	18.1	-96.46	-118.1	577.5	376.0	345.4	30.66	12.265	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,150.0	6,924.9	7,214.6	6,965.8	15.7	18.2	-96.56	-166.7	577.3	376.1	345.0	31.14	12.078	
7,185.0	6,936.7	7,251.9	6,978.7	15.9	18.3	-96.61	-201.7	577.2	376.1	344.6	31.53	11.929	
7,200.0	6,941.2	7,267.8	6,983.6	16.0	18.3	-96.63	-216.8	577.1	376.2	344.4	31.71	11.861	
7,250.0	6,954.2	7,321.0	6,997.7	16.3	18.5	-96.66	-268.2	576.9	376.2	343.8	32.38	11.617	
7,283.4	6,961.0	7,356.7	7,005.0	16.6	18.7	-96.66	-303.0	576.8	376.2	343.3	32.88	11.440	
7,300.0	6,963.8	7,374.3	7,007.9	16.7	18.8	-96.66	-320.4	576.8	376.2	343.0	33.14	11.350	
7,350.0	6,970.0	7,427.5	7,014.2	17.2	19.2	-96.62	-373.2	576.6	376.2	342.2	33.99	11.067	
7,381.9	6,972.1	7,461.4	7,016.2	17.5	19.4	-96.58	-407.1	576.4	376.1	341.6	34.57	10.880	
7,400.0	6,972.7	7,480.7	7,016.6	17.7	19.6	-96.55	-426.4	576.4	376.1	341.2	34.91	10.774	
7,415.7	6,972.8	7,496.9	7,016.6	17.8	19.7	-96.53	-442.5	576.3	376.1	340.9	35.21	10.682	
7,420.0	6,972.8	7,501.1	7,016.6	17.9	19.8	-96.53	-446.8	576.3	376.1	340.8	35.29	10.658	
7,480.3	6,972.2	7,561.5	7,016.4	18.5	20.3	-96.59	-507.1	576.1	376.1	339.6	36.55	10.291	
7,500.0	6,972.0	7,581.2	7,016.3	18.7	20.5	-96.60	-526.8	576.0	376.1	339.2	36.96	10.177	
7,578.7	6,971.3	7,659.9	7,016.1	19.7	21.4	-96.67	-605.5	575.7	376.2	337.4	38.77	9.704	
7,600.0	6,971.1	7,681.2	7,016.0	19.9	21.6	-96.69	-626.8	575.6	376.2	336.9	39.26	9.582	
7,677.1	6,970.4	7,758.3	7,015.7	20.9	22.5	-96.76	-704.0	575.3	376.3	335.0	41.21	9.130	
7,700.0	6,970.2	7,781.2	7,015.7	21.2	22.8	-96.78	-726.8	575.3	376.3	334.5	41.80	9.003	
7,775.6	6,969.5	7,856.7	7,015.4	22.2	23.8	-96.85	-802.4	575.0	376.3	332.5	43.86	8.580	
7,800.0	6,969.3	7,881.2	7,015.4	22.6	24.1	-96.87	-826.8	574.9	376.3	331.8	44.53	8.451	
7,874.0	6,968.6	7,955.1	7,015.1	23.7	25.2	-96.94	-900.8	574.6	376.4	329.7	46.68	8.063	
7,900.0	6,968.4	7,981.1	7,015.0	24.1	25.5	-96.96	-926.8	574.5	376.4	329.0	47.44	7.935	
7,972.4	6,967.8	8,053.6	7,014.8	25.2	26.6	-97.03	-999.2	574.3	376.5	326.8	49.64	7.584	
8,000.0	6,967.5	8,081.1	7,014.7	25.6	27.0	-97.05	-1,026.8	574.2	376.5	326.0	50.48	7.458	
8,070.8	6,966.9	8,152.0	7,014.5	26.7	28.1	-97.12	-1,097.7	573.9	376.5	323.8	52.72	7.142	
8,100.0	6,966.6	8,181.1	7,014.4	27.2	28.5	-97.14	-1,126.8	573.8	376.6	322.9	53.64	7.020	
8,169.3	6,966.0	8,250.4	7,014.2	28.3	29.6	-97.20	-1,196.1	573.5	376.6	320.7	55.90	6.738	
8,200.0	6,965.7	8,281.1	7,014.1	28.8	30.1	-97.23	-1,226.8	573.4	376.6	319.7	56.90	6.619	
8,267.7	6,965.1	8,348.8	7,013.9	30.0	31.2	-97.29	-1,294.5	573.2	376.7	317.5	59.16	6.368	
8,300.0	6,964.8	8,381.1	7,013.8	30.5	31.7	-97.32	-1,326.8	573.1	376.7	316.5	60.24	6.254	
8,366.1	6,964.2	8,447.3	7,013.6	31.7	32.8	-97.38	-1,392.9	572.8	376.8	314.3	62.48	6.030	
8,400.0	6,963.9	8,481.1	7,013.5	32.2	33.4	-97.41	-1,426.8	572.7	376.8	313.2	63.64	5.921	
8,464.5	6,963.3	8,545.7	7,013.3	33.4	34.5	-97.47	-1,491.3	572.5	376.8	311.0	65.87	5.721	
8,500.0	6,963.0	8,581.1	7,013.1	34.0	35.1	-97.50	-1,526.8	572.3	376.9	309.8	67.10	5.617	
8,563.0	6,962.4	8,644.1	7,012.9	35.1	36.2	-97.56	-1,589.8	572.1	376.9	307.6	69.30	5.439	
8,600.0	6,962.0	8,681.1	7,012.8	35.8	36.8	-97.59	-1,626.8	572.0	376.9	306.3	70.60	5.339	
8,661.4	6,961.5	8,742.5	7,012.6	36.9	37.9	-97.64	-1,688.2	571.8	377.0	304.2	72.78	5.180	
8,700.0	6,961.1	8,781.1	7,012.5	37.6	38.6	-97.68	-1,726.8	571.6	377.0	302.9	74.15	5.085	
8,759.8	6,960.6	8,841.0	7,012.3	38.7	39.6	-97.73	-1,786.6	571.4	377.1	300.8	76.29	4.942	
8,800.0	6,960.2	8,881.1	7,012.2	39.4	40.3	-97.77	-1,826.8	571.2	377.1	299.4	77.73	4.851	
8,858.2	6,959.7	8,939.4	7,012.0	40.5	41.4	-97.82	-1,885.0	571.0	377.2	297.3	79.84	4.724	
8,900.0	6,959.3	8,981.1	7,011.9	41.2	42.1	-97.86	-1,926.8	570.9	377.2	295.8	81.35	4.637	
8,956.7	6,958.8	9,037.8	7,011.7	42.3	43.1	-97.91	-1,983.4	570.7	377.2	293.8	83.41	4.523	
9,000.0	6,958.4	9,081.1	7,011.6	43.1	43.9	-97.94	-2,026.8	570.5	377.3	292.3	84.99	4.439	
9,055.1	6,957.9	9,136.2	7,011.4	44.1	44.9	-97.99	-2,081.9	570.3	377.3	290.3	87.00	4.337	
9,100.0	6,957.5	9,181.1	7,011.2	44.9	45.7	-98.03	-2,126.8	570.2	377.4	288.7	88.65	4.257	
9,153.5	6,957.0	9,234.6	7,011.1	45.9	46.7	-98.08	-2,180.3	570.0	377.4	286.8	90.62	4.165	
9,200.0	6,956.6	9,281.1	7,010.9	46.8	47.6	-98.12	-2,226.8	569.8	377.4	285.1	92.33	4.088	
9,251.9	6,956.1	9,333.1	7,010.7	47.8	48.5	-98.17	-2,278.7	569.6	377.5	283.2	94.25	4.005	
9,300.0	6,955.7	9,381.1	7,010.6	48.7	49.4	-98.21	-2,326.8	569.4	377.5	281.5	96.03	3.931	
9,350.4	6,955.2	9,431.5	7,010.4	49.6	50.3	-98.26	-2,377.1	569.2	377.6	279.7	97.90	3.857	
9,400.0	6,954.8	9,481.1	7,010.3	50.6	51.2	-98.30	-2,426.8	569.1	377.6	277.9	99.74	3.786	
9,448.8	6,954.3	9,529.9	7,010.1	51.5	52.2	-98.34	-2,475.6	568.9	377.7	276.1	101.56	3.719	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - HONEBEIN 7K-323 - ORIGINAL WELLBORE - PROPOSAL #2												Offset Site Error:	0.0 usft
Survey Program: 0-MWDD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,500.0	6,953.9	9,581.1	7,010.0	52.5	53.1	-98.39	-2,526.8	568.7	377.7	274.2	103.47	3.650	
9,547.2	6,953.4	9,628.3	7,009.8	53.4	54.0	-98.43	-2,574.0	568.5	377.7	272.5	105.23	3.590	
9,600.0	6,952.9	9,681.1	7,009.6	54.4	55.0	-98.48	-2,626.8	568.3	377.8	270.6	107.20	3.524	
9,645.6	6,952.5	9,726.8	7,009.5	55.2	55.8	-98.52	-2,672.4	568.2	377.8	268.9	108.91	3.469	
9,700.0	6,952.0	9,781.1	7,009.3	56.3	56.9	-98.57	-2,726.7	568.0	377.9	266.9	110.95	3.406	
9,744.1	6,951.6	9,825.2	7,009.2	57.1	57.7	-98.60	-2,770.8	567.8	377.9	265.3	112.61	3.356	
9,800.0	6,951.1	9,881.1	7,009.0	58.2	58.7	-98.65	-2,826.7	567.6	378.0	263.3	114.71	3.295	
9,842.5	6,950.7	9,923.6	7,008.9	59.0	59.5	-98.69	-2,869.2	567.5	378.0	261.7	116.31	3.250	
9,900.0	6,950.2	9,981.1	7,008.7	60.1	60.6	-98.74	-2,926.7	567.3	378.1	259.6	118.48	3.191	
9,940.9	6,949.8	10,022.0	7,008.5	60.9	61.4	-98.78	-2,967.7	567.1	378.1	258.1	120.02	3.150	
10,000.0	6,949.3	10,081.1	7,008.4	62.0	62.5	-98.83	-3,026.7	566.9	378.1	255.9	122.25	3.093	
10,039.3	6,948.9	10,120.5	7,008.2	62.8	63.3	-98.87	-3,066.1	566.7	378.2	254.4	123.73	3.056	
10,100.0	6,948.4	10,181.1	7,008.0	64.0	64.4	-98.92	-3,126.7	566.5	378.2	252.2	126.03	3.001	
10,137.8	6,948.0	10,218.9	7,007.9	64.7	65.1	-98.95	-3,164.5	566.4	378.3	250.8	127.46	2.968	
10,200.0	6,947.5	10,281.1	7,007.7	65.9	66.3	-99.01	-3,226.7	566.2	378.3	248.5	129.81	2.914	
10,236.2	6,947.1	10,317.3	7,007.6	66.6	67.0	-99.04	-3,262.9	566.0	378.4	247.2	131.18	2.884	
10,300.0	6,946.6	10,381.1	7,007.4	67.8	68.2	-99.10	-3,326.7	565.8	378.4	244.8	133.60	2.833	
10,334.6	6,946.3	10,415.7	7,007.3	68.5	68.9	-99.13	-3,361.4	565.7	378.5	243.5	134.91	2.805	
10,400.0	6,945.7	10,481.1	7,007.1	69.8	70.1	-99.18	-3,426.7	565.4	378.5	241.1	137.39	2.755	
10,433.0	6,945.4	10,514.1	7,007.0	70.4	70.8	-99.21	-3,459.8	565.3	378.5	239.9	138.65	2.730	
10,500.0	6,944.7	10,581.1	7,006.7	71.7	72.1	-99.27	-3,526.7	565.1	378.6	237.4	141.19	2.682	
10,531.5	6,944.5	10,612.6	7,006.6	72.3	72.7	-99.30	-3,558.2	565.0	378.6	236.3	142.39	2.659	
10,600.0	6,943.8	10,681.1	7,006.4	73.7	74.0	-99.36	-3,626.7	564.7	378.7	233.7	144.99	2.612	
10,629.9	6,943.6	10,711.0	7,006.3	74.2	74.5	-99.39	-3,656.6	564.6	378.7	232.6	146.13	2.592	
10,700.0	6,942.9	10,781.1	7,006.1	75.6	75.9	-99.45	-3,726.7	564.4	378.8	230.0	148.79	2.546	
10,728.3	6,942.7	10,809.4	7,006.0	76.2	76.4	-99.47	-3,755.0	564.3	378.8	229.0	149.87	2.528	
10,800.0	6,942.0	10,881.1	7,005.8	77.6	77.8	-99.53	-3,826.7	564.0	378.9	226.3	152.60	2.483	
10,826.7	6,941.8	10,907.8	7,005.7	78.1	78.3	-99.56	-3,853.5	563.9	378.9	225.3	153.62	2.467	
10,900.0	6,941.1	10,981.1	7,005.4	79.5	79.7	-99.62	-3,926.7	563.6	379.0	222.6	156.41	2.423	
10,925.2	6,940.9	11,006.3	7,005.4	80.0	80.2	-99.64	-3,951.9	563.5	379.0	221.7	157.37	2.409	
11,000.0	6,940.2	11,081.1	7,005.1	81.5	81.7	-99.71	-4,026.7	563.3	379.1	218.9	160.22	2.366	
11,023.6	6,940.0	11,104.7	7,005.0	81.9	82.1	-99.73	-4,050.3	563.2	379.1	218.0	161.12	2.353	
11,100.0	6,939.3	11,181.1	7,004.8	83.4	83.6	-99.80	-4,126.7	562.9	379.2	215.2	164.03	2.312	
11,122.0	6,939.1	11,203.1	7,004.7	83.8	84.0	-99.82	-4,148.7	562.8	379.2	214.4	164.87	2.300	
11,200.0	6,938.4	11,281.1	7,004.5	85.4	85.5	-99.89	-4,226.7	562.6	379.3	211.5	167.84	2.260	
11,220.4	6,938.2	11,301.5	7,004.4	85.8	85.9	-99.90	-4,247.1	562.5	379.3	210.7	168.62	2.250	
11,300.0	6,937.4	11,381.1	7,004.2	87.3	87.5	-99.97	-4,326.7	562.2	379.4	207.8	171.65	2.210	
11,318.9	6,937.3	11,400.0	7,004.1	87.7	87.8	-99.99	-4,345.6	562.1	379.4	207.1	172.37	2.201	
11,400.0	6,936.5	11,481.1	7,003.8	89.3	89.4	-100.06	-4,426.7	561.8	379.5	204.0	175.47	2.163	
11,417.3	6,936.4	11,498.4	7,003.8	89.6	89.8	-100.08	-4,444.0	561.8	379.5	203.4	176.13	2.155	
11,500.0	6,935.6	11,581.1	7,003.5	91.3	91.4	-100.15	-4,526.7	561.5	379.6	200.3	179.28	2.117	
11,515.7	6,935.5	11,596.8	7,003.4	91.6	91.7	-100.16	-4,542.4	561.4	379.6	199.8	179.88	2.110	
11,600.0	6,934.7	11,681.1	7,003.2	93.2	93.3	-100.24	-4,626.7	561.1	379.7	196.6	183.10	2.074	
11,614.1	6,934.6	11,695.2	7,003.1	93.5	93.6	-100.25	-4,640.8	561.1	379.7	196.1	183.64	2.068	
11,700.0	6,933.8	11,781.1	7,002.8	95.2	95.2	-100.32	-4,726.7	560.8	379.8	192.9	186.91	2.032	
11,712.6	6,933.7	11,793.6	7,002.8	95.4	95.5	-100.33	-4,739.3	560.7	379.8	192.5	187.39	2.027	
11,800.0	6,932.9	11,881.1	7,002.5	97.1	97.2	-100.41	-4,826.7	560.4	379.9	189.2	190.73	1.992	
11,811.0	6,932.8	11,892.1	7,002.5	97.4	97.4	-100.42	-4,837.7	560.4	380.0	188.8	191.15	1.988	
11,900.0	6,932.0	11,981.1	7,002.2	99.1	99.1	-100.50	-4,926.7	560.0	380.1	185.5	194.54	1.954	
11,909.4	6,931.9	11,990.5	7,002.2	99.3	99.3	-100.50	-4,936.1	560.0	380.1	185.2	194.90	1.950	
12,000.0	6,931.0	12,081.1	7,001.9	101.1	101.1	-100.58	-5,026.7	559.7	380.2	181.8	198.36	1.917	
12,007.8	6,931.0	12,088.9	7,001.8	101.2	101.2	-100.59	-5,034.5	559.6	380.2	181.5	198.66	1.914	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - HONEBEIN 7K-323 - ORIGINAL WELLBORE - PROPOSAL #2												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
12,100.0	6,930.1	12,181.1	7,001.5	103.0	103.0	-100.67	-5,126.7	559.3	380.3	178.1	202.17	1.881	
12,106.3	6,930.1	12,187.3	7,001.5	103.2	103.2	-100.68	-5,132.9	559.3	380.3	177.9	202.41	1.879	
12,200.0	6,929.2	12,281.1	7,001.2	105.0	105.0	-100.76	-5,226.7	559.0	380.4	174.4	205.99	1.847	
12,204.7	6,929.2	12,285.8	7,001.2	105.1	105.1	-100.76	-5,231.4	558.9	380.4	174.2	206.17	1.845	
12,300.0	6,928.3	12,381.1	7,000.9	107.0	106.9	-100.84	-5,326.7	558.6	380.5	170.7	209.80	1.814	
12,303.1	6,928.3	12,384.2	7,000.9	107.1	107.0	-100.85	-5,329.8	558.6	380.5	170.6	209.92	1.813	
12,400.0	6,927.4	12,481.1	7,000.6	109.0	108.9	-100.93	-5,426.7	558.2	380.6	167.0	213.61	1.782	
12,401.5	6,927.4	12,482.6	7,000.6	109.0	108.9	-100.93	-5,428.2	558.2	380.6	166.9	213.67	1.781	
12,500.0	6,926.5	12,581.1	7,000.2	110.9	110.8	-101.02	-5,526.7	557.9	380.7	163.3	217.43	1.751	
12,598.4	6,925.6	12,679.4	6,999.9	112.9	112.8	-101.10	-5,625.1	557.5	380.8	159.7	221.18	1.722	
12,600.0	6,925.6	12,681.0	6,999.9	112.9	112.8	-101.10	-5,626.7	557.5	380.8	159.6	221.24	1.721	
12,696.8	6,924.7	12,777.9	6,999.6	114.8	114.7	-101.19	-5,723.5	557.2	380.9	156.0	224.93	1.694	
12,700.0	6,924.6	12,781.0	6,999.6	114.9	114.7	-101.19	-5,726.6	557.2	381.0	155.9	225.05	1.693	
12,795.2	6,923.8	12,876.3	6,999.3	116.8	116.6	-101.27	-5,821.9	556.8	381.1	152.4	228.68	1.666	
12,800.0	6,923.7	12,881.0	6,999.2	116.9	116.7	-101.28	-5,826.6	556.8	381.1	152.2	228.86	1.665	
12,893.7	6,922.9	12,974.7	6,998.9	118.7	118.5	-101.36	-5,920.3	556.5	381.2	148.8	232.42	1.640	
12,900.0	6,922.8	12,981.0	6,998.9	118.8	118.7	-101.36	-5,926.6	556.4	381.2	148.5	232.66	1.638	
12,992.1	6,922.0	13,073.1	6,998.6	120.6	120.5	-101.44	-6,018.7	556.1	381.3	145.1	236.17	1.614	
13,000.0	6,921.9	13,081.0	6,998.6	120.8	120.6	-101.45	-6,026.6	556.1	381.3	144.8	236.47	1.612	
13,090.5	6,921.1	13,171.6	6,998.3	122.6	122.4	-101.53	-6,117.2	555.8	381.4	141.5	239.91	1.590	
13,100.0	6,921.0	13,181.0	6,998.3	122.8	122.6	-101.54	-6,126.6	555.7	381.4	141.1	240.28	1.587	
13,188.9	6,920.2	13,270.0	6,998.0	124.5	124.3	-101.61	-6,215.6	555.4	381.5	137.9	243.66	1.566	
13,200.0	6,920.1	13,281.0	6,997.9	124.8	124.5	-101.62	-6,226.6	555.4	381.5	137.5	244.08	1.563	
13,287.4	6,919.3	13,368.4	6,997.6	126.5	126.2	-101.70	-6,314.0	555.1	381.6	134.2	247.40	1.543	
13,300.0	6,919.1	13,381.0	6,997.6	126.7	126.5	-101.71	-6,326.6	555.0	381.7	133.8	247.88	1.540	
13,385.8	6,918.4	13,466.8	6,997.3	128.4	128.2	-101.78	-6,412.4	554.7	381.8	130.6	251.14	1.520	
13,400.0	6,918.2	13,481.0	6,997.3	128.7	128.4	-101.79	-6,426.6	554.7	381.8	130.1	251.68	1.517	
13,484.2	6,917.5	13,565.3	6,997.0	130.4	130.1	-101.87	-6,510.8	554.4	381.9	127.0	254.88	1.498 Level 3	
13,500.0	6,917.3	13,581.0	6,996.9	130.7	130.4	-101.88	-6,526.6	554.3	381.9	126.4	255.48	1.495 Level 3	
13,582.6	6,916.6	13,663.7	6,996.7	132.3	132.0	-101.95	-6,609.3	554.0	382.0	123.4	258.62	1.477 Level 3	
13,600.0	6,916.4	13,681.0	6,996.6	132.7	132.4	-101.97	-6,626.6	553.9	382.0	122.8	259.28	1.473 Level 3	
13,681.1	6,915.6	13,762.1	6,996.3	134.3	134.0	-102.04	-6,707.7	553.7	382.1	119.8	262.36	1.457 Level 3	
13,700.0	6,915.5	13,781.0	6,996.3	134.6	134.3	-102.05	-6,726.6	553.6	382.2	119.1	263.07	1.453 Level 3	
13,779.5	6,914.7	13,860.5	6,996.0	136.2	135.9	-102.12	-6,806.1	553.3	382.3	116.2	266.09	1.437 Level 3	
13,800.0	6,914.6	13,881.0	6,995.9	136.6	136.3	-102.14	-6,826.6	553.2	382.3	115.4	266.87	1.432 Level 3	
13,877.9	6,913.8	13,958.9	6,995.7	138.2	137.8	-102.20	-6,904.5	553.0	382.4	112.6	269.82	1.417 Level 3	
13,900.0	6,913.6	13,981.0	6,995.6	138.6	138.2	-102.22	-6,926.6	552.9	382.4	111.7	270.66	1.413 Level 3	
13,976.3	6,912.9	14,057.4	6,995.3	140.1	139.7	-102.29	-7,003.0	552.6	382.5	109.0	273.55	1.398 Level 3	
14,000.0	6,912.7	14,081.0	6,995.3	140.6	140.2	-102.31	-7,026.6	552.5	382.5	108.1	274.45	1.394 Level 3	
14,074.8	6,912.0	14,155.8	6,995.0	142.0	141.6	-102.37	-7,101.4	552.3	382.6	105.4	277.19	1.380 Level 3	
14,079.0	6,912.0	14,160.0	6,995.0	142.1	141.7	-102.38	-7,105.6	552.2	382.6	105.3	277.34	1.380 Level 3, SF	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

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	-90.00	0.0	-30.7	30.7				
98.4	98.4	97.4	97.4	0.1	0.1	-90.00	0.0	-30.7	30.7	30.5	0.19	161.299	
100.0	100.0	99.0	99.0	0.1	0.1	-90.00	0.0	-30.7	30.7	30.5	0.19	158.546	
196.8	196.8	195.8	195.8	0.3	0.3	-90.00	0.0	-30.7	30.7	30.0	0.63	48.874	
200.0	200.0	199.0	199.0	0.3	0.3	-90.00	0.0	-30.7	30.7	30.0	0.64	47.796	
295.3	295.3	294.3	294.3	0.5	0.5	-90.00	0.0	-30.7	30.7	29.6	1.07	28.664	
300.0	300.0	299.0	299.0	0.5	0.5	-90.00	0.0	-30.7	30.7	29.6	1.09	28.106	
393.7	393.7	392.7	392.7	0.8	0.8	-90.00	0.0	-30.7	30.7	29.2	1.51	20.279	
400.0	400.0	399.0	399.0	0.8	0.8	-90.00	0.0	-30.7	30.7	29.1	1.54	19.906	
492.1	492.1	491.1	491.1	1.0	1.0	-90.00	0.0	-30.7	30.7	28.7	1.95	15.689	
500.0	500.0	499.0	499.0	1.0	1.0	-90.00	0.0	-30.7	30.7	28.7	1.99	15.410	
590.5	590.5	589.5	589.5	1.2	1.2	-90.00	0.0	-30.7	30.7	28.3	2.40	12.794	
600.0	600.0	599.0	599.0	1.2	1.2	-90.00	0.0	-30.7	30.7	28.2	2.44	12.571	
689.0	689.0	688.0	688.0	1.4	1.4	-90.00	0.0	-30.7	30.7	27.8	2.84	10.800	
700.0	700.0	699.0	699.0	1.4	1.4	-90.00	0.0	-30.7	30.7	27.8	2.89	10.615	
787.4	787.4	786.4	786.4	1.6	1.6	-90.00	0.0	-30.7	30.7	27.4	3.28	9.344	
800.0	800.0	799.0	799.0	1.7	1.7	-90.00	0.0	-30.7	30.7	27.3	3.34	9.186	
885.8	885.8	884.8	884.8	1.9	1.9	-90.00	0.0	-30.7	30.7	26.9	3.72	8.234	
900.0	900.0	899.0	899.0	1.9	1.9	-90.00	0.0	-30.7	30.7	26.9	3.79	8.096	
984.2	984.2	983.2	983.2	2.1	2.1	-90.00	0.0	-30.7	30.7	26.5	4.17	7.360	
1,000.0	1,000.0	999.0	999.0	2.1	2.1	-90.00	0.0	-30.7	30.7	26.4	4.24	7.237	
1,082.7	1,082.7	1,081.7	1,081.7	2.3	2.3	-90.00	0.0	-30.7	30.7	26.1	4.61	6.654	
1,100.0	1,100.0	1,099.0	1,099.0	2.3	2.3	-90.00	0.0	-30.7	30.7	26.0	4.69	6.543	
1,181.1	1,181.1	1,180.1	1,180.1	2.5	2.5	-90.00	0.0	-30.7	30.7	25.6	5.05	6.071	
1,200.0	1,200.0	1,199.0	1,199.0	2.6	2.6	-90.00	0.0	-30.7	30.7	25.5	5.14	5.971 CC, ES	
1,279.5	1,279.5	1,278.5	1,278.5	2.7	2.7	-128.12	0.0	-30.7	31.3	25.8	5.49	5.707	
1,300.0	1,300.0	1,299.0	1,299.0	2.8	2.8	-129.02	0.0	-30.7	31.7	26.2	5.58	5.686	
1,377.9	1,377.8	1,376.9	1,376.9	3.0	3.0	-132.18	1.0	-30.7	34.2	28.3	5.93	5.773	
1,400.0	1,399.8	1,398.9	1,398.9	3.0	3.0	-132.82	1.7	-30.8	35.2	29.1	6.02	5.840	
1,476.4	1,475.9	1,475.2	1,475.1	3.2	3.2	-134.22	5.3	-31.1	39.4	33.0	6.36	6.192	
1,500.0	1,499.5	1,498.8	1,498.6	3.2	3.2	-134.43	6.9	-31.2	40.9	34.5	6.46	6.335	
1,574.8	1,573.7	1,573.5	1,573.0	3.4	3.4	-134.51	13.0	-31.6	46.7	39.9	6.80	6.871	
1,600.0	1,598.7	1,598.6	1,598.0	3.5	3.5	-134.38	15.5	-31.8	48.9	42.0	6.91	7.081	
1,673.2	1,671.1	1,671.5	1,670.5	3.7	3.6	-133.69	24.0	-32.5	56.2	48.9	7.25	7.744	
1,700.0	1,697.5	1,698.2	1,696.9	3.7	3.7	-133.35	27.5	-32.7	59.1	51.7	7.38	8.012	
1,771.6	1,767.9	1,769.4	1,767.3	4.0	3.9	-132.28	38.3	-33.5	67.8	60.0	7.74	8.755	
1,800.1	1,795.7	1,797.6	1,795.1	4.0	4.0	-131.82	43.0	-33.9	71.5	63.6	7.88	9.072	
1,870.1	1,864.2	1,866.9	1,863.2	4.3	4.2	-130.33	55.8	-34.8	81.0	72.7	8.29	9.772	
1,900.0	1,893.4	1,896.5	1,892.2	4.4	4.3	-129.45	61.7	-35.3	85.1	76.6	8.46	10.051	
1,968.5	1,960.4	1,964.3	1,958.5	4.6	4.5	-127.45	75.8	-36.3	94.5	85.6	8.90	10.618	
2,000.0	1,991.3	1,995.5	1,989.0	4.7	4.6	-126.66	82.2	-36.8	98.8	89.7	9.10	10.863	
2,066.9	2,056.7	2,061.7	2,053.8	5.0	4.8	-125.19	96.0	-37.9	108.1	98.6	9.54	11.332	
2,100.0	2,089.1	2,094.4	2,085.8	5.1	4.9	-124.55	102.7	-38.4	112.8	103.0	9.76	11.548	
2,165.3	2,153.0	2,159.1	2,149.0	5.3	5.1	-123.44	116.2	-39.4	121.9	111.7	10.22	11.934	
2,200.0	2,186.9	2,193.4	2,182.6	5.5	5.2	-122.91	123.3	-39.9	126.8	116.4	10.46	12.125	
2,263.8	2,249.3	2,256.5	2,244.3	5.7	5.5	-122.04	136.4	-40.9	135.8	124.9	10.92	12.443	
2,300.0	2,284.7	2,292.3	2,279.4	5.8	5.6	-121.59	143.8	-41.4	140.9	129.8	11.18	12.613	
2,362.2	2,345.5	2,353.9	2,339.6	6.1	5.8	-120.90	156.5	-42.4	149.8	138.1	11.63	12.877	
2,400.0	2,382.5	2,391.3	2,376.2	6.2	6.0	-120.52	164.3	-43.0	155.1	143.2	11.91	13.027	
2,460.6	2,441.8	2,451.3	2,434.8	6.5	6.2	-119.96	176.7	-43.9	163.8	151.4	12.36	13.247	
2,500.0	2,480.3	2,490.2	2,472.9	6.6	6.4	-119.63	184.8	-44.5	169.4	156.7	12.66	13.381	
2,559.0	2,538.1	2,548.6	2,530.1	6.9	6.6	-119.17	196.9	-45.4	177.8	164.7	13.11	13.566	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,600.0	2,578.1	2,589.2	2,569.7	7.0	6.8	-118.87	205.3	-46.1	183.6	170.2	13.42	13.686	
2,657.5	2,634.4	2,646.4	2,625.8	7.3	7.0	-118.53	217.1	-46.9	191.8	178.0	13.85	13.853	
2,700.0	2,675.9	2,689.1	2,667.7	7.5	7.1	-118.47	225.2	-47.5	197.8	183.6	14.15	13.972	
2,755.9	2,730.6	2,745.3	2,723.0	7.7	7.3	-118.67	234.9	-48.3	205.4	190.8	14.53	14.134	
2,800.0	2,773.8	2,789.6	2,766.7	7.9	7.4	-119.03	241.9	-48.8	211.2	196.4	14.82	14.255	
2,854.3	2,826.9	2,844.2	2,820.8	8.1	7.6	-119.69	249.4	-49.4	218.3	203.1	15.16	14.400	
2,857.4	2,829.9	2,847.2	2,823.8	8.1	7.6	-119.73	249.8	-49.4	218.7	203.5	15.18	14.408	
2,900.0	2,871.6	2,890.0	2,866.3	8.3	7.7	-120.43	255.0	-49.8	223.9	208.5	15.43	14.515	
2,952.7	2,923.5	2,943.1	2,919.0	8.4	7.8	-121.28	260.6	-50.2	229.9	214.2	15.70	14.644	
3,000.0	2,970.1	2,990.6	2,966.4	8.6	7.9	-122.02	264.7	-50.5	234.7	218.8	15.94	14.727	
3,051.2	3,020.7	3,042.0	3,017.7	8.7	8.0	-122.82	268.3	-50.8	239.4	223.2	16.17	14.805	
3,100.0	3,069.1	3,091.2	3,066.8	8.9	8.1	-123.58	270.9	-51.0	243.3	226.9	16.39	14.848	
3,149.6	3,118.3	3,141.0	3,116.6	9.0	8.2	-124.35	272.7	-51.1	246.7	230.1	16.58	14.882	
3,200.0	3,168.5	3,191.7	3,167.3	9.1	8.3	-125.13	273.6	-51.2	249.6	232.9	16.77	14.889	
3,248.0	3,216.3	3,239.8	3,215.3	9.2	8.4	-125.87	273.7	-51.2	251.9	235.0	16.93	14.882	
3,300.0	3,268.2	3,291.7	3,267.2	9.3	8.5	-126.51	273.7	-51.2	253.9	236.8	17.11	14.842	
3,346.4	3,314.6	3,338.1	3,313.6	9.4	8.6	-126.93	273.7	-51.2	255.2	237.9	17.26	14.784	
3,400.0	3,368.1	3,391.6	3,367.1	9.5	8.6	-127.22	273.7	-51.2	256.1	238.7	17.45	14.683	
3,444.9	3,413.0	3,436.4	3,412.0	9.6	8.7	-127.33	273.7	-51.2	256.5	238.9	17.59	14.578	
3,457.5	3,425.6	3,449.0	3,424.6	9.6	8.8	-90.83	273.7	-51.2	256.5	238.9	17.63	14.549	
3,500.0	3,468.1	3,491.6	3,467.1	9.7	8.8	-90.83	273.7	-51.2	256.5	238.7	17.78	14.427	
3,543.3	3,511.4	3,534.9	3,510.4	9.7	8.9	-90.83	273.7	-51.2	256.5	238.6	17.94	14.301	
3,600.0	3,568.1	3,591.6	3,567.1	9.8	9.0	-90.83	273.7	-51.2	256.5	238.4	18.14	14.138	
3,641.7	3,609.9	3,633.3	3,608.9	9.9	9.1	-90.83	273.7	-51.2	256.5	238.2	18.30	14.019	
3,700.0	3,668.1	3,691.6	3,667.1	10.0	9.2	-90.83	273.7	-51.2	256.5	238.0	18.51	13.857	
3,740.1	3,708.3	3,731.7	3,707.3	10.1	9.3	-90.83	273.7	-51.2	256.5	237.8	18.66	13.746	
3,800.0	3,768.1	3,791.6	3,767.1	10.2	9.4	-90.83	273.7	-51.2	256.5	237.6	18.88	13.585	
3,838.6	3,806.7	3,830.1	3,805.7	10.2	9.5	-90.83	273.7	-51.2	256.5	237.5	19.03	13.481	
3,900.0	3,868.1	3,891.6	3,867.1	10.3	9.6	-90.83	273.7	-51.2	256.5	237.2	19.26	13.320	
3,937.0	3,905.1	3,928.6	3,904.1	10.4	9.6	-90.83	273.7	-51.2	256.5	237.1	19.40	13.224	
4,000.0	3,968.1	3,991.6	3,967.1	10.5	9.8	-90.83	273.7	-51.2	256.5	236.9	19.63	13.064	
4,035.4	4,003.6	4,027.0	4,002.6	10.6	9.8	-90.83	273.7	-51.2	256.5	236.7	19.77	12.975	
4,100.0	4,068.1	4,091.6	4,067.1	10.7	10.0	-90.83	273.7	-51.2	256.5	236.5	20.01	12.815	
4,133.8	4,102.0	4,125.4	4,101.0	10.8	10.0	-90.83	273.7	-51.2	256.5	236.4	20.14	12.733	
4,200.0	4,168.1	4,191.6	4,167.1	10.9	10.2	-90.83	273.7	-51.2	256.5	236.1	20.40	12.574	
4,232.3	4,200.4	4,223.8	4,199.4	10.9	10.2	-90.83	273.7	-51.2	256.5	236.0	20.52	12.498	
4,300.0	4,268.1	4,291.6	4,267.1	11.1	10.4	-90.83	273.7	-51.2	256.5	235.7	20.78	12.341	
4,330.7	4,298.8	4,322.3	4,297.8	11.1	10.4	-90.83	273.7	-51.2	256.5	235.6	20.90	12.270	
4,400.0	4,368.1	4,391.6	4,367.1	11.2	10.5	-90.83	273.7	-51.2	256.5	235.3	21.17	12.114	
4,429.1	4,397.3	4,420.7	4,396.3	11.3	10.6	-90.83	273.7	-51.2	256.5	235.2	21.29	12.050	
4,500.0	4,468.1	4,491.6	4,467.1	11.4	10.7	-90.83	273.7	-51.2	256.5	234.9	21.56	11.895	
4,527.5	4,495.7	4,519.1	4,494.7	11.5	10.8	-90.83	273.7	-51.2	256.5	234.8	21.67	11.835	
4,600.0	4,568.1	4,591.6	4,567.1	11.6	10.9	-90.83	273.7	-51.2	256.5	234.5	21.96	11.682	
4,626.0	4,594.1	4,617.5	4,593.1	11.7	11.0	-90.83	273.7	-51.2	256.5	234.4	22.06	11.627	
4,700.0	4,668.1	4,691.6	4,667.1	11.8	11.1	-90.83	273.7	-51.2	256.5	234.1	22.35	11.475	
4,724.4	4,692.5	4,716.0	4,691.5	11.8	11.2	-90.83	273.7	-51.2	256.5	234.0	22.45	11.425	
4,800.0	4,768.1	4,791.6	4,767.1	12.0	11.3	-90.83	273.7	-51.2	256.5	233.7	22.75	11.274	
4,822.8	4,791.0	4,814.4	4,790.0	12.0	11.4	-90.83	273.7	-51.2	256.5	233.7	22.84	11.230	
4,900.0	4,868.1	4,891.6	4,867.1	12.2	11.5	-90.83	273.7	-51.2	256.5	233.3	23.15	11.080	
4,921.2	4,889.4	4,912.8	4,888.4	12.2	11.6	-90.83	273.7	-51.2	256.5	233.3	23.23	11.039	
5,000.0	4,968.1	4,991.6	4,967.1	12.4	11.7	-90.83	273.7	-51.2	256.5	232.9	23.55	10.891	
5,019.7	4,987.8	5,011.2	4,986.8	12.4	11.8	-90.83	273.7	-51.2	256.5	232.9	23.63	10.855	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

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	5,068.1	5,091.6	5,067.1	12.6	11.9	-90.83	273.7	-51.2	256.5	232.5	23.95	10.708	
5,118.1	5,086.2	5,109.7	5,085.2	12.6	12.0	-90.83	273.7	-51.2	256.5	232.5	24.03	10.675	
5,200.0	5,168.1	5,191.6	5,167.1	12.8	12.2	-90.83	273.7	-51.2	256.5	232.1	24.36	10.530	
5,216.5	5,184.7	5,208.1	5,183.7	12.8	12.2	-90.83	273.7	-51.2	256.5	232.1	24.43	10.501	
5,300.0	5,268.1	5,291.6	5,267.1	13.0	12.4	-90.83	273.7	-51.2	256.5	231.7	24.76	10.358	
5,314.9	5,283.1	5,306.5	5,282.1	13.0	12.4	-90.83	273.7	-51.2	256.5	231.7	24.82	10.332	
5,400.0	5,368.1	5,391.6	5,367.1	13.1	12.6	-90.83	273.7	-51.2	256.5	231.3	25.17	10.190	
5,413.4	5,381.5	5,404.9	5,380.5	13.2	12.6	-90.83	273.7	-51.2	256.5	231.3	25.23	10.168	
5,500.0	5,468.1	5,491.6	5,467.1	13.3	12.8	-90.83	273.7	-51.2	256.5	230.9	25.58	10.027	
5,511.8	5,479.9	5,503.4	5,478.9	13.4	12.8	-90.83	273.7	-51.2	256.5	230.9	25.63	10.008	
5,600.0	5,568.1	5,591.6	5,567.1	13.5	13.0	-90.83	273.7	-51.2	256.5	230.5	25.99	9.869	
5,610.2	5,578.4	5,601.8	5,577.4	13.6	13.0	-90.83	273.7	-51.2	256.5	230.5	26.03	9.853	
5,700.0	5,668.1	5,691.6	5,667.1	13.7	13.2	-90.83	273.7	-51.2	256.5	230.1	26.40	9.715	
5,708.6	5,676.8	5,700.2	5,675.8	13.8	13.2	-90.83	273.7	-51.2	256.5	230.1	26.44	9.702	
5,800.0	5,768.1	5,791.6	5,767.1	13.9	13.4	-90.83	273.7	-51.2	256.5	229.7	26.82	9.565	
5,807.1	5,775.2	5,798.6	5,774.2	14.0	13.4	-90.83	273.7	-51.2	256.5	229.7	26.84	9.555	
5,900.0	5,868.1	5,891.6	5,867.1	14.1	13.6	-90.83	273.7	-51.2	256.5	229.3	27.23	9.420	
5,905.5	5,873.6	5,897.1	5,872.6	14.1	13.6	-90.83	273.7	-51.2	256.5	229.2	27.25	9.412	
6,000.0	5,968.1	5,991.6	5,967.1	14.3	13.8	-90.83	273.7	-51.2	256.5	228.9	27.64	9.279	
6,003.9	5,972.1	5,995.5	5,971.1	14.3	13.8	-90.83	273.7	-51.2	256.5	228.8	27.66	9.273	
6,100.0	6,068.1	6,091.6	6,067.1	14.5	14.0	-90.83	273.7	-51.2	256.5	228.4	28.06	9.141	
6,102.3	6,070.5	6,093.9	6,069.5	14.5	14.0	-90.83	273.7	-51.2	256.5	228.4	28.07	9.138	
6,200.0	6,168.1	6,191.6	6,167.1	14.7	14.2	-90.83	273.7	-51.2	256.5	228.0	28.48	9.007	
6,200.8	6,168.9	6,192.3	6,167.9	14.7	14.2	-90.83	273.7	-51.2	256.5	228.0	28.48	9.006	
6,288.5	6,256.6	6,280.0	6,255.6	14.9	14.4	-90.83	273.7	-51.2	256.5	227.7	28.85	8.892	
6,299.2	6,267.3	6,290.8	6,266.3	14.9	14.4	88.98	273.7	-51.2	256.5	227.6	28.89	8.877	
6,300.0	6,268.1	6,291.6	6,267.1	14.9	14.4	88.98	273.7	-51.2	256.5	227.6	28.90	8.876	
6,350.0	6,318.1	6,341.5	6,317.1	15.0	14.5	89.56	273.7	-51.2	256.5	227.4	29.08	8.819	
6,370.0	6,338.0	6,361.4	6,337.0	15.0	14.6	90.00	273.7	-51.2	256.5	227.3	29.15	8.798	
6,397.6	6,365.3	6,388.8	6,364.3	15.1	14.6	90.81	273.7	-51.2	256.5	227.2	29.25	8.769	
6,400.0	6,367.7	6,391.1	6,366.7	15.1	14.6	90.89	273.7	-51.2	256.5	227.2	29.26	8.766	
6,450.0	6,416.8	6,440.3	6,415.8	15.1	14.7	92.94	273.7	-51.2	256.8	227.4	29.42	8.728	
6,496.0	6,461.3	6,486.4	6,461.9	15.1	14.8	95.12	271.9	-51.2	257.5	228.0	29.53	8.722	
6,500.0	6,465.1	6,490.4	6,465.9	15.1	14.8	95.30	271.7	-51.2	257.6	228.1	29.54	8.722	
6,550.0	6,512.4	6,541.3	6,516.5	15.1	14.9	97.65	266.0	-51.2	258.9	229.3	29.60	8.746	
6,594.5	6,553.4	6,587.3	6,561.8	15.1	14.9	99.70	257.8	-51.2	260.3	230.7	29.61	8.793	
6,600.0	6,558.4	6,593.1	6,567.4	15.1	14.9	99.95	256.6	-51.2	260.6	230.9	29.61	8.800	
6,650.0	6,603.0	6,645.7	6,618.3	15.1	14.9	102.19	243.3	-51.3	262.6	233.1	29.57	8.882	
6,692.9	6,639.9	6,691.6	6,661.8	15.1	14.9	104.06	228.7	-51.3	264.7	235.2	29.50	8.975	
6,700.0	6,645.9	6,699.3	6,668.9	15.1	14.9	104.36	225.9	-51.3	265.1	235.6	29.48	8.992	
6,750.0	6,686.8	6,753.7	6,719.0	15.1	14.9	106.44	204.5	-51.4	267.8	238.5	29.35	9.125	
6,791.3	6,719.1	6,799.4	6,759.6	15.1	14.9	108.09	183.6	-51.5	270.3	241.1	29.22	9.250	
6,800.0	6,725.7	6,809.1	6,768.0	15.1	14.9	108.42	178.8	-51.5	270.8	241.6	29.19	9.278	
6,850.0	6,762.3	6,865.4	6,815.7	15.1	14.9	110.29	148.9	-51.6	274.0	245.0	29.01	9.444	
6,889.7	6,789.7	6,910.9	6,852.4	15.1	14.9	111.69	122.1	-51.7	276.6	247.7	28.87	9.580	
6,900.0	6,796.5	6,922.7	6,861.7	15.1	14.9	112.04	114.8	-51.8	277.3	248.4	28.84	9.616	
6,950.0	6,828.0	6,980.9	6,905.4	15.1	15.0	113.65	76.4	-51.9	280.6	251.9	28.68	9.784	
6,988.2	6,850.2	7,025.9	6,937.1	15.1	15.0	114.79	44.3	-52.0	283.1	254.5	28.58	9.904	
7,000.0	6,856.7	7,040.0	6,946.5	15.1	15.0	115.12	33.9	-52.0	283.8	255.3	28.56	9.938	
7,050.0	6,882.5	7,100.0	6,984.5	15.2	15.1	116.45	-12.5	-52.2	287.0	258.5	28.51	10.065	
7,086.6	6,899.5	7,144.4	7,010.1	15.3	15.2	117.33	-48.8	-52.4	289.2	260.6	28.54	10.132	
7,100.0	6,905.3	7,160.8	7,018.9	15.4	15.3	117.63	-62.6	-52.4	289.9	261.4	28.56	10.152	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-MW/D												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,150.0	6,924.9	7,222.3	7,049.3	15.7	15.5	118.65	-116.1	-52.6	292.6	263.9	28.72	10.189	
7,185.0	6,936.7	7,265.8	7,067.9	15.9	15.7	119.27	-155.4	-52.7	294.3	265.4	28.91	10.179	
7,200.0	6,941.2	7,284.5	7,075.2	16.0	15.8	119.51	-172.6	-52.8	295.0	266.0	29.01	10.168	
7,250.0	6,954.2	7,347.3	7,096.3	16.3	16.2	120.21	-231.8	-53.0	296.9	267.5	29.45	10.084	
7,283.4	6,961.0	7,389.6	7,107.5	16.6	16.5	120.59	-272.5	-53.2	298.0	268.2	29.84	9.989	
7,300.0	6,963.8	7,410.6	7,112.2	16.7	16.6	120.75	-293.0	-53.2	298.5	268.5	30.05	9.934	
7,350.0	6,970.0	7,474.2	7,122.7	17.2	17.2	121.11	-355.7	-53.5	299.6	268.8	30.81	9.725	
7,381.9	6,972.1	7,514.9	7,126.5	17.5	17.5	121.26	-396.2	-53.6	300.0	268.7	31.37	9.563	
7,400.0	6,972.7	7,538.1	7,127.6	17.7	17.8	121.31	-419.3	-53.7	300.2	268.5	31.72	9.464	
7,420.0	6,972.8	7,563.5	7,128.0	17.9	18.0	121.35	-444.7	-53.8	300.3	268.2	32.12	9.349	
7,480.3	6,972.2	7,623.8	7,127.9	18.5	18.6	121.42	-505.0	-54.0	300.5	267.3	33.24	9.042	
7,500.0	6,972.0	7,643.5	7,127.8	18.7	18.9	121.44	-524.7	-54.1	300.6	267.0	33.61	8.943	
7,578.7	6,971.3	7,722.2	7,127.6	19.7	19.7	121.52	-603.5	-54.4	300.9	265.7	35.16	8.556	
7,600.0	6,971.1	7,743.5	7,127.6	19.9	20.0	121.55	-624.7	-54.5	300.9	265.4	35.57	8.459	
7,677.1	6,970.4	7,820.6	7,127.4	20.9	20.8	121.63	-701.9	-54.7	301.2	264.1	37.16	8.106	
7,700.0	6,970.2	7,843.5	7,127.4	21.2	21.1	121.66	-724.7	-54.8	301.3	263.6	37.64	8.004	
7,775.6	6,969.5	7,919.1	7,127.2	22.2	22.0	121.74	-800.3	-55.1	301.6	262.2	39.35	7.664	
7,800.0	6,969.3	7,943.5	7,127.1	22.6	22.3	121.77	-824.7	-55.2	301.6	261.7	39.93	7.554	
7,874.0	6,968.6	8,017.5	7,127.0	23.7	23.4	121.85	-898.7	-55.5	301.9	260.1	41.77	7.228	
7,900.0	6,968.4	8,043.5	7,126.9	24.1	23.7	121.88	-924.7	-55.6	302.0	259.6	42.43	7.118	
7,972.4	6,967.8	8,115.9	7,126.7	25.2	24.8	121.96	-997.1	-55.8	302.3	258.0	44.31	6.822	
8,000.0	6,967.5	8,143.5	7,126.7	25.6	25.2	121.99	-1,024.7	-55.9	302.4	257.3	45.04	6.714	
8,070.8	6,966.9	8,214.3	7,126.5	26.7	26.3	122.06	-1,095.6	-56.2	302.6	255.7	46.95	6.446	
8,100.0	6,966.6	8,243.5	7,126.5	27.2	26.8	122.10	-1,124.7	-56.3	302.7	255.0	47.74	6.341	
8,169.3	6,966.0	8,312.7	7,126.3	28.3	27.9	122.17	-1,194.0	-56.6	303.0	253.3	49.66	6.102	
8,200.0	6,965.7	8,343.5	7,126.2	28.8	28.4	122.21	-1,224.7	-56.7	303.1	252.6	50.51	6.000	
8,267.7	6,965.1	8,411.2	7,126.1	30.0	29.5	122.28	-1,292.4	-56.9	303.3	250.9	52.43	5.785	
8,300.0	6,964.8	8,443.5	7,126.0	30.5	30.0	122.31	-1,324.7	-57.0	303.5	250.1	53.35	5.688	
8,366.1	6,964.2	8,509.6	7,125.8	31.7	31.1	122.39	-1,390.8	-57.3	303.7	248.4	55.26	5.496	
8,400.0	6,963.9	8,543.5	7,125.8	32.2	31.7	122.42	-1,424.7	-57.4	303.8	247.6	56.24	5.402	
8,464.5	6,963.3	8,608.0	7,125.6	33.4	32.8	122.49	-1,489.3	-57.6	304.1	245.9	58.13	5.230	
8,500.0	6,963.0	8,643.5	7,125.5	34.0	33.4	122.53	-1,524.7	-57.8	304.2	245.0	59.18	5.140	
8,563.0	6,962.4	8,706.4	7,125.4	35.1	34.5	122.60	-1,587.7	-58.0	304.4	243.4	61.05	4.987	
8,600.0	6,962.0	8,743.5	7,125.3	35.8	35.1	122.64	-1,624.7	-58.1	304.6	242.4	62.15	4.901	
8,661.4	6,961.5	8,804.9	7,125.2	36.9	36.2	122.71	-1,686.1	-58.4	304.8	240.8	63.99	4.763	
8,700.0	6,961.1	8,843.5	7,125.1	37.6	36.8	122.75	-1,724.7	-58.5	304.9	239.8	65.15	4.681	
8,759.8	6,960.6	8,903.3	7,125.0	38.7	37.9	122.81	-1,784.5	-58.7	305.2	238.2	66.95	4.558	
8,800.0	6,960.2	8,943.5	7,124.9	39.4	38.6	122.86	-1,824.7	-58.9	305.3	237.1	68.17	4.478	
8,858.2	6,959.7	9,001.7	7,124.7	40.5	39.6	122.92	-1,882.9	-59.1	305.5	235.6	69.94	4.368	
8,900.0	6,959.3	9,043.5	7,124.6	41.2	40.4	122.96	-1,924.7	-59.2	305.7	234.5	71.22	4.292	
8,956.7	6,958.8	9,100.1	7,124.5	42.3	41.4	123.02	-1,981.4	-59.4	305.9	232.9	72.95	4.193	
9,000.0	6,958.4	9,143.5	7,124.4	43.1	42.1	123.07	-2,024.7	-59.6	306.0	231.8	74.28	4.120	
9,055.1	6,957.9	9,198.6	7,124.3	44.1	43.1	123.13	-2,079.8	-59.8	306.3	230.3	75.98	4.031	
9,100.0	6,957.5	9,243.5	7,124.2	44.9	43.9	123.18	-2,124.7	-60.0	306.4	229.1	77.36	3.961	
9,153.5	6,957.0	9,297.0	7,124.1	45.9	44.9	123.24	-2,178.2	-60.2	306.6	227.6	79.01	3.881	
9,200.0	6,956.6	9,343.4	7,124.0	46.8	45.7	123.28	-2,224.7	-60.3	306.8	226.4	80.45	3.814	
9,251.9	6,956.1	9,395.4	7,123.8	47.8	46.7	123.34	-2,276.6	-60.5	307.0	224.9	82.06	3.741	
9,300.0	6,955.7	9,443.4	7,123.7	48.7	47.6	123.39	-2,324.7	-60.7	307.2	223.6	83.55	3.677	
9,350.4	6,955.2	9,493.8	7,123.6	49.6	48.5	123.44	-2,375.0	-60.9	307.4	222.3	85.11	3.611	
9,400.0	6,954.8	9,543.4	7,123.5	50.6	49.4	123.50	-2,424.7	-61.1	307.6	220.9	86.66	3.549	
9,448.8	6,954.3	9,592.2	7,123.4	51.5	50.3	123.55	-2,473.5	-61.2	307.7	219.6	88.18	3.490	
9,500.0	6,953.9	9,643.4	7,123.3	52.5	51.2	123.60	-2,524.7	-61.4	307.9	218.2	89.77	3.430	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

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	
9,547.2	6,953.4	9,690.7	7,123.2	53.4	52.1	123.65	-2,571.9	-61.6	308.1	216.9	91.24	3.377	
9,600.0	6,952.9	9,743.4	7,123.1	54.4	53.0	123.71	-2,624.7	-61.8	308.3	215.4	92.89	3.319	
9,645.6	6,952.5	9,789.1	7,123.0	55.2	53.9	123.76	-2,670.3	-62.0	308.5	214.2	94.32	3.271	
9,700.0	6,952.0	9,843.4	7,122.8	56.3	54.9	123.82	-2,724.7	-62.2	308.7	212.7	96.01	3.215	
9,744.1	6,951.6	9,887.5	7,122.7	57.1	55.7	123.86	-2,768.7	-62.3	308.9	211.5	97.39	3.171	
9,800.0	6,951.1	9,943.4	7,122.6	58.2	56.7	123.92	-2,824.7	-62.5	309.1	209.9	99.14	3.118	
9,842.5	6,950.7	9,985.9	7,122.5	59.0	57.5	123.97	-2,867.2	-62.7	309.2	208.8	100.47	3.078	
9,900.0	6,950.2	10,043.4	7,122.4	60.1	58.6	124.03	-2,924.7	-62.9	309.5	207.2	102.27	3.026	
9,940.9	6,949.8	10,084.4	7,122.3	60.9	59.3	124.07	-2,965.6	-63.0	309.6	206.1	103.55	2.990	
10,000.0	6,949.3	10,143.4	7,122.2	62.0	60.4	124.13	-3,024.7	-63.2	309.9	204.5	105.40	2.940	
10,039.3	6,948.9	10,182.8	7,122.1	62.8	61.2	124.17	-3,064.0	-63.4	310.0	203.4	106.63	2.907	
10,100.0	6,948.4	10,243.4	7,121.9	64.0	62.3	124.24	-3,124.6	-63.6	310.2	201.7	108.53	2.859	
10,137.8	6,948.0	10,281.2	7,121.8	64.7	63.0	124.27	-3,162.4	-63.8	310.4	200.7	109.71	2.829	
10,200.0	6,947.5	10,343.4	7,121.7	65.9	64.2	124.34	-3,224.6	-64.0	310.6	199.0	111.66	2.782	
10,236.2	6,947.1	10,379.6	7,121.6	66.6	64.8	124.38	-3,260.8	-64.1	310.8	198.0	112.79	2.755	
10,300.0	6,946.6	10,443.4	7,121.5	67.8	66.0	124.44	-3,324.6	-64.3	311.0	196.2	114.78	2.710	
10,334.6	6,946.3	10,478.0	7,121.4	68.5	66.7	124.48	-3,359.3	-64.5	311.2	195.3	115.87	2.685	
10,400.0	6,945.7	10,543.4	7,121.3	69.8	67.9	124.55	-3,424.6	-64.7	311.4	193.5	117.91	2.641	
10,433.0	6,945.4	10,576.5	7,121.2	70.4	68.5	124.58	-3,457.7	-64.8	311.5	192.6	118.95	2.619	
10,500.0	6,944.7	10,643.4	7,121.0	71.7	69.8	124.65	-3,524.6	-65.1	311.8	190.8	121.04	2.576	
10,531.5	6,944.5	10,674.9	7,121.0	72.3	70.4	124.68	-3,556.1	-65.2	311.9	189.9	122.02	2.556	
10,600.0	6,943.8	10,743.4	7,120.8	73.7	71.6	124.76	-3,624.6	-65.4	312.2	188.0	124.16	2.514	
10,629.9	6,943.6	10,773.3	7,120.7	74.2	72.2	124.79	-3,654.5	-65.5	312.3	187.2	125.10	2.497	
10,700.0	6,942.9	10,843.4	7,120.6	75.6	73.5	124.86	-3,724.6	-65.8	312.6	185.3	127.28	2.456	
10,728.3	6,942.7	10,871.7	7,120.5	76.2	74.0	124.89	-3,753.0	-65.9	312.7	184.5	128.17	2.440	
10,800.0	6,942.0	10,943.4	7,120.4	77.6	75.4	124.96	-3,824.6	-66.2	313.0	182.6	130.40	2.400	
10,826.7	6,941.8	10,970.2	7,120.3	78.1	75.9	124.99	-3,851.4	-66.3	313.1	181.8	131.24	2.386	
10,900.0	6,941.1	11,043.4	7,120.1	79.5	77.3	125.06	-3,924.6	-66.5	313.4	179.9	133.52	2.347	
10,925.2	6,940.9	11,068.6	7,120.1	80.0	77.7	125.09	-3,949.8	-66.6	313.5	179.2	134.30	2.334	
11,000.0	6,940.2	11,143.4	7,119.9	81.5	79.2	125.17	-4,024.6	-66.9	313.8	177.1	136.63	2.296	
11,023.6	6,940.0	11,167.0	7,119.8	81.9	79.6	125.19	-4,048.2	-67.0	313.9	176.5	137.37	2.285	
11,100.0	6,939.3	11,243.4	7,119.7	83.4	81.0	125.27	-4,124.6	-67.3	314.2	174.4	139.74	2.248	
11,122.0	6,939.1	11,265.4	7,119.6	83.8	81.5	125.29	-4,146.6	-67.3	314.3	173.8	140.43	2.238	
11,200.0	6,938.4	11,343.4	7,119.5	85.4	82.9	125.37	-4,224.6	-67.6	314.6	171.7	142.85	2.202	
11,220.4	6,938.2	11,363.9	7,119.4	85.8	83.3	125.39	-4,245.1	-67.7	314.7	171.2	143.48	2.193	
11,300.0	6,937.4	11,443.4	7,119.2	87.3	84.8	125.47	-4,324.6	-68.0	315.0	169.0	145.95	2.158	
11,318.9	6,937.3	11,462.3	7,119.2	87.7	85.2	125.49	-4,343.5	-68.1	315.0	168.5	146.53	2.150	
11,400.0	6,936.5	11,543.4	7,119.0	89.3	86.7	125.57	-4,424.6	-68.4	315.4	166.3	149.05	2.116	
11,417.3	6,936.4	11,560.7	7,119.0	89.6	87.0	125.59	-4,441.9	-68.4	315.4	165.9	149.58	2.109	
11,500.0	6,935.6	11,643.4	7,118.8	91.3	88.6	125.68	-4,524.6	-68.7	315.8	163.6	152.14	2.076	
11,515.7	6,935.5	11,659.1	7,118.7	91.6	88.9	125.69	-4,540.3	-68.8	315.8	163.2	152.63	2.069	
11,600.0	6,934.7	11,743.4	7,118.6	93.2	90.5	125.78	-4,624.6	-69.1	316.2	161.0	155.23	2.037	
11,614.1	6,934.6	11,757.5	7,118.5	93.5	90.8	125.79	-4,638.8	-69.1	316.2	160.6	155.67	2.032	
11,700.0	6,933.8	11,843.4	7,118.3	95.2	92.4	125.88	-4,724.6	-69.4	316.6	158.3	158.31	2.000	
11,712.6	6,933.7	11,856.0	7,118.3	95.4	92.6	125.89	-4,737.2	-69.5	316.6	157.9	158.70	1.995	
11,800.0	6,932.9	11,943.4	7,118.1	97.1	94.3	125.98	-4,824.6	-69.8	317.0	155.6	161.39	1.964	
11,811.0	6,932.8	11,954.4	7,118.1	97.4	94.5	125.99	-4,835.6	-69.9	317.0	155.3	161.73	1.960	
11,900.0	6,932.0	12,043.4	7,117.9	99.1	96.2	126.08	-4,924.6	-70.2	317.4	152.9	164.47	1.930	
11,909.4	6,931.9	12,052.8	7,117.9	99.3	96.3	126.09	-4,934.0	-70.2	317.4	152.7	164.76	1.927	
12,000.0	6,931.0	12,143.4	7,117.7	101.1	98.1	126.18	-5,024.6	-70.5	317.8	150.3	167.54	1.897	
12,007.8	6,931.0	12,151.2	7,117.6	101.2	98.2	126.19	-5,032.4	-70.6	317.8	150.1	167.78	1.894	
12,100.0	6,930.1	12,243.4	7,117.4	103.0	100.0	126.28	-5,124.6	-70.9	318.2	147.6	170.60	1.865	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

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
12,106.3	6,930.1	12,249.7	7,117.4	103.2	100.1	126.29	-5,130.9	-70.9	318.2	147.5	170.80	1.863	
12,200.0	6,929.2	12,343.4	7,117.2	105.0	101.9	126.38	-5,224.6	-71.3	318.6	145.0	173.66	1.835	
12,204.7	6,929.2	12,348.1	7,117.2	105.1	101.9	126.38	-5,229.3	-71.3	318.7	144.8	173.81	1.833	
12,300.0	6,928.3	12,443.4	7,117.0	107.0	103.8	126.48	-5,324.6	-71.6	319.0	142.3	176.72	1.805	
12,303.1	6,928.3	12,446.5	7,117.0	107.1	103.8	126.48	-5,327.7	-71.6	319.1	142.2	176.81	1.804	
12,400.0	6,927.4	12,543.4	7,116.8	109.0	105.7	126.58	-5,424.6	-72.0	319.5	139.7	179.77	1.777	
12,401.5	6,927.4	12,544.9	7,116.8	109.0	105.7	126.58	-5,426.1	-72.0	319.5	139.7	179.82	1.777	
12,500.0	6,926.5	12,643.4	7,116.5	110.9	107.6	126.68	-5,524.6	-72.4	319.9	137.1	182.81	1.750	
12,598.4	6,925.6	12,741.8	7,116.3	112.9	109.4	126.77	-5,623.0	-72.7	320.3	134.5	185.80	1.724	
12,600.0	6,925.6	12,743.4	7,116.3	112.9	109.5	126.77	-5,624.6	-72.7	320.3	134.4	185.85	1.723	
12,696.8	6,924.7	12,840.2	7,116.1	114.8	111.3	126.87	-5,721.4	-73.1	320.7	131.9	188.79	1.699	
12,700.0	6,924.6	12,843.4	7,116.1	114.9	111.4	126.87	-5,724.6	-73.1	320.7	131.8	188.89	1.698	
12,795.2	6,923.8	12,938.6	7,115.9	116.8	113.2	126.97	-5,819.8	-73.4	321.1	129.3	191.77	1.674	
12,800.0	6,923.7	12,943.4	7,115.9	116.9	113.3	126.97	-5,824.6	-73.5	321.1	129.2	191.91	1.673	
12,893.7	6,922.9	13,037.0	7,115.6	118.7	115.0	127.06	-5,918.2	-73.8	321.5	126.8	194.75	1.651	
12,900.0	6,922.8	13,043.4	7,115.6	118.8	115.2	127.07	-5,924.6	-73.8	321.5	126.6	194.94	1.649	
12,992.1	6,922.0	13,135.5	7,115.4	120.6	116.9	127.16	-6,016.7	-74.2	321.9	124.2	197.72	1.628	
13,000.0	6,921.9	13,143.4	7,115.4	120.8	117.1	127.17	-6,024.6	-74.2	322.0	124.0	197.95	1.626	
13,090.5	6,921.1	13,233.9	7,115.2	122.6	118.8	127.26	-6,115.1	-74.5	322.3	121.7	200.68	1.606	
13,100.0	6,921.0	13,243.4	7,115.2	122.8	119.0	127.27	-6,124.6	-74.5	322.4	121.4	200.97	1.604	
13,188.9	6,920.2	13,332.3	7,115.0	124.5	120.7	127.35	-6,213.5	-74.9	322.8	119.1	203.64	1.585	
13,200.0	6,920.1	13,343.4	7,115.0	124.8	120.9	127.36	-6,224.5	-74.9	322.8	118.8	203.97	1.583	
13,287.4	6,919.3	13,430.7	7,114.8	126.5	122.5	127.45	-6,311.9	-75.2	323.2	116.6	206.59	1.564	
13,300.0	6,919.1	13,443.4	7,114.7	126.7	122.8	127.46	-6,324.5	-75.3	323.2	116.3	206.97	1.562	
13,385.8	6,918.4	13,529.2	7,114.5	128.4	124.4	127.54	-6,410.3	-75.6	323.6	114.1	209.54	1.544	
13,400.0	6,918.2	13,543.4	7,114.5	128.7	124.7	127.56	-6,424.5	-75.6	323.7	113.7	209.97	1.541	
13,484.2	6,917.5	13,627.6	7,114.3	130.4	126.3	127.64	-6,508.8	-75.9	324.0	111.5	212.49	1.525	
13,500.0	6,917.3	13,643.3	7,114.3	130.7	126.6	127.65	-6,524.5	-76.0	324.1	111.1	212.96	1.522	
13,582.6	6,916.6	13,726.0	7,114.1	132.3	128.2	127.73	-6,607.2	-76.3	324.4	109.0	215.42	1.506	
13,600.0	6,916.4	13,743.3	7,114.1	132.7	128.5	127.75	-6,624.5	-76.4	324.5	108.6	215.94	1.503	
13,681.1	6,915.6	13,824.4	7,113.9	134.3	130.0	127.83	-6,705.6	-76.7	324.9	106.5	218.35	1.488 Level 3	
13,700.0	6,915.5	13,843.3	7,113.8	134.6	130.4	127.85	-6,724.5	-76.7	324.9	106.0	218.92	1.484 Level 3	
13,779.5	6,914.7	13,922.8	7,113.7	136.2	131.9	127.92	-6,804.0	-77.0	325.3	104.0	221.28	1.470 Level 3	
13,800.0	6,914.6	13,943.3	7,113.6	136.6	132.3	127.94	-6,824.5	-77.1	325.4	103.5	221.89	1.466 Level 3	
13,877.9	6,913.8	14,021.3	7,113.4	138.2	133.8	128.02	-6,902.5	-77.4	325.7	101.5	224.20	1.453 Level 3	
13,900.0	6,913.6	14,043.3	7,113.4	138.6	134.2	128.04	-6,924.5	-77.5	325.8	100.9	224.86	1.449 Level 3	
13,976.3	6,912.9	14,119.7	7,113.2	140.1	135.7	128.11	-7,000.9	-77.7	326.1	99.0	227.12	1.436 Level 3	
14,000.0	6,912.7	14,143.3	7,113.2	140.6	136.1	128.13	-7,024.5	-77.8	326.2	98.4	227.82	1.432 Level 3	
14,074.8	6,912.0	14,218.1	7,113.0	142.0	137.5	128.20	-7,099.3	-78.1	326.6	96.6	229.98	1.420 Level 3	
14,079.0	6,912.0	14,219.1	7,113.0	142.1	137.6	128.21	-7,100.3	-78.1	326.6	96.5	230.06	1.420 Level 3, SF	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

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	2.0	2.0	0.0	0.0	89.99	0.0	58.6	58.6				
98.4	98.4	100.4	100.4	0.1	0.1	89.99	0.0	58.6	58.6	58.4	0.19	302.433	
100.0	100.0	102.0	102.0	0.1	0.1	89.99	0.0	58.6	58.6	58.4	0.20	294.360	
196.8	196.8	198.8	198.8	0.3	0.3	89.99	0.0	58.6	58.6	57.9	0.63	92.314	
200.0	200.0	202.0	202.0	0.3	0.3	89.99	0.0	58.6	58.6	57.9	0.65	90.298	
295.3	295.3	297.3	297.3	0.5	0.5	89.99	0.0	58.6	58.6	57.5	1.08	54.380	
300.0	300.0	302.0	302.0	0.5	0.6	89.99	0.0	58.6	58.6	57.5	1.10	53.328	
393.7	393.7	395.7	395.7	0.8	0.8	89.99	0.0	58.6	58.6	57.0	1.52	38.543	
400.0	400.0	402.0	402.0	0.8	0.8	89.99	0.0	58.6	58.6	57.0	1.55	37.837	
492.1	492.1	494.1	494.1	1.0	1.0	89.99	0.0	58.6	58.6	56.6	1.96	29.849	
500.0	500.0	502.0	502.0	1.0	1.0	89.99	0.0	58.6	58.6	56.6	2.00	29.320	
590.5	590.5	592.5	592.5	1.2	1.2	89.99	0.0	58.6	58.6	56.1	2.40	24.356	
600.0	600.0	602.0	602.0	1.2	1.2	89.99	0.0	58.6	58.6	56.1	2.45	23.933	
689.0	689.0	691.0	691.0	1.4	1.4	89.99	0.0	58.6	58.6	55.7	2.85	20.570	
700.0	700.0	702.0	702.0	1.4	1.5	89.99	0.0	58.6	58.6	55.7	2.90	20.218	
787.4	787.4	789.4	789.4	1.6	1.6	89.99	0.0	58.6	58.6	55.3	3.29	17.803	
800.0	800.0	802.0	802.0	1.7	1.7	89.99	0.0	58.6	58.6	55.2	3.35	17.501	
885.8	885.8	887.8	887.8	1.9	1.9	89.99	0.0	58.6	58.6	54.8	3.73	15.692	
900.0	900.0	902.0	902.0	1.9	1.9	89.99	0.0	58.6	58.6	54.8	3.80	15.428	
984.2	984.2	986.2	986.2	2.1	2.1	89.99	0.0	58.6	58.6	54.4	4.17	14.028	
989.0	989.0	991.0	991.0	2.1	2.1	89.99	0.0	58.6	58.6	54.4	4.20	13.957 CC	
1,000.0	1,000.0	1,002.0	1,002.0	2.1	2.1	89.99	0.0	58.6	58.6	54.3	4.24	13.795 ES	
1,082.7	1,082.7	1,083.1	1,083.0	2.3	2.3	89.60	0.4	59.7	59.7	55.1	4.61	12.964	
1,100.0	1,100.0	1,100.0	1,100.0	2.3	2.3	89.43	0.6	60.2	60.2	55.5	4.68	12.866	
1,181.1	1,181.1	1,179.4	1,179.3	2.5	2.5	88.28	1.9	63.8	64.0	58.9	5.03	12.712	
1,200.0	1,200.0	1,197.9	1,197.7	2.6	2.5	87.94	2.3	65.0	65.2	60.0	5.11	12.740	
1,279.5	1,279.5	1,275.4	1,275.0	2.7	2.7	50.44	4.5	71.0	70.7	65.3	5.45	12.969	
1,300.0	1,300.0	1,295.4	1,294.9	2.8	2.8	50.34	5.2	72.9	72.3	66.7	5.54	13.043	
1,377.9	1,377.8	1,371.2	1,370.1	3.0	3.0	50.45	8.2	81.1	78.5	72.7	5.87	13.368	
1,400.0	1,399.8	1,392.6	1,391.3	3.0	3.0	50.61	9.2	83.8	80.4	74.4	5.97	13.473	
1,476.4	1,475.9	1,466.6	1,464.5	3.2	3.2	51.48	12.9	94.2	87.3	81.0	6.30	13.860	
1,500.0	1,499.5	1,489.4	1,487.0	3.2	3.3	51.84	14.2	97.8	89.6	83.2	6.40	13.992	
1,574.8	1,573.7	1,561.5	1,558.0	3.4	3.5	53.20	18.7	110.1	97.2	90.5	6.74	14.417	
1,600.0	1,598.7	1,585.8	1,581.7	3.5	3.6	53.72	20.3	114.7	99.9	93.1	6.86	14.571	
1,673.2	1,671.1	1,658.1	1,652.4	3.7	3.8	55.53	25.5	128.8	107.7	100.5	7.22	14.931	
1,700.0	1,697.5	1,684.6	1,678.4	3.7	3.9	56.32	27.3	134.0	110.4	103.0	7.35	15.018	
1,771.6	1,767.9	1,755.8	1,748.0	4.0	4.2	58.79	32.4	147.9	116.9	109.1	7.74	15.110	
1,800.1	1,795.7	1,784.1	1,775.7	4.0	4.3	59.90	34.4	153.4	119.3	111.4	7.89	15.110	
1,870.1	1,864.2	1,853.5	1,843.6	4.3	4.5	62.68	39.3	167.0	125.2	116.9	8.32	15.046	
1,900.0	1,893.4	1,883.2	1,872.7	4.4	4.6	63.79	41.4	172.8	127.8	119.3	8.51	15.025	
1,968.5	1,960.4	1,951.3	1,939.2	4.6	4.9	66.16	46.2	186.1	134.0	125.1	8.96	14.963	
2,000.0	1,991.3	1,982.5	1,969.8	4.7	5.0	67.18	48.4	192.2	136.9	127.8	9.17	14.936	
2,066.9	2,056.7	2,049.0	2,034.8	5.0	5.3	69.21	53.1	205.2	143.3	133.6	9.63	14.871	
2,100.0	2,089.1	2,081.8	2,066.9	5.1	5.4	70.14	55.5	211.6	146.4	136.6	9.87	14.843	
2,165.3	2,153.0	2,146.7	2,130.4	5.3	5.7	71.88	60.1	224.3	152.8	142.5	10.34	14.781	
2,200.0	2,186.9	2,181.1	2,164.0	5.5	5.8	72.74	62.5	231.0	156.3	145.7	10.60	14.751	
2,263.8	2,249.3	2,244.4	2,225.9	5.7	6.1	74.23	67.0	243.4	162.7	151.6	11.07	14.693	
2,300.0	2,284.7	2,280.4	2,261.1	5.8	6.3	75.03	69.5	250.4	166.4	155.1	11.35	14.662	
2,362.2	2,345.5	2,342.1	2,321.5	6.1	6.5	76.31	73.9	262.5	172.8	161.0	11.83	14.609	
2,400.0	2,382.5	2,379.6	2,358.2	6.2	6.7	77.05	76.6	269.8	176.8	164.6	12.13	14.579	
2,460.6	2,441.8	2,439.8	2,417.1	6.5	6.9	78.16	80.8	281.6	183.1	170.5	12.60	14.531	
2,500.0	2,480.3	2,478.9	2,455.3	6.6	7.1	78.85	83.6	289.2	187.3	174.4	12.92	14.502	

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 HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,559.0	2,538.1	2,537.5	2,512.7	6.9	7.4	79.82	87.8	300.7	193.6	180.2	13.39	14.459	
2,600.0	2,578.1	2,578.2	2,552.4	7.0	7.5	80.45	90.6	308.6	198.0	184.3	13.72	14.432	
2,657.5	2,634.4	2,635.3	2,608.3	7.3	7.8	81.30	94.7	319.8	204.3	190.1	14.19	14.394	
2,700.0	2,675.9	2,677.5	2,649.5	7.5	8.0	81.89	97.7	328.0	208.9	194.4	14.54	14.368	
2,755.9	2,730.6	2,733.0	2,703.8	7.7	8.2	82.63	101.6	338.9	215.0	200.0	15.00	14.335	
2,800.0	2,773.8	2,776.8	2,746.7	7.9	8.4	83.19	104.7	347.4	219.9	204.5	15.36	14.311	
2,854.3	2,826.9	2,830.7	2,799.4	8.1	8.6	83.84	108.5	358.0	225.9	210.1	15.82	14.282	
2,857.4	2,829.9	2,833.7	2,802.4	8.1	8.6	83.88	108.7	358.6	226.2	210.4	15.84	14.280	
2,900.0	2,871.6	2,876.0	2,843.8	8.3	8.8	84.38	111.7	366.9	231.0	214.8	16.18	14.279	
2,952.7	2,923.5	2,928.4	2,895.0	8.4	9.1	84.77	115.5	377.1	237.0	220.4	16.55	14.319	
3,000.0	2,970.1	2,975.4	2,940.9	8.6	9.3	84.91	118.8	386.3	242.4	225.5	16.88	14.364	
3,051.2	3,020.7	3,026.2	2,990.6	8.7	9.5	84.87	122.4	396.2	248.4	231.2	17.21	14.436	
3,100.0	3,069.1	3,074.6	3,038.0	8.9	9.7	84.64	125.8	405.7	254.2	236.7	17.51	14.514	
3,149.6	3,118.3	3,123.8	3,086.2	9.0	9.9	84.23	129.3	415.3	260.1	242.3	17.80	14.617	
3,200.0	3,168.5	3,173.8	3,135.0	9.1	10.1	83.66	132.8	425.1	266.3	248.2	18.08	14.733	
3,248.0	3,216.3	3,221.2	3,181.4	9.2	10.4	82.98	136.2	434.3	272.3	254.0	18.32	14.870	
3,300.0	3,268.2	3,272.6	3,231.6	9.3	10.6	82.10	139.8	444.4	279.0	260.5	18.56	15.032	
3,346.4	3,314.6	3,318.3	3,276.4	9.4	10.8	81.20	143.1	453.3	285.2	266.5	18.76	15.206	
3,400.0	3,368.1	3,370.9	3,327.9	9.5	11.0	80.04	146.8	463.6	292.6	273.6	18.97	15.426	
3,444.9	3,413.0	3,414.9	3,370.9	9.6	11.2	78.98	149.9	472.2	299.1	279.9	19.12	15.640	
3,457.5	3,425.6	3,427.3	3,382.9	9.6	11.3	115.18	150.8	474.6	300.9	281.8	19.15	15.715	
3,500.0	3,468.1	3,468.9	3,423.6	9.7	11.5	114.02	153.7	482.7	307.3	288.0	19.28	15.939	
3,543.3	3,511.4	3,511.2	3,465.1	9.7	11.6	112.89	156.7	491.0	313.9	294.5	19.42	16.166	
3,600.0	3,568.1	3,566.7	3,519.3	9.8	11.9	111.48	160.7	501.9	322.7	303.1	19.60	16.467	
3,641.7	3,609.9	3,607.5	3,559.2	9.9	12.1	110.50	163.6	509.8	329.4	309.6	19.73	16.691	
3,700.0	3,668.1	3,664.5	3,615.0	10.0	12.3	109.18	167.6	521.0	338.8	318.8	19.92	17.007	
3,740.1	3,708.3	3,703.8	3,653.4	10.1	12.5	108.31	170.4	528.7	345.3	325.3	20.05	17.225	
3,800.0	3,768.1	3,762.3	3,710.7	10.2	12.8	107.08	174.5	540.1	355.3	335.0	20.24	17.550	
3,838.6	3,806.7	3,800.0	3,747.6	10.2	12.9	106.32	177.2	547.5	361.8	341.4	20.37	17.760	
3,900.0	3,868.1	3,860.1	3,806.3	10.3	13.2	105.17	181.5	559.2	372.2	351.6	20.57	18.092	
3,937.0	3,905.1	3,896.3	3,841.7	10.4	13.4	104.50	184.0	566.3	378.6	357.9	20.70	18.292	
4,000.0	3,968.1	3,957.9	3,902.0	10.5	13.6	103.42	188.4	578.4	389.5	368.6	20.91	18.630	
4,035.4	4,003.6	3,992.6	3,935.9	10.6	13.8	102.84	190.8	585.1	395.7	374.7	21.03	18.818	
4,100.0	4,068.1	4,055.7	3,997.7	10.7	14.1	101.82	195.3	597.5	407.2	385.9	21.25	19.160	
4,133.8	4,102.0	4,088.9	4,030.1	10.8	14.2	101.31	197.7	603.9	413.2	391.8	21.37	19.337	
4,200.0	4,168.1	4,153.6	4,093.4	10.9	14.5	100.35	202.3	616.6	425.1	403.5	21.60	19.679	
4,232.3	4,200.4	4,185.1	4,124.3	10.9	14.7	99.91	204.5	622.8	430.9	409.2	21.72	19.844	
4,300.0	4,268.1	4,251.4	4,189.0	11.1	15.0	99.01	209.2	635.7	443.3	421.3	21.96	20.187	
4,330.7	4,298.8	4,281.4	4,218.4	11.1	15.1	98.61	211.3	641.6	448.9	426.8	22.07	20.340	
4,400.0	4,368.1	4,349.2	4,284.7	11.2	15.4	97.76	216.1	654.8	461.7	439.3	22.32	20.682	
4,429.1	4,397.3	4,377.7	4,312.6	11.3	15.5	97.42	218.1	660.4	467.1	444.6	22.43	20.824	
4,500.0	4,468.1	4,447.0	4,380.4	11.4	15.9	96.62	223.0	674.0	480.3	457.6	22.69	21.164	
4,527.5	4,495.7	4,474.0	4,406.8	11.5	16.0	96.32	224.9	679.2	485.4	462.6	22.80	21.294	
4,600.0	4,568.1	4,544.8	4,476.1	11.6	16.3	95.55	230.0	693.1	499.0	476.0	23.07	21.631	
4,626.0	4,594.1	4,570.2	4,500.9	11.7	16.4	95.29	231.8	698.1	503.9	480.8	23.17	21.751	
4,700.0	4,668.1	4,642.6	4,571.8	11.8	16.7	94.57	236.9	712.2	517.9	494.5	23.45	22.085	
4,724.4	4,692.5	4,666.5	4,595.1	11.8	16.8	94.34	238.6	716.9	522.6	499.0	23.55	22.193	
4,800.0	4,768.1	4,740.4	4,667.4	12.0	17.2	93.65	243.8	731.3	537.0	513.2	23.84	22.524	
4,822.8	4,791.0	4,762.8	4,689.3	12.0	17.3	93.45	245.4	735.7	541.4	517.4	23.93	22.623	
4,900.0	4,868.1	4,838.3	4,763.1	12.2	17.6	92.80	250.8	750.4	556.2	532.0	24.24	22.950	
4,921.2	4,889.4	4,859.0	4,783.4	12.2	17.7	92.62	252.2	754.5	560.3	536.0	24.32	23.038	
5,000.0	4,968.1	4,936.1	4,858.8	12.4	18.1	92.00	257.7	769.6	575.5	550.9	24.63	23.361	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,019.7	4,987.8	4,955.3	4,877.6	12.4	18.2	91.85	259.1	773.3	579.3	554.6	24.71	23.441	
5,100.0	5,068.1	5,038.5	4,958.9	12.6	18.5	91.22	264.9	789.5	594.8	569.8	25.04	23.753	
5,118.1	5,086.2	5,060.5	4,980.6	12.6	18.6	91.07	266.4	793.6	598.1	573.0	25.12	23.812	
5,200.0	5,168.1	5,161.0	5,079.5	12.8	18.9	90.48	272.4	810.1	611.6	586.1	25.46	24.023	
5,216.5	5,184.7	5,181.5	5,099.7	12.8	19.0	90.37	273.5	813.1	614.0	588.4	25.53	24.052	
5,300.0	5,268.1	5,285.3	5,202.6	13.0	19.3	89.93	278.2	826.0	624.4	598.5	25.87	24.138	
5,314.9	5,283.1	5,304.0	5,221.2	13.0	19.3	89.87	278.9	828.0	626.0	600.0	25.93	24.141	
5,400.0	5,368.1	5,410.8	5,327.6	13.1	19.5	89.57	282.1	837.0	633.2	606.9	26.28	24.097	
5,413.4	5,381.5	5,427.7	5,344.4	13.2	19.6	89.54	282.5	838.1	634.0	607.7	26.33	24.080	
5,500.0	5,468.1	5,537.2	5,453.8	13.3	19.7	89.38	284.2	842.9	637.8	611.1	26.68	23.906	
5,511.8	5,479.9	5,552.1	5,468.7	13.4	19.8	89.37	284.4	843.2	638.1	611.4	26.73	23.873	
5,600.0	5,568.1	5,653.5	5,570.1	13.5	19.9	89.35	284.6	843.9	638.6	611.5	27.07	23.588	
5,610.2	5,578.4	5,663.7	5,580.4	13.6	19.9	89.35	284.6	843.9	638.6	611.5	27.11	23.554	
5,700.0	5,668.1	5,753.5	5,670.1	13.7	20.0	89.35	284.6	843.9	638.6	611.1	27.45	23.261	
5,708.6	5,676.8	5,762.2	5,678.8	13.8	20.0	89.35	284.6	843.9	638.6	611.1	27.49	23.233	
5,800.0	5,768.1	5,853.5	5,770.1	13.9	20.2	89.35	284.6	843.9	638.6	610.8	27.84	22.939	
5,807.1	5,775.2	5,860.6	5,777.2	14.0	20.2	89.35	284.6	843.9	638.6	610.7	27.87	22.916	
5,900.0	5,868.1	5,953.5	5,870.1	14.1	20.3	89.35	284.6	843.9	638.6	610.4	28.23	22.624	
5,905.5	5,873.6	5,959.0	5,875.6	14.1	20.3	89.35	284.6	843.9	638.6	610.3	28.25	22.607	
6,000.0	5,968.1	6,053.5	5,970.1	14.3	20.4	89.35	284.6	843.9	638.6	610.0	28.62	22.316	
6,003.9	5,972.1	6,057.4	5,974.1	14.3	20.4	89.35	284.6	843.9	638.6	610.0	28.63	22.304	
6,100.0	6,068.1	6,153.5	6,070.1	14.5	20.6	89.35	284.6	843.9	638.6	609.6	29.01	22.015	
6,102.3	6,070.5	6,155.9	6,072.5	14.5	20.6	89.35	284.6	843.9	638.6	609.6	29.02	22.008	
6,200.0	6,168.1	6,253.5	6,170.1	14.7	20.7	89.35	284.6	843.9	638.6	609.2	29.40	21.721	
6,200.8	6,168.9	6,254.3	6,170.9	14.7	20.7	89.35	284.6	843.9	638.6	609.2	29.40	21.719	
6,288.5	6,256.6	6,342.0	6,258.6	14.9	20.8	89.35	284.6	843.9	638.6	608.8	29.75	21.467	
6,299.2	6,267.3	6,352.9	6,269.5	14.9	20.8	-90.85	284.5	843.9	638.6	608.8	29.80	21.426	
6,300.0	6,268.1	6,353.7	6,270.3	14.9	20.8	-90.85	284.5	843.9	638.6	608.8	29.81	21.424	
6,350.0	6,318.1	6,404.4	6,320.9	15.0	20.9	-90.84	281.7	843.8	638.6	608.6	29.94	21.326	
6,397.6	6,365.3	6,452.6	6,368.8	15.1	20.9	-90.82	275.8	843.8	638.6	608.5	30.04	21.258	
6,400.0	6,367.7	6,455.0	6,371.1	15.1	20.9	-90.82	275.4	843.8	638.6	608.5	30.04	21.255	
6,450.0	6,416.8	6,505.7	6,420.8	15.1	21.0	-90.79	265.5	843.8	638.6	608.5	30.11	21.210	
6,496.0	6,461.3	6,552.3	6,465.8	15.1	21.0	-90.77	253.4	843.7	638.6	608.4	30.14	21.187	
6,500.0	6,465.1	6,556.3	6,469.6	15.1	21.0	-90.77	252.2	843.7	638.6	608.4	30.14	21.186	
6,550.0	6,512.4	6,606.9	6,517.3	15.1	21.0	-90.73	235.5	843.7	638.6	608.4	30.15	21.179	
6,594.5	6,553.4	6,651.8	6,558.7	15.1	21.0	-90.70	217.8	843.6	638.6	608.4	30.15	21.183	
6,600.0	6,558.4	6,657.4	6,563.7	15.1	21.0	-90.70	215.4	843.6	638.6	608.4	30.14	21.184	
6,650.0	6,603.0	6,708.0	6,608.6	15.1	21.0	-90.66	192.1	843.5	638.6	608.4	30.13	21.194	
6,692.9	6,639.9	6,751.3	6,645.7	15.1	20.9	-90.62	169.7	843.4	638.6	608.4	30.12	21.202	
6,700.0	6,645.9	6,758.5	6,651.7	15.1	20.9	-90.62	165.8	843.4	638.6	608.4	30.12	21.203	
6,750.0	6,686.8	6,808.9	6,692.7	15.1	20.9	-90.57	136.5	843.3	638.6	608.4	30.12	21.203	
6,791.3	6,719.1	6,850.6	6,725.0	15.1	20.9	-90.53	110.2	843.2	638.6	608.4	30.14	21.190	
6,800.0	6,725.7	6,859.4	6,731.6	15.1	20.9	-90.53	104.4	843.2	638.5	608.4	30.14	21.185	
6,850.0	6,762.3	6,909.7	6,768.1	15.1	20.9	-90.48	69.7	843.1	638.5	608.3	30.20	21.141	
6,889.7	6,789.7	6,949.8	6,795.3	15.1	20.9	-90.43	40.3	843.0	638.5	608.3	30.29	21.083	
6,900.0	6,796.5	6,960.1	6,802.1	15.1	20.9	-90.42	32.5	842.9	638.5	608.2	30.31	21.064	
6,950.0	6,828.0	7,010.4	6,833.3	15.1	20.9	-90.37	-6.9	842.8	638.5	608.1	30.49	20.945	
6,988.2	6,850.2	7,048.8	6,855.2	15.1	20.9	-90.33	-38.4	842.7	638.5	607.9	30.66	20.824	
7,000.0	6,856.7	7,060.7	6,861.7	15.1	20.9	-90.31	-48.4	842.6	638.5	607.8	30.73	20.781	
7,050.0	6,882.5	7,110.9	6,887.0	15.2	20.9	-90.25	-91.7	842.5	638.5	607.5	31.05	20.566	
7,086.6	6,899.5	7,147.6	6,903.6	15.3	21.0	-90.21	-124.5	842.4	638.5	607.2	31.34	20.376	
7,100.0	6,905.3	7,161.0	6,909.3	15.4	21.0	-90.20	-136.7	842.3	638.5	607.1	31.45	20.300	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,150.0	6,924.9	7,211.2	6,928.3	15.7	21.1	-90.13	-183.0	842.1	638.5	606.6	31.95	19.985	
7,185.0	6,936.7	7,246.3	6,939.7	15.9	21.2	-90.09	-216.2	842.0	638.5	606.2	32.36	19.734	
7,200.0	6,941.2	7,261.2	6,944.0	16.0	21.2	-90.07	-230.6	842.0	638.5	606.0	32.54	19.623	
7,250.0	6,954.2	7,311.3	6,956.4	16.3	21.4	-90.01	-279.0	841.8	638.5	605.3	33.22	19.221	
7,252.8	6,954.8	7,314.1	6,957.0	16.4	21.4	-90.01	-281.8	841.8	638.5	605.3	33.26	19.197	
7,283.4	6,961.0	7,344.7	6,962.7	16.6	21.5	-89.97	-311.9	841.7	638.5	604.8	33.73	18.931	
7,300.0	6,963.8	7,361.3	6,965.3	16.7	21.6	-89.95	-328.2	841.6	638.5	604.5	33.99	18.786	
7,350.0	6,970.0	7,411.2	6,970.8	17.2	21.9	-89.89	-377.8	841.4	638.5	603.7	34.84	18.326	
7,381.9	6,972.1	7,443.0	6,972.5	17.5	22.1	-89.85	-409.6	841.3	638.5	603.1	35.43	18.023	
7,400.0	6,972.7	7,461.1	6,972.8	17.7	22.2	-89.83	-427.7	841.2	638.5	602.8	35.77	17.852	
7,420.0	6,972.8	7,481.0	6,972.7	17.9	22.3	-89.81	-447.6	841.2	638.5	602.4	36.16	17.658	
7,480.3	6,972.2	7,541.4	6,972.1	18.5	22.8	-89.81	-507.9	840.9	638.5	601.1	37.41	17.070	
7,500.0	6,972.0	7,561.1	6,972.0	18.7	22.9	-89.81	-527.6	840.9	638.5	600.7	37.82	16.885	
7,578.7	6,971.3	7,639.8	6,971.2	19.7	23.6	-89.81	-606.4	840.6	638.5	599.0	39.57	16.139	
7,600.0	6,971.1	7,661.0	6,971.0	19.9	23.8	-89.81	-627.6	840.5	638.5	598.5	40.05	15.945	
7,677.1	6,970.4	7,738.2	6,970.3	20.9	24.6	-89.81	-704.8	840.2	638.5	596.6	41.92	15.231	
7,700.0	6,970.2	7,761.0	6,970.1	21.2	24.9	-89.81	-727.6	840.1	638.5	596.0	42.49	15.027	
7,775.6	6,969.5	7,836.6	6,969.5	22.2	25.8	-89.81	-803.2	839.9	638.5	594.0	44.49	14.351	
7,800.0	6,969.3	7,861.0	6,969.2	22.6	26.0	-89.81	-827.6	839.8	638.5	593.4	45.15	14.142	
7,874.0	6,968.6	7,935.0	6,968.6	23.7	27.0	-89.81	-901.6	839.5	638.5	591.3	47.24	13.515	
7,900.0	6,968.4	7,961.0	6,968.3	24.1	27.3	-89.81	-927.6	839.4	638.5	590.5	47.99	13.305	
7,972.4	6,967.8	8,033.5	6,967.7	25.2	28.2	-89.81	-1,000.0	839.2	638.5	588.4	50.15	12.733	
8,000.0	6,967.5	8,061.0	6,967.4	25.6	28.6	-89.81	-1,027.6	839.0	638.5	587.6	50.98	12.526	
8,070.8	6,966.9	8,131.9	6,966.8	26.7	29.6	-89.81	-1,098.5	838.8	638.5	585.4	53.18	12.008	
8,100.0	6,966.6	8,161.0	6,966.5	27.2	30.0	-89.81	-1,127.6	838.7	638.5	584.4	54.09	11.805	
8,169.3	6,966.0	8,230.3	6,965.9	28.3	31.0	-89.81	-1,196.9	838.4	638.5	582.2	56.31	11.339	
8,200.0	6,965.7	8,261.0	6,965.6	28.8	31.4	-89.81	-1,227.6	838.3	638.5	581.2	57.30	11.143	
8,267.7	6,965.1	8,328.7	6,965.0	30.0	32.4	-89.81	-1,295.3	838.1	638.5	579.0	59.53	10.725	
8,300.0	6,964.8	8,361.0	6,964.7	30.5	32.9	-89.81	-1,327.6	838.0	638.5	577.9	60.61	10.536	
8,366.1	6,964.2	8,427.2	6,964.1	31.7	33.9	-89.81	-1,393.7	837.7	638.5	575.7	62.83	10.162	
8,400.0	6,963.9	8,461.0	6,963.8	32.2	34.5	-89.81	-1,427.6	837.6	638.5	574.6	63.98	9.980	
8,464.5	6,963.3	8,525.6	6,963.2	33.4	35.5	-89.81	-1,492.1	837.4	638.5	572.3	66.20	9.646	
8,500.0	6,963.0	8,561.0	6,962.9	34.0	36.1	-89.81	-1,527.6	837.2	638.5	571.1	67.42	9.471	
8,563.0	6,962.4	8,624.0	6,962.3	35.1	37.1	-89.81	-1,590.5	837.0	638.5	568.9	69.62	9.172	
8,600.0	6,962.0	8,661.0	6,962.0	35.8	37.7	-89.81	-1,627.6	836.9	638.5	567.6	70.91	9.004	
8,661.4	6,961.5	8,722.4	6,961.4	36.9	38.7	-89.81	-1,689.0	836.6	638.5	565.5	73.08	8.737	
8,700.0	6,961.1	8,761.0	6,961.1	37.6	39.3	-89.81	-1,727.6	836.5	638.5	564.1	74.45	8.576	
8,759.8	6,960.6	8,820.9	6,960.5	38.7	40.3	-89.81	-1,787.4	836.3	638.5	561.9	76.59	8.337	
8,800.0	6,960.2	8,861.0	6,960.1	39.4	41.0	-89.81	-1,827.6	836.1	638.5	560.5	78.03	8.183	
8,858.2	6,959.7	8,919.3	6,959.6	40.5	42.0	-89.81	-1,885.8	835.9	638.5	558.4	80.13	7.968	
8,900.0	6,959.3	8,961.0	6,959.2	41.2	42.7	-89.81	-1,927.6	835.8	638.5	556.9	81.65	7.821	
8,956.7	6,958.8	9,017.7	6,958.7	42.3	43.6	-89.81	-1,984.2	835.6	638.5	554.8	83.71	7.628	
9,000.0	6,958.4	9,061.0	6,958.3	43.1	44.4	-89.81	-2,027.5	835.4	638.5	553.3	85.29	7.487	
9,055.1	6,957.9	9,116.1	6,957.8	44.1	45.3	-89.81	-2,082.6	835.2	638.5	551.2	87.31	7.314	
9,100.0	6,957.5	9,161.0	6,957.4	44.9	46.1	-89.81	-2,127.5	835.0	638.5	549.6	88.96	7.178	
9,153.5	6,957.0	9,214.6	6,956.9	45.9	47.1	-89.81	-2,181.1	834.9	638.5	547.6	90.93	7.022	
9,200.0	6,956.6	9,261.0	6,956.5	46.8	47.9	-89.81	-2,227.5	834.7	638.5	545.9	92.65	6.892	
9,251.9	6,956.1	9,313.0	6,956.0	47.8	48.8	-89.81	-2,279.5	834.5	638.5	544.0	94.58	6.751	
9,300.0	6,955.7	9,361.0	6,955.6	48.7	49.6	-89.81	-2,327.5	834.3	638.5	542.2	96.37	6.626	
9,350.4	6,955.2	9,411.4	6,955.1	49.6	50.5	-89.81	-2,377.9	834.1	638.5	540.3	98.24	6.500	
9,400.0	6,954.8	9,461.0	6,954.7	50.6	51.4	-89.81	-2,427.5	834.0	638.5	538.5	100.10	6.379	
9,448.8	6,954.3	9,509.8	6,954.2	51.5	52.3	-89.81	-2,476.3	833.8	638.5	536.6	101.93	6.265	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

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	
9,500.0	6,953.9	9,561.0	6,953.8	52.5	53.2	-89.81	-2,527.5	833.6	638.5	534.7	103.85	6.149	
9,547.2	6,953.4	9,608.2	6,953.4	53.4	54.1	-89.81	-2,574.7	833.4	638.6	532.9	105.62	6.046	
9,600.0	6,952.9	9,661.0	6,952.9	54.4	55.0	-89.81	-2,627.5	833.2	638.6	530.9	107.61	5.934	
9,645.6	6,952.5	9,706.7	6,952.5	55.2	55.8	-89.81	-2,673.2	833.1	638.6	529.2	109.33	5.840	
9,700.0	6,952.0	9,761.0	6,952.0	56.3	56.8	-89.81	-2,727.5	832.9	638.6	527.2	111.39	5.733	
9,744.1	6,951.6	9,805.1	6,951.6	57.1	57.6	-89.81	-2,771.6	832.7	638.6	525.5	113.05	5.648	
9,800.0	6,951.1	9,861.0	6,951.1	58.2	58.6	-89.81	-2,827.5	832.5	638.6	523.4	115.17	5.544	
9,842.5	6,950.7	9,903.5	6,950.7	59.0	59.4	-89.81	-2,870.0	832.4	638.6	521.8	116.79	5.468	
9,900.0	6,950.2	9,961.0	6,950.1	60.1	60.5	-89.81	-2,927.5	832.1	638.6	519.6	118.97	5.367	
9,940.9	6,949.8	10,001.9	6,949.8	60.9	61.2	-89.81	-2,968.4	832.0	638.6	518.0	120.53	5.298	
10,000.0	6,949.3	10,061.0	6,949.2	62.0	62.3	-89.81	-3,027.5	831.8	638.6	515.8	122.78	5.201	
10,039.3	6,948.9	10,100.4	6,948.9	62.8	63.0	-89.81	-3,066.8	831.6	638.6	514.3	124.28	5.138	
10,100.0	6,948.4	10,161.0	6,948.3	64.0	64.2	-89.81	-3,127.5	831.4	638.6	512.0	126.60	5.044	
10,137.8	6,948.0	10,198.8	6,948.0	64.7	64.9	-89.81	-3,165.3	831.3	638.6	510.5	128.04	4.987	
10,200.0	6,947.5	10,261.0	6,947.4	65.9	66.0	-89.81	-3,227.5	831.1	638.6	508.1	130.43	4.896	
10,236.2	6,947.1	10,297.2	6,947.1	66.6	66.7	-89.81	-3,263.7	830.9	638.6	506.8	131.81	4.845	
10,300.0	6,946.6	10,361.0	6,946.5	67.8	67.9	-89.81	-3,327.5	830.7	638.6	504.3	134.26	4.756	
10,334.6	6,946.3	10,395.6	6,946.2	68.5	68.5	-89.82	-3,362.1	830.6	638.6	503.0	135.59	4.710	
10,400.0	6,945.7	10,461.0	6,945.6	69.8	69.7	-89.82	-3,427.5	830.3	638.6	500.5	138.10	4.624	
10,433.0	6,945.4	10,494.1	6,945.3	70.4	70.4	-89.82	-3,460.5	830.2	638.6	499.2	139.37	4.582	
10,500.0	6,944.7	10,561.0	6,944.7	71.7	71.6	-89.82	-3,527.5	830.0	638.6	496.6	141.94	4.499	
10,531.5	6,944.5	10,592.5	6,944.4	72.3	72.2	-89.82	-3,558.9	829.9	638.6	495.4	143.16	4.461	
10,600.0	6,943.8	10,661.0	6,943.8	73.7	73.5	-89.82	-3,627.4	829.6	638.6	492.8	145.80	4.380	
10,629.9	6,943.6	10,690.9	6,943.5	74.2	74.0	-89.82	-3,657.3	829.5	638.6	491.6	146.95	4.346	
10,700.0	6,942.9	10,761.0	6,942.9	75.6	75.4	-89.82	-3,727.4	829.3	638.6	488.9	149.65	4.267	
10,728.3	6,942.7	10,789.3	6,942.6	76.2	75.9	-89.82	-3,755.8	829.2	638.6	487.8	150.75	4.236	
10,800.0	6,942.0	10,861.0	6,942.0	77.6	77.2	-89.82	-3,827.4	828.9	638.6	485.1	153.52	4.160	
10,826.7	6,941.8	10,887.8	6,941.7	78.1	77.7	-89.82	-3,854.2	828.8	638.6	484.0	154.55	4.132	
10,900.0	6,941.1	10,961.0	6,941.0	79.5	79.1	-89.82	-3,927.4	828.5	638.6	481.2	157.38	4.058	
10,925.2	6,940.9	10,986.2	6,940.8	80.0	79.6	-89.82	-3,952.6	828.5	638.6	480.2	158.36	4.033	
11,000.0	6,940.2	11,061.0	6,940.1	81.5	81.0	-89.82	-4,027.4	828.2	638.6	477.3	161.25	3.960	
11,023.6	6,940.0	11,084.6	6,939.9	81.9	81.5	-89.82	-4,051.0	828.1	638.6	476.4	162.17	3.938	
11,100.0	6,939.3	11,161.0	6,939.2	83.4	82.9	-89.82	-4,127.4	827.8	638.6	473.5	165.13	3.867	
11,122.0	6,939.1	11,183.0	6,939.0	83.8	83.3	-89.82	-4,149.4	827.7	638.6	472.6	165.98	3.847	
11,200.0	6,938.4	11,261.0	6,938.3	85.4	84.8	-89.82	-4,227.4	827.5	638.6	469.6	169.01	3.779	
11,220.4	6,938.2	11,281.5	6,938.1	85.8	85.2	-89.82	-4,247.9	827.4	638.6	468.8	169.80	3.761	
11,300.0	6,937.4	11,361.0	6,937.4	87.3	86.7	-89.82	-4,327.4	827.1	638.6	465.7	172.89	3.694	
11,318.9	6,937.3	11,379.9	6,937.2	87.7	87.1	-89.82	-4,346.3	827.0	638.6	465.0	173.62	3.678	
11,400.0	6,936.5	11,461.0	6,936.5	89.3	88.6	-89.82	-4,427.4	826.7	638.6	461.8	176.77	3.613	
11,417.3	6,936.4	11,478.3	6,936.3	89.6	88.9	-89.82	-4,444.7	826.7	638.6	461.2	177.44	3.599	
11,500.0	6,935.6	11,561.0	6,935.6	91.3	90.5	-89.82	-4,527.4	826.4	638.6	457.9	180.66	3.535	
11,515.7	6,935.5	11,576.7	6,935.4	91.6	90.8	-89.82	-4,543.1	826.3	638.6	457.3	181.27	3.523	
11,600.0	6,934.7	11,661.0	6,934.7	93.2	92.4	-89.82	-4,627.4	826.0	638.6	454.1	184.55	3.460	
11,614.1	6,934.6	11,675.1	6,934.5	93.5	92.7	-89.82	-4,641.5	826.0	638.6	453.5	185.10	3.450	
11,700.0	6,933.8	11,761.0	6,933.8	95.2	94.3	-89.82	-4,727.4	825.7	638.6	450.2	188.44	3.389	
11,712.6	6,933.7	11,773.6	6,933.6	95.4	94.6	-89.82	-4,740.0	825.6	638.6	449.7	188.93	3.380	
11,800.0	6,932.9	11,861.0	6,932.8	97.1	96.2	-89.82	-4,827.4	825.3	638.6	446.3	192.34	3.320	
11,811.0	6,932.8	11,872.0	6,932.7	97.4	96.4	-89.82	-4,838.4	825.3	638.6	445.8	192.77	3.313	
11,900.0	6,932.0	11,961.0	6,931.9	99.1	98.1	-89.82	-4,927.4	825.0	638.6	442.4	196.24	3.254	
11,909.4	6,931.9	11,970.4	6,931.8	99.3	98.3	-89.82	-4,936.8	824.9	638.6	442.0	196.61	3.248	
12,000.0	6,931.0	12,061.0	6,931.0	101.1	100.0	-89.82	-5,027.4	824.6	638.6	438.5	200.14	3.191	
12,007.8	6,931.0	12,068.8	6,930.9	101.2	100.2	-89.82	-5,035.2	824.6	638.6	438.2	200.44	3.186	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

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
12,100.0	6,930.1	12,161.0	6,930.1	103.0	102.0	-89.82	-5,127.4	824.2	638.6	434.6	204.04	3.130	
12,106.3	6,930.1	12,167.3	6,930.1	103.2	102.1	-89.82	-5,133.6	824.2	638.6	434.3	204.29	3.126	
12,200.0	6,929.2	12,261.0	6,929.2	105.0	103.9	-89.82	-5,227.4	823.9	638.6	430.7	207.94	3.071	
12,204.7	6,929.2	12,265.7	6,929.2	105.1	104.0	-89.82	-5,232.1	823.9	638.6	430.5	208.13	3.068	
12,300.0	6,928.3	12,361.0	6,928.3	107.0	105.8	-89.82	-5,327.3	823.5	638.6	426.8	211.85	3.015	
12,303.1	6,928.3	12,364.1	6,928.3	107.1	105.9	-89.82	-5,330.5	823.5	638.6	426.7	211.97	3.013	
12,400.0	6,927.4	12,461.0	6,927.4	109.0	107.7	-89.82	-5,427.3	823.2	638.6	422.9	215.76	2.960	
12,401.5	6,927.4	12,462.5	6,927.4	109.0	107.7	-89.82	-5,428.9	823.2	638.6	422.8	215.82	2.959	
12,500.0	6,926.5	12,561.0	6,926.5	110.9	109.6	-89.82	-5,527.3	822.8	638.6	419.0	219.67	2.907	
12,598.4	6,925.6	12,659.4	6,925.6	112.9	111.5	-89.82	-5,625.7	822.5	638.6	415.1	223.52	2.857	
12,600.0	6,925.6	12,661.0	6,925.5	112.9	111.6	-89.82	-5,627.3	822.5	638.6	415.1	223.58	2.856	
12,696.8	6,924.7	12,757.8	6,924.7	114.8	113.4	-89.82	-5,724.1	822.1	638.7	411.3	227.37	2.809	
12,700.0	6,924.6	12,761.0	6,924.6	114.9	113.5	-89.82	-5,727.3	822.1	638.7	411.2	227.49	2.807	
12,795.2	6,923.8	12,856.2	6,923.8	116.8	115.3	-89.82	-5,822.6	821.8	638.7	407.4	231.22	2.762	
12,800.0	6,923.7	12,861.0	6,923.7	116.9	115.4	-89.82	-5,827.3	821.7	638.7	407.3	231.41	2.760	
12,893.7	6,922.9	12,954.7	6,922.9	118.7	117.2	-89.82	-5,921.0	821.4	638.7	403.6	235.07	2.717	
12,900.0	6,922.8	12,961.0	6,922.8	118.8	117.3	-89.82	-5,927.3	821.4	638.7	403.3	235.32	2.714	
12,992.1	6,922.0	13,053.1	6,922.0	120.6	119.1	-89.82	-6,019.4	821.1	638.7	399.7	238.93	2.673	
13,000.0	6,921.9	13,061.0	6,921.9	120.8	119.3	-89.82	-6,027.3	821.0	638.7	399.4	239.24	2.670	
13,090.5	6,921.1	13,151.5	6,921.1	122.6	121.0	-89.82	-6,117.8	820.7	638.7	395.9	242.78	2.631	
13,100.0	6,921.0	13,161.0	6,921.0	122.8	121.2	-89.82	-6,127.3	820.7	638.7	395.5	243.15	2.627	
13,188.9	6,920.2	13,249.9	6,920.2	124.5	122.9	-89.82	-6,216.2	820.4	638.7	392.0	246.64	2.590	
13,200.0	6,920.1	13,261.0	6,920.1	124.8	123.1	-89.82	-6,227.3	820.3	638.7	391.6	247.07	2.585	
13,287.4	6,919.3	13,348.4	6,919.3	126.5	124.8	-89.82	-6,314.7	820.0	638.7	388.2	250.50	2.550	
13,300.0	6,919.1	13,361.0	6,919.2	126.7	125.1	-89.82	-6,327.3	820.0	638.7	387.7	250.99	2.545	
13,385.8	6,918.4	13,446.8	6,918.4	128.4	126.7	-89.82	-6,413.1	819.7	638.7	384.3	254.36	2.511	
13,400.0	6,918.2	13,461.0	6,918.2	128.7	127.0	-89.82	-6,427.3	819.6	638.7	383.8	254.91	2.505	
13,484.2	6,917.5	13,545.2	6,917.5	130.4	128.6	-89.82	-6,511.5	819.3	638.7	380.5	258.22	2.473	
13,500.0	6,917.3	13,561.0	6,917.3	130.7	128.9	-89.82	-6,527.3	819.3	638.7	379.9	258.84	2.468	
13,582.6	6,916.6	13,643.6	6,916.6	132.3	130.5	-89.82	-6,609.9	819.0	638.7	376.6	262.08	2.437	
13,600.0	6,916.4	13,661.0	6,916.4	132.7	130.9	-89.82	-6,627.3	818.9	638.7	375.9	262.76	2.431	
13,681.1	6,915.6	13,742.0	6,915.7	134.3	132.4	-89.82	-6,708.3	818.6	638.7	372.8	265.94	2.402	
13,700.0	6,915.5	13,761.0	6,915.5	134.6	132.8	-89.82	-6,727.3	818.6	638.7	372.0	266.68	2.395	
13,779.5	6,914.7	13,840.5	6,914.8	136.2	134.3	-89.82	-6,806.8	818.3	638.7	368.9	269.80	2.367	
13,800.0	6,914.6	13,861.0	6,914.6	136.6	134.7	-89.82	-6,827.3	818.2	638.7	368.1	270.61	2.360	
13,877.9	6,913.8	13,938.9	6,913.9	138.2	136.2	-89.82	-6,905.2	817.9	638.7	365.0	273.67	2.334	
13,900.0	6,913.6	13,961.0	6,913.7	138.6	136.7	-89.82	-6,927.2	817.8	638.7	364.2	274.53	2.327	
13,976.3	6,912.9	14,037.3	6,913.0	140.1	138.1	-89.82	-7,003.6	817.6	638.7	361.2	277.53	2.301	
14,000.0	6,912.7	14,061.0	6,912.8	140.6	138.6	-89.82	-7,027.2	817.5	638.7	360.3	278.46	2.294	
14,074.8	6,912.0	14,135.7	6,912.1	142.0	140.0	-89.82	-7,102.0	817.2	638.7	357.4	281.30	2.271	
14,079.0	6,912.0	14,139.9	6,912.0	142.1	140.1	-89.82	-7,106.2	817.2	638.7	357.3	281.46	2.269 SF	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-INC												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.0	0.0	0.0	0.0	0.0	0.0	-155.80	-3,511.9	-1,578.4	3,850.7				
98.4	98.4	36.9	36.9	0.1	0.5	-155.80	-3,511.9	-1,578.4	3,850.3	3,849.7	0.58	6,670.423	
100.0	100.0	38.5	38.5	0.1	0.5	-155.80	-3,511.9	-1,578.4	3,850.3	3,849.7	0.60	6,422.095	
196.8	196.8	135.3	135.3	0.3	2.1	-155.80	-3,511.9	-1,578.4	3,850.3	3,847.8	2.42	1,590.411	
200.0	200.0	138.5	138.5	0.3	2.2	-155.80	-3,511.9	-1,578.4	3,850.3	3,847.8	2.50	1,540.472	
295.3	295.3	233.8	233.8	0.5	4.3	-155.80	-3,511.9	-1,578.4	3,850.3	3,845.4	4.81	800.665	
300.0	300.0	238.5	238.5	0.5	4.4	-155.80	-3,511.9	-1,578.4	3,850.3	3,845.3	4.92	782.963	
393.7	393.7	332.2	332.2	0.8	6.3	-155.80	-3,511.9	-1,578.4	3,850.3	3,843.2	7.06	545.176	
400.0	400.0	338.5	338.5	0.8	6.4	-155.80	-3,511.9	-1,578.4	3,850.3	3,843.1	7.21	534.373	
492.1	492.1	430.6	430.6	1.0	8.3	-155.80	-3,511.9	-1,578.4	3,850.3	3,841.0	9.29	414.489	
500.0	500.0	438.5	438.5	1.0	8.5	-155.80	-3,511.9	-1,578.4	3,850.3	3,840.8	9.47	406.719	
590.5	590.5	529.0	529.0	1.2	10.3	-155.80	-3,511.9	-1,578.4	3,850.3	3,838.8	11.51	334.646	
600.0	600.0	538.5	538.5	1.2	10.5	-155.80	-3,511.9	-1,578.4	3,850.3	3,838.5	11.72	328.581	
689.0	689.0	627.5	627.5	1.4	12.3	-155.80	-3,511.9	-1,578.4	3,850.3	3,836.5	13.72	280.702	
700.0	700.0	638.5	638.5	1.4	12.5	-155.80	-3,511.9	-1,578.4	3,850.3	3,836.3	13.96	275.728	
787.4	787.4	725.9	725.9	1.6	14.3	-155.80	-3,511.9	-1,578.4	3,850.3	3,834.3	15.92	241.780	
800.0	800.0	738.5	738.5	1.7	14.5	-155.80	-3,511.9	-1,578.4	3,850.3	3,834.0	16.21	237.566	
885.8	885.8	824.3	824.3	1.9	16.3	-155.80	-3,511.9	-1,578.4	3,850.3	3,832.1	18.13	212.359	
900.0	900.0	838.5	838.5	1.9	16.6	-155.80	-3,511.9	-1,578.4	3,850.3	3,831.8	18.45	208.703	
984.2	984.2	922.7	922.7	2.1	18.3	-155.80	-3,511.9	-1,578.4	3,850.3	3,829.9	20.34	189.334	
1,000.0	1,000.0	938.5	938.5	2.1	18.6	-155.80	-3,511.9	-1,578.4	3,850.3	3,829.6	20.69	186.106	
1,082.7	1,082.7	1,021.2	1,021.2	2.3	20.2	-155.80	-3,511.9	-1,578.4	3,850.3	3,827.7	22.54	170.819	
1,100.0	1,100.0	1,038.5	1,038.5	2.3	20.6	-155.80	-3,511.9	-1,578.4	3,850.3	3,827.3	22.93	167.930	
1,181.1	1,181.1	1,119.6	1,119.6	2.5	22.2	-155.80	-3,511.9	-1,578.4	3,850.3	3,825.5	24.74	155.608	
1,200.0	1,200.0	1,138.5	1,138.5	2.6	22.6	-155.80	-3,511.9	-1,578.4	3,850.3	3,825.1	25.17	152.992	
1,279.5	1,279.5	1,218.0	1,218.0	2.7	24.2	-167.70	-3,511.9	-1,578.4	3,851.3	3,824.4	26.93	142.987	
1,300.0	1,300.0	1,238.5	1,238.5	2.8	24.6	167.69	-3,511.9	-1,578.4	3,852.0	3,824.6	27.39	140.652	
1,377.9	1,377.8	1,316.3	1,316.3	3.0	26.2	167.69	-3,511.9	-1,578.4	3,855.7	3,826.6	29.09	132.543	
1,400.0	1,399.8	1,338.3	1,338.3	3.0	26.6	167.69	-3,511.9	-1,578.4	3,857.1	3,827.5	29.57	130.455	
1,476.4	1,475.9	1,414.4	1,414.4	3.2	28.2	167.68	-3,511.9	-1,578.4	3,863.3	3,832.1	31.20	123.819	
1,500.0	1,499.5	1,438.0	1,438.0	3.2	28.6	167.68	-3,511.9	-1,578.4	3,865.6	3,833.9	31.70	121.944	
1,574.8	1,573.7	1,512.2	1,512.2	3.4	30.1	167.67	-3,511.9	-1,578.4	3,874.2	3,840.9	33.26	116.478	
1,600.0	1,598.7	1,537.2	1,537.2	3.5	30.6	167.67	-3,511.9	-1,578.4	3,877.5	3,843.7	33.78	114.793	
1,673.2	1,671.1	1,609.6	1,609.6	3.7	32.1	167.66	-3,511.9	-1,578.4	3,888.4	3,853.1	35.26	110.270	
1,700.0	1,697.5	1,636.0	1,636.0	3.7	32.6	167.65	-3,511.9	-1,578.4	3,892.8	3,857.0	35.79	108.755	
1,771.6	1,767.9	1,706.4	1,706.4	4.0	34.0	167.64	-3,511.9	-1,578.4	3,905.8	3,868.6	37.20	105.001	
1,800.1	1,795.7	1,734.2	1,734.2	4.0	34.6	167.63	-3,511.9	-1,578.4	3,911.5	3,873.7	37.74	103.635	
1,870.1	1,864.2	1,802.7	1,802.7	4.3	36.0	167.68	-3,511.9	-1,578.4	3,925.7	3,886.4	39.26	99.989	
1,900.0	1,893.4	1,831.9	1,831.9	4.4	36.6	167.69	-3,511.9	-1,578.4	3,931.8	3,891.9	39.91	98.519	
1,968.5	1,960.4	1,898.9	1,898.9	4.6	37.9	167.74	-3,511.9	-1,578.4	3,945.7	3,904.3	41.40	95.307	
2,000.0	1,991.3	1,929.8	1,929.8	4.7	38.5	167.76	-3,511.9	-1,578.4	3,952.1	3,910.0	42.08	93.914	
2,066.9	2,056.7	1,995.2	1,995.2	5.0	39.8	167.80	-3,511.9	-1,578.4	3,965.7	3,922.2	43.54	91.089	
2,100.0	2,089.1	2,027.6	2,027.6	5.1	40.5	167.82	-3,511.9	-1,578.4	3,972.5	3,928.2	44.26	89.754	
2,165.3	2,153.0	2,091.5	2,091.5	5.3	41.8	167.86	-3,511.9	-1,578.4	3,985.8	3,940.1	45.68	87.246	
2,200.0	2,186.9	2,125.4	2,125.4	5.5	42.5	167.89	-3,511.9	-1,578.4	3,992.8	3,946.4	46.44	85.979	
2,263.8	2,249.3	2,187.8	2,187.8	5.7	43.7	167.92	-3,511.9	-1,578.4	4,005.8	3,958.0	47.83	83.748	
2,300.0	2,284.7	2,223.2	2,223.2	5.8	44.4	167.95	-3,511.9	-1,578.4	4,013.2	3,964.5	48.62	82.538	
2,362.2	2,345.5	2,284.0	2,284.0	6.1	45.6	167.99	-3,511.9	-1,578.4	4,025.8	3,975.8	49.98	80.547	
2,400.0	2,382.5	2,321.0	2,321.0	6.2	46.4	168.01	-3,511.9	-1,578.4	4,033.5	3,982.7	50.81	79.390	
2,460.6	2,441.8	2,380.3	2,380.3	6.5	47.6	168.05	-3,511.9	-1,578.4	4,045.9	3,993.7	52.13	77.608	
2,500.0	2,480.3	2,418.8	2,418.8	6.6	48.4	168.07	-3,511.9	-1,578.4	4,053.9	4,000.9	52.99	76.499	
2,559.0	2,538.1	2,476.6	2,476.6	6.9	49.5	168.11	-3,511.9	-1,578.4	4,065.9	4,011.6	54.29	74.899	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-INC												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,600.0	2,578.1	2,516.6	2,516.6	7.0	50.3	168.13	-3,511.9	-1,578.4	4,074.3	4,019.1	55.18	73.834	
2,657.5	2,634.4	2,572.9	2,572.9	7.3	51.5	168.16	-3,511.9	-1,578.4	4,086.0	4,029.5	56.44	72.395	
2,700.0	2,675.9	2,614.4	2,614.4	7.5	52.3	168.19	-3,511.9	-1,578.4	4,094.6	4,037.3	57.37	71.372	
2,755.9	2,730.6	2,669.1	2,669.1	7.7	53.4	168.22	-3,511.9	-1,578.4	4,106.0	4,047.4	58.60	70.074	
2,800.0	2,773.8	2,712.3	2,712.3	7.9	54.3	168.25	-3,511.9	-1,578.4	4,115.0	4,055.4	59.56	69.089	
2,854.3	2,826.9	2,765.4	2,765.4	8.1	55.3	168.28	-3,511.9	-1,578.4	4,126.1	4,065.3	60.75	67.917	
2,857.4	2,829.9	2,768.4	2,768.4	8.1	55.4	168.28	-3,511.9	-1,578.4	4,126.7	4,065.9	60.82	67.853	
2,900.0	2,871.6	2,810.1	2,810.1	8.3	56.2	168.34	-3,511.9	-1,578.4	4,135.1	4,073.2	61.91	66.793	
2,952.7	2,923.5	2,862.0	2,862.0	8.4	57.3	168.41	-3,511.9	-1,578.4	4,144.6	4,081.4	63.23	65.545	
3,000.0	2,970.1	2,908.6	2,908.6	8.6	58.2	168.46	-3,511.9	-1,578.4	4,152.3	4,087.9	64.41	64.466	
3,051.2	3,020.7	2,959.2	2,959.2	8.7	59.2	168.51	-3,511.9	-1,578.4	4,159.9	4,094.2	65.67	63.341	
3,100.0	3,069.1	3,007.6	3,007.6	8.9	60.2	168.56	-3,511.9	-1,578.4	4,166.2	4,099.4	66.87	62.306	
3,149.6	3,118.3	3,056.8	3,056.8	9.0	61.2	168.59	-3,511.9	-1,578.4	4,171.9	4,103.8	68.06	61.293	
3,200.0	3,168.5	3,107.0	3,107.0	9.1	62.2	168.63	-3,511.9	-1,578.4	4,176.7	4,107.5	69.27	60.300	
3,248.0	3,216.3	3,154.8	3,154.8	9.2	63.2	168.65	-3,511.9	-1,578.4	4,180.6	4,110.2	70.39	59.388	
3,300.0	3,268.2	3,206.7	3,206.7	9.3	64.2	168.67	-3,511.9	-1,578.4	4,183.8	4,112.2	71.60	58.436	
3,346.4	3,314.6	3,253.1	3,253.1	9.4	65.1	168.69	-3,511.9	-1,578.4	4,186.0	4,113.3	72.65	57.616	
3,400.0	3,368.1	3,306.6	3,306.6	9.5	66.2	168.70	-3,511.9	-1,578.4	4,187.5	4,113.7	73.85	56.703	
3,444.9	3,413.0	3,351.5	3,351.5	9.6	67.1	168.70	-3,511.9	-1,578.4	4,188.1	4,113.2	74.83	55.965	
3,457.5	3,425.6	3,364.1	3,364.1	9.6	67.4	-154.79	-3,511.9	-1,578.4	4,188.1	4,113.0	75.11	55.760	
3,500.0	3,468.1	3,406.6	3,406.6	9.7	68.2	-154.79	-3,511.9	-1,578.4	4,188.1	4,112.0	76.04	55.074	
3,543.3	3,511.4	3,449.9	3,449.9	9.7	69.1	-154.79	-3,511.9	-1,578.4	4,188.1	4,111.1	77.01	54.387	
3,600.0	3,568.1	3,506.6	3,506.6	9.8	70.2	-154.79	-3,511.9	-1,578.4	4,188.1	4,109.8	78.26	53.512	
3,641.7	3,609.9	3,548.4	3,548.4	9.9	71.1	-154.79	-3,511.9	-1,578.4	4,188.1	4,108.9	79.19	52.886	
3,700.0	3,668.1	3,606.6	3,606.6	10.0	72.2	-154.79	-3,511.9	-1,578.4	4,188.1	4,107.6	80.48	52.036	
3,740.1	3,708.3	3,646.8	3,646.8	10.1	73.1	-154.79	-3,511.9	-1,578.4	4,188.1	4,106.7	81.38	51.466	
3,800.0	3,768.1	3,706.6	3,706.6	10.2	74.3	-154.79	-3,511.9	-1,578.4	4,188.1	4,105.4	82.70	50.639	
3,838.6	3,806.7	3,745.2	3,745.2	10.2	75.0	-154.79	-3,511.9	-1,578.4	4,188.1	4,104.5	83.56	50.120	
3,900.0	3,868.1	3,806.6	3,806.6	10.3	76.3	-154.79	-3,511.9	-1,578.4	4,188.1	4,103.2	84.93	49.314	
3,937.0	3,905.1	3,843.6	3,843.6	10.4	77.0	-154.79	-3,511.9	-1,578.4	4,188.1	4,102.3	85.75	48.842	
4,000.0	3,968.1	3,906.6	3,906.6	10.5	78.3	-154.79	-3,511.9	-1,578.4	4,188.1	4,100.9	87.15	48.057	
4,035.4	4,003.6	3,942.1	3,942.1	10.6	79.0	-154.79	-3,511.9	-1,578.4	4,188.1	4,100.1	87.94	47.627	
4,100.0	4,068.1	4,006.6	4,006.6	10.7	80.3	-154.79	-3,511.9	-1,578.4	4,188.1	4,098.7	89.37	46.862	
4,133.8	4,102.0	4,040.5	4,040.5	10.8	81.0	-154.79	-3,511.9	-1,578.4	4,188.1	4,098.0	90.12	46.470	
4,200.0	4,168.1	4,106.6	4,106.6	10.9	82.3	-154.79	-3,511.9	-1,578.4	4,188.1	4,096.5	91.59	45.724	
4,232.3	4,200.4	4,138.9	4,138.9	10.9	83.0	-154.79	-3,511.9	-1,578.4	4,188.1	4,095.8	92.31	45.369	
4,300.0	4,268.1	4,206.6	4,206.6	11.1	84.3	-154.79	-3,511.9	-1,578.4	4,188.1	4,094.3	93.82	44.640	
4,330.7	4,298.8	4,237.3	4,237.3	11.1	84.9	-154.79	-3,511.9	-1,578.4	4,188.1	4,093.6	94.50	44.318	
4,400.0	4,368.1	4,306.6	4,306.6	11.2	86.3	-154.79	-3,511.9	-1,578.4	4,188.1	4,092.0	96.04	43.606	
4,429.1	4,397.3	4,335.8	4,335.8	11.3	86.9	-154.79	-3,511.9	-1,578.4	4,188.1	4,091.4	96.69	43.314	
4,500.0	4,468.1	4,406.6	4,406.6	11.4	88.3	-154.79	-3,511.9	-1,578.4	4,188.1	4,089.8	98.27	42.619	
4,527.5	4,495.7	4,434.2	4,434.2	11.5	88.9	-154.79	-3,511.9	-1,578.4	4,188.1	4,089.2	98.88	42.355	
4,600.0	4,568.1	4,506.6	4,506.6	11.6	90.3	-154.79	-3,511.9	-1,578.4	4,188.1	4,087.6	100.49	41.675	
4,626.0	4,594.1	4,532.6	4,532.6	11.7	90.9	-154.79	-3,511.9	-1,578.4	4,188.1	4,087.0	101.07	41.437	
4,700.0	4,668.1	4,606.6	4,606.6	11.8	92.4	-154.79	-3,511.9	-1,578.4	4,188.1	4,085.4	102.72	40.772	
4,724.4	4,692.5	4,631.0	4,631.0	11.8	92.9	-154.79	-3,511.9	-1,578.4	4,188.1	4,084.8	103.26	40.557	
4,800.0	4,768.1	4,706.6	4,706.6	12.0	94.4	-154.79	-3,511.9	-1,578.4	4,188.1	4,083.1	104.95	39.907	
4,822.8	4,791.0	4,729.5	4,729.5	12.0	94.8	-154.79	-3,511.9	-1,578.4	4,188.1	4,082.6	105.45	39.715	
4,900.0	4,868.1	4,806.6	4,806.6	12.2	96.4	-154.79	-3,511.9	-1,578.4	4,188.1	4,080.9	107.17	39.078	
4,921.2	4,889.4	4,827.9	4,827.9	12.2	96.8	-154.79	-3,511.9	-1,578.4	4,188.1	4,080.4	107.65	38.906	
5,000.0	4,968.1	4,906.6	4,906.6	12.4	98.4	-154.79	-3,511.9	-1,578.4	4,188.1	4,078.7	109.40	38.282	
5,019.7	4,987.8	4,926.3	4,926.3	12.4	98.8	-154.79	-3,511.9	-1,578.4	4,188.1	4,078.2	109.84	38.130	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - HOW SAD C 18-31 - 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	5,068.1	5,006.6	5,006.6	12.6	100.4	-154.79	-3,511.9	-1,578.4	4,188.1	4,076.5	111.63	37.518	
5,118.1	5,086.2	5,024.7	5,024.7	12.6	100.8	-154.79	-3,511.9	-1,578.4	4,188.1	4,076.1	112.03	37.383	
5,200.0	5,168.1	5,106.6	5,106.6	12.8	102.4	-154.79	-3,511.9	-1,578.4	4,188.1	4,074.2	113.85	36.784	
5,216.5	5,184.7	5,123.2	5,123.2	12.8	102.7	-154.79	-3,511.9	-1,578.4	4,188.1	4,073.9	114.22	36.666	
5,300.0	5,268.1	5,206.6	5,206.6	13.0	104.4	-154.79	-3,511.9	-1,578.4	4,188.1	4,072.0	116.08	36.078	
5,314.9	5,283.1	5,221.6	5,221.6	13.0	104.7	-154.79	-3,511.9	-1,578.4	4,188.1	4,071.7	116.42	35.975	
5,400.0	5,368.1	5,306.6	5,306.6	13.1	106.4	-154.79	-3,511.9	-1,578.4	4,188.1	4,069.8	118.31	35.399	
5,413.4	5,381.5	5,320.0	5,320.0	13.2	106.7	-154.79	-3,511.9	-1,578.4	4,188.1	4,069.5	118.61	35.310	
5,500.0	5,468.1	5,406.6	5,406.6	13.3	108.4	-154.79	-3,511.9	-1,578.4	4,188.1	4,067.5	120.54	34.744	
5,511.8	5,479.9	5,418.4	5,418.4	13.4	108.7	-154.79	-3,511.9	-1,578.4	4,188.1	4,067.3	120.80	34.669	
5,600.0	5,568.1	5,506.6	5,506.6	13.5	110.5	-154.79	-3,511.9	-1,578.4	4,188.1	4,065.3	122.77	34.114	
5,610.2	5,578.4	5,516.9	5,516.9	13.6	110.7	-154.79	-3,511.9	-1,578.4	4,188.1	4,065.1	123.00	34.050	
5,700.0	5,668.1	5,606.6	5,606.6	13.7	112.5	-154.79	-3,511.9	-1,578.4	4,188.1	4,063.1	125.00	33.505	
5,708.6	5,676.8	5,615.3	5,615.3	13.8	112.6	-154.79	-3,511.9	-1,578.4	4,188.1	4,062.9	125.19	33.454	
5,800.0	5,768.1	5,706.6	5,706.6	13.9	114.5	-154.79	-3,511.9	-1,578.4	4,188.1	4,060.9	127.23	32.918	
5,807.1	5,775.2	5,713.7	5,713.7	14.0	114.6	-154.79	-3,511.9	-1,578.4	4,188.1	4,060.7	127.38	32.877	
5,900.0	5,868.1	5,806.6	5,806.6	14.1	116.5	-154.79	-3,511.9	-1,578.4	4,188.1	4,058.6	129.46	32.351	
5,905.5	5,873.6	5,812.1	5,812.1	14.1	116.6	-154.79	-3,511.9	-1,578.4	4,188.1	4,058.5	129.58	32.321	
6,000.0	5,968.1	5,906.6	5,906.6	14.3	118.5	-154.79	-3,511.9	-1,578.4	4,188.1	4,056.4	131.69	31.803	
6,003.9	5,972.1	5,910.6	5,910.6	14.3	118.6	-154.79	-3,511.9	-1,578.4	4,188.1	4,056.3	131.77	31.782	
6,100.0	6,068.1	6,006.6	6,006.6	14.5	120.5	-154.79	-3,511.9	-1,578.4	4,188.1	4,054.2	133.92	31.274	
6,102.3	6,070.5	6,009.0	6,009.0	14.5	120.6	-154.79	-3,511.9	-1,578.4	4,188.1	4,054.1	133.97	31.262	
6,200.0	6,168.1	6,106.6	6,106.6	14.7	122.5	-154.79	-3,511.9	-1,578.4	4,188.1	4,051.9	136.15	30.762	
6,200.8	6,168.9	6,107.4	6,107.4	14.7	122.5	-154.79	-3,511.9	-1,578.4	4,188.1	4,051.9	136.16	30.758	
6,288.5	6,256.6	6,195.1	6,195.1	14.9	124.3	-154.79	-3,511.9	-1,578.4	4,188.1	4,050.0	138.12	30.322	
6,299.2	6,267.3	6,205.8	6,205.8	14.9	124.5	25.00	-3,511.9	-1,578.4	4,188.0	4,049.7	138.33	30.275	
6,300.0	6,268.1	6,206.6	6,206.6	14.9	124.5	25.00	-3,511.9	-1,578.4	4,188.0	4,049.7	138.35	30.272	
6,350.0	6,318.1	6,256.6	6,256.6	15.0	125.5	25.09	-3,511.9	-1,578.4	4,185.7	4,046.7	138.99	30.114	
6,397.6	6,365.3	6,303.8	6,303.8	15.1	126.5	25.30	-3,511.9	-1,578.4	4,180.6	4,041.5	139.09	30.056	
6,400.0	6,367.7	6,306.2	6,306.2	15.1	126.5	25.32	-3,511.9	-1,578.4	4,180.2	4,041.1	139.09	30.055	
6,450.0	6,416.8	6,355.3	6,355.3	15.1	127.5	25.67	-3,511.9	-1,578.4	4,171.7	4,033.0	138.63	30.093	
6,496.0	6,461.3	6,399.8	6,399.8	15.1	128.4	26.12	-3,511.9	-1,578.4	4,161.0	4,023.3	137.73	30.212	
6,500.0	6,465.1	6,403.6	6,403.6	15.1	128.5	26.17	-3,511.9	-1,578.4	4,160.0	4,022.4	137.63	30.226	
6,550.0	6,512.4	6,450.9	6,450.9	15.1	129.4	26.81	-3,511.9	-1,578.4	4,145.3	4,009.2	136.14	30.450	
6,594.5	6,553.4	6,491.9	6,491.9	15.1	130.3	27.53	-3,511.9	-1,578.4	4,129.8	3,995.4	134.43	30.720	
6,600.0	6,558.4	6,496.9	6,496.9	15.1	130.4	27.62	-3,511.9	-1,578.4	4,127.7	3,993.5	134.20	30.758	
6,650.0	6,603.0	6,541.5	6,541.5	15.1	131.3	28.61	-3,511.9	-1,578.4	4,107.3	3,975.4	131.90	31.139	
6,692.9	6,639.9	6,578.4	6,578.4	15.1	132.0	29.62	-3,511.9	-1,578.4	4,087.6	3,957.9	129.73	31.509	
6,700.0	6,645.9	6,584.4	6,584.4	15.1	132.1	29.80	-3,511.9	-1,578.4	4,084.1	3,954.8	129.35	31.574	
6,750.0	6,686.8	6,625.3	6,625.3	15.1	133.0	31.22	-3,511.9	-1,578.4	4,058.4	3,931.7	126.70	32.031	
6,791.3	6,719.1	6,657.6	6,657.6	15.1	133.6	32.59	-3,511.9	-1,578.4	4,035.2	3,910.6	124.57	32.393	
6,800.0	6,725.7	6,664.2	6,664.2	15.1	133.7	32.90	-3,511.9	-1,578.4	4,030.1	3,906.0	124.14	32.464	
6,850.0	6,762.3	6,700.8	6,700.8	15.1	134.5	34.87	-3,511.9	-1,578.4	3,999.6	3,877.6	121.91	32.806	
6,889.7	6,789.7	6,728.2	6,728.2	15.1	135.0	36.68	-3,511.9	-1,578.4	3,973.7	3,853.1	120.57	32.957	
6,900.0	6,796.5	6,735.0	6,735.0	15.1	135.2	37.19	-3,511.9	-1,578.4	3,966.8	3,846.5	120.31	32.973	
6,950.0	6,828.0	6,766.5	6,766.5	15.1	135.8	39.90	-3,511.9	-1,578.4	3,932.2	3,812.5	119.64	32.868	
6,988.2	6,850.2	6,788.7	6,788.7	15.1	136.2	42.26	-3,511.9	-1,578.4	3,904.4	3,784.5	119.96	32.548	
7,000.0	6,856.7	6,795.2	6,795.2	15.1	136.4	43.06	-3,511.9	-1,578.4	3,895.7	3,775.5	120.21	32.407	
7,050.0	6,882.5	6,821.0	6,821.0	15.2	136.9	46.73	-3,511.9	-1,578.4	3,857.6	3,735.3	122.28	31.548	
7,086.6	6,899.5	6,838.0	6,838.0	15.3	137.2	49.79	-3,511.9	-1,578.4	3,828.8	3,704.0	124.80	30.680	
7,100.0	6,905.3	6,843.8	6,843.8	15.4	137.4	50.98	-3,511.9	-1,578.4	3,818.1	3,692.2	125.92	30.321	
7,150.0	6,924.9	6,863.4	6,863.4	15.7	137.7	55.86	-3,511.9	-1,578.4	3,777.4	3,646.4	131.01	28.832	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-INC												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,185.0	6,936.7	6,875.2	6,875.2	15.9	138.0	59.65	-3,511.9	-1,578.4	3,748.3	3,613.1	135.22	27.719	
7,200.0	6,941.2	6,879.7	6,879.7	16.0	138.1	61.37	-3,511.9	-1,578.4	3,735.7	3,598.6	137.12	27.245	
7,250.0	6,954.2	6,892.7	6,892.7	16.3	138.3	67.49	-3,511.9	-1,578.4	3,693.3	3,549.7	143.53	25.731	
7,283.4	6,961.0	6,899.5	6,899.5	16.6	138.5	71.87	-3,511.9	-1,578.4	3,664.6	3,517.0	147.57	24.833	
7,300.0	6,963.8	6,902.3	6,902.3	16.7	138.5	74.11	-3,511.9	-1,578.4	3,650.3	3,500.9	149.38	24.437	
7,350.0	6,970.0	6,908.5	6,908.5	17.2	138.7	81.07	-3,511.9	-1,578.4	3,607.0	3,453.2	153.77	23.456	
7,381.9	6,972.1	6,910.6	6,910.6	17.5	138.7	85.57	-3,511.9	-1,578.4	3,579.3	3,423.8	155.53	23.014	
7,400.0	6,972.7	6,911.2	6,911.2	17.7	138.7	88.12	-3,511.9	-1,578.4	3,563.6	3,407.5	156.11	22.828	
7,420.0	6,972.8	6,911.3	6,911.3	17.9	138.7	90.90	-3,511.9	-1,578.4	3,546.3	3,389.9	156.40	22.674	
7,480.3	6,972.2	6,910.7	6,910.7	18.5	138.7	90.89	-3,511.9	-1,578.4	3,494.1	3,337.1	157.04	22.250	
7,500.0	6,972.0	6,910.5	6,910.5	18.7	138.7	90.88	-3,511.9	-1,578.4	3,477.1	3,319.9	157.24	22.113	
7,578.7	6,971.3	6,909.8	6,909.8	19.7	138.7	90.86	-3,511.9	-1,578.4	3,409.6	3,251.5	158.15	21.559	
7,600.0	6,971.1	6,909.6	6,909.6	19.9	138.7	90.85	-3,511.9	-1,578.4	3,391.4	3,233.0	158.40	21.410	
7,677.1	6,970.4	6,908.9	6,908.9	20.9	138.7	90.83	-3,511.9	-1,578.4	3,325.9	3,166.5	159.38	20.868	
7,700.0	6,970.2	6,908.7	6,908.7	21.2	138.7	90.82	-3,511.9	-1,578.4	3,306.6	3,146.9	159.67	20.709	
7,775.6	6,969.5	6,908.0	6,908.0	22.2	138.6	90.80	-3,511.9	-1,578.4	3,243.0	3,082.3	160.71	20.180	
7,800.0	6,969.3	6,907.8	6,907.8	22.6	138.6	90.79	-3,511.9	-1,578.4	3,222.5	3,061.5	161.04	20.011	
7,874.0	6,968.6	6,907.1	6,907.1	23.7	138.6	90.77	-3,511.9	-1,578.4	3,161.0	2,998.8	162.12	19.498	
7,900.0	6,968.4	6,906.9	6,906.9	24.1	138.6	90.76	-3,511.9	-1,578.4	3,139.4	2,976.9	162.50	19.320	
7,972.4	6,967.8	6,906.3	6,906.3	25.2	138.6	90.74	-3,511.9	-1,578.4	3,079.9	2,916.3	163.61	18.825	
8,000.0	6,967.5	6,906.0	6,906.0	25.6	138.6	90.73	-3,511.9	-1,578.4	3,057.4	2,893.3	164.03	18.640	
8,070.8	6,966.9	6,905.4	6,905.4	26.7	138.6	90.71	-3,511.9	-1,578.4	2,999.9	2,834.7	165.15	18.165	
8,100.0	6,966.6	6,905.1	6,905.1	27.2	138.6	90.70	-3,511.9	-1,578.4	2,976.4	2,810.8	165.61	17.972	
8,169.3	6,966.0	6,904.5	6,904.5	28.3	138.6	90.68	-3,511.9	-1,578.4	2,921.0	2,754.2	166.75	17.518	
8,200.0	6,965.7	6,904.2	6,904.2	28.8	138.6	90.67	-3,511.9	-1,578.4	2,896.6	2,729.4	167.25	17.319	
8,267.7	6,965.1	6,903.6	6,903.6	30.0	138.6	90.65	-3,511.9	-1,578.4	2,843.3	2,674.9	168.38	16.886	
8,300.0	6,964.8	6,903.3	6,903.3	30.5	138.5	90.65	-3,511.9	-1,578.4	2,818.1	2,649.2	168.92	16.683	
8,366.1	6,964.2	6,902.7	6,902.7	31.7	138.5	90.63	-3,511.9	-1,578.4	2,767.0	2,596.9	170.05	16.271	
8,400.0	6,963.9	6,902.4	6,902.4	32.2	138.5	90.62	-3,511.9	-1,578.4	2,741.0	2,570.4	170.63	16.064	
8,464.5	6,963.3	6,901.8	6,901.8	33.4	138.5	90.60	-3,511.9	-1,578.4	2,692.0	2,520.3	171.76	15.674	
8,500.0	6,963.0	6,901.5	6,901.5	34.0	138.5	90.59	-3,511.9	-1,578.4	2,665.4	2,493.1	172.37	15.463	
8,563.0	6,962.4	6,900.9	6,900.9	35.1	138.5	90.57	-3,511.9	-1,578.4	2,618.7	2,445.2	173.48	15.095	
8,600.0	6,962.0	6,900.5	6,900.5	35.8	138.5	90.56	-3,511.9	-1,578.4	2,591.5	2,417.4	174.14	14.882	
8,661.4	6,961.5	6,900.0	6,900.0	36.9	138.5	90.54	-3,511.9	-1,578.4	2,547.0	2,371.8	175.23	14.535	
8,700.0	6,961.1	6,899.6	6,899.6	37.6	138.5	90.53	-3,511.9	-1,578.4	2,519.4	2,343.5	175.92	14.321	
8,759.8	6,960.6	6,899.1	6,899.1	38.7	138.5	90.51	-3,511.9	-1,578.4	2,477.2	2,300.2	177.00	13.995	
8,800.0	6,960.2	6,898.7	6,898.7	39.4	138.5	90.50	-3,511.9	-1,578.4	2,449.2	2,271.5	177.73	13.781	
8,858.2	6,959.7	6,898.2	6,898.2	40.5	138.4	90.48	-3,511.9	-1,578.4	2,409.3	2,230.6	178.79	13.476	
8,900.0	6,959.3	6,897.8	6,897.8	41.2	138.4	90.47	-3,511.9	-1,578.4	2,381.2	2,201.7	179.55	13.262	
8,956.7	6,958.8	6,897.3	6,897.3	42.3	138.4	90.45	-3,511.9	-1,578.4	2,343.7	2,163.1	180.58	12.978	
9,000.0	6,958.4	6,896.9	6,896.9	43.1	138.4	90.44	-3,511.9	-1,578.4	2,315.5	2,134.1	181.38	12.766	
9,055.1	6,957.9	6,896.4	6,896.4	44.1	138.4	90.42	-3,511.9	-1,578.4	2,280.4	2,098.0	182.40	12.502	
9,100.0	6,957.5	6,896.0	6,896.0	44.9	138.4	90.41	-3,511.9	-1,578.4	2,252.3	2,069.1	183.22	12.293	
9,153.5	6,957.0	6,895.5	6,895.5	45.9	138.4	90.39	-3,511.9	-1,578.4	2,219.6	2,035.4	184.22	12.049	
9,200.0	6,956.6	6,895.1	6,895.1	46.8	138.4	90.38	-3,511.9	-1,578.4	2,191.9	2,006.8	185.08	11.843	
9,251.9	6,956.1	6,894.6	6,894.6	47.8	138.4	90.37	-3,511.9	-1,578.4	2,161.6	1,975.6	186.05	11.619	
9,300.0	6,955.7	6,894.2	6,894.2	48.7	138.4	90.35	-3,511.9	-1,578.4	2,134.4	1,947.5	186.95	11.417	
9,350.4	6,955.2	6,893.7	6,893.7	49.6	138.4	90.34	-3,511.9	-1,578.4	2,106.7	1,918.8	187.89	11.212	
9,400.0	6,954.8	6,893.3	6,893.3	50.6	138.3	90.32	-3,511.9	-1,578.4	2,080.2	1,891.4	188.82	11.017	
9,448.8	6,954.3	6,892.8	6,892.8	51.5	138.3	90.31	-3,511.9	-1,578.4	2,055.0	1,865.2	189.74	10.831	
9,500.0	6,953.9	6,892.4	6,892.4	52.5	138.3	90.29	-3,511.9	-1,578.4	2,029.4	1,838.7	190.70	10.642	
9,547.2	6,953.4	6,891.9	6,891.9	53.4	138.3	90.28	-3,511.9	-1,578.4	2,006.7	1,815.1	191.59	10.474	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - HOW SAD C 18-31 - Wellbore #1 - Design #1												Offset Site Error:	0.0 usft
Survey Program: 0-INC												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,600.0	6,952.9	6,891.4	6,891.4	54.4	138.3	90.26	-3,511.9	-1,578.4	1,982.4	1,789.8	192.59	10.293	
9,645.6	6,952.5	6,891.0	6,891.0	55.2	138.3	90.25	-3,511.9	-1,578.4	1,962.3	1,768.8	193.45	10.143	
9,700.0	6,952.0	6,890.5	6,890.5	56.3	138.3	90.23	-3,511.9	-1,578.4	1,939.4	1,744.9	194.48	9.972	
9,744.1	6,951.6	6,890.1	6,890.1	57.1	138.3	90.22	-3,511.9	-1,578.4	1,921.8	1,726.5	195.32	9.839	
9,800.0	6,951.1	6,889.6	6,889.6	58.2	138.3	90.20	-3,511.9	-1,578.4	1,900.7	1,704.3	196.38	9.679	
9,842.5	6,950.7	6,889.2	6,889.2	59.0	138.3	90.19	-3,511.9	-1,578.4	1,885.6	1,688.4	197.19	9.562	
9,900.0	6,950.2	6,888.7	6,888.7	60.1	138.3	90.17	-3,511.9	-1,578.4	1,866.6	1,668.3	198.29	9.414	
9,940.9	6,949.8	6,888.3	6,888.3	60.9	138.2	90.16	-3,511.9	-1,578.4	1,854.0	1,654.9	199.07	9.313	
10,000.0	6,949.3	6,887.8	6,887.8	62.0	138.2	90.15	-3,511.9	-1,578.4	1,837.2	1,637.0	200.19	9.177	
10,039.3	6,948.9	6,887.4	6,887.4	62.8	138.2	90.13	-3,511.9	-1,578.4	1,827.1	1,626.1	200.95	9.092	
10,100.0	6,948.4	6,886.9	6,886.9	64.0	138.2	90.12	-3,511.9	-1,578.4	1,813.0	1,610.9	202.11	8.970	
10,137.8	6,948.0	6,886.5	6,886.5	64.7	138.2	90.10	-3,511.9	-1,578.4	1,805.2	1,602.3	202.83	8.900	
10,200.0	6,947.5	6,886.0	6,886.0	65.9	138.2	90.09	-3,511.9	-1,578.4	1,793.9	1,589.9	204.02	8.793	
10,236.2	6,947.1	6,885.6	6,885.6	66.6	138.2	90.08	-3,511.9	-1,578.4	1,788.4	1,583.7	204.72	8.736	
10,300.0	6,946.6	6,885.1	6,885.1	67.8	138.2	90.06	-3,511.9	-1,578.4	1,780.3	1,574.4	205.94	8.645	
10,334.6	6,946.3	6,884.8	6,884.8	68.5	138.2	90.05	-3,511.9	-1,578.4	1,776.9	1,570.3	206.61	8.600	
10,400.0	6,945.7	6,884.2	6,884.2	69.8	138.2	90.03	-3,511.9	-1,578.4	1,772.3	1,564.4	207.86	8.526	
10,433.0	6,945.4	6,883.9	6,883.9	70.4	138.2	90.02	-3,511.9	-1,578.4	1,770.9	1,562.4	208.50	8.493	
10,493.1	6,944.8	6,883.3	6,883.3	71.6	138.1	90.00	-3,511.9	-1,578.4	1,769.8	1,560.2	209.66	8.442 CC	
10,500.0	6,944.7	6,883.2	6,883.2	71.7	138.1	90.00	-3,511.9	-1,578.4	1,769.8	1,560.1	209.79	8.436	
10,531.5	6,944.5	6,883.0	6,883.0	72.3	138.1	89.99	-3,511.9	-1,578.4	1,770.3	1,559.9	210.40	8.414 ES	
10,600.0	6,943.8	6,882.3	6,882.3	73.7	138.1	89.97	-3,511.9	-1,578.4	1,773.1	1,561.3	211.72	8.375	
10,629.9	6,943.6	6,882.1	6,882.1	74.2	138.1	89.96	-3,511.9	-1,578.4	1,775.1	1,562.8	212.29	8.362	
10,700.0	6,942.9	6,881.4	6,881.4	75.6	138.1	89.94	-3,511.9	-1,578.4	1,781.9	1,568.2	213.65	8.340	
10,728.3	6,942.7	6,881.2	6,881.2	76.2	138.1	89.93	-3,511.9	-1,578.4	1,785.4	1,571.2	214.19	8.335	
10,800.0	6,942.0	6,880.5	6,880.5	77.6	138.1	89.91	-3,511.9	-1,578.4	1,796.2	1,580.7	215.58	8.332 SF	
10,826.7	6,941.8	6,880.3	6,880.3	78.1	138.1	89.90	-3,511.9	-1,578.4	1,801.0	1,584.9	216.10	8.334	
10,900.0	6,941.1	6,879.6	6,879.6	79.5	138.1	89.88	-3,511.9	-1,578.4	1,816.0	1,598.5	217.51	8.349	
10,925.2	6,940.9	6,879.4	6,879.4	80.0	138.1	89.87	-3,511.9	-1,578.4	1,821.8	1,603.8	218.00	8.357	
11,000.0	6,940.2	6,878.7	6,878.7	81.5	138.1	89.85	-3,511.9	-1,578.4	1,841.0	1,621.5	219.45	8.389	
11,023.6	6,940.0	6,878.5	6,878.5	81.9	138.0	89.84	-3,511.9	-1,578.4	1,847.6	1,627.7	219.91	8.402	
11,100.0	6,939.3	6,877.8	6,877.8	83.4	138.0	89.82	-3,511.9	-1,578.4	1,871.0	1,649.6	221.39	8.451	
11,122.0	6,939.1	6,877.6	6,877.6	83.8	138.0	89.81	-3,511.9	-1,578.4	1,878.3	1,656.4	221.81	8.468	
11,200.0	6,938.4	6,876.9	6,876.9	85.4	138.0	89.79	-3,511.9	-1,578.4	1,905.8	1,682.4	223.33	8.534	
11,220.4	6,938.2	6,876.7	6,876.7	85.8	138.0	89.78	-3,511.9	-1,578.4	1,913.5	1,689.7	223.72	8.553	
11,300.0	6,937.4	6,875.9	6,875.9	87.3	138.0	89.76	-3,511.9	-1,578.4	1,945.1	1,719.8	225.27	8.635	
11,318.9	6,937.3	6,875.8	6,875.8	87.7	138.0	89.76	-3,511.9	-1,578.4	1,953.0	1,727.4	225.63	8.656	
11,400.0	6,936.5	6,875.0	6,875.0	89.3	138.0	89.73	-3,511.9	-1,578.4	1,988.6	1,761.4	227.21	8.752	
11,417.3	6,936.4	6,874.9	6,874.9	89.6	138.0	89.73	-3,511.9	-1,578.4	1,996.6	1,769.0	227.55	8.774	
11,500.0	6,935.6	6,874.1	6,874.1	91.3	138.0	89.70	-3,511.9	-1,578.4	2,036.2	1,807.0	229.15	8.886	
11,515.7	6,935.5	6,874.0	6,874.0	91.6	138.0	89.70	-3,511.9	-1,578.4	2,044.0	1,814.6	229.46	8.908	
11,600.0	6,934.7	6,873.2	6,873.2	93.2	137.9	89.67	-3,511.9	-1,578.4	2,087.4	1,856.3	231.10	9.033	
11,614.1	6,934.6	6,873.1	6,873.1	93.5	137.9	89.67	-3,511.9	-1,578.4	2,095.0	1,863.6	231.37	9.055	
11,700.0	6,933.8	6,872.3	6,872.3	95.2	137.9	89.64	-3,511.9	-1,578.4	2,142.1	1,909.1	233.04	9.192	
11,712.6	6,933.7	6,872.2	6,872.2	95.4	137.9	89.64	-3,511.9	-1,578.4	2,149.3	1,916.0	233.29	9.213	
11,800.0	6,932.9	6,871.4	6,871.4	97.1	137.9	89.61	-3,511.9	-1,578.4	2,200.0	1,965.0	234.99	9.362	
11,811.0	6,932.8	6,871.3	6,871.3	97.4	137.9	89.61	-3,511.9	-1,578.4	2,206.6	1,971.4	235.21	9.382	
11,900.0	6,932.0	6,870.5	6,870.5	99.1	137.9	89.58	-3,511.9	-1,578.4	2,260.9	2,023.9	236.94	9.542	
11,909.4	6,931.9	6,870.4	6,870.4	99.3	137.9	89.58	-3,511.9	-1,578.4	2,266.7	2,029.6	237.12	9.559	
12,000.0	6,931.0	6,869.5	6,869.5	101.1	137.9	89.55	-3,511.9	-1,578.4	2,324.4	2,085.5	238.89	9.730	
12,007.8	6,931.0	6,869.5	6,869.5	101.2	137.9	89.55	-3,511.9	-1,578.4	2,329.5	2,090.5	239.04	9.745	
12,100.0	6,930.1	6,868.6	6,868.6	103.0	137.9	89.52	-3,511.9	-1,578.4	2,390.4	2,149.6	240.84	9.926	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-INC												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
12,106.3	6,930.1	6,868.6	6,868.6	103.2	137.8	89.52	-3,511.9	-1,578.4	2,394.7	2,153.7	240.96	9.938	
12,200.0	6,929.2	6,867.7	6,867.7	105.0	137.8	89.49	-3,511.9	-1,578.4	2,458.8	2,216.0	242.79	10.127	
12,204.7	6,929.2	6,867.7	6,867.7	105.1	137.8	89.49	-3,511.9	-1,578.4	2,462.0	2,219.2	242.88	10.137	
12,300.0	6,928.3	6,866.8	6,866.8	107.0	137.8	89.46	-3,511.9	-1,578.4	2,529.2	2,284.5	244.74	10.334	
12,303.1	6,928.3	6,866.8	6,866.8	107.1	137.8	89.46	-3,511.9	-1,578.4	2,531.5	2,286.7	244.80	10.341	
12,400.0	6,927.4	6,865.9	6,865.9	109.0	137.8	89.44	-3,511.9	-1,578.4	2,601.6	2,354.9	246.69	10.546	
12,401.5	6,927.4	6,865.9	6,865.9	109.0	137.8	89.43	-3,511.9	-1,578.4	2,602.7	2,356.0	246.72	10.549	
12,500.0	6,926.5	6,865.0	6,865.0	110.9	137.8	89.41	-3,511.9	-1,578.4	2,675.8	2,427.1	248.64	10.761	
12,598.4	6,925.6	6,864.1	6,864.1	112.9	137.8	89.38	-3,511.9	-1,578.4	2,750.3	2,499.8	250.57	10.976	
12,600.0	6,925.6	6,864.1	6,864.1	112.9	137.8	89.38	-3,511.9	-1,578.4	2,751.5	2,501.0	250.60	10.980	
12,696.8	6,924.7	6,863.2	6,863.2	114.8	137.7	89.35	-3,511.9	-1,578.4	2,826.4	2,573.9	252.49	11.194	
12,700.0	6,924.6	6,863.1	6,863.1	114.9	137.7	89.35	-3,511.9	-1,578.4	2,828.8	2,576.3	252.55	11.201	
12,795.2	6,923.8	6,862.3	6,862.3	116.8	137.7	89.32	-3,511.9	-1,578.4	2,903.8	2,649.3	254.41	11.414	
12,800.0	6,923.7	6,862.2	6,862.2	116.9	137.7	89.32	-3,511.9	-1,578.4	2,907.5	2,653.0	254.50	11.424	
12,893.7	6,922.9	6,861.4	6,861.4	118.7	137.7	89.29	-3,511.9	-1,578.4	2,982.4	2,726.1	256.34	11.635	
12,900.0	6,922.8	6,861.3	6,861.3	118.8	137.7	89.29	-3,511.9	-1,578.4	2,987.5	2,731.0	256.46	11.649	
12,992.1	6,922.0	6,860.5	6,860.5	120.6	137.7	89.26	-3,511.9	-1,578.4	3,062.2	2,803.9	258.26	11.857	
13,000.0	6,921.9	6,860.4	6,860.4	120.8	137.7	89.26	-3,511.9	-1,578.4	3,068.6	2,810.2	258.41	11.875	
13,090.5	6,921.1	6,859.6	6,859.6	122.6	137.7	89.23	-3,511.9	-1,578.4	3,143.0	2,882.8	260.19	12.080	
13,100.0	6,921.0	6,859.5	6,859.5	122.8	137.7	89.23	-3,511.9	-1,578.4	3,150.8	2,890.5	260.37	12.101	
13,188.9	6,920.2	6,858.7	6,858.7	124.5	137.7	89.20	-3,511.9	-1,578.4	3,224.8	2,962.7	262.11	12.303	
13,200.0	6,920.1	6,858.6	6,858.6	124.8	137.6	89.20	-3,511.9	-1,578.4	3,234.1	2,971.7	262.33	12.328	
13,287.4	6,919.3	6,857.8	6,857.8	126.5	137.6	89.17	-3,511.9	-1,578.4	3,307.5	3,043.5	264.04	12.527	
13,300.0	6,919.1	6,857.6	6,857.6	126.7	137.6	89.17	-3,511.9	-1,578.4	3,318.2	3,053.9	264.28	12.555	
13,385.8	6,918.4	6,856.9	6,856.9	128.4	137.6	89.14	-3,511.9	-1,578.4	3,391.1	3,125.1	265.96	12.750	
13,400.0	6,918.2	6,856.7	6,856.7	128.7	137.6	89.14	-3,511.9	-1,578.4	3,403.2	3,137.0	266.24	12.782	
13,484.2	6,917.5	6,856.0	6,856.0	130.4	137.6	89.11	-3,511.9	-1,578.4	3,475.4	3,207.5	267.89	12.973	
13,500.0	6,917.3	6,855.8	6,855.8	130.7	137.6	89.11	-3,511.9	-1,578.4	3,489.0	3,220.8	268.20	13.009	
13,582.6	6,916.6	6,855.1	6,855.1	132.3	137.6	89.08	-3,511.9	-1,578.4	3,560.5	3,290.7	269.82	13.196	
13,600.0	6,916.4	6,854.9	6,854.9	132.7	137.6	89.08	-3,511.9	-1,578.4	3,575.5	3,305.4	270.16	13.235	
13,681.1	6,915.6	6,854.1	6,854.1	134.3	137.6	89.05	-3,511.9	-1,578.4	3,646.2	3,374.5	271.74	13.418	
13,700.0	6,915.5	6,854.0	6,854.0	134.6	137.6	89.05	-3,511.9	-1,578.4	3,662.8	3,390.6	272.11	13.460	
13,779.5	6,914.7	6,853.2	6,853.2	136.2	137.5	89.02	-3,511.9	-1,578.4	3,732.6	3,458.9	273.67	13.639	
13,800.0	6,914.6	6,853.1	6,853.1	136.6	137.5	89.02	-3,511.9	-1,578.4	3,750.6	3,476.5	274.07	13.685	
13,877.9	6,913.8	6,852.3	6,852.3	138.2	137.5	89.00	-3,511.9	-1,578.4	3,819.5	3,543.9	275.60	13.859	
13,900.0	6,913.6	6,852.1	6,852.1	138.6	137.5	88.99	-3,511.9	-1,578.4	3,839.1	3,563.0	276.03	13.908	
13,976.3	6,912.9	6,851.4	6,851.4	140.1	137.5	88.97	-3,511.9	-1,578.4	3,907.0	3,629.5	277.53	14.078	
14,000.0	6,912.7	6,851.2	6,851.2	140.6	137.5	88.96	-3,511.9	-1,578.4	3,928.1	3,650.1	277.99	14.130	
14,074.8	6,912.0	6,850.5	6,850.5	142.0	137.5	88.94	-3,511.9	-1,578.4	3,995.0	3,715.6	279.39	14.299	
14,079.0	6,912.0	6,850.5	6,850.5	142.1	137.5	88.93	-3,511.9	-1,578.4	3,998.7	3,719.3	279.47	14.308	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

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	-161.00	-655.8	-225.9	694.1				
98.4	98.4	69.8	69.8	0.1	0.1	-160.97	-655.7	-226.1	693.6	693.4	0.14	4,811.776	
100.0	100.0	71.4	71.4	0.1	0.1	-160.97	-655.7	-226.1	693.6	693.4	0.15	4,717.942	
196.8	196.8	171.5	171.5	0.3	0.2	-160.90	-655.2	-226.9	693.4	692.9	0.48	1,440.146	
200.0	200.0	174.8	174.8	0.3	0.2	-160.90	-655.2	-226.9	693.4	692.9	0.49	1,406.359	
295.3	295.3	267.2	267.2	0.5	0.3	-160.85	-654.7	-227.3	693.0	692.2	0.79	881.746	
300.0	300.0	271.7	271.7	0.5	0.3	-160.85	-654.7	-227.3	693.0	692.2	0.80	866.765	
393.7	393.7	368.2	368.2	0.8	0.3	-160.79	-654.4	-228.0	693.0	691.9	1.07	646.545	
400.0	400.0	375.0	374.9	0.8	0.3	-160.78	-654.3	-228.1	693.0	691.9	1.09	635.605	
492.1	492.1	471.3	471.3	1.0	0.4	-160.71	-653.3	-228.7	692.2	690.8	1.36	510.191	
500.0	500.0	479.4	479.4	1.0	0.4	-160.70	-653.2	-228.7	692.1	690.7	1.38	501.729	
590.5	590.5	575.0	574.9	1.2	0.4	-160.65	-651.6	-228.8	690.7	689.1	1.64	420.832	
600.0	600.0	585.0	585.0	1.2	0.5	-160.64	-651.4	-228.8	690.6	688.9	1.67	413.823	
689.0	689.0	671.5	671.4	1.4	0.5	-160.56	-649.5	-229.3	688.9	687.0	1.92	359.239	
700.0	700.0	682.0	682.0	1.4	0.5	-160.54	-649.3	-229.4	688.7	686.8	1.95	353.500	
787.4	787.4	771.6	771.5	1.6	0.6	-160.44	-647.6	-230.0	687.4	685.2	2.19	313.641	
800.0	800.0	784.7	784.6	1.7	0.6	-160.43	-647.3	-230.1	687.1	684.9	2.23	308.595	
885.8	885.8	869.9	869.8	1.9	0.6	-160.35	-645.5	-230.4	685.5	683.0	2.46	278.430	
900.0	900.0	883.8	883.7	1.9	0.6	-160.34	-645.2	-230.5	685.2	682.7	2.50	274.014	
984.2	984.2	963.3	963.2	2.1	0.6	-160.29	-643.9	-230.7	684.0	681.2	2.73	250.767	
1,000.0	1,000.0	978.0	977.9	2.1	0.7	-160.28	-643.7	-230.7	683.8	681.0	2.77	246.884	
1,082.7	1,082.7	1,059.4	1,059.2	2.3	0.7	-160.24	-642.9	-231.0	683.2	680.2	2.99	228.302	
1,100.0	1,100.0	1,076.7	1,076.6	2.3	0.7	-160.23	-642.8	-231.0	683.1	680.0	3.04	224.748	
1,181.1	1,181.1	1,159.1	1,159.0	2.5	0.7	-160.18	-641.9	-231.4	682.4	679.1	3.26	209.568	
1,200.0	1,200.0	1,178.4	1,178.3	2.6	0.7	-160.17	-641.7	-231.4	682.2	678.9	3.31	206.319	
1,231.1	1,231.1	1,209.8	1,209.7	2.6	0.8	163.34	-641.4	-231.4	682.1	678.7	3.35	203.533	
1,279.5	1,279.5	1,257.8	1,257.6	2.7	0.8	163.37	-640.9	-231.3	682.5	679.0	3.48	196.178	
1,300.0	1,300.0	1,278.0	1,277.9	2.8	0.8	163.39	-640.7	-231.3	682.9	679.4	3.53	193.286	
1,377.9	1,377.8	1,353.4	1,353.2	3.0	0.8	163.47	-640.1	-231.3	685.9	682.2	3.74	183.629	
1,400.0	1,399.8	1,374.5	1,374.3	3.0	0.8	163.50	-640.0	-231.3	687.2	683.4	3.79	181.220	
1,476.4	1,475.9	1,450.5	1,450.4	3.2	0.8	163.61	-639.8	-231.1	693.0	689.0	3.99	173.660	
1,500.0	1,499.5	1,474.6	1,474.4	3.2	0.8	163.65	-639.6	-231.1	695.2	691.1	4.05	171.581	
1,574.8	1,573.7	1,547.6	1,547.5	3.4	0.9	163.84	-639.2	-231.3	703.2	699.0	4.25	165.452	
1,600.0	1,598.7	1,571.7	1,571.5	3.5	0.9	163.90	-639.1	-231.4	706.5	702.1	4.32	163.637	
1,673.2	1,671.1	1,643.3	1,643.1	3.7	0.9	164.12	-638.9	-231.7	717.1	712.6	4.52	158.690	
1,700.0	1,697.5	1,669.9	1,669.7	3.7	0.9	164.20	-638.8	-231.9	721.4	716.8	4.59	157.114	
1,771.6	1,767.9	1,740.9	1,740.7	4.0	0.9	164.44	-638.6	-232.1	734.2	729.4	4.79	153.168	
1,800.1	1,795.7	1,769.0	1,768.9	4.0	0.9	164.54	-638.5	-232.1	739.7	734.8	4.87	151.837	
1,870.1	1,864.2	1,835.5	1,835.4	4.3	0.9	164.83	-638.4	-232.1	753.6	748.6	5.05	149.115	
1,900.0	1,893.4	1,863.0	1,862.8	4.4	0.9	164.94	-638.5	-232.1	759.7	754.6	5.13	148.168	
1,968.5	1,960.4	1,929.1	1,928.9	4.6	0.9	165.19	-638.9	-232.0	773.8	768.5	5.31	145.804	
2,000.0	1,991.3	1,961.6	1,961.5	4.7	0.9	165.30	-639.0	-231.8	780.2	774.8	5.39	144.809	
2,066.9	2,056.7	2,027.3	2,027.2	5.0	1.0	165.52	-639.3	-231.3	793.7	788.1	5.56	142.629	
2,100.0	2,089.1	2,057.5	2,057.4	5.1	1.0	165.61	-639.4	-231.1	800.5	794.8	5.66	141.526	
2,165.3	2,153.0	2,118.2	2,118.1	5.3	1.0	165.80	-640.0	-230.7	814.1	808.2	5.83	139.540	
2,200.0	2,186.9	2,151.8	2,151.7	5.5	1.0	165.90	-640.3	-230.6	821.3	815.4	5.93	138.534	
2,263.8	2,249.3	2,213.5	2,213.4	5.7	1.0	166.10	-640.9	-230.5	834.7	828.6	6.10	136.741	
2,300.0	2,284.7	2,248.2	2,248.1	5.8	1.0	166.21	-641.3	-230.5	842.4	836.2	6.20	135.796	
2,362.2	2,345.5	2,307.9	2,307.7	6.1	1.0	166.40	-642.0	-230.5	855.6	849.2	6.37	134.219	
2,400.0	2,382.5	2,344.2	2,344.1	6.2	1.0	166.51	-642.4	-230.5	863.7	857.2	6.48	133.304	
2,460.6	2,441.8	2,402.6	2,402.5	6.5	1.0	166.68	-643.2	-230.5	876.7	870.0	6.65	131.875	
2,500.0	2,480.3	2,442.6	2,442.4	6.6	1.0	166.79	-643.6	-230.6	885.1	878.3	6.76	131.012	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - LATHAM 7-1 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,559.0	2,538.1	2,502.5	2,502.3	6.9	1.0	166.97	-644.2	-230.7	897.6	890.7	6.92	129.723	
2,600.0	2,578.1	2,543.4	2,543.3	7.0	1.0	167.10	-644.5	-230.9	906.2	899.2	7.03	128.875	
2,657.5	2,634.4	2,601.0	2,600.8	7.3	1.0	167.27	-644.8	-231.1	918.2	911.0	7.19	127.695	
2,700.0	2,675.9	2,642.9	2,642.7	7.5	1.0	167.40	-644.9	-231.2	927.1	919.8	7.31	126.844	
2,755.9	2,730.6	2,698.0	2,697.8	7.7	1.0	167.57	-645.1	-231.5	938.7	931.2	7.47	125.745	
2,800.0	2,773.8	2,739.3	2,739.1	7.9	1.0	167.70	-645.2	-231.8	947.9	940.3	7.59	124.892	
2,854.3	2,826.9	2,789.9	2,789.8	8.1	1.1	167.85	-645.5	-232.2	959.4	951.6	7.74	123.885	
2,857.4	2,829.9	2,792.8	2,792.6	8.1	1.1	167.86	-645.5	-232.3	960.0	952.3	7.75	123.831	
2,900.0	2,871.6	2,834.2	2,834.0	8.3	1.1	168.02	-645.7	-232.6	968.8	960.9	7.85	123.398	
2,952.7	2,923.5	2,886.2	2,886.0	8.4	1.1	168.19	-646.1	-233.1	978.8	970.8	7.96	123.034	
3,000.0	2,970.1	2,936.4	2,936.2	8.6	1.1	168.34	-646.3	-233.4	986.9	978.9	8.04	122.726	
3,051.2	3,020.7	2,992.6	2,992.4	8.7	1.1	168.47	-646.5	-233.5	994.6	986.4	8.13	122.345	
3,100.0	3,069.1	3,042.9	3,042.7	8.9	1.1	168.57	-646.4	-233.4	1,000.9	992.6	8.22	121.819	
3,149.6	3,118.3	3,093.5	3,093.3	9.0	1.1	168.66	-646.3	-233.4	1,006.4	998.0	8.30	121.194	
3,200.0	3,168.5	3,140.8	3,140.6	9.1	1.1	168.73	-646.2	-233.4	1,011.1	1,002.7	8.39	120.513	
3,248.0	3,216.3	3,185.3	3,185.1	9.2	1.1	168.79	-646.2	-233.5	1,015.0	1,006.5	8.47	119.848	
3,300.0	3,268.2	3,236.1	3,235.9	9.3	1.1	168.85	-646.3	-233.7	1,018.4	1,009.9	8.56	119.038	
3,346.4	3,314.6	3,282.5	3,282.3	9.4	1.1	168.88	-646.4	-233.7	1,020.7	1,012.1	8.63	118.267	
3,400.0	3,368.1	3,340.0	3,339.8	9.5	1.1	168.89	-646.7	-233.6	1,022.4	1,013.7	8.72	117.274	
3,444.9	3,413.0	3,389.8	3,389.6	9.6	1.1	168.88	-646.7	-233.3	1,022.8	1,014.1	8.79	116.367	
3,457.5	3,425.6	3,403.3	3,403.1	9.6	1.1	-154.61	-646.6	-233.2	1,022.8	1,014.0	8.81	116.047	
3,500.0	3,468.1	3,444.0	3,443.8	9.7	1.1	-154.63	-646.5	-232.9	1,022.6	1,013.7	8.90	114.853	
3,543.3	3,511.4	3,485.5	3,485.3	9.7	1.1	-154.63	-646.5	-232.7	1,022.4	1,013.4	9.00	113.569	
3,600.0	3,568.1	3,541.3	3,541.1	9.8	1.1	-154.64	-646.5	-232.5	1,022.4	1,013.2	9.13	111.959	
3,641.7	3,609.9	3,582.7	3,582.5	9.9	1.1	-154.66	-646.6	-232.2	1,022.3	1,013.1	9.23	110.800	
3,700.0	3,668.1	3,639.9	3,639.7	10.0	1.1	-154.71	-646.9	-231.5	1,022.3	1,012.9	9.36	109.219	
3,702.4	3,670.5	3,642.2	3,642.0	10.0	1.1	-154.71	-646.9	-231.4	1,022.3	1,012.9	9.37	109.156	
3,740.1	3,708.3	3,679.1	3,678.9	10.1	1.2	-154.74	-647.1	-230.9	1,022.3	1,012.8	9.45	108.154	
3,800.0	3,768.1	3,738.3	3,738.1	10.2	1.2	-154.80	-647.6	-230.1	1,022.4	1,012.8	9.59	106.612	
3,838.6	3,806.7	3,776.7	3,776.4	10.2	1.2	-154.83	-648.0	-229.5	1,022.4	1,012.7	9.68	105.638	
3,900.0	3,868.1	3,841.9	3,841.7	10.3	1.2	-154.90	-648.5	-228.4	1,022.5	1,012.6	9.82	104.113	
3,937.0	3,905.1	3,882.7	3,882.5	10.4	1.2	-154.94	-648.7	-227.7	1,022.3	1,012.4	9.91	103.193	
4,000.0	3,968.1	3,944.5	3,944.2	10.5	1.2	-154.99	-648.7	-226.7	1,021.9	1,011.9	10.05	101.664	
4,035.4	4,003.6	3,977.8	3,977.5	10.6	1.2	-155.02	-648.8	-226.2	1,021.8	1,011.7	10.13	100.833	
4,092.8	4,060.9	4,032.7	4,032.4	10.7	1.2	-155.06	-649.1	-225.6	1,021.8	1,011.5	10.27	99.528	
4,100.0	4,068.1	4,039.7	4,039.4	10.7	1.2	-155.06	-649.1	-225.5	1,021.8	1,011.5	10.28	99.367	
4,133.8	4,102.0	4,072.5	4,072.2	10.8	1.2	-155.09	-649.3	-225.1	1,021.8	1,011.4	10.36	98.621	
4,200.0	4,168.1	4,137.5	4,137.2	10.9	1.2	-155.14	-649.8	-224.3	1,021.9	1,011.4	10.51	97.207	
4,232.3	4,200.4	4,169.5	4,169.2	10.9	1.2	-155.16	-650.1	-224.0	1,022.0	1,011.4	10.59	96.530	
4,300.0	4,268.1	4,239.1	4,238.8	11.1	1.2	-155.20	-650.5	-223.4	1,022.1	1,011.4	10.74	95.140	
4,330.7	4,298.8	4,271.5	4,271.3	11.1	1.2	-155.22	-650.6	-223.2	1,022.1	1,011.3	10.81	94.515	
4,400.0	4,368.1	4,340.4	4,340.1	11.2	1.3	-155.25	-650.8	-222.6	1,022.0	1,011.1	10.97	93.130	
4,409.7	4,377.8	4,349.6	4,349.3	11.3	1.3	-155.26	-650.8	-222.5	1,022.0	1,011.0	11.00	92.940	
4,429.1	4,397.3	4,368.1	4,367.8	11.3	1.3	-155.27	-650.9	-222.3	1,022.0	1,011.0	11.04	92.563	
4,500.0	4,468.1	4,438.0	4,437.7	11.4	1.3	-155.33	-651.5	-221.3	1,022.2	1,011.0	11.21	91.219	
4,527.5	4,495.7	4,466.0	4,465.7	11.5	1.3	-155.36	-651.7	-220.9	1,022.2	1,011.0	11.27	90.704	
4,600.0	4,568.1	4,536.7	4,536.4	11.6	1.3	-155.41	-652.2	-220.2	1,022.3	1,010.9	11.44	89.400	
4,626.0	4,594.1	4,561.2	4,560.9	11.7	1.3	-155.42	-652.4	-220.0	1,022.4	1,011.0	11.49	88.953	
4,700.0	4,668.1	4,634.4	4,634.1	11.8	1.3	-155.43	-652.9	-220.0	1,022.9	1,011.2	11.66	87.707	
4,724.4	4,692.5	4,659.9	4,659.6	11.8	1.3	-155.44	-653.0	-220.0	1,023.0	1,011.3	11.72	87.295	
4,800.0	4,768.1	4,735.5	4,735.2	12.0	1.3	-155.44	-653.3	-220.0	1,023.3	1,011.4	11.89	86.042	
4,822.8	4,791.0	4,757.2	4,756.9	12.0	1.3	-155.44	-653.4	-220.0	1,023.4	1,011.4	11.95	85.672	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
4,900.0	4,868.1	4,831.3	4,831.0	12.2	1.3	-155.46	-654.0	-220.0	1,023.9	1,011.8	12.12	84.459	
4,921.2	4,889.4	4,851.9	4,851.6	12.2	1.3	-155.46	-654.2	-220.0	1,024.1	1,011.9	12.17	84.132	
5,000.0	4,968.1	4,930.4	4,930.1	12.4	1.3	-155.48	-655.0	-220.1	1,024.9	1,012.5	12.35	82.957	
5,019.7	4,987.8	4,950.9	4,950.6	12.4	1.3	-155.48	-655.2	-220.2	1,025.1	1,012.7	12.40	82.669	
5,100.0	5,068.1	5,032.2	5,032.9	12.6	1.4	-155.46	-655.6	-220.7	1,025.6	1,013.0	12.58	81.500	
5,118.1	5,086.2	5,051.3	5,051.0	12.6	1.4	-155.46	-655.6	-220.8	1,025.8	1,013.1	12.63	81.239	
5,200.0	5,168.1	5,133.1	5,132.8	12.8	1.4	-155.45	-656.1	-221.1	1,026.3	1,013.5	12.82	80.074	
5,216.5	5,184.7	5,149.7	5,149.4	12.8	1.4	-155.45	-656.2	-221.1	1,026.4	1,013.5	12.86	79.842	
5,300.0	5,268.1	5,234.6	5,234.2	13.0	1.4	-155.44	-656.6	-221.5	1,026.9	1,013.9	13.05	78.686	
5,314.9	5,283.1	5,250.1	5,249.8	13.0	1.4	-155.44	-656.7	-221.6	1,027.0	1,013.9	13.09	78.479	
5,400.0	5,368.1	5,336.0	5,335.7	13.1	1.4	-155.43	-656.9	-221.8	1,027.3	1,014.0	13.29	77.321	
5,413.4	5,381.5	5,349.0	5,348.6	13.2	1.4	-155.43	-656.9	-221.9	1,027.4	1,014.0	13.32	77.144	
5,500.0	5,468.1	5,433.2	5,432.9	13.3	1.4	-155.43	-657.3	-222.1	1,027.8	1,014.3	13.52	76.022	
5,511.8	5,479.9	5,444.8	5,444.4	13.4	1.4	-155.43	-657.4	-222.1	1,027.9	1,014.4	13.55	75.873	
5,600.0	5,568.1	5,530.3	5,530.0	13.5	1.4	-155.40	-657.8	-222.8	1,028.6	1,014.8	13.75	74.786	
5,610.2	5,578.4	5,540.0	5,539.7	13.6	1.4	-155.40	-657.9	-222.9	1,028.7	1,014.9	13.78	74.662	
5,700.0	5,668.1	5,628.3	5,628.0	13.7	1.5	-155.36	-658.5	-224.1	1,029.7	1,015.7	13.99	73.606	
5,708.6	5,676.8	5,637.5	5,637.2	13.8	1.5	-155.35	-658.5	-224.2	1,029.8	1,015.8	14.01	73.504	
5,800.0	5,768.1	5,729.8	5,729.5	13.9	1.5	-155.32	-659.1	-224.9	1,030.6	1,016.4	14.23	72.442	
5,807.1	5,775.2	5,736.3	5,736.0	14.0	1.5	-155.32	-659.1	-225.0	1,030.7	1,016.5	14.24	72.362	
5,900.0	5,868.1	5,826.5	5,826.1	14.1	1.5	-155.28	-659.9	-226.3	1,032.0	1,017.5	14.46	71.347	
5,905.5	5,873.6	5,832.6	5,832.2	14.1	1.5	-155.27	-659.9	-226.4	1,032.0	1,017.6	14.48	71.287	
6,000.0	5,968.1	5,933.4	5,933.1	14.3	1.5	-155.23	-660.4	-227.4	1,032.8	1,018.1	14.70	70.247	
6,003.9	5,972.1	5,937.3	5,936.9	14.3	1.5	-155.23	-660.4	-227.4	1,032.8	1,018.1	14.71	70.204	
6,100.0	6,068.1	6,037.4	6,037.0	14.5	1.5	-155.19	-660.6	-228.3	1,033.4	1,018.5	14.94	69.184	
6,102.3	6,070.5	6,040.1	6,039.7	14.5	1.5	-155.19	-660.6	-228.4	1,033.4	1,018.5	14.94	69.160	
6,200.0	6,168.1	6,148.2	6,147.8	14.7	1.5	-155.13	-659.8	-229.1	1,033.0	1,017.9	15.17	68.111	
6,200.8	6,168.9	6,149.0	6,148.6	14.7	1.5	-155.13	-659.8	-229.2	1,033.0	1,017.9	15.17	68.102	
6,288.5	6,256.6	6,237.1	6,236.7	14.9	1.6	-155.05	-658.4	-230.1	1,032.2	1,016.8	15.37	67.156	
6,299.2	6,267.3	6,247.2	6,246.8	14.9	1.6	24.76	-658.3	-230.3	1,032.0	1,016.7	15.38	67.094	
6,300.0	6,268.1	6,247.9	6,247.5	14.9	1.6	24.76	-658.3	-230.3	1,032.0	1,016.6	15.38	67.088	
6,350.0	6,318.1	6,294.6	6,294.2	15.0	1.6	24.96	-657.6	-231.1	1,029.4	1,013.9	15.47	66.552	
6,397.6	6,365.3	6,341.0	6,340.6	15.1	1.6	25.34	-657.0	-232.0	1,024.1	1,008.5	15.59	65.693	
6,400.0	6,367.7	6,343.3	6,342.9	15.1	1.6	25.36	-656.9	-232.0	1,023.8	1,008.2	15.60	65.643	
6,450.0	6,416.8	6,391.9	6,391.4	15.1	1.6	25.96	-656.3	-233.0	1,015.0	999.3	15.75	64.459	
6,496.0	6,461.3	6,430.2	6,429.7	15.1	1.6	26.65	-655.9	-233.7	1,004.4	988.5	15.89	63.220	
6,500.0	6,465.1	6,433.3	6,432.9	15.1	1.6	26.71	-655.9	-233.8	1,003.4	987.5	15.90	63.109	
6,550.0	6,512.4	6,472.8	6,472.4	15.1	1.6	27.64	-655.9	-234.5	989.2	973.1	16.04	61.670	
6,594.5	6,553.4	6,508.7	6,508.2	15.1	1.6	28.66	-656.1	-235.1	974.4	958.3	16.15	60.340	
6,600.0	6,558.4	6,513.7	6,513.3	15.1	1.6	28.81	-656.2	-235.2	972.4	956.3	16.16	60.169	
6,650.0	6,603.0	6,558.5	6,558.0	15.1	1.6	30.32	-656.7	-236.0	953.1	936.8	16.27	58.580	
6,692.9	6,639.9	6,595.6	6,595.1	15.1	1.6	31.86	-657.1	-236.5	934.3	918.0	16.35	57.152	
6,700.0	6,645.9	6,601.6	6,601.1	15.1	1.6	32.13	-657.2	-236.6	931.1	914.7	16.36	56.911	
6,750.0	6,686.8	6,641.7	6,641.2	15.1	1.6	34.28	-657.6	-237.3	906.7	890.2	16.44	55.141	
6,791.3	6,719.1	6,673.4	6,672.9	15.1	1.6	36.35	-658.0	-237.9	884.9	868.3	16.51	53.588	
6,800.0	6,725.7	6,679.9	6,679.4	15.1	1.6	36.82	-658.1	-238.0	880.1	863.6	16.53	53.255	
6,850.0	6,762.3	6,717.1	6,716.6	15.1	1.6	39.84	-658.6	-238.7	851.5	834.9	16.62	51.226	
6,889.7	6,789.7	6,745.9	6,745.4	15.1	1.6	42.64	-658.9	-239.3	827.6	810.8	16.72	49.490	
6,900.0	6,796.5	6,753.1	6,752.6	15.1	1.6	43.41	-658.9	-239.5	821.2	804.5	16.75	49.035	
6,950.0	6,828.0	6,786.1	6,785.6	15.1	1.7	47.49	-659.1	-240.3	789.3	772.4	16.90	46.700	
6,988.2	6,850.2	6,809.0	6,808.5	15.1	1.7	50.93	-659.2	-240.8	764.2	747.2	17.05	44.814	
7,000.0	6,856.7	6,815.7	6,815.2	15.1	1.7	52.04	-659.3	-241.0	756.3	739.2	17.09	44.258	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - LATHAM 7-1 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,050.0	6,882.5	6,842.2	6,841.7	15.2	1.7	57.00	-659.4	-241.5	722.5	705.2	17.29	41.777	
7,086.6	6,899.5	6,859.8	6,859.3	15.3	1.7	60.83	-659.6	-241.8	697.5	680.0	17.45	39.971	
7,100.0	6,905.3	6,865.8	6,865.3	15.4	1.7	62.26	-659.6	-241.9	688.3	670.8	17.50	39.329	
7,150.0	6,924.9	6,886.4	6,885.9	15.7	1.7	67.66	-659.8	-242.2	654.1	636.4	17.69	36.970	
7,185.0	6,936.7	6,898.9	6,898.4	15.9	1.7	71.39	-660.0	-242.3	630.5	612.7	17.83	35.371	
7,200.0	6,941.2	6,904.1	6,903.6	16.0	1.7	72.99	-660.0	-242.4	620.5	602.7	17.87	34.717	
7,250.0	6,954.2	6,919.3	6,918.7	16.3	1.7	78.06	-660.2	-242.5	588.0	570.0	18.07	32.548	
7,283.4	6,961.0	6,927.1	6,926.6	16.6	1.7	81.12	-660.2	-242.6	567.2	549.0	18.23	31.109	
7,300.0	6,963.8	6,930.4	6,929.8	16.7	1.7	82.51	-660.3	-242.6	557.2	538.9	18.32	30.412	
7,350.0	6,970.0	6,937.6	6,937.0	17.2	1.7	86.16	-660.3	-242.6	528.9	510.2	18.68	28.305	
7,381.9	6,972.1	6,940.1	6,939.6	17.5	1.7	88.03	-660.3	-242.6	512.3	493.4	18.98	27.001	
7,400.0	6,972.7	6,940.8	6,940.3	17.7	1.7	88.93	-660.3	-242.7	503.6	484.4	19.15	26.298	
7,420.0	6,972.8	6,941.1	6,940.5	17.9	1.7	89.77	-660.3	-242.7	494.5	475.2	19.36	25.547	
7,480.3	6,972.2	6,940.9	6,940.3	18.5	1.7	89.75	-660.3	-242.7	471.2	451.2	20.00	23.559	
7,500.0	6,972.0	6,940.8	6,940.3	18.7	1.7	89.74	-660.3	-242.7	465.1	444.8	20.21	23.009	
7,578.7	6,971.3	6,940.6	6,940.0	19.7	1.7	89.71	-660.3	-242.7	448.3	427.1	21.14	21.209	
7,600.0	6,971.1	6,940.5	6,940.0	19.9	1.7	89.70	-660.3	-242.6	446.0	424.6	21.39	20.856	
7,636.7	6,970.8	6,940.4	6,939.8	20.4	1.7	89.68	-660.3	-242.6	444.5	422.7	21.86	20.337 CC, ES	
7,677.1	6,970.4	6,940.3	6,939.7	20.9	1.7	89.67	-660.3	-242.6	446.4	424.0	22.38	19.947	
7,700.0	6,970.2	6,940.2	6,939.7	21.2	1.7	89.66	-660.3	-242.6	449.0	426.3	22.67	19.805	
7,775.6	6,969.5	6,940.0	6,939.4	22.2	1.7	89.63	-660.3	-242.6	465.7	442.0	23.72	19.634 SF	
7,800.0	6,969.3	6,939.9	6,939.4	22.6	1.7	89.62	-660.3	-242.6	473.6	449.5	24.06	19.683	
7,874.0	6,968.6	6,939.7	6,939.1	23.7	1.7	89.59	-660.3	-242.6	503.9	478.8	25.15	20.036	
7,900.0	6,968.4	6,939.6	6,939.1	24.1	1.7	89.58	-660.3	-242.6	516.7	491.1	25.53	20.234	
7,972.4	6,967.8	6,939.4	6,938.9	25.2	1.7	89.56	-660.3	-242.6	557.1	530.4	26.65	20.901	
8,000.0	6,967.5	6,939.3	6,938.8	25.6	1.7	89.55	-660.3	-242.6	574.1	547.0	27.08	21.201	
8,070.8	6,966.9	6,939.1	6,938.6	26.7	1.7	89.52	-660.3	-242.6	621.4	593.2	28.22	22.023	
8,100.0	6,966.6	6,939.1	6,938.5	27.2	1.7	89.51	-660.3	-242.6	642.1	613.4	28.68	22.386	
8,169.3	6,966.0	6,938.9	6,938.3	28.3	1.7	89.49	-660.3	-242.6	693.7	663.9	29.83	23.258	
8,200.0	6,965.7	6,938.8	6,938.2	28.8	1.7	89.48	-660.3	-242.6	717.6	687.3	30.33	23.656	
8,267.7	6,965.1	6,938.6	6,938.1	30.0	1.7	89.45	-660.3	-242.6	771.9	740.4	31.48	24.519	
8,300.0	6,964.8	6,938.5	6,938.0	30.5	1.7	89.44	-660.3	-242.6	798.5	766.5	32.03	24.931	
8,366.1	6,964.2	6,938.4	6,937.8	31.7	1.7	89.42	-660.3	-242.6	854.2	821.1	33.17	25.752	
8,400.0	6,963.9	6,938.3	6,937.7	32.2	1.7	89.41	-660.3	-242.6	883.3	849.6	33.76	26.168	
8,464.5	6,963.3	6,938.1	6,937.6	33.4	1.7	89.39	-660.3	-242.6	939.7	904.8	34.89	26.933	
8,500.0	6,963.0	6,938.0	6,937.5	34.0	1.7	89.38	-660.3	-242.6	971.0	935.5	35.51	27.344	
8,563.0	6,962.4	6,937.9	6,937.3	35.1	1.7	89.36	-660.3	-242.6	1,027.4	990.8	36.63	28.046	
8,600.0	6,962.0	6,937.8	6,937.3	35.8	1.7	89.35	-660.3	-242.6	1,060.9	1,023.6	37.29	28.448	
8,661.4	6,961.5	6,937.7	6,937.1	36.9	1.7	89.33	-660.3	-242.6	1,117.0	1,078.6	38.40	29.088	
8,700.0	6,961.1	6,937.6	6,937.0	37.6	1.7	89.32	-660.3	-242.6	1,152.5	1,113.4	39.10	29.478	
8,759.8	6,960.6	6,937.4	6,936.9	38.7	1.7	89.30	-660.3	-242.6	1,207.9	1,167.7	40.19	30.058	
8,800.0	6,960.2	6,937.3	6,936.8	39.4	1.7	89.29	-660.3	-242.6	1,245.4	1,204.4	40.92	30.436	
8,858.2	6,959.7	6,937.2	6,936.7	40.5	1.7	89.27	-660.3	-242.6	1,299.9	1,258.0	41.99	30.960	
8,900.0	6,959.3	6,937.1	6,936.6	41.2	1.7	89.26	-660.3	-242.6	1,339.3	1,296.5	42.75	31.324	
8,956.7	6,958.8	6,937.0	6,936.5	42.3	1.7	89.24	-660.3	-242.6	1,392.8	1,349.0	43.80	31.798	
9,000.0	6,958.4	6,936.9	6,936.4	43.1	1.7	89.23	-660.3	-242.6	1,434.0	1,389.4	44.61	32.148	
9,055.1	6,957.9	6,936.8	6,936.2	44.1	1.7	89.22	-660.3	-242.6	1,486.5	1,440.8	45.63	32.575	
9,100.0	6,957.5	6,936.7	6,936.1	44.9	1.7	89.20	-660.3	-242.6	1,529.4	1,482.9	46.47	32.912	
9,153.5	6,957.0	6,936.6	6,936.0	45.9	1.7	89.19	-660.3	-242.6	1,580.6	1,533.2	47.47	33.297	
9,200.0	6,956.6	6,936.5	6,935.9	46.8	1.7	89.18	-660.3	-242.6	1,625.3	1,577.0	48.34	33.621	
9,251.9	6,956.1	6,936.4	6,935.8	47.8	1.7	89.16	-660.3	-242.6	1,675.3	1,626.0	49.32	33.969	
9,300.0	6,955.7	6,936.3	6,935.7	48.7	1.7	89.15	-660.3	-242.6	1,721.7	1,671.5	50.22	34.280	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - LATHAM 7-1 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,350.4	6,955.2	6,936.2	6,935.6	49.6	1.7	89.14	-660.3	-242.6	1,770.4	1,719.2	51.18	34.594	
9,400.0	6,954.8	6,936.1	6,935.5	50.6	1.7	89.13	-660.3	-242.6	1,818.5	1,766.4	52.12	34.894	
9,448.8	6,954.3	6,936.0	6,935.5	51.5	1.7	89.11	-660.3	-242.6	1,865.9	1,812.8	53.04	35.177	
9,500.0	6,953.9	6,935.9	6,935.4	52.5	1.7	89.10	-660.3	-242.6	1,915.6	1,861.6	54.01	35.465	
9,547.2	6,953.4	6,935.8	6,935.3	53.4	1.7	89.09	-660.3	-242.6	1,961.6	1,906.7	54.91	35.721	
9,600.0	6,952.9	6,935.7	6,935.2	54.4	1.7	89.08	-660.3	-242.6	2,013.0	1,957.1	55.92	35.998	
9,645.6	6,952.5	6,935.6	6,935.1	55.2	1.7	89.07	-660.3	-242.6	2,057.6	2,000.8	56.79	36.230	
9,700.0	6,952.0	6,935.5	6,935.0	56.3	1.7	89.05	-660.3	-242.6	2,110.7	2,052.8	57.83	36.497	
9,744.1	6,951.6	6,935.4	6,934.9	57.1	1.7	89.04	-660.3	-242.6	2,153.8	2,095.1	58.68	36.706	
9,800.0	6,951.1	6,935.3	6,934.8	58.2	1.7	89.03	-660.3	-242.6	2,208.5	2,148.8	59.75	36.964	
9,842.5	6,950.7	6,935.3	6,934.7	59.0	1.7	89.02	-660.3	-242.6	2,250.2	2,189.6	60.56	37.153	
9,900.0	6,950.2	6,935.2	6,934.6	60.1	1.7	89.01	-660.3	-242.6	2,306.6	2,244.9	61.67	37.402	
9,940.9	6,949.8	6,935.1	6,934.6	60.9	1.7	89.00	-660.3	-242.6	2,346.7	2,284.3	62.46	37.573	
10,000.0	6,949.3	6,935.0	6,934.5	62.0	1.7	88.98	-660.3	-242.6	2,404.8	2,341.2	63.60	37.813	
10,039.3	6,948.9	6,934.9	6,934.4	62.8	1.7	88.98	-660.3	-242.6	2,443.5	2,379.1	64.36	37.968	
10,100.0	6,948.4	6,934.8	6,934.3	64.0	1.7	88.96	-660.3	-242.6	2,503.1	2,437.6	65.53	38.200	
10,137.8	6,948.0	6,934.8	6,934.2	64.7	1.7	88.95	-660.3	-242.6	2,540.3	2,474.0	66.26	38.340	
10,200.0	6,947.5	6,934.7	6,934.1	65.9	1.7	88.94	-660.3	-242.6	2,601.6	2,534.1	67.46	38.565	
10,236.2	6,947.1	6,934.6	6,934.1	66.6	1.7	88.93	-660.3	-242.6	2,637.3	2,569.1	68.16	38.692	
10,300.0	6,946.6	6,934.5	6,934.0	67.8	1.7	88.92	-660.3	-242.6	2,700.2	2,630.8	69.40	38.909	
10,334.6	6,946.3	6,934.5	6,933.9	68.5	1.7	88.91	-660.3	-242.6	2,734.3	2,664.3	70.07	39.024	
10,400.0	6,945.7	6,934.4	6,933.8	69.8	1.7	88.90	-660.3	-242.6	2,798.9	2,727.5	71.34	39.234	
10,433.0	6,945.4	6,934.3	6,933.8	70.4	1.7	88.89	-660.3	-242.6	2,831.5	2,759.5	71.98	39.338	
10,500.0	6,944.7	6,934.2	6,933.7	71.7	1.7	88.88	-660.3	-242.6	2,897.6	2,824.3	73.28	39.542	
10,531.5	6,944.5	6,934.1	6,933.6	72.3	1.7	88.87	-660.3	-242.6	2,928.7	2,854.8	73.89	39.635	
10,600.0	6,943.8	6,934.0	6,933.5	73.7	1.7	88.86	-660.3	-242.6	2,996.5	2,921.3	75.23	39.833	
10,629.9	6,943.6	6,934.0	6,933.5	74.2	1.7	88.85	-660.3	-242.6	3,026.1	2,950.2	75.81	39.917	
10,700.0	6,942.9	6,933.9	6,933.4	75.6	1.7	88.84	-660.3	-242.6	3,095.4	3,018.2	77.17	40.110	
10,728.3	6,942.7	6,933.9	6,933.3	76.2	1.7	88.83	-660.3	-242.6	3,123.4	3,045.7	77.73	40.185	
10,800.0	6,942.0	6,933.8	6,933.2	77.6	1.7	88.82	-660.3	-242.6	3,194.4	3,115.3	79.12	40.372	
10,826.7	6,941.8	6,933.7	6,933.2	78.1	1.7	88.81	-660.3	-242.6	3,220.9	3,141.3	79.65	40.440	
10,900.0	6,941.1	6,933.6	6,933.1	79.5	1.7	88.80	-660.3	-242.6	3,293.5	3,212.4	81.08	40.622	
10,925.2	6,940.9	6,933.6	6,933.0	80.0	1.7	88.79	-660.3	-242.6	3,318.4	3,236.8	81.57	40.683	
11,000.0	6,940.2	6,933.5	6,932.9	81.5	1.7	88.78	-660.3	-242.6	3,392.6	3,309.5	83.03	40.859	
11,023.6	6,940.0	6,933.4	6,932.9	81.9	1.7	88.78	-660.3	-242.6	3,416.0	3,332.5	83.49	40.914	
11,100.0	6,939.3	6,933.3	6,932.8	83.4	1.7	88.76	-660.3	-242.6	3,491.7	3,406.8	84.99	41.086	
11,122.0	6,939.1	6,933.3	6,932.8	83.8	1.7	88.76	-660.3	-242.6	3,513.6	3,428.2	85.42	41.134	
11,200.0	6,938.4	6,933.2	6,932.7	85.4	1.7	88.74	-660.3	-242.6	3,590.9	3,504.0	86.94	41.302	
11,220.4	6,938.2	6,933.2	6,932.6	85.8	1.7	88.74	-660.3	-242.6	3,611.2	3,523.9	87.34	41.345	
11,300.0	6,937.4	6,933.1	6,932.5	87.3	1.7	88.73	-660.3	-242.6	3,690.2	3,601.3	88.90	41.508	
11,318.9	6,937.3	6,933.0	6,932.5	87.7	1.7	88.72	-660.3	-242.6	3,708.9	3,619.7	89.27	41.546	
11,400.0	6,936.5	6,932.9	6,932.4	89.3	1.7	88.71	-660.3	-242.6	3,789.5	3,698.6	90.86	41.705	
11,417.3	6,936.4	6,932.9	6,932.4	89.6	1.7	88.71	-660.3	-242.6	3,806.7	3,715.5	91.20	41.738	
11,500.0	6,935.6	6,932.8	6,932.3	91.3	1.7	88.69	-660.3	-242.6	3,888.8	3,796.0	92.83	41.894	
11,515.7	6,935.5	6,932.8	6,932.2	91.6	1.7	88.69	-660.3	-242.6	3,904.4	3,811.3	93.13	41.923	
11,600.0	6,934.7	6,932.7	6,932.1	93.2	1.7	88.68	-660.3	-242.6	3,988.2	3,893.4	94.79	42.074	
11,614.1	6,934.6	6,932.7	6,932.1	93.5	1.7	88.67	-660.3	-242.6	4,002.2	3,907.2	95.07	42.099	
11,700.0	6,933.8	6,932.6	6,932.0	95.2	1.7	88.66	-660.3	-242.6	4,087.6	3,990.8	96.75	42.247	
11,712.6	6,933.7	6,932.6	6,932.0	95.4	1.7	88.66	-660.3	-242.6	4,100.1	4,003.1	97.00	42.269	
11,800.0	6,932.9	6,932.4	6,931.9	97.1	1.7	88.64	-660.3	-242.6	4,187.0	4,088.3	98.72	42.413	
11,811.0	6,932.8	6,932.4	6,931.9	97.4	1.7	88.64	-660.3	-242.6	4,197.9	4,099.0	98.93	42.431	
11,900.0	6,932.0	6,932.3	6,931.8	99.1	1.7	88.63	-660.3	-242.6	4,286.4	4,185.8	100.68	42.573	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
11,909.4	6,931.9	6,932.3	6,931.8	99.3	1.7	88.63	-660.3	-242.6	4,295.8	4,194.9	100.87	42.587	
12,000.0	6,931.0	6,932.2	6,931.7	101.1	1.7	88.61	-660.3	-242.6	4,385.9	4,283.3	102.65	42.726	
12,007.8	6,931.0	6,932.2	6,931.7	101.2	1.7	88.61	-660.3	-242.6	4,393.7	4,290.9	102.81	42.738	
12,100.0	6,930.1	6,932.1	6,931.6	103.0	1.7	88.60	-660.3	-242.6	4,485.4	4,380.8	104.62	42.873	
12,106.3	6,930.1	6,932.1	6,931.5	103.2	1.7	88.59	-660.3	-242.6	4,491.7	4,386.9	104.74	42.882	
12,200.0	6,929.2	6,932.0	6,931.4	105.0	1.7	88.58	-660.3	-242.6	4,584.9	4,478.3	106.59	43.015	
12,204.7	6,929.2	6,932.0	6,931.4	105.1	1.7	88.58	-660.3	-242.6	4,589.6	4,482.9	106.68	43.021	
12,300.0	6,928.3	6,931.9	6,931.3	107.0	1.7	88.56	-660.3	-242.6	4,684.5	4,575.9	108.56	43.151	
12,303.1	6,928.3	6,931.9	6,931.3	107.1	1.7	88.56	-660.3	-242.6	4,687.6	4,579.0	108.62	43.155	
12,400.0	6,927.4	6,931.8	6,931.2	109.0	1.7	88.55	-660.3	-242.6	4,784.0	4,673.5	110.53	43.282	
12,401.5	6,927.4	6,931.8	6,931.2	109.0	1.7	88.55	-660.3	-242.6	4,785.6	4,675.0	110.56	43.284	
12,500.0	6,926.5	6,931.7	6,931.1	110.9	1.7	88.54	-660.3	-242.6	4,883.6	4,771.1	112.50	43.409	
12,598.4	6,925.6	6,931.6	6,931.0	112.9	1.7	88.52	-660.3	-242.6	4,981.6	4,867.2	114.44	43.529	
12,600.0	6,925.6	6,931.6	6,931.0	112.9	1.7	88.52	-660.3	-242.6	4,983.2	4,868.7	114.47	43.531	
12,696.8	6,924.7	6,931.5	6,930.9	114.8	1.7	88.51	-660.3	-242.6	5,079.6	4,963.3	116.38	43.645	
12,700.0	6,924.6	6,931.5	6,930.9	114.9	1.7	88.51	-660.3	-242.6	5,082.8	4,966.4	116.45	43.649	
12,795.2	6,923.8	6,931.4	6,930.8	116.8	1.7	88.49	-660.3	-242.6	5,177.7	5,059.4	118.33	43.758	
12,800.0	6,923.7	6,931.4	6,930.8	116.9	1.7	88.49	-660.3	-242.6	5,182.4	5,064.0	118.42	43.763	
12,893.7	6,922.9	6,931.3	6,930.7	118.7	1.7	88.48	-660.3	-242.6	5,275.8	5,155.5	120.27	43.866	
12,900.0	6,922.8	6,931.3	6,930.7	118.8	1.7	88.48	-660.3	-242.6	5,282.1	5,161.7	120.39	43.873	
12,992.1	6,922.0	6,931.2	6,930.6	120.6	1.7	88.47	-660.3	-242.6	5,373.8	5,251.6	122.21	43.971	
13,000.0	6,921.9	6,931.2	6,930.6	120.8	1.7	88.46	-660.3	-242.6	5,381.7	5,259.4	122.37	43.979	
13,090.5	6,921.1	6,931.1	6,930.5	122.6	1.7	88.45	-660.3	-242.6	5,471.9	5,347.8	124.16	44.073	
13,100.0	6,921.0	6,931.1	6,930.5	122.8	1.7	88.45	-660.3	-242.6	5,481.4	5,357.0	124.34	44.082	
13,188.9	6,920.2	6,931.0	6,930.4	124.5	1.7	88.44	-660.3	-242.6	5,570.0	5,443.9	126.10	44.171	
13,200.0	6,920.1	6,931.0	6,930.4	124.8	1.7	88.44	-660.3	-242.6	5,581.1	5,454.7	126.32	44.182	
13,287.4	6,919.3	6,930.9	6,930.3	126.5	1.7	88.43	-660.3	-242.6	5,668.2	5,540.1	128.05	44.267	
13,300.0	6,919.1	6,930.9	6,930.3	126.7	1.7	88.42	-660.3	-242.6	5,680.7	5,552.5	128.30	44.279	
13,385.8	6,918.4	6,930.8	6,930.2	128.4	1.7	88.41	-660.3	-242.6	5,766.3	5,636.3	129.99	44.359	
13,400.0	6,918.2	6,930.8	6,930.2	128.7	1.7	88.41	-660.3	-242.6	5,780.4	5,650.2	130.27	44.372	
13,484.2	6,917.5	6,930.7	6,930.2	130.4	1.7	88.40	-660.3	-242.6	5,864.4	5,732.5	131.94	44.449	
13,500.0	6,917.3	6,930.7	6,930.1	130.7	1.7	88.40	-660.3	-242.6	5,880.2	5,747.9	132.25	44.463	
13,582.6	6,916.6	6,930.6	6,930.1	132.3	1.7	88.39	-660.3	-242.6	5,962.6	5,828.7	133.88	44.536	
13,600.0	6,916.4	6,930.6	6,930.1	132.7	1.7	88.39	-660.3	-242.6	5,979.9	5,845.6	134.23	44.551	
13,681.1	6,915.6	6,930.5	6,930.0	134.3	1.7	88.38	-660.3	-242.6	6,060.7	5,924.9	135.83	44.620	
13,700.0	6,915.5	6,930.5	6,930.0	134.6	1.7	88.37	-660.3	-242.6	6,079.6	5,943.4	136.20	44.636	
13,779.5	6,914.7	6,930.4	6,929.9	136.2	1.7	88.36	-660.3	-242.6	6,158.9	6,021.1	137.78	44.702	
13,800.0	6,914.6	6,930.4	6,929.9	136.6	1.7	88.36	-660.3	-242.6	6,179.3	6,041.2	138.18	44.719	
13,877.9	6,913.8	6,930.4	6,929.8	138.2	1.7	88.35	-660.3	-242.6	6,257.1	6,117.3	139.72	44.782	
13,900.0	6,913.6	6,930.3	6,929.8	138.6	1.7	88.35	-660.3	-242.6	6,279.1	6,138.9	140.16	44.799	
13,976.3	6,912.9	6,930.3	6,929.7	140.1	1.7	88.34	-660.3	-242.6	6,355.2	6,213.6	141.67	44.859	
14,000.0	6,912.7	6,930.2	6,929.7	140.6	1.7	88.34	-660.3	-242.6	6,378.8	6,236.7	142.14	44.877	
14,074.8	6,912.0	6,930.2	6,929.6	142.0	1.7	88.33	-660.3	-242.6	6,453.4	6,309.9	143.56	44.954	
14,079.0	6,912.0	6,930.2	6,929.6	142.1	1.7	88.33	-660.3	-242.6	6,457.6	6,314.0	143.64	44.958	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - LATHAM 7-2 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	2.4	2.4	0.0	0.0	136.23	-564.7	540.9	782.0				
98.4	98.4	98.0	98.0	0.1	0.0	136.24	-564.9	541.0	782.1	782.0	0.13	5,985.706	
100.0	100.0	100.0	100.0	0.1	0.0	136.24	-564.9	541.0	782.2	782.0	0.13	5,874.527	
196.8	196.8	199.9	199.9	0.3	0.2	136.25	-565.1	540.9	782.3	781.8	0.48	1,625.724	
200.0	200.0	203.0	203.0	0.3	0.2	136.25	-565.1	540.9	782.3	781.8	0.49	1,592.185	
246.6	246.6	249.1	249.1	0.4	0.2	136.26	-565.2	540.8	782.3	781.6	0.64	1,221.041	
295.3	295.3	297.2	297.2	0.5	0.3	136.27	-565.3	540.7	782.3	781.5	0.80	981.831	
300.0	300.0	301.9	301.9	0.5	0.3	136.28	-565.3	540.7	782.3	781.5	0.81	964.080	
393.7	393.7	396.5	396.5	0.8	0.3	136.29	-565.5	540.6	782.3	781.2	1.09	718.580	
400.0	400.0	402.8	402.8	0.8	0.3	136.29	-565.5	540.6	782.3	781.2	1.11	706.630	
492.1	492.1	496.8	496.8	1.0	0.4	136.30	-565.5	540.3	782.2	780.8	1.37	570.098	
500.0	500.0	504.5	504.5	1.0	0.4	136.31	-565.5	540.3	782.2	780.8	1.39	561.385	
550.8	550.8	553.3	553.3	1.1	0.4	136.32	-565.6	540.2	782.1	780.6	1.52	513.096	
590.5	590.5	591.5	591.5	1.2	0.4	136.33	-565.7	540.1	782.1	780.5	1.63	480.750	
600.0	600.0	600.0	600.0	1.2	0.4	136.33	-565.7	540.1	782.1	780.5	1.65	473.720	
689.0	689.0	688.5	688.5	1.4	0.5	136.36	-566.2	540.0	782.4	780.5	1.89	413.147	
700.0	700.0	699.4	699.4	1.4	0.5	136.36	-566.3	540.0	782.5	780.5	1.92	406.718	
787.4	787.4	783.4	783.4	1.6	0.5	136.39	-566.9	540.1	783.0	780.9	2.15	363.687	
800.0	800.0	795.5	795.5	1.7	0.5	136.39	-567.0	540.1	783.1	780.9	2.19	358.243	
885.8	885.8	883.3	883.3	1.9	0.6	136.41	-567.7	540.4	783.8	781.4	2.41	324.956	
900.0	900.0	897.9	897.9	1.9	0.6	136.42	-567.8	540.4	783.9	781.4	2.45	320.038	
984.2	984.2	984.1	984.1	2.1	0.6	136.47	-568.6	540.2	784.3	781.6	2.67	293.843	
1,000.0	1,000.0	1,000.2	1,000.2	2.1	0.6	136.48	-568.8	540.0	784.3	781.6	2.71	289.409	
1,082.7	1,082.7	1,084.2	1,084.2	2.3	0.7	136.56	-569.6	539.4	784.5	781.6	2.93	267.941	
1,100.0	1,100.0	1,101.8	1,101.7	2.3	0.7	136.58	-569.8	539.2	784.5	781.5	2.97	263.843	
1,181.1	1,181.1	1,180.9	1,180.8	2.5	0.7	136.65	-570.6	538.6	784.7	781.5	3.18	246.471	
1,200.0	1,200.0	1,200.0	1,200.0	2.6	0.7	136.67	-570.8	538.5	784.8	781.5	3.23	242.738	
1,279.5	1,279.5	1,276.8	1,276.8	2.7	0.8	100.28	-571.6	538.3	785.4	782.0	3.43	228.727	
1,300.0	1,300.0	1,296.8	1,296.7	2.8	0.8	100.33	-571.8	538.3	785.6	782.2	3.49	225.391	
1,377.9	1,377.8	1,374.1	1,374.1	3.0	0.8	100.61	-572.6	538.3	786.9	783.2	3.69	213.480	
1,400.0	1,399.8	1,396.0	1,395.9	3.0	0.8	100.71	-572.8	538.3	787.4	783.6	3.74	210.360	
1,476.4	1,475.9	1,473.6	1,473.5	3.2	0.8	101.15	-573.3	538.7	789.1	785.2	3.93	200.706	
1,500.0	1,499.5	1,497.6	1,497.5	3.2	0.8	101.29	-573.3	538.9	789.7	785.8	3.99	197.914	
1,574.8	1,573.7	1,575.4	1,575.3	3.4	0.8	101.87	-573.1	539.4	791.8	787.6	4.19	188.972	
1,600.0	1,598.7	1,601.6	1,601.5	3.5	0.8	102.10	-573.1	539.5	792.5	788.2	4.26	186.125	
1,673.2	1,671.1	1,679.1	1,679.0	3.7	0.8	102.88	-572.8	539.4	794.7	790.2	4.47	177.919	
1,700.0	1,697.5	1,706.5	1,706.5	3.7	0.8	103.18	-572.6	539.3	795.5	790.9	4.54	175.098	
1,771.6	1,767.9	1,773.3	1,773.2	4.0	0.9	103.99	-572.3	539.1	798.2	793.5	4.76	167.575	
1,800.1	1,795.7	1,800.0	1,799.9	4.0	0.9	104.35	-572.3	539.0	799.6	794.7	4.85	164.788	
1,870.1	1,864.2	1,873.2	1,873.1	4.3	0.9	105.44	-572.3	538.4	803.1	798.0	5.10	157.576	
1,900.0	1,893.4	1,904.7	1,904.6	4.4	0.9	105.92	-572.3	537.9	804.5	799.3	5.20	154.673	
1,968.5	1,960.4	1,978.6	1,978.6	4.6	0.9	107.03	-572.0	536.4	807.6	802.1	5.45	148.207	
2,000.0	1,991.3	2,010.7	2,010.7	4.7	0.9	107.51	-571.7	535.7	808.9	803.3	5.56	145.419	
2,066.9	2,056.7	2,072.0	2,071.9	5.0	0.9	108.43	-571.3	534.3	812.0	806.2	5.81	139.747	
2,100.0	2,089.1	2,102.5	2,102.4	5.1	0.9	108.89	-571.2	533.7	813.8	807.8	5.93	137.123	
2,165.3	2,153.0	2,166.4	2,166.3	5.3	1.0	109.85	-571.1	532.3	817.5	811.3	6.19	132.159	
2,200.0	2,186.9	2,200.0	2,199.9	5.5	1.0	110.36	-571.1	531.5	819.6	813.2	6.32	129.709	
2,263.8	2,249.3	2,259.8	2,259.7	5.7	1.0	111.27	-571.3	529.9	823.6	817.1	6.57	125.448	
2,300.0	2,284.7	2,293.6	2,293.4	5.8	1.0	111.78	-571.5	529.0	826.1	819.4	6.71	123.188	
2,362.2	2,345.5	2,353.2	2,353.0	6.1	1.0	112.70	-572.1	527.3	830.7	823.7	6.95	119.520	
2,400.0	2,382.5	2,389.5	2,389.3	6.2	1.0	113.26	-572.6	526.1	833.6	826.5	7.10	117.441	
2,460.6	2,441.8	2,453.5	2,453.2	6.5	1.1	114.26	-573.3	523.8	838.3	831.0	7.33	114.296	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - LATHAM 7-2 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis Highside Tooface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
2,500.0	2,480.3	2,496.0	2,495.7	6.6	1.1	114.91	-573.5	522.2	841.3	833.8	7.49	112.361	
2,559.0	2,538.1	2,557.7	2,557.3	6.9	1.1	115.81	-573.4	520.2	845.6	837.9	7.71	109.608	
2,600.0	2,578.1	2,600.5	2,600.2	7.0	1.1	116.42	-573.0	519.0	848.5	840.6	7.87	107.793	
2,657.5	2,634.4	2,656.8	2,656.4	7.3	1.1	117.19	-572.3	517.5	852.7	844.6	8.09	105.343	
2,700.0	2,675.9	2,698.4	2,698.0	7.5	1.1	117.75	-571.7	516.5	855.8	847.6	8.26	103.644	
2,755.9	2,730.6	2,752.2	2,751.8	7.7	1.1	118.46	-571.0	515.2	860.1	851.6	8.47	101.512	
2,800.0	2,773.8	2,794.5	2,794.1	7.9	1.2	119.03	-570.5	514.1	863.7	855.0	8.64	99.934	
2,854.3	2,826.9	2,848.1	2,847.7	8.1	1.2	119.74	-569.9	512.7	868.2	859.3	8.85	98.095	
2,857.4	2,829.9	2,851.1	2,850.7	8.1	1.2	119.78	-569.8	512.6	868.4	859.5	8.86	97.996	
2,900.0	2,871.6	2,893.5	2,893.0	8.3	1.2	120.38	-569.3	511.5	871.8	862.8	9.00	96.874	
2,952.7	2,923.5	2,944.6	2,944.1	8.4	1.2	121.05	-568.7	510.2	875.7	866.6	9.14	95.817	
3,000.0	2,970.1	2,990.4	2,989.9	8.6	1.2	121.58	-568.2	509.1	878.9	869.7	9.27	94.864	
3,051.2	3,020.7	3,043.4	3,042.9	8.7	1.2	122.12	-567.4	508.0	881.9	872.6	9.39	93.934	
3,100.0	3,069.1	3,094.9	3,094.4	8.9	1.2	122.56	-566.4	507.3	884.3	874.8	9.51	93.002	
3,149.6	3,118.3	3,143.3	3,142.7	9.0	1.2	122.90	-565.3	506.7	886.1	876.5	9.62	92.121	
3,200.0	3,168.5	3,192.0	3,191.5	9.1	1.3	123.21	-564.3	506.0	887.6	877.9	9.73	91.200	
3,248.0	3,216.3	3,236.9	3,236.3	9.2	1.3	123.45	-563.5	505.4	888.7	878.9	9.83	90.408	
3,300.0	3,268.2	3,285.1	3,284.5	9.3	1.3	123.65	-562.8	504.8	889.7	879.7	9.94	89.530	
3,346.4	3,314.6	3,330.1	3,329.5	9.4	1.3	123.79	-562.3	504.3	890.2	880.2	10.02	88.828	
3,400.0	3,368.1	3,383.2	3,382.6	9.5	1.3	123.90	-561.8	503.6	890.4	880.2	10.12	87.973	
3,444.9	3,413.0	3,429.1	3,428.5	9.6	1.3	123.96	-561.3	502.9	890.0	879.9	10.20	87.297	
3,457.5	3,425.6	3,442.3	3,441.7	9.6	1.3	160.48	-561.2	502.6	889.9	879.7	10.22	87.043	
3,500.0	3,468.1	3,486.6	3,486.0	9.7	1.3	160.53	-560.8	501.6	889.2	878.9	10.30	86.326	
3,543.3	3,511.4	3,530.2	3,529.6	9.7	1.3	160.60	-560.4	500.4	888.4	878.0	10.38	85.550	
3,600.0	3,568.1	3,586.4	3,585.8	9.8	1.4	160.71	-560.1	498.4	887.4	876.9	10.49	84.561	
3,641.7	3,609.9	3,629.3	3,628.5	9.9	1.4	160.82	-559.9	496.6	886.7	876.1	10.58	83.843	
3,700.0	3,668.1	3,690.1	3,689.3	10.0	1.4	160.94	-559.4	494.4	885.6	874.9	10.69	82.838	
3,740.1	3,708.3	3,730.3	3,729.5	10.1	1.4	161.01	-559.0	493.2	884.7	873.9	10.77	82.144	
3,800.0	3,768.1	3,789.4	3,788.6	10.2	1.4	161.07	-558.1	491.8	883.5	872.6	10.89	81.125	
3,838.6	3,806.7	3,827.0	3,826.2	10.2	1.4	161.10	-557.6	491.1	882.7	871.7	10.97	80.476	
3,900.0	3,868.1	3,886.7	3,885.9	10.3	1.4	161.16	-556.8	489.9	881.6	870.5	11.09	79.472	
3,937.0	3,905.1	3,922.6	3,921.8	10.4	1.5	161.20	-556.5	489.2	881.0	869.8	11.17	78.881	
4,000.0	3,968.1	3,983.8	3,983.0	10.5	1.5	161.26	-555.9	488.0	880.0	868.7	11.30	77.898	
4,035.4	4,003.6	4,018.6	4,017.8	10.6	1.5	161.29	-555.6	487.3	879.5	868.2	11.37	77.355	
4,100.0	4,068.1	4,082.6	4,081.7	10.7	1.5	161.35	-555.1	486.3	878.7	867.2	11.50	76.384	
4,133.8	4,102.0	4,114.5	4,113.6	10.8	1.5	161.37	-554.8	485.9	878.3	866.7	11.57	75.891	
4,200.0	4,168.1	4,173.5	4,172.6	10.9	1.5	161.41	-554.7	485.2	877.9	866.2	11.71	74.991	
4,217.9	4,186.0	4,189.4	4,188.5	10.9	1.5	161.42	-554.7	485.0	877.8	866.1	11.74	74.758	
4,232.3	4,200.4	4,202.6	4,201.7	10.9	1.5	161.43	-554.8	484.8	877.9	866.1	11.77	74.574	
4,300.0	4,268.1	4,272.7	4,271.9	11.1	1.6	161.47	-554.9	484.3	877.9	865.9	11.91	73.702	
4,330.7	4,298.8	4,304.7	4,303.8	11.1	1.6	161.47	-554.9	484.2	877.8	865.8	11.97	73.303	
4,400.0	4,368.1	4,378.9	4,378.1	11.2	1.6	161.50	-554.6	483.6	877.4	865.3	12.12	72.374	
4,429.1	4,397.3	4,408.7	4,407.8	11.3	1.6	161.52	-554.5	483.3	877.1	864.9	12.18	71.985	
4,500.0	4,468.1	4,473.7	4,472.8	11.4	1.6	161.56	-554.3	482.6	876.7	864.4	12.33	71.095	
4,527.5	4,495.7	4,500.0	4,499.1	11.5	1.6	161.57	-554.3	482.5	876.7	864.3	12.39	70.762	
4,600.0	4,568.1	4,573.4	4,572.5	11.6	1.6	161.59	-554.3	482.2	876.6	864.1	12.54	69.897	
4,626.0	4,594.1	4,600.1	4,599.3	11.7	1.7	161.59	-554.3	482.1	876.6	864.0	12.60	69.587	
4,700.0	4,668.1	4,675.5	4,674.6	11.8	1.7	161.60	-554.1	481.9	876.3	863.5	12.76	68.697	
4,724.4	4,692.5	4,700.4	4,699.5	11.8	1.7	161.60	-553.9	481.9	876.2	863.3	12.81	68.408	
4,800.0	4,768.1	4,776.8	4,775.9	12.0	1.7	161.59	-553.5	481.8	875.7	862.8	12.97	67.505	
4,822.8	4,791.0	4,799.9	4,799.0	12.0	1.7	161.59	-553.4	481.8	875.6	862.6	13.02	67.224	
4,900.0	4,868.1	4,874.4	4,873.5	12.2	1.7	161.60	-553.1	481.5	875.2	862.0	13.19	66.356	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - LATHAM 7-2 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,921.2	4,889.4	4,894.9	4,894.0	12.2	1.7	161.61	-553.0	481.4	875.2	861.9	13.24	66.123	
4,972.7	4,940.8	4,944.2	4,943.3	12.3	1.7	161.62	-553.1	481.2	875.1	861.7	13.34	65.582	
5,000.0	4,968.1	4,970.4	4,969.5	12.4	1.7	161.63	-553.1	481.1	875.1	861.7	13.40	65.303	
5,019.7	4,987.8	4,989.2	4,988.3	12.4	1.7	161.64	-553.2	481.0	875.1	861.7	13.44	65.104	
5,100.0	5,068.1	5,076.1	5,075.2	12.6	1.7	161.66	-553.2	480.7	875.1	861.5	13.61	64.303	
5,118.1	5,086.2	5,096.1	5,095.2	12.6	1.8	161.66	-553.1	480.6	875.0	861.3	13.65	64.118	
5,200.0	5,168.1	5,177.3	5,176.4	12.8	1.8	161.67	-552.6	480.3	874.4	860.6	13.83	63.229	
5,216.5	5,184.7	5,193.6	5,192.7	12.8	1.8	161.67	-552.5	480.3	874.3	860.4	13.87	63.051	
5,296.6	5,264.7	5,268.1	5,267.2	12.9	1.8	161.70	-552.4	479.7	874.0	860.0	14.04	62.266	
5,300.0	5,268.1	5,271.3	5,270.4	13.0	1.8	161.70	-552.4	479.7	874.0	860.0	14.04	62.234	
5,314.9	5,283.1	5,285.1	5,284.2	13.0	1.8	161.72	-552.5	479.5	874.0	860.0	14.08	62.096	
5,400.0	5,368.1	5,373.7	5,372.8	13.1	1.8	161.82	-553.0	478.0	874.1	859.8	14.26	61.307	
5,413.4	5,381.5	5,388.0	5,387.1	13.2	1.8	161.84	-553.1	477.7	874.0	859.8	14.29	61.180	
5,500.0	5,468.1	5,480.5	5,479.5	13.3	1.9	161.97	-553.1	475.6	873.4	859.0	14.47	60.342	
5,511.8	5,479.9	5,493.1	5,492.1	13.4	1.9	161.99	-553.1	475.3	873.3	858.8	14.50	60.226	
5,600.0	5,568.1	5,578.4	5,577.4	13.5	1.9	162.11	-552.8	473.3	872.5	857.8	14.69	59.378	
5,610.2	5,578.4	5,588.2	5,587.2	13.6	1.9	162.12	-552.8	473.1	872.4	857.7	14.72	59.282	
5,700.0	5,668.1	5,678.1	5,677.1	13.7	1.9	162.21	-552.6	471.7	871.7	856.8	14.91	58.451	
5,708.6	5,676.8	5,686.8	5,685.8	13.8	1.9	162.21	-552.6	471.6	871.7	856.7	14.93	58.372	
5,800.0	5,768.1	5,778.2	5,777.2	13.9	1.9	162.24	-552.1	471.0	871.0	855.9	15.14	57.540	
5,807.1	5,775.2	5,785.3	5,784.3	14.0	1.9	162.24	-552.0	470.9	870.9	855.8	15.15	57.477	
5,900.0	5,868.1	5,875.3	5,874.3	14.1	1.9	162.23	-551.4	471.0	870.4	855.0	15.36	56.652	
5,905.5	5,873.6	5,880.6	5,879.6	14.1	1.9	162.23	-551.4	471.0	870.3	855.0	15.38	56.604	
6,000.0	5,968.1	5,976.0	5,975.0	14.3	2.0	162.20	-550.9	471.2	870.0	854.4	15.59	55.796	
6,003.9	5,972.1	5,980.0	5,979.0	14.3	2.0	162.20	-550.9	471.2	870.0	854.4	15.60	55.763	
6,100.0	6,068.1	6,078.7	6,077.7	14.5	2.0	162.15	-550.0	471.8	869.3	853.5	15.82	54.945	
6,102.3	6,070.5	6,081.1	6,080.1	14.5	2.0	162.14	-550.0	471.8	869.3	853.5	15.83	54.925	
6,200.0	6,168.1	6,176.3	6,175.3	14.7	2.0	162.06	-548.9	472.8	868.6	852.5	16.05	54.120	
6,200.8	6,168.9	6,177.1	6,176.0	14.7	2.0	162.06	-548.9	472.8	868.6	852.5	16.05	54.113	
6,288.5	6,256.6	6,263.7	6,262.7	14.9	2.0	161.98	-548.2	473.9	868.2	851.9	16.25	53.427	
6,299.2	6,267.3	6,274.4	6,273.4	14.9	2.0	-18.25	-548.1	474.0	868.1	851.8	16.26	53.372	
6,300.0	6,268.1	6,275.2	6,274.2	14.9	2.0	-18.25	-548.1	474.0	868.1	851.8	16.27	53.366	
6,350.0	6,318.1	6,325.0	6,324.0	15.0	2.0	-18.42	-547.7	474.7	865.4	849.1	16.38	52.846	
6,397.6	6,365.3	6,372.2	6,371.2	15.1	2.0	-18.73	-547.3	475.4	859.9	843.4	16.52	52.059	
6,400.0	6,367.7	6,374.6	6,373.6	15.1	2.0	-18.75	-547.2	475.4	859.5	843.0	16.53	52.013	
6,450.0	6,416.8	6,422.5	6,421.4	15.1	1.9	-19.24	-546.8	476.0	850.4	833.7	16.69	50.950	
6,496.0	6,461.3	6,464.8	6,463.7	15.1	1.9	-19.86	-546.5	476.8	839.2	822.4	16.84	49.836	
6,500.0	6,465.1	6,468.3	6,467.3	15.1	1.9	-19.92	-546.5	476.9	838.1	821.3	16.85	49.735	
6,550.0	6,512.4	6,513.7	6,512.7	15.1	1.9	-20.82	-546.2	478.0	822.9	805.9	17.00	48.416	
6,594.5	6,553.4	6,554.1	6,553.0	15.1	1.9	-21.82	-546.0	479.0	806.9	789.8	17.11	47.173	
6,600.0	6,558.4	6,559.0	6,557.9	15.1	1.9	-21.96	-545.9	479.1	804.8	787.6	17.12	47.014	
6,650.0	6,603.0	6,602.8	6,601.8	15.1	1.9	-23.37	-545.8	480.2	783.7	766.5	17.21	45.542	
6,692.9	6,639.9	6,639.1	6,638.0	15.1	1.9	-24.83	-545.6	481.1	763.5	746.3	17.27	44.221	
6,700.0	6,645.9	6,644.9	6,643.8	15.1	1.9	-25.09	-545.6	481.3	760.0	742.7	17.27	43.996	
6,750.0	6,686.8	6,685.1	6,684.0	15.1	1.9	-27.20	-545.3	482.6	733.8	716.4	17.32	42.368	
6,791.3	6,719.1	6,715.8	6,714.6	15.1	1.9	-29.25	-545.2	483.6	710.3	692.9	17.34	40.954	
6,800.0	6,725.7	6,721.9	6,720.7	15.1	1.9	-29.71	-545.2	483.8	705.2	687.8	17.35	40.648	
6,850.0	6,762.3	6,756.0	6,754.8	15.1	1.9	-32.68	-545.1	485.0	674.6	657.2	17.38	38.814	
6,889.7	6,789.7	6,781.7	6,780.5	15.1	1.9	-35.43	-545.2	485.8	649.0	631.6	17.42	37.257	
6,900.0	6,796.5	6,788.1	6,786.9	15.1	1.9	-36.20	-545.2	486.0	642.2	624.8	17.43	36.840	
6,950.0	6,828.0	6,818.8	6,817.6	15.1	1.9	-40.42	-545.4	487.0	608.3	590.8	17.52	34.713	
6,988.2	6,850.2	6,840.7	6,839.5	15.1	1.9	-44.13	-545.6	487.8	581.5	563.9	17.62	33.003	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - LATHAM 7-2 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,000.0	6,856.7	6,847.2	6,846.0	15.1	1.9	-45.36	-545.6	488.0	573.1	555.5	17.66	32.445	
7,050.0	6,882.5	6,872.7	6,871.4	15.2	1.9	-50.97	-545.7	489.1	537.1	519.2	17.85	30.090	
7,086.6	6,899.5	6,889.3	6,888.1	15.3	1.9	-55.41	-545.7	489.8	510.4	492.4	18.00	28.352	
7,100.0	6,905.3	6,895.0	6,893.7	15.4	1.9	-57.09	-545.7	490.1	500.7	482.6	18.05	27.732	
7,150.0	6,924.9	6,913.9	6,912.7	15.7	1.9	-63.41	-545.8	491.0	464.4	446.2	18.24	25.455	
7,185.0	6,936.7	6,925.4	6,924.1	15.9	1.9	-67.81	-545.8	491.5	439.5	421.1	18.37	23.928	
7,200.0	6,941.2	6,929.8	6,928.5	16.0	1.9	-69.64	-545.9	491.7	429.0	410.6	18.41	23.305	
7,250.0	6,954.2	6,942.7	6,941.4	16.3	1.9	-75.39	-545.9	492.3	395.3	376.7	18.57	21.290	
7,283.4	6,961.0	6,949.5	6,948.2	16.6	1.9	-78.78	-546.0	492.6	374.1	355.4	18.70	20.008	
7,300.0	6,963.8	6,952.4	6,951.0	16.7	1.9	-80.30	-546.0	492.8	364.2	345.4	18.77	19.403	
7,350.0	6,970.0	6,958.8	6,957.5	17.2	1.9	-84.11	-546.1	493.1	336.9	317.9	19.07	17.671	
7,381.9	6,972.1	6,961.2	6,959.8	17.5	1.9	-85.90	-546.1	493.2	322.2	302.9	19.32	16.680	
7,400.0	6,972.7	6,961.9	6,960.5	17.7	1.9	-86.68	-546.1	493.2	314.9	295.4	19.47	16.175	
7,420.0	6,972.8	6,962.1	6,960.8	17.9	1.9	-87.33	-546.1	493.2	307.9	288.2	19.65	15.666	
7,480.3	6,972.2	6,962.1	6,960.8	18.5	1.9	-87.33	-546.1	493.2	293.9	273.6	20.30	14.480	
7,500.0	6,972.0	6,962.1	6,960.8	18.7	1.9	-87.33	-546.1	493.2	291.9	271.4	20.51	14.234	
7,519.8	6,971.9	6,962.1	6,960.8	19.0	1.9	-87.33	-546.1	493.2	291.2	270.5	20.74	14.042 CC, ES	
7,578.7	6,971.3	6,962.1	6,960.8	19.7	1.9	-87.33	-546.1	493.2	297.1	275.7	21.43	13.864 SF	
7,600.0	6,971.1	6,962.1	6,960.8	19.9	1.9	-87.33	-546.1	493.2	302.1	280.4	21.68	13.932	
7,677.1	6,970.4	6,962.1	6,960.8	20.9	1.9	-87.33	-546.1	493.2	331.0	308.3	22.67	14.599	
7,700.0	6,970.2	6,962.1	6,960.8	21.2	1.9	-87.33	-546.1	493.2	342.5	319.5	22.97	14.911	
7,775.6	6,969.5	6,962.1	6,960.8	22.2	1.9	-87.32	-546.1	493.2	387.6	363.6	24.02	16.138	
7,800.0	6,969.3	6,962.1	6,960.8	22.6	1.9	-87.32	-546.1	493.2	404.1	379.8	24.36	16.592	
7,874.0	6,968.6	6,962.1	6,960.7	23.7	1.9	-87.32	-546.1	493.2	458.5	433.1	25.45	18.019	
7,900.0	6,968.4	6,962.1	6,960.7	24.1	1.9	-87.32	-546.1	493.2	478.9	453.1	25.83	18.541	
7,972.4	6,967.8	6,962.1	6,960.7	25.2	1.9	-87.32	-546.1	493.2	538.2	511.3	26.95	19.971	
8,000.0	6,967.5	6,962.1	6,960.7	25.6	1.9	-87.32	-546.1	493.2	561.6	534.2	27.37	20.515	
8,070.8	6,966.9	6,962.1	6,960.7	26.7	1.9	-87.32	-546.1	493.2	623.3	594.7	28.51	21.861	
8,100.0	6,966.6	6,962.1	6,960.7	27.2	1.9	-87.31	-546.1	493.2	649.2	620.2	28.98	22.403	
8,169.3	6,966.0	6,962.1	6,960.7	28.3	1.9	-87.31	-546.1	493.2	711.8	681.6	30.12	23.630	
8,200.0	6,965.7	6,962.0	6,960.7	28.8	1.9	-87.31	-546.1	493.2	739.9	709.3	30.63	24.157	
8,267.7	6,965.1	6,962.0	6,960.7	30.0	1.9	-87.31	-546.1	493.2	802.6	770.8	31.77	25.259	
8,300.0	6,964.8	6,962.0	6,960.7	30.5	1.9	-87.31	-546.1	493.2	832.8	800.4	32.32	25.765	
8,366.1	6,964.2	6,962.0	6,960.7	31.7	1.9	-87.31	-546.1	493.2	895.0	861.5	33.46	26.747	
8,400.0	6,963.9	6,962.0	6,960.7	32.2	1.9	-87.30	-546.1	493.2	927.1	893.1	34.05	27.230	
8,464.5	6,963.3	6,962.0	6,960.7	33.4	1.9	-87.30	-546.1	493.2	988.6	953.4	35.18	28.101	
8,500.0	6,963.0	6,962.0	6,960.7	34.0	1.9	-87.30	-546.1	493.2	1,022.5	986.7	35.80	28.560	
8,563.0	6,962.4	6,962.0	6,960.6	35.1	1.9	-87.30	-546.1	493.2	1,083.0	1,046.1	36.92	29.332	
8,600.0	6,962.0	6,962.0	6,960.6	35.8	1.9	-87.30	-546.1	493.2	1,118.7	1,081.2	37.58	29.767	
8,661.4	6,961.5	6,962.0	6,960.6	36.9	1.9	-87.30	-546.1	493.2	1,178.1	1,139.4	38.69	30.451	
8,700.0	6,961.1	6,962.0	6,960.6	37.6	1.9	-87.29	-546.1	493.2	1,215.6	1,176.2	39.38	30.864	
8,759.8	6,960.6	6,962.0	6,960.6	38.7	1.9	-87.29	-546.1	493.2	1,273.7	1,233.3	40.47	31.471	
8,800.0	6,960.2	6,961.9	6,960.6	39.4	1.9	-87.29	-546.1	493.2	1,312.9	1,271.7	41.20	31.863	
8,858.2	6,959.7	6,961.9	6,960.6	40.5	1.9	-87.29	-546.1	493.2	1,369.7	1,327.5	42.27	32.402	
8,900.0	6,959.3	6,961.9	6,960.6	41.2	1.9	-87.29	-546.1	493.2	1,410.6	1,367.5	43.04	32.774	
8,956.7	6,958.8	6,961.9	6,960.6	42.3	1.9	-87.28	-546.1	493.2	1,466.1	1,422.0	44.09	33.253	
9,000.0	6,958.4	6,961.9	6,960.6	43.1	1.9	-87.28	-546.1	493.2	1,508.6	1,463.7	44.89	33.606	
9,055.1	6,957.9	6,961.9	6,960.6	44.1	1.9	-87.28	-546.1	493.2	1,562.7	1,516.7	45.91	34.034	
9,100.0	6,957.5	6,961.9	6,960.5	44.9	1.9	-87.28	-546.1	493.2	1,606.8	1,560.0	46.75	34.369	
9,153.5	6,957.0	6,961.9	6,960.5	45.9	1.9	-87.28	-546.1	493.2	1,659.5	1,611.7	47.75	34.751	
9,200.0	6,956.6	6,961.9	6,960.5	46.8	1.9	-87.27	-546.1	493.2	1,705.2	1,656.6	48.62	35.071	
9,251.9	6,956.1	6,961.9	6,960.5	47.8	1.9	-87.27	-546.1	493.2	1,756.4	1,706.8	49.60	35.412	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - LATHAM 7-2 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,300.0	6,955.7	6,961.8	6,960.5	48.7	1.9	-87.27	-546.1	493.2	1,803.8	1,753.3	50.50	35.716	
9,350.4	6,955.2	6,961.8	6,960.5	49.6	1.9	-87.27	-546.1	493.2	1,853.6	1,802.1	51.46	36.022	
9,400.0	6,954.8	6,961.8	6,960.5	50.6	1.9	-87.26	-546.1	493.2	1,902.6	1,850.2	52.39	36.313	
9,448.8	6,954.3	6,961.8	6,960.5	51.5	1.9	-87.26	-546.1	493.2	1,950.8	1,897.5	53.32	36.587	
9,500.0	6,953.9	6,961.8	6,960.5	52.5	1.9	-87.26	-546.1	493.2	2,001.5	1,947.2	54.29	36.865	
9,547.2	6,953.4	6,961.8	6,960.4	53.4	1.9	-87.26	-546.1	493.2	2,048.2	1,993.0	55.19	37.111	
9,600.0	6,952.9	6,961.8	6,960.4	54.4	1.9	-87.25	-546.1	493.2	2,100.5	2,044.3	56.20	37.378	
9,645.6	6,952.5	6,961.8	6,960.4	55.2	1.9	-87.25	-546.1	493.2	2,145.7	2,088.6	57.07	37.599	
9,700.0	6,952.0	6,961.7	6,960.4	56.3	1.9	-87.25	-546.1	493.2	2,199.5	2,141.4	58.11	37.854	
9,744.1	6,951.6	6,961.7	6,960.4	57.1	1.9	-87.24	-546.1	493.2	2,243.2	2,184.3	58.95	38.053	
9,800.0	6,951.1	6,961.7	6,960.4	58.2	1.9	-87.24	-546.1	493.2	2,298.7	2,238.7	60.02	38.298	
9,842.5	6,950.7	6,961.7	6,960.4	59.0	1.9	-87.24	-546.1	493.2	2,340.9	2,280.0	60.84	38.477	
9,900.0	6,950.2	6,961.7	6,960.4	60.1	1.9	-87.23	-546.1	493.2	2,397.9	2,336.0	61.94	38.713	
9,940.9	6,949.8	6,961.7	6,960.3	60.9	1.9	-87.23	-546.1	493.2	2,438.5	2,375.8	62.73	38.874	
10,000.0	6,949.3	6,961.7	6,960.3	62.0	1.9	-87.23	-546.1	493.2	2,497.2	2,433.3	63.87	39.100	
10,039.3	6,948.9	6,961.7	6,960.3	62.8	1.9	-87.23	-546.1	493.2	2,536.3	2,471.7	64.63	39.246	
10,100.0	6,948.4	6,961.6	6,960.3	64.0	1.9	-87.22	-546.1	493.2	2,596.6	2,530.8	65.80	39.464	
10,137.8	6,948.0	6,961.6	6,960.3	64.7	1.9	-87.22	-546.1	493.2	2,634.1	2,567.6	66.53	39.595	
10,200.0	6,947.5	6,961.6	6,960.3	65.9	1.9	-87.21	-546.1	493.2	2,695.9	2,628.2	67.73	39.806	
10,236.2	6,947.1	6,961.6	6,960.2	66.6	1.9	-87.21	-546.1	493.2	2,731.9	2,663.5	68.43	39.924	
10,300.0	6,946.6	6,961.6	6,960.2	67.8	1.9	-87.21	-546.1	493.2	2,795.4	2,725.7	69.66	40.127	
10,334.6	6,946.3	6,961.6	6,960.2	68.5	1.9	-87.20	-546.1	493.2	2,829.8	2,759.5	70.33	40.233	
10,400.0	6,945.7	6,961.5	6,960.2	69.8	1.9	-87.20	-546.1	493.2	2,894.9	2,823.3	71.60	40.430	
10,433.0	6,945.4	6,961.5	6,960.2	70.4	1.9	-87.20	-546.1	493.2	2,927.7	2,855.5	72.24	40.526	
10,500.0	6,944.7	6,961.5	6,960.2	71.7	1.9	-87.19	-546.1	493.2	2,994.4	2,920.8	73.54	40.715	
10,531.5	6,944.5	6,961.5	6,960.1	72.3	1.9	-87.19	-546.1	493.2	3,025.7	2,951.5	74.16	40.802	
10,600.0	6,943.8	6,961.5	6,960.1	73.7	1.9	-87.18	-546.1	493.2	3,093.9	3,018.4	75.49	40.985	
10,629.9	6,943.6	6,961.5	6,960.1	74.2	1.9	-87.18	-546.1	493.2	3,123.7	3,047.6	76.07	41.063	
10,700.0	6,942.9	6,961.4	6,960.1	75.6	1.9	-87.17	-546.1	493.2	3,193.5	3,116.0	77.44	41.241	
10,728.3	6,942.7	6,961.4	6,960.1	76.2	1.9	-87.17	-546.1	493.2	3,221.7	3,143.7	77.99	41.310	
10,800.0	6,942.0	6,961.4	6,960.0	77.6	1.9	-87.17	-546.1	493.2	3,293.1	3,213.7	79.38	41.483	
10,826.7	6,941.8	6,961.4	6,960.0	78.1	1.9	-87.16	-546.1	493.2	3,319.7	3,239.8	79.91	41.545	
10,900.0	6,941.1	6,961.3	6,960.0	79.5	1.9	-87.16	-546.1	493.2	3,392.7	3,311.4	81.33	41.713	
10,925.2	6,940.9	6,961.3	6,960.0	80.0	1.9	-87.15	-546.1	493.2	3,417.8	3,335.9	81.83	41.769	
11,000.0	6,940.2	6,961.3	6,960.0	81.5	1.9	-87.15	-546.1	493.2	3,492.3	3,409.0	83.29	41.931	
11,023.6	6,940.0	6,961.3	6,959.9	81.9	1.9	-87.14	-546.1	493.2	3,515.9	3,432.1	83.75	41.981	
11,100.0	6,939.3	6,961.2	6,959.9	83.4	1.9	-87.14	-546.1	493.2	3,592.0	3,506.8	85.24	42.139	
11,122.0	6,939.1	6,961.2	6,959.9	83.8	1.9	-87.13	-546.1	493.2	3,613.9	3,528.3	85.67	42.183	
11,200.0	6,938.4	6,961.2	6,959.9	85.4	1.9	-87.13	-546.1	493.2	3,691.7	3,604.5	87.20	42.337	
11,220.4	6,938.2	6,961.2	6,959.8	85.8	1.9	-87.12	-546.1	493.2	3,712.1	3,624.5	87.60	42.376	
11,300.0	6,937.4	6,961.1	6,959.8	87.3	1.9	-87.11	-546.1	493.2	3,791.4	3,702.2	89.16	42.525	
11,318.9	6,937.3	6,961.1	6,959.8	87.7	1.9	-87.11	-546.1	493.2	3,810.2	3,720.7	89.53	42.560	
11,400.0	6,936.5	6,961.1	6,959.7	89.3	1.9	-87.10	-546.1	493.2	3,891.1	3,800.0	91.11	42.705	
11,417.3	6,936.4	6,961.1	6,959.7	89.6	1.9	-87.10	-546.1	493.2	3,908.3	3,816.9	91.45	42.736	
11,500.0	6,935.6	6,961.0	6,959.7	91.3	1.9	-87.09	-546.1	493.2	3,990.8	3,897.7	93.08	42.877	
11,515.7	6,935.5	6,961.0	6,959.7	91.6	1.9	-87.09	-546.1	493.2	4,006.5	3,913.1	93.38	42.904	
11,600.0	6,934.7	6,961.0	6,959.6	93.2	1.9	-87.08	-546.1	493.2	4,090.5	3,995.5	95.04	43.042	
11,614.1	6,934.6	6,961.0	6,959.6	93.5	1.9	-87.07	-546.1	493.2	4,104.7	4,009.3	95.31	43.064	
11,700.0	6,933.8	6,960.9	6,959.6	95.2	1.9	-87.06	-546.1	493.1	4,190.3	4,093.3	97.00	43.199	
11,712.6	6,933.7	6,960.9	6,959.6	95.4	1.9	-87.06	-546.1	493.1	4,202.8	4,105.6	97.25	43.219	
11,800.0	6,932.9	6,960.8	6,959.5	97.1	1.9	-87.05	-546.1	493.1	4,290.1	4,191.1	98.96	43.350	
11,811.0	6,932.8	6,960.8	6,959.5	97.4	1.9	-87.05	-546.1	493.1	4,301.0	4,201.9	99.18	43.366	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - LATHAM 7-2 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
11,900.0	6,932.0	6,960.8	6,959.4	99.1	1.9	-87.03	-546.1	493.1	4,389.8	4,288.9	100.93	43.495	
11,909.4	6,931.9	6,960.8	6,959.4	99.3	1.9	-87.03	-546.1	493.1	4,399.2	4,298.1	101.11	43.508	
12,000.0	6,931.0	6,960.7	6,959.4	101.1	1.9	-87.02	-546.1	493.1	4,489.6	4,386.7	102.89	43.634	
12,007.8	6,931.0	6,960.7	6,959.3	101.2	1.9	-87.02	-546.1	493.1	4,497.5	4,394.4	103.05	43.644	
12,100.0	6,930.1	6,960.6	6,959.3	103.0	1.9	-87.00	-546.1	493.1	4,589.4	4,484.6	104.86	43.767	
12,106.3	6,930.1	6,960.6	6,959.3	103.2	1.9	-87.00	-546.1	493.1	4,595.7	4,490.7	104.98	43.775	
12,200.0	6,929.2	6,960.5	6,959.2	105.0	1.9	-86.98	-546.1	493.1	4,689.2	4,582.4	106.83	43.896	
12,204.7	6,929.2	6,960.5	6,959.2	105.1	1.9	-86.98	-546.1	493.1	4,693.9	4,587.0	106.92	43.901	
12,300.0	6,928.3	6,960.4	6,959.1	107.0	1.9	-86.96	-546.1	493.1	4,789.0	4,680.2	108.79	44.019	
12,303.1	6,928.3	6,960.4	6,959.1	107.1	1.9	-86.96	-546.1	493.1	4,792.1	4,683.3	108.86	44.023	
12,400.0	6,927.4	6,960.3	6,959.0	109.0	1.9	-86.94	-546.1	493.1	4,888.8	4,778.1	110.76	44.138	
12,401.5	6,927.4	6,960.3	6,959.0	109.0	1.9	-86.94	-546.1	493.1	4,890.4	4,779.6	110.79	44.140	
12,500.0	6,926.5	6,960.2	6,958.9	110.9	1.9	-86.92	-546.1	493.1	4,988.7	4,875.9	112.73	44.252	
12,598.4	6,925.6	6,960.1	6,958.8	112.9	1.9	-86.90	-546.1	493.1	5,086.9	4,972.2	114.67	44.361	
12,600.0	6,925.6	6,960.1	6,958.8	112.9	1.9	-86.90	-546.1	493.1	5,088.5	4,973.8	114.70	44.363	
12,696.8	6,924.7	6,960.0	6,958.7	114.8	1.9	-86.88	-546.1	493.1	5,185.2	5,068.6	116.61	44.466	
12,700.0	6,924.6	6,960.0	6,958.7	114.9	1.9	-86.88	-546.1	493.1	5,188.3	5,071.7	116.67	44.469	
12,795.2	6,923.8	6,959.9	6,958.6	116.8	1.9	-86.85	-546.1	493.1	5,283.4	5,164.9	118.55	44.567	
12,800.0	6,923.7	6,959.9	6,958.6	116.9	1.9	-86.85	-546.1	493.1	5,288.2	5,169.5	118.64	44.572	
12,893.7	6,922.9	6,959.8	6,958.4	118.7	1.9	-86.83	-546.1	493.1	5,381.7	5,261.2	120.49	44.665	
12,900.0	6,922.8	6,959.8	6,958.4	118.8	1.9	-86.82	-546.1	493.1	5,388.0	5,267.4	120.61	44.672	
12,992.1	6,922.0	6,959.6	6,958.3	120.6	1.9	-86.80	-546.1	493.1	5,480.0	5,357.6	122.43	44.760	
13,000.0	6,921.9	6,959.6	6,958.3	120.8	1.9	-86.79	-546.1	493.1	5,487.9	5,365.3	122.59	44.768	
13,090.5	6,921.1	6,959.5	6,958.1	122.6	1.9	-86.77	-546.1	493.1	5,578.3	5,453.9	124.37	44.852	
13,100.0	6,921.0	6,959.5	6,958.1	122.8	1.9	-86.76	-546.1	493.1	5,587.8	5,463.2	124.56	44.861	
13,188.9	6,920.2	6,959.3	6,958.0	124.5	1.9	-86.73	-546.1	493.1	5,676.6	5,550.3	126.31	44.941	
13,200.0	6,920.1	6,959.3	6,958.0	124.8	1.9	-86.73	-546.1	493.1	5,687.6	5,561.1	126.53	44.951	
13,287.4	6,919.3	6,959.1	6,957.8	126.5	1.9	-86.70	-546.1	493.1	5,774.9	5,646.6	128.25	45.027	
13,300.0	6,919.1	6,959.1	6,957.8	126.7	1.9	-86.69	-546.1	493.1	5,787.5	5,659.0	128.50	45.038	
13,385.8	6,918.4	6,959.0	6,957.6	128.4	1.9	-86.66	-546.1	493.1	5,873.2	5,743.0	130.19	45.111	
13,400.0	6,918.2	6,958.9	6,957.6	128.7	1.9	-86.65	-546.1	493.1	5,887.4	5,756.9	130.47	45.123	
13,484.2	6,917.5	6,958.7	6,957.4	130.4	1.9	-86.61	-546.1	493.0	5,971.5	5,839.4	132.13	45.192	
13,500.0	6,917.3	6,958.7	6,957.4	130.7	1.9	-86.61	-546.1	493.0	5,987.2	5,854.8	132.45	45.205	
13,582.6	6,916.6	6,958.5	6,957.2	132.3	1.9	-86.57	-546.1	493.0	6,069.8	5,935.7	134.08	45.271	
13,600.0	6,916.4	6,958.5	6,957.1	132.7	1.9	-86.56	-546.1	493.0	6,087.1	5,952.7	134.42	45.285	
13,681.1	6,915.6	6,958.3	6,956.9	134.3	1.9	-86.52	-546.1	493.0	6,168.1	6,032.1	136.02	45.348	
13,700.0	6,915.5	6,958.2	6,956.9	134.6	1.9	-86.51	-546.1	493.0	6,187.0	6,050.6	136.39	45.363	
13,779.5	6,914.7	6,958.0	6,956.7	136.2	1.9	-86.46	-546.0	493.0	6,266.4	6,128.5	137.96	45.423	
13,800.0	6,914.6	6,957.9	6,956.6	136.6	1.9	-86.45	-546.0	493.0	6,286.9	6,148.5	138.36	45.438	
13,877.9	6,913.8	6,957.7	6,956.4	138.2	1.9	-86.40	-546.0	493.0	6,364.8	6,224.9	139.90	45.496	
13,900.0	6,913.6	6,957.6	6,956.3	138.6	1.9	-86.39	-546.0	493.0	6,386.8	6,246.5	140.33	45.512	
13,976.3	6,912.9	6,957.4	6,956.0	140.1	1.9	-86.33	-546.0	493.0	6,463.1	6,321.2	141.84	45.567	
14,000.0	6,912.7	6,957.3	6,955.9	140.6	1.9	-86.32	-546.0	493.0	6,486.7	6,344.4	142.30	45.584	
14,074.8	6,912.0	6,957.0	6,955.7	142.0	1.9	-86.26	-546.0	493.0	6,561.4	6,417.7	143.71	45.656	
14,079.0	6,912.0	6,957.0	6,955.6	142.1	1.9	-86.25	-546.0	493.0	6,565.6	6,421.8	143.79	45.660	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

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									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	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	-157.93	-1,595.7	-646.9	1,721.9				
98.4	98.4	75.8	75.8	0.1	0.0	-157.93	-1,595.6	-647.1	1,721.8	1,721.7	0.14	N/A	
100.0	100.0	77.4	77.4	0.1	0.0	-157.93	-1,595.6	-647.1	1,721.8	1,721.7	0.14	N/A	
196.8	196.8	162.5	162.5	0.3	0.1	-157.91	-1,595.7	-647.5	1,722.2	1,721.7	0.44	3,886.482	
200.0	200.0	165.1	165.1	0.3	0.1	-157.91	-1,595.7	-647.6	1,722.2	1,721.7	0.45	3,801.348	
295.3	295.3	264.8	264.8	0.5	0.2	-157.91	-1,596.5	-647.9	1,723.0	1,722.3	0.77	2,235.816	
300.0	300.0	270.5	270.5	0.5	0.2	-157.91	-1,596.6	-647.9	1,723.0	1,722.3	0.79	2,189.239	
393.7	393.7	372.2	372.2	0.8	0.3	-157.90	-1,596.6	-648.2	1,723.2	1,722.1	1.05	1,636.124	
400.0	400.0	378.7	378.7	0.8	0.3	-157.90	-1,596.6	-648.3	1,723.2	1,722.1	1.07	1,610.919	
437.2	437.2	415.7	415.7	0.9	0.3	-157.89	-1,596.4	-648.6	1,723.2	1,722.0	1.17	1,472.961	
492.1	492.1	467.0	467.0	1.0	0.4	-157.87	-1,596.3	-649.0	1,723.2	1,721.9	1.32	1,302.735	
500.0	500.0	474.3	474.3	1.0	0.4	-157.87	-1,596.3	-649.1	1,723.3	1,721.9	1.34	1,281.504	
590.5	590.5	567.4	567.4	1.2	0.4	-157.85	-1,596.3	-649.7	1,723.5	1,721.9	1.60	1,079.265	
600.0	600.0	577.5	577.5	1.2	0.4	-157.85	-1,596.3	-649.8	1,723.5	1,721.9	1.62	1,061.769	
689.0	689.0	663.1	663.1	1.4	0.5	-157.83	-1,596.1	-650.4	1,723.6	1,721.7	1.86	924.879	
700.0	700.0	673.3	673.3	1.4	0.5	-157.83	-1,596.1	-650.5	1,723.6	1,721.7	1.89	910.485	
787.4	787.4	768.6	768.6	1.6	0.5	-157.80	-1,596.0	-651.3	1,723.8	1,721.6	2.13	810.382	
800.0	800.0	783.4	783.4	1.7	0.5	-157.80	-1,595.9	-651.4	1,723.7	1,721.6	2.16	797.710	
858.2	858.2	836.6	836.6	1.8	0.5	-157.78	-1,595.6	-651.8	1,723.6	1,721.3	2.31	746.200	
885.8	885.8	859.6	859.6	1.9	0.6	-157.77	-1,595.5	-652.0	1,723.6	1,721.3	2.38	724.435	
900.0	900.0	871.4	871.4	1.9	0.6	-157.77	-1,595.5	-652.2	1,723.7	1,721.3	2.41	713.747	
984.2	984.2	950.1	950.1	2.1	0.6	-157.74	-1,595.8	-653.0	1,724.3	1,721.6	2.63	654.697	
1,000.0	1,000.0	966.0	965.9	2.1	0.6	-157.74	-1,595.8	-653.2	1,724.4	1,721.7	2.68	644.532	
1,082.7	1,082.7	1,050.4	1,050.4	2.3	0.6	-157.72	-1,596.1	-654.0	1,725.0	1,722.1	2.89	596.265	
1,100.0	1,100.0	1,068.3	1,068.3	2.3	0.7	-157.72	-1,596.2	-654.1	1,725.1	1,722.1	2.94	587.095	
1,181.1	1,181.1	1,149.3	1,149.2	2.5	0.7	-157.71	-1,596.6	-654.4	1,725.5	1,722.4	3.15	548.374	
1,200.0	1,200.0	1,167.7	1,167.7	2.6	0.7	-157.71	-1,596.7	-654.5	1,725.6	1,722.4	3.19	540.179	
1,279.5	1,279.5	1,246.0	1,246.0	2.7	0.7	165.78	-1,597.2	-654.6	1,727.2	1,723.8	3.43	503.925	
1,300.0	1,300.0	1,266.3	1,266.3	2.8	0.7	165.78	-1,597.3	-654.6	1,728.0	1,724.5	3.48	496.193	
1,377.9	1,377.8	1,348.8	1,348.7	3.0	0.8	165.80	-1,597.8	-654.9	1,732.2	1,728.5	3.69	469.318	
1,400.0	1,399.8	1,373.2	1,373.2	3.0	0.8	165.80	-1,597.9	-654.9	1,733.7	1,729.9	3.75	462.407	
1,476.4	1,475.9	1,453.6	1,453.5	3.2	0.8	165.84	-1,597.9	-655.2	1,739.9	1,736.0	3.95	440.315	
1,500.0	1,499.5	1,477.8	1,477.8	3.2	0.8	165.85	-1,597.8	-655.3	1,742.2	1,738.2	4.01	434.041	
1,574.8	1,573.7	1,557.7	1,557.6	3.4	0.8	165.90	-1,597.6	-655.7	1,750.7	1,746.4	4.21	415.473	
1,600.0	1,598.7	1,585.0	1,584.9	3.5	0.8	165.92	-1,597.4	-655.9	1,753.9	1,749.6	4.28	409.808	
1,673.2	1,671.1	1,652.0	1,652.0	3.7	0.9	165.97	-1,596.9	-656.5	1,764.4	1,759.9	4.48	394.087	
1,700.0	1,697.5	1,675.4	1,675.4	3.7	0.9	165.99	-1,596.8	-656.7	1,768.8	1,764.2	4.55	388.867	
1,771.6	1,767.9	1,739.2	1,739.2	4.0	0.9	166.04	-1,596.7	-657.4	1,781.9	1,777.1	4.75	374.965	
1,800.1	1,795.7	1,764.8	1,764.8	4.0	0.9	166.07	-1,596.6	-657.7	1,787.6	1,782.8	4.83	369.900	
1,870.1	1,864.2	1,829.9	1,829.9	4.3	0.9	166.20	-1,596.6	-658.8	1,802.2	1,797.2	5.02	358.677	
1,900.0	1,893.4	1,859.0	1,859.0	4.4	0.9	166.27	-1,596.6	-659.4	1,808.5	1,803.4	5.11	354.245	
1,968.5	1,960.4	1,926.9	1,926.8	4.6	1.0	166.43	-1,596.4	-661.1	1,822.8	1,817.5	5.30	344.163	
2,000.0	1,991.3	1,959.0	1,958.9	4.7	1.0	166.50	-1,596.3	-661.9	1,829.4	1,824.0	5.38	340.006	
2,066.9	2,056.7	2,036.8	2,036.6	5.0	1.0	166.67	-1,596.0	-663.3	1,843.2	1,837.6	5.56	331.437	
2,100.0	2,089.1	2,082.2	2,082.1	5.1	1.0	166.76	-1,595.5	-664.0	1,849.8	1,844.1	5.65	327.304	
2,165.3	2,153.0	2,142.4	2,142.3	5.3	1.0	166.89	-1,594.6	-664.8	1,862.5	1,856.6	5.83	319.603	
2,200.0	2,186.9	2,170.4	2,170.3	5.5	1.1	166.94	-1,594.3	-665.2	1,869.4	1,863.4	5.92	315.725	
2,263.8	2,249.3	2,231.9	2,231.8	5.7	1.1	167.07	-1,593.8	-666.1	1,882.2	1,876.1	6.10	308.692	
2,300.0	2,284.7	2,274.7	2,274.5	5.8	1.1	167.15	-1,593.4	-666.7	1,889.5	1,883.3	6.20	304.762	
2,362.2	2,345.5	2,337.5	2,337.3	6.1	1.1	167.27	-1,592.5	-667.6	1,901.6	1,895.3	6.37	298.419	
2,400.0	2,382.5	2,372.2	2,372.1	6.2	1.1	167.34	-1,592.0	-668.0	1,909.1	1,902.6	6.48	294.766	
2,460.6	2,441.8	2,431.4	2,431.3	6.5	1.1	167.46	-1,591.3	-668.9	1,921.1	1,914.4	6.65	288.958	

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 HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - LATHAM 7-3 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,500.0	2,480.3	2,472.2	2,472.0	6.6	1.1	167.53	-1,590.8	-669.4	1,928.8	1,922.1	6.76	285.364	
2,559.0	2,538.1	2,531.3	2,531.1	6.9	1.2	167.65	-1,589.9	-670.3	1,940.4	1,933.5	6.93	280.178	
2,600.0	2,578.1	2,571.1	2,570.9	7.0	1.2	167.72	-1,589.3	-670.8	1,948.4	1,941.4	7.04	276.748	
2,657.5	2,634.4	2,625.9	2,625.7	7.3	1.2	167.83	-1,588.6	-671.6	1,959.7	1,952.5	7.20	272.062	
2,700.0	2,675.9	2,665.7	2,665.5	7.5	1.2	167.90	-1,588.0	-672.2	1,968.1	1,960.8	7.32	268.731	
2,755.9	2,730.6	2,720.9	2,720.7	7.7	1.2	168.00	-1,587.4	-672.8	1,979.2	1,971.7	7.48	264.486	
2,800.0	2,773.8	2,768.9	2,768.7	7.9	1.2	168.08	-1,586.7	-673.5	1,987.9	1,980.3	7.61	261.261	
2,854.3	2,826.9	2,822.0	2,821.7	8.1	1.3	168.19	-1,585.8	-674.4	1,998.5	1,990.7	7.76	257.421	
2,857.4	2,829.9	2,824.5	2,824.3	8.1	1.3	168.19	-1,585.7	-674.5	1,999.1	1,991.3	7.77	257.212	
2,900.0	2,871.6	2,860.9	2,860.6	8.3	1.3	168.29	-1,585.2	-675.1	2,007.2	1,999.3	7.87	254.999	
2,952.7	2,923.5	2,908.2	2,907.9	8.4	1.3	168.41	-1,584.7	-675.8	2,016.5	2,008.5	7.98	252.788	
3,000.0	2,970.1	2,963.1	2,962.8	8.6	1.3	168.52	-1,584.0	-676.5	2,024.0	2,016.0	8.07	250.724	
3,051.2	3,020.7	3,017.6	3,017.3	8.7	1.3	168.62	-1,583.2	-677.1	2,031.1	2,023.0	8.17	248.537	
3,100.0	3,069.1	3,061.6	3,061.3	8.9	1.3	168.69	-1,582.6	-677.6	2,037.1	2,028.8	8.27	246.470	
3,149.6	3,118.3	3,107.4	3,107.1	9.0	1.4	168.76	-1,582.1	-678.2	2,042.5	2,034.1	8.36	244.433	
3,200.0	3,168.5	3,160.7	3,160.4	9.1	1.4	168.82	-1,581.5	-678.5	2,047.0	2,038.6	8.45	242.374	
3,248.0	3,216.3	3,209.2	3,208.9	9.2	1.4	168.86	-1,581.2	-678.5	2,050.5	2,042.0	8.53	240.455	
3,300.0	3,268.2	3,252.9	3,252.6	9.3	1.4	168.88	-1,581.1	-678.2	2,053.6	2,044.9	8.62	238.366	
3,346.4	3,314.6	3,292.0	3,291.7	9.4	1.4	168.89	-1,581.2	-677.8	2,055.6	2,046.9	8.69	236.550	
3,400.0	3,368.1	3,351.7	3,351.3	9.5	1.4	168.88	-1,581.5	-677.1	2,057.2	2,048.4	8.78	234.234	
3,444.9	3,413.0	3,404.0	3,403.7	9.6	1.4	168.87	-1,581.6	-676.4	2,057.5	2,048.7	8.86	232.272	
3,457.5	3,425.6	3,418.1	3,417.8	9.6	1.4	-154.63	-1,581.6	-676.2	2,057.5	2,048.6	8.88	231.663	
3,500.0	3,468.1	3,465.7	3,465.3	9.7	1.4	-154.64	-1,581.4	-675.8	2,057.1	2,048.2	8.97	229.429	
3,543.3	3,511.4	3,513.8	3,513.4	9.7	1.4	-154.64	-1,580.9	-675.6	2,056.7	2,047.6	9.06	226.966	
3,600.0	3,568.1	3,575.9	3,575.6	9.8	1.4	-154.62	-1,580.0	-675.8	2,056.0	2,046.8	9.19	223.754	
3,641.7	3,609.9	3,620.9	3,620.5	9.9	1.4	-154.60	-1,579.1	-676.2	2,055.3	2,046.1	9.28	221.418	
3,700.0	3,668.1	3,682.3	3,681.9	10.0	1.4	-154.57	-1,577.7	-676.6	2,054.4	2,045.0	9.41	218.217	
3,740.1	3,708.3	3,720.6	3,720.2	10.1	1.4	-154.56	-1,576.9	-676.9	2,053.7	2,044.2	9.50	216.065	
3,800.0	3,768.1	3,773.5	3,773.1	10.2	1.4	-154.53	-1,575.8	-677.3	2,052.8	2,043.2	9.64	212.971	
3,838.6	3,806.7	3,808.1	3,807.7	10.2	1.4	-154.52	-1,575.2	-677.7	2,052.4	2,042.6	9.73	211.022	
3,900.0	3,868.1	3,865.9	3,865.5	10.3	1.5	-154.48	-1,574.2	-678.4	2,051.7	2,041.9	9.86	207.991	
3,937.0	3,905.1	3,900.0	3,899.6	10.4	1.5	-154.47	-1,573.6	-679.0	2,051.4	2,041.5	9.95	206.206	
4,000.0	3,968.1	3,955.6	3,955.1	10.5	1.5	-154.43	-1,572.7	-680.0	2,051.0	2,041.0	10.09	203.265	
4,035.4	4,003.6	3,986.4	3,985.9	10.6	1.5	-154.41	-1,572.3	-680.6	2,050.9	2,040.8	10.17	201.653	
4,062.4	4,030.6	4,009.3	4,008.9	10.6	1.5	-154.39	-1,572.1	-681.1	2,050.9	2,040.7	10.23	200.449	
4,100.0	4,068.1	4,040.0	4,039.6	10.7	1.5	-154.37	-1,571.8	-681.8	2,051.0	2,040.7	10.32	198.816	
4,133.8	4,102.0	4,067.7	4,067.2	10.8	1.5	-154.35	-1,571.7	-682.4	2,051.1	2,040.8	10.39	197.370	
4,200.0	4,168.1	4,121.5	4,121.0	10.9	1.5	-154.33	-1,571.7	-683.5	2,051.8	2,041.2	10.54	194.635	
4,232.3	4,200.4	4,147.6	4,147.1	10.9	1.5	-154.32	-1,571.8	-684.1	2,052.2	2,041.6	10.61	193.336	
4,300.0	4,268.1	4,202.9	4,202.4	11.1	1.6	-154.30	-1,572.5	-685.1	2,053.5	2,042.7	10.77	190.697	
4,330.7	4,298.8	4,233.6	4,233.1	11.1	1.6	-154.29	-1,572.9	-685.7	2,054.1	2,043.3	10.84	189.502	
4,400.0	4,368.1	4,300.0	4,299.5	11.2	1.6	-154.26	-1,573.8	-687.1	2,055.6	2,044.6	11.00	186.876	
4,429.1	4,397.3	4,326.8	4,326.3	11.3	1.6	-154.25	-1,574.2	-687.7	2,056.3	2,045.2	11.07	185.798	
4,500.0	4,468.1	4,385.9	4,385.4	11.4	1.6	-154.24	-1,575.5	-688.8	2,058.2	2,047.0	11.23	183.278	
4,527.5	4,495.7	4,410.5	4,409.9	11.5	1.6	-154.24	-1,576.1	-689.2	2,059.1	2,047.8	11.29	182.316	
4,600.0	4,568.1	4,481.7	4,481.0	11.6	1.6	-154.24	-1,578.2	-690.0	2,061.3	2,049.9	11.46	179.817	
4,626.0	4,594.1	4,506.9	4,506.3	11.7	1.6	-154.25	-1,579.0	-690.2	2,062.2	2,050.6	11.52	178.937	
4,700.0	4,668.1	4,576.7	4,576.0	11.8	1.6	-154.26	-1,581.2	-690.9	2,064.6	2,052.9	11.70	176.494	
4,724.4	4,692.5	4,600.0	4,599.3	11.8	1.6	-154.26	-1,582.0	-691.2	2,065.5	2,053.7	11.76	175.705	
4,800.0	4,768.1	4,675.4	4,674.7	12.0	1.6	-154.26	-1,584.4	-692.2	2,068.1	2,056.2	11.93	173.293	
4,822.8	4,791.0	4,698.3	4,697.6	12.0	1.7	-154.27	-1,585.2	-692.4	2,068.9	2,056.9	11.99	172.577	
4,900.0	4,868.1	4,773.3	4,772.5	12.2	1.7	-154.28	-1,587.8	-693.2	2,071.6	2,059.4	12.17	170.208	

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 HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - LATHAM 7-3 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,921.2	4,889.4	4,794.0	4,793.2	12.2	1.7	-154.28	-1,588.5	-693.4	2,072.4	2,060.2	12.22	169.569	
5,000.0	4,968.1	4,884.3	4,883.4	12.4	1.7	-154.30	-1,591.5	-694.1	2,075.0	2,062.6	12.41	167.190	
5,019.7	4,987.8	4,906.1	4,905.2	12.4	1.7	-154.31	-1,592.2	-694.1	2,075.6	2,063.1	12.46	166.603	
5,100.0	5,068.1	4,985.4	4,984.5	12.6	1.7	-154.33	-1,594.6	-694.6	2,078.0	2,065.3	12.65	164.272	
5,118.1	5,086.2	5,004.3	5,003.3	12.6	1.7	-154.33	-1,595.2	-694.7	2,078.5	2,065.8	12.69	163.755	
5,200.0	5,168.1	5,108.8	5,107.9	12.8	1.7	-154.36	-1,597.9	-694.8	2,080.5	2,067.6	12.89	161.372	
5,216.5	5,184.7	5,126.4	5,125.4	12.8	1.7	-154.37	-1,598.3	-694.7	2,080.8	2,067.8	12.93	160.899	
5,300.0	5,268.1	5,215.3	5,214.3	13.0	1.7	-154.40	-1,600.1	-694.4	2,082.2	2,069.0	13.13	158.553	
5,314.9	5,283.1	5,231.4	5,230.5	13.0	1.7	-154.40	-1,600.4	-694.3	2,082.4	2,069.2	13.17	158.135	
5,400.0	5,368.1	5,329.0	5,328.0	13.1	1.7	-154.44	-1,602.1	-693.6	2,083.5	2,070.1	13.37	155.815	
5,413.4	5,381.5	5,347.0	5,346.0	13.2	1.7	-154.45	-1,602.4	-693.4	2,083.6	2,070.2	13.40	155.459	
5,500.0	5,468.1	5,444.5	5,443.5	13.3	1.7	-154.49	-1,603.2	-692.1	2,083.8	2,070.2	13.61	153.136	
5,511.8	5,479.9	5,455.6	5,454.6	13.4	1.7	-154.49	-1,603.3	-692.0	2,083.8	2,070.2	13.63	152.829	
5,600.0	5,568.1	5,544.4	5,543.4	13.5	1.7	-154.53	-1,604.2	-690.8	2,084.0	2,070.2	13.84	150.571	
5,610.2	5,578.4	5,555.4	5,554.4	13.6	1.7	-154.54	-1,604.2	-690.6	2,084.0	2,070.2	13.86	150.312	
5,700.0	5,668.1	5,665.2	5,664.2	13.7	1.7	-154.57	-1,604.5	-689.4	2,083.8	2,069.8	14.07	148.093	
5,708.6	5,676.8	5,676.9	5,675.8	13.8	1.7	-154.57	-1,604.4	-689.3	2,083.8	2,069.7	14.09	147.882	
5,800.0	5,768.1	5,769.2	5,768.2	13.9	1.7	-154.58	-1,603.6	-688.6	2,082.7	2,068.4	14.30	145.690	
5,807.1	5,775.2	5,775.8	5,774.8	14.0	1.7	-154.58	-1,603.6	-688.5	2,082.6	2,068.3	14.31	145.523	
5,900.0	5,868.1	5,864.4	5,863.3	14.1	1.7	-154.59	-1,602.9	-688.0	2,081.8	2,067.3	14.52	143.380	
5,905.5	5,873.6	5,869.7	5,868.6	14.1	1.7	-154.59	-1,602.9	-688.0	2,081.8	2,067.2	14.53	143.253	
6,000.0	5,968.1	5,963.5	5,962.5	14.3	1.7	-154.60	-1,602.5	-687.2	2,081.1	2,066.3	14.75	141.115	
6,003.9	5,972.1	5,967.5	5,966.5	14.3	1.7	-154.61	-1,602.5	-687.1	2,081.0	2,066.3	14.76	141.028	
6,100.0	6,068.1	6,064.7	6,063.6	14.5	1.7	-154.64	-1,602.3	-685.7	2,080.3	2,065.3	14.98	138.905	
6,102.3	6,070.5	6,067.1	6,066.0	14.5	1.7	-154.64	-1,602.3	-685.7	2,080.3	2,065.3	14.98	138.854	
6,200.0	6,168.1	6,183.7	6,182.6	14.7	1.7	-154.68	-1,601.7	-683.8	2,079.1	2,063.9	15.21	136.716	
6,200.8	6,168.9	6,184.7	6,183.6	14.7	1.7	-154.68	-1,601.7	-683.7	2,079.1	2,063.9	15.21	136.699	
6,288.5	6,256.6	6,295.6	6,294.5	14.9	1.7	-154.74	-1,600.4	-680.6	2,077.1	2,061.7	15.41	134.754	
6,299.2	6,267.3	6,308.6	6,307.5	14.9	1.7	25.05	-1,600.2	-680.1	2,076.7	2,061.3	15.43	134.616	
6,300.0	6,268.1	6,309.6	6,308.4	14.9	1.7	25.05	-1,600.2	-680.1	2,076.7	2,061.3	15.43	134.603	
6,350.0	6,318.1	6,368.9	6,367.7	15.0	1.7	25.18	-1,599.1	-677.9	2,072.8	2,057.3	15.52	133.562	
6,397.6	6,365.3	6,425.6	6,424.3	15.1	1.7	25.45	-1,597.9	-675.6	2,065.9	2,050.3	15.65	132.001	
6,400.0	6,367.7	6,428.4	6,427.2	15.1	1.7	25.47	-1,597.8	-675.5	2,065.5	2,049.8	15.66	131.911	
6,450.0	6,416.8	6,487.7	6,486.4	15.1	1.7	25.95	-1,596.1	-673.3	2,054.9	2,039.1	15.83	129.848	
6,496.0	6,461.3	6,527.2	6,525.8	15.1	1.7	26.53	-1,594.8	-672.1	2,042.3	2,026.3	15.98	127.819	
6,500.0	6,465.1	6,530.2	6,528.8	15.1	1.7	26.58	-1,594.7	-672.0	2,041.1	2,025.1	15.99	127.643	
6,550.0	6,512.4	6,567.7	6,566.3	15.1	1.7	27.37	-1,593.5	-671.0	2,024.6	2,008.5	16.14	125.413	
6,594.5	6,553.4	6,600.0	6,598.6	15.1	1.7	28.23	-1,592.5	-670.4	2,007.7	1,991.4	16.26	123.447	
6,600.0	6,558.4	6,600.0	6,598.6	15.1	1.7	28.32	-1,592.5	-670.4	2,005.5	1,989.2	16.28	123.222	
6,650.0	6,603.0	6,637.8	6,636.4	15.1	1.7	29.51	-1,591.5	-669.9	1,983.7	1,967.4	16.39	121.066	
6,692.9	6,639.9	6,665.9	6,664.4	15.1	1.7	30.69	-1,590.8	-669.6	1,963.2	1,946.7	16.46	119.245	
6,700.0	6,645.9	6,670.4	6,669.0	15.1	1.7	30.90	-1,590.8	-669.5	1,959.6	1,943.1	16.47	118.947	
6,750.0	6,686.8	6,700.0	6,698.5	15.1	1.7	32.53	-1,590.2	-669.3	1,933.2	1,916.6	16.55	116.820	
6,791.3	6,719.1	6,726.1	6,724.6	15.1	1.7	34.11	-1,589.7	-669.3	1,909.7	1,893.1	16.61	114.989	
6,800.0	6,725.7	6,731.1	6,729.6	15.1	1.7	34.46	-1,589.7	-669.2	1,904.5	1,887.9	16.62	114.605	
6,850.0	6,762.3	6,758.9	6,757.5	15.1	1.7	36.70	-1,589.3	-669.2	1,873.9	1,857.2	16.69	112.252	
6,889.7	6,789.7	6,779.9	6,778.4	15.1	1.8	38.72	-1,589.2	-669.2	1,848.2	1,831.4	16.77	110.213	
6,900.0	6,796.5	6,785.1	6,783.6	15.1	1.8	39.29	-1,589.1	-669.2	1,841.4	1,824.6	16.79	109.680	
6,950.0	6,828.0	6,811.2	6,809.8	15.1	1.8	42.32	-1,589.0	-669.3	1,807.2	1,790.2	16.92	106.814	
6,988.2	6,850.2	6,831.7	6,830.3	15.1	1.8	44.98	-1,589.0	-669.3	1,779.9	1,762.9	17.06	104.335	
7,000.0	6,856.7	6,837.8	6,836.3	15.1	1.8	45.87	-1,588.9	-669.3	1,771.3	1,754.3	17.09	103.619	
7,050.0	6,882.5	6,861.8	6,860.3	15.2	1.8	49.92	-1,588.9	-669.3	1,734.1	1,716.8	17.32	100.150	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - LATHAM 7-3 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
7,086.6	6,899.5	6,877.6	6,876.1	15.3	1.8	53.21	-1,588.9	-669.3	1,706.2	1,688.7	17.50	97.478	
7,100.0	6,905.3	6,883.0	6,881.6	15.4	1.8	54.48	-1,589.0	-669.3	1,695.8	1,678.2	17.57	96.504	
7,150.0	6,924.9	6,900.0	6,898.5	15.7	1.8	59.46	-1,589.0	-669.3	1,656.5	1,638.6	17.84	92.828	
7,185.0	6,936.7	6,911.3	6,909.9	15.9	1.8	63.26	-1,589.0	-669.3	1,628.5	1,610.5	18.04	90.278	
7,200.0	6,941.2	6,915.2	6,913.7	16.0	1.8	64.92	-1,589.1	-669.3	1,616.5	1,598.3	18.11	89.245	
7,250.0	6,954.2	6,926.5	6,925.0	16.3	1.8	70.62	-1,589.1	-669.3	1,576.0	1,557.6	18.36	85.850	
7,283.4	6,961.0	6,932.4	6,931.0	16.6	1.8	74.54	-1,589.2	-669.3	1,548.8	1,530.3	18.52	83.650	
7,300.0	6,963.8	6,934.9	6,933.5	16.7	1.8	76.48	-1,589.2	-669.3	1,535.3	1,516.8	18.59	82.604	
7,350.0	6,970.0	6,940.6	6,939.1	17.2	1.8	82.32	-1,589.2	-669.3	1,494.7	1,475.9	18.85	79.294	
7,381.9	6,972.1	6,942.6	6,941.2	17.5	1.8	85.93	-1,589.3	-669.3	1,469.0	1,449.9	19.08	76.975	
7,400.0	6,972.7	6,943.3	6,941.8	17.7	1.8	87.93	-1,589.3	-669.3	1,454.4	1,435.1	19.24	75.582	
7,420.0	6,972.8	6,943.5	6,942.0	17.9	1.8	90.08	-1,589.3	-669.3	1,438.4	1,418.9	19.45	73.940	
7,480.3	6,972.2	6,943.5	6,942.0	18.5	1.8	90.08	-1,589.3	-669.3	1,390.8	1,370.7	20.10	69.198	
7,500.0	6,972.0	6,943.5	6,942.0	18.7	1.8	90.08	-1,589.3	-669.3	1,375.4	1,355.1	20.31	67.725	
7,578.7	6,971.3	6,943.5	6,942.0	19.7	1.8	90.08	-1,589.3	-669.3	1,315.3	1,294.0	21.23	61.943	
7,600.0	6,971.1	6,943.5	6,942.1	19.9	1.8	90.08	-1,589.3	-669.3	1,299.4	1,277.9	21.48	60.481	
7,677.1	6,970.4	6,943.5	6,942.1	20.9	1.8	90.08	-1,589.3	-669.3	1,243.0	1,220.5	22.48	55.305	
7,700.0	6,970.2	6,943.5	6,942.1	21.2	1.8	90.08	-1,589.3	-669.3	1,226.8	1,204.0	22.77	53.877	
7,775.6	6,969.5	6,943.5	6,942.1	22.2	1.8	90.08	-1,589.3	-669.3	1,174.5	1,150.7	23.82	49.310	
7,800.0	6,969.3	6,943.5	6,942.1	22.6	1.8	90.08	-1,589.3	-669.3	1,158.2	1,134.1	24.16	47.942	
7,874.0	6,968.6	6,943.6	6,942.1	23.7	1.8	90.08	-1,589.3	-669.3	1,110.6	1,085.3	25.25	43.984	
7,900.0	6,968.4	6,943.6	6,942.1	24.1	1.8	90.08	-1,589.3	-669.3	1,094.6	1,068.9	25.63	42.700	
7,972.4	6,967.8	6,943.6	6,942.1	25.2	1.8	90.08	-1,589.3	-669.3	1,052.0	1,025.2	26.75	39.322	
8,000.0	6,967.5	6,943.6	6,942.1	25.6	1.8	90.08	-1,589.3	-669.3	1,036.6	1,009.5	27.18	38.141	
8,070.8	6,966.9	6,943.6	6,942.1	26.7	1.8	90.08	-1,589.3	-669.3	999.6	971.3	28.32	35.303	
8,100.0	6,966.6	6,943.6	6,942.1	27.2	1.8	90.08	-1,589.3	-669.3	985.5	956.7	28.78	34.238	
8,169.3	6,966.0	6,943.6	6,942.1	28.3	1.8	90.08	-1,589.3	-669.3	954.6	924.7	29.93	31.896	
8,200.0	6,965.7	6,943.6	6,942.1	28.8	1.8	90.09	-1,589.3	-669.3	942.2	911.8	30.44	30.956	
8,267.7	6,965.1	6,943.6	6,942.1	30.0	1.8	90.09	-1,589.3	-669.3	917.9	886.4	31.58	29.064	
8,300.0	6,964.8	6,943.6	6,942.2	30.5	1.8	90.09	-1,589.3	-669.3	907.9	875.8	32.13	28.257	
8,366.1	6,964.2	6,943.6	6,942.2	31.7	1.8	90.09	-1,589.3	-669.3	890.7	857.4	33.27	26.770	
8,400.0	6,963.9	6,943.6	6,942.2	32.2	1.8	90.09	-1,589.3	-669.3	883.7	849.8	33.86	26.099	
8,464.5	6,963.3	6,943.6	6,942.2	33.4	1.8	90.09	-1,589.3	-669.3	873.8	838.8	34.99	24.970	
8,500.0	6,963.0	6,943.7	6,942.2	34.0	1.8	90.09	-1,589.3	-669.3	870.3	834.7	35.62	24.436	
8,563.0	6,962.4	6,943.7	6,942.2	35.1	1.8	90.09	-1,589.3	-669.3	867.7	831.0	36.74	23.620	
8,567.2	6,962.3	6,943.7	6,942.2	35.2	1.8	90.09	-1,589.3	-669.3	867.7	830.9	36.81	23.572 CC, ES	
8,600.0	6,962.0	6,943.7	6,942.2	35.8	1.8	90.09	-1,589.3	-669.3	868.3	831.0	37.40	23.219	
8,661.4	6,961.5	6,943.7	6,942.2	36.9	1.8	90.09	-1,589.3	-669.3	872.8	834.3	38.50	22.668	
8,700.0	6,961.1	6,943.7	6,942.2	37.6	1.8	90.09	-1,589.3	-669.3	877.8	838.6	39.20	22.393	
8,759.8	6,960.6	6,943.7	6,942.2	38.7	1.8	90.09	-1,589.3	-669.3	888.9	848.6	40.29	22.061	
8,800.0	6,960.2	6,943.7	6,942.2	39.4	1.8	90.09	-1,589.3	-669.3	898.4	857.4	41.02	21.901	
8,858.2	6,959.7	6,943.7	6,942.2	40.5	1.8	90.09	-1,589.3	-669.3	915.3	873.2	42.09	21.744	
8,900.0	6,959.3	6,943.7	6,942.3	41.2	1.8	90.09	-1,589.3	-669.3	929.4	886.5	42.86	21.684	
8,956.7	6,958.8	6,943.7	6,942.3	42.3	1.8	90.09	-1,589.3	-669.3	951.1	907.2	43.91	21.662 SF	
9,000.0	6,958.4	6,943.7	6,942.3	43.1	1.8	90.09	-1,589.3	-669.3	969.7	925.0	44.71	21.688	
9,055.1	6,957.9	6,943.7	6,942.3	44.1	1.8	90.09	-1,589.3	-669.3	995.5	949.8	45.74	21.766	
9,100.0	6,957.5	6,943.8	6,942.3	44.9	1.8	90.09	-1,589.3	-669.3	1,018.3	971.7	46.57	21.863	
9,153.5	6,957.0	6,943.8	6,942.3	45.9	1.8	90.10	-1,589.3	-669.3	1,047.3	999.7	47.58	22.012	
9,200.0	6,956.6	6,943.8	6,942.3	46.8	1.8	90.10	-1,589.3	-669.3	1,074.0	1,025.5	48.45	22.167	
9,251.9	6,956.1	6,943.8	6,942.3	47.8	1.8	90.10	-1,589.3	-669.3	1,105.4	1,056.0	49.43	22.364	
9,300.0	6,955.7	6,943.8	6,942.3	48.7	1.8	90.10	-1,589.3	-669.3	1,135.8	1,085.5	50.33	22.566	
9,350.4	6,955.2	6,943.8	6,942.3	49.6	1.8	90.10	-1,589.3	-669.3	1,168.9	1,117.6	51.29	22.793	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - LATHAM 7-3 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,400.0	6,954.8	6,943.8	6,942.3	50.6	1.8	90.10	-1,589.3	-669.3	1,202.7	1,150.5	52.22	23.030	
9,448.8	6,954.3	6,943.8	6,942.4	51.5	1.8	90.10	-1,589.3	-669.3	1,237.0	1,183.9	53.15	23.274	
9,500.0	6,953.9	6,943.8	6,942.4	52.5	1.8	90.10	-1,589.3	-669.3	1,274.0	1,219.9	54.12	23.539	
9,547.2	6,953.4	6,943.8	6,942.4	53.4	1.8	90.10	-1,589.3	-669.3	1,309.0	1,254.0	55.02	23.790	
9,600.0	6,952.9	6,943.8	6,942.4	54.4	1.8	90.10	-1,589.3	-669.3	1,349.0	1,292.9	56.03	24.076	
9,645.6	6,952.5	6,943.9	6,942.4	55.2	1.8	90.10	-1,589.3	-669.3	1,384.2	1,327.3	56.90	24.326	
9,700.0	6,952.0	6,943.9	6,942.4	56.3	1.8	90.10	-1,589.3	-669.3	1,427.0	1,369.0	57.94	24.628	
9,744.1	6,951.6	6,943.9	6,942.4	57.1	1.8	90.10	-1,589.3	-669.3	1,462.2	1,403.4	58.79	24.873	
9,800.0	6,951.1	6,943.9	6,942.4	58.2	1.8	90.10	-1,589.3	-669.3	1,507.6	1,447.7	59.86	25.186	
9,842.5	6,950.7	6,943.9	6,942.4	59.0	1.8	90.10	-1,589.3	-669.3	1,542.6	1,481.9	60.68	25.423	
9,900.0	6,950.2	6,943.9	6,942.4	60.1	1.8	90.10	-1,589.3	-669.3	1,590.4	1,528.6	61.78	25.743	
9,940.9	6,949.8	6,943.9	6,942.5	60.9	1.8	90.11	-1,589.3	-669.3	1,624.9	1,562.3	62.57	25.969	
10,000.0	6,949.3	6,943.9	6,942.5	62.0	1.8	90.11	-1,589.3	-669.3	1,675.1	1,611.4	63.71	26.293	
10,039.3	6,948.9	6,943.9	6,942.5	62.8	1.8	90.11	-1,589.3	-669.3	1,708.9	1,644.4	64.47	26.508	
10,100.0	6,948.4	6,944.0	6,942.5	64.0	1.8	90.11	-1,589.3	-669.3	1,761.4	1,695.8	65.64	26.835	
10,137.8	6,948.0	6,944.0	6,942.5	64.7	1.8	90.11	-1,589.3	-669.3	1,794.4	1,728.0	66.37	27.036	
10,200.0	6,947.5	6,944.0	6,942.5	65.9	1.8	90.11	-1,589.3	-669.3	1,849.1	1,781.5	67.57	27.364	
10,236.2	6,947.1	6,944.0	6,942.5	66.6	1.8	90.11	-1,589.3	-669.3	1,881.1	1,812.9	68.28	27.552	
10,300.0	6,946.6	6,944.0	6,942.5	67.8	1.8	90.11	-1,589.3	-669.3	1,938.0	1,868.5	69.51	27.880	
10,334.6	6,946.3	6,944.0	6,942.5	68.5	1.8	90.11	-1,589.3	-669.3	1,969.0	1,898.8	70.18	28.055	
10,400.0	6,945.7	6,944.0	6,942.6	69.8	1.8	90.11	-1,589.3	-669.3	2,027.9	1,956.4	71.45	28.381	
10,433.0	6,945.4	6,944.0	6,942.6	70.4	1.8	90.11	-1,589.3	-669.3	2,057.8	1,985.7	72.10	28.543	
10,500.0	6,944.7	6,944.1	6,942.6	71.7	1.8	90.11	-1,589.3	-669.3	2,118.7	2,045.3	73.40	28.866	
10,531.5	6,944.5	6,944.1	6,942.6	72.3	1.8	90.11	-1,589.3	-669.3	2,147.4	2,073.4	74.01	29.016	
10,600.0	6,943.8	6,944.1	6,942.6	73.7	1.8	90.11	-1,589.3	-669.3	2,210.3	2,135.0	75.34	29.336	
10,629.9	6,943.6	6,944.1	6,942.6	74.2	1.8	90.12	-1,589.3	-669.3	2,237.8	2,161.9	75.93	29.474	
10,700.0	6,942.9	6,944.1	6,942.6	75.6	1.8	90.12	-1,589.3	-669.3	2,302.6	2,225.3	77.29	29.791	
10,728.3	6,942.7	6,944.1	6,942.6	76.2	1.8	90.12	-1,589.3	-669.3	2,328.9	2,251.0	77.84	29.917	
10,800.0	6,942.0	6,944.1	6,942.7	77.6	1.8	90.12	-1,589.3	-669.3	2,395.5	2,316.3	79.24	30.230	
10,826.7	6,941.8	6,944.1	6,942.7	78.1	1.8	90.12	-1,589.3	-669.3	2,420.5	2,340.7	79.77	30.345	
10,900.0	6,941.1	6,944.2	6,942.7	79.5	1.8	90.12	-1,589.3	-669.3	2,489.0	2,407.8	81.20	30.654	
10,925.2	6,940.9	6,944.2	6,942.7	80.0	1.8	90.12	-1,589.3	-669.3	2,512.6	2,430.9	81.69	30.758	
11,000.0	6,940.2	6,944.2	6,942.7	81.5	1.8	90.12	-1,589.3	-669.3	2,583.0	2,499.8	83.15	31.063	
11,023.6	6,940.0	6,944.2	6,942.7	81.9	1.8	90.12	-1,589.3	-669.3	2,605.2	2,521.6	83.61	31.158	
11,100.0	6,939.3	6,944.2	6,942.8	83.4	1.8	90.12	-1,589.3	-669.3	2,677.4	2,592.3	85.11	31.458	
11,122.0	6,939.1	6,944.2	6,942.8	83.8	1.8	90.12	-1,589.3	-669.3	2,698.2	2,612.7	85.54	31.543	
11,200.0	6,938.4	6,944.3	6,942.8	85.4	1.8	90.12	-1,589.3	-669.3	2,772.2	2,685.1	87.07	31.839	
11,220.4	6,938.2	6,944.3	6,942.8	85.8	1.8	90.13	-1,589.3	-669.3	2,791.6	2,704.1	87.47	31.916	
11,300.0	6,937.4	6,944.3	6,942.8	87.3	1.8	90.13	-1,589.3	-669.3	2,867.3	2,778.3	89.03	32.207	
11,318.9	6,937.3	6,944.3	6,942.8	87.7	1.8	90.13	-1,589.3	-669.3	2,885.3	2,795.9	89.40	32.275	
11,400.0	6,936.5	6,944.3	6,942.9	89.3	1.8	90.13	-1,589.3	-669.3	2,962.8	2,871.8	90.99	32.562	
11,417.3	6,936.4	6,944.3	6,942.9	89.6	1.8	90.13	-1,589.3	-669.3	2,979.3	2,888.0	91.33	32.622	
11,500.0	6,935.6	6,944.4	6,942.9	91.3	1.8	90.13	-1,589.3	-669.3	3,058.5	2,965.6	92.95	32.905	
11,515.7	6,935.5	6,944.4	6,942.9	91.6	1.8	90.13	-1,589.3	-669.3	3,073.6	2,980.4	93.26	32.957	
11,600.0	6,934.7	6,944.4	6,942.9	93.2	1.8	90.13	-1,589.3	-669.3	3,154.5	3,059.6	94.92	33.235	
11,614.1	6,934.6	6,944.4	6,942.9	93.5	1.8	90.13	-1,589.3	-669.3	3,168.2	3,073.0	95.19	33.281	
11,700.0	6,933.8	6,944.4	6,943.0	95.2	1.8	90.14	-1,589.3	-669.3	3,250.8	3,153.9	96.88	33.555	
11,712.6	6,933.7	6,944.4	6,943.0	95.4	1.8	90.14	-1,589.3	-669.3	3,262.9	3,165.8	97.13	33.594	
11,800.0	6,932.9	6,944.5	6,943.0	97.1	1.8	90.14	-1,589.3	-669.3	3,347.3	3,248.4	98.85	33.863	
11,811.0	6,932.8	6,944.5	6,943.0	97.4	1.8	90.14	-1,589.3	-669.3	3,357.9	3,258.8	99.06	33.896	
11,900.0	6,932.0	6,944.5	6,943.1	99.1	1.8	90.14	-1,589.3	-669.3	3,444.0	3,343.2	100.82	34.161	
11,909.4	6,931.9	6,944.5	6,943.1	99.3	1.8	90.14	-1,589.3	-669.3	3,453.1	3,352.1	101.00	34.189	

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 HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - LATHAM 7-3 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
12,000.0	6,931.0	6,944.6	6,943.1	101.1	1.8	90.14	-1,589.3	-669.3	3,540.8	3,438.0	102.78	34.449	
12,007.8	6,931.0	6,944.6	6,943.1	101.2	1.8	90.14	-1,589.3	-669.3	3,548.4	3,445.5	102.94	34.472	
12,100.0	6,930.1	6,944.6	6,943.2	103.0	1.8	90.15	-1,589.3	-669.3	3,637.9	3,533.1	104.75	34.728	
12,106.3	6,930.1	6,944.6	6,943.2	103.2	1.8	90.15	-1,589.3	-669.3	3,644.0	3,539.1	104.88	34.745	
12,200.0	6,929.2	6,944.7	6,943.2	105.0	1.8	90.15	-1,589.3	-669.3	3,735.1	3,628.3	106.72	34.998	
12,204.7	6,929.2	6,944.7	6,943.2	105.1	1.8	90.15	-1,589.3	-669.3	3,739.6	3,632.8	106.82	35.010	
12,300.0	6,928.3	6,944.7	6,943.3	107.0	1.8	90.15	-1,589.3	-669.3	3,832.4	3,723.7	108.69	35.258	
12,303.1	6,928.3	6,944.7	6,943.3	107.1	1.8	90.15	-1,589.3	-669.3	3,835.4	3,726.7	108.76	35.266	
12,400.0	6,927.4	6,944.8	6,943.3	109.0	1.8	90.16	-1,589.3	-669.3	3,929.9	3,819.2	110.67	35.511	
12,401.5	6,927.4	6,944.8	6,943.3	109.0	1.8	90.16	-1,589.3	-669.3	3,931.4	3,820.7	110.70	35.515	
12,500.0	6,926.5	6,944.8	6,943.4	110.9	1.8	90.16	-1,589.3	-669.3	4,027.4	3,914.8	112.64	35.755	
12,598.4	6,925.6	6,944.9	6,943.4	112.9	1.8	90.16	-1,589.3	-669.3	4,123.6	4,009.0	114.58	35.988	
12,600.0	6,925.6	6,944.9	6,943.4	112.9	1.8	90.16	-1,589.3	-669.3	4,125.2	4,010.5	114.61	35.992	
12,696.8	6,924.7	6,945.0	6,943.5	114.8	1.8	90.17	-1,589.3	-669.3	4,219.9	4,103.3	116.52	36.215	
12,700.0	6,924.6	6,945.0	6,943.5	114.9	1.8	90.17	-1,589.3	-669.3	4,223.0	4,106.4	116.59	36.222	
12,795.2	6,923.8	6,945.0	6,943.6	116.8	1.8	90.17	-1,589.3	-669.3	4,316.2	4,197.8	118.47	36.434	
12,800.0	6,923.7	6,945.0	6,943.6	116.9	1.8	90.17	-1,589.3	-669.3	4,320.9	4,202.3	118.56	36.444	
12,893.7	6,922.9	6,945.1	6,943.6	118.7	1.8	90.18	-1,589.3	-669.3	4,412.7	4,292.3	120.41	36.647	
12,900.0	6,922.8	6,945.1	6,943.7	118.8	1.8	90.18	-1,589.3	-669.3	4,418.9	4,298.4	120.54	36.660	
12,992.1	6,922.0	6,945.2	6,943.7	120.6	1.8	90.18	-1,589.3	-669.3	4,509.2	4,386.9	122.36	36.853	
13,000.0	6,921.9	6,945.2	6,943.7	120.8	1.8	90.18	-1,589.3	-669.3	4,517.0	4,394.5	122.51	36.870	
13,090.5	6,921.1	6,945.3	6,943.8	122.6	1.8	90.19	-1,589.3	-669.3	4,605.9	4,481.6	124.30	37.054	
13,100.0	6,921.0	6,945.3	6,943.8	122.8	1.8	90.19	-1,589.3	-669.3	4,615.2	4,490.7	124.49	37.073	
13,188.9	6,920.2	6,945.4	6,943.9	124.5	1.8	90.19	-1,589.3	-669.3	4,702.6	4,576.3	126.25	37.249	
13,200.0	6,920.1	6,945.4	6,943.9	124.8	1.8	90.19	-1,589.3	-669.3	4,713.4	4,587.0	126.47	37.270	
13,287.4	6,919.3	6,945.5	6,944.0	126.5	1.8	90.20	-1,589.3	-669.3	4,799.3	4,671.1	128.19	37.438	
13,300.0	6,919.1	6,945.5	6,944.0	126.7	1.8	90.20	-1,589.3	-669.3	4,811.8	4,683.3	128.44	37.462	
13,385.8	6,918.4	6,945.6	6,944.1	128.4	1.8	90.20	-1,589.3	-669.3	4,896.2	4,766.0	130.14	37.622	
13,400.0	6,918.2	6,945.6	6,944.1	128.7	1.8	90.21	-1,589.3	-669.3	4,910.1	4,779.7	130.42	37.648	
13,484.2	6,917.5	6,945.7	6,944.2	130.4	1.8	90.21	-1,589.3	-669.3	4,993.1	4,861.0	132.09	37.801	
13,500.0	6,917.3	6,945.7	6,944.3	130.7	1.8	90.21	-1,589.3	-669.3	5,008.6	4,876.2	132.40	37.829	
13,582.6	6,916.6	6,945.8	6,944.4	132.3	1.8	90.22	-1,589.3	-669.3	5,090.0	4,956.0	134.04	37.975	
13,600.0	6,916.4	6,945.9	6,944.4	132.7	1.8	90.22	-1,589.3	-669.3	5,107.1	4,972.7	134.38	38.006	
13,681.1	6,915.6	6,946.0	6,944.5	134.3	1.8	90.23	-1,589.3	-669.3	5,187.0	5,051.1	135.98	38.145	
13,700.0	6,915.5	6,946.0	6,944.5	134.6	1.8	90.23	-1,589.3	-669.3	5,205.7	5,069.3	136.36	38.177	
13,779.5	6,914.7	6,946.1	6,944.7	136.2	1.8	90.24	-1,589.3	-669.3	5,284.1	5,146.2	137.93	38.310	
13,800.0	6,914.6	6,946.2	6,944.7	136.6	1.8	90.24	-1,589.3	-669.3	5,304.3	5,166.0	138.34	38.343	
13,877.9	6,913.8	6,946.3	6,944.8	138.2	1.8	90.25	-1,589.3	-669.3	5,381.2	5,241.3	139.88	38.470	
13,900.0	6,913.6	6,946.4	6,944.9	138.6	1.8	90.25	-1,589.3	-669.3	5,403.0	5,262.7	140.32	38.506	
13,976.3	6,912.9	6,946.5	6,945.0	140.1	1.8	90.26	-1,589.3	-669.3	5,478.4	5,336.5	141.83	38.627	
14,000.0	6,912.7	6,946.6	6,945.1	140.6	1.8	90.27	-1,589.3	-669.3	5,501.7	5,359.4	142.30	38.664	
14,074.8	6,912.0	6,946.7	6,945.3	142.0	1.8	90.28	-1,589.3	-669.3	5,575.6	5,431.9	143.72	38.796	
14,079.0	6,912.0	6,946.7	6,945.3	142.1	1.8	90.28	-1,589.3	-669.3	5,579.7	5,435.9	143.80	38.803	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - LATHAM 7-4 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	166.94	-1,683.1	390.4	1,727.8				
98.4	98.4	89.2	89.2	0.1	0.0	166.95	-1,683.2	390.2	1,727.8	1,727.7	0.14	N/A	
100.0	100.0	90.7	90.7	0.1	0.0	166.95	-1,683.2	390.2	1,727.8	1,727.7	0.14	N/A	
196.8	196.8	181.9	181.9	0.3	0.2	166.96	-1,683.6	389.8	1,728.2	1,727.7	0.49	3,549.834	
200.0	200.0	184.9	184.9	0.3	0.2	166.96	-1,683.6	389.8	1,728.2	1,727.7	0.50	3,466.956	
295.3	295.3	289.3	289.3	0.5	0.3	166.97	-1,684.0	389.6	1,728.5	1,727.7	0.78	2,203.550	
300.0	300.0	294.6	294.6	0.5	0.3	166.98	-1,684.0	389.5	1,728.5	1,727.7	0.80	2,166.248	
330.8	330.8	324.3	324.3	0.6	0.3	166.98	-1,684.0	389.5	1,728.4	1,727.6	0.88	1,967.779	
393.7	393.7	383.0	383.0	0.8	0.3	166.98	-1,684.1	389.4	1,728.5	1,727.5	1.04	1,662.468	
400.0	400.0	388.9	388.9	0.8	0.3	166.98	-1,684.1	389.4	1,728.5	1,727.5	1.06	1,637.041	
492.1	492.1	489.0	489.0	1.0	0.3	166.98	-1,684.2	389.4	1,728.6	1,727.4	1.27	1,364.407	
500.0	500.0	497.7	497.7	1.0	0.3	166.98	-1,684.2	389.4	1,728.6	1,727.3	1.28	1,345.575	
540.6	540.6	534.1	534.1	1.1	0.3	166.98	-1,684.1	389.4	1,728.6	1,727.2	1.38	1,256.256	
590.5	590.5	578.3	578.3	1.2	0.3	166.98	-1,684.2	389.4	1,728.6	1,727.1	1.49	1,161.561	
600.0	600.0	586.7	586.7	1.2	0.3	166.98	-1,684.2	389.4	1,728.7	1,727.2	1.51	1,145.238	
689.0	689.0	681.9	681.9	1.4	0.3	166.99	-1,684.6	389.2	1,728.9	1,727.2	1.74	990.945	
700.0	700.0	694.1	694.1	1.4	0.3	166.99	-1,684.6	389.2	1,728.9	1,727.2	1.77	974.177	
723.0	723.0	716.5	716.5	1.5	0.4	166.99	-1,684.6	389.1	1,728.9	1,727.1	1.84	941.548	
787.4	787.4	776.6	776.5	1.6	0.4	167.00	-1,684.7	388.9	1,729.0	1,727.0	2.01	861.073	
800.0	800.0	788.3	788.3	1.7	0.4	167.00	-1,684.7	388.9	1,729.0	1,727.0	2.04	846.933	
885.8	885.8	874.7	874.7	1.9	0.4	167.01	-1,685.1	388.7	1,729.3	1,727.0	2.28	758.918	
900.0	900.0	889.1	889.1	1.9	0.5	167.01	-1,685.1	388.6	1,729.3	1,727.0	2.32	746.037	
984.2	984.2	975.5	975.5	2.1	0.5	167.02	-1,685.3	388.4	1,729.5	1,727.0	2.55	678.320	
1,000.0	1,000.0	991.7	991.7	2.1	0.5	167.02	-1,685.4	388.4	1,729.5	1,726.9	2.59	667.018	
1,082.7	1,082.7	1,068.6	1,068.6	2.3	0.5	167.03	-1,685.6	388.3	1,729.7	1,726.9	2.81	616.659	
1,100.0	1,100.0	1,084.6	1,084.6	2.3	0.6	167.03	-1,685.6	388.3	1,729.8	1,727.0	2.85	607.143	
1,181.1	1,181.1	1,160.4	1,160.4	2.5	0.6	167.03	-1,686.1	388.4	1,730.4	1,727.3	3.06	565.257	
1,200.0	1,200.0	1,178.1	1,178.1	2.6	0.6	167.03	-1,686.3	388.4	1,730.5	1,727.4	3.11	556.265	
1,279.5	1,279.5	1,261.9	1,261.9	2.7	0.6	130.54	-1,687.0	388.3	1,731.9	1,728.6	3.35	517.118	
1,300.0	1,300.0	1,284.4	1,284.4	2.8	0.6	130.55	-1,687.2	388.3	1,732.4	1,729.0	3.41	508.721	
1,377.9	1,377.8	1,361.2	1,361.2	3.0	0.7	130.61	-1,687.6	388.2	1,735.3	1,731.7	3.62	479.914	
1,400.0	1,399.8	1,382.3	1,382.3	3.0	0.7	130.63	-1,687.7	388.1	1,736.4	1,732.7	3.68	472.481	
1,476.4	1,475.9	1,455.4	1,455.4	3.2	0.7	130.72	-1,688.3	388.1	1,741.1	1,737.2	3.89	448.101	
1,500.0	1,499.5	1,478.0	1,478.0	3.2	0.7	130.75	-1,688.5	388.1	1,742.8	1,738.9	3.95	441.142	
1,574.8	1,573.7	1,551.0	1,551.0	3.4	0.8	130.87	-1,689.1	388.2	1,749.3	1,745.1	4.17	419.939	
1,600.0	1,598.7	1,575.7	1,575.7	3.5	0.8	130.91	-1,689.4	388.2	1,751.7	1,747.5	4.24	413.307	
1,673.2	1,671.1	1,648.8	1,648.8	3.7	0.8	131.07	-1,690.1	388.1	1,759.8	1,755.3	4.46	394.701	
1,700.0	1,697.5	1,675.7	1,675.6	3.7	0.8	131.14	-1,690.4	388.1	1,763.0	1,758.5	4.54	388.420	
1,771.6	1,767.9	1,748.0	1,748.0	4.0	0.8	131.35	-1,691.0	387.6	1,772.5	1,767.7	4.77	371.847	
1,800.1	1,795.7	1,776.8	1,776.7	4.0	0.9	131.44	-1,691.3	387.4	1,776.5	1,771.7	4.86	365.752	
1,870.1	1,864.2	1,854.6	1,854.6	4.3	0.9	131.86	-1,691.8	386.6	1,786.7	1,781.6	5.08	351.714	
1,900.0	1,893.4	1,889.5	1,889.5	4.4	0.9	132.04	-1,691.9	386.3	1,790.9	1,785.7	5.17	346.090	
1,968.5	1,960.4	1,961.2	1,961.1	4.6	0.9	132.42	-1,691.9	385.5	1,800.4	1,795.0	5.40	333.689	
2,000.0	1,991.3	1,993.6	1,993.5	4.7	0.9	132.59	-1,691.8	385.1	1,804.7	1,799.2	5.50	328.343	
2,066.9	2,056.7	2,069.4	2,069.4	5.0	0.9	132.99	-1,691.4	384.1	1,813.8	1,808.1	5.71	317.386	
2,100.0	2,089.1	2,107.6	2,107.5	5.1	1.0	133.19	-1,691.0	383.5	1,818.1	1,812.3	5.82	312.139	
2,165.3	2,153.0	2,185.1	2,185.0	5.3	1.0	133.61	-1,689.9	382.0	1,826.4	1,820.4	6.04	302.346	
2,200.0	2,186.9	2,228.0	2,227.9	5.5	1.0	133.83	-1,689.0	381.1	1,830.7	1,824.5	6.15	297.430	
2,263.8	2,249.3	2,307.0	2,306.8	5.7	1.0	134.23	-1,686.8	379.8	1,838.0	1,831.6	6.37	288.697	
2,300.0	2,284.7	2,342.6	2,342.4	5.8	1.0	134.41	-1,685.6	379.3	1,842.1	1,835.6	6.49	283.922	
2,362.2	2,345.5	2,403.7	2,403.5	6.1	1.0	134.71	-1,683.6	378.4	1,849.1	1,842.4	6.70	276.046	
2,400.0	2,382.5	2,440.1	2,439.9	6.2	1.0	134.89	-1,682.4	377.9	1,853.4	1,846.5	6.83	271.444	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - LATHAM 7-4 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,460.6	2,441.8	2,498.4	2,498.2	6.5	1.0	135.18	-1,680.5	376.6	1,860.3	1,853.3	7.04	264.370	
2,500.0	2,480.3	2,537.1	2,536.8	6.6	1.0	135.38	-1,679.4	375.7	1,864.8	1,857.7	7.17	259.989	
2,559.0	2,538.1	2,595.1	2,594.7	6.9	1.1	135.68	-1,677.6	374.3	1,871.7	1,864.3	7.38	253.682	
2,600.0	2,578.1	2,631.2	2,630.8	7.0	1.1	135.86	-1,676.5	373.6	1,876.5	1,869.0	7.52	249.516	
2,657.5	2,634.4	2,681.1	2,680.7	7.3	1.1	136.11	-1,675.1	372.5	1,883.5	1,875.8	7.72	243.922	
2,700.0	2,675.9	2,721.2	2,720.8	7.5	1.1	136.31	-1,674.1	371.6	1,888.8	1,880.9	7.87	239.984	
2,755.9	2,730.6	2,778.4	2,777.9	7.7	1.1	136.59	-1,672.7	370.2	1,895.8	1,887.7	8.07	234.994	
2,800.0	2,773.8	2,818.8	2,818.3	7.9	1.1	136.80	-1,671.7	369.2	1,901.3	1,893.0	8.22	231.245	
2,854.3	2,826.9	2,863.3	2,862.8	8.1	1.1	137.02	-1,670.7	367.9	1,908.3	1,899.8	8.41	226.841	
2,857.4	2,829.9	2,865.8	2,865.3	8.1	1.1	137.03	-1,670.6	367.9	1,908.6	1,900.2	8.42	226.603	
2,900.0	2,871.6	2,900.9	2,900.4	8.3	1.1	137.28	-1,670.0	366.8	1,914.1	1,905.6	8.55	223.966	
2,952.7	2,923.5	2,955.2	2,954.7	8.4	1.1	137.62	-1,669.2	365.2	1,920.3	1,911.7	8.67	221.375	
3,000.0	2,970.1	3,003.9	3,003.3	8.6	1.2	137.88	-1,668.3	363.9	1,925.3	1,916.5	8.79	219.054	
3,051.2	3,020.7	3,055.2	3,054.6	8.7	1.2	138.14	-1,667.4	362.5	1,929.9	1,921.0	8.90	216.753	
3,100.0	3,069.1	3,104.1	3,103.5	8.9	1.2	138.35	-1,666.4	361.3	1,933.8	1,924.8	9.01	214.536	
3,149.6	3,118.3	3,153.0	3,152.3	9.0	1.2	138.54	-1,665.5	360.0	1,937.1	1,927.9	9.12	212.453	
3,200.0	3,168.5	3,202.7	3,202.0	9.1	1.2	138.71	-1,664.6	358.8	1,939.7	1,930.5	9.22	210.305	
3,248.0	3,216.3	3,249.4	3,248.6	9.2	1.2	138.84	-1,663.7	357.6	1,941.7	1,932.4	9.32	208.420	
3,300.0	3,268.2	3,300.0	3,299.3	9.3	1.2	138.95	-1,662.8	356.5	1,943.2	1,933.8	9.42	206.335	
3,346.4	3,314.6	3,349.6	3,348.9	9.4	1.3	139.03	-1,661.9	355.6	1,943.9	1,934.4	9.50	204.606	
3,400.0	3,368.1	3,406.1	3,405.4	9.5	1.3	139.08	-1,660.7	355.0	1,943.9	1,934.3	9.60	202.536	
3,444.9	3,413.0	3,448.7	3,447.9	9.6	1.3	139.09	-1,659.8	354.7	1,943.3	1,933.7	9.67	200.899	
3,457.5	3,425.6	3,460.6	3,459.8	9.6	1.3	175.59	-1,659.5	354.6	1,943.1	1,933.4	9.70	200.284	
3,500.0	3,468.1	3,500.0	3,499.2	9.7	1.3	175.60	-1,658.7	354.4	1,942.2	1,932.5	9.78	198.548	
3,543.3	3,511.4	3,540.0	3,539.2	9.7	1.3	175.59	-1,658.0	354.4	1,941.4	1,931.6	9.87	196.677	
3,600.0	3,568.1	3,591.3	3,590.5	9.8	1.3	175.58	-1,657.1	354.7	1,940.5	1,930.5	9.99	194.292	
3,641.7	3,609.9	3,634.3	3,633.5	9.9	1.3	175.57	-1,656.5	355.1	1,939.9	1,929.8	10.08	192.524	
3,700.0	3,668.1	3,696.5	3,695.7	10.0	1.3	175.56	-1,655.4	355.5	1,938.9	1,928.7	10.20	190.089	
3,740.1	3,708.3	3,730.5	3,729.7	10.1	1.3	175.55	-1,654.8	355.6	1,938.3	1,928.0	10.28	188.488	
3,800.0	3,768.1	3,780.0	3,779.1	10.2	1.3	175.55	-1,654.3	355.6	1,937.6	1,927.2	10.41	186.183	
3,838.6	3,806.7	3,815.7	3,814.8	10.2	1.3	175.55	-1,654.0	355.4	1,937.3	1,926.8	10.49	184.713	
3,900.0	3,868.1	3,882.8	3,882.0	10.3	1.3	175.56	-1,653.4	355.2	1,936.7	1,926.1	10.62	182.354	
3,937.0	3,905.1	3,921.0	3,920.2	10.4	1.3	175.56	-1,653.0	355.0	1,936.3	1,925.6	10.70	180.948	
4,000.0	3,968.1	3,983.4	3,982.5	10.5	1.4	175.57	-1,652.3	354.8	1,935.6	1,924.8	10.84	178.605	
4,035.4	4,003.6	4,017.0	4,016.2	10.6	1.4	175.57	-1,652.0	354.7	1,935.2	1,924.3	10.91	177.321	
4,100.0	4,068.1	4,076.0	4,075.1	10.7	1.4	175.58	-1,651.5	354.3	1,934.7	1,923.7	11.05	175.058	
4,133.8	4,102.0	4,108.2	4,107.4	10.8	1.4	175.59	-1,651.3	354.0	1,934.5	1,923.4	11.12	173.891	
4,200.0	4,168.1	4,180.7	4,179.9	10.9	1.4	175.60	-1,650.8	353.5	1,934.0	1,922.7	11.27	171.611	
4,232.3	4,200.4	4,213.3	4,212.4	10.9	1.4	175.61	-1,650.5	353.4	1,933.7	1,922.3	11.34	170.517	
4,300.0	4,268.1	4,274.7	4,273.8	11.1	1.4	175.62	-1,650.0	353.0	1,933.1	1,921.6	11.49	168.298	
4,330.7	4,298.8	4,303.3	4,302.4	11.1	1.4	175.63	-1,649.9	352.7	1,932.9	1,921.4	11.55	167.311	
4,400.0	4,368.1	4,385.7	4,384.8	11.2	1.5	175.64	-1,649.2	352.2	1,932.3	1,920.6	11.71	165.069	
4,429.1	4,397.3	4,419.5	4,418.6	11.3	1.5	175.64	-1,648.8	352.1	1,932.0	1,920.2	11.77	164.117	
4,500.0	4,468.1	4,500.2	4,499.3	11.4	1.5	175.66	-1,647.5	351.4	1,930.8	1,918.8	11.93	161.811	
4,527.5	4,495.7	4,527.9	4,527.0	11.5	1.5	175.67	-1,646.9	351.0	1,930.2	1,918.2	11.99	160.936	
4,600.0	4,568.1	4,600.0	4,599.1	11.6	1.5	175.71	-1,645.6	349.7	1,928.8	1,916.6	12.15	158.684	
4,626.0	4,594.1	4,624.3	4,623.3	11.7	1.5	175.72	-1,645.2	349.1	1,928.3	1,916.1	12.21	157.897	
4,700.0	4,668.1	4,691.6	4,690.7	11.8	1.6	175.76	-1,644.2	347.8	1,927.1	1,914.7	12.38	155.709	
4,724.4	4,692.5	4,716.9	4,716.0	11.8	1.6	175.77	-1,643.8	347.4	1,926.7	1,914.3	12.43	154.993	
4,800.0	4,768.1	4,800.0	4,799.0	12.0	1.6	175.80	-1,642.4	346.1	1,925.3	1,912.7	12.60	152.778	
4,822.8	4,791.0	4,820.1	4,819.1	12.0	1.6	175.81	-1,642.1	345.8	1,924.9	1,912.3	12.65	152.134	
4,900.0	4,868.1	4,885.0	4,884.0	12.2	1.6	175.84	-1,641.2	344.8	1,923.8	1,910.9	12.82	150.023	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - LATHAM 7-4 - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
4,921.2	4,889.4	4,900.0	4,899.0	12.2	1.6	175.85	-1,641.0	344.5	1,923.5	1,910.7	12.87	149.464		
5,000.0	4,968.1	4,968.6	4,967.6	12.4	1.6	175.89	-1,640.7	343.2	1,923.0	1,910.0	13.04	147.454		
5,019.7	4,987.8	4,985.0	4,984.0	12.4	1.6	175.90	-1,640.7	342.8	1,923.0	1,909.9	13.08	146.966		
5,100.0	5,068.1	5,066.4	5,065.3	12.6	1.7	175.95	-1,640.7	341.2	1,922.9	1,909.7	13.26	144.999		
5,118.1	5,086.2	5,085.6	5,084.6	12.6	1.7	175.96	-1,640.7	340.8	1,922.9	1,909.6	13.30	144.558		
5,164.6	5,132.8	5,127.3	5,126.3	12.7	1.7	175.98	-1,640.7	340.0	1,922.8	1,909.4	13.40	143.461		
5,200.0	5,168.1	5,156.6	5,155.5	12.8	1.7	176.00	-1,640.7	339.5	1,922.8	1,909.4	13.48	142.654		
5,216.5	5,184.7	5,170.2	5,169.2	12.8	1.7	176.00	-1,640.8	339.3	1,922.9	1,909.4	13.51	142.282		
5,300.0	5,268.1	5,240.3	5,239.2	13.0	1.7	176.03	-1,641.5	338.3	1,923.6	1,909.9	13.69	140.466		
5,314.9	5,283.1	5,253.0	5,251.9	13.0	1.7	176.04	-1,641.6	338.2	1,923.8	1,910.1	13.73	140.150		
5,400.0	5,368.1	5,325.5	5,324.4	13.1	1.7	176.07	-1,642.9	337.3	1,925.2	1,911.2	13.91	138.409		
5,413.4	5,381.5	5,337.0	5,335.9	13.2	1.7	176.07	-1,643.1	337.2	1,925.4	1,911.5	13.94	138.143		
5,500.0	5,468.1	5,412.9	5,411.8	13.3	1.7	176.09	-1,644.9	336.6	1,927.4	1,913.3	14.12	136.465		
5,511.8	5,479.9	5,424.3	5,423.2	13.4	1.7	176.09	-1,645.2	336.6	1,927.7	1,913.6	14.15	136.241		
5,600.0	5,568.1	5,509.6	5,508.5	13.5	1.7	176.09	-1,647.5	336.7	1,930.1	1,915.8	14.34	134.594		
5,610.2	5,578.4	5,520.0	5,518.9	13.6	1.7	176.09	-1,647.8	336.8	1,930.4	1,916.0	14.36	134.404		
5,700.0	5,668.1	5,612.8	5,611.6	13.7	1.7	176.07	-1,650.2	337.7	1,932.8	1,918.3	14.56	132.757		
5,708.6	5,676.8	5,622.8	5,621.6	13.8	1.7	176.07	-1,650.5	337.8	1,933.1	1,918.5	14.58	132.598		
5,800.0	5,768.1	5,725.7	5,724.5	13.9	1.7	176.05	-1,652.7	338.7	1,935.0	1,920.2	14.78	130.921		
5,807.1	5,775.2	5,733.1	5,731.9	14.0	1.7	176.04	-1,652.8	338.8	1,935.2	1,920.4	14.80	130.792		
5,900.0	5,868.1	5,830.7	5,829.4	14.1	1.7	176.03	-1,654.5	339.4	1,936.8	1,921.8	15.00	129.112		
5,905.5	5,873.6	5,836.6	5,835.4	14.1	1.7	176.03	-1,654.6	339.5	1,936.9	1,921.9	15.01	129.013		
6,000.0	5,968.1	5,939.5	5,938.2	14.3	1.7	175.99	-1,656.0	340.9	1,938.3	1,923.1	15.22	127.314		
6,003.9	5,972.1	5,943.8	5,942.6	14.3	1.7	175.99	-1,656.0	341.0	1,938.3	1,923.1	15.23	127.243		
6,100.0	6,068.1	6,036.6	6,035.4	14.5	1.7	175.94	-1,656.9	342.7	1,939.4	1,923.9	15.45	125.539		
6,102.3	6,070.5	6,038.5	6,037.2	14.5	1.7	175.94	-1,656.9	342.7	1,939.4	1,924.0	15.45	125.498		
6,200.0	6,168.1	6,123.4	6,122.1	14.7	1.7	175.89	-1,658.4	344.2	1,941.2	1,925.5	15.67	123.870		
6,200.8	6,168.9	6,124.3	6,123.0	14.7	1.7	175.89	-1,658.4	344.3	1,941.2	1,925.5	15.67	123.857		
6,288.5	6,256.6	6,227.2	6,225.8	14.9	1.7	175.83	-1,660.1	346.6	1,942.8	1,926.9	15.87	122.394		
6,299.2	6,267.3	6,242.2	6,240.8	14.9	1.7	-4.39	-1,660.2	347.0	1,942.8	1,926.9	15.88	122.307		
6,300.0	6,268.1	6,243.3	6,242.0	14.9	1.7	-4.39	-1,660.2	347.0	1,942.8	1,926.9	15.89	122.296		
6,350.0	6,318.1	6,300.0	6,298.6	15.0	1.7	-4.45	-1,660.4	348.4	1,940.5	1,924.5	15.99	121.375		
6,397.6	6,365.3	6,346.1	6,344.7	15.1	1.7	-4.54	-1,660.6	349.6	1,935.1	1,919.0	16.13	119.977		
6,400.0	6,367.7	6,348.0	6,346.6	15.1	1.7	-4.54	-1,660.6	349.7	1,934.8	1,918.6	16.14	119.898		
6,450.0	6,416.8	6,388.0	6,386.6	15.1	1.7	-4.65	-1,660.9	350.7	1,925.8	1,909.5	16.30	118.112		
6,496.0	6,461.3	6,433.4	6,432.0	15.1	1.7	-4.79	-1,661.4	351.9	1,914.7	1,898.2	16.46	116.324		
6,500.0	6,465.1	6,437.6	6,436.2	15.1	1.7	-4.80	-1,661.4	352.0	1,913.6	1,897.1	16.47	116.166		
6,550.0	6,512.4	6,490.6	6,489.2	15.1	1.7	-5.01	-1,661.9	353.5	1,897.9	1,881.3	16.62	114.166		
6,594.5	6,553.4	6,535.4	6,533.9	15.1	1.7	-5.23	-1,662.1	354.8	1,881.1	1,864.4	16.74	112.402		
6,600.0	6,558.4	6,540.8	6,539.4	15.1	1.7	-5.26	-1,662.1	354.9	1,878.9	1,862.1	16.75	112.185		
6,650.0	6,603.0	6,589.1	6,587.6	15.1	1.7	-5.56	-1,662.3	356.3	1,856.6	1,839.7	16.84	110.268		
6,692.9	6,639.9	6,622.7	6,621.2	15.1	1.7	-5.85	-1,662.4	357.2	1,835.0	1,818.1	16.88	108.735		
6,700.0	6,645.9	6,627.7	6,626.3	15.1	1.7	-5.91	-1,662.4	357.3	1,831.2	1,814.3	16.88	108.489		
6,750.0	6,686.8	6,662.5	6,661.0	15.1	1.7	-6.31	-1,662.7	358.3	1,803.1	1,786.2	16.88	106.818		
6,791.3	6,719.1	6,690.1	6,688.6	15.1	1.7	-6.71	-1,662.9	359.0	1,777.8	1,761.0	16.85	105.492		
6,800.0	6,725.7	6,700.0	6,698.5	15.1	1.7	-6.82	-1,663.0	359.3	1,772.3	1,755.4	16.85	105.187		
6,850.0	6,762.3	6,730.6	6,729.0	15.1	1.7	-7.41	-1,663.4	360.1	1,738.9	1,722.1	16.78	103.631		
6,889.7	6,789.7	6,757.0	6,755.5	15.1	1.7	-8.00	-1,663.8	360.9	1,710.7	1,693.9	16.71	102.347		
6,900.0	6,796.5	6,763.6	6,762.1	15.1	1.7	-8.17	-1,663.9	361.1	1,703.1	1,686.4	16.70	102.011		
6,950.0	6,828.0	6,794.2	6,792.7	15.1	1.7	-9.11	-1,664.3	362.1	1,665.0	1,648.4	16.60	100.313		
6,988.2	6,850.2	6,817.5	6,815.9	15.1	1.7	-10.01	-1,664.6	362.8	1,634.5	1,618.0	16.53	98.902		
7,000.0	6,856.7	6,824.6	6,823.0	15.1	1.7	-10.32	-1,664.7	363.0	1,624.8	1,608.3	16.51	98.412		

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - LATHAM 7-4 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
7,050.0	6,882.5	6,852.3	6,850.7	15.2	1.7	-11.89	-1,665.1	363.8	1,582.7	1,566.2	16.45	96.207	
7,086.6	6,899.5	6,870.6	6,869.0	15.3	1.7	-13.33	-1,665.3	364.3	1,550.7	1,534.3	16.44	94.301	
7,100.0	6,905.3	6,876.9	6,875.3	15.4	1.7	-13.95	-1,665.4	364.5	1,538.8	1,522.3	16.45	93.542	
7,150.0	6,924.9	6,898.1	6,896.5	15.7	1.7	-16.76	-1,665.7	365.0	1,493.4	1,476.8	16.56	90.194	
7,185.0	6,936.7	6,911.8	6,910.2	15.9	1.7	-19.43	-1,665.8	365.3	1,460.8	1,444.0	16.74	87.260	
7,200.0	6,941.2	6,917.2	6,915.5	16.0	1.7	-20.81	-1,665.9	365.5	1,446.7	1,429.8	16.85	85.849	
7,250.0	6,954.2	6,932.5	6,930.8	16.3	1.7	-26.89	-1,666.0	365.9	1,398.9	1,381.5	17.43	80.236	
7,283.4	6,961.0	6,940.5	6,938.8	16.6	1.7	-32.82	-1,666.1	366.1	1,366.5	1,348.4	18.05	75.718	
7,300.0	6,963.8	6,943.8	6,942.2	16.7	1.7	-36.58	-1,666.1	366.1	1,350.3	1,331.9	18.41	73.334	
7,350.0	6,970.0	6,951.2	6,949.5	17.2	1.7	-52.70	-1,666.2	366.3	1,301.2	1,281.6	19.59	66.407	
7,381.9	6,972.1	6,953.8	6,952.1	17.5	1.7	-67.71	-1,666.2	366.4	1,269.7	1,249.8	19.89	63.845	
7,400.0	6,972.7	6,954.6	6,952.9	17.7	1.7	-77.73	-1,666.2	366.4	1,251.7	1,232.0	19.68	63.604	
7,420.0	6,972.8	6,954.8	6,953.2	17.9	1.7	-89.32	-1,666.2	366.4	1,231.9	1,212.5	19.46	63.316	
7,480.3	6,972.2	6,954.7	6,953.1	18.5	1.7	-89.28	-1,666.2	366.4	1,172.2	1,152.1	20.10	58.312	
7,500.0	6,972.0	6,954.7	6,953.0	18.7	1.7	-89.26	-1,666.2	366.4	1,152.7	1,132.4	20.31	56.747	
7,578.7	6,971.3	6,954.5	6,952.9	19.7	1.7	-89.21	-1,666.2	366.4	1,074.9	1,053.7	21.24	50.609	
7,600.0	6,971.1	6,954.5	6,952.8	19.9	1.7	-89.19	-1,666.2	366.4	1,053.9	1,032.4	21.49	49.043	
7,677.1	6,970.4	6,954.3	6,952.7	20.9	1.7	-89.14	-1,666.2	366.4	977.8	955.3	22.48	43.493	
7,700.0	6,970.2	6,954.3	6,952.6	21.2	1.7	-89.13	-1,666.2	366.4	955.3	932.5	22.78	41.943	
7,775.6	6,969.5	6,954.1	6,952.5	22.2	1.7	-89.08	-1,666.2	366.4	881.0	857.2	23.83	36.976	
7,800.0	6,969.3	6,954.1	6,952.4	22.6	1.7	-89.06	-1,666.2	366.4	857.0	832.9	24.17	35.464	
7,874.0	6,968.6	6,953.9	6,952.3	23.7	1.7	-89.01	-1,666.2	366.4	784.6	759.4	25.26	31.064	
7,900.0	6,968.4	6,953.9	6,952.2	24.1	1.7	-88.99	-1,666.2	366.4	759.2	733.6	25.64	29.609	
7,972.4	6,967.8	6,953.7	6,952.1	25.2	1.7	-88.95	-1,666.2	366.4	688.8	662.0	26.76	25.738	
8,000.0	6,967.5	6,953.7	6,952.0	25.6	1.7	-88.93	-1,666.2	366.4	662.1	634.9	27.19	24.352	
8,070.8	6,966.9	6,953.5	6,951.9	26.7	1.7	-88.88	-1,666.2	366.4	593.9	565.5	28.33	20.965	
8,100.0	6,966.6	6,953.5	6,951.9	27.2	1.7	-88.87	-1,666.2	366.4	566.0	537.2	28.79	19.656	
8,169.3	6,966.0	6,953.4	6,951.7	28.3	1.7	-88.82	-1,666.2	366.4	500.2	470.3	29.94	16.708	
8,200.0	6,965.7	6,953.3	6,951.7	28.8	1.7	-88.80	-1,666.2	366.4	471.4	441.0	30.45	15.483	
8,267.7	6,965.1	6,953.2	6,951.5	30.0	1.7	-88.76	-1,666.2	366.4	408.9	377.3	31.59	12.942	
8,300.0	6,964.8	6,953.1	6,951.5	30.5	1.7	-88.74	-1,666.2	366.4	379.7	347.5	32.14	11.813	
8,366.1	6,964.2	6,953.0	6,951.4	31.7	1.7	-88.70	-1,666.2	366.4	321.7	288.5	33.28	9.666	
8,400.0	6,963.9	6,953.0	6,951.3	32.2	1.7	-88.68	-1,666.2	366.4	293.4	259.5	33.87	8.662	
8,464.5	6,963.3	6,952.8	6,951.2	33.4	1.7	-88.64	-1,666.2	366.4	243.3	208.3	35.00	6.952	
8,500.0	6,963.0	6,952.8	6,951.1	34.0	1.7	-88.62	-1,666.2	366.4	219.1	183.5	35.63	6.150	
8,563.0	6,962.4	6,952.7	6,951.0	35.1	1.7	-88.59	-1,666.2	366.4	185.2	148.4	36.75	5.039	
8,600.0	6,962.0	6,952.6	6,951.0	35.8	1.7	-88.56	-1,666.2	366.4	173.0	135.6	37.41	4.625	
8,640.4	6,961.7	6,952.5	6,950.9	36.5	1.7	-88.54	-1,666.2	366.4	168.2	130.1	38.14	4.411 CC, ES	
8,661.4	6,961.5	6,952.5	6,950.9	36.9	1.7	-88.53	-1,666.2	366.4	169.5	131.0	38.52	4.402 SF	
8,700.0	6,961.1	6,952.4	6,950.8	37.6	1.7	-88.51	-1,666.2	366.4	178.5	139.3	39.21	4.551	
8,759.8	6,960.6	6,952.3	6,950.7	38.7	1.7	-88.47	-1,666.2	366.4	206.3	166.0	40.30	5.119	
8,800.0	6,960.2	6,952.3	6,950.6	39.4	1.7	-88.45	-1,666.2	366.4	231.9	190.9	41.03	5.651	
8,858.2	6,959.7	6,952.2	6,950.5	40.5	1.7	-88.42	-1,666.2	366.3	275.3	233.2	42.11	6.537	
8,900.0	6,959.3	6,952.1	6,950.5	41.2	1.7	-88.39	-1,666.2	366.3	309.4	266.5	42.87	7.216	
8,956.7	6,958.8	6,952.0	6,950.4	42.3	1.7	-88.36	-1,666.2	366.3	358.2	314.3	43.92	8.157	
9,000.0	6,958.4	6,951.9	6,950.3	43.1	1.7	-88.34	-1,666.2	366.3	397.0	352.3	44.72	8.877	
9,055.1	6,957.9	6,951.9	6,950.2	44.1	1.7	-88.31	-1,666.2	366.3	447.5	401.8	45.75	9.782	
9,100.0	6,957.5	6,951.8	6,950.2	44.9	1.7	-88.29	-1,666.2	366.3	489.4	442.9	46.59	10.506	
9,153.5	6,957.0	6,951.7	6,950.1	45.9	1.7	-88.26	-1,666.2	366.3	540.0	492.4	47.59	11.347	
9,200.0	6,956.6	6,951.6	6,950.0	46.8	1.7	-88.23	-1,666.2	366.3	584.4	535.9	48.46	12.059	
9,251.9	6,956.1	6,951.6	6,949.9	47.8	1.7	-88.21	-1,666.2	366.3	634.3	584.8	49.44	12.830	
9,300.0	6,955.7	6,951.5	6,949.8	48.7	1.7	-88.18	-1,666.2	366.3	680.7	630.4	50.34	13.522	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - LATHAM 7-4 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,350.4	6,955.2	6,951.4	6,949.8	49.6	1.7	-88.15	-1,666.2	366.3	729.7	678.4	51.30	14.224	
9,400.0	6,954.8	6,951.3	6,949.7	50.6	1.7	-88.13	-1,666.2	366.3	778.0	725.8	52.23	14.895	
9,448.8	6,954.3	6,951.3	6,949.6	51.5	1.7	-88.10	-1,666.2	366.3	825.7	772.6	53.16	15.533	
9,500.0	6,953.9	6,951.2	6,949.5	52.5	1.7	-88.08	-1,666.2	366.3	875.9	821.8	54.13	16.181	
9,547.2	6,953.4	6,951.1	6,949.5	53.4	1.7	-88.05	-1,666.2	366.3	922.3	867.3	55.03	16.759	
9,600.0	6,952.9	6,951.0	6,949.4	54.4	1.7	-88.03	-1,666.2	366.3	974.3	918.2	56.04	17.385	
9,645.6	6,952.5	6,951.0	6,949.3	55.2	1.7	-88.00	-1,666.2	366.3	1,019.2	962.3	56.91	17.910	
9,700.0	6,952.0	6,950.9	6,949.3	56.3	1.7	-87.98	-1,666.2	366.3	1,072.9	1,014.9	57.95	18.514	
9,744.1	6,951.6	6,950.8	6,949.2	57.1	1.7	-87.96	-1,666.2	366.3	1,116.4	1,057.6	58.79	18.989	
9,800.0	6,951.1	6,950.7	6,949.1	58.2	1.7	-87.93	-1,666.2	366.3	1,171.8	1,111.9	59.87	19.573	
9,842.5	6,950.7	6,950.7	6,949.0	59.0	1.7	-87.91	-1,666.2	366.3	1,213.8	1,153.1	60.68	20.003	
9,900.0	6,950.2	6,950.6	6,949.0	60.1	1.7	-87.88	-1,666.2	366.3	1,270.8	1,209.0	61.79	20.567	
9,940.9	6,949.8	6,950.6	6,948.9	60.9	1.7	-87.86	-1,666.2	366.3	1,311.4	1,248.8	62.58	20.957	
10,000.0	6,949.3	6,950.5	6,948.8	62.0	1.7	-87.83	-1,666.2	366.3	1,370.0	1,306.3	63.71	21.503	
10,039.3	6,948.9	6,950.4	6,948.8	62.8	1.7	-87.81	-1,666.2	366.3	1,409.0	1,344.6	64.47	21.855	
10,100.0	6,948.4	6,950.3	6,948.7	64.0	1.7	-87.79	-1,666.2	366.3	1,469.3	1,403.6	65.64	22.383	
10,137.8	6,948.0	6,950.3	6,948.6	64.7	1.7	-87.77	-1,666.2	366.3	1,506.8	1,440.4	66.37	22.702	
10,200.0	6,947.5	6,950.2	6,948.6	65.9	1.7	-87.74	-1,666.2	366.3	1,568.7	1,501.1	67.58	23.214	
10,236.2	6,947.1	6,950.2	6,948.5	66.6	1.7	-87.72	-1,666.2	366.3	1,604.7	1,536.4	68.28	23.503	
10,300.0	6,946.6	6,950.1	6,948.4	67.8	1.7	-87.69	-1,666.2	366.3	1,668.1	1,598.6	69.51	23.998	
10,334.6	6,946.3	6,950.0	6,948.4	68.5	1.7	-87.68	-1,666.2	366.3	1,702.6	1,632.4	70.18	24.259	
10,400.0	6,945.7	6,949.9	6,948.3	69.8	1.7	-87.65	-1,666.2	366.3	1,767.6	1,696.2	71.45	24.739	
10,433.0	6,945.4	6,949.9	6,948.3	70.4	1.7	-87.63	-1,666.2	366.3	1,800.5	1,728.5	72.09	24.975	
10,500.0	6,944.7	6,949.8	6,948.2	71.7	1.7	-87.60	-1,666.2	366.3	1,867.2	1,793.8	73.39	25.441	
10,531.5	6,944.5	6,949.8	6,948.1	72.3	1.7	-87.59	-1,666.2	366.3	1,898.6	1,824.6	74.00	25.655	
10,600.0	6,943.8	6,949.7	6,948.0	73.7	1.7	-87.56	-1,666.2	366.3	1,966.8	1,891.5	75.34	26.107	
10,629.9	6,943.6	6,949.6	6,948.0	74.2	1.7	-87.55	-1,666.2	366.3	1,996.6	1,920.7	75.92	26.299	
10,700.0	6,942.9	6,949.6	6,947.9	75.6	1.7	-87.52	-1,666.2	366.3	2,066.5	1,989.2	77.28	26.739	
10,728.3	6,942.7	6,949.5	6,947.9	76.2	1.7	-87.50	-1,666.2	366.3	2,094.7	2,016.9	77.84	26.912	
10,800.0	6,942.0	6,949.4	6,947.8	77.6	1.7	-87.47	-1,666.2	366.3	2,166.2	2,086.9	79.23	27.339	
10,826.7	6,941.8	6,949.4	6,947.8	78.1	1.7	-87.46	-1,666.2	366.3	2,192.8	2,113.1	79.75	27.495	
10,900.0	6,941.1	6,949.3	6,947.7	79.5	1.7	-87.43	-1,666.2	366.3	2,265.9	2,184.7	81.18	27.910	
10,925.2	6,940.9	6,949.3	6,947.6	80.0	1.7	-87.42	-1,666.2	366.3	2,291.0	2,209.3	81.68	28.050	
11,000.0	6,940.2	6,949.2	6,947.6	81.5	1.7	-87.39	-1,666.2	366.3	2,365.6	2,282.5	83.14	28.455	
11,023.6	6,940.0	6,949.2	6,947.5	81.9	1.7	-87.38	-1,666.2	366.3	2,389.1	2,305.5	83.60	28.579	
11,100.0	6,939.3	6,949.1	6,947.4	83.4	1.7	-87.35	-1,666.2	366.3	2,465.4	2,380.3	85.09	28.973	
11,122.0	6,939.1	6,949.1	6,947.4	83.8	1.7	-87.34	-1,666.2	366.3	2,487.3	2,401.8	85.52	29.084	
11,200.0	6,938.4	6,949.0	6,947.3	85.4	1.7	-87.31	-1,666.2	366.3	2,565.1	2,478.1	87.05	29.469	
11,220.4	6,938.2	6,948.9	6,947.3	85.8	1.7	-87.30	-1,666.2	366.3	2,585.5	2,498.1	87.45	29.567	
11,300.0	6,937.4	6,948.8	6,947.2	87.3	1.7	-87.27	-1,666.2	366.3	2,664.9	2,575.9	89.00	29.942	
11,318.9	6,937.3	6,948.8	6,947.2	87.7	1.7	-87.26	-1,666.2	366.3	2,683.8	2,594.4	89.37	30.029	
11,400.0	6,936.5	6,948.7	6,947.1	89.3	1.7	-87.23	-1,666.2	366.3	2,764.7	2,673.8	90.96	30.394	
11,417.3	6,936.4	6,948.7	6,947.1	89.6	1.7	-87.22	-1,666.2	366.3	2,782.0	2,690.7	91.30	30.471	
11,500.0	6,935.6	6,948.6	6,947.0	91.3	1.7	-87.19	-1,666.2	366.3	2,864.6	2,771.6	92.92	30.828	
11,515.7	6,935.5	6,948.6	6,947.0	91.6	1.7	-87.18	-1,666.2	366.3	2,880.3	2,787.0	93.23	30.894	
11,600.0	6,934.7	6,948.5	6,946.9	93.2	1.7	-87.15	-1,666.2	366.3	2,964.4	2,869.5	94.88	31.243	
11,614.1	6,934.6	6,948.5	6,946.9	93.5	1.7	-87.14	-1,666.2	366.3	2,978.5	2,883.4	95.16	31.300	
11,700.0	6,933.8	6,948.4	6,946.8	95.2	1.7	-87.11	-1,666.2	366.3	3,064.2	2,967.4	96.84	31.641	
11,712.6	6,933.7	6,948.4	6,946.7	95.4	1.7	-87.10	-1,666.2	366.3	3,076.8	2,979.7	97.09	31.690	
11,800.0	6,932.9	6,948.3	6,946.6	97.1	1.7	-87.07	-1,666.2	366.3	3,164.1	3,065.3	98.81	32.023	
11,811.0	6,932.8	6,948.3	6,946.6	97.4	1.7	-87.07	-1,666.2	366.3	3,175.1	3,076.1	99.02	32.064	
11,900.0	6,932.0	6,948.2	6,946.5	99.1	1.7	-87.03	-1,666.2	366.2	3,264.0	3,163.2	100.77	32.390	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design NE SW SEC. 7 T4N R64W 6th P.M. - LATHAM 7-4 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Reference Depth (usft)	Offset 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
11,909.4	6,931.9	6,948.2	6,946.5	99.3	1.7	-87.03	-1,666.2	366.2	3,273.4	3,172.4	100.96	32.424	
12,000.0	6,931.0	6,948.1	6,946.4	101.1	1.7	-86.99	-1,666.2	366.2	3,363.8	3,261.1	102.74	32.742	
12,007.8	6,931.0	6,948.1	6,946.4	101.2	1.7	-86.99	-1,666.2	366.2	3,371.7	3,268.8	102.89	32.770	
12,100.0	6,930.1	6,948.0	6,946.3	103.0	1.7	-86.96	-1,666.2	366.2	3,463.7	3,359.0	104.70	33.082	
12,106.3	6,930.1	6,948.0	6,946.3	103.2	1.7	-86.95	-1,666.2	366.2	3,470.0	3,365.1	104.82	33.103	
12,200.0	6,929.2	6,947.9	6,946.2	105.0	1.7	-86.92	-1,666.2	366.2	3,563.6	3,456.9	106.67	33.408	
12,204.7	6,929.2	6,947.9	6,946.2	105.1	1.7	-86.92	-1,666.2	366.2	3,568.3	3,461.5	106.76	33.423	
12,300.0	6,928.3	6,947.8	6,946.1	107.0	1.7	-86.88	-1,666.2	366.2	3,663.5	3,554.8	108.63	33.723	
12,303.1	6,928.3	6,947.8	6,946.1	107.1	1.7	-86.88	-1,666.2	366.2	3,666.6	3,557.9	108.70	33.733	
12,400.0	6,927.4	6,947.7	6,946.0	109.0	1.7	-86.85	-1,666.2	366.2	3,763.4	3,652.8	110.60	34.026	
12,401.5	6,927.4	6,947.7	6,946.0	109.0	1.7	-86.85	-1,666.2	366.2	3,764.9	3,654.3	110.63	34.031	
12,500.0	6,926.5	6,947.6	6,945.9	110.9	1.7	-86.81	-1,666.2	366.2	3,863.3	3,750.7	112.57	34.319	
12,598.4	6,925.6	6,947.5	6,945.8	112.9	1.7	-86.78	-1,666.2	366.2	3,961.6	3,847.1	114.51	34.597	
12,600.0	6,925.6	6,947.5	6,945.8	112.9	1.7	-86.78	-1,666.2	366.2	3,963.2	3,848.6	114.54	34.601	
12,696.8	6,924.7	6,947.4	6,945.7	114.8	1.7	-86.75	-1,666.2	366.2	4,059.9	3,943.5	116.45	34.865	
12,700.0	6,924.6	6,947.4	6,945.7	114.9	1.7	-86.74	-1,666.2	366.2	4,063.1	3,946.6	116.51	34.874	
12,795.2	6,923.8	6,947.3	6,945.6	116.8	1.7	-86.71	-1,666.2	366.2	4,158.3	4,039.9	118.39	35.125	
12,800.0	6,923.7	6,947.3	6,945.6	116.9	1.7	-86.71	-1,666.2	366.2	4,163.0	4,044.5	118.48	35.137	
12,893.7	6,922.9	6,947.2	6,945.5	118.7	1.7	-86.68	-1,666.2	366.2	4,256.6	4,136.3	120.32	35.376	
12,900.0	6,922.8	6,947.2	6,945.5	118.8	1.7	-86.67	-1,666.2	366.2	4,262.9	4,142.5	120.45	35.392	
12,992.1	6,922.0	6,947.1	6,945.5	120.6	1.7	-86.64	-1,666.2	366.2	4,355.0	4,232.7	122.26	35.619	
13,000.0	6,921.9	6,947.1	6,945.5	120.8	1.7	-86.64	-1,666.2	366.2	4,362.9	4,240.4	122.42	35.638	
13,090.5	6,921.1	6,947.0	6,945.4	122.6	1.7	-86.61	-1,666.2	366.2	4,453.3	4,329.1	124.20	35.855	
13,100.0	6,921.0	6,947.0	6,945.4	122.8	1.7	-86.61	-1,666.2	366.2	4,462.8	4,338.4	124.39	35.877	
13,188.9	6,920.2	6,946.9	6,945.3	124.5	1.7	-86.58	-1,666.2	366.2	4,551.7	4,425.5	126.15	36.083	
13,200.0	6,920.1	6,946.9	6,945.3	124.8	1.7	-86.57	-1,666.2	366.2	4,562.7	4,436.4	126.36	36.108	
13,287.4	6,919.3	6,946.8	6,945.2	126.5	1.7	-86.55	-1,666.2	366.2	4,650.0	4,521.9	128.09	36.304	
13,300.0	6,919.1	6,946.8	6,945.2	126.7	1.7	-86.54	-1,666.2	366.2	4,662.6	4,534.3	128.34	36.332	
13,385.8	6,918.4	6,946.7	6,945.1	128.4	1.7	-86.51	-1,666.2	366.2	4,748.4	4,618.4	130.03	36.518	
13,400.0	6,918.2	6,946.7	6,945.1	128.7	1.7	-86.51	-1,666.2	366.2	4,762.6	4,632.3	130.31	36.549	
13,484.2	6,917.5	6,946.7	6,945.0	130.4	1.7	-86.48	-1,666.2	366.2	4,846.8	4,714.8	131.97	36.726	
13,500.0	6,917.3	6,946.6	6,945.0	130.7	1.7	-86.47	-1,666.2	366.2	4,862.5	4,730.2	132.28	36.759	
13,582.6	6,916.6	6,946.6	6,944.9	132.3	1.7	-86.45	-1,666.2	366.2	4,945.1	4,811.2	133.91	36.928	
13,600.0	6,916.4	6,946.5	6,944.9	132.7	1.7	-86.44	-1,666.2	366.2	4,962.5	4,828.2	134.25	36.963	
13,681.1	6,915.6	6,946.5	6,944.8	134.3	1.7	-86.42	-1,666.2	366.2	5,043.5	4,907.6	135.85	37.125	
13,700.0	6,915.5	6,946.5	6,944.8	134.6	1.7	-86.41	-1,666.2	366.2	5,062.4	4,926.2	136.23	37.162	
13,779.5	6,914.7	6,946.4	6,944.8	136.2	1.7	-86.39	-1,666.2	366.2	5,141.9	5,004.1	137.80	37.315	
13,800.0	6,914.6	6,946.4	6,944.7	136.6	1.7	-86.38	-1,666.2	366.2	5,162.4	5,024.2	138.20	37.354	
13,877.9	6,913.8	6,946.3	6,944.7	138.2	1.7	-86.36	-1,666.2	366.2	5,240.2	5,100.5	139.74	37.500	
13,900.0	6,913.6	6,946.3	6,944.7	138.6	1.7	-86.35	-1,666.2	366.2	5,262.3	5,122.1	140.17	37.541	
13,976.3	6,912.9	6,946.2	6,944.6	140.1	1.7	-86.33	-1,666.2	366.2	5,338.6	5,196.9	141.68	37.680	
14,000.0	6,912.7	6,946.2	6,944.6	140.6	1.7	-86.32	-1,666.2	366.2	5,362.2	5,220.1	142.15	37.723	
14,074.8	6,912.0	6,946.1	6,944.5	142.0	1.7	-86.30	-1,666.2	366.2	5,437.0	5,293.4	143.56	37.872	
14,079.0	6,912.0	6,946.1	6,944.5	142.1	1.7	-86.29	-1,666.2	366.2	5,441.2	5,297.5	143.64	37.880	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

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	
0.0	0.0	11,613.7	6,907.5	0.0	92.0	156.69	-2,834.3	1,221.4	7,625.9				
98.4	98.4	11,613.7	6,907.5	0.1	92.0	156.69	-2,834.3	1,221.4	7,536.0	7,469.2	66.85	112.724	
100.0	100.0	11,613.7	6,907.5	0.1	92.0	156.69	-2,834.3	1,221.4	7,534.6	7,467.7	66.86	112.700	
196.8	196.8	11,613.7	6,907.5	0.3	92.0	156.69	-2,834.3	1,221.4	7,446.3	7,379.3	67.07	111.018	
200.0	200.0	11,613.7	6,907.5	0.3	92.0	156.69	-2,834.3	1,221.4	7,443.5	7,376.4	67.08	110.964	
295.3	295.3	11,613.7	6,907.5	0.5	92.0	156.69	-2,834.3	1,221.4	7,356.9	7,289.6	67.29	109.324	
300.0	300.0	11,613.7	6,907.5	0.5	92.0	156.69	-2,834.3	1,221.4	7,352.6	7,285.3	67.30	109.243	
393.7	393.7	11,613.7	6,907.5	0.8	92.0	156.69	-2,834.3	1,221.4	7,267.6	7,200.1	67.52	107.644	
400.0	400.0	11,613.7	6,907.5	0.8	92.0	156.69	-2,834.3	1,221.4	7,261.9	7,194.4	67.53	107.537	
492.1	492.1	11,613.7	6,907.5	1.0	92.0	156.69	-2,834.3	1,221.4	7,178.7	7,110.9	67.74	105.979	
500.0	500.0	11,613.7	6,907.5	1.0	92.0	156.69	-2,834.3	1,221.4	7,171.5	7,103.8	67.75	105.846	
590.5	590.5	11,613.7	6,907.5	1.2	92.0	156.69	-2,834.3	1,221.4	7,089.9	7,022.0	67.96	104.328	
600.0	600.0	11,613.7	6,907.5	1.2	92.0	156.69	-2,834.3	1,221.4	7,081.4	7,013.4	67.98	104.170	
689.0	689.0	11,613.7	6,907.5	1.4	92.0	156.69	-2,834.3	1,221.4	7,001.4	6,933.3	68.18	102.692	
700.0	700.0	11,613.7	6,907.5	1.4	92.0	156.69	-2,834.3	1,221.4	6,991.5	6,923.3	68.20	102.509	
787.4	787.4	11,613.7	6,907.5	1.6	92.0	156.69	-2,834.3	1,221.4	6,913.2	6,844.8	68.40	101.070	
800.0	800.0	11,613.7	6,907.5	1.7	92.0	156.69	-2,834.3	1,221.4	6,902.0	6,833.5	68.43	100.863	
885.8	885.8	11,613.7	6,907.5	1.9	92.0	156.69	-2,834.3	1,221.4	6,825.3	6,756.7	68.62	99.463	
900.0	900.0	11,613.7	6,907.5	1.9	92.0	156.69	-2,834.3	1,221.4	6,812.7	6,744.0	68.65	99.232	
984.2	984.2	11,613.7	6,907.5	2.1	92.0	156.69	-2,834.3	1,221.4	6,737.7	6,668.8	68.84	97.870	
1,000.0	1,000.0	11,613.7	6,907.5	2.1	92.0	156.69	-2,834.3	1,221.4	6,723.7	6,654.8	68.88	97.616	
1,082.7	1,082.7	11,613.7	6,907.5	2.3	92.0	156.69	-2,834.3	1,221.4	6,650.3	6,581.3	69.06	96.292	
1,100.0	1,100.0	11,613.7	6,907.5	2.3	92.0	156.69	-2,834.3	1,221.4	6,635.0	6,565.9	69.10	96.016	
1,181.1	1,181.1	11,613.7	6,907.5	2.5	92.0	156.69	-2,834.3	1,221.4	6,563.3	6,494.0	69.29	94.728	
1,200.0	1,200.0	11,613.7	6,907.5	2.6	92.0	156.69	-2,834.3	1,221.4	6,546.6	6,477.3	69.33	94.430	
1,279.5	1,279.5	11,613.7	6,907.5	2.7	92.0	122.66	-2,834.3	1,221.4	6,476.9	6,449.6	27.28	237.396	
1,300.0	1,300.0	11,613.7	6,907.5	2.8	92.0	123.27	-2,834.3	1,221.4	6,459.0	6,432.0	27.03	238.972	
1,377.9	1,377.8	11,613.7	6,907.5	3.0	92.0	125.48	-2,834.3	1,221.4	6,391.7	6,365.3	26.40	242.074	
1,400.0	1,399.8	11,613.7	6,907.5	3.0	92.0	126.07	-2,834.3	1,221.4	6,372.8	6,346.5	26.32	242.132	
1,476.4	1,475.9	11,613.7	6,907.5	3.2	92.0	128.04	-2,834.3	1,221.4	6,307.9	6,281.6	26.31	239.780	
1,500.0	1,499.5	11,613.7	6,907.5	3.2	92.0	128.62	-2,834.3	1,221.4	6,288.0	6,261.6	26.38	238.365	
1,574.8	1,573.7	11,613.7	6,907.5	3.4	92.0	130.36	-2,834.3	1,221.4	6,225.7	6,198.9	26.81	232.216	
1,600.0	1,598.7	11,613.7	6,907.5	3.5	92.0	130.91	-2,834.3	1,221.4	6,204.9	6,177.9	27.01	229.725	
1,673.2	1,671.1	11,613.7	6,907.5	3.7	92.0	132.46	-2,834.3	1,221.4	6,145.2	6,117.5	27.72	221.698	
1,700.0	1,697.5	11,613.7	6,907.5	3.7	92.0	132.99	-2,834.3	1,221.4	6,123.6	6,095.6	28.01	218.609	
1,771.6	1,767.9	11,613.7	6,907.5	4.0	92.0	134.35	-2,834.3	1,221.4	6,066.6	6,037.7	28.87	210.155	
1,800.1	1,795.7	11,613.7	6,907.5	4.0	92.0	134.87	-2,834.3	1,221.4	6,044.2	6,015.0	29.22	206.832	
1,870.1	1,864.2	11,613.7	6,907.5	4.3	92.0	134.87	-2,834.3	1,221.4	5,989.6	5,960.2	29.42	203.562	
1,900.0	1,893.4	11,613.7	6,907.5	4.4	92.0	134.87	-2,834.3	1,221.4	5,966.4	5,936.9	29.51	202.178	
1,968.5	1,960.4	11,613.7	6,907.5	4.6	92.0	134.87	-2,834.3	1,221.4	5,913.4	5,883.7	29.72	198.990	
2,000.0	1,991.3	11,613.7	6,907.5	4.7	92.0	134.87	-2,834.3	1,221.4	5,889.1	5,859.3	29.81	197.549	
2,066.9	2,056.7	11,613.7	6,907.5	5.0	92.0	134.87	-2,834.3	1,221.4	5,837.8	5,807.8	30.02	194.486	
2,100.0	2,089.1	11,613.7	6,907.5	5.1	92.0	134.87	-2,834.3	1,221.4	5,812.6	5,782.5	30.12	192.972	
2,165.3	2,153.0	11,613.7	6,907.5	5.3	92.0	134.87	-2,834.3	1,221.4	5,762.9	5,732.6	30.33	190.013	
2,200.0	2,186.9	11,613.7	6,907.5	5.5	92.0	134.87	-2,834.3	1,221.4	5,736.7	5,706.3	30.44	188.461	
2,263.8	2,249.3	11,613.7	6,907.5	5.7	92.0	134.87	-2,834.3	1,221.4	5,688.8	5,658.1	30.65	185.621	
2,300.0	2,284.7	11,613.7	6,907.5	5.8	92.0	134.87	-2,834.3	1,221.4	5,661.7	5,630.9	30.77	184.027	
2,362.2	2,345.5	11,613.7	6,907.5	6.1	92.0	134.87	-2,834.3	1,221.4	5,615.4	5,584.4	30.97	181.310	
2,400.0	2,382.5	11,613.7	6,907.5	6.2	92.0	134.87	-2,834.3	1,221.4	5,587.4	5,556.3	31.10	179.679	
2,460.6	2,441.8	11,613.7	6,907.5	6.5	92.0	134.87	-2,834.3	1,221.4	5,542.7	5,511.4	31.30	177.085	
2,500.0	2,480.3	11,613.7	6,907.5	6.6	92.0	134.87	-2,834.3	1,221.4	5,513.9	5,482.4	31.43	175.422	
2,559.0	2,538.1	11,613.7	6,907.5	6.9	92.0	134.87	-2,834.3	1,221.4	5,470.9	5,439.2	31.63	172.950	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

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	
2,600.0	2,578.1	11,613.7	6,907.5	7.0	92.0	134.87	-2,834.3	1,221.4	5,441.2	5,409.5	31.77	171.259	
2,657.5	2,634.4	11,613.7	6,907.5	7.3	92.0	134.87	-2,834.3	1,221.4	5,399.9	5,367.9	31.97	168.910	
2,700.0	2,675.9	11,613.7	6,907.5	7.5	92.0	134.87	-2,834.3	1,221.4	5,369.5	5,337.4	32.12	167.195	
2,755.9	2,730.6	11,613.7	6,907.5	7.7	92.0	134.87	-2,834.3	1,221.4	5,329.8	5,297.4	32.31	164.964	
2,800.0	2,773.8	11,613.7	6,907.5	7.9	92.0	134.87	-2,834.3	1,221.4	5,298.6	5,266.2	32.46	163.230	
2,854.3	2,826.9	11,613.7	6,907.5	8.1	92.0	134.87	-2,834.3	1,221.4	5,260.5	5,227.9	32.65	161.117	
2,857.4	2,829.9	11,613.7	6,907.5	8.1	92.0	134.87	-2,834.3	1,221.4	5,258.4	5,225.8	32.66	161.001	
2,900.0	2,871.6	11,613.7	6,907.5	8.3	92.0	134.27	-2,834.3	1,221.4	5,228.6	5,196.1	32.48	160.993	
2,952.7	2,923.5	11,613.7	6,907.5	8.4	92.0	133.52	-2,834.3	1,221.4	5,191.5	5,159.2	32.24	161.018	
3,000.0	2,970.1	11,613.7	6,907.5	8.6	92.0	132.83	-2,834.3	1,221.4	5,158.0	5,126.0	32.05	160.920	
3,051.2	3,020.7	11,613.7	6,907.5	8.7	92.0	132.07	-2,834.3	1,221.4	5,121.7	5,089.8	31.87	160.697	
3,100.0	3,069.1	11,613.7	6,907.5	8.9	92.0	131.32	-2,834.3	1,221.4	5,086.8	5,055.1	31.73	160.296	
3,149.6	3,118.3	11,613.7	6,907.5	9.0	92.0	130.55	-2,834.3	1,221.4	5,051.2	5,019.6	31.63	159.714	
3,200.0	3,168.5	11,613.7	6,907.5	9.1	92.0	129.75	-2,834.3	1,221.4	5,014.9	4,983.3	31.57	158.856	
3,248.0	3,216.3	11,613.7	6,907.5	9.2	92.0	128.98	-2,834.3	1,221.4	4,980.2	4,948.6	31.56	157.811	
3,300.0	3,268.2	11,613.7	6,907.5	9.3	92.0	128.12	-2,834.3	1,221.4	4,942.4	4,910.8	31.61	156.340	
3,346.4	3,314.6	11,613.7	6,907.5	9.4	92.0	127.33	-2,834.3	1,221.4	4,908.6	4,876.9	31.72	154.761	
3,400.0	3,368.1	11,613.7	6,907.5	9.5	92.0	126.42	-2,834.3	1,221.4	4,869.4	4,837.5	31.92	152.551	
3,444.9	3,413.0	11,613.7	6,907.5	9.6	92.0	125.63	-2,834.3	1,221.4	4,836.5	4,804.4	32.15	150.420	
3,457.5	3,425.6	11,613.7	6,907.5	9.6	92.0	161.92	-2,834.3	1,221.4	4,827.3	4,795.0	32.31	149.426	
3,500.0	3,468.1	11,613.7	6,907.5	9.7	92.0	161.92	-2,834.3	1,221.4	4,796.1	4,763.7	32.37	148.142	
3,543.3	3,511.4	11,613.7	6,907.5	9.7	92.0	161.92	-2,834.3	1,221.4	4,764.5	4,732.1	32.45	146.814	
3,600.0	3,568.1	11,613.7	6,907.5	9.8	92.0	161.92	-2,834.3	1,221.4	4,723.5	4,690.9	32.56	145.092	
3,641.7	3,609.9	11,613.7	6,907.5	9.9	92.0	161.92	-2,834.3	1,221.4	4,693.5	4,660.9	32.63	143.835	
3,700.0	3,668.1	11,613.7	6,907.5	10.0	92.0	161.92	-2,834.3	1,221.4	4,651.9	4,619.2	32.74	142.098	
3,740.1	3,708.3	11,613.7	6,907.5	10.1	92.0	161.92	-2,834.3	1,221.4	4,623.5	4,590.7	32.81	140.911	
3,800.0	3,768.1	11,613.7	6,907.5	10.2	92.0	161.92	-2,834.3	1,221.4	4,581.4	4,548.5	32.92	139.162	
3,838.6	3,806.7	11,613.7	6,907.5	10.2	92.0	161.92	-2,834.3	1,221.4	4,554.5	4,521.5	32.99	138.044	
3,900.0	3,868.1	11,613.7	6,907.5	10.3	92.0	161.92	-2,834.3	1,221.4	4,512.0	4,478.9	33.11	136.285	
3,937.0	3,905.1	11,613.7	6,907.5	10.4	92.0	161.92	-2,834.3	1,221.4	4,486.6	4,453.4	33.18	135.235	
4,000.0	3,968.1	11,613.7	6,907.5	10.5	92.0	161.92	-2,834.3	1,221.4	4,443.8	4,410.5	33.29	133.469	
4,035.4	4,003.6	11,613.7	6,907.5	10.6	92.0	161.92	-2,834.3	1,221.4	4,419.9	4,386.5	33.36	132.485	
4,100.0	4,068.1	11,613.7	6,907.5	10.7	92.0	161.92	-2,834.3	1,221.4	4,376.8	4,343.3	33.48	130.715	
4,133.8	4,102.0	11,613.7	6,907.5	10.8	92.0	161.92	-2,834.3	1,221.4	4,354.4	4,320.8	33.55	129.796	
4,200.0	4,168.1	11,613.7	6,907.5	10.9	92.0	161.92	-2,834.3	1,221.4	4,311.0	4,277.4	33.67	128.024	
4,232.3	4,200.4	11,613.7	6,907.5	10.9	92.0	161.92	-2,834.3	1,221.4	4,290.1	4,256.4	33.74	127.169	
4,300.0	4,268.1	11,613.7	6,907.5	11.1	92.0	161.92	-2,834.3	1,221.4	4,246.6	4,212.8	33.87	125.398	
4,330.7	4,298.8	11,613.7	6,907.5	11.1	92.0	161.92	-2,834.3	1,221.4	4,227.1	4,193.2	33.92	124.605	
4,400.0	4,368.1	11,613.7	6,907.5	11.2	92.0	161.92	-2,834.3	1,221.4	4,183.6	4,149.6	34.06	122.838	
4,429.1	4,397.3	11,613.7	6,907.5	11.3	92.0	161.92	-2,834.3	1,221.4	4,165.6	4,131.5	34.11	122.105	
4,500.0	4,468.1	11,613.7	6,907.5	11.4	92.0	161.92	-2,834.3	1,221.4	4,122.1	4,087.9	34.25	120.346	
4,527.5	4,495.7	11,613.7	6,907.5	11.5	92.0	161.92	-2,834.3	1,221.4	4,105.4	4,071.1	34.31	119.671	
4,600.0	4,568.1	11,613.7	6,907.5	11.6	92.0	161.92	-2,834.3	1,221.4	4,062.1	4,027.7	34.45	117.922	
4,626.0	4,594.1	11,613.7	6,907.5	11.7	92.0	161.92	-2,834.3	1,221.4	4,046.8	4,012.3	34.50	117.303	
4,700.0	4,668.1	11,613.7	6,907.5	11.8	92.0	161.92	-2,834.3	1,221.4	4,003.7	3,969.1	34.64	115.568	
4,724.4	4,692.5	11,613.7	6,907.5	11.8	92.0	161.92	-2,834.3	1,221.4	3,989.7	3,955.0	34.69	115.004	
4,800.0	4,768.1	11,613.7	6,907.5	12.0	92.0	161.92	-2,834.3	1,221.4	3,947.0	3,912.1	34.84	113.284	
4,822.8	4,791.0	11,613.7	6,907.5	12.0	92.0	161.92	-2,834.3	1,221.4	3,934.3	3,899.4	34.89	112.773	
4,900.0	4,868.1	11,613.7	6,907.5	12.2	92.0	161.92	-2,834.3	1,221.4	3,892.0	3,856.9	35.04	111.074	
4,921.2	4,889.4	11,613.7	6,907.5	12.2	92.0	161.92	-2,834.3	1,221.4	3,880.5	3,845.4	35.08	110.613	
5,000.0	4,968.1	11,613.7	6,907.5	12.4	92.0	161.92	-2,834.3	1,221.4	3,838.8	3,803.6	35.24	108.937	
5,019.7	4,987.8	11,613.7	6,907.5	12.4	92.0	161.92	-2,834.3	1,221.4	3,828.6	3,793.3	35.28	108.525	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

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	5,068.1	11,613.7	6,907.5	12.6	92.0	161.92	-2,834.3	1,221.4	3,787.5	3,752.1	35.44	106.874	
5,118.1	5,086.2	11,613.7	6,907.5	12.6	92.0	161.92	-2,834.3	1,221.4	3,778.5	3,743.0	35.48	106.509	
5,200.0	5,168.1	11,613.7	6,907.5	12.8	92.0	161.92	-2,834.3	1,221.4	3,738.2	3,702.6	35.64	104.888	
5,216.5	5,184.7	11,613.7	6,907.5	12.8	92.0	161.92	-2,834.3	1,221.4	3,730.3	3,694.6	35.67	104.567	
5,300.0	5,268.1	11,613.7	6,907.5	13.0	92.0	161.92	-2,834.3	1,221.4	3,691.0	3,655.1	35.84	102.979	
5,314.9	5,283.1	11,613.7	6,907.5	13.0	92.0	161.92	-2,834.3	1,221.4	3,684.1	3,648.2	35.87	102.700	
5,400.0	5,368.1	11,613.7	6,907.5	13.1	92.0	161.92	-2,834.3	1,221.4	3,645.8	3,609.8	36.04	101.148	
5,413.4	5,381.5	11,613.7	6,907.5	13.2	92.0	161.92	-2,834.3	1,221.4	3,640.0	3,603.9	36.07	100.909	
5,500.0	5,468.1	11,613.7	6,907.5	13.3	92.0	161.92	-2,834.3	1,221.4	3,602.9	3,566.7	36.25	99.397	
5,511.8	5,479.9	11,613.7	6,907.5	13.4	92.0	161.92	-2,834.3	1,221.4	3,598.0	3,561.7	36.27	99.195	
5,600.0	5,568.1	11,613.7	6,907.5	13.5	92.0	161.92	-2,834.3	1,221.4	3,562.3	3,525.8	36.45	97.726	
5,610.2	5,578.4	11,613.7	6,907.5	13.6	92.0	161.92	-2,834.3	1,221.4	3,558.3	3,521.8	36.47	97.560	
5,700.0	5,668.1	11,613.7	6,907.5	13.7	92.0	161.92	-2,834.3	1,221.4	3,524.0	3,487.4	36.66	96.137	
5,708.6	5,676.8	11,613.7	6,907.5	13.8	92.0	161.92	-2,834.3	1,221.4	3,520.9	3,484.2	36.67	96.003	
5,800.0	5,768.1	11,613.7	6,907.5	13.9	92.0	161.92	-2,834.3	1,221.4	3,488.2	3,451.4	36.86	94.630	
5,807.1	5,775.2	11,613.7	6,907.5	14.0	92.0	161.92	-2,834.3	1,221.4	3,485.8	3,448.9	36.88	94.526	
5,900.0	5,868.1	11,613.7	6,907.5	14.1	92.0	161.92	-2,834.3	1,221.4	3,455.0	3,417.9	37.07	93.206	
5,905.5	5,873.6	11,613.7	6,907.5	14.1	92.0	161.92	-2,834.3	1,221.4	3,453.2	3,416.1	37.08	93.130	
6,000.0	5,968.1	11,613.7	6,907.5	14.3	92.0	161.92	-2,834.3	1,221.4	3,424.3	3,387.0	37.27	91.867	
6,003.9	5,972.1	11,613.7	6,907.5	14.3	92.0	161.92	-2,834.3	1,221.4	3,423.1	3,385.8	37.28	91.816	
6,100.0	6,068.1	11,613.7	6,907.5	14.5	92.0	161.92	-2,834.3	1,221.4	3,396.3	3,358.8	37.48	90.612	
6,102.3	6,070.5	11,613.7	6,907.5	14.5	92.0	161.92	-2,834.3	1,221.4	3,395.6	3,358.2	37.49	90.583	
6,200.0	6,168.1	11,613.7	6,907.5	14.7	92.0	161.92	-2,834.3	1,221.4	3,371.0	3,333.3	37.69	89.442	
6,200.8	6,168.9	11,613.7	6,907.5	14.7	92.0	161.92	-2,834.3	1,221.4	3,370.8	3,333.1	37.69	89.433	
6,288.5	6,256.6	11,613.7	6,907.5	14.9	92.0	161.92	-2,834.3	1,221.4	3,350.9	3,313.1	37.87	88.478	
6,299.2	6,267.3	11,613.7	6,907.5	14.9	92.0	-18.35	-2,834.3	1,221.4	3,348.6	3,310.8	37.76	88.682	
6,300.0	6,268.1	11,613.7	6,907.5	14.9	92.0	-18.36	-2,834.3	1,221.4	3,348.4	3,310.7	37.76	88.684	
6,350.0	6,318.1	11,613.7	6,907.5	15.0	92.0	-18.69	-2,834.3	1,221.4	3,335.9	3,298.2	37.65	88.599	
6,397.6	6,365.3	11,613.7	6,907.5	15.1	92.0	-19.08	-2,834.3	1,221.4	3,321.6	3,283.9	37.71	88.073	
6,400.0	6,367.7	11,613.7	6,907.5	15.1	92.0	-19.10	-2,834.3	1,221.4	3,320.9	3,283.1	37.72	88.034	
6,450.0	6,416.8	11,613.7	6,907.5	15.1	92.0	-19.59	-2,834.3	1,221.4	3,303.4	3,265.4	37.98	86.968	
6,496.0	6,461.3	11,613.7	6,907.5	15.1	92.0	-20.13	-2,834.3	1,221.4	3,285.2	3,246.8	38.40	85.542	
6,500.0	6,465.1	11,613.7	6,907.5	15.1	92.0	-20.18	-2,834.3	1,221.4	3,283.5	3,245.1	38.45	85.400	
6,550.0	6,512.4	11,613.7	6,907.5	15.1	92.0	-20.88	-2,834.3	1,221.4	3,261.3	3,222.2	39.13	83.347	
6,594.5	6,553.4	11,613.7	6,907.5	15.1	92.0	-21.59	-2,834.3	1,221.4	3,239.7	3,199.7	39.93	81.142	
6,600.0	6,558.4	11,613.7	6,907.5	15.1	92.0	-21.69	-2,834.3	1,221.4	3,236.8	3,196.8	40.04	80.844	
6,650.0	6,603.0	11,613.7	6,907.5	15.1	92.0	-22.65	-2,834.3	1,221.4	3,210.1	3,168.9	41.19	77.934	
6,692.9	6,639.9	11,613.7	6,907.5	15.1	92.0	-23.59	-2,834.3	1,221.4	3,185.5	3,143.1	42.39	75.150	
6,700.0	6,645.9	11,613.7	6,907.5	15.1	92.0	-23.76	-2,834.3	1,221.4	3,181.3	3,138.7	42.61	74.665	
6,750.0	6,686.8	11,613.7	6,907.5	15.1	92.0	-25.06	-2,834.3	1,221.4	3,150.4	3,106.1	44.32	71.081	
6,791.3	6,719.1	11,613.7	6,907.5	15.1	92.0	-26.30	-2,834.3	1,221.4	3,123.4	3,077.4	45.99	67.914	
6,800.0	6,725.7	11,613.7	6,907.5	15.1	92.0	-26.58	-2,834.3	1,221.4	3,117.5	3,071.1	46.37	67.228	
6,850.0	6,762.3	11,613.7	6,907.5	15.1	92.0	-28.36	-2,834.3	1,221.4	3,082.8	3,034.0	48.82	63.150	
6,889.7	6,789.7	11,613.7	6,907.5	15.1	92.0	-30.00	-2,834.3	1,221.4	3,053.9	3,002.8	51.09	59.779	
6,900.0	6,796.5	11,613.7	6,907.5	15.1	92.0	-30.46	-2,834.3	1,221.4	3,046.3	2,994.6	51.73	58.894	
6,950.0	6,828.0	11,613.7	6,907.5	15.1	92.0	-32.93	-2,834.3	1,221.4	3,008.2	2,953.0	55.18	54.512	
6,988.2	6,850.2	11,613.7	6,907.5	15.1	92.0	-35.13	-2,834.3	1,221.4	2,978.1	2,919.8	58.25	51.128	
7,000.0	6,856.7	11,613.7	6,907.5	15.1	92.0	-35.87	-2,834.3	1,221.4	2,968.5	2,909.3	59.29	50.071	
7,050.0	6,882.5	11,613.7	6,907.5	15.2	92.0	-39.37	-2,834.3	1,221.4	2,927.5	2,863.4	64.13	45.652	
7,086.6	6,899.5	11,613.7	6,907.5	15.3	92.0	-42.36	-2,834.3	1,221.4	2,896.7	2,828.5	68.18	42.484	
7,100.0	6,905.3	11,613.7	6,907.5	15.4	92.0	-43.56	-2,834.3	1,221.4	2,885.3	2,815.5	69.77	41.353	
7,150.0	6,924.9	11,613.7	6,907.5	15.7	92.0	-48.55	-2,834.3	1,221.4	2,842.0	2,765.8	76.21	37.291	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-MWDD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,185.0	6,936.7	11,613.7	6,907.5	15.9	92.0	-52.60	-2,834.3	1,221.4	2,811.1	2,730.0	81.12	34.651	
7,200.0	6,941.2	11,613.7	6,907.5	16.0	92.0	-54.49	-2,834.3	1,221.4	2,797.8	2,714.5	83.29	33.590	
7,250.0	6,954.2	11,613.7	6,907.5	16.3	92.0	-61.45	-2,834.3	1,221.4	2,752.8	2,662.2	90.62	30.378	
7,283.4	6,961.0	11,613.7	6,907.5	16.6	92.0	-66.68	-2,834.3	1,221.4	2,722.4	2,627.1	95.33	28.558	
7,300.0	6,963.8	11,613.7	6,907.5	16.7	92.0	-69.43	-2,834.3	1,221.4	2,707.3	2,609.8	97.50	27.767	
7,350.0	6,970.0	11,613.7	6,907.5	17.2	92.0	-78.25	-2,834.3	1,221.4	2,661.5	2,558.5	103.00	25.839	
7,381.9	6,972.1	11,613.7	6,907.5	17.5	92.0	-84.14	-2,834.3	1,221.4	2,632.1	2,526.8	105.36	24.982	
7,400.0	6,972.7	11,613.7	6,907.5	17.7	92.0	-87.53	-2,834.3	1,221.4	2,615.5	2,509.3	106.22	24.624	
7,420.0	6,972.8	11,613.7	6,907.5	17.9	92.0	-91.25	-2,834.3	1,221.4	2,597.1	2,490.4	106.74	24.331	
7,480.3	6,972.2	11,613.7	6,907.5	18.5	92.0	-91.25	-2,834.3	1,221.4	2,541.8	2,434.4	107.38	23.670	
7,500.0	6,972.0	11,613.7	6,907.5	18.7	92.0	-91.25	-2,834.3	1,221.4	2,523.8	2,416.2	107.59	23.457	
7,578.7	6,971.3	11,613.7	6,907.5	19.7	92.0	-91.25	-2,834.3	1,221.4	2,452.1	2,343.6	108.52	22.596	
7,600.0	6,971.1	11,613.7	6,907.5	19.9	92.0	-91.25	-2,834.3	1,221.4	2,432.8	2,324.1	108.77	22.367	
7,677.1	6,970.4	11,613.7	6,907.5	20.9	92.0	-91.25	-2,834.3	1,221.4	2,363.1	2,253.4	109.76	21.530	
7,700.0	6,970.2	11,613.7	6,907.5	21.2	92.0	-91.25	-2,834.3	1,221.4	2,342.6	2,232.5	110.05	21.286	
7,775.6	6,969.5	11,613.7	6,907.5	22.2	92.0	-91.25	-2,834.3	1,221.4	2,274.9	2,163.8	111.10	20.475	
7,800.0	6,969.3	11,613.7	6,907.5	22.6	92.0	-91.25	-2,834.3	1,221.4	2,253.1	2,141.7	111.44	20.218	
7,874.0	6,968.6	11,613.7	6,907.5	23.7	92.0	-91.25	-2,834.3	1,221.4	2,187.5	2,075.0	112.53	19.439	
7,900.0	6,968.4	11,613.7	6,907.5	24.1	92.0	-91.25	-2,834.3	1,221.4	2,164.6	2,051.7	112.92	19.170	
7,972.4	6,967.8	11,613.7	6,907.5	25.2	92.0	-91.25	-2,834.3	1,221.4	2,101.2	1,987.1	114.04	18.425	
8,000.0	6,967.5	11,613.7	6,907.5	25.6	92.0	-91.25	-2,834.3	1,221.4	2,077.2	1,962.7	114.46	18.147	
8,070.8	6,966.9	11,613.7	6,907.5	26.7	92.0	-91.25	-2,834.3	1,221.4	2,015.9	1,900.3	115.60	17.439	
8,100.0	6,966.6	11,613.7	6,907.5	27.2	92.0	-91.25	-2,834.3	1,221.4	1,990.9	1,874.8	116.07	17.153	
8,169.3	6,966.0	11,613.7	6,907.5	28.3	92.0	-91.25	-2,834.3	1,221.4	1,931.9	1,814.7	117.21	16.482	
8,200.0	6,965.7	11,613.7	6,907.5	28.8	92.0	-91.25	-2,834.3	1,221.4	1,905.9	1,788.2	117.72	16.190	
8,267.7	6,965.1	11,613.7	6,907.5	30.0	92.0	-91.25	-2,834.3	1,221.4	1,849.3	1,730.4	118.87	15.558	
8,300.0	6,964.8	11,613.7	6,907.5	30.5	92.0	-91.25	-2,834.3	1,221.4	1,822.5	1,703.1	119.41	15.262	
8,366.1	6,964.2	11,613.7	6,907.5	31.7	92.0	-91.25	-2,834.3	1,221.4	1,768.3	1,647.7	120.56	14.668	
8,400.0	6,963.9	11,613.7	6,907.5	32.2	92.0	-91.25	-2,834.3	1,221.4	1,740.8	1,619.7	121.14	14.370	
8,464.5	6,963.3	11,613.7	6,907.5	33.4	92.0	-91.25	-2,834.3	1,221.4	1,689.2	1,566.9	122.27	13.815	
8,500.0	6,963.0	11,613.7	6,907.5	34.0	92.0	-91.25	-2,834.3	1,221.4	1,661.2	1,538.3	122.90	13.517	
8,563.0	6,962.4	11,613.7	6,907.5	35.1	92.0	-91.25	-2,834.3	1,221.4	1,612.2	1,488.1	124.02	12.999	
8,600.0	6,962.0	11,613.7	6,907.5	35.8	92.0	-91.25	-2,834.3	1,221.4	1,583.8	1,459.1	124.68	12.703	
8,661.4	6,961.5	11,613.7	6,907.5	36.9	92.0	-91.25	-2,834.3	1,221.4	1,537.6	1,411.8	125.79	12.224	
8,700.0	6,961.1	11,613.7	6,907.5	37.6	92.0	-91.25	-2,834.3	1,221.4	1,509.1	1,382.6	126.48	11.932	
8,759.8	6,960.6	11,613.7	6,907.5	38.7	92.0	-91.25	-2,834.3	1,221.4	1,465.9	1,338.3	127.57	11.491	
8,800.0	6,960.2	11,613.7	6,907.5	39.4	92.0	-91.25	-2,834.3	1,221.4	1,437.5	1,309.2	128.30	11.204	
8,858.2	6,959.7	11,613.7	6,907.5	40.5	92.0	-91.25	-2,834.3	1,221.4	1,397.4	1,268.0	129.37	10.801	
8,900.0	6,959.3	11,613.7	6,907.5	41.2	92.0	-91.25	-2,834.3	1,221.4	1,369.5	1,239.3	130.14	10.523	
8,956.7	6,958.8	11,613.7	6,907.5	42.3	92.0	-91.25	-2,834.3	1,221.4	1,332.7	1,201.5	131.19	10.158	
9,000.0	6,958.4	11,613.7	6,907.5	43.1	92.0	-91.25	-2,834.3	1,221.4	1,305.5	1,173.5	131.99	9.891	
9,055.1	6,957.9	11,613.7	6,907.5	44.1	92.0	-91.25	-2,834.3	1,221.4	1,272.3	1,139.3	133.02	9.565	
9,100.0	6,957.5	11,613.7	6,907.5	44.9	92.0	-91.25	-2,834.3	1,221.4	1,246.3	1,112.5	133.85	9.311	
9,153.5	6,957.0	11,613.7	6,907.5	45.9	92.0	-91.25	-2,834.3	1,221.4	1,216.9	1,082.0	134.86	9.023	
9,200.0	6,956.6	11,613.7	6,907.5	46.8	92.0	-91.25	-2,834.3	1,221.4	1,192.6	1,056.9	135.73	8.787	
9,251.9	6,956.1	11,613.7	6,907.5	47.8	92.0	-91.25	-2,834.3	1,221.4	1,167.1	1,030.4	136.71	8.537	
9,300.0	6,955.7	11,613.7	6,907.5	48.7	92.0	-91.25	-2,834.3	1,221.4	1,145.1	1,007.5	137.61	8.321	
9,350.4	6,955.2	11,613.7	6,907.5	49.6	92.0	-91.25	-2,834.3	1,221.4	1,123.8	985.3	138.56	8.110	
9,400.0	6,954.8	11,613.7	6,907.5	50.6	92.0	-91.25	-2,834.3	1,221.4	1,104.7	965.2	139.50	7.919	
9,448.8	6,954.3	11,613.7	6,907.5	51.5	92.0	-91.25	-2,834.3	1,221.4	1,087.7	947.3	140.43	7.746	
9,500.0	6,953.9	11,613.7	6,907.5	52.5	92.0	-91.25	-2,834.3	1,221.4	1,072.0	930.6	141.40	7.582	
9,547.2	6,953.4	11,613.7	6,907.5	53.4	92.0	-91.25	-2,834.3	1,221.4	1,059.6	917.3	142.30	7.446	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-MWMD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,600.0	6,952.9	11,613.7	6,907.5	54.4	92.0	-91.25	-2,834.3	1,221.4	1,048.0	904.7	143.31	7.313	
9,645.6	6,952.5	11,613.7	6,907.5	55.2	92.0	-91.25	-2,834.3	1,221.4	1,040.0	895.8	144.18	7.213	
9,700.0	6,952.0	11,613.7	6,907.5	56.3	92.0	-91.25	-2,834.3	1,221.4	1,033.1	887.9	145.22	7.114	
9,744.1	6,951.6	11,613.7	6,907.5	57.1	92.0	-91.25	-2,834.3	1,221.4	1,029.5	883.5	146.06	7.048	
9,800.0	6,951.1	11,613.7	6,907.5	58.2	92.0	-91.25	-2,834.3	1,221.4	1,027.7	880.6	147.14	6.985	
9,805.1	6,951.1	11,613.7	6,907.5	58.3	92.0	-91.25	-2,834.3	1,221.4	1,027.7	880.5	147.24	6.980 CC, ES	
9,842.5	6,950.7	11,580.5	6,907.7	59.0	91.4	-91.28	-2,867.4	1,221.4	1,027.9	880.5	147.33	6.977	
9,900.0	6,950.2	11,523.0	6,908.1	60.1	90.4	-91.33	-2,924.9	1,221.4	1,028.1	880.7	147.36	6.977	
9,940.9	6,949.8	11,482.1	6,908.4	60.9	89.6	-91.37	-2,965.8	1,221.4	1,028.3	880.9	147.38	6.977	
10,000.0	6,949.3	11,423.1	6,908.8	62.0	88.6	-91.42	-3,024.9	1,221.4	1,028.5	881.1	147.40	6.977	
10,039.3	6,948.9	11,383.7	6,909.0	62.8	87.9	-91.45	-3,064.3	1,221.4	1,028.7	881.2	147.43	6.978	
10,100.0	6,948.4	11,323.1	6,909.4	64.0	86.8	-91.50	-3,124.9	1,221.4	1,028.9	881.5	147.46	6.978	
10,137.8	6,948.0	11,285.3	6,909.7	64.7	86.1	-91.54	-3,162.7	1,221.4	1,029.1	881.6	147.48	6.978	
10,200.0	6,947.5	11,223.1	6,910.1	65.9	85.0	-91.59	-3,224.9	1,221.4	1,029.3	881.8	147.52	6.978	
10,236.2	6,947.1	11,186.9	6,910.3	66.6	84.3	-91.62	-3,261.1	1,221.4	1,029.5	881.9	147.54	6.978	
10,300.0	6,946.6	11,123.1	6,910.8	67.8	83.2	-91.68	-3,324.9	1,221.5	1,029.8	882.2	147.58	6.977	
10,334.6	6,946.3	11,088.5	6,911.0	68.5	82.5	-91.71	-3,359.5	1,221.5	1,029.9	882.3	147.61	6.977	
10,400.0	6,945.7	11,023.1	6,911.4	69.8	81.4	-91.77	-3,424.9	1,221.5	1,030.2	882.5	147.66	6.977	
10,433.0	6,945.4	10,990.1	6,911.7	70.4	80.8	-91.79	-3,457.9	1,221.5	1,030.3	882.6	147.68	6.977	
10,500.0	6,944.7	10,923.1	6,912.1	71.7	79.6	-91.85	-3,524.8	1,221.5	1,030.6	882.9	147.73	6.976	
10,531.5	6,944.5	10,891.7	6,912.3	72.3	79.0	-91.88	-3,556.3	1,221.5	1,030.7	883.0	147.76	6.976	
10,600.0	6,943.8	10,823.1	6,912.8	73.7	77.8	-91.94	-3,624.8	1,221.5	1,031.0	883.2	147.81	6.975	
10,629.9	6,943.6	10,793.2	6,913.0	74.2	77.3	-91.97	-3,654.7	1,221.5	1,031.2	883.3	147.84	6.975	
10,700.0	6,942.9	10,723.2	6,913.4	75.6	76.0	-92.03	-3,724.8	1,221.5	1,031.5	883.6	147.90	6.974	
10,728.3	6,942.7	10,694.8	6,913.6	76.2	75.5	-92.05	-3,753.1	1,221.5	1,031.6	883.7	147.92	6.974	
10,800.0	6,942.0	10,623.2	6,914.1	77.6	74.2	-92.11	-3,824.8	1,221.5	1,031.9	883.9	147.99	6.973	
10,826.7	6,941.8	10,596.4	6,914.3	78.1	73.8	-92.14	-3,851.5	1,221.5	1,032.0	884.0	148.01	6.972	
10,900.0	6,941.1	10,523.2	6,914.8	79.5	72.5	-92.20	-3,924.8	1,221.5	1,032.3	884.2	148.09	6.971	
10,925.2	6,940.9	10,498.0	6,914.9	80.0	72.0	-92.22	-3,949.9	1,221.5	1,032.4	884.3	148.11	6.971	
11,000.0	6,940.2	10,423.2	6,915.4	81.5	70.7	-92.29	-4,024.8	1,221.5	1,032.8	884.6	148.19	6.969	
11,023.6	6,940.0	10,399.6	6,915.6	81.9	70.3	-92.31	-4,048.4	1,221.5	1,032.9	884.6	148.21	6.969	
11,100.0	6,939.3	10,323.2	6,916.1	83.4	69.0	-92.37	-4,124.7	1,221.5	1,033.2	884.9	148.29	6.967	
11,122.0	6,939.1	10,301.2	6,916.3	83.8	68.6	-92.39	-4,146.8	1,221.5	1,033.3	885.0	148.32	6.967	
11,200.0	6,938.4	10,223.2	6,916.8	85.4	67.3	-92.46	-4,224.7	1,221.6	1,033.6	885.2	148.41	6.965	
11,220.4	6,938.2	10,202.8	6,916.9	85.8	66.9	-92.48	-4,245.2	1,221.6	1,033.7	885.3	148.43	6.964	
11,300.0	6,937.4	10,123.2	6,917.4	87.3	65.5	-92.55	-4,324.7	1,221.6	1,034.1	885.5	148.53	6.962	
11,318.9	6,937.3	10,104.4	6,917.6	87.7	65.2	-92.56	-4,343.6	1,221.6	1,034.2	885.6	148.55	6.962	
11,400.0	6,936.5	10,023.2	6,918.1	89.3	63.8	-92.63	-4,424.7	1,221.6	1,034.5	885.9	148.65	6.959	
11,417.3	6,936.4	10,005.9	6,918.2	89.6	63.5	-92.65	-4,442.0	1,221.6	1,034.6	885.9	148.67	6.959	
11,500.0	6,935.6	9,923.3	6,918.8	91.3	62.1	-92.72	-4,524.7	1,221.6	1,035.0	886.2	148.78	6.956	
11,515.7	6,935.5	9,907.5	6,918.9	91.6	61.9	-92.73	-4,540.4	1,221.6	1,035.0	886.2	148.80	6.956	
11,600.0	6,934.7	9,823.3	6,919.4	93.2	60.4	-92.81	-4,624.7	1,221.6	1,035.4	886.5	148.92	6.953	
11,614.1	6,934.6	9,809.1	6,919.5	93.5	60.2	-92.82	-4,638.8	1,221.6	1,035.5	886.5	148.94	6.952	
11,700.0	6,933.8	9,723.3	6,920.1	95.2	58.8	-92.89	-4,724.7	1,221.6	1,035.9	886.8	149.07	6.949	
11,712.6	6,933.7	9,710.7	6,920.2	95.4	58.6	-92.90	-4,737.2	1,221.6	1,035.9	886.8	149.09	6.948	
11,800.0	6,932.9	9,623.3	6,920.8	97.1	57.1	-92.98	-4,824.6	1,221.6	1,036.3	887.1	149.22	6.945	
11,811.0	6,932.8	9,612.3	6,920.8	97.4	57.0	-92.99	-4,835.6	1,221.6	1,036.4	887.1	149.24	6.944	
11,900.0	6,932.0	9,523.3	6,921.4	99.1	55.5	-93.07	-4,924.6	1,221.6	1,036.8	887.4	149.39	6.940	
11,909.4	6,931.9	9,513.9	6,921.5	99.3	55.3	-93.07	-4,934.0	1,221.6	1,036.8	887.4	149.40	6.940	
12,000.0	6,931.0	9,423.3	6,922.1	101.1	53.9	-93.15	-5,024.6	1,221.6	1,037.2	887.7	149.56	6.935	
12,007.8	6,931.0	9,415.5	6,922.2	101.2	53.8	-93.16	-5,032.5	1,221.6	1,037.3	887.7	149.58	6.935	
12,100.0	6,930.1	9,323.3	6,922.8	103.0	52.3	-93.24	-5,124.6	1,221.7	1,037.7	887.9	149.75	6.929	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
12,106.3	6,930.1	9,317.1	6,922.8	103.2	52.2	-93.24	-5,130.9	1,221.7	1,037.7	888.0	149.76	6.929	
12,200.0	6,929.2	9,223.3	6,923.4	105.0	50.7	-93.32	-5,224.6	1,221.7	1,038.1	888.2	149.95	6.923	
12,204.7	6,929.2	9,218.6	6,923.5	105.1	50.7	-93.33	-5,229.3	1,221.7	1,038.2	888.2	149.96	6.923	
12,300.0	6,928.3	9,123.4	6,924.1	107.0	49.2	-93.41	-5,324.6	1,221.7	1,038.6	888.5	150.16	6.917	
12,303.1	6,928.3	9,120.2	6,924.1	107.1	49.2	-93.41	-5,327.7	1,221.7	1,038.6	888.5	150.17	6.917	
12,400.0	6,927.4	9,023.4	6,924.8	109.0	47.7	-93.49	-5,424.5	1,221.7	1,039.1	888.7	150.39	6.909	
12,401.5	6,927.4	9,021.8	6,924.8	109.0	47.7	-93.50	-5,426.1	1,221.7	1,039.1	888.7	150.39	6.909	
12,500.0	6,926.5	8,923.4	6,925.4	110.9	46.2	-93.58	-5,524.5	1,221.7	1,039.5	888.9	150.63	6.901	
12,598.4	6,925.6	8,825.0	6,926.1	112.9	44.8	-93.66	-5,622.9	1,221.7	1,040.0	889.1	150.89	6.893	
12,600.0	6,925.6	8,823.4	6,926.1	112.9	44.8	-93.67	-5,624.5	1,221.7	1,040.0	889.1	150.89	6.892	
12,696.8	6,924.7	8,726.6	6,926.7	114.8	43.5	-93.75	-5,721.3	1,221.7	1,040.5	889.3	151.17	6.883	
12,700.0	6,924.6	8,723.4	6,926.8	114.9	43.4	-93.75	-5,724.5	1,221.7	1,040.5	889.3	151.18	6.883	
12,795.2	6,923.8	8,628.2	6,927.4	116.8	42.2	-93.83	-5,819.7	1,221.7	1,040.9	889.5	151.47	6.872	
12,800.0	6,923.7	8,623.4	6,927.4	116.9	42.1	-93.84	-5,824.5	1,221.7	1,041.0	889.5	151.49	6.872	
12,893.7	6,922.9	8,529.8	6,928.0	118.7	40.9	-93.92	-5,918.1	1,221.7	1,041.4	889.6	151.80	6.860	
12,900.0	6,922.8	8,523.4	6,928.1	118.8	40.8	-93.92	-5,924.5	1,221.7	1,041.4	889.6	151.82	6.860	
12,992.1	6,922.0	8,431.3	6,928.7	120.6	39.7	-94.00	-6,016.6	1,221.8	1,041.9	889.7	152.17	6.847	
13,000.0	6,921.9	8,423.4	6,928.7	120.8	39.6	-94.01	-6,024.5	1,221.8	1,041.9	889.7	152.20	6.846	
13,090.5	6,921.1	8,332.9	6,929.3	122.6	38.6	-94.08	-6,115.0	1,221.8	1,042.4	889.8	152.56	6.832	
13,100.0	6,921.0	8,323.5	6,929.4	122.8	38.5	-94.09	-6,124.4	1,221.8	1,042.4	889.8	152.60	6.831	
13,188.9	6,920.2	8,234.5	6,930.0	124.5	37.5	-94.17	-6,213.4	1,221.8	1,042.8	889.8	153.01	6.816	
13,200.0	6,920.1	8,223.5	6,930.1	124.8	37.4	-94.18	-6,224.4	1,221.8	1,042.9	889.8	153.06	6.814	
13,287.4	6,919.3	8,136.1	6,930.7	126.5	36.5	-94.25	-6,311.8	1,221.8	1,043.3	889.8	153.49	6.797	
13,300.0	6,919.1	8,123.5	6,930.7	126.7	36.4	-94.26	-6,324.4	1,221.8	1,043.4	889.8	153.56	6.795	
13,385.8	6,918.4	8,037.7	6,931.3	128.4	35.7	-94.34	-6,410.2	1,221.8	1,043.8	889.8	154.04	6.776	
13,400.0	6,918.2	8,023.5	6,931.4	128.7	35.5	-94.35	-6,424.4	1,221.8	1,043.9	889.7	154.12	6.773	
13,484.2	6,917.5	7,939.3	6,932.0	130.4	34.9	-94.42	-6,508.6	1,221.8	1,044.3	889.6	154.65	6.752	
13,500.0	6,917.3	7,923.5	6,932.1	130.7	34.8	-94.43	-6,524.4	1,221.8	1,044.4	889.6	154.76	6.748	
13,582.6	6,916.6	7,840.9	6,932.6	132.3	34.2	-94.50	-6,607.0	1,221.8	1,044.8	889.4	155.34	6.725	
13,600.0	6,916.4	7,823.5	6,932.7	132.7	34.1	-94.52	-6,624.4	1,221.8	1,044.8	889.4	155.47	6.721	
13,681.1	6,915.6	7,742.5	6,933.3	134.3	33.6	-94.59	-6,705.4	1,221.8	1,045.2	889.1	156.13	6.695	
13,700.0	6,915.5	7,723.5	6,933.4	134.6	33.5	-94.60	-6,724.3	1,221.8	1,045.3	889.1	156.29	6.689	
13,779.5	6,914.7	7,644.1	6,933.9	136.2	33.1	-94.67	-6,803.8	1,221.8	1,045.7	888.7	157.02	6.660	
13,800.0	6,914.6	7,623.6	6,934.1	136.6	33.0	-94.69	-6,824.3	1,221.8	1,045.8	888.6	157.21	6.652	
13,877.9	6,913.8	7,541.6	6,933.8	138.2	32.7	-94.71	-6,906.2	1,221.8	1,046.2	888.2	157.98	6.622	
13,900.0	6,913.6	7,516.6	6,932.4	138.6	32.6	-94.65	-6,931.2	1,221.8	1,046.2	888.0	158.21	6.613	
13,976.3	6,912.9	7,431.2	6,921.0	140.1	32.4	-94.07	-7,015.8	1,221.9	1,045.7	886.6	159.11	6.572	
14,000.0	6,912.7	7,405.4	6,915.6	140.6	32.3	-93.78	-7,041.0	1,221.9	1,045.5	886.1	159.42	6.558	
14,074.8	6,912.0	7,326.8	6,893.5	142.0	32.2	-92.61	-7,116.4	1,221.9	1,044.6	884.1	160.43	6.511	
14,079.0	6,912.0	7,322.6	6,892.1	142.1	32.2	-92.53	-7,120.4	1,221.9	1,044.5	884.0	160.49	6.508 SF	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 106-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	171.20	-5,114.8	792.0	5,175.8				
98.4	98.4	131.1	131.1	0.1	0.1	171.19	-5,114.0	792.9	5,175.3	5,175.1	0.20	N/A	
100.0	100.0	132.9	132.9	0.1	0.1	171.19	-5,114.0	792.9	5,175.3	5,175.1	0.20	N/A	
196.8	196.8	223.6	223.6	0.3	0.3	171.18	-5,113.0	793.7	5,174.4	5,173.8	0.61	8,467.666	
200.0	200.0	225.7	225.7	0.3	0.3	171.18	-5,112.9	793.7	5,174.3	5,173.7	0.62	8,313.356	
295.3	295.3	285.0	285.0	0.5	0.4	171.17	-5,112.6	794.1	5,173.9	5,172.9	0.96	5,396.323	
300.0	300.0	285.0	285.0	0.5	0.4	171.17	-5,112.6	794.1	5,173.9	5,172.9	0.97	5,337.202	
300.5	300.5	285.0	285.0	0.5	0.4	171.17	-5,112.6	794.1	5,173.9	5,172.9	0.97	5,331.322	
393.7	393.7	342.2	342.2	0.8	0.5	171.16	-5,112.6	794.8	5,174.2	5,172.9	1.30	3,976.365	
400.0	400.0	345.7	345.6	0.8	0.6	171.16	-5,112.6	794.9	5,174.2	5,172.9	1.32	3,911.668	
492.1	492.1	390.0	390.0	1.0	0.6	171.15	-5,113.0	795.8	5,175.3	5,173.6	1.62	3,187.057	
500.0	500.0	390.0	390.0	1.0	0.6	171.15	-5,113.0	795.8	5,175.4	5,173.8	1.64	3,152.775	
590.5	590.5	454.2	454.1	1.2	0.8	171.13	-5,113.9	797.7	5,177.2	5,175.2	1.99	2,605.097	
600.0	600.0	459.7	459.6	1.2	0.8	171.13	-5,114.0	797.9	5,177.4	5,175.4	2.02	2,562.094	
689.0	689.0	517.0	516.9	1.4	0.9	171.11	-5,115.3	800.2	5,179.9	5,177.5	2.35	2,205.976	
700.0	700.0	517.0	516.9	1.4	0.9	171.11	-5,115.3	800.2	5,180.2	5,177.8	2.37	2,183.084	
787.4	787.4	562.8	562.6	1.6	1.0	171.09	-5,116.6	802.4	5,183.4	5,180.7	2.68	1,937.474	
800.0	800.0	569.3	569.1	1.7	1.1	171.08	-5,116.8	802.8	5,183.9	5,181.2	2.72	1,906.830	
885.8	885.8	613.6	613.2	1.9	1.2	171.06	-5,118.5	805.1	5,187.8	5,184.8	3.01	1,722.532	
900.0	900.0	653.0	652.6	1.9	1.3	171.04	-5,120.3	807.4	5,188.7	5,185.6	3.13	1,657.147	
984.2	984.2	671.2	670.8	2.1	1.3	171.03	-5,121.1	808.5	5,193.1	5,189.8	3.36	1,544.453	
1,000.0	1,000.0	684.4	683.9	2.1	1.3	171.02	-5,121.8	809.3	5,194.0	5,190.6	3.43	1,515.172	
1,082.7	1,082.7	728.0	727.3	2.3	1.4	170.99	-5,123.9	812.1	5,199.0	5,195.3	3.71	1,400.050	
1,100.0	1,100.0	756.8	756.0	2.3	1.5	170.98	-5,125.4	814.1	5,200.0	5,196.2	3.82	1,361.617	
1,181.1	1,181.1	805.5	804.6	2.5	1.7	170.94	-5,128.1	817.7	5,205.4	5,201.3	4.11	1,265.484	
1,200.0	1,200.0	816.9	815.9	2.6	1.7	170.93	-5,128.7	818.7	5,206.7	5,202.5	4.18	1,245.095	
1,279.5	1,279.5	856.0	854.7	2.7	1.8	134.30	-5,131.1	822.1	5,213.4	5,208.9	4.50	1,159.308	
1,300.0	1,300.0	856.0	854.7	2.8	1.8	134.27	-5,131.1	822.1	5,215.5	5,210.9	4.54	1,148.007	
1,377.9	1,377.8	926.1	924.4	3.0	2.0	134.10	-5,135.6	829.0	5,224.3	5,219.4	4.91	1,064.787	
1,400.0	1,399.8	939.8	937.9	3.0	2.0	134.05	-5,136.6	830.4	5,227.2	5,222.2	4.99	1,047.098	
1,476.4	1,475.9	985.0	982.7	3.2	2.2	133.87	-5,139.7	835.6	5,238.3	5,233.1	5.29	990.951	
1,500.0	1,499.5	985.0	982.7	3.2	2.2	133.81	-5,139.7	835.6	5,242.2	5,236.8	5.34	981.768	
1,574.8	1,573.7	985.0	982.7	3.4	2.2	133.61	-5,139.7	835.6	5,255.9	5,250.4	5.51	953.049	
1,600.0	1,598.7	1,033.5	1,030.7	3.5	2.3	133.53	-5,143.5	841.7	5,260.5	5,254.8	5.72	920.129	
1,673.2	1,671.1	1,061.3	1,058.1	3.7	2.4	133.29	-5,146.0	845.4	5,276.1	5,270.2	5.98	882.479	
1,700.0	1,697.5	1,071.4	1,068.1	3.7	2.5	133.20	-5,146.9	846.8	5,282.3	5,276.2	6.07	869.645	
1,771.6	1,767.9	1,113.0	1,109.0	4.0	2.6	132.94	-5,151.1	852.9	5,300.1	5,293.7	6.38	830.203	
1,800.1	1,795.7	1,113.0	1,109.0	4.0	2.6	132.82	-5,151.1	852.9	5,307.6	5,301.1	6.46	821.702	
1,870.1	1,864.2	1,113.0	1,109.0	4.3	2.6	132.82	-5,151.1	852.9	5,326.8	5,320.1	6.66	799.479	
1,900.0	1,893.4	1,151.5	1,146.9	4.4	2.8	132.83	-5,155.3	858.8	5,335.0	5,328.1	6.87	776.096	
1,968.5	1,960.4	1,181.1	1,175.9	4.6	2.9	132.84	-5,158.7	863.6	5,354.3	5,347.1	7.18	745.933	
2,000.0	1,991.3	1,194.7	1,189.1	4.7	2.9	132.84	-5,160.3	865.8	5,363.3	5,356.0	7.32	733.016	
2,066.9	2,056.7	1,242.0	1,235.4	5.0	3.1	132.84	-5,166.3	873.9	5,382.9	5,375.2	7.68	701.180	
2,100.0	2,089.1	1,242.0	1,235.4	5.1	3.1	132.84	-5,166.3	873.9	5,392.6	5,384.9	7.78	692.871	
2,165.3	2,153.0	1,281.5	1,273.9	5.3	3.3	132.84	-5,171.5	881.0	5,412.2	5,404.1	8.13	665.655	
2,200.0	2,186.9	1,306.4	1,298.1	5.5	3.4	132.83	-5,174.7	885.7	5,422.7	5,414.3	8.33	651.051	
2,263.8	2,249.3	1,352.0	1,342.4	5.7	3.6	132.82	-5,180.7	894.9	5,442.0	5,433.3	8.70	625.695	
2,300.0	2,284.7	1,370.0	1,359.8	5.8	3.7	132.82	-5,183.1	898.7	5,453.1	5,444.2	8.88	614.110	
2,362.2	2,345.5	1,370.0	1,359.8	6.1	3.7	132.82	-5,183.1	898.7	5,472.6	5,463.5	9.09	602.141	
2,400.0	2,382.5	1,415.4	1,403.7	6.2	4.0	132.79	-5,189.2	908.7	5,484.3	5,474.9	9.40	583.652	
2,460.6	2,441.8	1,440.0	1,427.3	6.5	4.1	132.78	-5,192.7	914.4	5,503.7	5,494.0	9.70	567.312	
2,500.0	2,480.3	1,455.9	1,442.6	6.6	4.2	132.77	-5,195.1	918.1	5,516.4	5,506.5	9.90	557.252	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 usft
Survey Program: 106-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
2,559.0	2,538.1	1,498.0	1,482.9	6.9	4.4	132.74	-5,201.4	928.6	5,535.9	5,525.6	10.27	538.947		
2,600.0	2,578.1	1,498.0	1,482.9	7.0	4.4	132.74	-5,201.4	928.6	5,549.5	5,539.1	10.41	532.925		
2,657.5	2,634.4	1,498.0	1,482.9	7.3	4.4	132.74	-5,201.4	928.6	5,569.0	5,558.4	10.61	524.701		
2,700.0	2,675.9	1,538.7	1,521.7	7.5	4.6	132.70	-5,207.9	939.1	5,583.4	5,572.5	10.95	509.818		
2,755.9	2,730.6	1,562.5	1,544.3	7.7	4.8	132.68	-5,211.7	945.5	5,602.8	5,591.5	11.26	497.562		
2,800.0	2,773.8	1,581.1	1,561.9	7.9	4.9	132.66	-5,214.8	950.7	5,618.3	5,606.8	11.50	488.404		
2,854.3	2,826.9	1,627.0	1,605.2	8.1	5.2	132.61	-5,222.7	963.8	5,637.6	5,625.7	11.91	473.439		
2,857.4	2,829.9	1,627.0	1,605.2	8.1	5.2	132.61	-5,222.7	963.8	5,638.7	5,626.8	11.92	473.102		
2,900.0	2,871.6	1,627.0	1,605.2	8.3	5.2	132.84	-5,222.7	963.8	5,653.7	5,641.7	12.06	468.794		
2,952.7	2,923.5	1,660.5	1,636.7	8.4	5.4	133.08	-5,228.6	973.6	5,672.0	5,659.7	12.38	458.229		
3,000.0	2,970.1	1,696.8	1,670.8	8.6	5.7	133.27	-5,235.0	984.2	5,688.0	5,675.3	12.70	448.037		
3,051.2	3,020.7	1,736.2	1,707.8	8.7	5.9	133.47	-5,242.0	995.8	5,704.8	5,691.7	13.03	437.802		
3,100.0	3,069.1	1,755.0	1,725.4	8.9	6.1	133.67	-5,245.3	1,001.4	5,720.3	5,707.1	13.25	431.616		
3,149.6	3,118.3	1,755.0	1,725.4	9.0	6.1	133.91	-5,245.3	1,001.4	5,735.9	5,722.5	13.37	429.026		
3,200.0	3,168.5	1,802.0	1,769.4	9.1	6.4	134.05	-5,254.0	1,015.5	5,751.1	5,737.3	13.75	418.316		
3,248.0	3,216.3	1,820.1	1,786.3	9.2	6.5	134.22	-5,257.4	1,021.0	5,765.4	5,751.5	13.95	413.303		
3,300.0	3,268.2	1,839.5	1,804.4	9.3	6.7	134.40	-5,261.2	1,027.0	5,780.6	5,766.4	14.17	408.061		
3,346.4	3,314.6	1,884.0	1,845.7	9.4	7.0	134.48	-5,270.2	1,041.0	5,793.9	5,779.4	14.50	399.564		
3,400.0	3,368.1	1,884.0	1,845.7	9.5	7.0	134.70	-5,270.2	1,041.0	5,808.7	5,794.1	14.60	397.938		
3,444.9	3,413.0	1,923.2	1,881.9	9.6	7.3	134.77	-5,278.2	1,053.5	5,820.8	5,805.9	14.89	390.886		
3,457.5	3,425.6	1,942.7	1,899.9	9.6	7.4	171.26	-5,282.2	1,059.8	5,824.1	5,809.0	15.02	387.774		
3,500.0	3,468.1	2,008.4	1,960.7	9.7	7.9	171.07	-5,295.2	1,081.2	5,835.0	5,819.5	15.46	377.350		
3,543.3	3,511.4	2,012.0	1,964.0	9.7	7.9	171.06	-5,295.9	1,082.4	5,846.2	5,830.6	15.56	375.628		
3,600.0	3,568.1	2,064.8	2,012.7	9.8	8.3	170.90	-5,306.4	1,099.9	5,860.9	5,844.9	15.98	366.678		
3,641.7	3,609.9	2,087.3	2,033.4	9.9	8.5	170.83	-5,310.9	1,107.5	5,871.9	5,855.7	16.20	362.569		
3,700.0	3,668.1	2,140.0	2,081.8	10.0	8.9	170.67	-5,321.7	1,125.4	5,887.6	5,871.0	16.62	354.329		
3,740.1	3,708.3	2,140.0	2,081.8	10.1	8.9	170.67	-5,321.7	1,125.4	5,898.5	5,881.8	16.69	353.364		
3,800.0	3,768.1	2,140.0	2,081.8	10.2	8.9	170.67	-5,321.7	1,125.4	5,915.1	5,898.3	16.81	351.970		
3,838.6	3,806.7	2,140.0	2,081.8	10.2	8.9	170.67	-5,321.7	1,125.4	5,926.1	5,909.2	16.88	351.087		
3,900.0	3,868.1	2,194.5	2,131.6	10.3	9.4	170.50	-5,333.4	1,144.0	5,943.4	5,926.1	17.33	342.919		
3,937.0	3,905.1	2,207.0	2,143.1	10.4	9.5	170.46	-5,336.2	1,148.3	5,954.2	5,936.7	17.48	340.629		
4,000.0	3,968.1	2,228.3	2,162.5	10.5	9.6	170.40	-5,341.1	1,155.5	5,972.9	5,955.2	17.73	336.845		
4,035.4	4,003.6	2,269.0	2,199.5	10.6	10.0	170.28	-5,350.8	1,169.3	5,983.8	5,965.7	18.05	331.528		
4,100.0	4,068.1	2,269.0	2,199.5	10.7	10.0	170.28	-5,350.8	1,169.3	6,003.4	5,985.2	18.17	330.327		
4,133.8	4,102.0	2,269.0	2,199.5	10.8	10.0	170.28	-5,350.8	1,169.3	6,013.9	5,995.7	18.24	329.711		
4,200.0	4,168.1	2,325.3	2,250.4	10.9	10.4	170.11	-5,364.5	1,189.0	6,034.7	6,015.9	18.73	322.212		
4,232.3	4,200.4	2,347.9	2,270.8	10.9	10.6	170.04	-5,370.0	1,197.2	6,044.9	6,025.9	18.94	319.220		
4,300.0	4,268.1	2,397.0	2,314.7	11.1	11.1	169.88	-5,381.7	1,215.7	6,066.4	6,047.0	19.38	313.020		
4,330.7	4,298.8	2,397.0	2,314.7	11.1	11.1	169.88	-5,381.7	1,215.7	6,076.3	6,056.8	19.44	312.555		
4,400.0	4,368.1	2,397.0	2,314.7	11.2	11.1	169.88	-5,381.7	1,215.7	6,099.1	6,079.5	19.58	311.541		
4,429.1	4,397.3	2,443.0	2,355.6	11.3	11.5	169.72	-5,392.8	1,233.6	6,108.5	6,088.5	19.96	306.027		
4,500.0	4,468.1	2,468.6	2,378.3	11.4	11.8	169.63	-5,399.1	1,243.6	6,132.2	6,111.9	20.28	302.356		
4,527.5	4,495.7	2,478.5	2,387.1	11.5	11.9	169.60	-5,401.6	1,247.6	6,141.6	6,121.2	20.41	300.969		
4,600.0	4,568.1	2,526.0	2,428.8	11.6	12.3	169.44	-5,413.8	1,266.5	6,166.6	6,145.7	20.88	295.294		
4,626.0	4,594.1	2,526.0	2,428.8	11.7	12.3	169.44	-5,413.8	1,266.5	6,175.6	6,154.6	20.93	294.992		
4,700.0	4,668.1	2,526.0	2,428.8	11.8	12.3	169.44	-5,413.8	1,266.5	6,201.7	6,180.7	21.08	294.163		
4,724.4	4,692.5	2,526.0	2,428.8	11.8	12.3	169.44	-5,413.8	1,266.5	6,210.5	6,189.4	21.13	293.897		
4,800.0	4,768.1	2,526.0	2,428.8	12.0	12.3	169.44	-5,413.8	1,266.5	6,238.3	6,217.0	21.28	293.106		
4,822.8	4,791.0	2,574.3	2,471.0	12.0	12.8	169.27	-5,426.7	1,286.2	6,246.3	6,224.6	21.69	287.972		
4,900.0	4,868.1	2,596.9	2,490.6	12.2	13.1	169.19	-5,433.0	1,295.5	6,275.0	6,253.0	22.01	285.037		
4,921.2	4,889.4	2,603.1	2,496.0	12.2	13.1	169.17	-5,434.7	1,298.1	6,283.1	6,261.0	22.10	284.251		
5,000.0	4,968.1	2,654.0	2,539.8	12.4	13.7	168.99	-5,449.3	1,319.5	6,313.3	6,290.7	22.64	278.852		

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design													SE SE SEC. 18 T4N R64W 6th P.M. - NEI C17-33D - Wellbore #1 - Wellbore #1		Offset Site Error:		0.0 usft
Survey Program: 106-MWD													Offset Well Error:		0.0 usft		
Reference		Offset		Semi Major Axis			Distance							Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor					
5,019.7	4,987.8	2,654.0	2,539.8	12.4	13.7	168.99	-5,449.3	1,319.5	6,320.9	6,298.2	22.68	278.694					
5,100.0	5,068.1	2,654.0	2,539.8	12.6	13.7	168.99	-5,449.3	1,319.5	6,352.2	6,329.4	22.84	278.076					
5,118.1	5,086.2	2,654.0	2,539.8	12.6	13.7	168.99	-5,449.3	1,319.5	6,359.4	6,336.5	22.88	277.941					
5,200.0	5,168.1	2,702.3	2,581.0	12.8	14.2	168.82	-5,463.4	1,340.4	6,392.1	6,368.7	23.43	272.834					
5,216.5	5,184.7	2,710.0	2,587.5	12.8	14.3	168.79	-5,465.7	1,343.8	6,398.8	6,375.3	23.52	272.021					
5,300.0	5,268.1	2,748.7	2,620.3	13.0	14.7	168.64	-5,477.1	1,361.0	6,432.7	6,408.7	24.00	268.060					
5,314.9	5,283.1	2,782.0	2,648.2	13.0	15.1	168.52	-5,487.0	1,376.2	6,438.9	6,414.6	24.29	265.114					
5,400.0	5,368.1	2,801.4	2,664.5	13.1	15.3	168.44	-5,492.7	1,385.1	6,474.0	6,449.3	24.62	262.921					
5,413.4	5,381.5	2,810.9	2,672.4	13.2	15.4	168.41	-5,495.5	1,389.5	6,479.5	6,454.8	24.73	262.017					
5,500.0	5,468.1	2,871.9	2,723.1	13.3	16.2	168.17	-5,513.3	1,418.3	6,515.7	6,490.3	25.41	256.421					
5,511.8	5,479.9	2,880.1	2,730.0	13.4	16.3	168.14	-5,515.7	1,422.2	6,520.6	6,495.1	25.50	255.691					
5,600.0	5,568.1	2,958.5	2,794.7	13.5	17.2	167.82	-5,538.3	1,460.3	6,557.7	6,531.4	26.33	249.035					
5,610.2	5,578.4	2,969.7	2,803.9	13.6	17.3	167.78	-5,541.5	1,465.7	6,562.0	6,535.6	26.45	248.131					
5,700.0	5,668.1	3,039.0	2,861.0	13.7	18.1	167.50	-5,561.1	1,499.8	6,599.7	6,572.5	27.20	242.605					
5,708.6	5,676.8	3,039.0	2,861.0	13.8	18.1	167.50	-5,561.1	1,499.8	6,603.4	6,576.2	27.22	242.580					
5,800.0	5,768.1	3,094.2	2,906.3	13.9	18.8	167.28	-5,576.7	1,527.2	6,642.2	6,614.3	27.88	238.216					
5,807.1	5,775.2	3,097.3	2,908.8	14.0	18.9	167.26	-5,577.6	1,528.7	6,645.3	6,617.3	27.92	237.975					
5,900.0	5,868.1	4,283.9	3,941.8	14.1	30.4	163.33	-5,847.3	2,039.8	6,673.0	6,636.8	36.17	184.497					
5,905.5	5,873.6	4,286.0	3,943.7	14.1	30.4	163.32	-5,847.6	2,040.8	6,674.6	6,638.4	36.19	184.408					
6,000.0	5,968.1	4,323.0	3,976.1	14.3	30.8	163.18	-5,852.7	2,057.9	6,702.0	6,665.4	36.65	182.887					
6,003.9	5,972.1	4,323.0	3,976.1	14.3	30.8	163.18	-5,852.7	2,057.9	6,703.2	6,666.6	36.65	182.878					
6,100.0	6,068.1	4,323.0	3,976.1	14.5	30.8	163.18	-5,852.7	2,057.9	6,732.2	6,695.4	36.85	182.676					
6,102.3	6,070.5	4,323.0	3,976.1	14.5	30.8	163.18	-5,852.7	2,057.9	6,732.9	6,696.1	36.86	182.672					
6,200.0	6,168.1	4,385.6	4,030.4	14.7	31.5	162.95	-5,861.8	2,087.7	6,762.9	6,725.4	37.56	180.036					
6,200.8	6,168.9	4,385.8	4,030.6	14.7	31.5	162.95	-5,861.8	2,087.8	6,763.2	6,725.6	37.57	180.025					
6,288.5	6,256.6	4,452.0	4,087.5	14.9	32.2	162.71	-5,872.3	2,119.9	6,791.4	6,753.1	38.28	177.419					
6,299.2	6,267.3	4,452.0	4,087.5	14.9	32.2	-17.42	-5,872.3	2,119.9	6,794.7	6,756.3	38.41	176.919					
6,300.0	6,268.1	4,452.0	4,087.5	14.9	32.2	-17.41	-5,872.3	2,119.9	6,794.9	6,756.5	38.41	176.905					
6,350.0	6,318.1	4,452.0	4,087.5	15.0	32.2	-17.07	-5,872.3	2,119.9	6,808.7	6,770.2	38.57	176.543					
6,397.6	6,365.3	4,452.0	4,087.5	15.1	32.2	-16.82	-5,872.3	2,119.9	6,819.2	6,780.6	38.52	177.019					
6,400.0	6,367.7	4,452.0	4,087.5	15.1	32.2	-16.81	-5,872.3	2,119.9	6,819.6	6,781.1	38.52	177.063					
6,450.0	6,416.8	4,603.8	4,217.9	15.1	33.8	-17.24	-5,895.9	2,193.9	6,827.0	6,787.6	39.44	173.107					
6,496.0	6,461.3	4,647.2	4,255.3	15.1	34.3	-17.33	-5,902.3	2,215.1	6,830.7	6,791.4	39.34	173.624					
6,500.0	6,465.1	4,650.9	4,258.5	15.1	34.3	-17.34	-5,902.8	2,216.9	6,830.9	6,791.6	39.33	173.702					
6,550.0	6,512.4	4,697.4	4,298.4	15.1	34.8	-17.53	-5,909.6	2,239.8	6,831.5	6,792.5	38.99	175.198					
6,594.5	6,553.4	4,708.0	4,307.4	15.1	34.9	-17.63	-5,911.1	2,245.0	6,829.4	6,791.1	38.30	178.308					
6,600.0	6,558.4	4,708.0	4,307.4	15.1	34.9	-17.64	-5,911.1	2,245.0	6,829.0	6,790.8	38.20	178.788					
6,650.0	6,603.0	4,748.2	4,341.9	15.1	35.3	-17.96	-5,917.0	2,264.8	6,823.3	6,785.9	37.42	182.364					
6,692.9	6,639.9	4,767.3	4,358.4	15.1	35.5	-18.24	-5,919.9	2,274.1	6,816.0	6,779.5	36.50	186.737					
6,700.0	6,645.9	4,770.5	4,361.1	15.1	35.6	-18.29	-5,920.4	2,275.6	6,814.5	6,778.2	36.34	187.535					
6,750.0	6,686.8	4,792.3	4,379.9	15.1	35.8	-18.70	-5,923.9	2,286.1	6,802.8	6,767.7	35.10	193.799					
6,791.3	6,719.1	4,837.0	4,418.5	15.1	36.3	-19.26	-5,931.3	2,307.5	6,790.9	6,756.8	34.14	198.923					
6,800.0	6,725.7	4,837.0	4,418.5	15.1	36.3	-19.34	-5,931.3	2,307.5	6,788.1	6,754.3	33.87	200.415					
6,850.0	6,762.3	5,034.5	4,588.5	15.1	38.3	-21.00	-5,959.8	2,403.7	6,770.0	6,736.6	33.35	202.981					
6,889.7	6,789.7	5,085.7	4,632.7	15.1	38.9	-21.86	-5,966.3	2,428.8	6,753.0	6,720.7	32.28	209.205					
6,900.0	6,796.5	5,096.3	4,641.8	15.1	39.0	-22.08	-5,967.7	2,434.0	6,748.4	6,716.4	31.98	210.986					
6,950.0	6,828.0	5,127.4	4,668.7	15.1	39.3	-23.15	-5,971.6	2,449.1	6,724.0	6,693.5	30.45	220.795					
6,988.2	6,850.2	5,149.9	4,688.2	15.1	39.5	-24.08	-5,974.5	2,459.9	6,703.6	6,674.2	29.33	228.543					
7,000.0	6,856.7	5,156.7	4,694.1	15.1	39.6	-24.39	-5,975.4	2,463.2	6,696.9	6,667.9	29.01	230.853					
7,050.0	6,882.5	5,184.0	4,717.8	15.2	39.9	-25.84	-5,979.0	2,476.3	6,667.4	6,639.7	27.77	240.138					
7,086.6	6,899.5	5,202.7	4,734.0	15.3	40.0	-27.06	-5,981.5	2,485.1	6,644.3	6,617.3	27.06	245.514					
7,100.0	6,905.3	5,209.2	4,739.7	15.4	40.1	-27.54	-5,982.4	2,488.2	6,635.6	6,608.7	26.86	247.053					

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design													SE SE SEC. 18 T4N R64W 6th P.M. - NEI C17-33D - Wellbore #1 - Wellbore #1		Offset Site Error:		0.0 usft
Survey Program: 106-MWD													Offset Well Error:		0.0 usft		
Reference		Offset		Semi Major Axis			Distance							Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor					
7,150.0	6,924.9	5,222.0	4,750.9	15.7	40.2	-29.43	-5,984.2	2,494.3	6,601.5	6,575.1	26.39	250.122					
7,185.0	6,936.7	5,222.0	4,750.9	15.9	40.2	-30.87	-5,984.2	2,494.3	6,576.5	6,550.1	26.39	249.182					
7,200.0	6,941.2	5,222.0	4,750.9	16.0	40.2	-31.54	-5,984.2	2,494.3	6,565.5	6,539.0	26.49	247.836					
7,250.0	6,954.2	5,251.8	4,776.8	16.3	40.5	-34.41	-5,988.3	2,508.3	6,527.5	6,500.0	27.53	237.134					
7,283.4	6,961.0	5,258.2	4,782.4	16.6	40.6	-36.46	-5,989.1	2,511.4	6,501.2	6,472.6	28.56	227.615					
7,300.0	6,963.8	5,261.1	4,784.9	16.7	40.6	-37.58	-5,989.5	2,512.7	6,487.9	6,458.7	29.19	222.275					
7,350.0	6,970.0	5,268.6	4,791.4	17.2	40.7	-41.36	-5,990.6	2,516.3	6,446.8	6,415.3	31.52	204.557					
7,381.9	6,972.1	5,272.4	4,794.8	17.5	40.7	-44.16	-5,991.1	2,518.1	6,419.8	6,386.6	33.28	192.910					
7,400.0	6,972.7	5,274.3	4,796.4	17.7	40.8	-45.89	-5,991.4	2,519.0	6,404.3	6,370.0	34.35	186.454					
7,420.0	6,972.8	5,276.1	4,798.0	17.9	40.8	-47.94	-5,991.7	2,519.8	6,387.0	6,351.5	35.57	179.559					
7,480.3	6,972.2	5,281.0	4,802.3	18.5	40.8	-48.03	-5,992.4	2,522.1	6,334.6	6,298.5	36.13	175.306					
7,500.0	6,972.0	5,282.7	4,803.7	18.7	40.9	-48.06	-5,992.6	2,522.9	6,317.5	6,281.2	36.32	173.945					
7,578.7	6,971.3	5,289.2	4,809.4	19.7	40.9	-48.17	-5,993.5	2,526.0	6,249.4	6,212.2	37.12	168.353					
7,600.0	6,971.1	5,291.0	4,810.9	19.9	40.9	-48.20	-5,993.8	2,526.8	6,231.0	6,193.6	37.34	166.881					
7,677.1	6,970.4	5,297.4	4,816.5	20.9	41.0	-48.32	-5,994.7	2,529.9	6,164.5	6,126.3	38.19	161.412					
7,700.0	6,970.2	5,299.4	4,818.2	21.2	41.0	-48.35	-5,995.0	2,530.8	6,144.9	6,106.4	38.44	159.838					
7,775.6	6,969.5	5,305.8	4,823.8	22.2	41.1	-48.46	-5,995.9	2,533.8	6,080.0	6,040.7	39.34	154.545					
7,800.0	6,969.3	5,307.9	4,825.6	22.6	41.1	-48.50	-5,996.2	2,534.8	6,059.1	6,019.5	39.63	152.884					
7,874.0	6,968.6	5,314.2	4,831.1	23.7	41.2	-48.61	-5,997.1	2,537.8	5,996.0	5,955.4	40.56	147.823					
7,900.0	6,968.4	5,316.5	4,833.1	24.1	41.2	-48.65	-5,997.5	2,538.9	5,973.8	5,932.9	40.89	146.098					
7,972.4	6,967.8	5,322.8	4,838.6	25.2	41.3	-48.76	-5,998.4	2,541.9	5,912.3	5,870.5	41.84	141.303					
8,000.0	6,967.5	5,325.2	4,840.7	25.6	41.3	-48.81	-5,998.7	2,543.0	5,889.0	5,846.8	42.21	139.532					
8,070.8	6,966.9	5,350.0	4,862.2	26.7	41.5	-49.24	-6,002.4	2,554.7	5,829.2	5,785.8	43.39	134.358					
8,100.0	6,966.6	5,350.0	4,862.2	27.2	41.5	-49.24	-6,002.4	2,554.7	5,804.6	5,760.9	43.76	132.659					
8,169.3	6,966.0	5,350.0	4,862.2	28.3	41.5	-49.24	-6,002.4	2,554.7	5,746.4	5,701.7	44.66	128.663					
8,200.0	6,965.7	5,350.0	4,862.2	28.8	41.5	-49.24	-6,002.4	2,554.7	5,720.7	5,675.6	45.06	126.943					
8,267.7	6,965.1	5,350.0	4,862.2	30.0	41.5	-49.24	-6,002.4	2,554.7	5,664.1	5,618.2	45.97	123.208					
8,300.0	6,964.8	5,353.6	4,865.4	30.5	41.6	-49.31	-6,002.9	2,556.4	5,637.3	5,590.8	46.45	121.363					
8,366.1	6,964.2	5,364.1	4,874.5	31.7	41.7	-49.50	-6,004.5	2,561.4	5,582.4	5,534.9	47.48	117.562					
8,400.0	6,963.9	5,369.5	4,879.2	32.2	41.7	-49.59	-6,005.3	2,563.9	5,554.4	5,506.3	48.02	115.676					
8,464.5	6,963.3	5,379.7	4,888.0	33.4	41.8	-49.77	-6,006.8	2,568.8	5,501.1	5,452.1	49.05	112.161					
8,500.0	6,963.0	5,385.3	4,892.9	34.0	41.9	-49.87	-6,007.6	2,571.4	5,472.0	5,422.4	49.61	110.292					
8,563.0	6,962.4	5,395.1	4,901.4	35.1	42.0	-50.05	-6,009.1	2,576.1	5,420.4	5,369.8	50.64	107.047					
8,600.0	6,962.0	5,400.9	4,906.4	35.8	42.1	-50.15	-6,009.9	2,578.8	5,390.2	5,338.9	51.24	105.198					
8,661.4	6,961.5	5,410.5	4,914.7	36.9	42.2	-50.32	-6,011.3	2,583.3	5,340.2	5,288.0	52.25	102.205					
8,700.0	6,961.1	5,416.4	4,919.9	37.6	42.2	-50.43	-6,012.2	2,586.1	5,308.9	5,256.1	52.89	100.381					
8,759.8	6,960.6	5,425.7	4,928.0	38.7	42.3	-50.59	-6,013.6	2,590.5	5,260.6	5,206.8	53.89	97.623					
8,800.0	6,960.2	5,431.9	4,933.3	39.4	42.4	-50.70	-6,014.5	2,593.4	5,228.3	5,173.8	54.56	95.828					
8,858.2	6,959.7	5,440.8	4,941.1	40.5	42.5	-50.86	-6,015.8	2,597.7	5,181.7	5,126.1	55.54	93.289					
8,900.0	6,959.3	5,447.2	4,946.6	41.2	42.5	-50.98	-6,016.7	2,600.7	5,148.3	5,092.1	56.25	91.523					
8,956.7	6,958.8	5,455.8	4,954.1	42.3	42.6	-51.13	-6,018.0	2,604.8	5,103.3	5,046.1	57.22	89.187					
9,000.0	6,958.4	5,462.4	4,959.8	43.1	42.7	-51.25	-6,018.9	2,607.9	5,069.0	5,011.1	57.96	87.453					
9,055.1	6,957.9	5,470.7	4,967.1	44.1	42.8	-51.40	-6,020.1	2,611.8	5,025.6	4,966.7	58.91	85.304					
9,100.0	6,957.5	5,477.5	4,973.0	44.9	42.9	-51.52	-6,021.1	2,615.0	4,990.4	4,930.7	59.69	83.604					
9,153.5	6,957.0	5,479.0	4,974.3	45.9	42.9	-51.55	-6,021.4	2,615.8	4,948.7	4,888.1	60.53	81.756					
9,200.0	6,956.6	5,479.0	4,974.3	46.8	42.9	-51.55	-6,021.4	2,615.8	4,912.6	4,851.3	61.24	80.221					
9,251.9	6,956.1	5,479.0	4,974.3	47.8	42.9	-51.55	-6,021.4	2,615.8	4,872.4	4,810.4	62.03	78.544					
9,300.0	6,955.7	5,479.0	4,974.3	48.7	42.9	-51.55	-6,021.4	2,615.8	4,835.5	4,772.8	62.77	77.035					
9,350.4	6,955.2	5,479.0	4,974.3	49.6	42.9	-51.55	-6,021.4	2,615.8	4,797.0	4,733.5	63.55	75.489					
9,400.0	6,954.8	5,479.0	4,974.3	50.6	42.9	-51.55	-6,021.4	2,615.8	4,759.3	4,695.0	64.31	74.005					
9,448.8	6,954.3	5,479.0	4,974.3	51.5	42.9	-51.55	-6,021.4	2,615.8	4,722.5	4,657.4	65.07	72.581					
9,500.0	6,953.9	5,479.0	4,974.3	52.5	42.9	-51.55	-6,021.4	2,615.8	4,684.1	4,618.2	65.86	71.125					

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 106-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,547.2	6,953.4	5,479.0	4,974.3	53.4	42.9	-51.55	-6,021.4	2,615.8	4,648.8	4,582.2	66.59	69.813	
9,600.0	6,952.9	5,479.0	4,974.3	54.4	42.9	-51.55	-6,021.4	2,615.8	4,609.7	4,542.3	67.41	68.384	
9,645.6	6,952.5	5,479.0	4,974.3	55.2	42.9	-51.55	-6,021.4	2,615.8	4,576.1	4,508.0	68.12	67.177	
9,700.0	6,952.0	5,479.0	4,974.3	56.3	42.9	-51.55	-6,021.4	2,615.8	4,536.3	4,467.4	68.97	65.777	
9,744.1	6,951.6	5,479.0	4,974.3	57.1	42.9	-51.55	-6,021.4	2,615.8	4,504.3	4,434.7	69.65	64.667	
9,800.0	6,951.1	5,518.2	5,008.2	58.2	43.3	-52.26	-6,027.2	2,634.5	4,463.6	4,392.4	71.18	62.706	
9,842.5	6,950.7	5,520.8	5,010.4	59.0	43.3	-52.30	-6,027.6	2,635.7	4,433.1	4,361.2	71.90	61.659	
9,900.0	6,950.2	5,524.3	5,013.5	60.1	43.4	-52.37	-6,028.1	2,637.4	4,392.2	4,319.3	72.86	60.279	
9,940.9	6,949.8	5,526.8	5,015.7	60.9	43.4	-52.41	-6,028.5	2,638.6	4,363.3	4,289.8	73.56	59.320	
10,000.0	6,949.3	5,530.5	5,018.8	62.0	43.4	-52.48	-6,029.1	2,640.4	4,321.9	4,247.4	74.56	57.969	
10,039.3	6,948.9	5,533.0	5,020.9	62.8	43.5	-52.52	-6,029.5	2,641.6	4,294.6	4,219.4	75.22	57.091	
10,100.0	6,948.4	5,536.8	5,024.3	64.0	43.5	-52.59	-6,030.1	2,643.4	4,252.8	4,176.6	76.26	55.771	
10,137.8	6,948.0	5,539.2	5,026.3	64.7	43.5	-52.64	-6,030.5	2,644.6	4,227.0	4,150.1	76.90	54.968	
10,200.0	6,947.5	5,543.2	5,029.8	65.9	43.6	-52.71	-6,031.1	2,646.6	4,184.9	4,107.0	77.96	53.678	
10,236.2	6,947.1	5,545.6	5,031.8	66.6	43.6	-52.75	-6,031.5	2,647.7	4,160.7	4,082.1	78.59	52.945	
10,300.0	6,946.6	5,549.8	5,035.4	67.8	43.6	-52.83	-6,032.1	2,649.7	4,118.4	4,038.7	79.68	51.685	
10,334.6	6,946.3	5,552.1	5,037.4	68.5	43.7	-52.87	-6,032.5	2,650.9	4,095.6	4,015.3	80.28	51.017	
10,400.0	6,945.7	5,556.4	5,041.1	69.8	43.7	-52.95	-6,033.2	2,653.0	4,053.1	3,971.7	81.41	49.787	
10,433.0	6,945.4	5,558.7	5,043.1	70.4	43.7	-52.99	-6,033.6	2,654.1	4,031.9	3,949.9	81.98	49.180	
10,500.0	6,944.7	5,563.2	5,047.0	71.7	43.8	-53.07	-6,034.3	2,656.3	3,989.3	3,906.1	83.14	47.980	
10,531.5	6,944.5	5,565.4	5,048.8	72.3	43.8	-53.11	-6,034.7	2,657.4	3,969.5	3,885.8	83.69	47.430	
10,600.0	6,943.8	5,570.2	5,052.9	73.7	43.9	-53.20	-6,035.4	2,659.7	3,926.9	3,842.0	84.89	46.260	
10,629.9	6,943.6	5,607.0	5,084.3	74.2	44.3	-53.87	-6,041.6	2,677.9	3,908.9	3,822.9	86.07	45.415	
10,700.0	6,942.9	5,607.0	5,084.3	75.6	44.3	-53.87	-6,041.6	2,677.9	3,866.4	3,779.2	87.21	44.333	
10,728.3	6,942.7	5,607.0	5,084.3	76.2	44.3	-53.87	-6,041.6	2,677.9	3,849.4	3,761.8	87.67	43.906	
10,800.0	6,942.0	5,985.7	5,417.7	77.6	48.0	-60.84	-6,093.0	2,849.5	3,806.7	3,711.1	95.59	39.824	
10,826.7	6,941.8	5,990.7	5,422.2	78.1	48.0	-60.94	-6,093.5	2,851.6	3,790.8	3,694.6	96.13	39.432	
10,900.0	6,941.1	5,992.0	5,423.4	79.5	48.0	-60.96	-6,093.7	2,852.1	3,747.8	3,650.4	97.43	38.467	
10,925.2	6,940.9	5,992.0	5,423.4	80.0	48.0	-60.96	-6,093.7	2,852.1	3,733.3	3,635.4	97.87	38.146	
11,000.0	6,940.2	5,992.0	5,423.4	81.5	48.0	-60.96	-6,093.7	2,852.1	3,690.8	3,591.6	99.17	37.215	
11,023.6	6,940.0	5,992.0	5,423.4	81.9	48.0	-60.96	-6,093.7	2,852.1	3,677.6	3,578.0	99.59	36.929	
11,100.0	6,939.3	5,992.0	5,423.4	83.4	48.0	-60.96	-6,093.7	2,852.1	3,635.6	3,534.6	100.92	36.024	
11,122.0	6,939.1	5,992.0	5,423.4	83.8	48.0	-60.96	-6,093.7	2,852.1	3,623.7	3,522.4	101.30	35.770	
11,200.0	6,938.4	6,016.9	5,445.8	85.4	48.2	-61.42	-6,096.4	2,862.6	3,582.2	3,479.1	103.09	34.747	
11,220.4	6,938.2	6,018.3	5,447.1	85.8	48.2	-61.45	-6,096.5	2,863.2	3,571.5	3,468.0	103.48	34.515	
11,300.0	6,937.4	6,023.8	5,452.0	87.3	48.3	-61.55	-6,097.1	2,865.5	3,530.8	3,425.9	104.97	33.638	
11,318.9	6,937.3	6,025.1	5,453.2	87.7	48.3	-61.58	-6,097.3	2,866.0	3,521.4	3,416.1	105.32	33.435	
11,400.0	6,936.5	6,030.7	5,458.2	89.3	48.4	-61.68	-6,097.9	2,868.4	3,481.6	3,374.8	106.84	32.586	
11,417.3	6,936.4	6,031.8	5,459.3	89.6	48.4	-61.70	-6,098.0	2,868.9	3,473.3	3,366.2	107.17	32.409	
11,500.0	6,935.6	6,037.5	5,464.4	91.3	48.4	-61.81	-6,098.6	2,871.3	3,434.6	3,325.9	108.73	31.589	
11,515.7	6,935.5	6,038.6	5,465.4	91.6	48.4	-61.83	-6,098.7	2,871.8	3,427.4	3,318.4	109.02	31.437	
11,600.0	6,934.7	6,044.4	5,470.6	93.2	48.5	-61.94	-6,099.4	2,874.2	3,389.8	3,279.2	110.61	30.645	
11,614.1	6,934.6	6,045.4	5,471.5	93.5	48.5	-61.96	-6,099.5	2,874.7	3,383.7	3,272.8	110.88	30.516	
11,700.0	6,933.8	6,051.4	5,476.8	95.2	48.5	-62.07	-6,100.1	2,877.2	3,347.4	3,234.9	112.51	29.753	
11,712.6	6,933.7	6,052.2	5,477.6	95.4	48.6	-62.08	-6,100.2	2,877.6	3,342.3	3,229.5	112.74	29.644	
11,800.0	6,932.9	6,058.3	5,483.0	97.1	48.6	-62.20	-6,100.9	2,880.1	3,307.5	3,193.1	114.40	28.911	
11,811.0	6,932.8	6,059.1	5,483.7	97.4	48.6	-62.21	-6,101.0	2,880.5	3,303.3	3,188.6	114.61	28.821	
11,900.0	6,932.0	6,065.3	5,489.3	99.1	48.7	-62.33	-6,101.6	2,883.1	3,270.1	3,153.8	116.30	28.117	
11,909.4	6,931.9	6,065.9	5,489.9	99.3	48.7	-62.34	-6,101.7	2,883.4	3,266.7	3,150.2	116.48	28.045	
12,000.0	6,931.0	6,072.2	5,495.5	101.1	48.7	-62.46	-6,102.4	2,886.1	3,235.4	3,117.2	118.21	27.370	
12,007.8	6,931.0	6,072.8	5,496.0	101.2	48.7	-62.47	-6,102.5	2,886.3	3,232.8	3,114.4	118.36	27.313	
12,100.0	6,930.1	6,079.2	5,501.8	103.0	48.8	-62.59	-6,103.2	2,889.1	3,203.3	3,083.2	120.12	26.668	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 106-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
12,106.3	6,930.1	6,079.7	5,502.2	103.2	48.8	-62.60	-6,103.2	2,889.3	3,201.4	3,081.2	120.24	26.626	
12,200.0	6,929.2	6,086.2	5,508.1	105.0	48.9	-62.72	-6,103.9	2,892.1	3,174.1	3,052.1	122.03	26.011	
12,204.7	6,929.2	6,086.6	5,508.4	105.1	48.9	-62.73	-6,104.0	2,892.2	3,172.8	3,050.7	122.12	25.981	
12,300.0	6,928.3	6,093.3	5,514.4	107.0	48.9	-62.85	-6,104.7	2,895.1	3,147.8	3,023.9	123.95	25.396	
12,303.1	6,928.3	6,093.5	5,514.6	107.1	48.9	-62.85	-6,104.7	2,895.2	3,147.0	3,023.0	124.01	25.377	
12,400.0	6,927.4	6,100.3	5,520.7	109.0	49.0	-62.98	-6,105.5	2,898.2	3,124.4	2,998.6	125.87	24.822	
12,401.5	6,927.4	6,100.4	5,520.8	109.0	49.0	-62.98	-6,105.5	2,898.2	3,124.1	2,998.2	125.90	24.814	
12,500.0	6,926.5	6,121.0	5,539.2	110.9	49.2	-63.37	-6,107.8	2,907.1	3,104.1	2,976.1	128.06	24.239	
12,598.4	6,925.6	6,121.0	5,539.2	112.9	49.2	-63.37	-6,107.8	2,907.1	3,087.1	2,957.3	129.83	23.779	
12,600.0	6,925.6	6,121.0	5,539.2	112.9	49.2	-63.37	-6,107.8	2,907.1	3,086.8	2,957.0	129.86	23.771	
12,696.8	6,924.7	6,121.0	5,539.2	114.8	49.2	-63.37	-6,107.8	2,907.1	3,073.1	2,941.5	131.59	23.353	
12,700.0	6,924.6	6,121.0	5,539.2	114.9	49.2	-63.37	-6,107.8	2,907.1	3,072.7	2,941.0	131.65	23.340	
12,795.2	6,923.8	6,121.0	5,539.2	116.8	49.2	-63.37	-6,107.8	2,907.1	3,062.2	2,928.8	133.36	22.962	
12,800.0	6,923.7	6,121.0	5,539.2	116.9	49.2	-63.37	-6,107.8	2,907.1	3,061.8	2,928.3	133.44	22.944	
12,893.7	6,922.9	6,137.9	5,554.3	118.7	49.3	-63.68	-6,109.6	2,914.5	3,054.4	2,918.9	135.47	22.546	
12,900.0	6,922.8	6,138.4	5,554.8	118.8	49.3	-63.69	-6,109.7	2,914.7	3,054.0	2,918.4	135.60	22.523	
12,992.1	6,922.0	6,146.2	5,561.7	120.6	49.4	-63.84	-6,110.6	2,918.0	3,049.7	2,912.3	137.41	22.194	
13,000.0	6,921.9	6,146.8	5,562.3	120.8	49.4	-63.85	-6,110.6	2,918.3	3,049.5	2,911.9	137.57	22.167	
13,088.8	6,921.1	6,154.3	5,569.0	122.6	49.5	-63.99	-6,111.5	2,921.6	3,048.2	2,908.9	139.32	21.879 CC	
13,090.5	6,921.1	6,154.4	5,569.1	122.6	49.5	-63.99	-6,111.5	2,921.7	3,048.2	2,908.9	139.36	21.873	
13,100.0	6,921.0	6,155.2	5,569.8	122.8	49.5	-64.01	-6,111.6	2,922.0	3,048.2	2,908.7	139.54	21.844	
13,188.9	6,920.2	6,162.7	5,576.5	124.5	49.6	-64.15	-6,112.4	2,925.3	3,049.8	2,908.5	141.31	21.583 ES	
13,200.0	6,920.1	6,163.7	5,577.3	124.8	49.6	-64.17	-6,112.5	2,925.7	3,050.2	2,908.7	141.53	21.552	
13,287.4	6,919.3	6,171.1	5,583.9	126.5	49.7	-64.30	-6,113.3	2,928.9	3,054.6	2,911.4	143.26	21.322	
13,300.0	6,919.1	6,172.1	5,584.9	126.7	49.7	-64.32	-6,113.4	2,929.4	3,055.5	2,911.9	143.51	21.291	
13,385.8	6,918.4	6,179.4	5,591.4	128.4	49.7	-64.46	-6,114.3	2,932.6	3,062.5	2,917.3	145.22	21.089	
13,400.0	6,918.2	6,180.6	5,592.5	128.7	49.7	-64.48	-6,114.4	2,933.1	3,063.9	2,918.4	145.50	21.058	
13,484.2	6,917.5	6,187.8	5,598.9	130.4	49.8	-64.62	-6,115.2	2,936.2	3,073.5	2,926.4	147.18	20.883	
13,500.0	6,917.3	6,189.1	5,600.1	130.7	49.8	-64.64	-6,115.3	2,936.8	3,075.6	2,928.1	147.49	20.852	
13,582.6	6,916.6	6,196.2	5,606.3	132.3	49.9	-64.77	-6,116.1	2,939.9	3,087.6	2,938.5	149.14	20.702	
13,600.0	6,916.4	6,197.6	5,607.7	132.7	49.9	-64.80	-6,116.3	2,940.5	3,090.4	2,940.9	149.49	20.673	
13,681.1	6,915.6	6,204.6	5,613.8	134.3	50.0	-64.93	-6,117.1	2,943.6	3,104.7	2,953.6	151.11	20.546	
13,700.0	6,915.5	6,206.2	5,615.3	134.6	50.0	-64.96	-6,117.2	2,944.3	3,108.4	2,956.9	151.49	20.519	
13,779.5	6,914.7	6,213.0	5,621.3	136.2	50.1	-65.09	-6,118.0	2,947.3	3,124.8	2,971.7	153.08	20.412	
13,800.0	6,914.6	6,214.8	5,622.9	136.6	50.1	-65.12	-6,118.2	2,948.1	3,129.4	2,975.9	153.49	20.387	
13,877.9	6,913.8	6,221.4	5,628.9	138.2	50.1	-65.25	-6,119.0	2,951.0	3,147.8	2,992.8	155.06	20.301	
13,900.0	6,913.6	6,223.3	5,630.6	138.6	50.1	-65.28	-6,119.2	2,951.8	3,153.4	2,997.9	155.50	20.279	
13,976.3	6,912.9	6,229.9	5,636.4	140.1	50.2	-65.40	-6,119.9	2,954.7	3,173.7	3,016.7	157.04	20.210	
14,000.0	6,912.7	6,232.0	5,638.2	140.6	50.2	-65.44	-6,120.1	2,955.6	3,180.4	3,022.8	157.52	20.191	
14,074.8	6,912.0	6,238.4	5,644.0	142.0	50.3	-65.56	-6,120.9	2,958.5	3,202.4	3,043.4	158.97	20.145	
14,079.0	6,912.0	6,238.8	5,644.3	142.1	50.3	-65.57	-6,120.9	2,958.6	3,203.7	3,044.6	159.05	20.143 SF	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 128-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	170.95	-5,114.8	814.3	5,179.3				
98.4	98.4	125.5	125.5	0.1	0.1	170.95	-5,114.3	814.4	5,178.9	5,178.8	0.17	N/A	
100.0	100.0	127.9	127.9	0.1	0.1	170.95	-5,114.3	814.4	5,178.9	5,178.7	0.17	N/A	
196.8	196.8	728.0	725.6	0.3	1.6	170.62	-5,075.5	838.4	5,173.0	5,171.1	1.92	2,689.300	
200.0	200.0	728.0	725.6	0.3	1.6	170.62	-5,075.5	838.4	5,172.7	5,170.7	1.93	2,679.266	
295.3	295.3	785.2	782.1	0.5	1.8	170.54	-5,068.7	844.2	5,163.0	5,160.6	2.34	2,209.156	
300.0	300.0	787.6	784.5	0.5	1.8	170.54	-5,068.4	844.5	5,162.5	5,160.2	2.36	2,191.214	
393.7	393.7	856.0	852.0	0.8	2.0	170.43	-5,060.7	852.8	5,153.9	5,151.1	2.80	1,841.242	
400.0	400.0	856.0	852.0	0.8	2.0	170.43	-5,060.7	852.8	5,153.3	5,150.5	2.81	1,831.770	
492.1	492.1	896.1	891.4	1.0	2.2	170.36	-5,056.5	858.4	5,145.6	5,142.4	3.17	1,622.449	
500.0	500.0	901.3	896.5	1.0	2.2	170.36	-5,055.9	859.2	5,144.9	5,141.7	3.21	1,603.325	
590.5	590.5	961.0	955.1	1.2	2.4	170.24	-5,049.7	869.0	5,138.0	5,134.3	3.64	1,411.828	
600.0	600.0	985.0	978.6	1.2	2.5	170.18	-5,047.2	873.3	5,137.3	5,133.6	3.75	1,369.309	
689.0	689.0	1,024.2	1,016.8	1.4	2.7	170.09	-5,043.2	880.9	5,131.0	5,126.9	4.12	1,245.175	
700.0	700.0	1,031.1	1,023.6	1.4	2.7	170.08	-5,042.5	882.3	5,130.3	5,126.1	4.18	1,228.641	
787.4	787.4	1,086.1	1,077.0	1.6	3.0	169.94	-5,037.0	893.8	5,124.8	5,120.2	4.61	1,111.644	
800.0	800.0	1,113.0	1,103.2	1.7	3.1	169.87	-5,034.4	899.7	5,124.1	5,119.4	4.76	1,077.550	
885.8	885.8	1,151.3	1,140.3	1.9	3.3	169.76	-5,030.8	908.5	5,119.3	5,114.2	5.12	998.960	
900.0	900.0	1,161.1	1,149.8	1.9	3.3	169.74	-5,029.9	910.7	5,118.5	5,113.3	5.20	984.031	
984.2	984.2	1,219.2	1,206.0	2.1	3.6	169.57	-5,024.6	924.5	5,114.4	5,108.8	5.66	903.761	
1,000.0	1,000.0	1,242.0	1,228.0	2.1	3.7	169.51	-5,022.5	930.0	5,113.7	5,107.9	5.80	881.742	
1,082.7	1,082.7	1,405.6	1,385.9	2.3	4.5	169.04	-5,006.1	969.7	5,109.1	5,102.4	6.75	756.566	
1,100.0	1,100.0	1,423.2	1,402.8	2.3	4.6	168.99	-5,004.2	974.0	5,108.0	5,101.1	6.88	742.730	
1,181.1	1,181.1	1,524.6	1,500.5	2.5	5.1	168.69	-4,993.0	999.0	5,103.0	5,095.4	7.56	675.423	
1,200.0	1,200.0	1,595.0	1,568.2	2.6	5.5	168.48	-4,984.7	1,016.1	5,101.6	5,093.7	7.95	642.111	
1,279.5	1,279.5	1,661.6	1,632.3	2.7	5.8	131.86	-4,976.4	1,032.1	5,096.3	5,087.9	8.39	607.505	
1,300.0	1,300.0	1,671.6	1,642.0	2.8	5.9	131.85	-4,975.2	1,034.5	5,095.3	5,086.8	8.48	600.790	
1,377.9	1,377.8	1,710.1	1,679.2	3.0	6.1	131.80	-4,970.8	1,043.4	5,092.7	5,083.8	8.83	576.636	
1,400.0	1,399.8	1,721.0	1,689.8	3.0	6.1	131.78	-4,969.6	1,045.9	5,092.3	5,083.3	8.93	570.203	
1,445.3	1,445.0	1,755.0	1,722.6	3.1	6.3	131.71	-4,966.1	1,053.6	5,092.0	5,082.8	9.19	554.089	
1,476.4	1,475.9	1,763.7	1,731.1	3.2	6.3	131.69	-4,965.2	1,055.6	5,092.2	5,082.9	9.30	547.516	
1,500.0	1,499.5	1,788.9	1,755.5	3.2	6.4	131.64	-4,962.7	1,061.2	5,092.5	5,083.1	9.47	537.552	
1,574.8	1,573.7	1,868.6	1,832.7	3.4	6.8	131.47	-4,954.6	1,079.4	5,094.4	5,084.3	10.03	508.041	
1,600.0	1,598.7	1,899.8	1,862.8	3.5	7.0	131.41	-4,951.4	1,086.7	5,095.2	5,085.0	10.24	497.720	
1,673.2	1,671.1	2,007.4	1,967.0	3.7	7.5	131.20	-4,939.8	1,111.3	5,098.4	5,087.4	10.95	465.758	
1,700.0	1,697.5	2,012.0	1,971.4	3.7	7.5	131.17	-4,939.3	1,112.3	5,099.8	5,088.7	11.03	462.227	
1,771.6	1,767.9	2,072.3	2,029.8	4.0	7.8	131.02	-4,932.8	1,126.0	5,104.5	5,093.0	11.50	443.890	
1,800.1	1,795.7	2,090.4	2,047.3	4.0	7.9	130.97	-4,931.0	1,130.1	5,106.8	5,095.1	11.66	438.095	
1,870.1	1,864.2	2,140.0	2,095.4	4.3	8.1	130.92	-4,926.1	1,141.3	5,112.9	5,100.9	12.09	422.772	
1,900.0	1,893.4	2,301.0	2,251.3	4.4	8.9	130.77	-4,908.1	1,177.2	5,114.9	5,102.0	12.94	395.135	
1,968.5	1,960.4	2,367.7	2,315.9	4.6	9.2	130.71	-4,900.0	1,191.5	5,119.3	5,105.9	13.47	380.188	
2,000.0	1,991.3	2,397.0	2,344.4	4.7	9.4	130.68	-4,896.5	1,197.6	5,121.3	5,107.6	13.70	373.887	
2,066.9	2,056.7	2,446.6	2,392.5	5.0	9.6	130.64	-4,890.7	1,207.8	5,125.8	5,111.7	14.13	362.811	
2,100.0	2,089.1	2,470.5	2,415.8	5.1	9.7	130.63	-4,887.9	1,212.8	5,128.1	5,113.7	14.34	357.572	
2,165.3	2,153.0	2,526.0	2,469.7	5.3	10.0	130.58	-4,881.7	1,224.2	5,132.7	5,117.9	14.80	346.800	
2,200.0	2,186.9	2,526.0	2,469.7	5.5	10.0	130.58	-4,881.7	1,224.2	5,135.4	5,120.4	14.91	344.322	
2,263.8	2,249.3	2,576.9	2,519.2	5.7	10.2	130.54	-4,876.3	1,234.7	5,140.3	5,125.0	15.35	334.784	
2,300.0	2,284.7	2,598.0	2,539.7	5.8	10.3	130.53	-4,874.2	1,239.0	5,143.3	5,127.7	15.57	330.339	
2,362.2	2,345.5	2,654.0	2,594.3	6.1	10.5	130.49	-4,868.8	1,250.6	5,148.7	5,132.7	16.03	321.168	
2,400.0	2,382.5	2,657.9	2,598.1	6.2	10.6	130.49	-4,868.5	1,251.4	5,152.1	5,135.9	16.18	318.472	
2,460.6	2,441.8	2,721.3	2,659.9	6.5	10.8	130.44	-4,862.7	1,264.2	5,157.6	5,141.0	16.66	309.578	
2,500.0	2,480.3	2,762.4	2,700.1	6.6	11.0	130.42	-4,859.0	1,272.3	5,161.2	5,144.2	16.97	304.064	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design													SE SE SEC. 18 T4N R64W 6th P.M. - NEI C18-21D - Wellbore #1 - Wellbore #1		Offset Site Error:		0.0 usft
Survey Program: 128-MWD													Offset Well Error:		0.0 usft		
Reference		Offset		Semi Major Axis			Distance							Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor					
2,559.0	2,538.1	2,829.6	2,765.7	6.9	11.3	130.38	-4,853.0	1,285.0	5,166.5	5,149.1	17.45	295.996					
2,600.0	2,578.1	2,877.9	2,813.1	7.0	11.5	130.36	-4,848.7	1,293.6	5,170.1	5,152.4	17.79	290.608					
2,657.5	2,634.4	2,946.3	2,880.3	7.3	11.8	130.35	-4,842.7	1,304.8	5,175.1	5,156.9	18.25	283.608					
2,700.0	2,675.9	2,997.1	2,930.4	7.5	11.9	130.35	-4,838.3	1,312.2	5,178.7	5,160.1	18.57	278.825					
2,755.9	2,730.6	3,039.0	2,971.8	7.7	12.1	130.35	-4,834.8	1,317.6	5,183.4	5,164.5	18.92	274.004					
2,800.0	2,773.8	3,039.0	2,971.8	7.9	12.1	130.35	-4,834.8	1,317.6	5,187.4	5,168.3	19.08	271.943					
2,854.3	2,826.9	3,095.7	3,028.0	8.1	12.2	130.38	-4,830.6	1,323.8	5,192.2	5,172.8	19.42	267.403					
2,857.4	2,829.9	3,097.2	3,029.4	8.1	12.2	130.38	-4,830.6	1,323.9	5,192.5	5,173.0	19.43	267.217					
2,900.0	2,871.6	3,117.4	3,049.6	8.3	12.3	130.45	-4,829.3	1,325.8	5,196.4	5,176.8	19.63	264.772					
2,952.7	2,923.5	3,168.0	3,100.0	8.4	12.4	130.55	-4,826.8	1,329.5	5,201.1	5,181.2	19.90	261.333					
3,000.0	2,970.1	3,168.0	3,100.0	8.6	12.4	130.60	-4,826.8	1,329.5	5,204.7	5,184.7	20.03	259.820					
3,051.2	3,020.7	3,168.0	3,100.0	8.7	12.4	130.66	-4,826.8	1,329.5	5,208.6	5,188.4	20.16	258.344					
3,100.0	3,069.1	3,210.8	3,142.7	8.9	12.5	130.73	-4,825.4	1,331.7	5,211.8	5,191.4	20.35	256.049					
3,149.6	3,118.3	3,233.5	3,165.4	9.0	12.5	130.79	-4,824.8	1,332.7	5,214.8	5,194.3	20.50	254.326					
3,200.0	3,168.5	3,256.7	3,188.5	9.1	12.6	130.84	-4,824.4	1,333.5	5,217.6	5,197.0	20.66	252.606					
3,248.0	3,216.3	3,296.0	3,227.8	9.2	12.6	130.89	-4,824.1	1,334.3	5,220.0	5,199.2	20.82	250.776					
3,300.0	3,268.2	3,314.3	3,246.1	9.3	12.7	130.93	-4,824.1	1,334.6	5,222.2	5,201.2	20.94	249.387					
3,346.4	3,314.6	3,374.3	3,306.1	9.4	12.7	130.97	-4,823.9	1,335.5	5,223.6	5,202.5	21.10	247.597					
3,400.0	3,368.1	3,436.3	3,368.1	9.5	12.8	130.99	-4,823.6	1,336.3	5,224.5	5,203.2	21.27	245.657					
3,444.9	3,413.0	3,473.0	3,404.8	9.6	12.9	130.99	-4,823.4	1,336.7	5,224.7	5,203.4	21.38	244.390					
3,457.5	3,425.6	3,483.3	3,415.1	9.6	12.9	167.49	-4,823.4	1,336.8	5,224.8	5,203.3	21.42	243.868					
3,484.8	3,452.9	3,505.6	3,437.4	9.6	12.9	167.49	-4,823.3	1,336.9	5,224.7	5,203.2	21.50	243.026					
3,500.0	3,468.1	3,518.1	3,449.9	9.7	12.9	167.49	-4,823.3	1,337.0	5,224.7	5,203.2	21.54	242.561					
3,543.3	3,511.4	3,553.0	3,484.8	9.7	13.0	167.49	-4,823.3	1,337.2	5,224.8	5,203.1	21.66	241.172					
3,600.0	3,568.1	3,595.8	3,527.5	9.8	13.0	167.49	-4,823.4	1,337.3	5,225.0	5,203.2	21.82	239.459					
3,641.7	3,609.9	3,626.9	3,558.7	9.9	13.1	167.49	-4,823.6	1,337.4	5,225.2	5,203.3	21.93	238.215					
3,700.0	3,668.1	3,681.0	3,612.8	10.0	13.1	167.49	-4,824.0	1,337.6	5,225.7	5,203.6	22.11	236.369					
3,740.1	3,708.3	3,706.1	3,637.9	10.1	13.1	167.49	-4,824.3	1,337.7	5,226.1	5,203.9	22.21	235.295					
3,800.0	3,768.1	3,763.8	3,695.5	10.2	13.2	167.49	-4,825.0	1,337.4	5,226.8	5,204.4	22.39	233.482					
3,838.6	3,806.7	3,800.9	3,732.7	10.2	13.2	167.50	-4,825.5	1,337.0	5,227.2	5,204.7	22.50	232.326					
3,900.0	3,868.1	3,938.0	3,869.8	10.3	13.4	167.52	-4,826.5	1,335.3	5,227.5	5,204.7	22.76	229.676					
3,937.0	3,905.1	3,964.8	3,896.6	10.4	13.4	167.52	-4,826.5	1,335.0	5,227.4	5,204.5	22.86	228.684					
3,959.3	3,927.5	3,980.2	3,912.0	10.4	13.4	167.52	-4,826.5	1,334.8	5,227.4	5,204.5	22.92	228.100					
4,000.0	3,968.1	4,008.2	3,939.9	10.5	13.5	167.53	-4,826.6	1,334.3	5,227.4	5,204.4	23.02	227.048					
4,035.4	4,003.6	4,032.5	3,964.3	10.6	13.5	167.53	-4,826.8	1,333.9	5,227.6	5,204.4	23.12	226.139					
4,100.0	4,068.1	4,080.1	4,011.8	10.7	13.5	167.54	-4,827.4	1,332.8	5,228.0	5,204.7	23.29	224.488					
4,133.8	4,102.0	4,110.0	4,041.7	10.8	13.6	167.55	-4,827.8	1,332.2	5,228.2	5,204.9	23.38	223.599					
4,200.0	4,168.1	4,169.0	4,100.7	10.9	13.6	167.57	-4,828.6	1,330.9	5,228.9	5,205.3	23.57	221.878					
4,232.3	4,200.4	4,197.6	4,129.3	10.9	13.6	167.58	-4,829.0	1,330.3	5,229.2	5,205.5	23.66	221.040					
4,300.0	4,268.1	4,329.9	4,261.6	11.1	13.8	167.60	-4,830.0	1,328.5	5,229.5	5,205.5	23.94	218.469					
4,330.7	4,298.8	4,360.2	4,291.9	11.1	13.8	167.60	-4,830.0	1,328.1	5,229.4	5,205.4	24.03	217.617					
4,400.0	4,368.1	4,428.5	4,360.2	11.2	13.9	167.62	-4,830.2	1,326.7	5,229.3	5,205.1	24.24	215.720					
4,429.1	4,397.3	4,452.0	4,383.6	11.3	13.9	167.62	-4,830.4	1,326.0	5,229.3	5,204.9	24.32	214.982					
4,454.4	4,422.5	4,475.4	4,407.0	11.3	13.9	167.63	-4,830.5	1,325.2	5,229.2	5,204.8	24.40	214.345					
4,500.0	4,468.1	4,510.3	4,441.9	11.4	14.0	167.65	-4,830.8	1,324.1	5,229.3	5,204.8	24.52	213.269					
4,527.5	4,495.7	4,531.4	4,463.0	11.5	14.0	167.65	-4,831.0	1,323.5	5,229.4	5,204.8	24.59	212.624					
4,600.0	4,568.1	4,708.0	4,639.5	11.6	14.2	167.70	-4,831.3	1,319.2	5,229.4	5,204.5	24.93	209.742					
4,626.0	4,594.1	4,708.0	4,639.5	11.7	14.2	167.70	-4,831.3	1,319.2	5,229.1	5,204.1	24.98	209.293					
4,700.0	4,668.1	4,763.2	4,694.7	11.8	14.3	167.70	-4,830.6	1,318.7	5,228.1	5,202.9	25.21	207.417					
4,724.4	4,692.5	4,774.9	4,706.4	11.8	14.3	167.70	-4,830.6	1,318.6	5,228.0	5,202.7	25.27	206.881					
4,749.4	4,717.6	4,786.9	4,718.4	11.9	14.3	167.71	-4,830.5	1,318.5	5,227.8	5,202.5	25.34	206.336					
4,800.0	4,768.1	4,837.0	4,768.5	12.0	14.4	167.71	-4,830.7	1,318.1	5,227.9	5,202.4	25.51	204.976					

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 usft
Survey Program: 128-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		
4,815.9	4,784.0	4,837.0	4,768.5	12.0	14.4	167.71	-4,830.7	1,318.1	5,227.9	5,202.4	25.54	204.719		
4,822.8	4,791.0	4,837.0	4,768.5	12.0	14.4	167.71	-4,830.7	1,318.1	5,227.9	5,202.4	25.55	204.608		
4,900.0	4,868.1	4,965.0	4,896.5	12.2	14.5	167.71	-4,829.9	1,317.8	5,227.3	5,201.4	25.89	201.889		
4,921.2	4,889.4	5,003.7	4,935.2	12.2	14.6	167.71	-4,829.3	1,317.8	5,226.8	5,200.8	25.99	201.078		
5,000.0	4,968.1	5,040.2	4,971.7	12.4	14.7	167.71	-4,829.0	1,317.9	5,226.2	5,200.0	26.21	199.406		
5,019.7	4,987.8	5,049.3	4,980.8	12.4	14.7	167.71	-4,828.9	1,317.9	5,226.2	5,199.9	26.26	198.995		
5,035.6	5,003.7	5,056.7	4,988.2	12.4	14.7	167.71	-4,828.9	1,318.0	5,226.2	5,199.8	26.31	198.666		
5,100.0	5,068.1	5,094.0	5,025.5	12.6	14.7	167.71	-4,829.1	1,318.1	5,226.4	5,199.9	26.49	197.265		
5,118.1	5,086.2	5,096.3	5,027.9	12.6	14.7	167.71	-4,829.1	1,318.1	5,226.5	5,200.0	26.53	196.970		
5,200.0	5,168.1	5,191.4	5,122.9	12.8	14.9	167.70	-4,829.6	1,318.6	5,227.1	5,200.2	26.85	194.692		
5,216.5	5,184.7	5,210.6	5,142.1	12.8	14.9	167.70	-4,829.7	1,318.7	5,227.2	5,200.3	26.91	194.237		
5,300.0	5,268.1	5,282.3	5,213.8	13.0	15.0	167.70	-4,830.1	1,319.1	5,227.7	5,200.5	27.19	192.252		
5,314.9	5,283.1	5,294.5	5,226.0	13.0	15.0	167.70	-4,830.2	1,319.1	5,227.8	5,200.5	27.24	191.908		
5,400.0	5,368.1	5,369.9	5,301.4	13.1	15.2	167.70	-4,830.9	1,319.2	5,228.6	5,201.0	27.53	189.915		
5,413.4	5,381.5	5,385.4	5,316.9	13.2	15.2	167.70	-4,831.0	1,319.2	5,228.7	5,201.1	27.58	189.566		
5,500.0	5,468.1	5,484.3	5,415.8	13.3	15.3	167.70	-4,831.8	1,319.7	5,229.4	5,201.5	27.91	187.340		
5,511.8	5,479.9	5,495.5	5,427.0	13.4	15.3	167.70	-4,831.8	1,319.7	5,229.5	5,201.5	27.96	187.062		
5,600.0	5,568.1	5,579.6	5,511.2	13.5	15.5	167.69	-4,832.4	1,320.0	5,230.2	5,201.9	28.27	185.013		
5,610.2	5,578.4	5,589.4	5,520.9	13.6	15.5	167.69	-4,832.5	1,320.0	5,230.2	5,201.9	28.31	184.779		
5,700.0	5,668.1	5,664.9	5,596.4	13.7	15.6	167.70	-4,833.2	1,320.0	5,231.1	5,202.5	28.61	182.851		
5,708.6	5,676.8	5,671.9	5,603.4	13.8	15.6	167.70	-4,833.3	1,320.0	5,231.2	5,202.5	28.64	182.670		
5,800.0	5,768.1	5,747.2	5,678.7	13.9	15.7	167.70	-4,834.2	1,320.2	5,232.3	5,203.4	28.94	180.772		
5,807.1	5,775.2	5,753.5	5,685.0	14.0	15.7	167.70	-4,834.3	1,320.3	5,232.4	5,203.4	28.97	180.618		
5,900.0	5,868.1	5,836.9	5,768.4	14.1	15.9	167.69	-4,835.4	1,321.0	5,233.8	5,204.5	29.30	178.633		
5,905.5	5,873.6	5,841.9	5,773.4	14.1	15.9	167.69	-4,835.5	1,321.0	5,233.9	5,204.6	29.32	178.517		
6,000.0	5,968.1	5,979.8	5,911.3	14.3	16.1	167.68	-4,837.1	1,322.2	5,235.2	5,205.4	29.74	176.015		
6,003.9	5,972.1	5,986.3	5,917.8	14.3	16.1	167.68	-4,837.1	1,322.2	5,235.2	5,205.4	29.76	175.904		
6,100.0	6,068.1	6,085.9	6,017.4	14.5	16.3	167.68	-4,837.7	1,322.6	5,235.9	5,205.7	30.13	173.791		
6,102.3	6,070.5	6,088.3	6,019.8	14.5	16.3	167.68	-4,837.7	1,322.6	5,235.9	5,205.7	30.14	173.741		
6,200.0	6,168.1	6,277.9	6,209.3	14.7	16.6	167.65	-4,837.1	1,324.9	5,236.0	5,205.3	30.67	170.698		
6,200.8	6,168.9	6,279.7	6,211.1	14.7	16.6	167.65	-4,837.1	1,324.9	5,235.9	5,205.3	30.68	170.671		
6,288.5	6,256.6	6,422.0	6,353.4	14.9	16.9	167.64	-4,834.3	1,325.8	5,234.3	5,203.2	31.12	168.218		
6,299.2	6,267.3	6,432.5	6,363.9	14.9	16.9	-12.58	-4,834.1	1,325.8	5,234.0	5,202.8	31.13	168.125		
6,300.0	6,268.1	6,433.3	6,364.7	14.9	16.9	-12.58	-4,834.1	1,325.8	5,233.9	5,202.8	31.13	168.115		
6,350.0	6,318.1	6,482.0	6,413.4	15.0	17.0	-12.65	-4,832.9	1,326.1	5,230.4	5,199.2	31.16	167.830		
6,397.6	6,365.3	6,506.0	6,437.4	15.1	17.0	-12.78	-4,832.4	1,326.3	5,223.9	5,192.9	31.05	168.269		
6,400.0	6,367.7	6,506.0	6,437.4	15.1	17.0	-12.79	-4,832.4	1,326.3	5,223.5	5,192.5	31.03	168.314		
6,450.0	6,416.8	6,552.8	6,484.2	15.1	17.1	-13.00	-4,831.4	1,326.5	5,213.4	5,182.6	30.83	169.115		
6,496.0	6,461.3	6,581.0	6,512.4	15.1	17.1	-13.24	-4,831.0	1,326.6	5,201.3	5,170.8	30.51	170.466		
6,500.0	6,465.1	6,583.4	6,514.8	15.1	17.1	-13.27	-4,831.0	1,326.6	5,200.1	5,169.7	30.48	170.602		
6,550.0	6,512.4	6,634.0	6,565.4	15.1	17.2	-13.64	-4,830.4	1,326.7	5,183.9	5,153.8	30.07	172.420		
6,594.5	6,553.4	6,634.0	6,565.4	15.1	17.2	-13.99	-4,830.4	1,326.7	5,166.7	5,137.2	29.54	174.931		
6,600.0	6,558.4	6,634.0	6,565.4	15.1	17.2	-14.04	-4,830.4	1,326.7	5,164.5	5,135.0	29.47	175.272		
6,650.0	6,603.0	6,676.5	6,607.9	15.1	17.3	-14.59	-4,830.2	1,326.7	5,142.2	5,113.3	28.85	178.210		
6,692.9	6,639.9	6,703.6	6,634.9	15.1	17.3	-15.15	-4,830.1	1,326.8	5,120.7	5,092.5	28.26	181.217		
6,700.0	6,645.9	6,708.0	6,639.3	15.1	17.4	-15.25	-4,830.1	1,326.8	5,117.0	5,088.8	28.15	181.747		
6,750.0	6,686.8	6,738.1	6,669.4	15.1	17.4	-16.04	-4,830.0	1,326.9	5,089.1	5,061.7	27.40	185.731		
6,791.3	6,719.1	6,763.0	6,694.4	15.1	17.4	-16.82	-4,830.0	1,327.1	5,064.0	5,037.2	26.75	189.281		
6,800.0	6,725.7	6,763.0	6,694.4	15.1	17.4	-16.98	-4,830.0	1,327.1	5,058.5	5,031.9	26.61	190.116		
6,850.0	6,762.3	6,797.3	6,728.6	15.1	17.5	-18.16	-4,830.1	1,327.3	5,025.5	4,999.6	25.83	194.527		
6,889.7	6,789.7	6,819.8	6,751.2	15.1	17.5	-19.25	-4,830.2	1,327.4	4,997.5	4,972.3	25.24	198.028		
6,900.0	6,796.5	6,825.5	6,756.8	15.1	17.6	-19.56	-4,830.2	1,327.4	4,990.1	4,965.0	25.09	198.897		

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 HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 128-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	
6,950.0	6,828.0	6,852.0	6,783.4	15.1	17.6	-21.29	-4,830.3	1,327.6	4,952.5	4,928.0	24.43	202.731	
6,988.2	6,850.2	6,871.8	6,803.2	15.1	17.6	-22.87	-4,830.4	1,327.7	4,922.4	4,898.4	24.02	204.947	
7,000.0	6,856.7	6,877.8	6,809.2	15.1	17.6	-23.42	-4,830.4	1,327.7	4,912.8	4,888.9	23.92	205.375	
7,050.0	6,882.5	6,903.0	6,834.4	15.2	17.7	-26.09	-4,830.6	1,327.8	4,871.4	4,847.7	23.65	205.967	
7,086.6	6,899.5	6,920.8	6,852.2	15.3	17.7	-28.51	-4,830.7	1,327.8	4,840.0	4,816.3	23.67	204.500	
7,100.0	6,905.3	6,926.9	6,858.2	15.4	17.7	-29.50	-4,830.7	1,327.9	4,828.3	4,804.5	23.72	203.527	
7,150.0	6,924.9	6,947.4	6,878.7	15.7	17.8	-33.89	-4,830.8	1,328.0	4,783.7	4,759.5	24.25	197.250	
7,185.0	6,936.7	6,959.7	6,891.1	15.9	17.8	-37.74	-4,830.9	1,328.0	4,751.8	4,726.8	24.96	190.344	
7,200.0	6,941.2	6,964.5	6,895.9	16.0	17.8	-39.62	-4,830.9	1,328.1	4,738.0	4,712.6	25.36	186.837	
7,250.0	6,954.2	6,978.2	6,909.6	16.3	17.8	-47.18	-4,831.0	1,328.1	4,691.2	4,664.1	27.11	173.050	
7,283.4	6,961.0	6,985.4	6,916.7	16.6	17.8	-53.53	-4,831.0	1,328.2	4,659.5	4,630.9	28.60	162.921	
7,300.0	6,963.8	6,988.4	6,919.7	16.7	17.8	-57.11	-4,831.0	1,328.2	4,643.7	4,614.3	29.39	158.013	
7,350.0	6,970.0	6,994.9	6,926.3	17.2	17.8	-69.71	-4,831.1	1,328.3	4,595.7	4,564.0	31.70	144.989	
7,381.9	6,972.1	6,997.3	6,928.6	17.5	17.8	-78.95	-4,831.1	1,328.3	4,564.9	4,532.1	32.77	139.300	
7,400.0	6,972.7	6,997.9	6,929.3	17.7	17.8	-84.46	-4,831.1	1,328.3	4,547.4	4,514.2	33.12	137.313	
7,420.0	6,972.8	6,998.1	6,929.5	17.9	17.8	-90.60	-4,831.1	1,328.3	4,528.0	4,494.8	33.25	136.198	
7,480.3	6,972.2	6,997.9	6,929.2	18.5	17.8	-90.59	-4,831.1	1,328.3	4,469.7	4,435.8	33.89	131.887	
7,500.0	6,972.0	6,997.8	6,929.1	18.7	17.8	-90.58	-4,831.1	1,328.3	4,450.6	4,416.5	34.10	130.514	
7,578.7	6,971.3	6,997.4	6,928.8	19.7	17.8	-90.57	-4,831.1	1,328.3	4,374.6	4,339.6	35.03	124.898	
7,600.0	6,971.1	6,997.3	6,928.7	19.9	17.8	-90.56	-4,831.1	1,328.3	4,354.0	4,318.8	35.28	123.431	
7,677.1	6,970.4	6,996.9	6,928.3	20.9	17.8	-90.54	-4,831.1	1,328.3	4,279.6	4,243.4	36.27	118.004	
7,700.0	6,970.2	6,996.8	6,928.2	21.2	17.8	-90.54	-4,831.1	1,328.3	4,257.6	4,221.1	36.56	116.454	
7,775.6	6,969.5	6,996.5	6,927.8	22.2	17.8	-90.52	-4,831.1	1,328.3	4,184.9	4,147.3	37.61	111.269	
7,800.0	6,969.3	6,996.4	6,927.7	22.6	17.8	-90.51	-4,831.1	1,328.3	4,161.4	4,123.4	37.95	109.655	
7,874.0	6,968.6	6,996.0	6,927.4	23.7	17.8	-90.50	-4,831.1	1,328.3	4,090.3	4,051.2	39.04	104.768	
7,900.0	6,968.4	6,995.9	6,927.3	24.1	17.8	-90.49	-4,831.1	1,328.3	4,065.3	4,025.9	39.42	103.116	
7,972.4	6,967.8	6,995.6	6,926.9	25.2	17.8	-90.48	-4,831.1	1,328.3	3,995.8	3,955.3	40.54	98.556	
8,000.0	6,967.5	6,995.4	6,926.8	25.6	17.8	-90.47	-4,831.1	1,328.3	3,969.4	3,928.5	40.97	96.886	
8,070.8	6,966.9	6,995.1	6,926.5	26.7	17.8	-90.45	-4,831.1	1,328.3	3,901.6	3,859.5	42.11	92.661	
8,100.0	6,966.6	6,995.0	6,926.4	27.2	17.8	-90.45	-4,831.1	1,328.3	3,873.8	3,831.2	42.57	90.989	
8,169.3	6,966.0	6,994.7	6,926.0	28.3	17.8	-90.43	-4,831.1	1,328.3	3,807.6	3,763.9	43.72	87.093	
8,200.0	6,965.7	6,994.5	6,925.9	28.8	17.8	-90.42	-4,831.1	1,328.3	3,778.3	3,734.1	44.23	85.430	
8,267.7	6,965.1	6,994.2	6,925.6	30.0	17.8	-90.41	-4,831.1	1,328.3	3,713.8	3,668.5	45.37	81.850	
8,300.0	6,964.8	6,994.1	6,925.4	30.5	17.8	-90.40	-4,831.1	1,328.3	3,683.1	3,637.2	45.92	80.206	
8,366.1	6,964.2	6,993.8	6,925.1	31.7	17.8	-90.39	-4,831.1	1,328.2	3,620.3	3,573.2	47.06	76.924	
8,400.0	6,963.9	6,993.6	6,925.0	32.2	17.8	-90.38	-4,831.1	1,328.2	3,588.2	3,540.5	47.65	75.305	
8,464.5	6,963.3	6,993.3	6,924.7	33.4	17.8	-90.36	-4,831.1	1,328.2	3,527.0	3,478.3	48.78	72.301	
8,500.0	6,963.0	6,993.2	6,924.5	34.0	17.8	-90.36	-4,831.1	1,328.2	3,493.5	3,444.1	49.41	70.711	
8,563.0	6,962.4	6,992.9	6,924.2	35.1	17.8	-90.34	-4,831.1	1,328.2	3,434.1	3,383.5	50.53	67.964	
8,600.0	6,962.0	6,992.7	6,924.1	35.8	17.8	-90.33	-4,831.1	1,328.2	3,399.2	3,348.0	51.19	66.406	
8,661.4	6,961.5	6,992.4	6,923.8	36.9	17.8	-90.32	-4,831.1	1,328.2	3,341.4	3,289.1	52.29	63.895	
8,700.0	6,961.1	6,992.3	6,923.6	37.6	17.8	-90.31	-4,831.1	1,328.2	3,305.1	3,252.2	52.99	62.372	
8,759.8	6,960.6	6,992.0	6,923.4	38.7	17.8	-90.30	-4,831.1	1,328.2	3,249.1	3,195.0	54.08	60.078	
8,800.0	6,960.2	6,991.8	6,923.2	39.4	17.8	-90.29	-4,831.1	1,328.2	3,211.5	3,156.7	54.81	58.591	
8,858.2	6,959.7	6,991.6	6,922.9	40.5	17.8	-90.28	-4,831.1	1,328.2	3,157.1	3,101.2	55.88	56.496	
8,900.0	6,959.3	6,991.4	6,922.7	41.2	17.8	-90.27	-4,831.1	1,328.2	3,118.2	3,061.6	56.65	55.044	
8,956.7	6,958.8	6,991.1	6,922.5	42.3	17.8	-90.25	-4,831.1	1,328.2	3,065.6	3,007.9	57.70	53.130	
9,000.0	6,958.4	6,990.9	6,922.3	43.1	17.8	-90.24	-4,831.1	1,328.2	3,025.4	2,966.9	58.50	51.715	
9,055.1	6,957.9	6,990.7	6,922.0	44.1	17.8	-90.23	-4,831.1	1,328.2	2,974.4	2,914.9	59.53	49.967	
9,100.0	6,957.5	6,990.5	6,921.8	44.9	17.8	-90.22	-4,831.1	1,328.2	2,933.0	2,872.7	60.36	48.589	
9,153.5	6,957.0	6,990.2	6,921.6	45.9	17.8	-90.21	-4,831.1	1,328.2	2,883.8	2,822.4	61.37	46.992	
9,200.0	6,956.6	6,990.0	6,921.4	46.8	17.8	-90.20	-4,831.1	1,328.2	2,841.2	2,778.9	62.24	45.650	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 128-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	
9,251.9	6,956.1	6,989.8	6,921.2	47.8	17.8	-90.19	-4,831.0	1,328.2	2,793.7	2,730.5	63.22	44.192	
9,300.0	6,955.7	6,989.6	6,920.9	48.7	17.8	-90.18	-4,831.0	1,328.2	2,749.9	2,685.8	64.12	42.886	
9,350.4	6,955.2	6,989.4	6,920.7	49.6	17.8	-90.17	-4,831.0	1,328.2	2,704.1	2,639.1	65.07	41.555	
9,400.0	6,954.8	6,989.1	6,920.5	50.6	17.8	-90.16	-4,831.0	1,328.2	2,659.2	2,593.2	66.01	40.283	
9,448.8	6,954.3	6,988.9	6,920.3	51.5	17.8	-90.15	-4,831.0	1,328.2	2,615.2	2,548.3	66.94	39.069	
9,500.0	6,953.9	6,988.7	6,920.1	52.5	17.8	-90.13	-4,831.0	1,328.2	2,569.3	2,501.4	67.91	37.832	
9,547.2	6,953.4	6,988.5	6,919.9	53.4	17.8	-90.12	-4,831.0	1,328.2	2,527.1	2,458.2	68.81	36.724	
9,600.0	6,952.9	6,988.3	6,919.6	54.4	17.8	-90.11	-4,831.0	1,328.2	2,480.1	2,410.3	69.82	35.522	
9,645.6	6,952.5	6,988.1	6,919.4	55.2	17.8	-90.10	-4,831.0	1,328.2	2,439.7	2,369.0	70.69	34.511	
9,700.0	6,952.0	6,987.8	6,919.2	56.3	17.8	-90.09	-4,831.0	1,328.2	2,391.8	2,320.0	71.73	33.344	
9,744.1	6,951.6	6,987.6	6,919.0	57.1	17.8	-90.08	-4,831.0	1,328.2	2,353.1	2,280.5	72.58	32.423	
9,800.0	6,951.1	6,987.4	6,918.8	58.2	17.8	-90.07	-4,831.0	1,328.2	2,304.4	2,230.7	73.65	31.289	
9,842.5	6,950.7	6,987.2	6,918.6	59.0	17.8	-90.06	-4,831.0	1,328.2	2,267.6	2,193.1	74.46	30.451	
9,900.0	6,950.2	6,987.0	6,918.3	60.1	17.8	-90.05	-4,831.0	1,328.2	2,218.1	2,142.5	75.57	29.351	
9,940.9	6,949.8	6,986.8	6,918.1	60.9	17.8	-90.04	-4,831.0	1,328.2	2,183.1	2,106.7	76.36	28.590	
10,000.0	6,949.3	6,986.5	6,917.9	62.0	17.8	-90.03	-4,831.0	1,328.2	2,132.9	2,055.4	77.50	27.523	
10,039.3	6,948.9	6,986.3	6,917.7	62.8	17.8	-90.02	-4,831.0	1,328.2	2,099.8	2,021.6	78.26	26.832	
10,100.0	6,948.4	6,986.1	6,917.4	64.0	17.8	-90.00	-4,831.0	1,328.2	2,049.2	1,969.7	79.43	25.799	
10,137.8	6,948.0	6,985.9	6,917.3	64.7	17.8	-90.00	-4,831.0	1,328.2	2,017.9	1,937.7	80.16	25.174	
10,200.0	6,947.5	6,985.7	6,917.0	65.9	17.8	-89.98	-4,831.0	1,328.2	1,966.9	1,885.5	81.36	24.175	
10,236.2	6,947.1	6,985.5	6,916.9	66.6	17.8	-89.97	-4,831.0	1,328.2	1,937.5	1,855.5	82.06	23.610	
10,300.0	6,946.6	6,985.2	6,916.6	67.8	17.8	-89.96	-4,831.0	1,328.2	1,886.4	1,803.1	83.30	22.646	
10,334.6	6,946.3	6,985.1	6,916.4	68.5	17.8	-89.95	-4,831.0	1,328.2	1,858.9	1,774.9	83.97	22.137	
10,400.0	6,945.7	6,984.8	6,916.2	69.8	17.8	-89.94	-4,831.0	1,328.2	1,807.8	1,722.5	85.24	21.208	
10,433.0	6,945.4	6,984.7	6,916.0	70.4	17.8	-89.93	-4,831.0	1,328.2	1,782.3	1,696.4	85.88	20.752	
10,500.0	6,944.7	6,984.4	6,915.7	71.7	17.8	-89.92	-4,831.0	1,328.2	1,731.4	1,644.2	87.18	19.859	
10,531.5	6,944.5	6,984.2	6,915.6	72.3	17.8	-89.91	-4,831.0	1,328.2	1,707.8	1,620.0	87.80	19.452	
10,600.0	6,943.8	6,983.9	6,915.3	73.7	17.8	-89.90	-4,831.0	1,328.2	1,657.5	1,568.4	89.13	18.596	
10,629.9	6,943.6	6,983.8	6,915.2	74.2	17.8	-89.89	-4,831.0	1,328.2	1,636.0	1,546.2	89.71	18.235	
10,700.0	6,942.9	6,983.5	6,914.9	75.6	17.8	-89.87	-4,831.0	1,328.2	1,586.5	1,495.4	91.08	17.419	
10,728.3	6,942.7	6,983.4	6,914.8	76.2	17.8	-89.87	-4,831.0	1,328.2	1,567.0	1,475.3	91.63	17.101	
10,800.0	6,942.0	6,983.1	6,914.4	77.6	17.8	-89.85	-4,831.0	1,328.2	1,518.7	1,425.7	93.03	16.325	
10,826.7	6,941.8	6,983.0	6,914.3	78.1	17.8	-89.85	-4,831.0	1,328.2	1,501.2	1,407.7	93.55	16.047	
10,900.0	6,941.1	6,982.7	6,914.0	79.5	17.8	-89.83	-4,831.0	1,328.2	1,454.7	1,359.7	94.98	15.316	
10,925.2	6,940.9	6,982.6	6,913.9	80.0	17.8	-89.83	-4,831.0	1,328.2	1,439.3	1,343.8	95.47	15.075	
11,000.0	6,940.2	6,982.2	6,913.6	81.5	17.8	-89.81	-4,831.0	1,328.2	1,394.9	1,298.0	96.94	14.390	
11,023.6	6,940.0	6,982.1	6,913.5	81.9	17.8	-89.81	-4,831.0	1,328.2	1,381.5	1,284.1	97.40	14.184	
11,100.0	6,939.3	6,981.8	6,913.2	83.4	17.8	-89.79	-4,831.0	1,328.2	1,340.0	1,241.1	98.89	13.550	
11,122.0	6,939.1	6,981.7	6,913.1	83.8	17.8	-89.79	-4,831.0	1,328.2	1,328.6	1,229.2	99.33	13.376	
11,200.0	6,938.4	6,981.4	6,912.8	85.4	17.8	-89.77	-4,831.0	1,328.2	1,290.4	1,189.6	100.85	12.795	
11,220.4	6,938.2	6,981.3	6,912.7	85.8	17.8	-89.76	-4,831.0	1,328.2	1,281.0	1,179.7	101.25	12.651	
11,300.0	6,937.4	6,981.0	6,912.3	87.3	17.8	-89.75	-4,831.0	1,328.2	1,246.9	1,144.1	102.81	12.128	
11,318.9	6,937.3	6,980.9	6,912.3	87.7	17.8	-89.74	-4,831.0	1,328.2	1,239.4	1,136.3	103.18	12.012	
11,400.0	6,936.5	6,980.6	6,911.9	89.3	17.8	-89.73	-4,831.0	1,328.2	1,210.1	1,105.4	104.77	11.550	
11,417.3	6,936.4	6,980.5	6,911.8	89.6	17.8	-89.72	-4,831.0	1,328.2	1,204.5	1,099.4	105.11	11.459	
11,500.0	6,935.6	6,980.1	6,911.5	91.3	17.8	-89.71	-4,831.0	1,328.2	1,180.7	1,074.0	106.74	11.062	
11,515.7	6,935.5	6,980.1	6,911.4	91.6	17.8	-89.70	-4,831.0	1,328.2	1,176.8	1,069.7	107.04	10.993	
11,600.0	6,934.7	6,979.7	6,911.1	93.2	17.8	-89.69	-4,831.0	1,328.2	1,159.2	1,050.5	108.70	10.664	
11,614.1	6,934.6	6,979.7	6,911.0	93.5	17.8	-89.68	-4,831.0	1,328.2	1,156.8	1,047.8	108.98	10.615	
11,700.0	6,933.8	6,979.3	6,910.7	95.2	17.8	-89.66	-4,831.0	1,328.2	1,146.0	1,035.3	110.66	10.356	
11,712.6	6,933.7	6,979.3	6,910.6	95.4	17.8	-89.66	-4,831.0	1,328.2	1,145.0	1,034.1	110.91	10.323	
11,800.0	6,932.9	6,978.9	6,910.3	97.1	17.8	-89.64	-4,831.0	1,328.2	1,141.5	1,028.9	112.63	10.135	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 128-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	
11,801.8	6,932.9	6,978.9	6,910.2	97.2	17.8	-89.64	-4,831.0	1,328.2	1,141.5	1,028.8	112.67	10.131	CC
11,811.0	6,932.8	6,978.8	6,910.2	97.4	17.8	-89.64	-4,831.0	1,328.2	1,141.5	1,028.7	112.85	10.116	ES
11,900.0	6,932.0	6,978.5	6,909.8	99.1	17.8	-89.62	-4,831.0	1,328.1	1,145.7	1,031.1	114.60	9.998	
11,909.4	6,931.9	6,978.4	6,909.8	99.3	17.8	-89.62	-4,831.0	1,328.1	1,146.5	1,031.8	114.78	9.989	
12,000.0	6,931.0	6,978.1	6,909.4	101.1	17.8	-89.60	-4,831.0	1,328.1	1,158.6	1,042.0	116.57	9.939	
12,007.8	6,931.0	6,978.0	6,909.4	101.2	17.8	-89.60	-4,831.0	1,328.1	1,159.9	1,043.2	116.72	9.938	SF
12,100.0	6,930.1	6,977.7	6,909.0	103.0	17.8	-89.58	-4,831.0	1,328.1	1,179.8	1,061.2	118.53	9.953	
12,106.3	6,930.1	6,977.6	6,909.0	103.2	17.8	-89.58	-4,831.0	1,328.1	1,181.4	1,062.7	118.66	9.956	
12,200.0	6,929.2	6,977.2	6,908.6	105.0	17.8	-89.56	-4,831.0	1,328.1	1,208.9	1,088.4	120.50	10.032	
12,204.7	6,929.2	6,977.2	6,908.6	105.1	17.8	-89.56	-4,831.0	1,328.1	1,210.5	1,089.9	120.60	10.037	
12,300.0	6,928.3	6,976.8	6,908.2	107.0	17.8	-89.54	-4,831.0	1,328.1	1,245.5	1,123.0	122.48	10.169	
12,303.1	6,928.3	6,976.8	6,908.2	107.1	17.8	-89.54	-4,831.0	1,328.1	1,246.7	1,124.2	122.54	10.174	
12,400.0	6,927.4	6,976.4	6,907.8	109.0	17.8	-89.52	-4,831.0	1,328.1	1,288.7	1,164.3	124.45	10.356	
12,401.5	6,927.4	6,976.4	6,907.8	109.0	17.8	-89.52	-4,831.0	1,328.1	1,289.4	1,165.0	124.48	10.359	
12,500.0	6,926.5	6,976.0	6,907.4	110.9	17.8	-89.50	-4,831.0	1,328.1	1,338.1	1,211.6	126.42	10.584	
12,598.4	6,925.6	6,975.6	6,907.0	112.9	17.8	-89.48	-4,831.0	1,328.1	1,391.9	1,263.6	128.36	10.844	
12,600.0	6,925.6	6,975.6	6,907.0	112.9	17.8	-89.48	-4,831.0	1,328.1	1,392.9	1,264.5	128.39	10.848	
12,696.8	6,924.7	6,975.2	6,906.6	114.8	17.8	-89.46	-4,831.0	1,328.1	1,450.5	1,320.2	130.30	11.132	
12,700.0	6,924.6	6,975.2	6,906.6	114.9	17.8	-89.46	-4,831.0	1,328.1	1,452.5	1,322.1	130.37	11.142	
12,795.2	6,923.8	6,974.8	6,906.2	116.8	17.8	-89.44	-4,831.0	1,328.1	1,513.2	1,381.0	132.25	11.443	
12,800.0	6,923.7	6,974.8	6,906.2	116.9	17.8	-89.44	-4,831.0	1,328.1	1,516.3	1,384.0	132.34	11.458	
12,893.7	6,922.9	6,974.4	6,905.8	118.7	17.8	-89.42	-4,831.0	1,328.1	1,579.6	1,445.4	134.19	11.771	
12,900.0	6,922.8	6,974.4	6,905.8	118.8	17.8	-89.42	-4,831.0	1,328.1	1,584.0	1,449.6	134.31	11.793	
12,992.1	6,922.0	6,974.0	6,905.4	120.6	17.8	-89.40	-4,831.0	1,328.1	1,649.1	1,513.0	136.13	12.114	
13,000.0	6,921.9	6,974.0	6,905.4	120.8	17.8	-89.40	-4,831.0	1,328.1	1,654.9	1,518.6	136.29	12.142	
13,090.5	6,921.1	6,973.6	6,905.0	122.6	17.8	-89.38	-4,831.0	1,328.1	1,721.5	1,583.5	138.08	12.468	
13,100.0	6,921.0	6,973.6	6,905.0	122.8	17.8	-89.38	-4,831.0	1,328.1	1,728.6	1,590.4	138.26	12.502	
13,188.9	6,920.2	6,973.3	6,904.6	124.5	17.8	-89.36	-4,831.0	1,328.1	1,796.4	1,656.4	140.02	12.829	
13,200.0	6,920.1	6,973.2	6,904.6	124.8	17.8	-89.36	-4,831.0	1,328.1	1,804.9	1,664.7	140.24	12.870	
13,287.4	6,919.3	6,972.9	6,904.2	126.5	17.8	-89.34	-4,831.0	1,328.1	1,873.4	1,731.5	141.97	13.196	
13,300.0	6,919.1	6,972.8	6,904.2	126.7	17.8	-89.34	-4,831.0	1,328.1	1,883.5	1,741.2	142.22	13.244	
13,385.8	6,918.4	6,972.5	6,903.8	128.4	17.8	-89.32	-4,831.0	1,328.1	1,952.4	1,808.5	143.91	13.566	
13,400.0	6,918.2	6,972.4	6,903.8	128.7	17.8	-89.32	-4,831.0	1,328.1	1,963.9	1,819.7	144.19	13.620	
13,484.2	6,917.5	6,972.1	6,903.4	130.4	17.8	-89.30	-4,831.0	1,328.1	2,033.1	1,887.2	145.86	13.938	
13,500.0	6,917.3	6,972.0	6,903.4	130.7	17.8	-89.30	-4,831.0	1,328.1	2,046.1	1,900.0	146.17	13.998	
13,582.6	6,916.6	6,971.7	6,903.1	132.3	17.8	-89.28	-4,831.0	1,328.1	2,115.2	1,967.4	147.81	14.311	
13,600.0	6,916.4	6,971.6	6,903.0	132.7	17.8	-89.28	-4,831.0	1,328.1	2,129.9	1,981.7	148.15	14.376	
13,681.1	6,915.6	6,971.3	6,902.7	134.3	17.8	-89.26	-4,831.0	1,328.1	2,198.7	2,049.0	149.75	14.682	
13,700.0	6,915.5	6,971.2	6,902.6	134.6	17.8	-89.26	-4,831.0	1,328.1	2,214.9	2,064.8	150.13	14.754	
13,779.5	6,914.7	6,970.9	6,902.3	136.2	17.8	-89.24	-4,831.0	1,328.1	2,283.4	2,131.7	151.70	15.052	
13,800.0	6,914.6	6,970.8	6,902.2	136.6	17.8	-89.24	-4,831.0	1,328.1	2,301.2	2,149.1	152.11	15.129	
13,877.9	6,913.8	6,970.5	6,901.9	138.2	17.8	-89.22	-4,831.0	1,328.1	2,369.2	2,215.5	153.65	15.419	
13,900.0	6,913.6	6,970.4	6,901.8	138.6	17.8	-89.22	-4,831.0	1,328.1	2,388.6	2,234.5	154.09	15.501	
13,976.3	6,912.9	6,970.1	6,901.5	140.1	17.8	-89.20	-4,831.0	1,328.1	2,455.9	2,300.3	155.60	15.784	
14,000.0	6,912.7	6,970.0	6,901.4	140.6	17.8	-89.20	-4,831.0	1,328.1	2,476.9	2,320.8	156.07	15.871	
14,074.8	6,912.0	6,969.8	6,901.1	142.0	17.8	-89.18	-4,831.0	1,328.1	2,543.4	2,386.0	157.48	16.151	
14,079.0	6,912.0	6,969.7	6,901.1	142.1	17.8	-89.18	-4,831.0	1,328.1	2,547.2	2,389.6	157.56	16.166	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 134-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	170.71	-5,114.8	836.7	5,182.8				
98.4	98.4	134.0	134.0	0.1	0.1	170.72	-5,114.1	835.9	5,182.2	5,182.1	0.18	N/A	
100.0	100.0	134.0	134.0	0.1	0.1	170.72	-5,114.1	835.9	5,182.2	5,182.0	0.18	N/A	
196.8	196.8	187.8	187.8	0.3	0.2	170.72	-5,113.8	835.5	5,181.6	5,181.1	0.51	N/A	
200.0	200.0	189.3	189.3	0.3	0.2	170.72	-5,113.8	835.5	5,181.6	5,181.1	0.52	N/A	
209.3	209.3	193.8	193.8	0.3	0.2	170.72	-5,113.8	835.5	5,181.6	5,181.1	0.55	9,468.038	
295.3	295.3	242.3	242.3	0.5	0.3	170.72	-5,114.0	835.6	5,182.0	5,181.1	0.84	6,172.483	
300.0	300.0	246.1	246.1	0.5	0.3	170.72	-5,114.0	835.6	5,182.0	5,181.1	0.86	6,037.676	
393.7	393.7	316.0	316.0	0.8	0.5	170.72	-5,114.6	835.8	5,182.9	5,181.7	1.23	4,212.361	
400.0	400.0	316.0	316.0	0.8	0.5	170.72	-5,114.6	835.8	5,182.9	5,181.7	1.23	4,212.361	
492.1	492.1	396.1	396.0	1.0	0.6	170.71	-5,115.6	836.6	5,184.2	5,182.5	1.61	3,221.685	
500.0	500.0	402.0	402.0	1.0	0.6	170.71	-5,115.6	836.7	5,184.3	5,182.6	1.64	3,162.028	
590.5	590.5	444.0	444.0	1.2	0.7	170.70	-5,116.2	837.7	5,186.0	5,184.1	1.93	2,682.595	
600.0	600.0	471.6	471.5	1.2	0.8	170.69	-5,116.6	838.6	5,186.1	5,184.1	2.02	2,573.007	
689.0	689.0	527.2	527.1	1.4	0.9	170.67	-5,117.6	841.0	5,188.4	5,186.0	2.34	2,218.088	
700.0	700.0	534.1	534.0	1.4	0.9	170.66	-5,117.8	841.4	5,188.7	5,186.3	2.38	2,180.977	
787.4	787.4	572.0	571.8	1.6	1.0	170.64	-5,118.6	843.6	5,191.5	5,188.9	2.66	1,952.809	
800.0	800.0	596.1	595.8	1.7	1.1	170.62	-5,119.2	845.2	5,191.9	5,189.2	2.74	1,892.925	
885.8	885.8	661.0	660.5	1.9	1.2	170.57	-5,121.0	850.1	5,195.4	5,192.3	3.09	1,683.769	
900.0	900.0	661.0	660.5	1.9	1.2	170.57	-5,121.0	850.1	5,195.9	5,192.8	3.12	1,666.750	
984.2	984.2	725.0	724.2	2.1	1.4	170.52	-5,123.0	855.8	5,199.7	5,196.3	3.46	1,504.813	
1,000.0	1,000.0	725.0	724.2	2.1	1.4	170.52	-5,123.0	855.8	5,200.5	5,197.0	3.49	1,489.772	
1,082.7	1,082.7	797.8	796.5	2.3	1.6	170.43	-5,125.1	864.2	5,204.5	5,200.7	3.86	1,349.600	
1,100.0	1,100.0	809.4	808.0	2.3	1.7	170.41	-5,125.5	865.9	5,205.4	5,201.5	3.92	1,326.624	
1,181.1	1,181.1	1,082.6	1,075.8	2.5	2.7	169.83	-5,126.0	919.4	5,208.6	5,203.7	4.90	1,063.393	
1,200.0	1,200.0	1,239.0	1,225.9	2.6	3.4	169.35	-5,119.0	962.4	5,208.9	5,203.3	5.56	936.947	
1,218.5	1,218.5	1,239.0	1,225.9	2.6	3.4	132.85	-5,119.0	962.4	5,208.8	5,202.8	6.00	867.472	
1,279.5	1,279.5	1,239.0	1,225.9	2.7	3.4	132.84	-5,119.0	962.4	5,209.6	5,203.5	6.14	848.618	
1,300.0	1,300.0	1,279.4	1,264.2	2.8	3.7	132.70	-5,116.6	974.8	5,209.9	5,203.5	6.42	812.056	
1,377.9	1,377.8	1,311.3	1,294.5	3.0	3.9	132.55	-5,115.0	984.7	5,213.1	5,206.3	6.77	770.331	
1,400.0	1,399.8	1,320.3	1,303.1	3.0	3.9	132.51	-5,114.6	987.5	5,214.4	5,207.5	6.87	759.429	
1,476.4	1,475.9	1,367.0	1,347.4	3.2	4.2	132.29	-5,112.8	1,002.1	5,220.3	5,213.0	7.30	715.312	
1,500.0	1,499.5	1,367.0	1,347.4	3.2	4.2	132.26	-5,112.8	1,002.1	5,222.4	5,215.1	7.35	710.637	
1,574.8	1,573.7	1,428.3	1,405.3	3.4	4.6	131.98	-5,110.6	1,022.2	5,230.5	5,222.6	7.91	661.080	
1,600.0	1,598.7	1,453.3	1,428.7	3.5	4.7	131.86	-5,109.6	1,030.8	5,233.5	5,225.4	8.13	643.891	
1,673.2	1,671.1	1,680.2	1,639.3	3.7	6.3	131.07	-5,095.5	1,114.2	5,241.6	5,231.8	9.86	531.555	
1,700.0	1,697.5	1,700.6	1,658.2	3.7	6.4	130.97	-5,093.9	1,121.7	5,244.7	5,234.7	10.06	521.348	
1,771.6	1,767.9	1,757.8	1,711.4	4.0	6.8	130.68	-5,089.9	1,142.4	5,254.0	5,243.4	10.62	494.531	
1,800.1	1,795.7	1,794.8	1,745.7	4.0	7.1	130.53	-5,087.2	1,155.8	5,258.0	5,247.0	10.96	479.925	
1,870.1	1,864.2	1,885.6	1,829.8	4.3	7.7	130.30	-5,080.3	1,189.2	5,267.9	5,256.1	11.81	446.128	
1,900.0	1,893.4	1,925.3	1,866.5	4.4	8.0	130.20	-5,077.1	1,204.0	5,272.1	5,259.9	12.19	432.469	
1,968.5	1,960.4	2,009.0	1,944.0	4.6	8.7	129.99	-5,070.1	1,235.0	5,281.4	5,268.4	13.02	405.527	
2,000.0	1,991.3	2,009.0	1,944.0	4.7	8.7	129.99	-5,070.1	1,235.0	5,285.8	5,272.6	13.12	402.859	
2,066.9	2,056.7	2,064.0	1,994.9	5.0	9.1	129.86	-5,065.6	1,255.4	5,295.1	5,281.4	13.74	385.503	
2,100.0	2,089.1	2,081.5	2,011.0	5.1	9.2	129.81	-5,064.3	1,262.0	5,299.9	5,285.9	13.97	379.335	
2,165.3	2,153.0	2,138.0	2,063.3	5.3	9.6	129.67	-5,060.3	1,283.2	5,309.8	5,295.2	14.60	363.662	
2,200.0	2,186.9	2,138.0	2,063.3	5.5	9.6	129.67	-5,060.3	1,283.2	5,315.0	5,300.3	14.72	361.183	
2,263.8	2,249.3	2,193.8	2,114.9	5.7	10.0	129.53	-5,056.6	1,304.1	5,325.0	5,309.7	15.33	347.286	
2,300.0	2,284.7	2,229.7	2,148.1	5.8	10.3	129.45	-5,054.3	1,317.4	5,330.7	5,315.0	15.71	339.229	
2,362.2	2,345.5	2,394.0	2,300.5	6.1	11.5	129.05	-5,042.3	1,377.8	5,340.2	5,323.1	17.12	311.999	
2,400.0	2,382.5	2,419.0	2,323.6	6.2	11.7	128.99	-5,040.3	1,386.9	5,345.5	5,328.0	17.42	306.808	
2,460.6	2,441.8	2,458.6	2,360.5	6.5	12.0	128.90	-5,037.2	1,401.1	5,354.1	5,336.2	17.91	298.868	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 usft
Survey Program: 134-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
2,500.0	2,480.3	2,484.5	2,384.6	6.6	12.1	128.85	-5,035.3	1,410.1	5,359.9	5,341.6	18.23	293.934		
2,559.0	2,538.1	2,523.0	2,420.7	6.9	12.4	128.77	-5,032.6	1,423.4	5,368.7	5,349.9	18.72	286.841		
2,600.0	2,578.1	2,553.8	2,449.6	7.0	12.6	128.70	-5,030.6	1,434.0	5,374.9	5,355.8	19.08	281.753		
2,657.5	2,634.4	2,596.6	2,489.6	7.3	12.9	128.61	-5,027.8	1,448.8	5,383.7	5,364.2	19.58	274.955		
2,700.0	2,675.9	2,628.2	2,519.1	7.5	13.1	128.54	-5,025.8	1,459.9	5,390.4	5,370.4	19.95	270.154		
2,755.9	2,730.6	2,780.0	2,660.1	7.7	14.3	128.20	-5,014.3	1,515.0	5,398.7	5,377.4	21.28	253.657		
2,800.0	2,773.8	2,825.8	2,702.4	7.9	14.6	128.08	-5,010.2	1,532.1	5,404.8	5,383.0	21.80	247.937		
2,854.3	2,826.9	2,859.0	2,733.0	8.1	14.9	128.00	-5,007.3	1,544.6	5,412.5	5,390.2	22.26	243.201		
2,857.4	2,829.9	2,860.8	2,734.7	8.1	14.9	128.00	-5,007.1	1,545.3	5,412.9	5,390.6	22.28	242.942		
2,900.0	2,871.6	2,908.0	2,778.2	8.3	15.3	127.97	-5,003.2	1,563.2	5,419.0	5,396.2	22.81	237.621		
2,952.7	2,923.5	2,925.2	2,794.0	8.4	15.4	128.04	-5,001.8	1,569.8	5,426.1	5,403.0	23.10	234.881		
3,000.0	2,970.1	2,970.6	2,835.8	8.6	15.8	128.00	-4,998.1	1,587.0	5,432.0	5,408.4	23.59	230.228		
3,051.2	3,020.7	3,019.6	2,881.0	8.7	16.1	127.95	-4,994.2	1,605.7	5,437.9	5,413.8	24.12	225.498		
3,100.0	3,069.1	3,066.9	2,924.6	8.9	16.5	127.89	-4,990.4	1,623.5	5,443.0	5,418.4	24.61	221.185		
3,149.6	3,118.3	3,115.2	2,969.2	9.0	16.9	127.82	-4,986.5	1,641.7	5,447.8	5,422.7	25.10	217.077		
3,200.0	3,168.5	3,164.1	3,014.5	9.1	17.2	127.73	-4,982.6	1,659.9	5,452.1	5,426.5	25.59	213.066		
3,248.0	3,216.3	3,200.7	3,048.3	9.2	17.5	127.66	-4,979.8	1,673.4	5,455.8	5,429.8	25.97	210.114		
3,300.0	3,268.2	3,239.9	3,084.6	9.3	17.8	127.58	-4,976.8	1,687.9	5,459.3	5,433.0	26.37	207.037		
3,346.4	3,314.6	3,274.9	3,117.0	9.4	18.1	127.50	-4,974.3	1,700.7	5,462.1	5,435.4	26.71	204.461		
3,400.0	3,368.1	3,319.7	3,158.7	9.5	18.4	127.38	-4,971.1	1,717.1	5,465.0	5,437.8	27.15	201.306		
3,444.9	3,413.0	3,360.4	3,196.4	9.6	18.7	127.26	-4,968.2	1,732.0	5,466.9	5,439.4	27.52	198.634		
3,457.5	3,425.6	3,371.7	3,206.9	9.6	18.8	163.73	-4,967.4	1,736.2	5,467.4	5,439.8	27.63	197.901		
3,500.0	3,468.1	3,410.0	3,242.4	9.7	19.1	163.58	-4,964.6	1,750.3	5,469.0	5,441.0	27.98	195.431		
3,543.3	3,511.4	3,508.7	3,334.2	9.7	19.8	163.20	-4,957.4	1,785.8	5,470.5	5,441.8	28.77	190.117		
3,600.0	3,568.1	3,550.0	3,372.9	9.8	20.1	163.05	-4,954.2	1,799.8	5,472.2	5,443.0	29.17	187.573		
3,641.7	3,609.9	3,550.0	3,372.9	9.9	20.1	163.05	-4,954.2	1,799.8	5,473.7	5,444.4	29.25	187.136		
3,700.0	3,668.1	3,597.6	3,417.7	10.0	20.4	162.88	-4,950.9	1,815.8	5,475.8	5,446.1	29.68	184.496		
3,740.1	3,708.3	3,611.1	3,430.3	10.1	20.5	162.83	-4,950.1	1,820.4	5,477.6	5,447.8	29.84	183.538		
3,800.0	3,768.1	3,631.0	3,449.0	10.2	20.6	162.76	-4,949.0	1,827.1	5,480.7	5,450.6	30.09	182.142		
3,838.6	3,806.7	3,678.0	3,493.1	10.2	21.0	162.59	-4,947.0	1,843.3	5,483.2	5,452.7	30.48	179.896		
3,900.0	3,868.1	3,678.0	3,493.1	10.3	21.0	162.59	-4,947.0	1,843.3	5,486.9	5,456.3	30.59	179.344		
3,937.0	3,905.1	3,678.0	3,493.1	10.4	21.0	162.59	-4,947.0	1,843.3	5,489.5	5,458.8	30.66	179.022		
4,000.0	3,968.1	3,881.3	3,683.3	10.5	22.4	161.85	-4,935.9	1,914.1	5,492.8	5,460.6	32.19	170.628		
4,035.4	4,003.6	3,933.8	3,732.6	10.6	22.8	161.66	-4,932.5	1,931.9	5,494.5	5,461.9	32.62	168.444		
4,100.0	4,068.1	4,064.0	3,855.3	10.7	23.6	161.21	-4,923.5	1,974.5	5,497.1	5,463.5	33.59	163.660		
4,133.8	4,102.0	4,064.0	3,855.3	10.8	23.6	161.21	-4,923.5	1,974.5	5,498.4	5,464.8	33.65	163.387		
4,200.0	4,168.1	4,108.6	3,897.4	10.9	23.9	161.06	-4,920.4	1,988.9	5,501.2	5,467.1	34.08	161.427		
4,232.3	4,200.4	4,122.1	3,910.0	10.9	24.0	161.01	-4,919.5	1,993.4	5,502.8	5,468.5	34.23	160.756		
4,300.0	4,268.1	4,150.1	3,936.3	11.1	24.2	160.91	-4,917.7	2,002.9	5,506.4	5,471.9	34.55	159.384		
4,330.7	4,298.8	4,192.0	3,975.5	11.1	24.5	160.76	-4,915.2	2,017.6	5,508.4	5,473.5	34.89	157.888		
4,400.0	4,368.1	4,192.0	3,975.5	11.2	24.5	160.76	-4,915.2	2,017.6	5,512.7	5,477.7	35.02	157.410		
4,429.1	4,397.3	4,215.9	3,997.8	11.3	24.7	160.67	-4,913.8	2,026.2	5,514.7	5,479.5	35.25	156.452		
4,500.0	4,468.1	4,278.2	4,055.8	11.4	25.1	160.44	-4,910.3	2,048.6	5,519.7	5,483.9	35.83	154.048		
4,527.5	4,495.7	4,302.4	4,078.3	11.5	25.3	160.35	-4,908.9	2,057.4	5,521.7	5,485.7	36.06	153.137		
4,600.0	4,568.1	4,348.2	4,120.9	11.6	25.7	160.18	-4,906.3	2,074.0	5,527.2	5,490.6	36.52	151.333		
4,626.0	4,594.1	4,362.2	4,133.9	11.7	25.8	160.12	-4,905.6	2,079.1	5,529.2	5,492.5	36.67	150.771		
4,700.0	4,668.1	4,402.0	4,171.0	11.8	26.1	159.98	-4,903.7	2,093.5	5,535.4	5,498.3	37.10	149.204		
4,724.4	4,692.5	4,415.2	4,183.3	11.8	26.2	159.93	-4,903.1	2,098.2	5,537.6	5,500.3	37.24	148.697		
4,800.0	4,768.1	4,449.0	4,214.8	12.0	26.4	159.80	-4,901.7	2,110.4	5,544.6	5,506.9	37.63	147.354		
4,822.8	4,791.0	4,476.8	4,240.7	12.0	26.6	159.70	-4,900.7	2,120.5	5,546.7	5,508.9	37.87	146.464		
4,900.0	4,868.1	4,536.5	4,296.2	12.2	27.1	159.48	-4,898.4	2,142.4	5,554.3	5,515.9	38.45	144.463		
4,921.2	4,889.4	4,552.9	4,311.4	12.2	27.2	159.42	-4,897.7	2,148.5	5,556.5	5,517.9	38.61	143.926		

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design													SE SE SEC. 18 T4N R64W 6th P.M. - NEI C18-22D - Wellbore #1 - Wellbore #1		Offset Site Error:		0.0 usft
Survey Program: 134-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	4,968.1	4,609.8	4,364.1	12.4	27.6	159.21	-4,895.5	2,169.8	5,564.6	5,525.4	39.17	142.080					
5,019.7	4,987.8	4,623.5	4,376.8	12.4	27.7	159.15	-4,895.1	2,174.8	5,566.7	5,527.4	39.30	141.643					
5,100.0	5,068.1	4,939.2	4,674.1	12.6	29.8	158.10	-4,883.2	2,279.9	5,574.8	5,533.4	41.44	134.522					
5,118.1	5,086.2	4,968.7	4,702.6	12.6	30.0	158.02	-4,882.2	2,287.3	5,576.1	5,534.4	41.63	133.938					
5,200.0	5,168.1	5,061.3	4,792.5	12.8	30.4	157.81	-4,879.7	2,309.3	5,581.4	5,539.2	42.20	132.247					
5,216.5	5,184.7	5,254.9	4,982.0	12.8	31.2	157.41	-4,873.6	2,348.5	5,582.2	5,539.2	43.00	129.833					
5,300.0	5,268.1	5,360.5	5,085.9	13.0	31.6	157.22	-4,869.5	2,366.6	5,584.8	5,541.3	43.52	128.318					
5,314.9	5,283.1	5,372.4	5,097.7	13.0	31.6	157.20	-4,869.1	2,368.5	5,585.2	5,541.7	43.59	128.140					
5,400.0	5,368.1	5,440.7	5,165.3	13.1	31.8	157.10	-4,867.4	2,378.2	5,588.0	5,544.0	43.95	127.135					
5,413.4	5,381.5	5,451.5	5,176.0	13.2	31.9	157.09	-4,867.2	2,379.6	5,588.4	5,544.4	44.01	126.978					
5,500.0	5,468.1	5,733.0	5,456.6	13.3	32.4	156.88	-4,863.5	2,399.8	5,589.7	5,545.0	44.70	125.043					
5,511.8	5,479.9	5,762.8	5,486.4	13.4	32.5	156.87	-4,863.0	2,400.5	5,589.6	5,544.8	44.76	124.885					
5,567.8	5,535.9	5,796.8	5,520.4	13.5	32.5	156.87	-4,862.6	2,401.3	5,589.5	5,544.6	44.91	124.467					
5,600.0	5,568.1	5,816.4	5,540.0	13.5	32.5	156.86	-4,862.5	2,401.7	5,589.5	5,544.5	44.99	124.229					
5,610.2	5,578.4	5,822.6	5,546.2	13.6	32.5	156.86	-4,862.5	2,401.8	5,589.5	5,544.5	45.02	124.154					
5,700.0	5,668.1	5,882.1	5,605.7	13.7	32.6	156.85	-4,862.5	2,402.7	5,590.1	5,544.8	45.26	123.497					
5,708.6	5,676.8	5,889.0	5,612.5	13.8	32.6	156.85	-4,862.5	2,402.8	5,590.1	5,544.9	45.29	123.433					
5,800.0	5,768.1	5,961.6	5,685.2	13.9	32.7	156.84	-4,862.8	2,403.9	5,591.1	5,545.6	45.54	122.761					
5,807.1	5,775.2	5,967.2	5,690.8	14.0	32.7	156.84	-4,862.8	2,404.0	5,591.2	5,545.6	45.56	122.709					
5,900.0	5,868.1	6,045.9	5,769.5	14.1	32.7	156.83	-4,863.5	2,405.3	5,592.5	5,546.6	45.83	122.032					
5,905.5	5,873.6	6,050.7	5,774.3	14.1	32.7	156.83	-4,863.5	2,405.4	5,592.5	5,546.7	45.84	121.992					
6,000.0	5,968.1	6,138.0	5,861.6	14.3	32.8	156.82	-4,864.6	2,406.5	5,594.1	5,547.9	46.12	121.301					
6,003.9	5,972.1	6,142.6	5,866.2	14.3	32.8	156.82	-4,864.6	2,406.6	5,594.1	5,548.0	46.13	121.270					
6,100.0	6,068.1	6,251.2	5,974.8	14.5	32.9	156.81	-4,865.7	2,408.2	5,595.5	5,549.1	46.43	120.522					
6,102.3	6,070.5	6,253.4	5,977.0	14.5	32.9	156.81	-4,865.7	2,408.2	5,595.6	5,549.1	46.43	120.505					
6,200.0	6,168.1	6,344.8	6,068.3	14.7	33.0	156.80	-4,866.6	2,409.5	5,597.0	5,550.3	46.72	119.797					
6,200.8	6,168.9	6,345.5	6,069.1	14.7	33.0	156.80	-4,866.6	2,409.5	5,597.0	5,550.3	46.72	119.792					
6,288.5	6,256.6	6,477.1	6,200.6	14.9	33.1	156.80	-4,867.9	2,410.7	5,598.1	5,551.1	47.02	119.051					
6,299.2	6,267.3	6,496.6	6,220.1	14.9	33.2	-23.41	-4,867.9	2,410.9	5,598.1	5,551.0	47.08	118.913					
6,300.0	6,268.1	6,498.0	6,221.5	14.9	33.2	-23.41	-4,867.9	2,410.9	5,598.1	5,551.0	47.08	118.908					
6,350.0	6,318.1	6,540.2	6,263.7	15.0	33.2	-23.49	-4,868.0	2,411.2	5,596.1	5,549.0	47.06	118.902					
6,397.6	6,365.3	6,577.5	6,301.0	15.1	33.2	-23.67	-4,868.2	2,411.5	5,591.3	5,544.4	46.86	119.312					
6,400.0	6,367.7	6,579.4	6,302.9	15.1	33.2	-23.68	-4,868.2	2,411.6	5,590.9	5,544.1	46.85	119.342					
6,450.0	6,416.8	6,618.1	6,341.6	15.1	33.3	-23.98	-4,868.5	2,411.9	5,582.7	5,536.3	46.44	120.222					
6,496.0	6,461.3	6,666.1	6,389.6	15.1	33.3	-24.38	-4,868.9	2,412.3	5,572.5	5,526.6	45.90	121.398					
6,500.0	6,465.1	6,670.9	6,394.4	15.1	33.3	-24.42	-4,868.9	2,412.3	5,571.4	5,525.6	45.85	121.514					
6,550.0	6,512.4	6,730.7	6,454.2	15.1	33.4	-25.01	-4,869.4	2,412.6	5,557.0	5,511.9	45.09	123.233					
6,594.5	6,553.4	6,781.4	6,504.9	15.1	33.4	-25.67	-4,869.7	2,412.6	5,541.6	5,497.3	44.28	125.138					
6,600.0	6,558.4	6,787.5	6,511.0	15.1	33.4	-25.76	-4,869.8	2,412.6	5,539.5	5,495.3	44.18	125.398					
6,650.0	6,603.0	6,840.9	6,564.4	15.1	33.5	-26.68	-4,870.0	2,412.9	5,519.0	5,475.9	43.11	128.007					
6,692.9	6,639.9	6,885.0	6,608.5	15.1	33.5	-27.62	-4,870.0	2,413.2	5,499.1	5,457.0	42.11	130.592					
6,700.0	6,645.9	6,892.3	6,615.8	15.1	33.5	-27.79	-4,870.0	2,413.2	5,495.6	5,453.7	41.94	131.047					
6,750.0	6,686.8	6,943.0	6,666.4	15.1	33.6	-29.13	-4,869.9	2,413.6	5,469.6	5,428.9	40.68	134.465					
6,791.3	6,719.1	6,982.8	6,706.3	15.1	33.6	-30.43	-4,869.8	2,414.0	5,446.0	5,406.4	39.60	137.539					
6,800.0	6,725.7	6,990.9	6,714.4	15.1	33.6	-30.72	-4,869.8	2,414.0	5,440.9	5,401.5	39.37	138.206					
6,850.0	6,762.3	7,029.4	6,752.9	15.1	33.7	-32.58	-4,869.6	2,414.3	5,409.8	5,371.7	38.05	142.168					
6,889.7	6,789.7	7,052.0	6,775.5	15.1	33.7	-34.25	-4,869.5	2,414.5	5,383.5	5,346.5	37.04	145.358					
6,900.0	6,796.5	7,057.7	6,781.2	15.1	33.7	-34.72	-4,869.5	2,414.5	5,376.5	5,339.7	36.78	146.165					
6,950.0	6,828.0	7,084.2	6,807.7	15.1	33.7	-37.25	-4,869.4	2,414.8	5,341.2	5,305.6	35.64	149.875					
6,988.2	6,850.2	7,102.8	6,826.3	15.1	33.7	-39.48	-4,869.3	2,415.0	5,313.1	5,278.2	34.89	152.301					
7,000.0	6,856.7	7,108.3	6,831.8	15.1	33.7	-40.23	-4,869.3	2,415.0	5,304.1	5,269.4	34.69	152.905					
7,050.0	6,882.5	7,130.0	6,853.5	15.2	33.8	-43.73	-4,869.2	2,415.3	5,265.4	5,231.4	34.01	154.805					

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 134-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,086.6	6,899.5	7,145.0	6,868.5	15.3	33.8	-46.68	-4,869.2	2,415.5	5,236.1	5,202.3	33.73	155.212	
7,100.0	6,905.3	7,150.0	6,873.5	15.4	33.8	-47.85	-4,869.1	2,415.6	5,225.1	5,191.5	33.68	155.161	
7,150.0	6,924.9	7,170.1	6,893.5	15.7	33.8	-52.71	-4,869.1	2,415.8	5,183.6	5,149.9	33.72	153.744	
7,185.0	6,936.7	7,182.1	6,905.6	15.9	33.8	-56.57	-4,869.1	2,416.0	5,153.9	5,120.0	33.96	151.778	
7,200.0	6,941.2	7,186.8	6,910.3	16.0	33.8	-58.33	-4,869.0	2,416.0	5,141.1	5,107.0	34.10	150.773	
7,250.0	6,954.2	7,200.1	6,923.6	16.3	33.8	-64.74	-4,869.0	2,416.2	5,097.7	5,063.0	34.72	146.841	
7,283.4	6,961.0	7,207.1	6,930.5	16.6	33.8	-69.44	-4,869.0	2,416.3	5,068.3	5,033.1	35.18	144.083	
7,300.0	6,963.8	7,209.9	6,933.4	16.7	33.8	-71.87	-4,869.0	2,416.3	5,053.6	5,018.2	35.39	142.816	
7,350.0	6,970.0	7,216.2	6,939.6	17.2	33.8	-79.54	-4,869.0	2,416.4	5,009.2	4,973.3	35.89	139.569	
7,381.9	6,972.1	7,218.3	6,941.8	17.5	33.9	-84.59	-4,869.0	2,416.4	4,980.7	4,944.7	36.05	138.179	
7,400.0	6,972.7	7,218.8	6,942.3	17.7	33.9	-87.48	-4,869.0	2,416.4	4,964.5	4,928.5	36.06	137.693	
7,420.0	6,972.8	7,218.9	6,942.4	17.9	33.9	-90.65	-4,869.0	2,416.4	4,946.7	4,910.7	36.01	137.372	
7,480.3	6,972.2	7,218.2	6,941.7	18.5	33.9	-90.63	-4,869.0	2,416.4	4,892.9	4,856.3	36.65	133.488	
7,500.0	6,972.0	7,218.0	6,941.4	18.7	33.9	-90.62	-4,869.0	2,416.4	4,875.4	4,838.5	36.86	132.250	
7,578.7	6,971.3	7,217.1	6,940.5	19.7	33.9	-90.60	-4,869.0	2,416.4	4,805.5	4,767.7	37.79	127.163	
7,600.0	6,971.1	7,216.8	6,940.3	19.9	33.8	-90.59	-4,869.0	2,416.4	4,786.7	4,748.7	38.04	125.832	
7,677.1	6,970.4	7,215.9	6,939.4	20.9	33.8	-90.57	-4,869.0	2,416.4	4,718.6	4,679.5	39.03	120.888	
7,700.0	6,970.2	7,215.7	6,939.1	21.2	33.8	-90.56	-4,869.0	2,416.4	4,698.4	4,659.1	39.33	119.473	
7,775.6	6,969.5	7,214.8	6,938.3	22.2	33.8	-90.54	-4,869.0	2,416.4	4,632.1	4,591.7	40.38	114.721	
7,800.0	6,969.3	7,214.5	6,938.0	22.6	33.8	-90.53	-4,869.0	2,416.4	4,610.7	4,570.0	40.72	113.239	
7,874.0	6,968.6	7,213.6	6,937.1	23.7	33.8	-90.51	-4,869.0	2,416.3	4,546.0	4,504.2	41.81	108.735	
7,900.0	6,968.4	7,213.3	6,936.8	24.1	33.8	-90.50	-4,869.0	2,416.3	4,523.4	4,481.2	42.19	107.210	
7,972.4	6,967.8	7,212.5	6,936.0	25.2	33.8	-90.48	-4,869.0	2,416.3	4,460.5	4,417.2	43.31	102.986	
8,000.0	6,967.5	7,212.2	6,935.6	25.6	33.8	-90.47	-4,869.0	2,416.3	4,436.7	4,392.9	43.74	101.437	
8,070.8	6,966.9	7,211.3	6,934.8	26.7	33.8	-90.45	-4,869.0	2,416.3	4,375.6	4,330.7	44.88	97.505	
8,100.0	6,966.6	7,211.0	6,934.5	27.2	33.8	-90.44	-4,869.0	2,416.3	4,350.5	4,305.2	45.34	95.946	
8,169.3	6,966.0	7,210.2	6,933.6	28.3	33.8	-90.42	-4,869.0	2,416.3	4,291.2	4,244.7	46.49	92.306	
8,200.0	6,965.7	7,209.8	6,933.3	28.8	33.8	-90.41	-4,869.0	2,416.3	4,265.0	4,218.0	47.00	90.750	
8,267.7	6,965.1	7,209.0	6,932.5	30.0	33.8	-90.39	-4,869.0	2,416.3	4,207.4	4,159.3	48.14	87.392	
8,300.0	6,964.8	7,208.6	6,932.1	30.5	33.8	-90.38	-4,869.0	2,416.3	4,180.0	4,131.3	48.69	85.848	
8,366.1	6,964.2	7,207.8	6,931.3	31.7	33.8	-90.36	-4,869.0	2,416.3	4,124.3	4,074.4	49.83	82.759	
8,400.0	6,963.9	7,207.4	6,930.9	32.2	33.8	-90.35	-4,869.0	2,416.3	4,095.8	4,045.4	50.42	81.233	
8,464.5	6,963.3	7,206.7	6,930.2	33.4	33.8	-90.33	-4,869.0	2,416.3	4,041.8	3,990.3	51.55	78.398	
8,500.0	6,963.0	7,206.3	6,929.7	34.0	33.8	-90.32	-4,869.0	2,416.3	4,012.3	3,960.1	52.18	76.896	
8,563.0	6,962.4	7,205.5	6,929.0	35.1	33.8	-90.30	-4,869.0	2,416.3	3,960.1	3,906.8	53.30	74.297	
8,600.0	6,962.0	7,205.1	6,928.6	35.8	33.8	-90.29	-4,869.0	2,416.3	3,929.5	3,875.6	53.96	72.822	
8,661.4	6,961.5	7,204.3	6,927.8	36.9	33.8	-90.27	-4,869.0	2,416.2	3,879.1	3,824.1	55.07	70.442	
8,700.0	6,961.1	7,203.9	6,927.4	37.6	33.8	-90.26	-4,869.0	2,416.2	3,847.6	3,791.9	55.76	68.998	
8,759.8	6,960.6	7,203.2	6,926.7	38.7	33.8	-90.24	-4,869.0	2,416.2	3,799.0	3,742.2	56.85	66.820	
8,800.0	6,960.2	7,202.7	6,926.2	39.4	33.8	-90.23	-4,869.0	2,416.2	3,766.6	3,709.0	57.59	65.407	
8,858.2	6,959.7	7,202.0	6,925.5	40.5	33.8	-90.21	-4,869.0	2,416.2	3,719.8	3,661.1	58.66	63.415	
8,900.0	6,959.3	7,201.5	6,925.0	41.2	33.8	-90.20	-4,869.0	2,416.2	3,686.5	3,627.0	59.43	62.035	
8,956.7	6,958.8	7,200.8	6,924.3	42.3	33.8	-90.18	-4,869.0	2,416.2	3,641.5	3,581.0	60.47	60.215	
9,000.0	6,958.4	7,200.3	6,923.8	43.1	33.8	-90.17	-4,869.0	2,416.2	3,607.3	3,546.1	61.28	58.869	
9,055.1	6,957.9	7,199.6	6,923.1	44.1	33.8	-90.15	-4,869.0	2,416.2	3,564.2	3,501.9	62.30	57.206	
9,100.0	6,957.5	7,199.1	6,922.6	44.9	33.8	-90.14	-4,869.0	2,416.2	3,529.3	3,466.1	63.14	55.895	
9,153.5	6,957.0	7,198.4	6,921.9	45.9	33.8	-90.12	-4,869.0	2,416.2	3,487.9	3,423.8	64.14	54.376	
9,200.0	6,956.6	7,197.9	6,921.4	46.8	33.8	-90.11	-4,869.0	2,416.2	3,452.3	3,387.3	65.02	53.100	
9,251.9	6,956.1	7,197.3	6,920.7	47.8	33.8	-90.09	-4,869.0	2,416.2	3,412.8	3,346.8	65.99	51.714	
9,300.0	6,955.7	7,196.7	6,920.2	48.7	33.8	-90.08	-4,869.0	2,416.2	3,376.6	3,309.7	66.90	50.472	
9,350.4	6,955.2	7,196.1	6,919.5	49.6	33.8	-90.06	-4,869.0	2,416.2	3,338.9	3,271.1	67.85	49.208	
9,400.0	6,954.8	7,195.5	6,918.9	50.6	33.8	-90.05	-4,869.0	2,416.1	3,302.2	3,233.4	68.79	48.002	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 134-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,448.8	6,954.3	7,194.9	6,918.3	51.5	33.8	-90.03	-4,869.0	2,416.1	3,266.3	3,196.6	69.72	46.849	
9,500.0	6,953.9	7,194.2	6,917.7	52.5	33.8	-90.02	-4,869.0	2,416.1	3,229.1	3,158.4	70.69	45.678	
9,547.2	6,953.4	7,193.7	6,917.1	53.4	33.8	-90.00	-4,869.0	2,416.1	3,195.1	3,123.5	71.59	44.629	
9,600.0	6,952.9	7,193.0	6,916.5	54.4	33.8	-89.99	-4,869.0	2,416.1	3,157.5	3,084.9	72.60	43.492	
9,645.6	6,952.5	7,192.5	6,915.9	55.2	33.8	-89.97	-4,869.0	2,416.1	3,125.4	3,051.9	73.47	42.538	
9,700.0	6,952.0	7,191.8	6,915.3	56.3	33.8	-89.95	-4,869.0	2,416.1	3,087.5	3,013.0	74.51	41.436	
9,744.1	6,951.6	7,191.3	6,914.7	57.1	33.8	-89.94	-4,869.0	2,416.1	3,057.2	2,981.8	75.36	40.569	
9,800.0	6,951.1	7,190.6	6,914.1	58.2	33.8	-89.92	-4,869.0	2,416.1	3,019.2	2,942.8	76.43	39.503	
9,842.5	6,950.7	7,190.1	6,913.5	59.0	33.8	-89.91	-4,869.0	2,416.1	2,990.7	2,913.5	77.25	38.716	
9,900.0	6,950.2	7,189.3	6,912.8	60.1	33.8	-89.89	-4,869.0	2,416.1	2,952.7	2,874.3	78.35	37.684	
9,940.9	6,949.8	7,188.8	6,912.3	60.9	33.8	-89.88	-4,869.0	2,416.1	2,926.0	2,846.9	79.14	36.972	
10,000.0	6,949.3	7,188.1	6,911.6	62.0	33.8	-89.86	-4,869.0	2,416.1	2,888.1	2,807.8	80.28	35.975	
10,039.3	6,948.9	7,187.6	6,911.1	62.8	33.8	-89.85	-4,869.0	2,416.1	2,863.3	2,782.2	81.04	35.331	
10,100.0	6,948.4	7,186.9	6,910.4	64.0	33.8	-89.83	-4,869.0	2,416.0	2,825.6	2,743.4	82.21	34.370	
10,137.8	6,948.0	7,186.4	6,909.9	64.7	33.8	-89.82	-4,869.1	2,416.0	2,802.6	2,719.6	82.94	33.789	
10,200.0	6,947.5	7,185.6	6,909.1	65.9	33.8	-89.80	-4,869.1	2,416.0	2,765.3	2,681.1	84.15	32.863	
10,236.2	6,947.1	7,185.2	6,908.7	66.6	33.8	-89.78	-4,869.1	2,416.0	2,744.0	2,659.2	84.85	32.340	
10,300.0	6,946.6	7,184.4	6,907.9	67.8	33.8	-89.76	-4,869.1	2,416.0	2,707.3	2,621.3	86.09	31.449	
10,334.6	6,946.3	7,184.0	6,907.4	68.5	33.8	-89.75	-4,869.1	2,416.0	2,687.8	2,601.1	86.76	30.981	
10,400.0	6,945.7	7,183.1	6,906.6	69.8	33.8	-89.73	-4,869.1	2,416.0	2,651.9	2,563.9	88.03	30.126	
10,433.0	6,945.4	7,182.7	6,906.2	70.4	33.8	-89.72	-4,869.1	2,416.0	2,634.1	2,545.5	88.67	29.707	
10,500.0	6,944.7	7,181.9	6,905.4	71.7	33.8	-89.70	-4,869.1	2,416.0	2,599.1	2,509.1	89.97	28.888	
10,531.5	6,944.5	7,181.5	6,905.0	72.3	33.8	-89.69	-4,869.1	2,416.0	2,583.1	2,492.5	90.58	28.516	
10,600.0	6,943.8	7,180.6	6,904.1	73.7	33.8	-89.67	-4,869.1	2,416.0	2,549.1	2,457.2	91.92	27.733	
10,629.9	6,943.6	7,180.3	6,903.7	74.2	33.8	-89.66	-4,869.1	2,416.0	2,534.8	2,442.3	92.50	27.403	
10,700.0	6,942.9	7,179.4	6,902.9	75.6	33.8	-89.64	-4,869.1	2,416.0	2,502.2	2,408.3	93.87	26.657	
10,728.3	6,942.7	7,179.0	6,902.5	76.2	33.8	-89.63	-4,869.1	2,415.9	2,489.4	2,395.0	94.42	26.366	
10,800.0	6,942.0	7,178.1	6,901.6	77.6	33.8	-89.60	-4,869.1	2,415.9	2,458.4	2,362.6	95.82	25.657	
10,826.7	6,941.8	7,177.8	6,901.3	78.1	33.8	-89.59	-4,869.1	2,415.9	2,447.2	2,350.9	96.34	25.402	
10,900.0	6,941.1	7,176.9	6,900.3	79.5	33.8	-89.57	-4,869.1	2,415.9	2,418.0	2,320.2	97.77	24.731	
10,925.2	6,940.9	7,176.5	6,900.0	80.0	33.8	-89.56	-4,869.1	2,415.9	2,408.3	2,310.1	98.26	24.509	
11,000.0	6,940.2	7,175.6	6,899.1	81.5	33.8	-89.54	-4,869.1	2,415.9	2,381.0	2,281.3	99.73	23.875	
11,023.6	6,940.0	7,175.3	6,898.8	81.9	33.8	-89.53	-4,869.1	2,415.9	2,372.8	2,272.7	100.19	23.684	
11,100.0	6,939.3	7,174.3	6,897.8	83.4	33.8	-89.51	-4,869.1	2,415.9	2,347.8	2,246.1	101.68	23.089	
11,122.0	6,939.1	7,174.0	6,897.5	83.8	33.8	-89.50	-4,869.1	2,415.9	2,341.0	2,238.9	102.12	22.925	
11,200.0	6,938.4	7,173.1	6,896.5	85.4	33.8	-89.47	-4,869.1	2,415.9	2,318.4	2,214.7	103.64	22.369	
11,220.4	6,938.2	7,172.8	6,896.3	85.8	33.8	-89.47	-4,869.1	2,415.9	2,312.8	2,208.8	104.04	22.230	
11,300.0	6,937.4	7,171.8	6,895.3	87.3	33.8	-89.44	-4,869.1	2,415.9	2,293.0	2,187.3	105.60	21.713	
11,318.9	6,937.3	7,171.5	6,895.0	87.7	33.8	-89.43	-4,869.1	2,415.9	2,288.6	2,182.6	105.97	21.596	
11,400.0	6,936.5	7,170.5	6,894.0	89.3	33.8	-89.41	-4,869.1	2,415.8	2,271.7	2,164.1	107.56	21.119	
11,417.3	6,936.4	7,170.3	6,893.8	89.6	33.8	-89.40	-4,869.1	2,415.8	2,268.4	2,160.5	107.90	21.022	
11,500.0	6,935.6	7,169.2	6,892.7	91.3	33.8	-89.37	-4,869.1	2,415.8	2,254.6	2,145.1	109.53	20.585	
11,515.7	6,935.5	7,169.0	6,892.5	91.6	33.8	-89.37	-4,869.1	2,415.8	2,252.3	2,142.5	109.84	20.506	
11,600.0	6,934.7	7,167.9	6,891.4	93.2	33.8	-89.34	-4,869.1	2,415.8	2,241.9	2,130.4	111.49	20.108	
11,614.1	6,934.6	7,167.7	6,891.2	93.5	33.8	-89.34	-4,869.1	2,415.8	2,240.4	2,128.6	111.77	20.045	
11,700.0	6,933.8	7,166.6	6,890.1	95.2	33.8	-89.31	-4,869.1	2,415.8	2,233.5	2,120.1	113.46	19.686	
11,712.6	6,933.7	7,166.5	6,889.9	95.4	33.8	-89.30	-4,869.1	2,415.8	2,232.8	2,119.1	113.70	19.637	
11,800.0	6,932.9	7,165.3	6,888.8	97.1	33.8	-89.27	-4,869.1	2,415.8	2,229.7	2,114.3	115.42	19.317	
11,811.0	6,932.8	7,165.2	6,888.7	97.4	33.8	-89.27	-4,869.1	2,415.8	2,229.5	2,113.9	115.64	19.280	
11,836.2	6,932.5	7,164.9	6,888.3	97.9	33.8	-89.26	-4,869.1	2,415.8	2,229.4	2,113.3	116.14	19.196 CC	
11,900.0	6,932.0	7,164.0	6,887.5	99.1	33.8	-89.24	-4,869.1	2,415.8	2,230.3	2,112.9	117.39	18.999 ES	
11,909.4	6,931.9	7,163.9	6,887.4	99.3	33.8	-89.24	-4,869.1	2,415.8	2,230.6	2,113.0	117.58	18.971	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 134-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
12,000.0	6,931.0	7,162.7	6,886.2	101.1	33.8	-89.21	-4,869.1	2,415.7	2,235.4	2,116.0	119.36	18.728	
12,007.8	6,931.0	7,162.6	6,886.1	101.2	33.8	-89.21	-4,869.1	2,415.7	2,236.0	2,116.5	119.51	18.709	
12,100.0	6,930.1	7,161.4	6,884.9	103.0	33.8	-89.17	-4,869.1	2,415.7	2,244.9	2,123.6	121.33	18.503	
12,106.3	6,930.1	7,161.3	6,884.8	103.2	33.8	-89.17	-4,869.1	2,415.7	2,245.7	2,124.2	121.45	18.490	
12,200.0	6,929.2	7,160.1	6,883.6	105.0	33.8	-89.14	-4,869.1	2,415.7	2,258.9	2,135.6	123.30	18.320	
12,204.7	6,929.2	7,160.1	6,883.5	105.1	33.8	-89.14	-4,869.1	2,415.7	2,259.6	2,136.2	123.39	18.313	
12,300.0	6,928.3	7,158.8	6,882.3	107.0	33.8	-89.11	-4,869.1	2,415.7	2,277.1	2,151.8	125.27	18.178	
12,303.1	6,928.3	7,158.8	6,882.2	107.1	33.8	-89.11	-4,869.1	2,415.7	2,277.8	2,152.4	125.33	18.174	
12,400.0	6,927.4	7,157.5	6,881.0	109.0	33.8	-89.07	-4,869.1	2,415.7	2,299.6	2,172.3	127.24	18.073	
12,401.5	6,927.4	7,157.5	6,880.9	109.0	33.8	-89.07	-4,869.1	2,415.7	2,299.9	2,172.7	127.27	18.071	
12,500.0	6,926.5	7,156.2	6,879.6	110.9	33.8	-89.04	-4,869.1	2,415.7	2,326.1	2,196.9	129.21	18.002	
12,598.4	6,925.6	7,154.9	6,878.3	112.9	33.8	-89.01	-4,869.1	2,415.6	2,356.1	2,224.9	131.15	17.964	
12,600.0	6,925.6	7,154.8	6,878.3	112.9	33.8	-89.00	-4,869.1	2,415.6	2,356.6	2,225.4	131.18	17.964	
12,696.8	6,924.7	7,153.6	6,877.0	114.8	33.8	-88.97	-4,869.1	2,415.6	2,389.7	2,256.6	133.10	17.955 SF	
12,700.0	6,924.6	7,153.5	6,877.0	114.9	33.8	-88.97	-4,869.1	2,415.6	2,390.9	2,257.7	133.16	17.955	
12,795.2	6,923.8	7,152.2	6,875.7	116.8	33.8	-88.94	-4,869.1	2,415.6	2,426.9	2,291.8	135.04	17.972	
12,800.0	6,923.7	7,152.2	6,875.7	116.9	33.8	-88.94	-4,869.1	2,415.6	2,428.8	2,293.6	135.13	17.973	
12,893.7	6,922.9	7,150.9	6,874.4	118.7	33.8	-88.90	-4,869.1	2,415.6	2,467.4	2,330.5	136.98	18.013	
12,900.0	6,922.8	7,150.8	6,874.3	118.8	33.8	-88.90	-4,869.1	2,415.6	2,470.1	2,333.0	137.11	18.016	
12,992.1	6,922.0	7,149.6	6,873.1	120.6	33.8	-88.87	-4,869.1	2,415.6	2,511.2	2,372.3	138.92	18.076	
13,000.0	6,921.9	7,149.5	6,873.0	120.8	33.8	-88.87	-4,869.1	2,415.6	2,514.8	2,375.7	139.08	18.082	
13,090.5	6,921.1	7,148.3	6,871.8	122.6	33.8	-88.84	-4,869.2	2,415.5	2,558.0	2,417.1	140.87	18.159	
13,100.0	6,921.0	7,148.2	6,871.6	122.8	33.8	-88.83	-4,869.2	2,415.5	2,562.6	2,421.6	141.06	18.167	
13,188.9	6,920.2	7,147.0	6,870.4	124.5	33.8	-88.80	-4,869.2	2,415.5	2,607.6	2,464.8	142.81	18.259	
13,200.0	6,920.1	7,146.8	6,870.3	124.8	33.8	-88.80	-4,869.2	2,415.5	2,613.4	2,470.4	143.03	18.271	
13,287.4	6,919.3	7,145.6	6,869.1	126.5	33.8	-88.77	-4,869.2	2,415.5	2,660.0	2,515.3	144.76	18.376	
13,300.0	6,919.1	7,145.5	6,868.9	126.7	33.8	-88.76	-4,869.2	2,415.5	2,666.9	2,521.9	145.01	18.392	
13,385.8	6,918.4	7,145.0	6,868.5	128.4	33.8	-88.75	-4,869.2	2,415.5	2,715.0	2,568.3	146.70	18.506	
13,400.0	6,918.2	7,145.0	6,868.5	128.7	33.8	-88.75	-4,869.2	2,415.5	2,723.1	2,576.1	146.98	18.526	
13,484.2	6,917.5	7,145.0	6,868.5	130.4	33.8	-88.75	-4,869.2	2,415.5	2,772.3	2,623.7	148.65	18.650	
13,500.0	6,917.3	7,145.0	6,868.5	130.7	33.8	-88.75	-4,869.2	2,415.5	2,781.7	2,632.7	148.96	18.674	
13,582.6	6,916.6	7,145.0	6,868.5	132.3	33.8	-88.75	-4,869.2	2,415.5	2,831.9	2,681.3	150.60	18.804	
13,600.0	6,916.4	7,145.0	6,868.5	132.7	33.8	-88.75	-4,869.2	2,415.5	2,842.6	2,691.7	150.94	18.833	
13,681.1	6,915.6	7,145.0	6,868.5	134.3	33.8	-88.75	-4,869.2	2,415.5	2,893.6	2,741.1	152.55	18.969	
13,700.0	6,915.5	7,145.0	6,868.5	134.6	33.8	-88.75	-4,869.2	2,415.5	2,905.7	2,752.8	152.92	19.002	
13,779.5	6,914.7	7,145.0	6,868.5	136.2	33.8	-88.75	-4,869.2	2,415.5	2,957.4	2,802.9	154.49	19.142	
13,800.0	6,914.6	7,139.9	6,863.4	136.6	33.8	-88.62	-4,869.2	2,415.4	2,970.9	2,816.0	154.89	19.180	
13,877.9	6,913.8	7,139.0	6,862.5	138.2	33.8	-88.60	-4,869.2	2,415.4	3,022.9	2,866.5	156.44	19.324	
13,900.0	6,913.6	7,138.8	6,862.3	138.6	33.8	-88.59	-4,869.2	2,415.4	3,037.9	2,881.0	156.87	19.365	
13,976.3	6,912.9	7,137.9	6,861.4	140.1	33.8	-88.57	-4,869.2	2,415.4	3,090.2	2,931.9	158.38	19.511	
14,000.0	6,912.7	7,137.7	6,861.1	140.6	33.8	-88.56	-4,869.2	2,415.4	3,106.7	2,947.8	158.85	19.557	
14,074.8	6,912.0	7,136.8	6,860.3	142.0	33.8	-88.54	-4,869.2	2,415.4	3,159.2	2,998.9	160.27	19.712	
14,079.0	6,912.0	7,136.8	6,860.3	142.1	33.8	-88.54	-4,869.2	2,415.4	3,162.2	3,001.8	160.35	19.720	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 726-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	171.44	-5,114.8	769.7	5,172.5				
98.4	98.4	78.9	78.9	0.1	0.1	171.44	-5,114.9	769.7	5,172.5	5,172.3	0.18	N/A	
100.0	100.0	80.4	80.4	0.1	0.1	171.44	-5,114.9	769.7	5,172.5	5,172.3	0.18	N/A	
196.8	196.8	172.5	172.5	0.3	0.2	171.45	-5,115.0	769.4	5,172.6	5,172.1	0.49	N/A	
200.0	200.0	175.5	175.5	0.3	0.2	171.45	-5,115.0	769.4	5,172.6	5,172.1	0.50	N/A	
295.3	295.3	266.1	266.1	0.5	0.3	171.45	-5,115.3	769.0	5,172.8	5,172.0	0.81	6,364.378	
300.0	300.0	270.6	270.6	0.5	0.3	171.45	-5,115.3	769.0	5,172.8	5,172.0	0.83	6,246.859	
393.7	393.7	359.7	359.7	0.8	0.4	171.46	-5,115.7	768.4	5,173.1	5,172.0	1.13	4,572.623	
400.0	400.0	365.7	365.7	0.8	0.4	171.46	-5,115.7	768.4	5,173.1	5,172.0	1.15	4,491.691	
492.1	492.1	453.3	453.3	1.0	0.5	171.47	-5,116.2	767.6	5,173.5	5,172.1	1.45	3,568.266	
500.0	500.0	460.8	460.8	1.0	0.5	171.47	-5,116.2	767.6	5,173.6	5,172.1	1.48	3,506.649	
590.5	590.5	546.9	546.9	1.2	0.6	171.48	-5,116.8	766.7	5,174.0	5,172.2	1.77	2,925.799	
600.0	600.0	555.9	555.8	1.2	0.6	171.48	-5,116.9	766.6	5,174.1	5,172.3	1.80	2,876.088	
689.0	689.0	640.5	640.4	1.4	0.7	171.49	-5,117.5	765.6	5,174.6	5,172.5	2.09	2,479.507	
700.0	700.0	650.9	650.9	1.4	0.7	171.49	-5,117.6	765.4	5,174.7	5,172.5	2.12	2,437.862	
787.4	787.4	726.0	726.0	1.6	0.8	171.51	-5,118.3	764.4	5,175.3	5,172.9	2.40	2,158.971	
800.0	800.0	726.0	726.0	1.7	0.8	171.51	-5,118.3	764.4	5,175.4	5,173.0	2.43	2,133.814	
885.8	885.8	795.0	794.9	1.9	0.9	171.51	-5,119.1	764.0	5,176.4	5,173.6	2.76	1,876.066	
900.0	900.0	804.1	804.1	1.9	0.9	171.51	-5,119.3	764.0	5,176.6	5,173.8	2.81	1,842.398	
984.2	984.2	854.0	853.9	2.1	1.0	171.51	-5,120.1	764.5	5,178.1	5,175.0	3.10	1,669.880	
1,000.0	1,000.0	854.0	853.9	2.1	1.0	171.51	-5,120.1	764.5	5,178.5	5,175.4	3.14	1,651.150	
1,082.7	1,082.7	904.5	904.5	2.3	1.1	171.50	-5,121.2	765.8	5,180.7	5,177.3	3.42	1,513.770	
1,100.0	1,100.0	912.8	912.7	2.3	1.1	171.49	-5,121.5	766.1	5,181.3	5,177.8	3.48	1,489.808	
1,181.1	1,181.1	983.0	982.8	2.5	1.3	171.46	-5,123.8	769.8	5,184.5	5,180.7	3.80	1,364.542	
1,200.0	1,200.0	983.0	982.8	2.6	1.3	171.46	-5,123.8	769.8	5,185.2	5,181.4	3.84	1,349.636	
1,279.5	1,279.5	983.0	982.8	2.7	1.3	134.89	-5,123.8	769.8	5,189.7	5,185.7	4.01	1,293.775	
1,300.0	1,300.0	983.0	982.8	2.8	1.3	134.87	-5,123.8	769.8	5,191.3	5,187.2	4.06	1,279.440	
1,377.9	1,377.8	1,040.4	1,039.9	3.0	1.4	134.74	-5,126.3	773.9	5,198.3	5,194.0	4.36	1,192.092	
1,400.0	1,399.8	1,050.0	1,049.5	3.0	1.4	134.70	-5,126.8	774.7	5,200.8	5,196.3	4.43	1,173.498	
1,476.4	1,475.9	1,111.0	1,110.2	3.2	1.6	134.56	-5,130.5	780.1	5,210.6	5,205.9	4.74	1,098.513	
1,500.0	1,499.5	1,111.0	1,110.2	3.2	1.6	134.51	-5,130.5	780.1	5,213.9	5,209.1	4.80	1,086.748	
1,574.8	1,573.7	1,111.0	1,110.2	3.4	1.6	134.33	-5,130.5	780.1	5,226.0	5,221.0	4.98	1,050.105	
1,600.0	1,598.7	1,111.0	1,110.2	3.5	1.6	134.27	-5,130.5	780.1	5,230.6	5,225.5	5.04	1,038.430	
1,673.2	1,671.1	1,157.5	1,156.3	3.7	1.7	134.06	-5,133.9	784.7	5,244.9	5,239.5	5.34	982.250	
1,700.0	1,697.5	1,166.8	1,165.6	3.7	1.7	133.98	-5,134.6	785.7	5,250.6	5,245.2	5.43	966.829	
1,771.6	1,767.9	1,191.7	1,190.1	4.0	1.8	133.75	-5,136.8	788.5	5,267.2	5,261.5	5.69	926.177	
1,800.1	1,795.7	1,240.0	1,237.9	4.0	1.9	133.66	-5,141.5	794.5	5,274.7	5,268.8	5.88	896.455	
1,870.1	1,864.2	1,240.0	1,237.9	4.3	1.9	133.66	-5,141.5	794.5	5,292.5	5,286.4	6.09	869.518	
1,900.0	1,893.4	1,240.0	1,237.9	4.4	1.9	133.66	-5,141.5	794.5	5,300.3	5,294.1	6.17	858.528	
1,968.5	1,960.4	1,270.8	1,268.2	4.6	2.0	133.67	-5,144.8	798.6	5,318.7	5,312.2	6.47	822.422	
2,000.0	1,991.3	1,288.1	1,285.2	4.7	2.1	133.68	-5,146.6	801.1	5,327.3	5,320.7	6.61	805.968	
2,066.9	2,056.7	1,324.8	1,321.3	5.0	2.2	133.69	-5,150.7	806.7	5,345.8	5,338.9	6.92	772.684	
2,100.0	2,089.1	1,368.0	1,363.6	5.1	2.4	133.69	-5,155.6	813.8	5,355.1	5,348.0	7.14	749.719	
2,165.3	2,153.0	1,368.0	1,363.6	5.3	2.4	133.69	-5,155.6	813.8	5,373.6	5,366.2	7.35	730.859	
2,200.0	2,186.9	1,368.0	1,363.6	5.5	2.4	133.69	-5,155.6	813.8	5,383.7	5,376.2	7.46	721.273	
2,263.8	2,249.3	1,414.4	1,408.9	5.7	2.6	133.68	-5,161.3	822.1	5,402.3	5,394.4	7.82	690.648	
2,300.0	2,284.7	1,428.7	1,422.8	5.8	2.6	133.68	-5,163.1	824.8	5,413.1	5,405.1	7.99	677.768	
2,362.2	2,345.5	1,453.0	1,446.4	6.1	2.7	133.68	-5,166.3	829.4	5,431.9	5,423.6	8.27	656.677	
2,400.0	2,382.5	1,496.0	1,488.2	6.2	2.9	133.66	-5,172.3	838.1	5,443.7	5,435.2	8.54	637.782	
2,460.6	2,441.8	1,496.0	1,488.2	6.5	2.9	133.66	-5,172.3	838.1	5,462.5	5,453.8	8.74	624.953	
2,500.0	2,480.3	1,496.0	1,488.2	6.6	2.9	133.66	-5,172.3	838.1	5,475.0	5,466.2	8.87	616.958	
2,559.0	2,538.1	1,496.0	1,488.2	6.9	2.9	133.66	-5,172.3	838.1	5,494.3	5,485.2	9.08	605.324	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 726-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,600.0	2,578.1	1,543.5	1,534.1	7.0	3.2	133.64	-5,179.5	848.1	5,507.5	5,498.1	9.39	586.319	
2,657.5	2,634.4	1,564.9	1,554.7	7.3	3.3	133.63	-5,182.9	852.7	5,526.6	5,516.9	9.67	571.440	
2,700.0	2,675.9	1,580.6	1,569.8	7.5	3.3	133.63	-5,185.5	856.1	5,540.9	5,531.0	9.88	560.996	
2,755.9	2,730.6	1,625.0	1,612.4	7.7	3.6	133.61	-5,193.1	866.0	5,560.1	5,549.9	10.24	543.201	
2,800.0	2,773.8	1,625.0	1,612.4	7.9	3.6	133.61	-5,193.1	866.0	5,575.3	5,564.9	10.39	536.599	
2,854.3	2,826.9	1,625.0	1,612.4	8.1	3.6	133.61	-5,193.1	866.0	5,594.4	5,583.9	10.58	528.719	
2,857.4	2,829.9	1,625.0	1,612.4	8.1	3.6	133.61	-5,193.1	866.0	5,595.5	5,584.9	10.59	528.289	
2,900.0	2,871.6	1,663.2	1,648.9	8.3	3.8	133.81	-5,199.9	874.8	5,610.4	5,599.5	10.88	515.625	
2,952.7	2,923.5	1,688.6	1,673.1	8.4	3.9	134.07	-5,204.6	880.7	5,628.5	5,617.4	11.12	506.038	
3,000.0	2,970.1	1,711.3	1,694.7	8.6	4.1	134.29	-5,208.8	886.2	5,644.4	5,633.0	11.34	497.759	
3,051.2	3,020.7	1,753.0	1,734.4	8.7	4.3	134.49	-5,216.8	896.4	5,661.2	5,649.6	11.64	486.453	
3,100.0	3,069.1	1,753.0	1,734.4	8.9	4.3	134.73	-5,216.8	896.4	5,676.8	5,665.1	11.75	482.934	
3,149.6	3,118.3	1,785.7	1,765.4	9.0	4.5	134.91	-5,223.2	904.7	5,692.3	5,680.3	12.02	473.720	
3,200.0	3,168.5	1,811.9	1,790.1	9.1	4.7	135.09	-5,228.4	911.5	5,707.7	5,695.5	12.25	465.918	
3,248.0	3,216.3	1,836.7	1,813.5	9.2	4.9	135.26	-5,233.4	918.2	5,722.0	5,709.5	12.46	459.087	
3,300.0	3,268.2	1,882.0	1,856.0	9.3	5.2	135.38	-5,242.7	930.7	5,737.0	5,724.2	12.78	448.868	
3,346.4	3,314.6	1,882.0	1,856.0	9.4	5.2	135.57	-5,242.7	930.7	5,750.0	5,737.1	12.86	447.086	
3,400.0	3,368.1	1,882.0	1,856.0	9.5	5.2	135.78	-5,242.7	930.7	5,764.8	5,751.8	12.95	445.107	
3,444.9	3,413.0	1,929.2	1,900.1	9.6	5.5	135.84	-5,252.6	944.3	5,776.5	5,763.3	13.27	435.229	
3,457.5	3,425.6	1,934.6	1,905.2	9.6	5.5	172.37	-5,253.7	945.8	5,779.8	5,766.5	13.32	433.897	
3,500.0	3,468.1	1,952.9	1,922.2	9.7	5.7	172.33	-5,257.7	951.2	5,791.0	5,777.5	13.49	429.248	
3,543.3	3,511.4	1,971.5	1,939.5	9.7	5.8	172.28	-5,261.7	956.7	5,802.5	5,788.8	13.67	424.430	
3,600.0	3,568.1	2,010.0	1,975.2	9.8	6.1	172.17	-5,270.4	968.2	5,817.9	5,803.9	13.98	416.068	
3,641.7	3,609.9	2,010.0	1,975.2	9.9	6.1	172.17	-5,270.4	968.2	5,829.4	5,815.3	14.06	414.553	
3,700.0	3,668.1	2,045.7	2,008.3	10.0	6.4	172.07	-5,278.5	979.1	5,845.6	5,831.2	14.38	406.493	
3,740.1	3,708.3	2,067.2	2,028.1	10.1	6.5	172.01	-5,283.5	985.9	5,857.0	5,842.4	14.58	401.650	
3,800.0	3,768.1	2,099.1	2,057.3	10.2	6.8	171.92	-5,290.9	996.1	5,874.1	5,859.2	14.88	394.733	
3,838.6	3,806.7	2,138.0	2,092.9	10.2	7.1	171.80	-5,300.0	1,009.0	5,885.4	5,870.2	15.18	387.691	
3,900.0	3,868.1	2,138.0	2,092.9	10.3	7.1	171.80	-5,300.0	1,009.0	5,903.4	5,888.1	15.30	385.885	
3,937.0	3,905.1	2,138.0	2,092.9	10.4	7.1	171.80	-5,300.0	1,009.0	5,914.5	5,899.1	15.37	384.817	
4,000.0	3,968.1	2,186.2	2,136.7	10.5	7.5	171.65	-5,311.5	1,025.4	5,933.5	5,917.7	15.80	375.511	
4,035.4	4,003.6	2,199.6	2,148.8	10.6	7.6	171.61	-5,314.8	1,030.1	5,944.4	5,928.4	15.96	372.554	
4,100.0	4,068.1	2,223.8	2,170.7	10.7	7.8	171.53	-5,320.8	1,038.7	5,964.6	5,948.3	16.24	367.356	
4,133.8	4,102.0	2,267.0	2,209.4	10.8	8.2	171.39	-5,331.7	1,054.3	5,975.5	5,958.9	16.58	360.454	
4,200.0	4,168.1	2,267.0	2,209.4	10.9	8.2	171.39	-5,331.7	1,054.3	5,996.6	5,979.9	16.71	358.928	
4,232.3	4,200.4	2,267.0	2,209.4	10.9	8.2	171.39	-5,331.7	1,054.3	6,007.1	5,990.4	16.77	358.199	
4,300.0	4,268.1	2,267.0	2,209.4	11.1	8.2	171.39	-5,331.7	1,054.3	6,029.7	6,012.8	16.90	356.715	
4,330.7	4,298.8	2,267.0	2,209.4	11.1	8.2	171.39	-5,331.7	1,054.3	6,040.2	6,023.2	16.96	356.056	
4,400.0	4,368.1	2,323.0	2,259.3	11.2	8.7	171.21	-5,346.6	1,075.0	6,063.6	6,046.1	17.48	346.900	
4,429.1	4,397.3	2,331.8	2,267.1	11.3	8.8	171.18	-5,349.0	1,078.2	6,073.7	6,056.1	17.60	345.167	
4,500.0	4,468.1	2,395.0	2,322.9	11.4	9.4	170.97	-5,367.0	1,101.9	6,099.0	6,080.9	18.16	335.839	
4,527.5	4,495.7	2,395.0	2,322.9	11.5	9.4	170.97	-5,367.0	1,101.9	6,108.7	6,090.5	18.22	335.356	
4,600.0	4,568.1	2,395.0	2,322.9	11.6	9.4	170.97	-5,367.0	1,101.9	6,134.7	6,116.3	18.36	334.129	
4,626.0	4,594.1	2,395.0	2,322.9	11.7	9.4	170.97	-5,367.0	1,101.9	6,144.2	6,125.8	18.41	333.699	
4,700.0	4,668.1	2,450.7	2,371.8	11.8	10.0	170.79	-5,383.3	1,122.9	6,171.5	6,152.6	18.93	325.995	
4,724.4	4,692.5	2,473.5	2,391.8	11.8	10.2	170.72	-5,389.9	1,131.6	6,180.5	6,161.4	19.13	323.053	
4,800.0	4,768.1	2,552.0	2,460.7	12.0	10.9	170.46	-5,412.7	1,161.7	6,208.5	6,188.7	19.80	313.602	
4,822.8	4,791.0	2,581.8	2,486.7	12.0	11.2	170.36	-5,421.3	1,173.2	6,216.9	6,196.9	20.03	310.311	
4,900.0	4,868.1	2,689.8	2,581.5	12.2	12.2	170.00	-5,451.9	1,215.1	6,245.2	6,224.3	20.88	299.135	
4,921.2	4,889.4	2,724.4	2,611.9	12.2	12.5	169.89	-5,461.5	1,228.6	6,252.9	6,231.7	21.14	295.817	
5,000.0	4,968.1	2,780.0	2,660.8	12.4	13.0	169.71	-5,476.7	1,250.2	6,281.3	6,259.7	21.65	290.191	
5,019.7	4,987.8	2,780.0	2,660.8	12.4	13.0	169.71	-5,476.7	1,250.2	6,288.5	6,266.8	21.69	289.988	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 usft
Survey Program: 726-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	5,068.1	2,846.3	2,718.9	12.6	13.6	169.49	-5,495.1	1,276.2	6,317.8	6,295.5	22.29	283.415		
5,118.1	5,086.2	2,854.5	2,726.1	12.6	13.7	169.46	-5,497.4	1,279.4	6,324.5	6,302.1	22.38	282.551		
5,200.0	5,168.1	2,909.0	2,773.7	12.8	14.2	169.28	-5,513.0	1,301.0	6,355.2	6,332.2	22.91	277.369		
5,216.5	5,184.7	2,909.0	2,773.7	12.8	14.2	169.28	-5,513.0	1,301.0	6,361.4	6,338.4	22.95	277.231		
5,300.0	5,268.1	2,968.1	2,825.1	13.0	14.8	169.09	-5,529.9	1,324.7	6,393.0	6,369.5	23.54	271.601		
5,314.9	5,283.1	2,982.4	2,837.5	13.0	15.0	169.04	-5,534.0	1,330.5	6,398.7	6,375.0	23.67	270.329		
5,400.0	5,368.1	3,037.0	2,884.8	13.1	15.5	168.86	-5,549.4	1,353.0	6,431.1	6,406.8	24.23	265.415		
5,413.4	5,381.5	3,061.2	2,905.8	13.2	15.8	168.77	-5,556.2	1,363.1	6,436.1	6,411.7	24.44	263.380		
5,500.0	5,468.1	3,112.2	2,949.8	13.3	16.3	168.60	-5,570.6	1,384.5	6,469.4	6,444.5	24.99	258.877		
5,511.8	5,479.9	3,119.2	2,955.7	13.4	16.4	168.58	-5,572.6	1,387.4	6,474.0	6,449.0	25.07	258.283		
5,600.0	5,568.1	3,183.7	3,011.3	13.5	17.1	168.36	-5,591.0	1,414.7	6,508.4	6,482.7	25.71	253.130		
5,610.2	5,578.4	3,206.0	3,030.5	13.6	17.3	168.28	-5,597.4	1,424.1	6,512.4	6,486.5	25.89	251.584		
5,700.0	5,668.1	3,378.2	3,180.1	13.7	19.0	167.72	-5,645.8	1,494.2	6,546.7	6,519.5	27.21	240.641		
5,708.6	5,676.8	3,392.8	3,192.8	13.8	19.1	167.68	-5,649.9	1,500.1	6,550.0	6,522.7	27.32	239.789		
5,800.0	5,768.1	3,664.9	3,434.3	13.9	21.5	166.89	-5,722.6	1,602.2	6,582.3	6,553.2	29.09	226.248		
5,807.1	5,775.2	3,672.7	3,441.3	14.0	21.6	166.87	-5,724.7	1,605.0	6,584.8	6,555.6	29.15	225.887		
5,900.0	5,868.1	3,756.5	3,516.4	14.1	22.3	166.65	-5,746.7	1,634.9	6,617.5	6,587.7	29.83	221.876		
5,905.5	5,873.6	3,761.4	3,520.7	14.1	22.4	166.64	-5,748.0	1,636.6	6,619.5	6,589.6	29.86	221.648		
6,000.0	5,968.1	3,831.7	3,583.5	14.3	23.0	166.44	-5,766.3	1,662.5	6,652.9	6,622.5	30.48	218.306		
6,003.9	5,972.1	3,833.9	3,585.5	14.3	23.1	166.44	-5,766.8	1,663.3	6,654.3	6,623.8	30.50	218.194		
6,100.0	6,068.1	3,888.3	3,633.9	14.5	23.6	166.29	-5,781.0	1,683.6	6,688.8	6,657.8	31.03	215.532		
6,102.3	6,070.5	3,889.6	3,635.1	14.5	23.6	166.28	-5,781.4	1,684.1	6,689.7	6,658.6	31.05	215.468		
6,200.0	6,168.1	3,947.9	3,686.7	14.7	24.1	166.12	-5,796.8	1,706.1	6,725.3	6,693.7	31.61	212.782		
6,200.8	6,168.9	3,948.5	3,687.3	14.7	24.2	166.12	-5,797.0	1,706.3	6,725.5	6,693.9	31.61	212.756		
6,288.5	6,256.6	4,016.9	3,748.1	14.9	24.8	165.93	-5,815.4	1,731.9	6,757.8	6,725.6	32.20	209.886		
6,299.2	6,267.3	4,025.4	3,755.5	14.9	24.9	-14.22	-5,817.7	1,735.0	6,761.7	6,729.3	32.35	209.030		
6,300.0	6,268.1	4,026.0	3,756.1	14.9	24.9	-14.21	-5,817.8	1,735.3	6,762.0	6,729.6	32.36	208.991		
6,350.0	6,318.1	4,064.0	3,789.9	15.0	25.2	-13.98	-5,828.2	1,749.2	6,778.1	6,745.4	32.71	207.195		
6,397.6	6,365.3	4,064.0	3,789.9	15.1	25.2	-13.73	-5,828.2	1,749.2	6,790.7	6,758.0	32.68	207.774		
6,400.0	6,367.7	4,064.0	3,789.9	15.1	25.2	-13.72	-5,828.2	1,749.2	6,791.3	6,758.6	32.68	207.825		
6,450.0	6,416.8	4,104.0	3,825.5	15.1	25.6	-13.64	-5,839.3	1,763.9	6,801.2	6,768.5	32.71	207.898		
6,496.0	6,461.3	4,122.1	3,841.5	15.1	25.8	-13.57	-5,844.4	1,770.6	6,807.7	6,775.2	32.49	209.537		
6,500.0	6,465.1	4,123.7	3,842.9	15.1	25.8	-13.57	-5,844.8	1,771.2	6,808.1	6,775.6	32.46	209.715		
6,550.0	6,512.4	4,143.3	3,860.2	15.1	26.0	-13.56	-5,850.4	1,778.6	6,811.8	6,779.8	32.05	212.522		
6,594.5	6,553.4	4,193.0	3,903.8	15.1	26.5	-13.71	-5,864.7	1,797.5	6,812.7	6,780.9	31.74	214.666		
6,600.0	6,558.4	4,193.0	3,903.8	15.1	26.5	-13.72	-5,864.7	1,797.5	6,812.5	6,780.9	31.65	215.220		
6,650.0	6,603.0	4,193.0	3,903.8	15.1	26.5	-13.77	-5,864.7	1,797.5	6,809.8	6,779.0	30.83	220.875		
6,692.9	6,639.9	4,193.0	3,903.8	15.1	26.5	-13.86	-5,864.7	1,797.5	6,805.1	6,775.1	30.02	226.668		
6,700.0	6,645.9	4,193.0	3,903.8	15.1	26.5	-13.88	-5,864.7	1,797.5	6,804.1	6,774.2	29.88	227.712		
6,750.0	6,686.8	4,193.0	3,903.8	15.1	26.5	-14.05	-5,864.7	1,797.5	6,795.4	6,766.6	28.82	235.819		
6,791.3	6,719.1	4,242.1	3,946.7	15.1	27.0	-14.44	-5,879.1	1,816.6	6,785.6	6,757.5	28.11	241.360		
6,800.0	6,725.7	4,245.8	3,949.9	15.1	27.0	-14.50	-5,880.2	1,818.0	6,783.3	6,755.4	27.92	242.926		
6,850.0	6,762.3	4,266.6	3,968.1	15.1	27.2	-14.90	-5,886.4	1,826.1	6,768.3	6,741.5	26.78	252.771		
6,889.7	6,789.7	4,282.6	3,982.0	15.1	27.4	-15.29	-5,891.2	1,832.4	6,754.2	6,728.4	25.82	261.579		
6,900.0	6,796.5	4,286.7	3,985.6	15.1	27.4	-15.40	-5,892.5	1,834.0	6,750.3	6,724.7	25.57	263.985		
6,950.0	6,828.0	4,321.0	4,015.3	15.1	27.8	-16.06	-5,902.9	1,847.4	6,729.5	6,705.1	24.41	275.716		
6,988.2	6,850.2	7,525.6	7,061.3	15.1	43.5	-34.35	-6,345.7	2,461.1	6,703.1	6,671.5	31.67	211.643		
7,000.0	6,856.7	7,531.0	7,066.7	15.1	43.5	-35.10	-6,345.5	2,461.1	6,693.6	6,662.0	31.65	211.512		
7,050.0	6,882.5	7,556.5	7,092.1	15.2	43.5	-38.77	-6,344.7	2,461.0	6,652.6	6,620.5	32.01	207.828		
7,086.6	6,899.5	7,571.5	7,107.2	15.3	43.5	-41.94	-6,344.1	2,460.9	6,621.6	6,588.7	32.84	201.625		
7,100.0	6,905.3	7,576.7	7,112.3	15.4	43.5	-43.22	-6,344.0	2,460.9	6,610.0	6,576.8	33.27	198.695		
7,150.0	6,924.9	7,593.8	7,129.5	15.7	43.5	-48.63	-6,343.4	2,460.8	6,566.2	6,530.8	35.46	185.153		

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 726-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,185.0	6,936.7	7,604.0	7,139.7	15.9	43.5	-53.10	-6,343.1	2,460.7	6,535.0	6,497.5	37.49	174.295	
7,200.0	6,941.2	7,607.9	7,143.5	16.0	43.5	-55.19	-6,342.9	2,460.7	6,521.4	6,483.0	38.45	169.623	
7,250.0	6,954.2	7,618.8	7,154.4	16.3	43.5	-63.02	-6,342.6	2,460.6	6,475.8	6,434.0	41.82	154.860	
7,283.4	6,961.0	7,624.3	7,159.9	16.6	43.5	-68.96	-6,342.4	2,460.6	6,445.0	6,401.0	43.98	146.547	
7,300.0	6,963.8	7,626.4	7,162.1	16.7	43.5	-72.09	-6,342.3	2,460.6	6,429.6	6,384.7	44.93	143.117	
7,350.0	6,970.0	7,630.8	7,166.4	17.2	43.5	-82.10	-6,342.2	2,460.5	6,383.1	6,336.1	46.98	135.862	
7,381.9	6,972.1	7,631.8	7,167.4	17.5	43.5	-88.72	-6,342.1	2,460.5	6,353.4	6,305.9	47.44	133.920	
7,400.0	6,972.7	7,631.8	7,167.4	17.7	43.5	-92.49	-6,342.1	2,460.5	6,336.4	6,289.1	47.36	133.802	
7,420.0	6,972.8	7,631.3	7,166.9	17.9	43.5	-96.58	-6,342.2	2,460.5	6,317.8	6,270.8	46.99	134.464	
7,480.3	6,972.2	7,628.9	7,164.5	18.5	43.5	-96.52	-6,342.2	2,460.5	6,261.7	6,214.0	47.63	131.457	
7,500.0	6,972.0	7,628.1	7,163.7	18.7	43.5	-96.50	-6,342.3	2,460.6	6,243.3	6,195.5	47.84	130.493	
7,578.7	6,971.3	7,624.9	7,160.5	19.7	43.5	-96.42	-6,342.4	2,460.6	6,170.2	6,121.4	48.77	126.508	
7,600.0	6,971.1	7,624.1	7,159.7	19.9	43.5	-96.40	-6,342.4	2,460.6	6,150.4	6,101.4	49.02	125.457	
7,677.1	6,970.4	7,621.0	7,156.6	20.9	43.5	-96.33	-6,342.5	2,460.6	6,078.9	6,028.9	50.02	121.529	
7,700.0	6,970.2	7,620.0	7,155.6	21.2	43.5	-96.30	-6,342.5	2,460.6	6,057.8	6,007.4	50.32	120.397	
7,775.6	6,969.5	7,617.0	7,152.6	22.2	43.5	-96.23	-6,342.6	2,460.6	5,987.9	5,936.5	51.37	116.565	
7,800.0	6,969.3	7,616.0	7,151.6	22.6	43.5	-96.20	-6,342.7	2,460.6	5,965.3	5,913.6	51.71	115.361	
7,874.0	6,968.6	7,613.0	7,148.6	23.7	43.5	-96.13	-6,342.8	2,460.7	5,897.1	5,844.3	52.81	111.674	
7,900.0	6,968.4	7,611.9	7,147.5	24.1	43.5	-96.10	-6,342.8	2,460.7	5,873.1	5,819.9	53.19	110.416	
7,972.4	6,967.8	7,609.0	7,144.6	25.2	43.5	-96.03	-6,342.9	2,460.7	5,806.5	5,752.2	54.32	106.904	
8,000.0	6,967.5	7,607.9	7,143.5	25.6	43.5	-96.00	-6,342.9	2,460.7	5,781.2	5,726.5	54.74	105.606	
8,070.8	6,966.9	7,605.0	7,140.6	26.7	43.5	-95.93	-6,343.0	2,460.7	5,716.2	5,660.3	55.88	102.287	
8,100.0	6,966.6	7,603.8	7,139.4	27.2	43.5	-95.90	-6,343.1	2,460.7	5,689.5	5,633.2	56.35	100.960	
8,169.3	6,966.0	7,600.9	7,136.5	28.3	43.5	-95.83	-6,343.2	2,460.7	5,626.2	5,568.7	57.50	97.840	
8,200.0	6,965.7	7,599.7	7,135.3	28.8	43.5	-95.80	-6,343.2	2,460.8	5,598.1	5,540.1	58.01	96.496	
8,267.7	6,965.1	7,596.9	7,132.5	30.0	43.5	-95.73	-6,343.3	2,460.8	5,536.4	5,477.3	59.17	93.575	
8,300.0	6,964.8	7,595.5	7,131.2	30.5	43.5	-95.70	-6,343.3	2,460.8	5,507.1	5,447.3	59.72	92.222	
8,366.1	6,964.2	7,592.8	7,128.4	31.7	43.5	-95.63	-6,343.4	2,460.8	5,447.0	5,386.1	60.86	89.496	
8,400.0	6,963.9	7,591.4	7,127.0	32.2	43.5	-95.59	-6,343.5	2,460.8	5,416.3	5,354.8	61.45	88.139	
8,464.5	6,963.3	7,588.7	7,124.3	33.4	43.5	-95.53	-6,343.6	2,460.8	5,357.9	5,295.3	62.59	85.601	
8,500.0	6,963.0	7,587.2	7,122.9	34.0	43.5	-95.49	-6,343.6	2,460.8	5,325.8	5,262.6	63.22	84.247	
8,563.0	6,962.4	7,584.6	7,120.2	35.1	43.5	-95.43	-6,343.7	2,460.8	5,269.0	5,204.7	64.34	81.888	
8,600.0	6,962.0	7,583.1	7,118.7	35.8	43.5	-95.39	-6,343.8	2,460.9	5,235.7	5,170.7	65.01	80.541	
8,661.4	6,961.5	7,580.5	7,116.1	36.9	43.5	-95.32	-6,343.8	2,460.9	5,180.6	5,114.5	66.12	78.351	
8,700.0	6,961.1	7,578.9	7,114.5	37.6	43.5	-95.28	-6,343.9	2,460.9	5,146.0	5,079.2	66.82	77.013	
8,759.8	6,960.6	7,576.4	7,112.0	38.7	43.5	-95.22	-6,344.0	2,460.9	5,092.5	5,024.6	67.91	74.984	
8,800.0	6,960.2	7,574.7	7,110.3	39.4	43.5	-95.18	-6,344.0	2,460.9	5,056.6	4,988.0	68.65	73.658	
8,858.2	6,959.7	7,572.2	7,107.8	40.5	43.5	-95.12	-6,344.1	2,460.9	5,004.7	4,935.0	69.73	71.778	
8,900.0	6,959.3	7,570.4	7,106.1	41.2	43.5	-95.07	-6,344.2	2,460.9	4,967.6	4,897.2	70.50	70.466	
8,956.7	6,958.8	7,568.0	7,103.7	42.3	43.5	-95.01	-6,344.3	2,460.9	4,917.4	4,845.9	71.55	68.725	
9,000.0	6,958.4	7,566.2	7,101.8	43.1	43.5	-94.97	-6,344.3	2,461.0	4,879.1	4,806.8	72.36	67.430	
9,055.1	6,957.9	7,563.9	7,099.5	44.1	43.5	-94.91	-6,344.4	2,461.0	4,830.5	4,757.1	73.39	65.820	
9,100.0	6,957.5	7,561.9	7,097.6	44.9	43.5	-94.86	-6,344.5	2,461.0	4,791.0	4,716.8	74.23	64.541	
9,153.5	6,957.0	7,559.7	7,095.3	45.9	43.5	-94.80	-6,344.5	2,461.0	4,744.1	4,668.8	75.24	63.052	
9,200.0	6,956.6	7,557.7	7,093.3	46.8	43.5	-94.75	-6,344.6	2,461.0	4,703.4	4,627.3	76.12	61.792	
9,251.9	6,956.1	7,555.4	7,091.1	47.8	43.5	-94.70	-6,344.7	2,461.0	4,658.1	4,581.0	77.10	60.416	
9,300.0	6,955.7	7,553.4	7,089.0	48.7	43.5	-94.65	-6,344.8	2,461.0	4,616.3	4,538.3	78.01	59.175	
9,350.4	6,955.2	7,551.2	7,086.8	49.6	43.5	-94.59	-6,344.8	2,461.0	4,572.6	4,493.6	78.97	57.903	
9,400.0	6,954.8	7,549.1	7,084.7	50.6	43.5	-94.54	-6,344.9	2,461.0	4,529.7	4,449.8	79.91	56.682	
9,448.8	6,954.3	7,546.9	7,082.6	51.5	43.5	-94.49	-6,345.0	2,461.1	4,487.6	4,406.8	80.85	55.508	
9,500.0	6,953.9	7,544.7	7,080.4	52.5	43.5	-94.43	-6,345.1	2,461.1	4,443.7	4,361.8	81.82	54.307	
9,547.2	6,953.4	7,542.7	7,078.3	53.4	43.5	-94.38	-6,345.1	2,461.1	4,403.2	4,320.5	82.73	53.224	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 726-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	
9,600.0	6,952.9	7,540.4	7,076.0	54.4	43.5	-94.32	-6,345.2	2,461.1	4,358.2	4,274.5	83.74	52.043	
9,645.6	6,952.5	7,538.4	7,074.0	55.2	43.5	-94.27	-6,345.3	2,461.1	4,319.4	4,234.8	84.62	51.045	
9,700.0	6,952.0	7,536.0	7,071.7	56.3	43.5	-94.22	-6,345.4	2,461.1	4,273.4	4,187.7	85.67	49.884	
9,744.1	6,951.6	7,534.1	7,069.7	57.1	43.5	-94.17	-6,345.4	2,461.1	4,236.2	4,149.7	86.52	48.964	
9,800.0	6,951.1	7,531.6	7,067.3	58.2	43.5	-94.11	-6,345.5	2,461.1	4,189.3	4,101.7	87.60	47.825	
9,842.5	6,950.7	7,529.4	7,065.1	59.0	43.5	-94.05	-6,345.6	2,461.1	4,153.7	4,065.3	88.42	46.977	
9,900.0	6,950.2	7,526.2	7,061.8	60.1	43.5	-93.97	-6,345.7	2,461.1	4,105.8	4,016.3	89.53	45.857	
9,940.9	6,949.8	7,523.9	7,059.5	60.9	43.5	-93.91	-6,345.8	2,461.2	4,071.9	3,981.5	90.33	45.078	
10,000.0	6,949.3	7,520.6	7,056.2	62.0	43.5	-93.83	-6,345.9	2,461.2	4,023.1	3,931.6	91.48	43.979	
10,039.3	6,948.9	7,518.4	7,054.0	62.8	43.5	-93.77	-6,346.0	2,461.2	3,990.8	3,898.5	92.25	43.263	
10,100.0	6,948.4	7,515.0	7,050.7	64.0	43.5	-93.69	-6,346.1	2,461.2	3,941.2	3,847.8	93.43	42.185	
10,137.8	6,948.0	7,512.9	7,048.6	64.7	43.5	-93.64	-6,346.1	2,461.2	3,910.5	3,816.3	94.16	41.529	
10,200.0	6,947.5	7,509.5	7,045.1	65.9	43.5	-93.55	-6,346.3	2,461.2	3,860.2	3,764.8	95.38	40.472	
10,236.2	6,947.1	7,507.5	7,043.2	66.6	43.5	-93.50	-6,346.3	2,461.2	3,831.0	3,735.0	96.09	39.871	
10,300.0	6,946.6	7,504.0	7,039.7	67.8	43.5	-93.42	-6,346.5	2,461.2	3,780.0	3,682.7	97.33	38.836	
10,334.6	6,946.3	7,502.1	7,037.8	68.5	43.5	-93.37	-6,346.5	2,461.2	3,752.5	3,654.5	98.01	38.286	
10,400.0	6,945.7	7,498.5	7,034.2	69.8	43.5	-93.28	-6,346.6	2,461.2	3,700.8	3,601.5	99.29	37.273	
10,433.0	6,945.4	7,496.7	7,032.4	70.4	43.5	-93.23	-6,346.7	2,461.2	3,674.9	3,574.9	99.94	36.771	
10,500.0	6,944.7	7,493.1	7,028.8	71.7	43.5	-93.14	-6,346.8	2,461.2	3,622.7	3,521.4	101.25	35.779	
10,531.5	6,944.5	7,491.4	7,027.1	72.3	43.5	-93.10	-6,346.9	2,461.2	3,598.3	3,496.4	101.87	35.323	
10,600.0	6,943.8	7,487.7	7,023.4	73.7	43.5	-93.01	-6,347.0	2,461.3	3,545.6	3,442.4	103.21	34.352	
10,629.9	6,943.6	7,486.1	7,021.8	74.2	43.5	-92.97	-6,347.1	2,461.3	3,522.8	3,419.0	103.80	33.937	
10,700.0	6,942.9	7,482.4	7,018.1	75.6	43.5	-92.87	-6,347.2	2,461.3	3,469.7	3,364.5	105.18	32.988	
10,728.3	6,942.7	7,480.9	7,016.6	76.2	43.5	-92.84	-6,347.2	2,461.3	3,448.4	3,342.7	105.74	32.613	
10,800.0	6,942.0	7,477.1	7,012.8	77.6	43.5	-92.74	-6,347.4	2,461.3	3,395.0	3,287.9	107.15	31.686	
10,826.7	6,941.8	7,475.6	7,011.3	78.1	43.5	-92.71	-6,347.4	2,461.3	3,375.3	3,267.6	107.67	31.347	
10,900.0	6,941.1	7,471.8	7,007.5	79.5	43.5	-92.61	-6,347.5	2,461.3	3,321.7	3,212.5	109.12	30.442	
10,925.2	6,940.9	7,470.5	7,006.2	80.0	43.5	-92.58	-6,347.6	2,461.3	3,303.4	3,193.8	109.61	30.138	
11,000.0	6,940.2	7,466.5	7,002.2	81.5	43.5	-92.48	-6,347.7	2,461.3	3,249.7	3,138.6	111.09	29.254	
11,023.6	6,940.0	7,465.3	7,001.0	81.9	43.5	-92.45	-6,347.7	2,461.3	3,233.0	3,121.4	111.55	28.982	
11,100.0	6,939.3	7,461.3	6,997.0	83.4	43.5	-92.35	-6,347.9	2,461.3	3,179.3	3,066.3	113.06	28.121	
11,122.0	6,939.1	7,460.2	6,995.9	83.8	43.5	-92.32	-6,347.9	2,461.3	3,164.0	3,050.5	113.49	27.879	
11,200.0	6,938.4	7,456.2	6,991.9	85.4	43.5	-92.22	-6,348.0	2,461.3	3,110.5	2,995.5	115.03	27.041	
11,220.4	6,938.2	7,455.1	6,990.8	85.8	43.5	-92.19	-6,348.1	2,461.3	3,096.6	2,981.2	115.44	26.826	
11,300.0	6,937.4	7,451.0	6,986.7	87.3	43.5	-92.09	-6,348.2	2,461.3	3,043.4	2,926.4	117.01	26.011	
11,318.9	6,937.3	7,450.0	6,985.8	87.7	43.5	-92.07	-6,348.2	2,461.3	3,031.0	2,913.6	117.38	25.822	
11,400.0	6,936.5	7,445.9	6,981.6	89.3	43.5	-91.96	-6,348.4	2,461.3	2,978.2	2,859.2	118.98	25.031	
11,417.3	6,936.4	7,445.0	6,980.7	89.6	43.5	-91.94	-6,348.4	2,461.3	2,967.1	2,847.8	119.32	24.866	
11,500.0	6,935.6	7,440.8	6,976.5	91.3	43.5	-91.83	-6,348.5	2,461.3	2,914.9	2,794.0	120.96	24.098	
11,515.7	6,935.5	7,440.0	6,975.7	91.6	43.5	-91.81	-6,348.6	2,461.3	2,905.2	2,783.9	121.27	23.956	
11,600.0	6,934.7	7,435.8	6,971.5	93.2	43.5	-91.71	-6,348.7	2,461.3	2,853.7	2,730.8	122.94	23.213	
11,614.1	6,934.6	7,435.1	6,970.8	93.5	43.5	-91.69	-6,348.7	2,461.3	2,845.3	2,722.0	123.22	23.092	
11,700.0	6,933.8	7,430.8	6,966.5	95.2	43.5	-91.58	-6,348.9	2,461.3	2,794.8	2,669.9	124.91	22.374	
11,712.6	6,933.7	7,430.1	6,965.9	95.4	43.5	-91.57	-6,348.9	2,461.3	2,787.5	2,662.4	125.16	22.271	
11,800.0	6,932.9	7,425.8	6,961.5	97.1	43.5	-91.46	-6,349.0	2,461.2	2,738.2	2,611.3	126.89	21.579	
11,811.0	6,932.8	7,425.2	6,961.0	97.4	43.5	-91.44	-6,349.0	2,461.2	2,732.1	2,605.0	127.11	21.494	
11,900.0	6,932.0	7,420.8	6,956.6	99.1	43.5	-91.33	-6,349.2	2,461.2	2,684.2	2,555.3	128.87	20.828	
11,909.4	6,931.9	7,420.4	6,956.1	99.3	43.5	-91.32	-6,349.2	2,461.2	2,679.2	2,550.1	129.06	20.759	
12,000.0	6,931.0	7,415.9	6,951.6	101.1	43.5	-91.21	-6,349.3	2,461.2	2,632.8	2,501.9	130.85	20.120	
12,007.8	6,931.0	7,415.5	6,951.3	101.2	43.5	-91.20	-6,349.3	2,461.2	2,628.9	2,497.9	131.01	20.066	
12,100.0	6,930.1	7,411.0	6,946.8	103.0	43.5	-91.09	-6,349.5	2,461.2	2,584.3	2,451.4	132.84	19.455	
12,106.3	6,930.1	7,410.7	6,946.5	103.2	43.5	-91.08	-6,349.5	2,461.2	2,581.3	2,448.4	132.96	19.414	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design SE SE SEC. 18 T4N R64W 6th P.M. - NEI C18-23D - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 726-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
12,200.0	6,929.2	7,406.2	6,941.9	105.0	43.5	-90.97	-6,349.6	2,461.2	2,538.8	2,403.9	134.82	18.831	
12,204.7	6,929.2	7,406.0	6,941.7	105.1	43.5	-90.96	-6,349.7	2,461.2	2,536.7	2,401.8	134.91	18.803	
12,300.0	6,928.3	7,401.2	6,936.9	107.0	43.5	-90.84	-6,349.8	2,461.2	2,496.4	2,359.6	136.80	18.249	
12,303.1	6,928.3	7,401.0	6,936.7	107.1	43.5	-90.84	-6,349.8	2,461.2	2,495.1	2,358.3	136.86	18.231	
12,400.0	6,927.4	7,395.9	6,931.6	109.0	43.5	-90.71	-6,350.0	2,461.2	2,457.4	2,318.6	138.78	17.707	
12,401.5	6,927.4	7,395.8	6,931.6	109.0	43.5	-90.71	-6,350.0	2,461.2	2,456.8	2,318.0	138.81	17.699	
12,500.0	6,926.5	7,390.8	6,926.6	110.9	43.5	-90.58	-6,350.1	2,461.1	2,421.9	2,281.1	140.76	17.205	
12,598.4	6,925.6	7,386.0	6,921.7	112.9	43.5	-90.46	-6,350.3	2,461.1	2,390.5	2,247.8	142.71	16.750	
12,600.0	6,925.6	7,385.9	6,921.6	112.9	43.5	-90.46	-6,350.3	2,461.1	2,390.0	2,247.3	142.75	16.743	
12,696.8	6,924.7	7,381.2	6,917.0	114.8	43.5	-90.34	-6,350.4	2,461.1	2,362.8	2,218.1	144.66	16.333	
12,700.0	6,924.6	7,381.1	6,916.8	114.9	43.5	-90.33	-6,350.4	2,461.1	2,361.9	2,217.2	144.73	16.320	
12,795.2	6,923.8	7,376.6	6,912.4	116.8	43.5	-90.22	-6,350.5	2,461.1	2,338.9	2,192.2	146.62	15.952	
12,800.0	6,923.7	7,376.4	6,912.2	116.9	43.5	-90.22	-6,350.5	2,461.1	2,337.8	2,191.1	146.71	15.935	
12,893.7	6,922.9	7,372.2	6,907.9	118.7	43.4	-90.11	-6,350.7	2,461.1	2,318.9	2,170.3	148.57	15.608	
12,900.0	6,922.8	7,371.9	6,907.6	118.8	43.4	-90.10	-6,350.7	2,461.1	2,317.7	2,169.0	148.69	15.588	
12,992.1	6,922.0	7,367.8	6,903.6	120.6	43.4	-90.00	-6,350.8	2,461.0	2,302.9	2,152.4	150.52	15.300	
13,000.0	6,921.9	7,367.5	6,903.2	120.8	43.4	-89.99	-6,350.8	2,461.0	2,301.8	2,151.1	150.67	15.277	
13,090.5	6,921.1	7,363.6	6,899.3	122.6	43.4	-89.90	-6,350.9	2,461.0	2,291.1	2,138.6	152.47	15.027	
13,100.0	6,921.0	7,363.2	6,898.9	122.8	43.4	-89.89	-6,350.9	2,461.0	2,290.2	2,137.5	152.66	15.002	
13,188.9	6,920.2	7,359.5	6,895.2	124.5	43.4	-89.79	-6,351.0	2,461.0	2,283.4	2,129.0	154.42	14.787	
13,200.0	6,920.1	7,359.0	6,894.8	124.8	43.4	-89.78	-6,351.0	2,461.0	2,282.8	2,128.2	154.64	14.763	
13,287.4	6,919.3	7,355.5	6,891.2	126.5	43.4	-89.69	-6,351.1	2,461.0	2,280.0	2,123.6	156.37	14.581	
13,300.0	6,919.1	7,355.0	6,890.7	126.7	43.4	-89.68	-6,351.1	2,461.0	2,279.9	2,123.2	156.62	14.557	
13,318.0	6,919.0	7,354.3	6,890.0	127.1	43.4	-89.66	-6,351.1	2,461.0	2,279.8	2,122.8	156.98	14.523 CC	
13,385.8	6,918.4	7,351.6	6,887.3	128.4	43.4	-89.59	-6,351.2	2,460.9	2,280.8	2,122.5	158.32	14.406 ES	
13,400.0	6,918.2	7,351.0	6,886.8	128.7	43.4	-89.58	-6,351.2	2,460.9	2,281.3	2,122.7	158.60	14.384	
13,484.2	6,917.5	7,347.8	6,883.6	130.4	43.4	-89.50	-6,351.3	2,460.9	2,285.8	2,125.6	160.27	14.262	
13,500.0	6,917.3	7,347.2	6,883.0	130.7	43.4	-89.48	-6,351.3	2,460.9	2,287.0	2,126.4	160.58	14.242	
13,582.6	6,916.6	7,344.1	6,879.9	132.3	43.4	-89.41	-6,351.4	2,460.9	2,295.1	2,132.8	162.22	14.148	
13,600.0	6,916.4	7,343.5	6,879.2	132.7	43.4	-89.39	-6,351.4	2,460.9	2,297.1	2,134.6	162.56	14.131	
13,681.1	6,915.6	7,340.5	6,876.3	134.3	43.4	-89.32	-6,351.5	2,460.9	2,308.5	2,144.3	164.17	14.062	
13,700.0	6,915.5	7,339.8	6,875.6	134.6	43.4	-89.30	-6,351.5	2,460.9	2,311.5	2,147.0	164.54	14.048	
13,779.5	6,914.7	7,337.0	6,872.7	136.2	43.4	-89.23	-6,351.5	2,460.8	2,326.0	2,159.8	166.12	14.002	
13,800.0	6,914.6	7,336.3	6,872.0	136.6	43.4	-89.21	-6,351.6	2,460.8	2,330.1	2,163.6	166.53	13.993	
13,877.9	6,913.8	7,333.5	6,869.3	138.2	43.4	-89.14	-6,351.6	2,460.8	2,347.4	2,179.4	168.07	13.967	
13,900.0	6,913.6	7,332.8	6,868.5	138.6	43.4	-89.12	-6,351.6	2,460.8	2,352.8	2,184.3	168.51	13.963	
13,976.3	6,912.9	7,330.2	6,866.0	140.1	43.4	-89.06	-6,351.7	2,460.8	2,372.8	2,202.8	170.02	13.956 SF	
14,000.0	6,912.7	7,329.4	6,865.2	140.6	43.4	-89.04	-6,351.7	2,460.8	2,379.5	2,209.0	170.49	13.957	
14,074.8	6,912.0	7,326.9	6,862.7	142.0	43.4	-88.98	-6,351.8	2,460.8	2,401.9	2,230.0	171.91	13.972	
14,079.0	6,912.0	7,326.8	6,862.6	142.1	43.4	-88.97	-6,351.8	2,460.8	2,403.3	2,231.3	171.99	13.974	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 731-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	171.94	-5,118.5	725.1	5,169.6				
98.4	98.4	78.1	78.1	0.1	0.1	171.94	-5,118.5	725.1	5,169.6	5,169.5	0.18	N/A	
100.0	100.0	79.6	79.6	0.1	0.1	171.94	-5,118.5	725.1	5,169.6	5,169.4	0.18	N/A	
196.8	196.8	171.9	171.9	0.3	0.2	171.94	-5,118.6	725.1	5,169.7	5,169.3	0.49	N/A	
200.0	200.0	174.9	174.9	0.3	0.2	171.94	-5,118.6	725.1	5,169.7	5,169.2	0.50	N/A	
295.3	295.3	265.7	265.7	0.5	0.3	171.94	-5,118.8	725.1	5,169.9	5,169.1	0.81	6,386.176	
300.0	300.0	270.2	270.2	0.5	0.3	171.94	-5,118.8	725.1	5,170.0	5,169.1	0.82	6,268.080	
393.7	393.7	359.5	359.5	0.8	0.4	171.94	-5,119.1	725.1	5,170.2	5,169.1	1.13	4,586.328	
400.0	400.0	365.5	365.5	0.8	0.4	171.94	-5,119.1	725.1	5,170.3	5,169.1	1.15	4,505.065	
492.1	492.1	453.3	453.3	1.0	0.5	171.94	-5,119.5	725.2	5,170.6	5,169.2	1.45	3,578.091	
500.0	500.0	460.8	460.8	1.0	0.5	171.94	-5,119.5	725.2	5,170.7	5,169.2	1.47	3,516.251	
590.5	590.5	547.1	547.1	1.2	0.6	171.94	-5,119.9	725.2	5,171.1	5,169.3	1.76	2,933.386	
600.0	600.0	556.1	556.1	1.2	0.6	171.94	-5,120.0	725.2	5,171.1	5,169.3	1.79	2,883.510	
689.0	689.0	640.9	640.9	1.4	0.7	171.94	-5,120.4	725.2	5,171.6	5,169.6	2.08	2,485.651	
700.0	700.0	651.4	651.4	1.4	0.7	171.94	-5,120.5	725.2	5,171.7	5,169.6	2.12	2,443.875	
787.4	787.4	731.0	731.0	1.6	0.8	171.94	-5,121.0	725.3	5,172.3	5,169.9	2.39	2,160.029	
800.0	800.0	731.0	731.0	1.7	0.8	171.94	-5,121.0	725.3	5,172.4	5,170.0	2.42	2,134.828	
885.8	885.8	782.5	782.5	1.9	0.9	171.94	-5,121.6	725.4	5,173.5	5,170.7	2.73	1,893.290	
900.0	900.0	789.6	789.6	1.9	0.9	171.94	-5,121.8	725.4	5,173.7	5,170.9	2.78	1,860.673	
984.2	984.2	859.0	859.0	2.1	1.0	171.94	-5,123.5	725.7	5,175.7	5,172.6	3.13	1,655.079	
1,000.0	1,000.0	859.0	859.0	2.1	1.0	171.94	-5,123.5	725.7	5,176.1	5,172.9	3.16	1,636.665	
1,082.7	1,082.7	859.0	859.0	2.3	1.0	171.94	-5,123.5	725.7	5,178.7	5,175.4	3.35	1,546.626	
1,100.0	1,100.0	859.0	859.0	2.3	1.0	171.94	-5,123.5	725.7	5,179.5	5,176.1	3.39	1,529.060	
1,181.1	1,181.1	915.0	915.0	2.5	1.2	171.94	-5,125.6	726.1	5,182.8	5,179.1	3.70	1,400.578	
1,200.0	1,200.0	922.4	922.3	2.6	1.2	171.94	-5,126.0	726.2	5,183.8	5,180.0	3.76	1,378.581	
1,279.5	1,279.5	987.0	986.8	2.7	1.3	135.37	-5,129.8	726.9	5,189.2	5,185.1	4.08	1,270.335	
1,300.0	1,300.0	987.0	986.8	2.8	1.3	135.35	-5,129.8	726.9	5,190.8	5,186.7	4.13	1,256.447	
1,377.9	1,377.8	987.0	986.8	3.0	1.3	135.24	-5,129.8	726.9	5,198.5	5,194.2	4.31	1,206.653	
1,400.0	1,399.8	987.0	986.8	3.0	1.3	135.20	-5,129.8	726.9	5,201.2	5,196.8	4.36	1,193.470	
1,476.4	1,475.9	1,030.5	1,030.2	3.2	1.5	135.08	-5,133.1	727.5	5,211.6	5,206.9	4.64	1,123.794	
1,500.0	1,499.5	1,039.8	1,039.4	3.2	1.5	135.03	-5,133.8	727.7	5,215.2	5,210.5	4.71	1,106.365	
1,574.8	1,573.7	1,068.9	1,068.4	3.4	1.6	134.87	-5,136.4	728.3	5,228.1	5,223.2	4.96	1,053.669	
1,600.0	1,598.7	1,116.0	1,115.3	3.5	1.7	134.85	-5,141.0	729.4	5,233.2	5,228.1	5.13	1,019.492	
1,673.2	1,671.1	1,116.0	1,115.3	3.7	1.7	134.63	-5,141.0	729.4	5,248.1	5,242.8	5.32	986.790	
1,700.0	1,697.5	1,116.0	1,115.3	3.7	1.7	134.54	-5,141.0	729.4	5,254.1	5,248.7	5.39	975.472	
1,771.6	1,767.9	1,162.9	1,161.9	4.0	1.8	134.35	-5,146.0	730.7	5,271.3	5,265.6	5.69	926.893	
1,800.1	1,795.7	1,180.7	1,179.6	4.0	1.9	134.27	-5,148.0	731.2	5,278.6	5,272.8	5.80	909.379	
1,870.1	1,864.2	1,244.0	1,242.4	4.3	2.0	134.37	-5,155.2	732.7	5,296.9	5,290.8	6.15	861.433	
1,900.0	1,893.4	1,244.0	1,242.4	4.4	2.0	134.37	-5,155.2	732.7	5,304.8	5,298.6	6.24	850.719	
1,968.5	1,960.4	1,284.4	1,282.5	4.6	2.2	134.44	-5,160.0	733.7	5,323.2	5,316.6	6.53	815.153	
2,000.0	1,991.3	1,303.4	1,301.4	4.7	2.2	134.46	-5,162.4	734.3	5,331.7	5,325.1	6.67	799.857	
2,066.9	2,056.7	1,343.7	1,341.4	5.0	2.3	134.52	-5,167.4	735.6	5,350.1	5,343.1	6.96	768.722	
2,100.0	2,089.1	1,373.0	1,370.4	5.1	2.4	134.57	-5,171.2	736.7	5,359.3	5,352.2	7.13	751.827	
2,165.3	2,153.0	1,373.0	1,370.4	5.3	2.4	134.57	-5,171.2	736.7	5,377.8	5,370.5	7.34	733.003	
2,200.0	2,186.9	1,373.0	1,370.4	5.5	2.4	134.57	-5,171.2	736.7	5,387.9	5,380.4	7.45	723.434	
2,263.8	2,249.3	1,431.3	1,428.1	5.7	2.6	134.65	-5,179.2	739.3	5,406.2	5,398.5	7.79	694.202	
2,300.0	2,284.7	1,445.5	1,442.1	5.8	2.7	134.66	-5,181.2	740.1	5,417.0	5,409.1	7.94	682.396	
2,362.2	2,345.5	1,501.0	1,496.9	6.1	2.8	134.73	-5,189.8	743.2	5,436.0	5,427.7	8.27	657.316	
2,400.0	2,382.5	1,501.0	1,496.9	6.2	2.8	134.73	-5,189.8	743.2	5,447.4	5,439.0	8.40	648.857	
2,460.6	2,441.8	1,501.0	1,496.9	6.5	2.8	134.73	-5,189.8	743.2	5,466.2	5,457.6	8.60	635.681	
2,500.0	2,480.3	1,501.0	1,496.9	6.6	2.8	134.73	-5,189.8	743.2	5,478.8	5,470.1	8.73	627.474	
2,559.0	2,538.1	1,559.6	1,554.5	6.9	3.1	134.79	-5,199.4	747.5	5,497.5	5,488.4	9.07	606.198	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 731-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,600.0	2,578.1	1,580.1	1,574.6	7.0	3.1	134.81	-5,202.8	749.4	5,510.7	5,501.5	9.26	595.373	
2,657.5	2,634.4	1,629.0	1,622.5	7.3	3.3	134.85	-5,211.2	754.4	5,529.6	5,520.0	9.57	577.973	
2,700.0	2,675.9	1,629.0	1,622.5	7.5	3.3	134.85	-5,211.2	754.4	5,543.6	5,533.9	9.71	570.724	
2,755.9	2,730.6	1,629.0	1,622.5	7.7	3.3	134.85	-5,211.2	754.4	5,562.5	5,552.5	9.91	561.483	
2,800.0	2,773.8	1,676.4	1,668.9	7.9	3.5	134.88	-5,219.7	759.8	5,577.3	5,567.1	10.18	548.090	
2,854.3	2,826.9	1,701.5	1,693.3	8.1	3.6	134.89	-5,224.3	762.6	5,595.9	5,585.5	10.43	536.698	
2,857.4	2,829.9	1,702.9	1,694.7	8.1	3.6	134.90	-5,224.6	762.8	5,596.9	5,586.5	10.44	536.079	
2,900.0	2,871.6	1,722.6	1,713.9	8.3	3.7	135.13	-5,228.3	765.0	5,611.5	5,600.9	10.62	528.494	
2,952.7	2,923.5	1,758.0	1,748.4	8.4	3.8	135.40	-5,235.2	769.1	5,629.2	5,618.3	10.84	519.387	
3,000.0	2,970.1	1,758.0	1,748.4	8.6	3.8	135.63	-5,235.2	769.1	5,644.6	5,633.7	10.96	515.226	
3,051.2	3,020.7	1,758.0	1,748.4	8.7	3.8	135.88	-5,235.2	769.1	5,661.2	5,650.1	11.07	511.244	
3,100.0	3,069.1	1,805.0	1,794.1	8.9	4.1	136.10	-5,244.8	774.6	5,676.3	5,665.0	11.31	501.692	
3,149.6	3,118.3	1,823.9	1,812.5	9.0	4.2	136.32	-5,248.8	776.9	5,691.4	5,680.0	11.47	496.151	
3,200.0	3,168.5	1,843.2	1,831.1	9.1	4.2	136.53	-5,252.9	779.3	5,706.5	5,694.9	11.63	490.660	
3,248.0	3,216.3	1,886.0	1,872.5	9.2	4.4	136.71	-5,262.5	784.8	5,720.6	5,708.8	11.84	483.122	
3,300.0	3,268.2	1,886.0	1,872.5	9.3	4.4	136.92	-5,262.5	784.8	5,735.2	5,723.3	11.94	480.471	
3,346.4	3,314.6	1,886.0	1,872.5	9.4	4.4	137.10	-5,262.5	784.8	5,748.1	5,736.1	12.01	478.533	
3,400.0	3,368.1	1,935.6	1,920.3	9.5	4.7	137.26	-5,274.0	791.5	5,762.4	5,750.2	12.25	470.431	
3,444.9	3,413.0	1,961.0	1,944.7	9.6	4.8	137.39	-5,279.9	795.0	5,774.0	5,761.6	12.39	465.995	
3,457.5	3,425.6	1,968.1	1,951.5	9.6	4.9	173.93	-5,281.6	796.0	5,777.2	5,764.8	12.43	464.595	
3,500.0	3,468.1	2,015.0	1,996.6	9.7	5.1	173.88	-5,292.8	802.7	5,788.1	5,775.4	12.65	457.528	
3,543.3	3,511.4	2,018.3	1,999.8	9.7	5.1	173.87	-5,293.6	803.2	5,799.1	5,786.4	12.74	455.113	
3,600.0	3,568.1	2,091.8	2,070.3	9.8	5.5	173.78	-5,311.3	814.1	5,813.6	5,800.6	13.07	444.927	
3,641.7	3,609.9	2,143.0	2,119.4	9.9	5.8	173.72	-5,323.4	821.8	5,824.2	5,810.9	13.30	438.021	
3,700.0	3,668.1	2,188.5	2,163.1	10.0	6.0	173.66	-5,334.2	828.7	5,839.0	5,825.5	13.54	431.214	
3,740.1	3,708.3	2,218.7	2,192.1	10.1	6.1	173.62	-5,341.4	833.1	5,849.3	5,835.6	13.71	426.765	
3,800.0	3,768.1	2,271.0	2,242.3	10.2	6.4	173.56	-5,354.0	840.6	5,864.7	5,850.7	13.97	419.711	
3,838.6	3,806.7	2,303.6	2,273.5	10.2	6.5	173.53	-5,361.9	845.1	5,874.7	5,860.5	14.14	415.394	
3,900.0	3,868.1	2,372.7	2,339.9	10.3	6.8	173.45	-5,378.6	854.8	5,890.5	5,876.0	14.46	407.315	
3,937.0	3,905.1	2,419.3	2,384.7	10.4	7.1	173.40	-5,389.8	861.2	5,900.0	5,885.3	14.67	402.249	
4,000.0	3,968.1	2,514.9	2,476.7	10.5	7.5	173.30	-5,412.4	874.0	5,915.8	5,900.8	15.06	392.823	
4,035.4	4,003.6	2,548.3	2,508.8	10.6	7.7	173.26	-5,420.3	878.3	5,924.7	5,909.4	15.22	389.157	
4,100.0	4,068.1	2,597.1	2,555.9	10.7	7.9	173.22	-5,431.8	884.3	5,940.8	5,925.3	15.49	383.500	
4,133.8	4,102.0	2,622.8	2,580.6	10.8	8.0	173.20	-5,438.0	887.3	5,949.4	5,933.8	15.63	380.608	
4,200.0	4,168.1	2,657.0	2,613.6	10.9	8.2	173.17	-5,446.2	891.1	5,966.2	5,950.4	15.86	376.190	
4,232.3	4,200.4	2,657.0	2,613.6	10.9	8.2	173.17	-5,446.2	891.1	5,974.6	5,958.7	15.92	375.212	
4,300.0	4,268.1	2,706.9	2,661.7	11.1	8.5	173.13	-5,458.6	896.8	5,992.3	5,976.1	16.21	369.631	
4,330.7	4,298.8	2,719.5	2,673.8	11.1	8.5	173.11	-5,461.8	898.3	6,000.5	5,984.2	16.31	367.868	
4,400.0	4,368.1	2,747.9	2,701.0	11.2	8.7	173.09	-5,469.0	902.0	6,019.3	6,002.7	16.54	363.994	
4,429.1	4,397.3	2,785.0	2,736.4	11.3	8.9	173.05	-5,478.8	907.0	6,027.4	6,010.7	16.71	360.726	
4,500.0	4,468.1	2,785.0	2,736.4	11.4	8.9	173.05	-5,478.8	907.0	6,047.1	6,030.3	16.85	358.867	
4,527.5	4,495.7	2,785.0	2,736.4	11.5	8.9	173.05	-5,478.8	907.0	6,055.0	6,038.1	16.91	358.159	
4,600.0	4,568.1	2,832.5	2,781.6	11.6	9.2	173.00	-5,491.6	913.7	6,075.8	6,058.6	17.21	353.058	
4,626.0	4,594.1	2,843.8	2,792.4	11.7	9.2	172.99	-5,494.7	915.3	6,083.4	6,066.1	17.30	351.664	
4,700.0	4,668.1	2,875.9	2,822.9	11.8	9.4	172.95	-5,503.7	919.9	6,105.4	6,087.8	17.55	347.792	
4,724.4	4,692.5	2,913.0	2,858.0	11.8	9.7	172.92	-5,514.3	925.1	6,112.9	6,095.1	17.73	344.833	
4,800.0	4,768.1	2,913.0	2,858.0	12.0	9.7	172.92	-5,514.3	925.1	6,135.8	6,117.9	17.88	343.163	
4,822.8	4,791.0	2,913.0	2,858.0	12.0	9.7	172.92	-5,514.3	925.1	6,142.8	6,124.9	17.93	342.670	
4,900.0	4,868.1	2,965.4	2,907.5	12.2	10.0	172.86	-5,529.7	932.8	6,166.9	6,148.6	18.26	337.645	
4,921.2	4,889.4	2,975.1	2,916.7	12.2	10.1	172.85	-5,532.5	934.3	6,173.6	6,155.3	18.34	336.596	
5,000.0	4,968.1	3,255.9	3,182.2	12.4	11.7	172.53	-5,612.4	978.1	6,198.2	6,178.8	19.42	319.154	
5,019.7	4,987.8	3,275.9	3,201.3	12.4	11.9	172.50	-5,617.7	981.2	6,203.9	6,184.3	19.52	317.750	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 731-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	5,068.1	3,592.8	3,505.0	12.6	13.5	172.18	-5,696.5	1,025.4	6,225.2	6,204.5	20.66	301.319	
5,118.1	5,086.2	3,606.9	3,518.5	12.6	13.6	172.17	-5,699.8	1,027.3	6,229.7	6,208.9	20.74	300.368	
5,200.0	5,168.1	3,670.4	3,579.7	12.8	13.9	172.11	-5,714.6	1,036.0	6,250.2	6,229.1	21.10	296.162	
5,216.5	5,184.7	3,684.0	3,592.8	12.8	14.0	172.09	-5,717.7	1,037.8	6,254.3	6,233.1	21.18	295.298	
5,300.0	5,268.1	3,722.8	3,630.1	13.0	14.2	172.06	-5,727.0	1,043.1	6,275.6	6,254.1	21.48	292.199	
5,314.9	5,283.1	3,729.8	3,636.9	13.0	14.3	172.05	-5,728.6	1,044.0	6,279.5	6,258.0	21.53	291.651	
5,400.0	5,368.1	3,769.7	3,675.1	13.1	14.5	172.01	-5,738.4	1,049.6	6,301.8	6,280.0	21.84	288.607	
5,413.4	5,381.5	3,776.0	3,681.1	13.2	14.5	172.01	-5,739.9	1,050.4	6,305.4	6,283.5	21.88	288.138	
5,500.0	5,468.1	3,812.0	3,715.6	13.3	14.7	171.97	-5,749.0	1,055.5	6,328.8	6,306.6	22.18	285.351	
5,511.8	5,479.9	3,812.0	3,715.6	13.4	14.7	171.97	-5,749.0	1,055.5	6,332.1	6,309.9	22.20	285.183	
5,600.0	5,568.1	3,890.8	3,791.0	13.5	15.2	171.89	-5,769.2	1,066.5	6,356.3	6,333.7	22.65	280.694	
5,610.2	5,578.4	3,898.2	3,798.1	13.6	15.2	171.89	-5,771.1	1,067.6	6,359.2	6,336.5	22.69	280.258	
5,700.0	5,668.1	3,941.0	3,839.0	13.7	15.5	171.85	-5,782.2	1,073.5	6,384.3	6,361.2	23.02	277.368	
5,708.6	5,676.8	3,941.0	3,839.0	13.8	15.5	171.85	-5,782.2	1,073.5	6,386.7	6,363.7	23.04	277.257	
5,800.0	5,768.1	3,983.9	3,879.8	13.9	15.7	171.81	-5,793.7	1,079.6	6,413.0	6,389.6	23.37	274.399	
5,807.1	5,775.2	3,986.2	3,882.1	14.0	15.8	171.80	-5,794.3	1,079.9	6,415.0	6,391.6	23.39	274.222	
5,900.0	5,868.1	4,016.5	3,910.9	14.1	15.9	171.77	-5,802.7	1,084.4	6,442.6	6,418.9	23.69	271.952	
5,905.5	5,873.6	4,018.3	3,912.6	14.1	16.0	171.77	-5,803.2	1,084.7	6,444.3	6,420.6	23.71	271.820	
6,000.0	5,968.1	4,069.0	3,960.5	14.3	16.3	171.72	-5,817.8	1,092.4	6,473.3	6,449.2	24.08	268.863	
6,003.9	5,972.1	4,069.0	3,960.5	14.3	16.3	171.72	-5,817.8	1,092.4	6,474.5	6,450.4	24.08	268.821	
6,100.0	6,068.1	4,109.4	3,998.5	14.5	16.5	171.68	-5,829.7	1,098.8	6,504.6	6,480.2	24.43	266.304	
6,102.3	6,070.5	4,111.9	4,000.9	14.5	16.5	171.67	-5,830.4	1,099.2	6,505.4	6,480.9	24.44	266.187	
6,200.0	6,168.1	6,309.6	6,146.7	14.7	24.6	170.30	-6,158.4	1,305.3	6,529.2	6,499.0	30.16	216.457	
6,200.8	6,168.9	6,310.5	6,147.6	14.7	24.6	170.30	-6,158.4	1,305.3	6,529.2	6,499.0	30.17	216.435	
6,240.0	6,208.1	6,353.1	6,190.2	14.8	24.7	170.29	-6,158.3	1,306.3	6,529.2	6,498.9	30.32	215.336	
6,288.5	6,256.6	6,380.0	6,217.1	14.9	24.7	170.29	-6,158.2	1,306.9	6,529.2	6,498.8	30.47	214.298	
6,299.2	6,267.3	6,403.8	6,240.9	14.9	24.8	-9.93	-6,158.1	1,307.4	6,529.1	6,498.6	30.58	213.519	
6,300.0	6,268.1	6,404.3	6,241.4	14.9	24.8	-9.93	-6,158.1	1,307.4	6,529.1	6,498.5	30.58	213.490	
6,350.0	6,318.1	6,438.8	6,275.9	15.0	24.8	-9.97	-6,158.1	1,308.2	6,526.8	6,496.0	30.76	212.174	
6,397.6	6,365.3	6,471.4	6,308.5	15.1	24.8	-10.06	-6,158.1	1,308.9	6,521.4	6,490.6	30.81	211.698	
6,400.0	6,367.7	6,473.0	6,310.1	15.1	24.8	-10.06	-6,158.1	1,309.0	6,521.1	6,490.3	30.80	211.693	
6,450.0	6,416.8	6,509.0	6,346.1	15.1	24.9	-10.21	-6,158.3	1,309.8	6,512.1	6,481.4	30.72	212.006	
6,496.0	6,461.3	6,550.2	6,387.3	15.1	24.9	-10.40	-6,158.5	1,310.6	6,501.0	6,470.4	30.53	212.910	
6,500.0	6,465.1	6,554.0	6,391.0	15.1	24.9	-10.42	-6,158.5	1,310.7	6,499.9	6,469.3	30.51	213.015	
6,550.0	6,512.4	6,601.0	6,438.0	15.1	25.0	-10.69	-6,158.8	1,311.5	6,484.3	6,454.1	30.19	214.798	
6,594.5	6,553.4	6,637.0	6,474.0	15.1	25.0	-10.99	-6,159.0	1,312.1	6,467.8	6,438.0	29.79	217.122	
6,600.0	6,558.4	6,637.0	6,474.0	15.1	25.0	-11.03	-6,159.0	1,312.1	6,465.6	6,435.8	29.73	217.505	
6,650.0	6,603.0	6,683.7	6,520.7	15.1	25.1	-11.45	-6,159.4	1,312.8	6,443.7	6,414.5	29.17	220.883	
6,692.9	6,639.9	6,715.5	6,552.5	15.1	25.1	-11.88	-6,159.6	1,313.3	6,422.6	6,394.0	28.61	224.511	
6,700.0	6,645.9	6,720.6	6,557.6	15.1	25.2	-11.96	-6,159.7	1,313.3	6,418.9	6,390.4	28.51	225.166	
6,750.0	6,686.8	6,765.0	6,602.0	15.1	25.2	-12.59	-6,160.1	1,314.1	6,391.2	6,363.4	27.77	230.110	
6,791.3	6,719.1	6,785.7	6,622.8	15.1	25.2	-13.19	-6,160.3	1,314.4	6,366.2	6,339.1	27.10	234.910	
6,800.0	6,725.7	6,792.0	6,629.0	15.1	25.2	-13.33	-6,160.3	1,314.5	6,360.8	6,333.8	26.96	235.942	
6,850.0	6,762.3	6,826.8	6,663.8	15.1	25.3	-14.24	-6,160.7	1,315.1	6,327.7	6,301.6	26.13	242.172	
6,889.7	6,789.7	6,852.9	6,689.9	15.1	25.3	-15.11	-6,160.9	1,315.5	6,299.7	6,274.3	25.47	247.298	
6,900.0	6,796.5	6,859.4	6,696.4	15.1	25.3	-15.35	-6,161.0	1,315.6	6,292.3	6,267.0	25.31	248.612	
6,950.0	6,828.0	6,889.5	6,726.5	15.1	25.4	-16.72	-6,161.3	1,316.1	6,254.5	6,230.0	24.56	254.699	
6,988.2	6,850.2	6,917.9	6,754.9	15.1	25.4	-18.02	-6,161.6	1,316.5	6,224.3	6,200.2	24.08	258.448	
7,000.0	6,856.7	6,926.8	6,763.8	15.1	25.4	-18.47	-6,161.7	1,316.7	6,214.7	6,190.7	23.97	259.285	
7,050.0	6,882.5	6,963.7	6,800.7	15.2	25.5	-20.70	-6,162.1	1,317.2	6,172.9	6,149.3	23.65	261.026	
7,086.6	6,899.5	6,988.5	6,825.5	15.3	25.5	-22.73	-6,162.3	1,317.5	6,141.2	6,117.5	23.67	259.404	
7,100.0	6,905.3	6,997.0	6,833.9	15.4	25.5	-23.58	-6,162.3	1,317.7	6,129.4	6,105.6	23.75	258.063	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 731-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,150.0	6,924.9	7,022.0	6,859.0	15.7	25.6	-27.36	-6,162.5	1,318.0	6,084.4	6,059.9	24.47	248.601	
7,185.0	6,936.7	7,022.0	6,859.0	15.9	25.6	-30.59	-6,162.5	1,318.0	6,052.1	6,026.7	25.41	238.131	
7,200.0	6,941.2	7,022.0	6,859.0	16.0	25.6	-32.20	-6,162.5	1,318.0	6,038.1	6,012.1	25.96	232.568	
7,250.0	6,954.2	7,045.8	6,882.7	16.3	25.6	-39.39	-6,162.6	1,318.3	5,990.8	5,962.0	28.77	208.222	
7,283.4	6,961.0	7,051.0	6,887.9	16.6	25.6	-45.64	-6,162.6	1,318.4	5,958.7	5,927.4	31.32	190.264	
7,300.0	6,963.8	7,053.1	6,890.1	16.7	25.6	-49.33	-6,162.7	1,318.4	5,942.7	5,910.0	32.77	181.343	
7,350.0	6,970.0	7,057.9	6,894.9	17.2	25.6	-63.36	-6,162.7	1,318.5	5,894.1	5,856.6	37.52	157.106	
7,381.9	6,972.1	7,059.7	6,896.6	17.5	25.6	-74.63	-6,162.7	1,318.5	5,862.9	5,822.9	40.06	146.348	
7,400.0	6,972.7	7,060.2	6,897.2	17.7	25.6	-81.65	-6,162.7	1,318.5	5,845.2	5,804.2	40.96	142.689	
7,420.0	6,972.8	7,060.4	6,897.3	17.9	25.6	-89.64	-6,162.7	1,318.5	5,825.6	5,784.3	41.32	140.972	
7,480.3	6,972.2	7,060.3	6,897.3	18.5	25.6	-89.64	-6,162.7	1,318.5	5,766.4	5,724.5	41.97	137.397	
7,500.0	6,972.0	7,060.3	6,897.3	18.7	25.6	-89.64	-6,162.7	1,318.5	5,747.1	5,704.9	42.18	136.253	
7,578.7	6,971.3	7,060.2	6,897.2	19.7	25.6	-89.64	-6,162.7	1,318.5	5,670.0	5,626.9	43.10	131.540	
7,600.0	6,971.1	7,060.2	6,897.2	19.9	25.6	-89.64	-6,162.7	1,318.5	5,649.1	5,605.8	43.35	130.301	
7,677.1	6,970.4	7,060.1	6,897.1	20.9	25.6	-89.63	-6,162.7	1,318.5	5,573.6	5,529.2	44.35	125.682	
7,700.0	6,970.2	7,060.1	6,897.1	21.2	25.6	-89.63	-6,162.7	1,318.5	5,551.2	5,506.6	44.64	124.354	
7,775.6	6,969.5	7,060.0	6,897.0	22.2	25.6	-89.63	-6,162.7	1,318.5	5,477.3	5,431.6	45.69	119.878	
7,800.0	6,969.3	7,060.0	6,896.9	22.6	25.6	-89.63	-6,162.7	1,318.5	5,453.4	5,407.3	46.03	118.475	
7,874.0	6,968.6	7,059.9	6,896.9	23.7	25.6	-89.62	-6,162.7	1,318.5	5,381.0	5,333.9	47.12	114.195	
7,900.0	6,968.4	7,059.9	6,896.8	24.1	25.6	-89.62	-6,162.7	1,318.5	5,355.6	5,308.1	47.50	112.739	
7,972.4	6,967.8	7,059.8	6,896.8	25.2	25.6	-89.62	-6,162.7	1,318.5	5,284.9	5,236.2	48.62	108.688	
8,000.0	6,967.5	7,059.8	6,896.7	25.6	25.6	-89.61	-6,162.7	1,318.5	5,257.9	5,208.9	49.05	107.195	
8,070.8	6,966.9	7,059.7	6,896.6	26.7	25.6	-89.61	-6,162.7	1,318.5	5,188.8	5,138.6	50.19	103.389	
8,100.0	6,966.6	7,059.6	6,896.6	27.2	25.6	-89.61	-6,162.7	1,318.5	5,160.3	5,109.7	50.65	101.873	
8,169.3	6,966.0	7,059.6	6,896.5	28.3	25.6	-89.61	-6,162.7	1,318.5	5,092.8	5,041.0	51.80	98.317	
8,200.0	6,965.7	7,059.5	6,896.5	28.8	25.6	-89.60	-6,162.7	1,318.5	5,062.8	5,010.5	52.31	96.790	
8,267.7	6,965.1	7,059.5	6,896.4	30.0	25.6	-89.60	-6,162.7	1,318.5	4,996.9	4,943.4	53.45	93.480	
8,300.0	6,964.8	7,059.4	6,896.4	30.5	25.6	-89.60	-6,162.7	1,318.5	4,965.4	4,911.4	54.00	91.951	
8,366.1	6,964.2	7,059.4	6,896.3	31.7	25.6	-89.60	-6,162.7	1,318.5	4,901.1	4,846.0	55.14	88.879	
8,400.0	6,963.9	7,059.3	6,896.3	32.2	25.6	-89.59	-6,162.7	1,318.5	4,868.2	4,812.4	55.73	87.354	
8,464.5	6,963.3	7,059.2	6,896.2	33.4	25.6	-89.59	-6,162.7	1,318.5	4,805.4	4,748.5	56.86	84.508	
8,500.0	6,963.0	7,059.2	6,896.2	34.0	25.6	-89.59	-6,162.7	1,318.5	4,771.0	4,713.5	57.49	82.993	
8,563.0	6,962.4	7,059.1	6,896.1	35.1	25.6	-89.58	-6,162.7	1,318.5	4,709.8	4,651.2	58.61	80.361	
8,600.0	6,962.0	7,059.1	6,896.0	35.8	25.6	-89.58	-6,162.7	1,318.5	4,673.9	4,614.6	59.27	78.861	
8,661.4	6,961.5	7,059.0	6,896.0	36.9	25.6	-89.58	-6,162.7	1,318.5	4,614.4	4,554.0	60.38	76.428	
8,700.0	6,961.1	7,059.0	6,895.9	37.6	25.6	-89.58	-6,162.7	1,318.5	4,577.0	4,515.9	61.07	74.945	
8,759.8	6,960.6	7,058.9	6,895.9	38.7	25.6	-89.57	-6,162.7	1,318.5	4,519.1	4,456.9	62.16	72.699	
8,800.0	6,960.2	7,058.8	6,895.8	39.4	25.6	-89.57	-6,162.7	1,318.5	4,480.2	4,417.3	62.89	71.235	
8,858.2	6,959.7	7,058.8	6,895.7	40.5	25.6	-89.57	-6,162.7	1,318.5	4,423.9	4,359.9	63.96	69.163	
8,900.0	6,959.3	7,058.7	6,895.7	41.2	25.6	-89.57	-6,162.7	1,318.5	4,383.5	4,318.8	64.73	67.720	
8,956.7	6,958.8	7,058.7	6,895.6	42.3	25.6	-89.56	-6,162.7	1,318.5	4,328.8	4,263.0	65.78	65.808	
9,000.0	6,958.4	7,058.6	6,895.6	43.1	25.6	-89.56	-6,162.7	1,318.5	4,287.0	4,220.4	66.58	64.388	
9,055.1	6,957.9	7,058.5	6,895.5	44.1	25.6	-89.56	-6,162.7	1,318.5	4,233.9	4,166.3	67.61	62.625	
9,100.0	6,957.5	7,058.5	6,895.5	44.9	25.6	-89.55	-6,162.7	1,318.5	4,190.7	4,122.2	68.44	61.228	
9,153.5	6,957.0	7,058.4	6,895.4	45.9	25.6	-89.55	-6,162.7	1,318.5	4,139.2	4,069.8	69.45	59.602	
9,200.0	6,956.6	7,058.4	6,895.3	46.8	25.6	-89.55	-6,162.7	1,318.5	4,094.5	4,024.2	70.32	58.228	
9,251.9	6,956.1	7,058.3	6,895.3	47.8	25.6	-89.55	-6,162.7	1,318.5	4,044.7	3,973.4	71.30	56.730	
9,300.0	6,955.7	7,058.2	6,895.2	48.7	25.6	-89.54	-6,162.7	1,318.5	3,998.6	3,926.4	72.20	55.380	
9,350.4	6,955.2	7,058.2	6,895.1	49.6	25.6	-89.54	-6,162.7	1,318.5	3,950.3	3,877.1	73.15	53.999	
9,400.0	6,954.8	7,058.1	6,895.1	50.6	25.6	-89.54	-6,162.7	1,318.5	3,902.8	3,828.7	74.09	52.674	
9,448.8	6,954.3	7,058.0	6,895.0	51.5	25.6	-89.53	-6,162.7	1,318.5	3,856.1	3,781.1	75.02	51.401	
9,500.0	6,953.9	7,058.0	6,895.0	52.5	25.6	-89.53	-6,162.7	1,318.5	3,807.2	3,731.2	75.99	50.100	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 731-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,547.2	6,953.4	7,057.9	6,894.9	53.4	25.6	-89.53	-6,162.7	1,318.5	3,762.2	3,685.3	76.89	48.928	
9,600.0	6,952.9	7,057.9	6,894.8	54.4	25.6	-89.52	-6,162.7	1,318.5	3,711.9	3,634.0	77.90	47.650	
9,645.6	6,952.5	7,057.8	6,894.8	55.2	25.6	-89.52	-6,162.7	1,318.5	3,668.5	3,589.7	78.77	46.571	
9,700.0	6,952.0	7,057.7	6,894.7	56.3	25.6	-89.52	-6,162.7	1,318.5	3,616.9	3,537.0	79.81	45.318	
9,744.1	6,951.6	7,057.7	6,894.6	57.1	25.6	-89.51	-6,162.7	1,318.5	3,575.0	3,494.4	80.66	44.324	
9,800.0	6,951.1	7,057.6	6,894.6	58.2	25.6	-89.51	-6,162.7	1,318.5	3,522.1	3,440.3	81.73	43.095	
9,842.5	6,950.7	7,057.5	6,894.5	59.0	25.6	-89.51	-6,162.7	1,318.5	3,481.9	3,399.3	82.55	42.181	
9,900.0	6,950.2	7,057.5	6,894.4	60.1	25.6	-89.51	-6,162.7	1,318.5	3,427.6	3,343.9	83.65	40.975	
9,940.9	6,949.8	7,057.4	6,894.4	60.9	25.6	-89.50	-6,162.7	1,318.5	3,389.0	3,304.5	84.44	40.135	
10,000.0	6,949.3	7,057.3	6,894.3	62.0	25.6	-89.50	-6,162.7	1,318.5	3,333.4	3,247.8	85.58	38.952	
10,039.3	6,948.9	7,057.3	6,894.2	62.8	25.6	-89.50	-6,162.7	1,318.5	3,296.4	3,210.1	86.34	38.181	
10,100.0	6,948.4	7,057.2	6,894.2	64.0	25.6	-89.49	-6,162.7	1,318.4	3,239.6	3,152.0	87.51	37.020	
10,137.8	6,948.0	7,057.1	6,894.1	64.7	25.6	-89.49	-6,162.7	1,318.4	3,204.2	3,116.0	88.24	36.313	
10,200.0	6,947.5	7,057.1	6,894.0	65.9	25.6	-89.49	-6,162.7	1,318.4	3,146.1	3,056.7	89.44	35.175	
10,236.2	6,947.1	7,057.0	6,894.0	66.6	25.6	-89.48	-6,162.7	1,318.4	3,112.4	3,022.2	90.14	34.527	
10,300.0	6,946.6	7,056.9	6,893.9	67.8	25.6	-89.48	-6,162.7	1,318.4	3,053.1	2,961.7	91.38	33.411	
10,334.6	6,946.3	7,056.9	6,893.8	68.5	25.6	-89.48	-6,162.7	1,318.4	3,021.0	2,928.9	92.05	32.818	
10,400.0	6,945.7	7,056.8	6,893.7	69.8	25.6	-89.47	-6,162.7	1,318.4	2,960.5	2,867.2	93.32	31.724	
10,433.0	6,945.4	7,056.7	6,893.7	70.4	25.6	-89.47	-6,162.7	1,318.4	2,930.0	2,836.0	93.96	31.182	
10,500.0	6,944.7	7,056.6	6,893.6	71.7	25.6	-89.46	-6,162.7	1,318.4	2,868.4	2,773.2	95.26	30.110	
10,531.5	6,944.5	7,056.6	6,893.6	72.3	25.6	-89.46	-6,162.7	1,318.4	2,839.6	2,743.7	95.88	29.616	
10,600.0	6,943.8	7,056.5	6,893.5	73.7	25.6	-89.46	-6,162.7	1,318.4	2,776.9	2,679.7	97.21	28.566	
10,629.9	6,943.6	7,056.4	6,893.4	74.2	25.6	-89.46	-6,162.7	1,318.4	2,749.6	2,651.8	97.79	28.117	
10,700.0	6,942.9	7,056.3	6,893.3	75.6	25.6	-89.45	-6,162.7	1,318.4	2,686.0	2,586.8	99.16	27.087	
10,728.3	6,942.7	7,056.3	6,893.3	76.2	25.6	-89.45	-6,162.7	1,318.4	2,660.3	2,560.6	99.71	26.680	
10,800.0	6,942.0	7,056.2	6,893.2	77.6	25.6	-89.44	-6,162.7	1,318.4	2,595.7	2,494.6	101.11	25.672	
10,826.7	6,941.8	7,056.2	6,893.1	78.1	25.6	-89.44	-6,162.7	1,318.4	2,571.7	2,470.0	101.63	25.304	
10,900.0	6,941.1	7,056.0	6,893.0	79.5	25.6	-89.44	-6,162.7	1,318.4	2,506.2	2,403.1	103.06	24.317	
10,925.2	6,940.9	7,056.0	6,893.0	80.0	25.6	-89.43	-6,162.7	1,318.4	2,483.8	2,380.2	103.56	23.985	
11,000.0	6,940.2	7,055.9	6,892.9	81.5	25.6	-89.43	-6,162.7	1,318.4	2,417.5	2,312.5	105.02	23.020	
11,023.6	6,940.0	7,055.9	6,892.8	81.9	25.6	-89.43	-6,162.7	1,318.4	2,396.7	2,291.2	105.48	22.722	
11,100.0	6,939.3	7,055.7	6,892.7	83.4	25.6	-89.42	-6,162.7	1,318.4	2,329.7	2,222.7	106.98	21.778	
11,122.0	6,939.1	7,055.7	6,892.7	83.8	25.6	-89.42	-6,162.7	1,318.4	2,310.5	2,203.1	107.41	21.512	
11,200.0	6,938.4	7,055.6	6,892.6	85.4	25.6	-89.41	-6,162.7	1,318.4	2,242.9	2,134.0	108.93	20.590	
11,220.4	6,938.2	7,055.6	6,892.5	85.8	25.6	-89.41	-6,162.7	1,318.4	2,225.3	2,116.0	109.33	20.353	
11,300.0	6,937.4	7,055.4	6,892.4	87.3	25.6	-89.41	-6,162.7	1,318.4	2,157.3	2,046.4	110.89	19.454	
11,318.9	6,937.3	7,055.4	6,892.4	87.7	25.6	-89.40	-6,162.7	1,318.4	2,141.3	2,030.0	111.26	19.245	
11,400.0	6,936.5	7,055.3	6,892.2	89.3	25.6	-89.40	-6,162.7	1,318.4	2,073.0	1,960.1	112.86	18.369	
11,417.3	6,936.4	7,055.3	6,892.2	89.6	25.6	-89.40	-6,162.7	1,318.4	2,058.6	1,945.4	113.19	18.186	
11,500.0	6,935.6	7,055.1	6,892.1	91.3	25.6	-89.39	-6,162.7	1,318.4	1,990.1	1,875.3	114.82	17.333	
11,515.7	6,935.5	7,055.1	6,892.1	91.6	25.6	-89.39	-6,162.7	1,318.4	1,977.2	1,862.1	115.13	17.174	
11,600.0	6,934.7	7,055.0	6,891.9	93.2	25.6	-89.38	-6,162.7	1,318.4	1,908.9	1,792.1	116.78	16.346	
11,614.1	6,934.6	7,054.9	6,891.9	93.5	25.6	-89.38	-6,162.7	1,318.4	1,897.5	1,780.5	117.06	16.210	
11,700.0	6,933.8	7,054.8	6,891.8	95.2	25.6	-89.37	-6,162.7	1,318.4	1,829.5	1,710.8	118.75	15.407	
11,712.6	6,933.7	7,054.8	6,891.7	95.4	25.6	-89.37	-6,162.7	1,318.4	1,819.7	1,700.7	118.99	15.292	
11,800.0	6,932.9	7,054.6	6,891.6	97.1	25.6	-89.37	-6,162.7	1,318.4	1,752.3	1,631.6	120.71	14.516	
11,811.0	6,932.8	7,054.6	6,891.6	97.4	25.6	-89.37	-6,162.7	1,318.4	1,743.9	1,623.0	120.93	14.421	
11,900.0	6,932.0	7,054.5	6,891.4	99.1	25.6	-89.36	-6,162.7	1,318.4	1,677.4	1,554.7	122.68	13.673	
11,909.4	6,931.9	7,054.5	6,891.4	99.3	25.6	-89.36	-6,162.7	1,318.4	1,670.5	1,547.6	122.87	13.596	
12,000.0	6,931.0	7,054.3	6,891.3	101.1	25.6	-89.35	-6,162.7	1,318.4	1,605.3	1,480.6	124.65	12.879	
12,007.8	6,931.0	7,054.3	6,891.3	101.2	25.6	-89.35	-6,162.7	1,318.4	1,599.8	1,475.0	124.80	12.818	
12,100.0	6,930.1	7,054.1	6,891.1	103.0	25.6	-89.34	-6,162.7	1,318.4	1,536.3	1,409.7	126.62	12.133	

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 HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 731-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
12,106.3	6,930.1	7,054.1	6,891.1	103.2	25.6	-89.34	-6,162.7	1,318.4	1,532.1	1,405.4	126.74	12.088	
12,200.0	6,929.2	7,054.0	6,890.9	105.0	25.6	-89.33	-6,162.7	1,318.4	1,470.9	1,342.3	128.59	11.439	
12,204.7	6,929.2	7,053.9	6,890.9	105.1	25.6	-89.33	-6,162.7	1,318.4	1,467.9	1,339.2	128.68	11.407	
12,300.0	6,928.3	7,053.8	6,890.8	107.0	25.6	-89.32	-6,162.7	1,318.4	1,409.5	1,279.0	130.56	10.796	
12,303.1	6,928.3	7,053.8	6,890.7	107.1	25.6	-89.32	-6,162.7	1,318.4	1,407.7	1,277.1	130.62	10.777	
12,400.0	6,927.4	7,053.6	6,890.6	109.0	25.6	-89.31	-6,162.7	1,318.4	1,352.8	1,220.3	132.53	10.208	
12,401.5	6,927.4	7,053.6	6,890.6	109.0	25.6	-89.31	-6,162.7	1,318.4	1,352.0	1,219.4	132.56	10.199	
12,500.0	6,926.5	7,053.4	6,890.4	110.9	25.6	-89.31	-6,162.7	1,318.4	1,301.3	1,166.8	134.50	9.675	
12,598.4	6,925.6	7,053.3	6,890.2	112.9	25.6	-89.30	-6,162.7	1,318.4	1,256.3	1,119.9	136.44	9.208	
12,600.0	6,925.6	7,053.2	6,890.2	112.9	25.6	-89.30	-6,162.7	1,318.4	1,255.6	1,119.2	136.48	9.200	
12,696.8	6,924.7	7,053.1	6,890.0	114.8	25.6	-89.29	-6,162.7	1,318.4	1,217.6	1,079.3	138.39	8.799	
12,700.0	6,924.6	7,053.1	6,890.0	114.9	25.6	-89.29	-6,162.7	1,318.4	1,216.5	1,078.1	138.45	8.787	
12,795.2	6,923.8	7,052.9	6,889.9	116.8	25.6	-89.28	-6,162.7	1,318.4	1,185.9	1,045.6	140.33	8.451	
12,800.0	6,923.7	7,052.9	6,889.8	116.9	25.6	-89.28	-6,162.7	1,318.4	1,184.6	1,044.1	140.42	8.436	
12,893.7	6,922.9	7,052.7	6,889.7	118.7	25.6	-89.27	-6,162.7	1,318.4	1,161.6	1,019.4	142.27	8.165	
12,900.0	6,922.8	7,052.7	6,889.7	118.8	25.6	-89.27	-6,162.7	1,318.4	1,160.4	1,018.0	142.40	8.149	
12,992.1	6,922.0	7,052.5	6,889.5	120.6	25.6	-89.26	-6,162.7	1,318.4	1,145.4	1,001.2	144.22	7.942	
13,000.0	6,921.9	7,052.5	6,889.5	120.8	25.6	-89.26	-6,162.7	1,318.4	1,144.4	1,000.0	144.37	7.927	
13,090.5	6,921.1	7,052.3	6,889.3	122.6	25.6	-89.25	-6,162.7	1,318.4	1,137.4	991.2	146.16	7.782	
13,100.0	6,921.0	7,052.3	6,889.3	122.8	25.6	-89.25	-6,162.7	1,318.4	1,137.1	990.7	146.35	7.770	
13,133.6	6,920.7	7,052.2	6,889.2	123.4	25.6	-89.25	-6,162.7	1,318.4	1,136.6	989.6	147.02	7.731 CC, ES	
13,188.9	6,920.2	7,052.1	6,889.1	124.5	25.6	-89.24	-6,162.7	1,318.4	1,137.9	989.8	148.11	7.683	
13,200.0	6,920.1	7,052.1	6,889.1	124.8	25.6	-89.24	-6,162.6	1,318.4	1,138.5	990.2	148.33	7.676	
13,287.4	6,919.3	7,051.9	6,888.9	126.5	25.6	-89.23	-6,162.6	1,318.4	1,146.9	996.9	150.05	7.644	
13,300.0	6,919.1	7,051.9	6,888.9	126.7	25.6	-89.23	-6,162.6	1,318.4	1,148.7	998.4	150.30	7.643 SF	
13,385.8	6,918.4	7,051.7	6,888.7	128.4	25.6	-89.22	-6,162.6	1,318.4	1,164.2	1,012.2	152.00	7.659	
13,400.0	6,918.2	7,051.7	6,888.7	128.7	25.6	-89.22	-6,162.6	1,318.4	1,167.4	1,015.1	152.28	7.666	
13,484.2	6,917.5	7,051.5	6,888.5	130.4	25.6	-89.21	-6,162.6	1,318.4	1,189.4	1,035.5	153.95	7.726	
13,500.0	6,917.3	7,051.5	6,888.5	130.7	25.6	-89.21	-6,162.6	1,318.4	1,194.2	1,039.9	154.26	7.741	
13,582.6	6,916.6	7,051.3	6,888.3	132.3	25.6	-89.20	-6,162.6	1,318.4	1,222.1	1,066.2	155.89	7.839	
13,600.0	6,916.4	7,051.3	6,888.3	132.7	25.6	-89.20	-6,162.6	1,318.4	1,228.5	1,072.3	156.24	7.863	
13,681.1	6,915.6	7,051.1	6,888.1	134.3	25.6	-89.19	-6,162.6	1,318.4	1,261.6	1,103.7	157.84	7.993	
13,700.0	6,915.5	7,051.1	6,888.1	134.6	25.6	-89.19	-6,162.6	1,318.4	1,269.9	1,111.7	158.22	8.026	
13,779.5	6,914.7	7,050.9	6,887.9	136.2	25.6	-89.18	-6,162.6	1,318.4	1,307.3	1,147.5	159.79	8.181	
13,800.0	6,914.6	7,050.9	6,887.9	136.6	25.6	-89.18	-6,162.6	1,318.4	1,317.5	1,157.3	160.19	8.224	
13,877.9	6,913.8	7,050.7	6,887.7	138.2	25.6	-89.17	-6,162.6	1,318.4	1,358.6	1,196.9	161.74	8.400	
13,900.0	6,913.6	7,050.7	6,887.7	138.6	25.6	-89.17	-6,162.6	1,318.4	1,370.8	1,208.6	162.17	8.453	
13,976.3	6,912.9	7,050.5	6,887.5	140.1	25.6	-89.16	-6,162.6	1,318.4	1,414.9	1,251.2	163.69	8.644	
14,000.0	6,912.7	7,050.5	6,887.4	140.6	25.6	-89.16	-6,162.6	1,318.4	1,429.1	1,265.0	164.15	8.706	
14,074.8	6,912.0	7,050.3	6,887.3	142.0	25.6	-89.15	-6,162.6	1,318.4	1,475.6	1,310.1	165.57	8.912	
14,079.0	6,912.0	7,050.3	6,887.3	142.1	25.6	-89.15	-6,162.6	1,318.4	1,478.3	1,312.7	165.65	8.924	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 260-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	171.69	-5,114.8	747.4	5,169.2				
98.4	98.4	100.4	100.4	0.1	0.1	171.69	-5,114.7	747.2	5,169.0	5,168.8	0.18	N/A	
100.0	100.0	102.4	102.3	0.1	0.1	171.69	-5,114.7	747.2	5,169.0	5,168.8	0.19	N/A	
196.8	196.8	221.1	221.1	0.3	0.2	171.69	-5,114.1	746.5	5,168.5	5,168.0	0.50	N/A	
200.0	200.0	224.9	224.9	0.3	0.2	171.70	-5,114.1	746.5	5,168.4	5,167.9	0.52	N/A	
295.3	295.3	295.2	295.2	0.5	0.3	171.70	-5,113.6	745.9	5,167.8	5,166.9	0.83	6,226.447	
300.0	300.0	297.7	297.6	0.5	0.3	171.70	-5,113.6	745.9	5,167.8	5,166.9	0.85	6,111.313	
329.9	329.9	313.5	313.4	0.6	0.3	171.70	-5,113.6	745.8	5,167.7	5,166.8	0.94	5,470.099	
393.7	393.7	351.0	351.0	0.8	0.4	171.70	-5,113.8	745.7	5,167.9	5,166.7	1.16	4,440.686	
400.0	400.0	351.0	351.0	0.8	0.4	171.70	-5,113.8	745.7	5,167.9	5,166.8	1.18	4,387.333	
492.1	492.1	400.1	400.1	1.0	0.5	171.70	-5,114.3	745.7	5,168.9	5,167.4	1.49	3,478.534	
500.0	500.0	404.3	404.3	1.0	0.5	171.70	-5,114.3	745.7	5,169.0	5,167.5	1.51	3,417.768	
590.5	590.5	479.0	479.0	1.2	0.7	171.70	-5,115.9	746.1	5,170.9	5,169.0	1.87	2,764.811	
600.0	600.0	479.0	479.0	1.2	0.7	171.70	-5,115.9	746.1	5,171.1	5,169.2	1.89	2,733.860	
689.0	689.0	479.0	479.0	1.4	0.7	171.70	-5,115.9	746.1	5,173.6	5,171.6	2.09	2,473.676	
700.0	700.0	479.0	479.0	1.4	0.7	171.70	-5,115.9	746.1	5,174.1	5,172.0	2.12	2,444.911	
787.4	787.4	541.5	541.4	1.6	0.8	171.69	-5,118.0	747.1	5,177.4	5,174.9	2.45	2,111.449	
800.0	800.0	546.8	546.7	1.7	0.8	171.69	-5,118.3	747.2	5,177.9	5,175.4	2.49	2,077.696	
885.8	885.8	607.0	606.8	1.9	1.0	171.68	-5,121.2	749.2	5,182.4	5,179.6	2.82	1,838.107	
900.0	900.0	607.0	606.8	1.9	1.0	171.68	-5,121.2	749.2	5,183.1	5,180.3	2.85	1,817.826	
984.2	984.2	607.0	606.8	2.1	1.0	171.68	-5,121.2	749.2	5,188.3	5,185.3	3.04	1,706.319	
1,000.0	1,000.0	607.0	606.8	2.1	1.0	171.68	-5,121.2	749.2	5,189.4	5,186.4	3.08	1,687.046	
1,082.7	1,082.7	666.0	665.6	2.3	1.1	171.65	-5,125.2	752.0	5,195.5	5,192.1	3.41	1,525.806	
1,100.0	1,100.0	666.0	665.6	2.3	1.1	171.65	-5,125.2	752.0	5,196.9	5,193.4	3.44	1,508.950	
1,181.1	1,181.1	705.8	705.3	2.5	1.2	171.63	-5,128.3	754.3	5,203.8	5,200.1	3.72	1,398.614	
1,200.0	1,200.0	726.0	725.3	2.6	1.3	171.62	-5,129.9	755.5	5,205.5	5,201.7	3.81	1,366.913	
1,279.5	1,279.5	726.0	725.3	2.7	1.3	135.00	-5,129.9	755.5	5,213.9	5,209.9	3.99	1,308.066	
1,300.0	1,300.0	726.0	725.3	2.8	1.3	134.96	-5,129.9	755.5	5,216.5	5,212.4	4.03	1,293.391	
1,377.9	1,377.8	781.5	780.5	3.0	1.4	134.79	-5,135.0	759.2	5,227.2	5,222.8	4.35	1,202.160	
1,400.0	1,399.8	788.8	787.7	3.0	1.4	134.74	-5,135.8	759.8	5,230.7	5,226.2	4.42	1,184.377	
1,476.4	1,475.9	854.0	852.3	3.2	1.6	134.55	-5,143.3	764.9	5,244.6	5,239.8	4.75	1,103.847	
1,500.0	1,499.5	854.0	852.3	3.2	1.6	134.48	-5,143.3	764.9	5,249.0	5,244.2	4.81	1,092.136	
1,574.8	1,573.7	854.0	852.3	3.4	1.6	134.25	-5,143.3	764.9	5,264.7	5,259.7	4.99	1,055.677	
1,600.0	1,598.7	854.0	852.3	3.5	1.6	134.17	-5,143.3	764.9	5,270.5	5,265.4	5.05	1,044.070	
1,673.2	1,671.1	854.0	852.3	3.7	1.6	133.90	-5,143.3	764.9	5,288.8	5,283.5	5.23	1,010.294	
1,700.0	1,697.5	854.0	852.3	3.7	1.6	133.79	-5,143.3	764.9	5,296.0	5,290.7	5.30	998.605	
1,771.6	1,767.9	910.0	907.5	4.0	1.8	133.52	-5,150.9	770.2	5,316.0	5,310.3	5.65	940.970	
1,800.1	1,795.7	919.0	916.4	4.0	1.9	133.39	-5,152.3	771.2	5,324.5	5,318.7	5.75	925.763	
1,870.1	1,864.2	983.0	979.1	4.3	2.1	133.44	-5,162.4	778.7	5,346.6	5,340.5	6.12	873.170	
1,900.0	1,893.4	983.0	979.1	4.4	2.1	133.44	-5,162.4	778.7	5,355.8	5,349.6	6.21	862.397	
1,968.5	1,960.4	983.0	979.1	4.6	2.1	133.44	-5,162.4	778.7	5,377.5	5,371.0	6.42	837.802	
2,000.0	1,991.3	983.0	979.1	4.7	2.1	133.44	-5,162.4	778.7	5,387.7	5,381.2	6.51	827.163	
2,066.9	2,056.7	983.0	979.1	5.0	2.1	133.44	-5,162.4	778.7	5,409.9	5,403.2	6.72	804.918	
2,100.0	2,089.1	983.0	979.1	5.1	2.1	133.44	-5,162.4	778.7	5,421.2	5,414.4	6.83	794.105	
2,165.3	2,153.0	983.0	979.1	5.3	2.1	133.44	-5,162.4	778.7	5,444.0	5,437.0	7.04	773.654	
2,200.0	2,186.9	1,035.1	1,029.8	5.5	2.3	133.47	-5,171.8	785.6	5,455.5	5,448.2	7.30	747.202	
2,263.8	2,249.3	1,051.8	1,046.1	5.7	2.4	133.47	-5,175.0	787.9	5,478.1	5,470.5	7.56	724.676	
2,300.0	2,284.7	1,061.3	1,055.2	5.8	2.5	133.48	-5,176.9	789.2	5,491.1	5,483.4	7.71	712.558	
2,362.2	2,345.5	1,111.0	1,103.3	6.1	2.7	133.50	-5,187.6	796.5	5,514.2	5,506.2	8.06	684.265	
2,400.0	2,382.5	1,111.0	1,103.3	6.2	2.7	133.50	-5,187.6	796.5	5,528.1	5,519.9	8.19	675.374	
2,460.6	2,441.8	1,111.0	1,103.3	6.5	2.7	133.50	-5,187.6	796.5	5,550.8	5,542.4	8.39	661.535	
2,500.0	2,480.3	1,111.0	1,103.3	6.6	2.7	133.50	-5,187.6	796.5	5,565.8	5,557.3	8.52	652.921	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 260-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,559.0	2,538.1	1,111.0	1,103.3	6.9	2.7	133.50	-5,187.6	796.5	5,588.8	5,580.1	8.73	640.396	
2,600.0	2,578.1	1,157.6	1,148.1	7.0	2.9	133.51	-5,198.2	803.7	5,604.7	5,595.7	9.01	621.925	
2,657.5	2,634.4	1,182.4	1,171.8	7.3	3.1	133.52	-5,204.0	807.7	5,627.4	5,618.1	9.29	605.904	
2,700.0	2,675.9	1,200.7	1,189.4	7.5	3.2	133.53	-5,208.4	810.7	5,644.3	5,634.8	9.49	594.674	
2,755.9	2,730.6	1,240.0	1,226.9	7.7	3.4	133.53	-5,217.9	817.4	5,666.9	5,657.1	9.81	577.795	
2,800.0	2,773.8	1,240.0	1,226.9	7.9	3.4	133.53	-5,217.9	817.4	5,684.8	5,674.8	9.96	570.641	
2,854.3	2,826.9	1,240.0	1,226.9	8.1	3.4	133.53	-5,217.9	817.4	5,707.2	5,697.0	10.15	562.109	
2,857.4	2,829.9	1,240.0	1,226.9	8.1	3.4	133.53	-5,217.9	817.4	5,708.4	5,698.3	10.16	561.643	
2,900.0	2,871.6	1,240.0	1,226.9	8.3	3.4	133.82	-5,217.9	817.4	5,726.2	5,715.9	10.29	556.301	
2,952.7	2,923.5	1,297.7	1,281.9	8.4	3.7	134.15	-5,232.6	827.3	5,747.2	5,736.5	10.61	541.618	
3,000.0	2,970.1	1,314.7	1,298.0	8.6	3.8	134.44	-5,237.1	830.2	5,765.9	5,755.2	10.79	534.613	
3,051.2	3,020.7	1,368.0	1,348.4	8.7	4.2	134.74	-5,251.6	839.2	5,786.2	5,775.1	11.08	522.200	
3,100.0	3,069.1	1,368.0	1,348.4	8.9	4.2	135.02	-5,251.6	839.2	5,804.8	5,793.6	11.19	518.527	
3,149.6	3,118.3	1,368.0	1,348.4	9.0	4.2	135.30	-5,251.6	839.2	5,823.4	5,812.1	11.30	515.344	
3,200.0	3,168.5	1,368.0	1,348.4	9.1	4.2	135.59	-5,251.6	839.2	5,842.2	5,830.8	11.41	512.218	
3,248.0	3,216.3	1,410.5	1,388.5	9.2	4.4	135.81	-5,263.7	846.6	5,859.5	5,847.8	11.65	503.004	
3,300.0	3,268.2	1,432.6	1,409.3	9.3	4.6	136.06	-5,270.1	850.7	5,877.9	5,866.1	11.83	496.954	
3,346.4	3,314.6	1,452.4	1,427.8	9.4	4.7	136.28	-5,275.8	854.4	5,894.1	5,882.1	11.98	492.054	
3,400.0	3,368.1	1,496.0	1,468.6	9.5	5.0	136.48	-5,288.8	862.9	5,912.4	5,900.1	12.23	483.444	
3,444.9	3,413.0	1,496.0	1,468.6	9.6	5.0	136.70	-5,288.8	862.9	5,927.2	5,914.9	12.30	482.064	
3,457.5	3,425.6	1,496.0	1,468.6	9.6	5.0	173.26	-5,288.8	862.9	5,931.3	5,919.0	12.32	481.625	
3,500.0	3,468.1	1,496.0	1,468.6	9.7	5.0	173.26	-5,288.8	862.9	5,945.4	5,933.0	12.39	479.942	
3,543.3	3,511.4	1,496.0	1,468.6	9.7	5.0	173.26	-5,288.8	862.9	5,959.9	5,947.5	12.47	477.982	
3,600.0	3,568.1	1,553.0	1,521.6	9.8	5.4	173.16	-5,306.2	874.7	5,978.8	5,966.0	12.81	466.644	
3,641.7	3,609.9	1,568.7	1,536.1	9.9	5.5	173.14	-5,311.1	878.0	5,993.0	5,980.1	12.96	462.561	
3,700.0	3,668.1	1,625.0	1,588.0	10.0	6.0	173.04	-5,329.2	890.2	6,013.4	6,000.1	13.30	452.191	
3,740.1	3,708.3	1,625.0	1,588.0	10.1	6.0	173.04	-5,329.2	890.2	6,027.3	6,014.0	13.38	450.639	
3,800.0	3,768.1	1,632.2	1,594.7	10.2	6.0	173.02	-5,331.5	891.8	6,048.5	6,035.0	13.52	447.363	
3,838.6	3,806.7	1,670.3	1,629.7	10.2	6.3	172.95	-5,343.9	900.4	6,062.2	6,048.5	13.76	440.671	
3,900.0	3,868.1	1,730.8	1,685.1	10.3	6.8	172.83	-5,363.5	914.5	6,084.1	6,070.0	14.13	430.539	
3,937.0	3,905.1	1,753.0	1,705.5	10.4	6.9	172.79	-5,370.6	919.8	6,097.3	6,083.0	14.30	426.482	
4,000.0	3,968.1	1,753.0	1,705.5	10.5	6.9	172.79	-5,370.6	919.8	6,120.1	6,105.7	14.42	424.456	
4,035.4	4,003.6	1,792.8	1,741.8	10.6	7.3	172.71	-5,383.6	929.6	6,132.9	6,118.2	14.67	417.992	
4,100.0	4,068.1	1,815.4	1,762.3	10.7	7.4	172.66	-5,391.0	935.3	6,156.7	6,141.8	14.90	413.136	
4,133.8	4,102.0	1,827.1	1,773.0	10.8	7.5	172.64	-5,395.0	938.3	6,169.4	6,154.3	15.02	410.660	
4,200.0	4,168.1	1,882.0	1,822.5	10.9	8.0	172.52	-5,413.7	952.9	6,194.6	6,179.2	15.40	402.123	
4,232.3	4,200.4	1,882.0	1,822.5	10.9	8.0	172.52	-5,413.7	952.9	6,206.8	6,191.3	15.47	401.258	
4,300.0	4,268.1	1,882.0	1,822.5	11.1	8.0	172.52	-5,413.7	952.9	6,232.8	6,217.2	15.60	399.494	
4,330.7	4,298.8	1,882.0	1,822.5	11.1	8.0	172.52	-5,413.7	952.9	6,244.9	6,229.2	15.66	398.709	
4,400.0	4,368.1	1,920.8	1,857.2	11.2	8.3	172.43	-5,427.3	963.4	6,272.2	6,256.2	16.00	392.070	
4,429.1	4,397.3	1,931.3	1,866.6	11.3	8.4	172.41	-5,431.1	966.3	6,283.8	6,267.7	16.11	390.078	
4,500.0	4,468.1	1,956.9	1,889.4	11.4	8.7	172.35	-5,440.2	973.4	6,312.4	6,296.0	16.38	385.381	
4,527.5	4,495.7	1,966.7	1,898.2	11.5	8.8	172.33	-5,443.8	976.1	6,323.6	6,307.1	16.48	383.606	
4,600.0	4,568.1	2,010.0	1,936.6	11.6	9.2	172.23	-5,459.7	988.2	6,353.4	6,336.6	16.85	377.112	
4,626.0	4,594.1	2,010.0	1,936.6	11.7	9.2	172.23	-5,459.7	988.2	6,364.2	6,347.3	16.90	376.581	
4,700.0	4,668.1	2,010.0	1,936.6	11.8	9.2	172.23	-5,459.7	988.2	6,395.3	6,378.2	17.05	375.114	
4,724.4	4,692.5	2,010.0	1,936.6	11.8	9.2	172.23	-5,459.7	988.2	6,405.6	6,388.5	17.10	374.641	
4,800.0	4,768.1	2,062.8	1,983.1	12.0	9.7	172.11	-5,479.7	1,003.1	6,437.8	6,420.3	17.53	367.333	
4,822.8	4,791.0	2,070.8	1,990.1	12.0	9.7	172.09	-5,482.7	1,005.4	6,447.6	6,430.0	17.61	366.069	
4,900.0	4,868.1	2,097.5	2,013.5	12.2	10.0	172.03	-5,493.1	1,013.0	6,481.2	6,463.3	17.91	361.920	
4,921.2	4,889.4	2,138.0	2,048.9	12.2	10.4	171.94	-5,509.1	1,024.7	6,490.7	6,472.6	18.16	357.419	
5,000.0	4,968.1	2,138.0	2,048.9	12.4	10.4	171.94	-5,509.1	1,024.7	6,525.4	6,507.1	18.32	356.183	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 usft
Survey Program: 260-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,019.7	4,987.8	2,140.0	2,050.6	12.4	10.4	171.94	-5,509.9	1,025.2	6,534.2	6,515.8	18.37	355.687		
5,100.0	5,068.1	2,252.2	2,148.2	12.6	11.5	171.68	-5,554.0	1,058.4	6,569.9	6,550.8	19.10	343.963		
5,118.1	5,086.2	2,275.3	2,168.3	12.6	11.7	171.62	-5,563.0	1,065.4	6,577.8	6,558.6	19.25	341.684		
5,200.0	5,168.1	2,366.1	2,247.5	12.8	12.5	171.41	-5,598.2	1,092.5	6,613.9	6,594.0	19.85	333.181		
5,216.5	5,184.7	2,384.5	2,263.6	12.8	12.6	171.37	-5,605.3	1,097.9	6,621.1	6,601.2	19.97	331.524		
5,300.0	5,268.1	2,538.5	2,399.0	13.0	13.9	171.05	-5,664.4	1,141.6	6,657.3	6,636.4	20.85	319.287		
5,314.9	5,283.1	2,549.1	2,408.4	13.0	14.0	171.02	-5,668.4	1,144.5	6,663.7	6,642.7	20.93	318.353		
5,400.0	5,368.1	2,609.1	2,461.3	13.1	14.6	170.90	-5,691.3	1,161.2	6,700.2	6,678.9	21.39	313.201		
5,413.4	5,381.5	2,618.6	2,469.6	13.2	14.6	170.88	-5,694.9	1,163.8	6,706.0	6,684.6	21.47	312.414		
5,500.0	5,468.1	2,681.5	2,525.0	13.3	15.2	170.76	-5,719.1	1,181.3	6,743.5	6,721.6	21.95	307.206		
5,511.8	5,479.9	2,690.4	2,532.8	13.4	15.3	170.74	-5,722.5	1,183.8	6,748.6	6,726.6	22.02	306.474		
5,600.0	5,568.1	2,756.8	2,591.2	13.5	16.0	170.60	-5,748.0	1,202.3	6,787.0	6,764.5	22.54	301.170		
5,610.2	5,578.4	2,764.4	2,598.0	13.6	16.0	170.59	-5,751.0	1,204.5	6,791.5	6,768.9	22.60	300.573		
5,700.0	5,668.1	2,828.2	2,654.0	13.7	16.7	170.46	-5,775.7	1,222.3	6,830.8	6,807.7	23.09	295.808		
5,708.6	5,676.8	2,834.3	2,659.3	13.8	16.7	170.45	-5,778.0	1,224.0	6,834.6	6,811.4	23.14	295.370		
5,800.0	5,768.1	2,909.0	2,725.0	13.9	17.4	170.31	-5,807.2	1,244.7	6,874.8	6,851.1	23.69	290.220		
5,807.1	5,775.2	2,909.0	2,725.0	14.0	17.4	170.31	-5,807.2	1,244.7	6,877.9	6,854.2	23.70	290.170		
5,900.0	5,868.1	2,951.0	2,761.7	14.1	17.8	170.23	-5,823.7	1,256.4	6,919.2	6,895.1	24.10	287.069		
5,905.5	5,873.6	2,953.7	2,764.1	14.1	17.8	170.22	-5,824.7	1,257.1	6,921.7	6,897.5	24.13	286.875		
6,000.0	5,968.1	3,000.3	2,804.8	14.3	18.3	170.13	-5,843.2	1,270.6	6,964.1	6,939.6	24.55	283.635		
6,003.9	5,972.1	3,002.3	2,806.5	14.3	18.3	170.12	-5,844.0	1,271.1	6,965.9	6,941.3	24.57	283.504		
6,100.0	6,068.1	3,056.8	2,853.8	14.5	18.8	170.01	-5,865.6	1,287.4	7,009.6	6,984.5	25.04	279.955		
6,102.3	6,070.5	3,058.7	2,855.4	14.5	18.9	170.01	-5,866.4	1,287.9	7,010.6	6,985.6	25.05	279.841		
6,200.0	6,168.1	3,135.6	2,922.2	14.7	19.6	169.85	-5,897.2	1,310.7	7,055.3	7,029.6	25.64	275.210		
6,200.8	6,168.9	3,136.3	2,922.7	14.7	19.6	169.85	-5,897.4	1,310.9	7,055.6	7,030.0	25.64	275.174		
6,288.5	6,256.6	3,343.1	3,103.3	14.9	21.5	169.45	-5,978.8	1,370.3	7,094.9	7,068.1	26.78	264.884		
6,299.2	6,267.3	3,351.9	3,111.0	14.9	21.6	-10.70	-5,982.2	1,372.9	7,099.6	7,072.6	26.92	263.697		
6,300.0	6,268.1	3,352.5	3,111.6	14.9	21.6	-10.69	-5,982.5	1,373.0	7,099.9	7,073.0	26.93	263.638		
6,350.0	6,318.1	3,394.2	3,148.1	15.0	22.0	-10.46	-5,998.5	1,385.2	7,119.7	7,092.4	27.31	260.723		
6,397.6	6,365.3	3,485.8	3,228.2	15.1	22.8	-10.41	-6,033.5	1,412.3	7,135.7	7,107.9	27.80	256.709		
6,400.0	6,367.7	3,496.0	3,237.3	15.1	22.9	-10.42	-6,037.4	1,415.3	7,136.4	7,108.5	27.85	256.282		
6,450.0	6,416.8	3,604.1	3,332.7	15.1	23.8	-10.44	-6,078.1	1,445.7	7,149.1	7,120.9	28.26	252.948		
6,496.0	6,461.3	3,670.8	3,392.0	15.1	24.4	-10.44	-6,103.3	1,462.9	7,157.8	7,129.4	28.36	252.365		
6,500.0	6,465.1	3,676.6	3,397.2	15.1	24.5	-10.44	-6,105.5	1,464.3	7,158.4	7,130.0	28.37	252.354		
6,550.0	6,512.4	3,722.4	3,438.0	15.1	24.9	-10.44	-6,122.8	1,475.9	7,164.2	7,136.0	28.22	253.888		
6,594.5	6,553.4	3,762.2	3,473.4	15.1	25.2	-10.49	-6,137.7	1,486.3	7,166.5	7,138.5	27.97	256.223		
6,600.0	6,558.4	3,767.2	3,477.7	15.1	25.3	-10.50	-6,139.6	1,487.6	7,166.6	7,138.7	27.93	256.574		
6,650.0	6,603.0	3,808.0	3,513.9	15.1	25.6	-10.61	-6,154.8	1,498.9	7,165.7	7,138.2	27.50	260.551		
6,692.9	6,639.9	3,845.7	3,547.3	15.1	26.0	-10.75	-6,168.8	1,509.4	7,162.2	7,135.1	27.06	264.672		
6,700.0	6,645.9	3,851.4	3,552.4	15.1	26.0	-10.78	-6,170.9	1,511.0	7,161.3	7,134.4	26.98	265.461		
6,750.0	6,686.8	3,891.1	3,587.5	15.1	26.4	-10.99	-6,185.7	1,522.2	7,153.7	7,127.4	26.33	271.734		
6,791.3	6,719.1	3,923.5	3,616.1	15.1	26.7	-11.22	-6,197.8	1,531.3	7,144.9	7,119.2	25.71	277.866		
6,800.0	6,725.7	3,936.0	3,627.2	15.1	26.8	-11.29	-6,202.5	1,534.8	7,142.8	7,117.2	25.60	278.999		
6,850.0	6,762.3	4,064.0	3,740.8	15.1	28.0	-11.90	-6,249.2	1,570.6	7,128.0	7,102.8	25.12	283.746		
6,889.7	6,789.7	4,100.5	3,773.3	15.1	28.3	-12.26	-6,262.3	1,580.8	7,113.8	7,089.4	24.43	291.134		
6,900.0	6,796.5	4,104.5	3,776.8	15.1	28.3	-12.35	-6,263.8	1,581.9	7,109.9	7,085.7	24.23	293.386		
6,950.0	6,828.0	4,123.3	3,793.5	15.1	28.5	-12.81	-6,270.6	1,587.2	7,089.0	7,065.7	23.25	304.892		
6,988.2	6,850.2	4,137.2	3,805.9	15.1	28.6	-13.23	-6,275.7	1,591.1	7,071.1	7,048.5	22.51	314.097		
7,000.0	6,856.7	4,141.4	3,809.6	15.1	28.7	-13.37	-6,277.3	1,592.3	7,065.2	7,042.9	22.30	316.894		
7,050.0	6,882.5	4,193.0	3,855.2	15.2	29.1	-14.17	-6,296.5	1,606.9	7,038.8	7,017.2	21.54	326.717		
7,086.6	6,899.5	4,193.0	3,855.2	15.3	29.1	-14.69	-6,296.5	1,606.9	7,017.5	6,996.6	20.95	334.938		
7,100.0	6,905.3	4,193.0	3,855.2	15.4	29.1	-14.90	-6,296.5	1,606.9	7,009.4	6,988.7	20.76	337.677		

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 260-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,150.0	6,924.9	4,193.0	3,855.2	15.7	29.1	-15.78	-6,296.5	1,606.9	6,977.6	6,957.4	20.20	345.470	
7,185.0	6,936.7	4,193.0	3,855.2	15.9	29.1	-16.49	-6,296.5	1,606.9	6,954.0	6,934.0	19.99	347.933	
7,200.0	6,941.2	4,193.0	3,855.2	16.0	29.1	-16.83	-6,296.5	1,606.9	6,943.5	6,923.5	19.95	348.096	
7,250.0	6,954.2	4,193.0	3,855.2	16.3	29.1	-18.09	-6,296.5	1,606.9	6,907.2	6,887.1	20.09	343.783	
7,283.4	6,961.0	4,193.0	3,855.2	16.6	29.1	-19.09	-6,296.5	1,606.9	6,881.7	6,861.3	20.45	336.526	
7,300.0	6,963.8	4,193.0	3,855.2	16.7	29.1	-19.64	-6,296.5	1,606.9	6,868.8	6,848.1	20.71	331.714	
7,350.0	6,970.0	4,193.0	3,855.2	17.2	29.1	-21.55	-6,296.5	1,606.9	6,828.6	6,806.7	21.85	312.510	
7,381.9	6,972.1	4,193.0	3,855.2	17.5	29.1	-23.01	-6,296.5	1,606.9	6,802.0	6,779.1	22.88	297.336	
7,400.0	6,972.7	4,236.4	3,893.3	17.7	29.6	-24.39	-6,312.9	1,619.5	6,786.2	6,762.2	23.95	283.297	
7,420.0	6,972.8	4,239.0	3,895.6	17.9	29.6	-25.57	-6,313.9	1,620.3	6,768.9	6,744.1	24.86	272.300	
7,480.3	6,972.2	4,246.6	3,902.3	18.5	29.7	-25.66	-6,316.9	1,622.6	6,716.5	6,691.2	25.30	265.489	
7,500.0	6,972.0	4,249.1	3,904.4	18.7	29.7	-25.69	-6,317.8	1,623.4	6,699.4	6,673.9	25.44	263.312	
7,578.7	6,971.3	4,259.2	3,913.2	19.7	29.8	-25.80	-6,321.7	1,626.5	6,631.1	6,605.1	26.06	254.423	
7,600.0	6,971.1	4,261.9	3,915.6	19.9	29.8	-25.83	-6,322.7	1,627.3	6,612.7	6,586.5	26.23	252.088	
7,677.1	6,970.4	4,271.8	3,924.2	20.9	29.9	-25.95	-6,326.6	1,630.4	6,546.1	6,519.2	26.89	243.468	
7,700.0	6,970.2	4,274.8	3,926.7	21.2	30.0	-25.98	-6,327.7	1,631.3	6,526.4	6,499.3	27.08	240.989	
7,775.6	6,969.5	4,321.0	3,966.6	22.2	30.4	-26.52	-6,345.8	1,646.2	6,461.7	6,433.5	28.16	229.472	
7,800.0	6,969.3	4,321.0	3,966.6	22.6	30.4	-26.52	-6,345.8	1,646.2	6,440.6	6,412.3	28.35	227.199	
7,874.0	6,968.6	4,321.0	3,966.6	23.7	30.4	-26.52	-6,345.8	1,646.2	6,377.1	6,348.1	28.95	220.264	
7,900.0	6,968.4	4,321.0	3,966.6	24.1	30.4	-26.52	-6,345.8	1,646.2	6,354.8	6,325.6	29.16	217.897	
7,972.4	6,967.8	4,321.0	3,966.6	25.2	30.4	-26.52	-6,345.8	1,646.2	6,292.9	6,263.1	29.78	211.306	
8,000.0	6,967.5	4,321.0	3,966.6	25.6	30.4	-26.52	-6,345.8	1,646.2	6,269.4	6,239.3	30.02	208.869	
8,070.8	6,966.9	4,321.0	3,966.6	26.7	30.4	-26.52	-6,345.8	1,646.2	6,209.1	6,178.5	30.64	202.646	
8,100.0	6,966.6	4,336.4	3,979.7	27.2	30.6	-26.70	-6,351.9	1,651.3	6,184.3	6,153.3	31.08	198.982	
8,169.3	6,966.0	4,358.1	3,998.3	28.3	30.8	-26.96	-6,360.5	1,658.5	6,125.6	6,093.6	31.97	191.582	
8,200.0	6,965.7	4,367.7	4,006.6	28.8	30.9	-27.08	-6,364.3	1,661.7	6,099.6	6,067.2	32.37	188.412	
8,267.7	6,965.1	4,389.0	4,024.8	30.0	31.2	-27.34	-6,372.7	1,668.8	6,042.4	6,009.1	33.28	181.581	
8,300.0	6,964.8	4,399.2	4,033.5	30.5	31.3	-27.47	-6,376.7	1,672.2	6,015.2	5,981.4	33.71	178.433	
8,366.1	6,964.2	4,420.1	4,051.4	31.7	31.5	-27.72	-6,385.0	1,679.1	5,959.5	5,924.8	34.62	172.140	
8,400.0	6,963.9	4,430.8	4,060.6	32.2	31.6	-27.86	-6,389.3	1,682.7	5,931.0	5,895.9	35.09	169.025	
8,464.5	6,963.3	4,455.6	4,081.8	33.4	31.9	-28.17	-6,399.2	1,691.0	5,876.8	5,840.7	36.06	162.978	
8,500.0	6,963.0	4,503.9	4,123.1	34.0	32.4	-28.77	-6,418.3	1,706.8	5,847.0	5,809.9	37.06	157.760	
8,563.0	6,962.4	4,581.0	4,189.6	35.1	33.1	-29.76	-6,448.8	1,731.1	5,794.0	5,755.2	38.78	149.419	
8,600.0	6,962.0	4,594.6	4,201.5	35.8	33.3	-29.93	-6,454.2	1,735.3	5,762.9	5,723.5	39.35	146.437	
8,661.4	6,961.5	4,617.4	4,221.2	36.9	33.5	-30.23	-6,463.2	1,742.3	5,711.3	5,670.9	40.33	141.625	
8,700.0	6,961.1	4,631.7	4,233.6	37.6	33.6	-30.41	-6,468.8	1,746.7	5,678.9	5,637.9	40.94	138.697	
8,759.8	6,960.6	4,654.1	4,253.0	38.7	33.8	-30.70	-6,477.7	1,753.4	5,628.7	5,586.8	41.92	134.283	
8,800.0	6,960.2	4,669.1	4,266.0	39.4	34.0	-30.90	-6,483.6	1,758.0	5,595.1	5,552.6	42.58	131.414	
8,858.2	6,959.7	4,690.9	4,284.9	40.5	34.2	-31.19	-6,492.3	1,764.6	5,546.5	5,502.9	43.55	127.368	
8,900.0	6,959.3	4,706.0	4,298.0	41.2	34.3	-31.39	-6,498.3	1,769.1	5,511.7	5,467.5	44.24	124.588	
8,956.7	6,958.8	4,706.0	4,298.0	42.3	34.3	-31.39	-6,498.3	1,769.1	5,464.6	5,419.7	44.87	121.781	
9,000.0	6,958.4	4,706.0	4,298.0	43.1	34.3	-31.39	-6,498.3	1,769.1	5,428.7	5,383.3	45.36	119.690	
9,055.1	6,957.9	4,742.2	4,329.3	44.1	34.7	-31.88	-6,512.8	1,779.9	5,383.0	5,336.4	46.56	115.621	
9,100.0	6,957.5	4,752.8	4,338.5	44.9	34.8	-32.02	-6,517.1	1,783.0	5,345.9	5,298.7	47.24	113.167	
9,153.5	6,957.0	4,765.5	4,349.5	45.9	34.9	-32.19	-6,522.3	1,786.7	5,301.8	5,253.7	48.06	110.312	
9,200.0	6,956.6	4,776.7	4,359.2	46.8	35.0	-32.34	-6,526.9	1,790.0	5,263.6	5,214.8	48.78	107.901	
9,251.9	6,956.1	4,789.3	4,370.1	47.8	35.1	-32.52	-6,532.1	1,793.7	5,221.1	5,171.5	49.60	105.271	
9,300.0	6,955.7	4,801.1	4,380.3	48.7	35.3	-32.68	-6,537.0	1,797.1	5,181.8	5,131.4	50.36	102.903	
9,350.4	6,955.2	4,835.0	4,409.5	49.6	35.6	-33.14	-6,551.1	1,806.8	5,140.8	5,089.3	51.53	99.760	
9,400.0	6,954.8	4,835.0	4,409.5	50.6	35.6	-33.14	-6,551.1	1,806.8	5,100.4	5,048.3	52.12	97.864	
9,448.8	6,954.3	4,843.5	4,416.8	51.5	35.7	-33.26	-6,554.7	1,809.2	5,060.9	5,008.0	52.85	95.766	
9,500.0	6,953.9	4,875.2	4,444.2	52.5	36.0	-33.69	-6,568.0	1,818.2	5,019.4	4,965.4	54.02	92.909	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 260-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,547.2	6,953.4	4,904.3	4,469.3	53.4	36.3	-34.10	-6,580.2	1,826.4	4,981.2	4,926.1	55.12	90.363	
9,600.0	6,952.9	4,936.6	4,497.2	54.4	36.6	-34.56	-6,593.6	1,835.4	4,938.6	4,882.3	56.37	87.618	
9,645.6	6,952.5	4,963.8	4,520.8	55.2	36.8	-34.95	-6,604.9	1,843.1	4,901.8	4,844.4	57.44	85.335	
9,700.0	6,952.0	4,985.7	4,539.7	56.3	37.0	-35.26	-6,614.0	1,849.2	4,858.1	4,799.6	58.53	82.997	
9,744.1	6,951.6	5,003.4	4,555.0	57.1	37.2	-35.52	-6,621.3	1,854.2	4,822.7	4,763.3	59.43	81.154	
9,800.0	6,951.1	5,025.8	4,574.4	58.2	37.4	-35.85	-6,630.6	1,860.5	4,777.9	4,717.4	60.57	78.884	
9,842.5	6,950.7	5,042.7	4,589.1	59.0	37.6	-36.10	-6,637.5	1,865.3	4,744.0	4,682.5	61.45	77.206	
9,900.0	6,950.2	5,065.6	4,608.9	60.1	37.8	-36.45	-6,647.0	1,871.8	4,698.2	4,635.5	62.64	75.002	
9,940.9	6,949.8	5,081.8	4,622.9	60.9	38.0	-36.69	-6,653.6	1,876.5	4,665.7	4,602.2	63.50	73.476	
10,000.0	6,949.3	5,113.4	4,650.3	62.0	38.3	-37.17	-6,666.6	1,885.6	4,618.9	4,553.9	64.92	71.145	
10,039.3	6,948.9	5,138.5	4,672.0	62.8	38.5	-37.56	-6,676.9	1,892.7	4,587.7	4,521.8	65.97	69.546	
10,100.0	6,948.4	5,176.8	4,705.2	64.0	38.9	-38.15	-6,692.4	1,903.7	4,539.8	4,472.2	67.59	67.167	
10,137.8	6,948.0	5,200.4	4,725.8	64.7	39.1	-38.53	-6,702.0	1,910.4	4,510.1	4,441.4	68.61	65.735	
10,200.0	6,947.5	5,361.3	4,866.9	65.9	40.6	-41.14	-6,765.3	1,954.6	4,460.7	4,387.6	73.08	61.040	
10,236.2	6,947.1	5,373.1	4,877.3	66.6	40.7	-41.34	-6,769.8	1,957.8	4,431.9	4,358.1	73.85	60.012	
10,300.0	6,946.6	5,394.1	4,895.9	67.8	40.8	-41.69	-6,777.9	1,963.3	4,381.4	4,306.1	75.23	58.242	
10,334.6	6,946.3	5,405.7	4,906.1	68.5	40.9	-41.88	-6,782.4	1,966.3	4,354.0	4,278.0	75.98	57.304	
10,400.0	6,945.7	5,427.7	4,925.6	69.8	41.1	-42.26	-6,791.0	1,971.9	4,302.6	4,225.1	77.42	55.575	
10,433.0	6,945.4	5,438.9	4,935.5	70.4	41.2	-42.45	-6,795.4	1,974.8	4,276.6	4,198.5	78.15	54.721	
10,500.0	6,944.7	5,461.9	4,955.8	71.7	41.4	-42.84	-6,804.4	1,980.6	4,224.4	4,144.7	79.66	53.033	
10,531.5	6,944.5	5,477.0	4,969.2	72.3	41.6	-43.09	-6,810.4	1,984.4	4,199.9	4,119.4	80.47	52.190	
10,600.0	6,943.8	5,477.0	4,969.2	73.7	41.6	-43.09	-6,810.4	1,984.4	4,146.8	4,065.4	81.45	50.912	
10,629.9	6,943.6	5,477.0	4,969.2	74.2	41.6	-43.09	-6,810.4	1,984.4	4,123.8	4,041.9	81.88	50.366	
10,700.0	6,942.9	5,477.0	4,969.2	75.6	41.6	-43.09	-6,810.4	1,984.4	4,070.2	3,987.4	82.88	49.111	
10,728.3	6,942.7	5,513.7	5,001.5	76.2	41.9	-43.73	-6,825.0	1,993.6	4,048.4	3,964.2	84.22	48.068	
10,800.0	6,942.0	5,528.0	5,014.1	77.6	42.1	-43.98	-6,830.8	1,997.4	3,994.1	3,908.4	85.63	46.643	
10,826.7	6,941.8	5,533.4	5,018.8	78.1	42.1	-44.07	-6,832.9	1,998.8	3,973.9	3,887.7	86.16	46.123	
10,900.0	6,941.1	5,548.2	5,031.8	79.5	42.3	-44.33	-6,838.9	2,002.7	3,919.0	3,831.4	87.61	44.730	
10,925.2	6,940.9	5,553.3	5,036.3	80.0	42.3	-44.42	-6,840.9	2,004.1	3,900.2	3,812.1	88.12	44.262	
11,000.0	6,940.2	5,568.5	5,049.5	81.5	42.4	-44.70	-6,847.0	2,008.2	3,844.8	3,755.2	89.62	42.901	
11,023.6	6,940.0	5,573.3	5,053.7	81.9	42.5	-44.78	-6,849.0	2,009.5	3,827.5	3,737.4	90.10	42.481	
11,100.0	6,939.3	5,605.0	5,081.4	83.4	42.8	-45.36	-6,861.8	2,018.4	3,771.7	3,679.6	92.10	40.954	
11,122.0	6,939.1	5,605.0	5,081.4	83.8	42.8	-45.36	-6,861.8	2,018.4	3,755.7	3,663.3	92.42	40.636	
11,200.0	6,938.4	5,620.8	5,095.1	85.4	42.9	-45.64	-6,868.2	2,022.9	3,699.5	3,605.5	94.02	39.347	
11,220.4	6,938.2	5,635.5	5,107.9	85.8	43.1	-45.91	-6,874.1	2,027.0	3,684.9	3,590.1	94.74	38.894	
11,300.0	6,937.4	5,691.6	5,156.8	87.3	43.6	-46.95	-6,896.7	2,042.8	3,628.1	3,530.6	97.54	37.196	
11,318.9	6,937.3	5,704.8	5,168.3	87.7	43.7	-47.20	-6,901.9	2,046.5	3,614.7	3,516.5	98.20	36.808	
11,400.0	6,936.5	5,766.0	5,222.0	89.3	44.3	-48.36	-6,926.0	2,063.4	3,557.3	3,456.1	101.22	35.145	
11,417.3	6,936.4	5,780.1	5,234.4	89.6	44.4	-48.63	-6,931.5	2,067.2	3,545.1	3,443.2	101.89	34.792	
11,500.0	6,935.6	5,846.0	5,292.5	91.3	45.0	-49.91	-6,957.0	2,085.0	3,487.0	3,381.9	105.11	33.174	
11,515.7	6,935.5	5,858.2	5,303.3	91.6	45.2	-50.15	-6,961.6	2,088.3	3,476.0	3,370.3	105.72	32.879	
11,600.0	6,934.7	5,969.1	5,402.1	93.2	46.1	-52.38	-7,002.5	2,117.8	3,417.2	3,306.8	110.34	30.971	
11,614.1	6,934.6	5,986.7	5,417.9	93.5	46.3	-52.74	-7,008.8	2,122.5	3,407.3	3,296.2	111.09	30.672	
11,700.0	6,933.8	6,021.7	5,449.3	95.2	46.6	-53.46	-7,021.1	2,131.7	3,347.8	3,234.3	113.52	29.490	
11,712.6	6,933.7	6,026.5	5,453.6	95.4	46.6	-53.56	-7,022.8	2,133.0	3,339.2	3,225.3	113.87	29.324	
11,800.0	6,932.9	6,059.9	5,483.6	97.1	46.9	-54.26	-7,034.5	2,141.7	3,279.7	3,163.4	116.31	28.198	
11,811.0	6,932.8	6,064.1	5,487.4	97.4	46.9	-54.35	-7,036.0	2,142.8	3,272.3	3,155.6	116.62	28.060	
11,900.0	6,932.0	6,098.3	5,518.1	99.1	47.2	-55.07	-7,048.1	2,151.6	3,212.8	3,093.7	119.12	26.971	
11,909.4	6,931.9	6,101.9	5,521.4	99.3	47.2	-55.15	-7,049.4	2,152.6	3,206.5	3,087.1	119.39	26.859	
12,000.0	6,931.0	6,135.8	5,551.9	101.1	47.5	-55.87	-7,061.3	2,161.3	3,147.2	3,025.3	121.93	25.812	
12,007.8	6,931.0	6,138.7	5,554.4	101.2	47.5	-55.93	-7,062.3	2,162.0	3,142.1	3,020.0	122.15	25.724	
12,100.0	6,930.1	6,172.6	5,584.9	103.0	47.8	-56.65	-7,074.4	2,170.6	3,083.1	2,958.3	124.73	24.718	

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 260-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
12,106.3	6,930.1	6,174.9	5,587.0	103.2	47.8	-56.70	-7,075.2	2,171.2	3,079.1	2,954.2	124.91	24.651	
12,200.0	6,929.2	6,209.9	5,618.5	105.0	48.1	-57.46	-7,087.8	2,179.9	3,020.5	2,892.9	127.57	23.677	
12,204.7	6,929.2	6,211.6	5,620.1	105.1	48.2	-57.49	-7,088.4	2,180.3	3,017.6	2,889.9	127.70	23.629	
12,300.0	6,928.3	6,247.9	5,652.7	107.0	48.5	-58.28	-7,101.5	2,189.3	2,959.5	2,829.0	130.45	22.687	
12,303.1	6,928.3	6,249.5	5,654.1	107.1	48.5	-58.31	-7,102.1	2,189.6	2,957.6	2,827.0	130.55	22.655	
12,400.0	6,927.4	6,297.6	5,697.5	109.0	48.9	-59.37	-7,119.6	2,201.2	2,900.1	2,766.4	133.69	21.692	
12,401.5	6,927.4	6,298.4	5,698.2	109.0	48.9	-59.38	-7,119.9	2,201.4	2,899.2	2,765.4	133.74	21.677	
12,500.0	6,926.5	6,348.1	5,743.0	110.9	49.3	-60.47	-7,138.1	2,212.9	2,842.4	2,705.4	136.97	20.751	
12,598.4	6,925.6	6,393.7	5,784.1	112.9	49.7	-61.48	-7,154.9	2,223.0	2,787.3	2,647.2	140.08	19.898	
12,600.0	6,925.6	6,394.4	5,784.7	112.9	49.7	-61.50	-7,155.1	2,223.2	2,786.4	2,646.3	140.13	19.885	
12,696.8	6,924.7	6,432.7	5,819.4	114.8	50.0	-62.36	-7,169.1	2,231.8	2,734.1	2,591.1	142.99	19.121	
12,700.0	6,924.6	6,433.9	5,820.5	114.9	50.0	-62.38	-7,169.5	2,232.0	2,732.4	2,589.3	143.09	19.096	
12,795.2	6,923.8	6,470.6	5,853.7	116.8	50.3	-63.21	-7,182.7	2,240.3	2,683.0	2,537.1	145.88	18.391	
12,800.0	6,923.7	6,472.4	5,855.3	116.9	50.3	-63.25	-7,183.3	2,240.8	2,680.5	2,534.5	146.02	18.357	
12,893.7	6,922.9	6,504.0	5,884.0	118.7	50.6	-63.97	-7,194.6	2,248.0	2,634.0	2,485.4	148.65	17.720	
12,900.0	6,922.8	6,504.0	5,884.0	118.8	50.6	-63.97	-7,194.6	2,248.0	2,631.0	2,482.2	148.76	17.686	
12,992.1	6,922.0	6,527.8	5,905.5	120.6	50.7	-64.52	-7,202.9	2,253.5	2,587.5	2,436.4	151.13	17.121	
13,000.0	6,921.9	6,529.5	5,907.1	120.8	50.8	-64.56	-7,203.5	2,253.9	2,583.9	2,432.6	151.32	17.076	
13,090.5	6,921.1	6,549.3	5,925.0	122.6	50.9	-65.01	-7,210.5	2,258.6	2,543.7	2,390.2	153.55	16.566	
13,100.0	6,921.0	6,551.4	5,926.9	122.8	50.9	-65.06	-7,211.3	2,259.1	2,539.7	2,385.9	153.79	16.514	
13,188.9	6,920.2	6,570.8	5,944.5	124.5	51.1	-65.51	-7,218.1	2,263.9	2,502.7	2,346.8	155.98	16.045	
13,200.0	6,920.1	6,573.2	5,946.6	124.8	51.1	-65.57	-7,218.9	2,264.5	2,498.3	2,342.1	156.26	15.989	
13,287.4	6,919.3	6,592.2	5,963.8	126.5	51.3	-66.01	-7,225.6	2,269.2	2,464.7	2,306.3	158.41	15.559	
13,300.0	6,919.1	6,595.0	5,966.2	126.7	51.3	-66.07	-7,226.5	2,269.9	2,460.1	2,301.3	158.73	15.499	
13,385.8	6,918.4	6,632.0	5,999.6	128.4	51.6	-66.94	-7,239.5	2,279.5	2,429.9	2,268.5	161.39	15.056	
13,400.0	6,918.2	6,632.0	5,999.6	128.7	51.6	-66.94	-7,239.5	2,279.5	2,425.1	2,263.4	161.65	15.002	
13,484.2	6,917.5	6,709.8	6,069.9	130.4	52.2	-68.76	-7,266.9	2,298.6	2,398.0	2,232.6	165.43	14.496	
13,500.0	6,917.3	6,767.2	6,122.0	130.7	52.7	-70.11	-7,287.3	2,311.0	2,393.0	2,225.7	167.28	14.305	
13,582.6	6,916.6	6,832.6	6,181.9	132.3	53.2	-71.65	-7,310.4	2,324.1	2,367.6	2,197.0	170.53	13.883	
13,600.0	6,916.4	6,846.0	6,194.1	132.7	53.3	-71.97	-7,315.0	2,326.6	2,362.5	2,191.3	171.20	13.800	
13,681.1	6,915.6	7,048.1	6,383.4	134.3	54.6	-76.85	-7,377.2	2,359.9	2,338.6	2,161.4	177.20	13.197	
13,700.0	6,915.5	7,052.7	6,387.8	134.6	54.6	-76.97	-7,378.3	2,360.6	2,333.2	2,155.6	177.65	13.134	
13,779.5	6,914.7	7,071.3	6,405.6	136.2	54.7	-77.43	-7,383.0	2,363.4	2,312.2	2,132.7	179.53	12.879	
13,800.0	6,914.6	7,076.0	6,410.0	136.6	54.8	-77.55	-7,384.1	2,364.1	2,307.2	2,127.2	180.01	12.817	
13,877.9	6,913.8	7,092.8	6,426.2	138.2	54.9	-77.97	-7,388.2	2,366.7	2,289.6	2,107.8	181.83	12.592	
13,900.0	6,913.6	7,097.4	6,430.6	138.6	54.9	-78.08	-7,389.3	2,367.4	2,285.1	2,102.8	182.34	12.532	
13,976.3	6,912.9	7,112.8	6,445.3	140.1	55.0	-78.46	-7,392.8	2,369.8	2,270.9	2,086.8	184.09	12.336	
14,000.0	6,912.7	7,117.3	6,449.7	140.6	55.0	-78.58	-7,393.9	2,370.5	2,266.9	2,082.3	184.63	12.278	
14,074.8	6,912.0	7,131.3	6,463.1	142.0	55.1	-78.92	-7,397.0	2,372.7	2,256.1	2,069.8	186.26	12.112	
14,079.0	6,912.0	7,132.0	6,463.8	142.1	55.1	-78.94	-7,397.2	2,372.8	2,255.5	2,069.2	186.35	12.103 CC, ES, SF	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

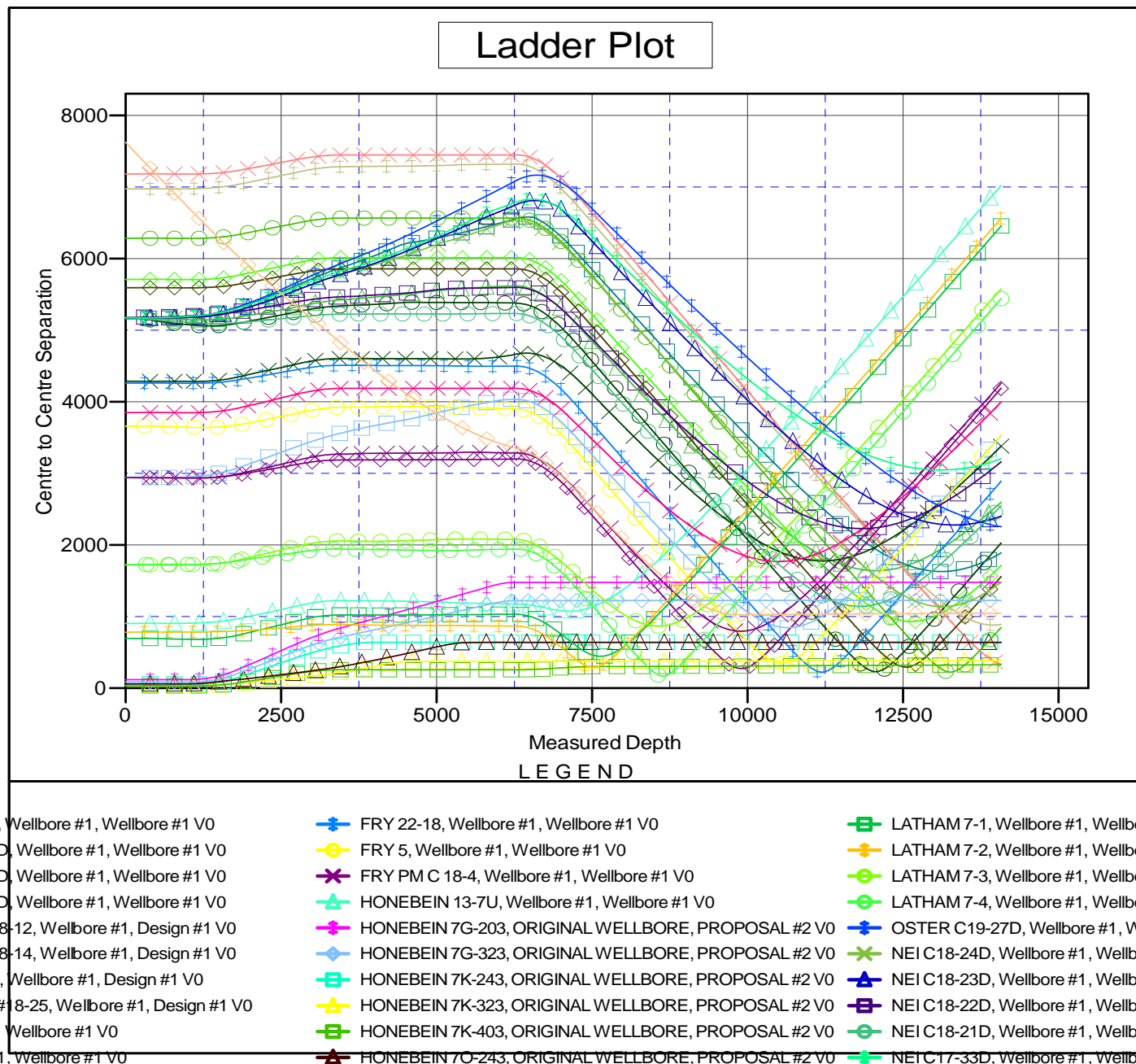
Reference Depths are relative to KB-EST @ 4863.5usft (Original Well ECoordinates are relative to: HONEBEIN 7K-223

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: 0.58°



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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7K-223
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Reference Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4863.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	HONEBEIN 7K-223	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KB-EST @ 4863.5usft (Original Well Elev) Coordinates are relative to: HONEBEIN 7K-223

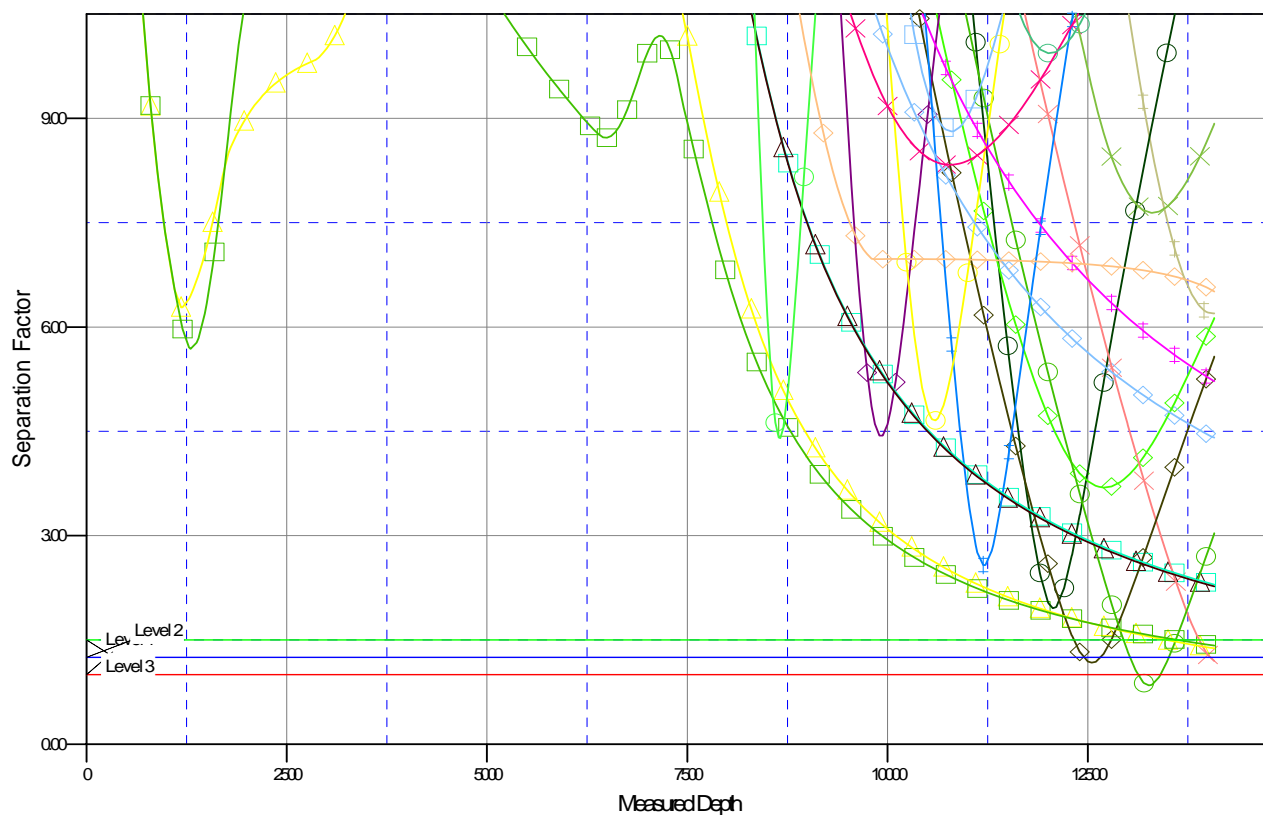
Offset Depths are relative to Offset Datum

Coordinate System is US State Plane 1983, Colorado Northern Zone

Central Meridian is -105.500000

Grid Convergence at Surface is: 0.58°

Separation Factor Plot



LEGEND

1, Wellbore #1, Wellbore #1 V0	FRY 22-18, Wellbore #1, Wellbore #1 V0	LATHAM 7-1, Wellbore #1, Wellbore
2D, Wellbore #1, Wellbore #1 V0	FRY 5, Wellbore #1, Wellbore #1 V0	LATHAM 7-2, Wellbore #1, Wellbore
3D, Wellbore #1, Wellbore #1 V0	FRY PM C 18-4, Wellbore #1, Wellbore #1 V0	LATHAM 7-3, Wellbore #1, Wellbore
18-12, Wellbore #1, Design #1 V0	HONEBEIN 13-7U, Wellbore #1, Wellbore #1 V0	LATHAM 7-4, Wellbore #1, Wellbore
18-14, Wellbore #1, Design #1 V0	HONEBEIN 7G-203, ORIGINAL WELLBORE, PROPOSAL #2 V0	OSTER C19-27D, Wellbore #1, Well
2, Wellbore #1, Design #1 V0	HONEBEIN 7G-323, ORIGINAL WELLBORE, PROPOSAL #2 V0	NEI C18-24D, Wellbore #1, Wellbore
# 8-25, Wellbore #1, Design #1 V0	HONEBEIN 7K-243, ORIGINAL WELLBORE, PROPOSAL #2 V0	NEI C18-23D, Wellbore #1, Wellbore
1, Wellbore #1 V0	HONEBEIN 7K-323, ORIGINAL WELLBORE, PROPOSAL #2 V0	NEI C18-22D, Wellbore #1, Wellbore
#1, Wellbore #1 V0	HONEBEIN 7K-403, ORIGINAL WELLBORE, PROPOSAL #2 V0	NEI C18-21D, Wellbore #1, Wellbore
	HONEBEIN 7O-243, ORIGINAL WELLBORE, PROPOSAL #2 V0	NEI C17-33D, Wellbore #1, Wellbore