PDC ENERGY

WELD COUNTY, COLORADO
SE SW SEC. 21 T4N R67W 6th P.M.
WALTERS 21Q-304

ORIGINAL WELLBORE
PROPOSAL #1

Anticollision Report

26 March, 2016

total

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Reference PROPOSAL #1

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

Survey Tool Program **Date** 26/03/2016

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	11,828.8	PROPOSAL #1 (ORIGINAL WELLBORE)	MWD	MWD - Standard

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
SE SW SEC. 21 T4N R67W 6th P.M.						
EXIST DD RYLAND 20XD - Wellbore #1 - Wellbore #1	142.2	143.9	779.3	779.0	2,559.725	CC
EXIST DD RYLAND 20XD - Wellbore #1 - Wellbore #1	200.0	194.3	779.6	779.0	1,461.680	ES
EXIST DD RYLAND 20XD - Wellbore #1 - Wellbore #1	10,300.0	7,467.7	1,199.0	1,076.1	9.756	SF
EXIST DD RYLAND 20YD - Wellbore #1 - Wellbore #1	9,915.6	7,600.4	61.0	-50.7	0.546	Level 1, CC, ES, SF
EXIST DD RYLAND 33-20D - Wellbore #1 - Wellbore #1	11,757.7	7,224.9	1,856.5	1,713.7	13.004	CC
EXIST DD RYLAND 33-20D - Wellbore #1 - Wellbore #1	11,800.0	7,224.7	1,857.0	1,713.0	12.902	ES
EXIST DD RYLAND 33-20D - Wellbore #1 - Wellbore #1	11,828.8	7,224.5	1,857.8	1,713.1	12.837	SF
EXIST DD RYLAND 34-20D - Wellbore #1 - Wellbore #1	11,767.6	7,164.1	537.3	395.1	3.779	CC, ES
EXIST DD RYLAND 34-20D - Wellbore #1 - Wellbore #1	11,828.8	7,165.3	540.8	396.9	3.759	SF
EXIST DD RYLAND 43-20D - Wellbore #1 - Wellbore #1	10,493.0	7,371.6	1,855.9	1,737.3	15.639	CC
EXIST DD RYLAND 43-20D - Wellbore #1 - Wellbore #1	10,500.0	7,371.7	1,855.9	1,737.1	15.614	ES
EXIST DD RYLAND 43-20D - Wellbore #1 - Wellbore #1	11,300.0	7,379.6	2,023.8	1,882.9	14.363	SF
EXIST DD RYLAND 44-20D - Wellbore #1 - Wellbore #1	10,498.3	7,299.2	547.0	428.4	4.614	CC
EXIST DD RYLAND 44-20D - Wellbore #1 - Wellbore #1	10,500.0	7,299.2	547.0	428.4	4.612	ES
EXIST DD RYLAND 44-20D - Wellbore #1 - Wellbore #1	10,600.0	7,298.6	556.4	435.0	4.585	SF
EXIST DD WALTERS #21ODU - Wellbore #1 - Wellbore	314.8	320.4	805.3	804.4	884.677	CC, ES
EXIST DD WALTERS #21ODU - Wellbore #1 - Wellbore	11,828.8	7,364.5	5,107.4	4,955.4	33.595	SF
EXIST DD WALTERS 21LDU - Wellbore #1 - Wellbore #	8,525.2	7,386.1	89.9	32.4	1.563	CC, ES, SF
EXIST DD WALTERS 21QDU - Wellbore #1 - Wellbore #	7,200.0	7,328.0	140.6	92.9	2.949	SF
EXIST DD WALTERS 21QDU - Wellbore #1 - Wellbore #	7,249.7	7,358.9	135.1	90.4	3.022	CC, ES
EXIST DD WALTERS 23-21DU - Wellbore #1 - Wellbore	0.0	0.0	788.1			
EXIST DD WALTERS 23-21DU - Wellbore #1 - Wellbore	300.0	298.6	788.6	787.8	919.852	ES
EXIST DD WALTERS 23-21DU - Wellbore #1 - Wellbore	10,700.0	7,251.4	3,509.2	3,394.2	30.519	SF
EXIST DD WALTERS 24-21DU - Wellbore #1 - Wellbore	7,867.6	7,285.3	474.2	431.7	11.146	CC, ES
EXIST DD WALTERS 24-21DU - Wellbore #1 - Wellbore	8,000.0	7,285.3	492.4	447.3	10.931	SF
EXIST DD WEDCO #13-21DU - Wellbore #1 - Wellbore	0.0	1.5	796.7			
EXIST DD WEDCO #13-21DU - Wellbore #1 - Wellbore	300.0	300.9	796.8	795.9	925.480	ES
EXIST DD WEDCO #13-21DU - Wellbore #1 - Wellbore	10,300.0	7,365.1	2,078.1	1,967.2	18.753	SF
EXIST DD WEDCO 14-21DU - Wellbore #1 - Wellbore #	9,213.6	7,361.3	530.2	449.4	6.557	CC, ES
EXIST DD WEDCO 14-21DU - Wellbore #1 - Wellbore #	9,300.0	7,360.9	537.2	454.1	6.461	SF
EXIST VERT BUNYAN #1 - Wellbore #1 - Wellbore #1	100.0	85.1	923.6	923.5	6,069.857	CC
EXIST VERT BUNYAN #1 - Wellbore #1 - Wellbore #1	302.8	290.2	923.8	923.0	1,178.385	ES
EXIST VERT BUNYAN #1 - Wellbore #1 - Wellbore #1	10,300.0	7,157.5	2,551.5	2,462.5	28.666	SF
EXIST VERT EVANS-STROH 20-1 - Wellbore #1 - Desig	11,437.0	7,140.9	1,084.1	822.7	4.147	CC, ES
EXIST VERT EVANS-STROH 20-1 - Wellbore #1 - Desig	11,600.0	7,140.3	1,096.3	830.4	4.123	SF
WALTERS 21P-204 - ORIGINAL WELLBORE - PROPOS	300.0	299.0	90.0	88.9	82.454	CC, ES

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

Anticollision Report

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
SE SW SEC. 21 T4N R67W 6th P.M.						
WALTERS 21P-204 - ORIGINAL WELLBORE - PROPOS	11,828.8	11,679.2	1,249.8	992.5	4.858	SF
WALTERS 21P-234 - ORIGINAL WELLBORE - PROPOS	300.0	300.0	45.2	44.1	41.305	CC, ES
WALTERS 21P-234 - ORIGINAL WELLBORE - PROPOS	11,828.8	11,684.0	609.6	355.2	2.396	SF
WALTERS 21P-304 - ORIGINAL WELLBORE - PROPOS	300.0	299.0	75.0	73.9	68.766	CC, ES
WALTERS 21P-304 - ORIGINAL WELLBORE - PROPOS	11,828.8	11,777.4	1,000.4	741.9	3.870	SF
WALTERS 21P-314 - ORIGINAL WELLBORE - PROPOS	300.0	298.0	104.9	103.8	96.341	CC, ES
WALTERS 21P-314 - ORIGINAL WELLBORE - PROPOS	11,828.8	11,792.7	1,515.5	1,257.9	5.883	SF
WALTERS 21P-434 - ORIGINAL WELLBORE - PROPOS	300.0	299.0	60.1	59.0	55.077	CC, ES
WALTERS 21P-434 - ORIGINAL WELLBORE - PROPOS	11,828.8	11,880.9	811.2	555.7	3.175	SF
WALTERS 21Q-214 - ORIGINAL WELLBORE - PROPO	300.0	300.0	14.9	13.8	13.652	CC
WALTERS 21Q-214 - ORIGINAL WELLBORE - PROPO	11,828.8	11,709.6	227.3	-1.5	0.993	Level 1, ES, SF
WALTERS 21Q-314 - ORIGINAL WELLBORE - PROPO	300.0	300.0	30.2	29.1	27.646	CC, ES
WALTERS 21Q-314 - ORIGINAL WELLBORE - PROPO	11,828.8	11,797.7	400.0	141.5	1.547	SF

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD RYLAND 20XD - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 152-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	1.5	1.5	0.0	0.0	-46.63	535.2	-566.6	779.3				
100.0	100.0	101.6	101.6	0.1	0.1	-46.70	534.5	-567.2	779.3	779.2	0.18	4,413.853	
142.2	142.2	143.9	143.9	0.2	0.1	-46.76	533.9	-567.8	779.3	779.0	0.30	2,559.725	CC
200.0	200.0	194.3	194.2	0.3	0.2	-46.86	533.0	-568.8	779.6	779.0	0.53	1,461.680	ES
300.0	300.0	275.3	275.2	0.5	0.4	-47.05	532.2	-571.8	781.6	780.6	0.94	831.956	
400.0	400.0	352.4	352.2	0.8	0.6	173.15	532.9	-576.3	788.2	786.8	1.35	583.484	
500.0	499.8	425.0	424.5	1.0	0.8	172.98	534.7	-581.8	800.8	799.0	1.75	456.880	
600.0	599.5	518.0	517.0	1.2	1.0	172.74	538.1	-591.0	819.2	816.9	2.22	369.027	
700.0	698.7	603.4	601.6	1.5	1.3	172.39	540.7	-601.9	842.5	839.8	2.67	315.097	
800.0	797.5	701.5	698.7	1.8	1.6	171.83	541.6	-616.4	869.4	866.3	3.16	275.440	
900.1	895.7	802.7	798.7	2.2	1.9	171.23	541.4	-631.7	899.3	895.7	3.65	246.173	
1,000.0	993.4	909.5	904.3	2.6	2.3	170.64	538.9	-647.8	929.3	925.2	4.17	222.617	
1,100.0	1,091.3	984.0	977.6	3.0	2.6	170.15	536.3	-660.9	960.7	956.0	4.65	206.522	
1,200.0	1,189.1	1,059.0	1,050.9	3.5	2.9	169.56	533.4	-676.3	994.0	988.9	5.17	192.132	
1,300.0	1,286.9	1,128.5	1,118.4	3.9	3.2	168.97	530.4	-692.2	1,029.1	1,023.4	5.70	180.575	
1,400.0	1,384.7	1,193.0	1,180.9	4.4	3.5	168.43	528.3	-708.4	1,066.7	1,060.5	6.22	171.565	
1,500.0	1,482.5	1,263.0	1,248.0	4.8	3.9	167.81	526.4	-728.2	1,106.9	1,100.1	6.77	163.420	
1,600.0	1,580.3	1,325.2	1,307.2	5.3	4.3	167.24	524.8	-747.3	1,149.2	1,141.8	7.32	157.017	
1,700.0	1,678.1	1,404.9	1,382.6	5.7	4.8	166.50	522.5	-773.1	1,192.9	1,185.0	7.95	150.054	
1,800.0	1,776.0	1,481.9	1,455.0	6.2	5.3	165.75	519.3	-799.1	1,237.2	1,228.7	8.58	144.167	
1,900.0	1,873.8	1,543.0	1,512.0	6.6	5.8	165.15	516.7	-820.8	1,283.2	1,274.0	9.15	140.193	
2,000.0	1,971.6	1,605.2	1,569.6	7.1	6.3	164.54	514.2	-844.2	1,331.0	1,321.3	9.76	136.428	
2,100.0	2,069.4	1,674.9	1,633.5	7.6	6.8	163.85	511.4	-871.9	1,380.7	1,370.3	10.40	132.758	
2,200.0	2,167.2	1,770.5	1,720.9	8.0	7.6	162.93	507.0	-910.3	1,430.7	1,419.6	11.16	128.182	
2,300.0	2,265.0	1,874.2	1,816.1	8.5	8.3	162.00	501.5	-950.9	1,479.8	1,467.9	11.92	124.178	
2,400.0	2,362.8	2,010.0	1,942.0	9.0	9.3	160.95	494.0	-1,001.5	1,527.6	1,514.8	12.79	119.433	
2,500.0	2,460.6	2,068.8	1,996.6	9.4	9.7	160.51	490.3	-1,022.8	1,574.4	1,561.1	13.35	117.914	
2,600.0	2,558.5	2,145.5	2,067.7	9.9	10.2	160.02	487.1	-1,051.4	1,623.0	1,609.0	13.98	116.054	
2,700.0	2,656.3	2,289.0	2,202.1	10.3	11.2	159.26	482.1	-1,101.3	1,669.8	1,655.0	14.86	112.396	

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

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD RYLAND 20XD - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 152-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
2,800.0	2,754.1	2,359.2	2,268.3	10.8	11.7	158.93	479.6	-1,124.6	1,715.5	1,700.1	15.44	111.131	
2,900.0	2,851.9	2,428.7	2,333.6	11.3	12.2	158.63	477.9	-1,148.5	1,762.7	1,746.7	16.03	109.971	
3,000.0	2,949.7	2,516.1	2,415.2	11.7	12.8	158.23	475.0	-1,179.4	1,810.5	1,793.8	16.71	108.347	
3,100.0	3,047.5	2,606.2	2,499.3	12.2	13.4	157.79	470.6	-1,211.6	1,857.9	1,840.5	17.41	106.731	
3,200.0	3,145.3	2,682.9	2,570.8	12.7	14.0	157.44	467.2	-1,239.2	1,905.7	1,887.7	18.04	105.643	
3,300.0	3,243.2	2,761.9	2,644.5	13.1	14.5	157.13	464.7	-1,267.5	1,954.1	1,935.5	18.67	104.669	
3,400.0	3,341.0	2,902.3	2,776.3	13.6	15.5	156.65	460.9	-1,315.7	2,001.4	1,981.8	19.52	102.544	
3,500.0	3,438.8	2,973.5	2,843.4	14.1	16.0	156.42	458.4	-1,339.4	2,047.6	2,027.5	20.10	101.855	
3,600.0	3,536.6	3,034.0	2,900.1	14.5	16.4	156.24	457.0	-1,360.6	2,095.6	2,074.9	20.66	101.454	
3,700.0	3,634.4	3,083.7	2,946.3	15.0	16.8	156.09	456.4	-1,378.5	2,144.9	2,123.7	21.17	101.316	
3,800.0	3,732.2	3,220.0	3,073.5	15.5	17.8	155.68	453.0	-1,427.6	2,193.9	2,171.8	22.03	99.569	
3,900.0	3,830.0	3,283.2	3,132.5	15.9	18.2	155.47	450.3	-1,450.0	2,241.8	2,219.2	22.61	99.150	
4,000.0	3,927.9	3,381.1	3,223.6	16.4	18.9	155.17	446.6	-1,485.8	2,291.0	2,267.6	23.33	98.192	
4,100.0	4,025.7	3,499.4	3,334.1	16.9	19.8	154.80	441.1	-1,527.6	2,338.6	2,314.5	24.12	96.942	
4,200.0	4,123.5	3,644.1	3,470.2	17.3	20.7	154.42	434.5	-1,576.2	2,385.0	2,360.0	25.00	95.383	
4,300.0	4,221.3	3,758.3	3,578.2	17.8	21.5	154.11	427.6	-1,612.9	2,429.4	2,403.7	25.77	94.284	
4,400.0	4,319.1	3,851.3	3,666.2	18.2	22.1	153.88	422.3	-1,642.2	2,473.6	2,447.2	26.45	93.520	
4,500.0	4,416.9	3,903.1	3,715.2	18.7	22.4	153.75	419.0	-1,658.9	2,518.3	2,491.3	26.98	93.326	
4,600.0	4,514.7	3,965.0	3,773.0	19.2	22.8	153.57	415.0	-1,680.5	2,564.9	2,537.4	27.57	93.042	
4,700.0	4,612.6	4,007.7	3,812.7	19.6	23.2	153.44	412.1	-1,696.0	2,612.6	2,584.5	28.08	93.045	
4,800.0	4,710.4	4,083.4	3,883.0	20.1	23.7	153.21	406.6	-1,723.7	2,660.6	2,631.9	28.74	92.577	
4,900.0	4,808.2	4,151.0	3,945.4	20.6	24.3	153.00	401.8	-1,749.2	2,709.8	2,680.4	29.37	92.274	
5,000.0	4,906.0	4,338.0	4,120.2	21.0	25.6	152.59	392.8	-1,814.8	2,757.8	2,727.3	30.43	90.628	
5,100.0	5,003.8	4,393.4	4,172.6	21.5	25.9	152.52	391.5	-1,832.7	2,804.1	2,773.2	30.95	90.592	
5,200.0	5,101.6	4,446.9	4,222.9	22.0	26.3	152.45	390.5	-1,850.8	2,851.7	2,820.3	31.48	90.600	
5,300.0	5,199.4	4,524.0	4,295.0	22.4	26.9	152.32	387.7	-1,878.0	2,900.1	2,868.0	32.11	90.329	
5,400.0	5,297.3	4,646.5	4,409.8	22.9	27.7	152.11	382.9	-1,920.6	2,947.9	2,914.9	32.91	89.587	
5,476.5	5,372.1	4,712.6	4,471.9	23.3	28.2	152.01	380.9	-1,943.1	2,984.1	2,950.7	33.40	89.351	
5,500.0	5,395.1	4,754.9	4,511.8	23.3	28.4	152.07	379.6	-1,957.3	2,995.1	2,961.4	33.68	88.922	
5,600.0	5,493.4	4,839.2	4,591.3	23.7	29.0	152.40	376.8	-1,985.0	3,039.6	3,005.1	34.48	88.160	
5,700.0	5,592.3	4,896.0	4,644.6	23.9	29.4	152.73	375.0	-2,004.4	3,082.4	3,047.2	35.12	87.755	
5,800.0	5,691.6	4,980.0	4,723.4	24.1	30.0	152.94	372.6	-2,033.6	3,123.0	3,087.2	35.83	87.170	
5,900.0	5,791.3	5,035.9	4,775.6	24.3	30.4	153.17	370.9	-2,053.3	3,161.2	3,124.8	36.38	86.904	
6,000.0	5,891.2	5,923.6	5,636.9	24.5	34.5	151.77	339.1	-2,252.0	3,178.9	3,139.7	39.24	81.021	
6,076.6	5,967.8	6,102.0	5,814.6	24.6	34.8	-68.70	335.3	-2,265.9	3,184.8	3,130.5	54.30	58.649	
6,100.0	5,991.2	6,152.0	5,864.6	24.6	34.9	-68.73	334.6	-2,268.6	3,185.8	3,131.4	54.40	58.558	
6,200.0	6,091.2	6,363.7	6,076.2	24.7	35.1	-68.78	333.4	-2,273.2	3,187.2	3,132.4	54.75	58.211	
6,300.0	6,191.2	6,464.2	6,176.7	24.8	35.2	-68.79	333.1	-2,273.8	3,187.7	3,132.7	54.95	58.006	
6,400.0	6,291.2	6,566.1	6,278.6	24.9	35.3	-68.80	332.8	-2,274.5	3,188.2	3,133.0	55.16	57.799	
6,500.0	6,391.2	6,668.3	6,380.8	25.0	35.4	-68.81	332.4	-2,275.1	3,188.6	3,133.2	55.37	57.589	
6,571.6	6,462.8	6,743.4	6,455.9	25.1	35.4	-68.82	332.1	-2,275.5	3,188.8	3,133.3	55.52	57.436	
6,600.0	6,491.2	6,773.2	6,485.7	25.1	35.5	21.20	332.0	-2,275.6	3,188.4	3,147.0	41.31	77.174	
6,650.0	6,541.1	6,825.5	6,538.0	25.1	35.5	21.32	331.8	-2,275.8	3,185.0	3,143.6	41.41	76.916	
6,700.0	6,590.5	6,875.9	6,588.3	25.1	35.6	21.55	331.6	-2,275.9	3,178.3	3,136.9	41.38	76.815	
6,750.0	6,639.4	6,923.7	6,636.2	25.1	35.6	21.92	331.4	-2,276.1	3,168.5	3,127.3	41.22	76.871	
6,800.0	6,687.4	6,970.8	6,683.3	25.0	35.6	22.41	331.2	-2,276.2	3,155.5	3,114.6	40.94	77.070	
6,850.0	6,734.3	7,016.8	6,729.3	25.0	35.7	23.05	331.0	-2,276.4	3,139.5	3,098.9	40.56	77.398	
6,900.0	6,779.8	7,062.4	6,774.9	24.9	35.7	23.85	330.8	-2,276.6	3,120.5	3,080.4	40.10	77.823	
6,950.0	6,823.8	7,107.5	6,819.9	24.8	35.8	24.83	330.6	-2,276.7	3,098.6	3,059.0	39.57	78.304	
7,000.0	6,866.1	7,150.7	6,863.2	24.7	35.8	26.01	330.4	-2,276.9	3,073.9	3,034.8	39.02	78.781	
7,050.0	6,906.4	7,192.0	6,904.4	24.6	35.8	27.42	330.2	-2,277.0	3,046.5	3,008.0	38.49	79.161	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD RYLAND 20XD - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 152-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
7,100.0	6,944.6	7,231.3	6,943.8	24.5	35.9	29.11	330.0	-2,277.2	3,016.6	2,978.6	38.04	79.304	
7,150.0	6,980.4	7,270.1	6,982.6	24.4	35.9	31.14	329.7	-2,277.3	2,984.4	2,946.7	37.77	79.012	
7,200.0	7,013.6	7,306.1	7,018.6	24.3	35.9	33.55	329.5	-2,277.3	2,950.0	2,912.2	37.79	78.073	
7,250.0	7,044.2	7,339.2	7,051.7	24.2	36.0	36.41	329.3	-2,277.4	2,913.6	2,875.4	38.21	76.260	
7,300.0	7,072.0	7,369.1	7,081.6	24.1	36.0	39.80	329.1	-2,277.4	2,875.4	2,836.2	39.16	73.424	
7,350.0	7,096.8	7,395.8	7,108.2	24.0	36.0	43.82	328.9	-2,277.4	2,835.5	2,794.8	40.75	69.588	
7,400.0	7,118.5	7,418.9	7,131.4	23.9	36.0	48.55	328.8	-2,277.3	2,794.3	2,751.4	42.99	64.999	
7,450.0	7,137.0	7,438.2	7,150.7	23.8	36.1	54.06	328.6	-2,277.3	2,752.0	2,706.2	45.81	60.069	
7,500.0	7,152.2	7,454.1	7,166.6	23.8	36.1	60.40	328.5	-2,277.3	2,708.7	2,659.7	49.03	55.250	
7,550.0	7,164.1	7,466.5	7,179.0	23.8	36.1	67.50	328.4	-2,277.3	2,664.8	2,612.5	52.32	50.936	
7,600.0	7,172.5	7,475.3	7,187.8	23.8	36.1	75.22	328.3	-2,277.3	2,620.4	2,565.1	55.29	47.394	
7,650.0	7,177.5	7,480.4	7,192.9	23.9	36.1	83.24	328.3	-2,277.2	2,575.7	2,518.1	57.57	44.738	
7,699.2	7,179.0	7,481.9	7,194.4	24.1	36.1	91.10	328.3	-2,277.2	2,531.8	2,472.8	58.93	42.962	
7,700.0	7,179.0	7,481.9	7,194.4	24.1	36.1	91.10	328.3	-2,277.2	2,531.1	2,472.1	58.94	42.941	
7,800.0	7,178.6	7,481.4	7,193.8	24.9	36.1	91.08	328.3	-2,277.2	2,442.4	2,381.9	60.48	40.385	
7,900.0	7,178.3	7,480.8	7,193.3	26.4	36.1	91.05	328.3	-2,277.2	2,354.6	2,292.4	62.23	37.834	
8,000.0	7,177.9	7,480.2	7,192.7	28.2	36.1	91.02	328.3	-2,277.2	2,267.8	2,203.7	64.16	35.346	
8,100.0	7,177.5	7,479.7	7,192.2	30.3	36.1	90.99	328.3	-2,277.2	2,182.2	2,116.0	66.23	32.951	
8,200.0	7,177.2	7,479.1	7,191.6	32.5	36.1	90.97	328.3	-2,277.3	2,097.8	2,029.4	68.40	30.669	
8,300.0	7,176.8	7,478.6	7,191.1	34.8	36.1	90.94	328.3	-2,277.3	2,014.9	1,944.2	70.67	28.512	
8,400.0	7,176.4	7,478.0	7,190.5	37.2	36.1	90.91	328.3	-2,277.3	1,933.6	1,860.6	73.01	26.484	
8,500.0	7,176.1	7,477.5	7,189.9	39.6	36.1	90.88	328.3	-2,277.3	1,854.1	1,778.7	75.41	24.586	
8,600.0	7,175.7	7,476.9	7,189.4	42.0	36.1	90.85	328.3	-2,277.3	1,776.7	1,698.8	77.86	22.818	
8,700.0	7,175.3	7,476.4	7,188.8	44.6	36.1	90.83	328.3	-2,277.3	1,701.6	1,621.2	80.36	21.175	
8,800.0	7,175.0	7,475.8	7,188.3	47.1	36.1	90.80	328.3	-2,277.3	1,629.2	1,546.3	82.89	19.656	
8,900.0	7,174.6	7,475.3	7,187.7	49.7	36.1	90.77	328.3	-2,277.3	1,559.9	1,474.4	85.45	18.256	
9,000.0	7,174.3	7,474.7	7,187.2	52.3	36.1	90.74	328.3	-2,277.3	1,494.0	1,406.0	88.03	16.971	
9,100.0	7,173.9	7,474.2	7,186.6	54.9	36.1	90.72	328.3	-2,277.3	1,432.1	1,341.5	90.64	15.800	
9,200.0	7,173.5	7,473.6	7,186.1	57.5	36.1	90.69	328.3	-2,277.3	1,374.7	1,281.5	93.26	14.740	
9,300.0	7,173.2	7,473.1	7,185.6	60.1	36.1	90.66	328.3	-2,277.3	1,322.4	1,226.5	95.91	13.789	
9,400.0	7,172.8	7,472.5	7,185.0	62.8	36.1	90.64	328.3	-2,277.3	1,275.8	1,177.2	98.56	12.944	
9,500.0	7,172.4	7,472.0	7,184.5	65.5	36.1	90.61	328.3	-2,277.3	1,235.5	1,134.3	101.23	12.205	
9,600.0	7,172.1	7,471.4	7,183.9	68.2	36.1	90.58	328.3	-2,277.3	1,202.3	1,098.4	103.91	11.570	
9,700.0	7,171.7	7,470.9	7,183.4	70.9	36.1	90.55	328.4	-2,277.3	1,176.6	1,070.0	106.60	11.037	
9,800.0	7,171.3	7,470.4	7,182.8	73.6	36.1	90.53	328.4	-2,277.3	1,159.0	1,049.7	109.30	10.603	
9,900.0	7,171.0	7,469.8	7,182.3	76.3	36.1	90.50	328.4	-2,277.3	1,149.8	1,037.8	112.01	10.266	
9,955.6	7,170.8	7,469.5	7,182.0	77.8	36.1	90.48	328.4	-2,277.3	1,148.5	1,035.0	113.52	10.117	
10,000.0	7,170.6	7,469.3	7,181.8	79.0	36.1	90.47	328.4	-2,277.3	1,149.4	1,034.6	114.72	10.018	
10,100.0	7,170.3	7,468.7	7,181.2	81.7	36.1	90.45	328.4	-2,277.3	1,157.5	1,040.1	117.44	9.856	
10,200.0	7,169.9	7,468.2	7,180.7	84.4	36.1	90.42	328.4	-2,277.3	1,174.2	1,054.0	120.17	9.771	
10,300.0	7,169.5	7,467.7	7,180.1	87.2	36.1	90.39	328.4	-2,277.3	1,199.0	1,076.1	122.90	9.756	SF
10,400.0	7,169.2	7,467.1	7,179.6	89.9	36.1	90.37	328.4	-2,277.3	1,231.5	1,105.9	125.64	9.802	
10,500.0	7,168.8	7,466.6	7,179.1	92.6	36.1	90.34	328.4	-2,277.3	1,271.0	1,142.6	128.38	9.901	
10,600.0	7,168.4	7,466.0	7,178.5	95.4	36.1	90.31	328.4	-2,277.3	1,316.9	1,185.8	131.12	10.044	
10,700.0	7,168.1	7,465.5	7,178.0	98.1	36.1	90.29	328.4	-2,277.3	1,368.7	1,234.8	133.87	10.224	
10,800.0	7,167.7	7,465.0	7,177.5	100.9	36.1	90.26	328.4	-2,277.3	1,425.5	1,288.9	136.62	10.434	
10,900.0	7,167.4	7,464.4	7,176.9	103.6	36.1	90.23	328.4	-2,277.3	1,486.9	1,347.6	139.37	10.669	
11,000.0	7,167.0	7,463.9	7,176.4	106.4	36.1	90.21	328.4	-2,277.3	1,552.4	1,410.2	142.13	10.922	
11,100.0	7,166.6	7,463.4	7,175.9	109.1	36.1	90.18	328.4	-2,277.3	1,621.3	1,476.5	144.89	11.190	
11,200.0	7,166.3	7,462.9	7,175.3	111.9	36.1	90.15	328.4	-2,277.3	1,693.4	1,545.8	147.65	11.469	
11,300.0	7,165.9	7,462.3	7,174.8	114.7	36.1	90.13	328.4	-2,277.3	1,768.2	1,617.8	150.42	11.755	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD RYLAND 20XD - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 152-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
11,400.0	7,165.5	7,461.8	7,174.3	117.4	36.1	90.10	328.4	-2,277.3	1,845.4	1,692.2	153.18	12.047	
11,500.0	7,165.2	7,461.3	7,173.7	120.2	36.1	90.07	328.4	-2,277.3	1,924.6	1,768.7	155.95	12.341	
11,600.0	7,164.8	7,460.7	7,173.2	123.0	36.1	90.05	328.4	-2,277.3	2,005.8	1,847.1	158.72	12.637	
11,700.0	7,164.5	7,460.2	7,172.7	125.7	36.1	90.02	328.4	-2,277.3	2,088.5	1,927.1	161.49	12.933	
11,800.0	7,164.1	7,459.7	7,172.2	128.5	36.1	89.99	328.4	-2,277.3	2,172.8	2,008.5	164.27	13.227	
11,828.8	7,164.0	7,459.5	7,172.0	129.3	36.1	89.99	328.4	-2,277.3	2,197.3	2,032.2	165.06	13.312	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD RYLAND 20YD - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 156-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	1.6	1.6	0.0	0.0	-51.01	475.1	-586.9	755.1				
100.0	100.0	105.0	105.0	0.1	0.1	-51.02	474.9	-586.7	754.8	754.7	0.17	4,315.066	
197.9	197.9	199.4	199.4	0.3	0.2	-51.04	474.4	-586.6	754.4	753.9	0.52	1,442.892	
200.0	200.0	201.3	201.3	0.3	0.2	-51.04	474.4	-586.6	754.4	753.9	0.53	1,419.034	
300.0	300.0	286.1	286.1	0.5	0.4	-51.16	473.6	-588.1	755.3	754.3	0.94	806.569	
400.0	400.0	368.3	368.2	0.8	0.6	168.97	472.5	-592.5	760.3	758.9	1.35	564.755	
500.0	499.8	456.4	455.9	1.0	0.8	168.56	470.8	-599.8	770.7	768.9	1.79	431.094	
600.0	599.5	552.3	551.2	1.2	1.1	167.89	466.7	-610.5	785.3	783.0	2.28	344.805	
700.0	698.7	655.3	653.0	1.5	1.4	167.00	459.6	-623.9	803.5	800.7	2.81	285.587	
800.0	797.5	758.1	754.5	1.8	1.8	166.07	450.4	-637.2	823.8	820.4	3.37	244.611	
900.1	895.7	835.2	830.0	2.2	2.1	165.14	441.3	-650.1	848.9	845.0	3.90	217.795	
1,000.0	993.4	930.9	922.5	2.6	2.6	163.89	426.4	-669.5	876.8	872.2	4.59	190.880	
1,100.0	1,091.3	1,019.7	1,007.4	3.0	3.1	162.57	409.8	-689.4	905.3	900.0	5.32	170.187	
1,200.0	1,189.1	1,102.9	1,086.4	3.5	3.6	161.28	393.1	-709.7	935.1	929.0	6.07	154.117	
1,300.0	1,286.9	1,190.8	1,169.1	3.9	4.2	159.88	374.1	-732.5	966.2	959.3	6.89	140.310	
1,400.0	1,384.7	1,283.0	1,255.2	4.4	4.8	158.36	352.5	-757.6	998.0	990.3	7.77	128.519	
1,500.0	1,482.5	1,367.8	1,333.8	4.8	5.4	156.97	331.6	-781.3	1,030.7	1,022.1	8.63	119.434	
1,600.0	1,580.3	1,447.6	1,407.4	5.3	6.0	155.69	311.5	-804.5	1,064.8	1,055.4	9.44	112.780	
1,700.0	1,678.1	1,534.9	1,487.8	5.7	6.6	154.34	289.5	-830.7	1,100.3	1,090.0	10.31	106.700	
1,800.0	1,776.0	1,618.3	1,563.5	6.2	7.3	152.97	266.0	-856.8	1,136.4	1,125.2	11.21	101.373	
1,900.0	1,873.8	1,699.3	1,636.4	6.6	8.0	151.66	242.6	-883.0	1,174.0	1,161.9	12.11	96.986	
2,000.0	1,971.6	1,784.2	1,713.1	7.1	8.6	150.40	218.7	-910.5	1,212.5	1,199.5	12.99	93.340	
2,100.0	2,069.4	1,863.9	1,785.1	7.6	9.3	149.29	196.7	-936.7	1,252.1	1,238.2	13.83	90.530	
2,200.0	2,167.2	1,961.7	1,874.0	8.0	10.0	148.08	171.1	-968.4	1,292.0	1,277.3	14.77	87.490	
2,300.0	2,265.0	2,053.2	1,957.7	8.5	10.7	147.05	147.8	-997.3	1,331.9	1,316.2	15.64	85.183	
2,400.0	2,362.8	2,132.0	2,029.0	9.0	11.3	146.15	126.5	-1,023.0	1,372.6	1,356.1	16.48	83.275	
2,500.0	2,460.6	2,226.7	2,114.3	9.4	12.1	145.07	99.7	-1,054.3	1,413.8	1,396.4	17.44	81.063	
2,600.0	2,558.5	2,334.0	2,211.5	9.9	12.9	143.94	69.6	-1,088.3	1,454.2	1,435.8	18.43	78.921	
2,700.0	2,656.3	2,411.0	2,281.6	10.3	13.5	143.22	49.1	-1,112.6	1,495.1	1,475.9	19.23	77.760	
2,800.0	2,754.1	2,488.0	2,351.6	10.8	14.1	142.55	29.0	-1,137.5	1,537.0	1,517.0	20.05	76.661	
2,900.0	2,851.9	2,597.7	2,451.3	11.3	15.0	141.61	-0.4	-1,172.6	1,578.8	1,557.8	21.07	74.941	
3,000.0	2,949.7	2,702.4	2,546.4	11.7	15.8	140.72	-30.0	-1,205.0	1,619.6	1,597.6	22.06	73.432	
3,100.0	3,047.5	2,783.1	2,619.5	12.2	16.4	140.04	-53.5	-1,230.0	1,660.6	1,637.7	22.91	72.483	
3,200.0	3,145.3	2,881.0	2,708.1	12.7	17.2	139.26	-81.9	-1,260.2	1,701.8	1,677.9	23.86	71.323	
3,300.0	3,243.2	2,982.4	2,800.1	13.1	18.0	138.48	-111.5	-1,290.8	1,742.4	1,717.6	24.83	70.185	
3,400.0	3,341.0	3,046.5	2,858.2	13.6	18.5	138.01	-130.3	-1,310.5	1,783.8	1,758.2	25.58	69.730	
3,500.0	3,438.8	3,108.0	2,913.7	14.1	19.0	137.58	-148.0	-1,330.1	1,826.6	1,800.3	26.31	69.416	
3,600.0	3,536.6	3,216.9	3,012.5	14.5	19.9	136.93	-176.7	-1,365.9	1,870.7	1,843.4	27.30	68.526	
3,700.0	3,634.4	3,342.0	3,127.0	15.0	20.9	136.24	-210.1	-1,403.6	1,912.0	1,883.7	28.35	67.455	
3,800.0	3,732.2	3,395.8	3,176.3	15.5	21.3	135.95	-224.2	-1,419.9	1,954.0	1,925.0	29.02	67.343	
3,900.0	3,830.0	3,464.1	3,238.5	15.9	21.8	135.62	-241.7	-1,442.1	1,997.8	1,968.1	29.76	67.130	
4,000.0	3,927.9	3,568.2	3,333.8	16.4	22.6	135.15	-267.5	-1,475.0	2,041.1	2,010.4	30.69	66.505	
4,100.0	4,025.7	3,641.4	3,400.6	16.9	23.2	134.83	-285.9	-1,498.5	2,085.0	2,053.5	31.46	66.282	
4,200.0	4,123.5	3,715.0	3,467.9	17.3	23.8	134.53	-303.9	-1,522.3	2,129.2	2,096.9	32.22	66.076	
4,300.0	4,221.3	3,786.7	3,533.3	17.8	24.4	134.26	-321.3	-1,546.0	2,174.1	2,141.1	32.98	65.926	
4,400.0	4,319.1	3,900.0	3,636.5	18.2	25.3	133.82	-349.3	-1,583.4	2,218.9	2,185.0	33.95	65.355	
4,500.0	4,416.9	3,968.4	3,698.8	18.7	25.8	133.55	-366.9	-1,605.7	2,263.6	2,228.9	34.71	65.222	
4,600.0	4,514.7	4,037.0	3,760.4	19.2	26.4	133.25	-385.5	-1,629.2	2,309.7	2,274.2	35.47	65.109	
4,700.0	4,612.6	4,107.7	3,823.7	19.6	27.0	132.93	-405.5	-1,653.6	2,356.3	2,320.0	36.27	64.971	
4,800.0	4,710.4	4,156.7	3,867.2	20.1	27.5	132.70	-419.6	-1,671.2	2,404.1	2,367.1	36.94	65.079	
4,900.0	4,808.2	4,236.1	3,937.4	20.6	28.2	132.35	-442.5	-1,700.6	2,453.0	2,415.2	37.78	64.927	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD RYLAND 20YD - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 156-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,000.0	4,906.0	4,405.7	4,089.2	21.0	29.6	131.71	-488.7	-1,760.2	2,500.2	2,461.1	39.07	63.995	
5,100.0	5,003.8	4,480.5	4,156.8	21.5	30.3	131.46	-508.4	-1,785.5	2,546.4	2,506.5	39.85	63.900	
5,200.0	5,101.6	4,552.0	4,220.9	22.0	30.9	131.21	-527.8	-1,810.6	2,593.6	2,552.9	40.62	63.847	
5,300.0	5,199.4	4,695.1	4,349.9	22.4	32.1	130.74	-566.6	-1,858.9	2,639.7	2,597.9	41.77	63.191	
5,400.0	5,297.3	4,777.0	4,423.6	22.9	32.8	130.46	-589.7	-1,885.8	2,685.2	2,642.6	42.61	63.023	
5,476.5	5,372.1	4,859.4	4,497.7	23.3	33.5	130.17	-613.6	-1,913.0	2,720.1	2,676.8	43.35	62.748	
5,500.0	5,395.1	4,925.0	4,557.3	23.3	34.0	130.15	-631.4	-1,933.8	2,730.4	2,686.6	43.85	62.274	
5,600.0	5,493.4	4,977.6	4,605.3	23.7	34.4	130.71	-645.2	-1,950.4	2,773.2	2,728.5	44.68	62.070	
5,700.0	5,592.3	5,040.0	4,661.8	23.9	34.9	131.17	-661.6	-1,971.0	2,815.3	2,769.8	45.50	61.869	
5,800.0	5,691.6	5,337.9	4,935.0	24.1	37.2	130.53	-741.3	-2,058.8	2,851.6	2,804.2	47.37	60.194	
5,900.0	5,791.3	5,513.9	5,101.6	24.3	38.2	130.49	-776.5	-2,103.4	2,882.2	2,833.8	48.43	59.514	
6,000.0	5,891.2	5,908.8	5,483.9	24.5	40.2	129.85	-837.8	-2,179.6	2,905.8	2,855.9	49.93	58.201	
6,076.6	5,967.8	6,153.5	5,726.2	24.6	40.9	-90.73	-856.9	-2,207.6	2,915.8	2,862.8	53.06	54.956	
6,100.0	5,991.2	6,237.6	5,810.0	24.6	41.0	-90.82	-861.5	-2,213.6	2,917.5	2,864.3	53.27	54.769	
6,200.0	6,091.2	6,417.7	5,989.6	24.7	41.3	-90.94	-868.1	-2,222.1	2,922.2	2,868.5	53.69	54.422	
6,300.0	6,191.2	6,551.6	6,123.4	24.8	41.5	-91.00	-871.2	-2,225.8	2,925.0	2,871.0	54.00	54.170	
6,400.0	6,291.2	6,660.9	6,232.7	24.9	41.6	-91.04	-873.4	-2,228.2	2,927.2	2,872.9	54.26	53.949	
6,500.0	6,391.2	6,782.2	6,354.0	25.0	41.7	-91.07	-874.7	-2,230.3	2,929.0	2,874.4	54.52	53.720	
6,571.6	6,462.8	6,859.2	6,431.0	25.1	41.8	-91.08	-875.6	-2,231.2	2,929.8	2,875.1	54.70	53.564	
6,600.0	6,491.2	6,888.9	6,460.7	25.1	41.8	-1.09	-876.0	-2,231.5	2,929.6	2,877.5	52.10	56.233	
6,650.0	6,541.1	6,939.4	6,511.2	25.1	41.9	-1.11	-876.6	-2,232.1	2,926.4	2,874.3	52.11	56.160	
6,700.0	6,590.5	6,990.6	6,562.4	25.1	41.9	-1.14	-877.3	-2,232.6	2,919.7	2,867.8	51.88	56.276	
6,750.0	6,639.4	7,044.6	6,616.4	25.1	42.0	-1.17	-877.8	-2,233.1	2,909.6	2,858.1	51.43	56.578	
6,800.0	6,687.4	7,092.4	6,664.2	25.0	42.0	-1.21	-878.3	-2,233.5	2,895.9	2,845.2	50.73	57.083	
6,850.0	6,734.3	7,134.6	6,706.4	25.0	42.1	-1.25	-878.7	-2,233.8	2,879.1	2,829.2	49.81	57.801	
6,900.0	6,779.8	7,179.4	6,751.1	24.9	42.1	-1.31	-879.1	-2,234.3	2,859.0	2,810.3	48.67	58.739	
6,950.0	6,823.8	7,230.4	6,802.2	24.8	42.1	-1.38	-879.4	-2,234.8	2,835.7	2,788.4	47.34	59.905	
7,000.0	6,866.1	7,274.5	6,846.2	24.7	42.2	-1.46	-879.7	-2,235.1	2,809.4	2,763.6	45.80	61.337	
7,050.0	6,906.4	7,311.5	6,883.2	24.6	42.2	-1.56	-879.9	-2,235.4	2,780.1	2,736.1	44.08	63.068	
7,100.0	6,944.6	7,350.0	6,921.8	24.5	42.2	-1.68	-880.2	-2,235.8	2,748.2	2,706.0	42.20	65.118	
7,150.0	6,980.4	7,388.6	6,960.3	24.4	42.3	-1.83	-880.4	-2,236.1	2,713.6	2,673.5	40.19	67.526	
7,200.0	7,013.6	7,428.4	7,000.2	24.3	42.3	-2.01	-880.6	-2,236.4	2,676.6	2,638.5	38.06	70.327	
7,250.0	7,044.2	7,460.4	7,032.1	24.2	42.3	-2.24	-880.8	-2,236.5	2,637.2	2,601.3	35.84	73.573	
7,300.0	7,072.0	7,486.7	7,058.4	24.1	42.4	-2.53	-880.9	-2,236.7	2,595.8	2,562.2	33.59	77.286	
7,350.0	7,096.8	7,510.3	7,082.0	24.0	42.4	-2.90	-881.0	-2,236.8	2,552.5	2,521.2	31.34	81.447	
7,400.0	7,118.5	7,531.0	7,102.8	23.9	42.4	-3.40	-881.0	-2,237.0	2,507.7	2,478.5	29.17	85.955	
7,450.0	7,137.0	7,552.5	7,124.3	23.8	42.4	-4.13	-881.0	-2,237.1	2,461.4	2,434.2	27.19	90.515	
7,500.0	7,152.2	7,571.4	7,143.1	23.8	42.4	-5.24	-881.0	-2,237.2	2,413.8	2,388.3	25.55	94.463	
7,550.0	7,164.1	7,586.0	7,157.7	23.8	42.4	-7.12	-881.1	-2,237.3	2,365.3	2,340.8	24.57	96.281	
7,600.0	7,172.5	7,596.3	7,168.1	23.8	42.4	-10.88	-881.1	-2,237.3	2,316.1	2,291.0	25.11	92.248	
7,650.0	7,177.5	7,602.5	7,174.2	23.9	42.5	-21.86	-881.1	-2,237.3	2,266.4	2,235.1	31.31	72.390	
7,699.2	7,179.0	7,604.4	7,176.2	24.1	42.5	-93.52	-881.1	-2,237.3	2,217.2	2,159.4	57.78	38.373	
7,700.0	7,179.0	7,604.4	7,176.2	24.1	42.5	-93.52	-881.1	-2,237.3	2,216.4	2,158.7	57.79	38.351	
7,800.0	7,178.6	7,604.2	7,175.9	24.9	42.5	-93.32	-881.1	-2,237.3	2,116.5	2,057.1	59.35	35.660	
7,900.0	7,178.3	7,604.0	7,175.7	26.4	42.5	-93.12	-881.1	-2,237.3	2,016.5	1,955.4	61.13	32.986	
8,000.0	7,177.9	7,603.8	7,175.5	28.2	42.5	-92.93	-881.1	-2,237.3	1,916.6	1,853.5	63.09	30.380	
8,100.0	7,177.5	7,603.6	7,175.3	30.3	42.5	-92.74	-881.1	-2,237.3	1,816.6	1,751.5	65.18	27.873	
8,200.0	7,177.2	7,603.4	7,175.1	32.5	42.5	-92.55	-881.1	-2,237.3	1,716.7	1,649.3	67.38	25.479	
8,300.0	7,176.8	7,603.2	7,174.9	34.8	42.5	-92.36	-881.1	-2,237.3	1,616.8	1,547.1	69.67	23.207	
8,400.0	7,176.4	7,603.0	7,174.7	37.2	42.5	-92.18	-881.1	-2,237.3	1,516.8	1,444.8	72.03	21.058	
8,500.0	7,176.1	7,602.8	7,174.6	39.6	42.5	-92.01	-881.1	-2,237.3	1,416.9	1,342.5	74.46	19.030	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD RYLAND 20YD - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 156-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,600.0	7,175.7	7,602.6	7,174.4	42.0	42.5	-91.83	-881.1	-2,237.3	1,317.0	1,240.1	76.93	17.120	
8,700.0	7,175.3	7,602.4	7,174.2	44.6	42.5	-91.66	-881.1	-2,237.3	1,217.1	1,137.7	79.45	15.320	
8,800.0	7,175.0	7,602.3	7,174.0	47.1	42.5	-91.49	-881.1	-2,237.3	1,117.3	1,035.3	82.00	13.626	
8,900.0	7,174.6	7,602.1	7,173.8	49.7	42.5	-91.32	-881.1	-2,237.3	1,017.4	932.9	84.58	12.030	
9,000.0	7,174.3	7,601.9	7,173.7	52.3	42.5	-91.16	-881.1	-2,237.3	917.6	830.5	87.18	10.526	
9,100.0	7,173.9	7,601.7	7,173.5	54.9	42.5	-91.00	-881.1	-2,237.3	817.9	728.1	89.80	9.107	
9,200.0	7,173.5	7,601.6	7,173.3	57.5	42.5	-90.84	-881.1	-2,237.3	718.2	625.8	92.45	7.769	
9,300.0	7,173.2	7,601.4	7,173.2	60.1	42.5	-90.69	-881.1	-2,237.3	618.6	523.5	95.11	6.505	
9,400.0	7,172.8	7,601.2	7,173.0	62.8	42.5	-90.54	-881.1	-2,237.3	519.2	421.4	97.78	5.310	
9,500.0	7,172.4	7,601.1	7,172.8	65.5	42.5	-90.39	-881.1	-2,237.3	420.1	319.6	100.46	4.181	
9,600.0	7,172.1	7,600.9	7,172.7	68.2	42.5	-90.24	-881.1	-2,237.3	321.5	218.3	103.15	3.116	
9,700.0	7,171.7	7,600.8	7,172.5	70.9	42.5	-90.09	-881.1	-2,237.3	224.1	118.2	105.86	2.117	
9,800.0	7,171.3	7,600.6	7,172.4	73.6	42.5	-89.95	-881.1	-2,237.3	130.7	22.2	108.57	1.204	Level 2
9,900.0	7,171.0	7,600.5	7,172.2	76.3	42.5	-89.81	-881.1	-2,237.3	63.0	-48.3	111.29	0.566	Level 1
9,915.6	7,170.9	7,600.4	7,172.2	76.7	42.5	-89.79	-881.1	-2,237.3	61.0	-50.7	111.71	0.546	Level 1, CC, ES, SF
10,000.0	7,170.6	7,600.3	7,172.1	79.0	42.5	-89.67	-881.1	-2,237.3	104.1	-9.9	114.01	0.913	Level 1
10,100.0	7,170.3	7,600.2	7,171.9	81.7	42.5	-89.54	-881.1	-2,237.3	194.2	77.5	116.74	1.664	
10,200.0	7,169.9	7,600.0	7,171.8	84.4	42.5	-89.40	-881.1	-2,237.3	290.9	171.4	119.47	2.435	
10,300.0	7,169.5	7,599.9	7,171.7	87.2	42.5	-89.27	-881.1	-2,237.3	389.2	267.0	122.21	3.185	
10,400.0	7,169.2	7,599.8	7,171.5	89.9	42.5	-89.14	-881.1	-2,237.3	488.2	363.3	124.95	3.907	
10,500.0	7,168.8	7,599.6	7,171.4	92.6	42.5	-89.02	-881.1	-2,237.3	587.6	459.9	127.70	4.601	
10,600.0	7,168.4	7,599.5	7,171.2	95.4	42.5	-88.89	-881.1	-2,237.3	687.1	556.7	130.45	5.267	
10,700.0	7,168.1	7,599.4	7,171.1	98.1	42.5	-88.77	-881.1	-2,237.3	786.8	653.6	133.20	5.907	
10,800.0	7,167.7	7,599.2	7,171.0	100.9	42.5	-88.65	-881.1	-2,237.3	886.5	750.5	135.95	6.521	
10,900.0	7,167.4	7,599.1	7,170.9	103.6	42.5	-88.53	-881.1	-2,237.3	986.3	847.6	138.71	7.110	
11,000.0	7,167.0	7,599.0	7,170.7	106.4	42.5	-88.41	-881.1	-2,237.3	1,086.1	944.6	141.47	7.677	
11,100.0	7,166.6	7,598.8	7,170.6	109.1	42.5	-88.29	-881.1	-2,237.3	1,186.0	1,041.7	144.23	8.223	
11,200.0	7,166.3	7,598.7	7,170.5	111.9	42.5	-88.18	-881.1	-2,237.3	1,285.8	1,138.8	146.99	8.748	
11,300.0	7,165.9	7,598.6	7,170.4	114.7	42.5	-88.07	-881.1	-2,237.3	1,385.7	1,236.0	149.75	9.254	
11,400.0	7,165.5	7,598.5	7,170.2	117.4	42.5	-87.96	-881.1	-2,237.3	1,485.6	1,333.1	152.51	9.741	
11,500.0	7,165.2	7,598.4	7,170.1	120.2	42.5	-87.85	-881.1	-2,237.3	1,585.6	1,430.3	155.28	10.211	
11,600.0	7,164.8	7,598.3	7,170.0	123.0	42.5	-87.74	-881.1	-2,237.3	1,685.5	1,527.4	158.04	10.665	
11,700.0	7,164.5	7,598.1	7,169.9	125.7	42.5	-87.64	-881.1	-2,237.3	1,785.4	1,624.6	160.81	11.103	
11,800.0	7,164.1	7,598.0	7,169.8	128.5	42.5	-87.53	-881.1	-2,237.3	1,885.4	1,721.8	163.58	11.526	
11,828.8	7,164.0	7,598.0	7,169.7	129.3	42.5	-87.50	-881.1	-2,237.3	1,914.2	1,749.8	164.37	11.645	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD RYLAND 33-20D - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 568-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-87.72	158.8	-3,981.0	3,984.4				
100.0	100.0	55.6	55.6	0.1	0.1	-87.72	158.8	-3,981.0	3,984.2	3,984.0	0.16	N/A	
200.0	200.0	152.3	152.3	0.3	0.2	-87.72	158.8	-3,981.1	3,984.3	3,983.8	0.49	8,123.904	
300.0	300.0	249.0	249.0	0.5	0.3	-87.72	158.7	-3,981.3	3,984.4	3,983.6	0.82	4,846.295	
400.0	400.0	345.6	345.6	0.8	0.4	132.68	158.6	-3,981.5	3,985.9	3,984.7	1.13	3,516.228	
500.0	499.8	442.2	442.2	1.0	0.5	132.67	158.5	-3,981.8	3,989.8	3,988.3	1.45	2,758.135	
600.0	599.5	538.5	538.5	1.2	0.6	132.66	158.4	-3,982.3	3,996.1	3,994.3	1.79	2,233.240	
700.0	698.7	638.2	638.2	1.5	0.8	132.66	158.3	-3,982.7	4,004.9	4,002.6	2.23	1,799.438	
800.0	797.5	748.7	748.7	1.8	1.0	132.68	158.6	-3,983.1	4,015.9	4,013.1	2.73	1,473.515	
900.1	895.7	830.3	830.3	2.2	1.2	132.65	158.6	-3,983.4	4,029.3	4,026.1	3.22	1,252.042	
1,000.0	993.4	923.5	923.5	2.6	1.4	132.85	158.5	-3,984.0	4,044.2	4,040.5	3.75	1,077.070	
1,100.0	1,091.3	1,027.7	1,027.7	3.0	1.6	133.08	158.6	-3,984.6	4,059.2	4,054.9	4.32	939.961	
1,200.0	1,189.1	1,113.6	1,113.6	3.5	1.7	133.26	158.5	-3,985.2	4,074.2	4,069.4	4.86	838.605	
1,300.0	1,286.9	1,201.7	1,201.7	3.9	1.9	133.46	158.7	-3,986.0	4,089.6	4,084.2	5.41	755.948	
1,400.0	1,384.7	1,305.4	1,305.4	4.4	2.2	133.68	159.1	-3,987.0	4,105.1	4,099.1	5.99	685.264	
1,500.0	1,482.5	1,410.0	1,410.0	4.8	2.4	133.91	159.4	-3,987.8	4,120.4	4,113.8	6.57	627.284	
1,600.0	1,580.3	1,503.0	1,503.0	5.3	2.6	134.11	159.9	-3,988.4	4,135.8	4,128.6	7.13	579.974	
1,700.0	1,678.1	1,597.0	1,597.0	5.7	2.8	134.31	160.5	-3,989.2	4,151.3	4,143.6	7.70	539.163	
1,800.0	1,776.0	1,683.5	1,683.5	6.2	2.9	134.50	161.0	-3,990.1	4,167.1	4,158.8	8.25	505.039	
1,900.0	1,873.8	1,910.1	1,910.0	6.6	3.4	135.01	164.9	-3,989.6	4,182.2	4,173.1	9.07	461.087	
2,000.0	1,971.6	1,999.4	1,999.0	7.1	3.6	135.28	171.1	-3,987.4	4,195.2	4,185.6	9.63	435.794	
2,100.0	2,069.4	2,065.0	2,064.3	7.6	3.8	135.50	177.7	-3,985.9	4,208.9	4,198.8	10.14	415.064	
2,200.0	2,167.2	2,100.8	2,099.8	8.0	3.8	135.63	182.0	-3,985.4	4,223.8	4,213.2	10.60	398.541	
2,300.0	2,265.0	2,158.0	2,156.5	8.5	4.0	135.85	189.4	-3,985.6	4,240.3	4,229.2	11.10	381.958	
2,400.0	2,362.8	2,185.9	2,184.1	9.0	4.0	135.95	193.4	-3,986.1	4,257.9	4,246.4	11.55	368.810	
2,500.0	2,460.6	2,283.4	2,280.4	9.4	4.3	136.35	209.0	-3,987.5	4,276.5	4,264.3	12.15	351.900	
2,600.0	2,558.5	2,375.3	2,370.5	9.9	4.6	136.76	226.8	-3,987.9	4,294.6	4,281.9	12.76	336.464	
2,700.0	2,656.3	2,439.0	2,432.6	10.3	4.8	137.07	240.9	-3,988.8	4,314.1	4,300.8	13.31	324.014	
2,800.0	2,754.1	2,439.0	2,432.6	10.8	4.8	137.07	240.9	-3,988.8	4,334.8	4,321.1	13.69	316.650	
2,900.0	2,851.9	2,494.6	2,486.4	11.3	5.0	137.35	254.6	-3,990.4	4,356.8	4,342.6	14.24	305.923	
3,000.0	2,949.7	2,532.0	2,522.4	11.7	5.1	137.55	264.9	-3,991.9	4,380.3	4,365.6	14.73	297.295	
3,100.0	3,047.5	2,597.1	2,584.6	12.2	5.4	137.92	283.9	-3,994.7	4,404.9	4,389.6	15.34	287.114	
3,200.0	3,145.3	2,664.5	2,648.7	12.7	5.7	138.30	304.6	-3,997.9	4,430.4	4,414.4	15.96	277.647	
3,300.0	3,243.2	2,752.3	2,732.3	13.1	6.0	138.79	330.9	-4,002.4	4,456.5	4,439.9	16.64	267.869	
3,400.0	3,341.0	2,969.3	2,940.4	13.6	7.0	139.93	391.8	-4,011.0	4,481.6	4,463.8	17.77	252.268	
3,500.0	3,438.8	3,122.5	3,088.4	14.1	7.6	140.69	431.3	-4,014.2	4,504.9	4,486.2	18.68	241.127	
3,600.0	3,536.6	3,204.4	3,167.5	14.5	8.0	141.08	452.2	-4,015.6	4,528.1	4,508.7	19.35	234.025	
3,700.0	3,634.4	3,284.7	3,245.3	15.0	8.3	141.47	472.4	-4,017.2	4,551.8	4,531.8	20.01	227.496	
3,800.0	3,732.2	3,389.5	3,346.9	15.5	8.8	141.95	498.0	-4,019.5	4,575.8	4,555.0	20.75	220.557	
3,900.0	3,830.0	3,527.5	3,480.6	15.9	9.4	142.59	532.0	-4,021.1	4,599.1	4,577.5	21.62	212.761	
4,000.0	3,927.9	3,599.7	3,550.4	16.4	9.8	142.93	550.4	-4,021.6	4,622.6	4,600.3	22.25	207.790	
4,100.0	4,025.7	3,656.0	3,604.8	16.9	10.0	143.19	564.9	-4,022.4	4,646.9	4,624.1	22.82	203.664	
4,200.0	4,123.5	3,713.1	3,659.9	17.3	10.3	143.46	579.8	-4,023.5	4,672.2	4,648.8	23.39	199.712	
4,300.0	4,221.3	3,770.1	3,714.8	17.8	10.6	143.73	595.4	-4,024.9	4,698.3	4,674.4	23.97	195.983	
4,400.0	4,319.1	3,843.0	3,784.7	18.2	10.9	144.08	615.6	-4,027.0	4,725.4	4,700.7	24.62	191.936	
4,500.0	4,416.9	3,897.6	3,837.1	18.7	11.2	144.34	631.0	-4,028.8	4,753.1	4,727.9	25.19	188.662	
4,600.0	4,514.7	3,973.6	3,909.9	19.2	11.6	144.70	652.6	-4,031.7	4,781.6	4,755.7	25.85	184.983	
4,700.0	4,612.6	4,217.0	4,143.7	19.6	12.8	145.82	719.8	-4,038.7	4,810.1	4,782.9	27.14	177.251	
4,800.0	4,710.4	4,281.7	4,205.8	20.1	13.2	146.12	738.1	-4,039.0	4,836.3	4,808.6	27.75	174.306	
4,900.0	4,808.2	4,373.5	4,293.7	20.6	13.7	146.55	764.8	-4,039.8	4,863.4	4,835.0	28.47	170.827	
5,000.0	4,906.0	4,438.3	4,355.5	21.0	14.0	146.86	784.2	-4,040.1	4,890.6	4,861.6	29.09	168.127	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD RYLAND 33-20D - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 568-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.0	5,003.8	4,497.0	4,411.2	21.5	14.3	147.15	802.5	-4,040.7	4,919.0	4,889.3	29.68	165.708	
5,200.0	5,101.6	4,547.8	4,459.4	22.0	14.6	147.40	818.6	-4,041.5	4,948.2	4,917.9	30.24	163.611	
5,300.0	5,199.4	4,619.1	4,527.2	22.4	15.0	147.74	840.8	-4,043.0	4,977.9	4,947.0	30.89	161.161	
5,400.0	5,297.3	4,687.0	4,591.6	22.9	15.4	148.06	862.1	-4,044.7	5,008.4	4,976.9	31.51	158.930	
5,476.5	5,372.1	4,737.9	4,639.9	23.3	15.7	148.30	878.1	-4,046.1	5,032.1	5,000.1	31.98	157.334	
5,500.0	5,395.1	4,757.2	4,658.2	23.3	15.8	148.47	884.0	-4,046.7	5,039.4	5,007.2	32.13	156.836	
5,600.0	5,493.4	5,123.2	5,012.1	23.7	17.5	150.10	975.1	-4,059.1	5,068.9	5,035.2	33.63	150.707	
5,700.0	5,592.3	5,552.9	5,438.8	23.9	18.8	151.14	1,023.9	-4,064.8	5,086.7	5,051.9	34.80	146.160	
5,800.0	5,691.6	5,655.2	5,540.9	24.1	19.0	151.39	1,030.5	-4,064.6	5,098.8	5,063.6	35.19	144.911	
5,900.0	5,791.3	5,762.1	5,647.7	24.3	19.2	151.58	1,035.9	-4,064.9	5,107.9	5,072.4	35.53	143.759	
6,000.0	5,891.2	5,857.5	5,743.0	24.5	19.3	151.68	1,038.7	-4,065.8	5,113.7	5,077.9	35.81	142.808	
6,076.6	5,967.8	6,035.5	5,921.0	24.6	19.6	-68.68	1,039.8	-4,067.6	5,115.6	5,078.2	37.42	136.692	
6,100.0	5,991.2	6,058.4	5,943.9	24.6	19.6	-68.68	1,039.6	-4,067.7	5,115.6	5,078.1	37.49	136.461	
6,200.0	6,091.2	6,158.2	6,043.7	24.7	19.7	-68.69	1,038.8	-4,068.1	5,115.7	5,078.0	37.76	135.487	
6,300.0	6,191.2	6,242.8	6,128.3	24.8	19.8	-68.70	1,038.6	-4,068.4	5,115.9	5,077.9	38.01	134.597	
6,400.0	6,291.2	6,318.5	6,204.0	24.9	19.9	-68.70	1,038.3	-4,069.0	5,116.6	5,078.3	38.25	133.765	
6,500.0	6,391.2	6,394.1	6,279.5	25.0	20.0	-68.71	1,037.8	-4,070.1	5,117.7	5,079.2	38.50	132.943	
6,571.6	6,462.8	6,452.3	6,337.7	25.1	20.1	-68.72	1,037.5	-4,071.2	5,118.7	5,080.1	38.68	132.335	
6,600.0	6,491.2	6,491.1	6,376.6	25.1	20.2	21.28	1,037.4	-4,071.9	5,118.7	5,081.3	37.36	136.998	
6,650.0	6,541.1	6,566.8	6,452.2	25.1	20.3	21.38	1,037.1	-4,072.9	5,115.7	5,078.5	37.26	137.289	
6,700.0	6,590.5	6,609.1	6,494.5	25.1	20.3	21.59	1,037.0	-4,073.4	5,109.5	5,072.6	36.94	138.311	
6,750.0	6,639.4	6,649.0	6,534.4	25.1	20.4	21.90	1,037.0	-4,073.8	5,100.2	5,063.7	36.45	139.940	
6,800.0	6,687.4	6,692.3	6,577.7	25.0	20.4	22.34	1,036.9	-4,074.4	5,087.7	5,051.9	35.79	142.164	
6,850.0	6,734.3	6,732.7	6,618.2	25.0	20.5	22.90	1,036.8	-4,075.1	5,072.2	5,037.3	34.97	145.031	
6,900.0	6,779.8	6,799.9	6,685.3	24.9	20.6	23.66	1,036.4	-4,076.2	5,053.7	5,019.7	34.05	148.432	
6,950.0	6,823.8	6,858.2	6,743.6	24.8	20.6	24.58	1,036.2	-4,076.8	5,032.1	4,999.1	33.00	152.510	
7,000.0	6,866.1	6,899.7	6,785.1	24.7	20.7	25.65	1,036.0	-4,077.2	5,007.6	4,975.8	31.84	157.270	
7,050.0	6,906.4	6,942.4	6,827.8	24.6	20.8	26.95	1,035.7	-4,077.7	4,980.5	4,949.8	30.64	162.536	
7,100.0	6,944.6	6,992.2	6,877.5	24.5	20.8	28.53	1,035.5	-4,078.1	4,950.7	4,921.2	29.46	168.041	
7,150.0	6,980.4	7,023.0	6,908.4	24.4	20.9	30.34	1,035.4	-4,078.3	4,918.5	4,890.2	28.34	173.549	
7,200.0	7,013.6	7,057.2	6,942.5	24.3	20.9	32.53	1,035.4	-4,078.4	4,884.2	4,856.8	27.40	178.239	
7,250.0	7,044.2	7,080.3	6,965.7	24.2	20.9	35.06	1,035.5	-4,078.6	4,847.8	4,821.1	26.73	181.345	
7,300.0	7,072.0	7,101.4	6,986.7	24.1	21.0	38.06	1,035.5	-4,078.7	4,809.7	4,783.2	26.47	181.723	
7,350.0	7,096.8	7,123.1	7,008.5	24.0	21.0	41.67	1,035.7	-4,078.9	4,769.9	4,743.1	26.73	178.451	
7,400.0	7,118.5	7,154.3	7,039.7	23.9	21.1	46.15	1,035.9	-4,079.1	4,728.6	4,701.0	27.65	171.033	
7,450.0	7,137.0	7,180.8	7,066.2	23.8	21.1	51.45	1,036.1	-4,079.2	4,686.1	4,656.9	29.17	160.665	
7,500.0	7,152.2	7,202.4	7,087.8	23.8	21.1	57.68	1,036.2	-4,079.3	4,642.5	4,611.3	31.18	148.913	
7,550.0	7,164.1	7,249.7	7,135.1	23.8	21.2	65.61	1,036.5	-4,079.2	4,598.0	4,564.3	33.67	136.553	
7,600.0	7,172.5	7,296.7	7,182.1	23.8	21.3	74.72	1,036.7	-4,078.8	4,552.9	4,516.9	36.08	126.207	
7,650.0	7,177.5	7,307.8	7,193.1	23.9	21.3	83.58	1,036.8	-4,078.6	4,507.5	4,469.7	37.76	119.374	
7,699.2	7,179.0	7,308.7	7,194.1	24.1	21.3	92.23	1,036.8	-4,078.6	4,462.7	4,424.0	38.69	115.335	
7,700.0	7,179.0	7,308.7	7,194.1	24.1	21.3	92.23	1,036.8	-4,078.6	4,462.0	4,423.3	38.71	115.282	
7,800.0	7,178.6	7,306.3	7,191.6	24.9	21.3	92.16	1,036.8	-4,078.6	4,371.3	4,331.0	40.24	108.637	
7,900.0	7,178.3	7,303.5	7,188.9	26.4	21.3	92.07	1,036.7	-4,078.7	4,281.0	4,239.0	41.99	101.951	
8,000.0	7,177.9	7,295.8	7,181.2	28.2	21.3	91.84	1,036.7	-4,078.8	4,191.1	4,147.2	43.91	95.456	
8,100.0	7,177.5	7,289.2	7,174.6	30.3	21.2	91.63	1,036.7	-4,078.9	4,101.7	4,055.8	45.96	89.243	
8,200.0	7,177.2	7,283.4	7,168.8	32.5	21.2	91.45	1,036.7	-4,078.9	4,012.8	3,964.7	48.13	83.376	
8,300.0	7,176.8	7,278.3	7,163.7	34.8	21.2	91.30	1,036.6	-4,079.0	3,924.4	3,874.0	50.39	77.884	
8,400.0	7,176.4	7,273.8	7,159.2	37.2	21.2	91.16	1,036.6	-4,079.0	3,836.6	3,783.9	52.72	72.770	
8,500.0	7,176.1	7,269.8	7,155.2	39.6	21.2	91.03	1,036.6	-4,079.1	3,749.4	3,694.3	55.12	68.025	
8,600.0	7,175.7	7,266.2	7,151.6	42.0	21.2	90.92	1,036.6	-4,079.1	3,662.9	3,605.3	57.57	63.630	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD RYLAND 33-20D - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 568-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,700.0	7,175.3	7,262.9	7,148.3	44.6	21.2	90.82	1,036.6	-4,079.1	3,577.1	3,517.0	60.06	59.562	
8,800.0	7,175.0	7,260.0	7,145.3	47.1	21.2	90.73	1,036.6	-4,079.2	3,492.0	3,429.4	62.58	55.799	
8,900.0	7,174.6	7,257.3	7,142.7	49.7	21.2	90.65	1,036.6	-4,079.2	3,407.7	3,342.6	65.14	52.315	
9,000.0	7,174.3	7,254.8	7,140.2	52.3	21.2	90.57	1,036.5	-4,079.2	3,324.3	3,256.6	67.72	49.089	
9,100.0	7,173.9	7,252.5	7,137.9	54.9	21.2	90.50	1,036.5	-4,079.2	3,241.8	3,171.5	70.32	46.098	
9,200.0	7,173.5	7,250.5	7,135.8	57.5	21.2	90.44	1,036.5	-4,079.2	3,160.4	3,087.4	72.95	43.324	
9,300.0	7,173.2	7,248.5	7,133.9	60.1	21.2	90.38	1,036.5	-4,079.2	3,080.0	3,004.4	75.59	40.747	
9,400.0	7,172.8	7,246.7	7,132.1	62.8	21.2	90.32	1,036.5	-4,079.2	3,000.8	2,922.6	78.24	38.353	
9,500.0	7,172.4	7,245.1	7,130.5	65.5	21.2	90.27	1,036.5	-4,079.2	2,922.9	2,842.0	80.91	36.125	
9,600.0	7,172.1	7,243.5	7,128.9	68.2	21.2	90.22	1,036.5	-4,079.2	2,846.4	2,762.8	83.59	34.052	
9,700.0	7,171.7	7,242.1	7,127.5	70.9	21.2	90.18	1,036.5	-4,079.3	2,771.4	2,685.1	86.28	32.121	
9,800.0	7,171.3	7,240.7	7,126.1	73.6	21.2	90.13	1,036.5	-4,079.3	2,697.9	2,609.0	88.98	30.322	
9,900.0	7,171.0	7,239.4	7,124.8	76.3	21.2	90.10	1,036.5	-4,079.3	2,626.3	2,534.6	91.68	28.645	
10,000.0	7,170.6	7,238.3	7,123.6	79.0	21.2	90.06	1,036.5	-4,079.3	2,556.5	2,462.1	94.40	27.083	
10,100.0	7,170.3	7,237.1	7,122.5	81.7	21.2	90.02	1,036.4	-4,079.3	2,488.8	2,391.7	97.12	25.628	
10,200.0	7,169.9	7,236.1	7,121.4	84.4	21.2	89.99	1,036.4	-4,079.3	2,423.4	2,323.5	99.84	24.273	
10,300.0	7,169.5	7,235.1	7,120.4	87.2	21.2	89.96	1,036.4	-4,079.3	2,360.4	2,257.8	102.57	23.012	
10,400.0	7,169.2	7,234.1	7,119.5	89.9	21.2	89.93	1,036.4	-4,079.3	2,299.9	2,194.6	105.31	21.840	
10,500.0	7,168.8	7,233.2	7,118.6	92.6	21.2	89.90	1,036.4	-4,079.3	2,242.4	2,134.3	108.05	20.754	
10,600.0	7,168.4	7,232.3	7,117.7	95.4	21.2	89.88	1,036.4	-4,079.3	2,187.9	2,077.1	110.79	19.748	
10,700.0	7,168.1	7,231.5	7,116.9	98.1	21.2	89.85	1,036.4	-4,079.3	2,136.6	2,023.1	113.54	18.819	
10,800.0	7,167.7	7,230.7	7,116.1	100.9	21.2	89.83	1,036.4	-4,079.3	2,088.9	1,972.6	116.29	17.963	
10,900.0	7,167.4	7,230.0	7,115.4	103.6	21.2	89.80	1,036.4	-4,079.3	2,045.0	1,926.0	119.04	17.179	
11,000.0	7,167.0	7,229.3	7,114.7	106.4	21.2	89.78	1,036.4	-4,079.3	2,005.1	1,883.3	121.80	16.463	
11,100.0	7,166.6	7,228.6	7,114.0	109.1	21.2	89.76	1,036.4	-4,079.3	1,969.5	1,845.0	124.56	15.812	
11,200.0	7,166.3	7,228.0	7,113.4	111.9	21.2	89.74	1,036.4	-4,079.3	1,938.4	1,811.1	127.32	15.225	
11,300.0	7,165.9	7,227.4	7,112.7	114.7	21.2	89.72	1,036.4	-4,079.3	1,912.1	1,782.0	130.08	14.699	
11,400.0	7,165.5	7,226.8	7,112.2	117.4	21.2	89.70	1,036.4	-4,079.3	1,890.6	1,757.8	132.85	14.231	
11,500.0	7,165.2	7,226.2	7,111.6	120.2	21.2	89.69	1,036.4	-4,079.3	1,874.3	1,738.7	135.62	13.820	
11,600.0	7,164.8	7,225.7	7,111.0	123.0	21.2	89.67	1,036.4	-4,079.3	1,863.2	1,724.8	138.39	13.463	
11,700.0	7,164.5	7,225.2	7,110.5	125.7	21.2	89.65	1,036.4	-4,079.3	1,857.4	1,716.2	141.16	13.158	
11,757.7	7,164.3	7,224.9	7,110.2	127.3	21.2	89.64	1,036.4	-4,079.3	1,856.5	1,713.7	142.76	13.004	CC
11,800.0	7,164.1	7,224.7	7,110.0	128.5	21.2	89.64	1,036.4	-4,079.3	1,857.0	1,713.0	143.93	12.902	ES
11,828.8	7,164.0	7,224.5	7,109.9	129.3	21.2	89.63	1,036.4	-4,079.3	1,857.8	1,713.1	144.73	12.837	SF

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD RYLAND 34-20D - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 561-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-88.65	93.6	-3,976.8	3,978.1				
100.0	100.0	57.5	57.5	0.1	0.1	-88.65	93.6	-3,976.8	3,977.9	3,977.8	0.16	N/A	
200.0	200.0	157.5	157.5	0.3	0.2	-88.65	93.6	-3,976.8	3,977.9	3,977.4	0.50	8,022.814	
300.0	300.0	257.5	257.5	0.5	0.3	-88.65	93.6	-3,976.8	3,977.9	3,977.1	0.83	4,787.068	
400.0	400.0	357.5	357.5	0.8	0.4	131.75	93.6	-3,976.8	3,979.1	3,977.9	1.15	3,473.195	
500.0	499.8	457.3	457.3	1.0	0.5	131.75	93.6	-3,976.8	3,982.6	3,981.1	1.46	2,724.844	
600.0	599.5	557.0	557.0	1.2	0.6	131.76	93.6	-3,976.8	3,988.4	3,986.6	1.81	2,206.464	
700.0	698.7	653.8	653.8	1.5	0.8	131.76	93.6	-3,976.8	3,996.6	3,994.3	2.26	1,766.088	
800.0	797.5	747.0	747.0	1.8	1.0	131.76	93.5	-3,976.9	4,007.2	4,004.4	2.74	1,461.545	
900.1	895.7	847.9	847.9	2.2	1.2	131.77	93.7	-3,977.2	4,020.2	4,017.0	3.28	1,225.915	
1,000.0	993.4	948.3	948.3	2.6	1.4	132.00	93.8	-3,977.2	4,034.3	4,030.5	3.83	1,054.615	
1,100.0	1,091.3	1,048.2	1,048.2	3.0	1.6	132.21	93.5	-3,977.3	4,048.5	4,044.1	4.38	925.074	
1,200.0	1,189.1	1,144.3	1,144.3	3.5	1.8	132.42	93.3	-3,977.3	4,062.7	4,057.8	4.93	823.849	
1,300.0	1,286.9	1,249.7	1,249.7	3.9	2.0	132.64	92.8	-3,977.3	4,076.9	4,071.4	5.51	739.292	
1,400.0	1,384.7	1,332.9	1,332.9	4.4	2.2	132.82	92.7	-3,977.4	4,091.2	4,085.2	6.06	674.997	
1,500.0	1,482.5	1,426.0	1,426.0	4.8	2.4	133.02	92.4	-3,977.7	4,105.9	4,099.2	6.63	619.554	
1,600.0	1,580.3	1,505.0	1,505.0	5.3	2.6	133.18	92.0	-3,978.1	4,120.8	4,113.6	7.17	574.951	
1,700.0	1,678.1	1,582.3	1,582.3	5.7	2.7	133.34	91.9	-3,978.9	4,136.2	4,128.5	7.71	536.648	
1,800.0	1,776.0	1,691.7	1,691.7	6.2	3.0	133.58	92.1	-3,980.4	4,152.1	4,143.8	8.31	499.597	
1,900.0	1,873.8	1,785.7	1,785.7	6.6	3.2	133.78	92.7	-3,981.2	4,167.5	4,158.6	8.88	469.352	
2,000.0	1,971.6	1,883.1	1,883.1	7.1	3.4	133.99	93.1	-3,982.3	4,183.3	4,173.8	9.45	442.486	
2,100.0	2,069.4	1,999.8	1,999.8	7.6	3.6	134.23	93.0	-3,983.4	4,198.8	4,188.7	10.06	417.404	
2,200.0	2,167.2	2,074.1	2,074.1	8.0	3.8	134.38	93.0	-3,984.0	4,214.4	4,203.8	10.59	398.061	
2,300.0	2,265.0	2,159.8	2,159.8	8.5	3.9	134.55	93.2	-3,985.2	4,230.5	4,219.4	11.14	379.789	
2,400.0	2,362.8	2,274.3	2,274.2	9.0	4.2	134.78	93.1	-3,986.8	4,246.7	4,234.9	11.74	361.632	
2,500.0	2,460.6	2,361.0	2,360.9	9.4	4.4	134.95	92.9	-3,987.9	4,262.7	4,250.4	12.29	346.784	
2,600.0	2,558.5	2,441.3	2,441.2	9.9	4.5	135.10	92.0	-3,989.2	4,279.1	4,266.2	12.83	333.489	
2,700.0	2,656.3	2,694.9	2,694.5	10.3	5.1	135.44	79.7	-3,990.0	4,293.8	4,280.1	13.72	313.064	
2,800.0	2,754.1	2,773.7	2,773.0	10.8	5.2	135.49	72.3	-3,989.5	4,307.1	4,292.9	14.26	301.940	
2,900.0	2,851.9	2,844.0	2,842.7	11.3	5.4	135.52	64.0	-3,989.4	4,320.9	4,306.1	14.80	291.865	
3,000.0	2,949.7	2,920.9	2,918.8	11.7	5.6	135.52	52.8	-3,990.0	4,335.2	4,319.8	15.37	281.987	
3,100.0	3,047.5	2,994.6	2,991.4	12.2	5.8	135.50	40.6	-3,991.2	4,350.3	4,334.3	15.95	272.787	
3,200.0	3,145.3	3,068.9	3,064.6	12.7	6.0	135.47	27.7	-3,992.9	4,365.8	4,349.3	16.53	264.057	
3,300.0	3,243.2	3,150.9	3,145.2	13.1	6.2	135.42	12.4	-3,995.5	4,382.0	4,364.8	17.15	255.530	
3,400.0	3,341.0	3,247.8	3,240.5	13.6	6.5	135.38	-4.9	-3,998.3	4,398.1	4,380.3	17.80	247.131	
3,500.0	3,438.8	3,319.0	3,310.6	14.1	6.7	135.36	-16.8	-4,000.7	4,414.7	4,396.3	18.37	240.341	
3,600.0	3,536.6	3,440.1	3,430.0	14.5	7.0	135.32	-36.6	-4,004.7	4,431.4	4,412.3	19.09	232.116	
3,700.0	3,634.4	3,544.9	3,533.2	15.0	7.3	135.29	-54.5	-4,007.8	4,447.6	4,427.8	19.79	224.740	
3,800.0	3,732.2	3,654.6	3,641.1	15.5	7.7	135.24	-74.0	-4,011.2	4,463.9	4,443.4	20.52	217.523	
3,900.0	3,830.0	3,739.9	3,724.8	15.9	8.0	135.19	-89.8	-4,013.6	4,479.9	4,458.7	21.19	211.426	
4,000.0	3,927.9	3,829.6	3,812.7	16.4	8.3	135.12	-108.2	-4,016.9	4,496.5	4,474.6	21.89	205.395	
4,100.0	4,025.7	3,942.1	3,922.5	16.9	8.7	135.02	-131.8	-4,020.7	4,512.8	4,490.1	22.68	199.003	
4,200.0	4,123.5	4,013.9	3,992.8	17.3	8.9	134.97	-146.5	-4,023.2	4,529.2	4,505.9	23.31	194.335	
4,300.0	4,221.3	4,077.7	4,055.3	17.8	9.2	134.93	-159.0	-4,025.8	4,546.4	4,522.5	23.91	190.179	
4,400.0	4,319.1	4,155.0	4,131.1	18.2	9.4	134.88	-173.8	-4,029.5	4,564.2	4,539.7	24.56	185.871	
4,500.0	4,416.9	4,242.0	4,216.3	18.7	9.7	134.82	-190.7	-4,034.0	4,582.4	4,557.2	25.26	181.438	
4,600.0	4,514.7	4,342.0	4,314.2	19.2	10.1	134.75	-210.4	-4,039.2	4,600.6	4,574.6	26.00	176.923	
4,700.0	4,612.6	4,438.2	4,408.4	19.6	10.4	134.69	-229.1	-4,044.2	4,618.9	4,592.2	26.73	172.784	
4,800.0	4,710.4	4,555.3	4,523.6	20.1	10.8	134.64	-249.5	-4,049.7	4,636.8	4,609.3	27.51	168.536	
4,900.0	4,808.2	4,625.0	4,592.5	20.6	11.1	134.65	-259.2	-4,052.9	4,655.0	4,626.8	28.11	165.604	
5,000.0	4,906.0	4,709.4	4,676.4	21.0	11.3	134.69	-268.0	-4,057.0	4,673.6	4,644.8	28.71	162.757	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD RYLAND 34-20D - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 561-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.0	5,003.8	4,904.6	4,871.2	21.5	11.7	134.95	-275.2	-4,063.8	4,691.7	4,662.2	29.47	159.225	
5,200.0	5,101.6	5,033.7	5,000.3	22.0	11.9	135.19	-274.5	-4,065.6	4,707.9	4,677.9	30.03	156.777	
5,300.0	5,199.4	5,130.0	5,096.7	22.4	12.1	135.37	-273.9	-4,066.8	4,724.2	4,693.7	30.55	154.646	
5,400.0	5,297.3	5,232.3	5,199.0	22.9	12.3	135.56	-273.4	-4,067.9	4,740.3	4,709.2	31.08	152.528	
5,476.5	5,372.1	5,305.5	5,272.1	23.3	12.4	135.69	-273.1	-4,068.8	4,752.8	4,721.3	31.48	150.997	
5,500.0	5,395.1	5,335.3	5,301.9	23.3	12.4	135.80	-272.9	-4,069.1	4,756.5	4,724.9	31.60	150.535	
5,600.0	5,493.4	5,451.9	5,418.5	23.7	12.6	136.19	-272.1	-4,070.0	4,770.6	4,738.6	32.03	148.954	
5,700.0	5,592.3	5,543.4	5,510.0	23.9	12.8	136.46	-271.7	-4,070.7	4,782.1	4,749.7	32.39	147.619	
5,800.0	5,691.6	5,648.7	5,615.3	24.1	13.0	136.69	-271.6	-4,071.5	4,791.2	4,758.4	32.76	146.260	
5,900.0	5,791.3	5,735.6	5,702.2	24.3	13.2	136.83	-271.6	-4,072.2	4,797.8	4,764.7	33.06	145.114	
6,000.0	5,891.2	5,841.2	5,807.8	24.5	13.3	136.93	-271.6	-4,073.2	4,802.0	4,768.6	33.37	143.910	
6,076.6	5,967.8	5,922.9	5,889.5	24.6	13.5	-83.44	-271.8	-4,073.9	4,803.3	4,770.8	32.53	147.640	
6,100.0	5,991.2	5,947.8	5,914.4	24.6	13.5	-83.45	-272.0	-4,074.1	4,803.5	4,770.9	32.61	147.282	
6,200.0	6,091.2	6,048.1	6,014.7	24.7	13.7	-83.46	-273.1	-4,074.9	4,804.2	4,771.2	32.94	145.848	
6,300.0	6,191.2	6,134.1	6,100.7	24.8	13.9	-83.47	-274.0	-4,075.7	4,805.0	4,771.8	33.24	144.566	
6,400.0	6,291.2	6,228.4	6,195.0	24.9	14.1	-83.49	-275.1	-4,076.9	4,806.1	4,772.5	33.56	143.228	
6,500.0	6,391.2	6,329.4	6,295.9	25.0	14.3	-83.50	-276.3	-4,078.2	4,807.3	4,773.4	33.89	141.856	
6,571.6	6,462.8	6,417.2	6,383.7	25.1	14.5	-83.52	-277.4	-4,079.1	4,807.8	4,773.7	34.16	140.751	
6,600.0	6,491.2	6,439.0	6,405.6	25.1	14.5	6.48	-277.7	-4,079.3	4,807.5	4,772.4	35.17	136.712	
6,650.0	6,541.1	6,477.4	6,444.0	25.1	14.6	6.51	-278.1	-4,079.7	4,804.3	4,769.3	35.05	137.079	
6,700.0	6,590.5	6,523.7	6,490.2	25.1	14.7	6.57	-278.6	-4,080.4	4,797.8	4,763.0	34.79	137.908	
6,750.0	6,639.4	6,574.9	6,541.4	25.1	14.8	6.67	-279.0	-4,081.0	4,787.8	4,753.4	34.39	139.232	
6,800.0	6,687.4	6,622.5	6,589.0	25.0	14.9	6.82	-279.4	-4,081.6	4,774.4	4,740.6	33.83	141.140	
6,850.0	6,734.3	6,668.2	6,634.7	25.0	15.0	7.01	-279.7	-4,082.2	4,757.8	4,724.7	33.12	143.652	
6,900.0	6,779.8	6,711.4	6,677.9	24.9	15.0	7.25	-280.1	-4,082.8	4,737.9	4,705.7	32.27	146.821	
6,950.0	6,823.8	6,752.8	6,719.3	24.8	15.1	7.54	-280.3	-4,083.3	4,715.0	4,683.7	31.29	150.700	
7,000.0	6,866.1	6,796.2	6,762.7	24.7	15.2	7.91	-280.4	-4,083.9	4,689.0	4,658.8	30.19	155.324	
7,050.0	6,906.4	6,841.6	6,808.1	24.6	15.3	8.37	-280.5	-4,084.5	4,660.1	4,631.2	28.99	160.763	
7,100.0	6,944.6	6,885.9	6,852.3	24.5	15.4	8.93	-280.6	-4,085.0	4,628.5	4,600.8	27.70	167.116	
7,150.0	6,980.4	6,929.1	6,895.6	24.4	15.5	9.61	-280.7	-4,085.5	4,594.2	4,567.9	26.34	174.444	
7,200.0	7,013.6	6,961.0	6,927.5	24.3	15.5	10.44	-280.8	-4,085.8	4,557.4	4,532.5	24.92	182.886	
7,250.0	7,044.2	6,988.4	6,954.9	24.2	15.6	11.47	-280.9	-4,086.0	4,518.5	4,495.0	23.50	192.305	
7,300.0	7,072.0	7,009.0	6,975.4	24.1	15.6	12.75	-281.0	-4,086.3	4,477.5	4,455.4	22.12	202.456	
7,350.0	7,096.8	7,027.4	6,993.9	24.0	15.6	14.39	-281.1	-4,086.5	4,434.7	4,413.9	20.87	212.537	
7,400.0	7,118.5	7,054.0	7,020.5	23.9	15.7	16.63	-281.3	-4,086.9	4,390.4	4,370.5	19.89	220.697	
7,450.0	7,137.0	7,054.0	7,020.5	23.8	15.7	19.46	-281.3	-4,086.9	4,344.6	4,325.2	19.32	224.888	
7,500.0	7,152.2	7,070.6	7,037.1	23.8	15.7	23.73	-281.5	-4,087.2	4,297.6	4,278.0	19.58	219.542	
7,550.0	7,164.1	7,080.6	7,047.0	23.8	15.8	30.08	-281.6	-4,087.4	4,249.6	4,228.5	21.11	201.334	
7,600.0	7,172.5	7,087.9	7,054.4	23.8	15.8	40.29	-281.7	-4,087.6	4,200.9	4,176.2	24.68	170.244	
7,650.0	7,177.5	7,092.6	7,059.0	23.9	15.8	57.47	-281.7	-4,087.7	4,151.7	4,120.8	30.85	134.566	
7,699.2	7,179.0	7,094.5	7,061.0	24.1	15.8	83.57	-281.8	-4,087.7	4,102.9	4,065.9	37.02	110.824	
7,700.0	7,179.0	7,094.6	7,061.0	24.1	15.8	83.57	-281.8	-4,087.7	4,102.2	4,065.1	37.03	110.767	
7,800.0	7,178.6	7,095.9	7,062.3	24.9	15.8	83.71	-281.8	-4,087.7	4,003.1	3,964.5	38.58	103.771	
7,900.0	7,178.3	7,097.2	7,063.6	26.4	15.8	83.85	-281.8	-4,087.7	3,904.0	3,863.7	40.34	96.773	
8,000.0	7,177.9	7,098.5	7,065.0	28.2	15.8	83.99	-281.8	-4,087.8	3,805.0	3,762.7	42.28	89.994	
8,100.0	7,177.5	7,099.9	7,066.3	30.3	15.8	84.13	-281.8	-4,087.8	3,706.0	3,661.7	44.36	83.549	
8,200.0	7,177.2	7,101.3	7,067.7	32.5	15.8	84.28	-281.8	-4,087.8	3,607.1	3,560.6	46.55	77.493	
8,300.0	7,176.8	7,102.7	7,069.1	34.8	15.8	84.42	-281.9	-4,087.9	3,508.3	3,459.5	48.83	71.849	
8,400.0	7,176.4	7,104.1	7,070.5	37.2	15.8	84.57	-281.9	-4,087.9	3,409.5	3,358.3	51.19	66.612	
8,500.0	7,176.1	7,105.5	7,072.0	39.6	15.8	84.72	-281.9	-4,087.9	3,310.8	3,257.2	53.60	61.766	
8,600.0	7,175.7	7,107.0	7,073.4	42.0	15.8	84.88	-281.9	-4,087.9	3,212.2	3,156.1	56.07	57.288	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD RYLAND 34-20D - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 561-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,700.0	7,175.3	7,108.4	7,074.9	44.6	15.8	85.03	-281.9	-4,088.0	3,113.7	3,055.1	58.58	53.150	
8,800.0	7,175.0	7,109.9	7,076.4	47.1	15.8	85.19	-282.0	-4,088.0	3,015.3	2,954.1	61.13	49.325	
8,900.0	7,174.6	7,111.4	7,077.9	49.7	15.8	85.35	-282.0	-4,088.0	2,916.9	2,853.2	63.71	45.786	
9,000.0	7,174.3	7,112.9	7,079.4	52.3	15.8	85.51	-282.0	-4,088.1	2,818.7	2,752.4	66.31	42.507	
9,100.0	7,173.9	7,114.5	7,080.9	54.9	15.8	85.67	-282.0	-4,088.1	2,720.6	2,651.7	68.94	39.464	
9,200.0	7,173.5	7,116.1	7,082.5	57.5	15.8	85.84	-282.0	-4,088.1	2,622.7	2,551.1	71.59	36.637	
9,300.0	7,173.2	7,117.6	7,084.1	60.1	15.8	86.00	-282.1	-4,088.2	2,524.9	2,450.7	74.25	34.006	
9,400.0	7,172.8	7,119.3	7,085.7	62.8	15.8	86.17	-282.1	-4,088.2	2,427.3	2,350.4	76.93	31.554	
9,500.0	7,172.4	7,120.9	7,087.3	65.5	15.8	86.35	-282.1	-4,088.2	2,329.9	2,250.3	79.62	29.264	
9,600.0	7,172.1	7,122.6	7,089.0	68.2	15.8	86.52	-282.1	-4,088.3	2,232.8	2,150.4	82.32	27.123	
9,700.0	7,171.7	7,124.2	7,090.7	70.9	15.8	86.70	-282.2	-4,088.3	2,135.8	2,050.8	85.03	25.118	
9,800.0	7,171.3	7,125.9	7,092.4	73.6	15.8	86.88	-282.2	-4,088.4	2,039.2	1,951.5	87.76	23.238	
9,900.0	7,171.0	7,127.7	7,094.1	76.3	15.9	87.06	-282.2	-4,088.4	1,943.0	1,852.5	90.49	21.473	
10,000.0	7,170.6	7,129.4	7,095.9	79.0	15.9	87.25	-282.2	-4,088.4	1,847.1	1,753.9	93.22	19.814	
10,100.0	7,170.3	7,131.2	7,097.6	81.7	15.9	87.44	-282.3	-4,088.5	1,751.7	1,655.7	95.97	18.253	
10,200.0	7,169.9	7,133.0	7,099.5	84.4	15.9	87.63	-282.3	-4,088.5	1,656.8	1,558.1	98.72	16.783	
10,300.0	7,169.5	7,134.8	7,101.3	87.2	15.9	87.82	-282.3	-4,088.6	1,562.6	1,461.1	101.47	15.399	
10,400.0	7,169.2	7,136.7	7,103.1	89.9	15.9	88.02	-282.4	-4,088.6	1,469.1	1,364.8	104.23	14.094	
10,500.0	7,168.8	7,138.6	7,105.0	92.6	15.9	88.22	-282.4	-4,088.7	1,376.5	1,269.5	106.99	12.865	
10,600.0	7,168.4	7,140.5	7,106.9	95.4	15.9	88.43	-282.4	-4,088.7	1,285.1	1,175.3	109.76	11.708	
10,700.0	7,168.1	7,142.4	7,108.9	98.1	15.9	88.63	-282.4	-4,088.7	1,195.0	1,082.4	112.53	10.619	
10,800.0	7,167.7	7,144.4	7,110.9	100.9	15.9	88.84	-282.5	-4,088.8	1,106.6	991.3	115.30	9.597	
10,900.0	7,167.4	7,146.4	7,112.9	103.6	15.9	89.06	-282.5	-4,088.8	1,020.3	902.3	118.08	8.641	
11,000.0	7,167.0	7,148.5	7,114.9	106.4	15.9	89.27	-282.6	-4,088.9	936.8	816.0	120.86	7.752	
11,100.0	7,166.6	7,150.5	7,117.0	109.1	15.9	89.49	-282.6	-4,088.9	856.8	733.2	123.63	6.931	
11,200.0	7,166.3	7,152.6	7,119.0	111.9	15.9	89.71	-282.6	-4,089.0	781.5	655.1	126.41	6.182	
11,300.0	7,165.9	7,154.6	7,121.1	114.7	15.9	89.93	-282.7	-4,089.0	712.2	583.0	129.19	5.513	
11,400.0	7,165.5	7,156.7	7,123.1	117.4	15.9	90.15	-282.7	-4,089.1	651.0	519.0	131.97	4.933	
11,500.0	7,165.2	7,158.7	7,125.2	120.2	15.9	90.37	-282.7	-4,089.1	600.2	465.5	134.75	4.454	
11,600.0	7,164.8	7,160.7	7,127.2	123.0	15.9	90.58	-282.8	-4,089.2	562.8	425.3	137.53	4.092	
11,700.0	7,164.5	7,162.8	7,129.2	125.7	15.9	90.80	-282.8	-4,089.2	541.6	401.2	140.31	3.860	
11,767.6	7,164.2	7,164.1	7,130.5	127.6	15.9	90.94	-282.8	-4,089.3	537.3	395.1	142.19	3.779	CC, ES
11,800.0	7,164.1	7,164.8	7,131.2	128.5	15.9	91.01	-282.8	-4,089.3	538.3	395.2	143.09	3.762	
11,828.8	7,164.0	7,165.3	7,131.8	129.3	15.9	91.07	-282.8	-4,089.3	540.8	396.9	143.89	3.759	SF

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD RYLAND 43-20D - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 599-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-88.03	136.9	-3,978.8	3,981.3				
100.0	100.0	58.0	58.0	0.1	0.1	-88.03	136.9	-3,978.8	3,981.1	3,981.0	0.16	N/A	
200.0	200.0	158.7	158.7	0.3	0.2	-88.03	137.0	-3,978.7	3,981.1	3,980.6	0.50	8,004.729	
300.0	300.0	259.5	259.5	0.5	0.3	-88.03	137.0	-3,978.7	3,981.1	3,980.2	0.83	4,776.584	
302.2	302.2	261.7	261.7	0.6	0.3	132.37	137.0	-3,978.7	3,981.1	3,980.2	0.84	4,737.378	
400.0	400.0	360.3	360.3	0.8	0.4	132.37	137.1	-3,978.6	3,982.2	3,981.0	1.15	3,466.225	
500.0	499.8	461.0	461.0	1.0	0.5	132.38	137.1	-3,978.5	3,985.6	3,984.2	1.46	2,720.749	
600.0	599.5	561.4	561.4	1.2	0.6	132.39	137.3	-3,978.4	3,991.4	3,989.6	1.81	2,205.060	
700.0	698.7	1,296.0	1,291.8	1.5	2.5	133.71	161.5	-3,923.2	3,996.3	3,992.6	3.70	1,081.404	
800.0	797.5	1,742.2	1,722.7	1.8	4.5	135.58	227.2	-3,829.7	3,986.0	3,980.5	5.50	724.409	
900.1	895.7	1,840.9	1,816.3	2.2	5.1	136.22	246.7	-3,804.8	3,975.0	3,968.8	6.24	637.239	
1,000.0	993.4	1,919.9	1,891.1	2.6	5.6	136.64	262.7	-3,785.0	3,965.9	3,959.0	6.93	572.378	
1,100.0	1,091.3	2,002.0	1,968.6	3.0	6.1	137.08	279.9	-3,764.3	3,957.0	3,949.3	7.66	516.646	
1,200.0	1,189.1	2,072.5	2,035.2	3.5	6.5	137.46	294.7	-3,746.7	3,948.8	3,940.5	8.34	473.645	
1,300.0	1,286.9	2,139.8	2,099.1	3.9	6.9	137.82	308.7	-3,730.8	3,942.0	3,933.0	8.99	438.409	
1,400.0	1,384.7	2,342.7	2,291.9	4.4	8.0	138.87	347.2	-3,680.8	3,934.7	3,924.4	10.26	383.481	
1,500.0	1,482.5	2,424.8	2,369.5	4.8	8.5	139.31	363.3	-3,659.4	3,926.1	3,915.1	11.02	356.398	
1,600.0	1,580.3	2,555.6	2,493.1	5.3	9.3	140.01	389.5	-3,625.3	3,918.2	3,906.2	12.03	325.808	
1,700.0	1,678.1	2,657.0	2,588.3	5.7	10.0	140.57	410.8	-3,597.8	3,909.5	3,896.5	12.93	302.312	
1,800.0	1,776.0	2,711.8	2,639.7	6.2	10.3	140.88	422.6	-3,583.1	3,901.5	3,887.9	13.58	287.261	
1,900.0	1,873.8	2,751.0	2,676.7	6.6	10.6	141.11	431.1	-3,573.0	3,894.9	3,880.8	14.15	275.271	
2,000.0	1,971.6	2,805.7	2,728.4	7.1	10.9	141.41	442.7	-3,559.4	3,889.7	3,874.9	14.78	263.195	
2,100.0	2,069.4	2,869.4	2,789.0	7.6	11.3	141.76	455.7	-3,544.7	3,886.0	3,870.6	15.46	251.425	
2,200.0	2,167.2	2,992.9	2,906.0	8.0	12.0	142.44	481.9	-3,515.2	3,882.2	3,865.7	16.45	235.968	
2,300.0	2,265.0	3,065.0	2,974.4	8.5	12.4	142.84	497.1	-3,498.0	3,878.8	3,861.6	17.18	225.803	
2,400.0	2,362.8	3,125.0	3,031.4	9.0	12.8	143.17	509.7	-3,484.1	3,876.5	3,858.6	17.83	217.369	
2,500.0	2,460.6	3,208.3	3,110.7	9.4	13.2	143.63	526.8	-3,465.4	3,875.0	3,856.4	18.60	208.313	
2,600.0	2,558.5	3,354.2	3,250.0	9.9	14.1	144.39	554.3	-3,432.2	3,873.2	3,853.5	19.66	197.016	
2,700.0	2,656.3	3,445.4	3,337.3	10.3	14.6	144.86	570.6	-3,411.0	3,871.2	3,850.8	20.45	189.296	
2,800.0	2,754.1	3,567.0	3,453.2	10.8	15.3	145.50	593.9	-3,382.5	3,869.6	3,848.2	21.42	180.654	
2,900.0	2,851.9	3,657.6	3,539.3	11.3	15.8	145.99	611.4	-3,360.5	3,867.6	3,845.3	22.24	173.936	
3,000.0	2,949.7	3,768.9	3,645.2	11.7	16.5	146.58	632.5	-3,333.7	3,866.0	3,842.9	23.15	167.001	
3,100.0	3,047.5	3,889.6	3,759.9	12.2	17.2	147.22	655.2	-3,303.7	3,863.9	3,839.8	24.12	160.167	
3,200.0	3,145.3	3,967.0	3,833.4	12.7	17.7	147.64	670.0	-3,284.5	3,862.3	3,837.4	24.88	155.256	
3,300.0	3,243.2	4,022.2	3,885.9	13.1	18.0	147.94	680.7	-3,271.1	3,861.6	3,836.1	25.51	151.403	
3,311.6	3,254.5	4,029.4	3,892.8	13.2	18.0	147.97	682.1	-3,269.4	3,861.6	3,836.0	25.58	150.947	
3,400.0	3,341.0	4,104.9	3,964.8	13.6	18.5	148.38	696.6	-3,251.7	3,862.0	3,835.7	26.27	147.008	
3,500.0	3,438.8	4,222.0	4,076.6	14.1	19.2	148.98	717.7	-3,224.1	3,862.3	3,835.1	27.20	141.970	
3,600.0	3,536.6	4,379.9	4,226.3	14.5	20.1	149.83	747.9	-3,184.1	3,861.3	3,832.9	28.40	135.980	
3,690.2	3,624.8	4,435.0	4,278.6	14.9	20.5	150.13	758.3	-3,170.2	3,860.9	3,831.9	29.00	133.153	
3,700.0	3,634.4	4,443.3	4,286.5	15.0	20.5	150.17	759.8	-3,168.1	3,860.9	3,831.8	29.07	132.795	
3,800.0	3,732.2	4,552.0	4,389.4	15.5	21.2	150.77	781.1	-3,140.5	3,860.9	3,830.9	30.01	128.671	
3,900.0	3,830.0	4,649.1	4,481.1	15.9	21.8	151.31	800.6	-3,115.3	3,861.0	3,830.1	30.89	125.004	
4,000.0	3,927.9	4,727.5	4,555.3	16.4	22.3	151.74	816.1	-3,095.3	3,861.6	3,830.0	31.65	122.001	
4,100.0	4,025.7	4,812.0	4,635.3	16.9	22.8	152.20	832.9	-3,073.8	3,862.8	3,830.3	32.45	119.026	
4,200.0	4,123.5	4,880.1	4,699.8	17.3	23.2	152.58	846.6	-3,056.7	3,864.7	3,831.5	33.17	116.529	
4,300.0	4,221.3	4,942.1	4,758.6	17.8	23.6	152.92	859.3	-3,041.6	3,867.8	3,833.9	33.83	114.313	
4,400.0	4,319.1	5,008.7	4,821.9	18.2	24.0	153.28	872.7	-3,026.0	3,871.9	3,837.4	34.52	112.156	
4,500.0	4,416.9	5,109.8	4,918.3	18.7	24.6	153.82	892.4	-3,002.9	3,876.6	3,841.2	35.38	109.573	
4,600.0	4,514.7	5,241.0	5,043.8	19.2	25.3	154.49	916.1	-2,972.7	3,880.9	3,844.6	36.38	106.674	
4,700.0	4,612.6	5,339.7	5,137.8	19.6	25.9	155.00	934.6	-2,949.0	3,885.1	3,847.8	37.24	104.339	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD RYLAND 43-20D - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 599-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,800.0	4,710.4	5,406.4	5,201.2	20.1	26.3	155.36	947.4	-2,933.1	3,889.8	3,851.8	37.91	102.605	
4,900.0	4,808.2	5,466.0	5,258.4	20.6	26.7	155.65	958.1	-2,919.9	3,895.7	3,857.1	38.54	101.089	
5,000.0	4,906.0	5,517.0	5,307.6	21.0	26.9	155.89	966.5	-2,909.4	3,902.8	3,863.7	39.09	99.850	
5,100.0	5,003.8	5,560.0	5,349.3	21.5	27.1	156.08	973.1	-2,901.2	3,911.1	3,871.5	39.60	98.771	
5,200.0	5,101.6	5,628.2	5,415.8	22.0	27.4	156.37	982.8	-2,889.2	3,920.6	3,880.4	40.19	97.551	
5,300.0	5,199.4	5,722.1	5,507.8	22.4	27.8	156.73	994.0	-2,874.6	3,931.0	3,890.1	40.85	96.232	
5,400.0	5,297.3	5,796.0	5,580.5	22.9	28.1	156.98	1,001.1	-2,863.9	3,941.5	3,900.1	41.41	95.193	
5,476.5	5,372.1	5,840.0	5,624.0	23.3	28.2	157.12	1,005.2	-2,858.0	3,950.2	3,908.4	41.78	94.539	
5,500.0	5,395.1	5,840.0	5,624.0	23.3	28.2	157.14	1,005.2	-2,858.0	3,953.0	3,911.1	41.88	94.385	
5,600.0	5,493.4	5,933.0	5,715.9	23.7	28.5	157.50	1,013.7	-2,846.6	3,963.1	3,920.6	42.51	93.226	
5,700.0	5,592.3	5,986.1	5,768.5	23.9	28.7	157.70	1,018.4	-2,840.8	3,970.9	3,928.0	42.96	92.438	
5,800.0	5,691.6	6,054.6	5,836.4	24.1	28.9	157.91	1,024.6	-2,833.6	3,976.3	3,933.0	43.39	91.648	
5,900.0	5,791.3	6,119.0	5,900.2	24.3	29.1	158.07	1,029.9	-2,827.8	3,979.4	3,935.7	43.74	90.980	
6,000.0	5,891.2	6,199.4	5,980.2	24.5	29.3	158.20	1,035.5	-2,821.6	3,979.9	3,935.9	44.05	90.355	
6,076.6	5,967.8	6,257.1	6,037.7	24.6	29.4	-62.13	1,038.7	-2,817.9	3,978.5	3,936.4	42.13	94.442	
6,100.0	5,991.2	6,274.6	6,055.1	24.6	29.4	-62.12	1,039.5	-2,816.9	3,977.9	3,935.7	42.18	94.302	
6,200.0	6,091.2	6,360.7	6,141.1	24.7	29.6	-62.06	1,042.3	-2,813.1	3,975.4	3,933.0	42.43	93.697	
6,300.0	6,191.2	6,442.7	6,223.1	24.8	29.7	-62.03	1,043.0	-2,810.7	3,973.3	3,930.6	42.66	93.128	
6,400.0	6,291.2	6,520.4	6,300.7	24.9	29.8	-62.02	1,043.4	-2,809.1	3,971.7	3,928.8	42.89	92.602	
6,500.0	6,391.2	6,605.9	6,386.2	25.0	29.9	-62.01	1,043.5	-2,807.9	3,970.6	3,927.4	43.12	92.072	
6,571.6	6,462.8	6,664.6	6,445.0	25.1	29.9	-62.01	1,043.3	-2,807.5	3,970.0	3,926.7	43.29	91.712	
6,600.0	6,491.2	6,688.5	6,468.8	25.1	30.0	28.02	1,043.1	-2,807.5	3,969.4	3,924.0	45.40	87.432	
6,650.0	6,541.1	6,732.1	6,512.5	25.1	30.0	28.17	1,042.7	-2,807.5	3,965.9	3,920.7	45.17	87.792	
6,700.0	6,590.5	6,773.0	6,553.3	25.1	30.0	28.45	1,042.4	-2,807.5	3,959.4	3,914.6	44.80	88.375	
6,750.0	6,639.4	6,819.5	6,599.9	25.1	30.1	28.89	1,042.1	-2,807.6	3,949.9	3,905.6	44.30	89.157	
6,800.0	6,687.4	6,867.0	6,647.3	25.0	30.1	29.48	1,041.8	-2,807.7	3,937.6	3,893.9	43.69	90.134	
6,850.0	6,734.3	6,910.8	6,691.1	25.0	30.1	30.23	1,041.5	-2,807.9	3,922.3	3,879.4	42.96	91.294	
6,900.0	6,779.8	6,958.2	6,738.5	24.9	30.2	31.17	1,041.0	-2,808.2	3,904.3	3,862.1	42.17	92.581	
6,950.0	6,823.8	6,989.3	6,769.7	24.8	30.2	32.24	1,040.7	-2,808.4	3,883.5	3,842.2	41.32	93.995	
7,000.0	6,866.1	7,018.5	6,798.8	24.7	30.2	33.52	1,040.4	-2,808.8	3,860.3	3,819.9	40.45	95.426	
7,050.0	6,906.4	7,054.0	6,834.3	24.6	30.2	35.06	1,040.1	-2,809.3	3,834.8	3,795.1	39.65	96.724	
7,100.0	6,944.6	7,078.0	6,858.4	24.5	30.3	36.79	1,039.9	-2,809.7	3,806.9	3,768.0	38.92	97.804	
7,150.0	6,980.4	7,109.9	6,890.2	24.4	30.3	38.88	1,039.6	-2,810.3	3,777.0	3,738.6	38.39	98.371	
7,200.0	7,013.6	7,139.8	6,920.1	24.3	30.3	41.30	1,039.3	-2,810.9	3,745.0	3,706.8	38.12	98.246	
7,250.0	7,044.2	7,182.4	6,962.7	24.2	30.3	44.26	1,038.7	-2,811.9	3,711.1	3,672.9	38.23	97.079	
7,300.0	7,072.0	7,226.7	7,007.0	24.1	30.4	47.77	1,038.0	-2,812.7	3,675.4	3,636.6	38.76	94.822	
7,350.0	7,096.8	7,257.9	7,038.2	24.0	30.4	51.65	1,037.4	-2,813.3	3,638.1	3,598.5	39.66	91.740	
7,400.0	7,118.5	7,281.2	7,061.4	23.9	30.4	55.97	1,036.9	-2,813.6	3,599.6	3,558.7	40.89	88.037	
7,450.0	7,137.0	7,301.0	7,081.3	23.8	30.4	60.80	1,036.6	-2,813.9	3,559.9	3,517.5	42.39	83.983	
7,500.0	7,152.2	7,317.4	7,097.7	23.8	30.4	66.12	1,036.4	-2,814.1	3,519.4	3,475.4	44.04	79.919	
7,550.0	7,164.1	7,330.3	7,110.5	23.8	30.4	71.84	1,036.2	-2,814.3	3,478.3	3,432.6	45.69	76.137	
7,600.0	7,172.5	7,339.3	7,119.5	23.8	30.4	77.86	1,036.1	-2,814.4	3,436.8	3,389.6	47.19	72.835	
7,650.0	7,177.5	7,344.7	7,124.9	23.9	30.4	84.01	1,036.0	-2,814.4	3,395.0	3,346.6	48.43	70.101	
7,699.2	7,179.0	7,346.7	7,126.9	24.1	30.4	90.02	1,036.0	-2,814.5	3,354.0	3,304.6	49.36	67.955	
7,700.0	7,179.0	7,346.7	7,126.9	24.1	30.4	90.02	1,036.0	-2,814.5	3,353.3	3,304.0	49.37	67.926	
7,800.0	7,178.6	7,347.5	7,127.8	24.9	30.4	90.05	1,036.0	-2,814.5	3,270.5	3,219.6	50.90	64.248	
7,900.0	7,178.3	7,348.3	7,128.6	26.4	30.4	90.07	1,036.0	-2,814.5	3,188.7	3,136.0	52.66	60.548	
8,000.0	7,177.9	7,349.2	7,129.4	28.2	30.4	90.10	1,036.0	-2,814.5	3,107.9	3,053.3	54.59	56.928	
8,100.0	7,177.5	7,350.0	7,130.2	30.3	30.4	90.12	1,036.0	-2,814.5	3,028.3	2,971.6	56.66	53.445	
8,200.0	7,177.2	7,350.9	7,131.1	32.5	30.4	90.15	1,035.9	-2,814.5	2,949.9	2,891.1	58.84	50.134	
8,300.0	7,176.8	7,351.7	7,131.9	34.8	30.4	90.17	1,035.9	-2,814.5	2,872.9	2,811.8	61.11	47.011	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD RYLAND 43-20D - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 599-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,400.0	7,176.4	7,352.6	7,132.8	37.2	30.4	90.20	1,035.9	-2,814.5	2,797.3	2,733.8	63.45	44.084	
8,500.0	7,176.1	7,353.4	7,133.6	39.6	30.4	90.23	1,035.9	-2,814.6	2,723.3	2,657.4	65.86	41.351	
8,600.0	7,175.7	7,354.3	7,134.5	42.0	30.4	90.25	1,035.9	-2,814.6	2,651.0	2,582.7	68.31	38.806	
8,700.0	7,175.3	7,355.1	7,135.4	44.6	30.4	90.28	1,035.9	-2,814.6	2,580.5	2,509.7	70.81	36.443	
8,800.0	7,175.0	7,356.0	7,136.2	47.1	30.4	90.31	1,035.9	-2,814.6	2,512.1	2,438.7	73.34	34.252	
8,900.0	7,174.6	7,356.9	7,137.1	49.7	30.4	90.33	1,035.9	-2,814.6	2,445.8	2,369.9	75.90	32.223	
9,000.0	7,174.3	7,357.8	7,138.0	52.3	30.4	90.36	1,035.9	-2,814.6	2,381.9	2,303.4	78.49	30.346	
9,100.0	7,173.9	7,358.7	7,138.9	54.9	30.4	90.39	1,035.8	-2,814.6	2,320.5	2,239.4	81.10	28.613	
9,200.0	7,173.5	7,359.6	7,139.8	57.5	30.4	90.42	1,035.8	-2,814.6	2,261.9	2,178.2	83.73	27.015	
9,300.0	7,173.2	7,360.5	7,140.7	60.1	30.4	90.44	1,035.8	-2,814.6	2,206.3	2,119.9	86.37	25.544	
9,400.0	7,172.8	7,361.4	7,141.6	62.8	30.4	90.47	1,035.8	-2,814.6	2,153.8	2,064.8	89.03	24.192	
9,500.0	7,172.4	7,362.3	7,142.5	65.5	30.4	90.50	1,035.8	-2,814.7	2,104.9	2,013.2	91.70	22.953	
9,600.0	7,172.1	7,363.2	7,143.4	68.2	30.4	90.53	1,035.8	-2,814.7	2,059.6	1,965.2	94.38	21.821	
9,700.0	7,171.7	7,364.1	7,144.3	70.9	30.4	90.56	1,035.8	-2,814.7	2,018.2	1,921.2	97.08	20.790	
9,800.0	7,171.3	7,365.0	7,145.3	73.6	30.4	90.58	1,035.8	-2,814.7	1,981.1	1,881.3	99.78	19.855	
9,900.0	7,171.0	7,366.0	7,146.2	76.3	30.4	90.61	1,035.7	-2,814.7	1,948.4	1,845.9	102.49	19.011	
10,000.0	7,170.6	7,366.9	7,147.1	79.0	30.4	90.64	1,035.7	-2,814.7	1,920.3	1,815.1	105.20	18.254	
10,100.0	7,170.3	7,367.8	7,148.1	81.7	30.4	90.67	1,035.7	-2,814.7	1,897.1	1,789.2	107.92	17.578	
10,200.0	7,169.9	7,368.8	7,149.0	84.4	30.4	90.70	1,035.7	-2,814.7	1,878.9	1,768.3	110.65	16.981	
10,300.0	7,169.5	7,369.7	7,150.0	87.2	30.4	90.73	1,035.7	-2,814.8	1,865.9	1,752.6	113.38	16.457	
10,400.0	7,169.2	7,370.7	7,150.9	89.9	30.4	90.76	1,035.7	-2,814.8	1,858.3	1,742.1	116.12	16.003	
10,493.0	7,168.8	7,371.6	7,151.8	92.4	30.4	90.79	1,035.7	-2,814.8	1,855.9	1,737.3	118.67	15.639	CC
10,500.0	7,168.8	7,371.7	7,151.9	92.6	30.4	90.79	1,035.7	-2,814.8	1,855.9	1,737.1	118.86	15.614	ES
10,600.0	7,168.4	7,372.6	7,152.9	95.4	30.4	90.82	1,035.7	-2,814.8	1,859.0	1,737.4	121.61	15.287	
10,700.0	7,168.1	7,373.6	7,153.8	98.1	30.4	90.85	1,035.6	-2,814.8	1,867.4	1,743.1	124.35	15.017	
10,800.0	7,167.7	7,374.6	7,154.8	100.9	30.4	90.88	1,035.6	-2,814.8	1,881.1	1,754.0	127.11	14.800	
10,900.0	7,167.4	7,375.6	7,155.8	103.6	30.5	90.91	1,035.6	-2,814.8	1,900.0	1,770.2	129.86	14.631	
11,000.0	7,167.0	7,376.6	7,156.8	106.4	30.5	90.94	1,035.6	-2,814.8	1,923.9	1,791.3	132.62	14.507	
11,100.0	7,166.6	7,377.6	7,157.8	109.1	30.5	90.97	1,035.6	-2,814.9	1,952.6	1,817.3	135.38	14.424	
11,200.0	7,166.3	7,378.6	7,158.8	111.9	30.5	91.00	1,035.6	-2,814.9	1,986.0	1,847.9	138.14	14.377	
11,300.0	7,165.9	7,379.6	7,159.8	114.7	30.5	91.03	1,035.6	-2,814.9	2,023.8	1,882.9	140.91	14.363	SF
11,400.0	7,165.5	7,380.6	7,160.9	117.4	30.5	91.07	1,035.5	-2,814.9	2,065.7	1,922.0	143.67	14.378	
11,500.0	7,165.2	7,381.7	7,161.9	120.2	30.5	91.10	1,035.5	-2,814.9	2,111.5	1,965.0	146.44	14.419	
11,600.0	7,164.8	7,382.7	7,162.9	123.0	30.5	91.13	1,035.5	-2,814.9	2,161.0	2,011.7	149.21	14.483	
11,700.0	7,164.5	7,383.7	7,164.0	125.7	30.5	91.16	1,035.5	-2,814.9	2,213.8	2,061.9	151.98	14.567	
11,800.0	7,164.1	7,384.8	7,165.0	128.5	30.5	91.19	1,035.5	-2,815.0	2,269.9	2,115.2	154.75	14.668	
11,828.8	7,164.0	7,385.1	7,165.3	129.3	30.5	91.20	1,035.5	-2,815.0	2,286.6	2,131.1	155.55	14.700	

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

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD RYLAND 44-20D - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 599-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-88.33	115.8	-3,976.3	3,978.2				
100.0	100.0	48.9	48.9	0.1	0.1	-88.33	115.8	-3,976.3	3,978.0	3,977.9	0.15	N/A	
200.0	200.0	133.8	133.8	0.3	0.2	-88.33	116.1	-3,976.6	3,978.4	3,977.9	0.47	8,432.536	
300.0	300.0	218.8	218.8	0.5	0.3	-88.32	116.7	-3,977.3	3,979.2	3,978.4	0.79	5,026.317	
400.0	400.0	303.7	303.7	0.8	0.3	132.07	117.6	-3,978.3	3,981.5	3,980.4	1.09	3,636.526	
500.0	499.8	388.5	388.4	1.0	0.4	132.06	118.7	-3,979.5	3,986.6	3,985.2	1.40	2,851.906	
600.0	599.5	472.8	472.8	1.2	0.5	132.04	120.2	-3,981.1	3,994.3	3,992.6	1.73	2,308.763	
700.0	698.7	599.0	598.9	1.5	0.7	132.09	122.8	-3,984.0	4,005.1	4,002.9	2.15	1,865.413	
800.0	797.5	761.8	761.7	1.8	1.0	132.23	125.2	-3,985.0	4,016.3	4,013.6	2.73	1,470.699	
900.1	895.7	2,044.1	2,021.3	2.2	5.2	134.08	65.0	-3,795.5	4,011.6	4,005.6	6.00	668.477	
1,000.0	993.4	2,116.2	2,090.1	2.6	5.5	134.16	58.5	-3,775.0	3,996.8	3,990.2	6.55	610.459	
1,100.0	1,091.3	2,198.0	2,168.4	3.0	6.0	134.26	52.1	-3,752.1	3,982.5	3,975.4	7.12	559.209	
1,200.0	1,189.1	2,311.7	2,277.1	3.5	6.6	134.40	42.7	-3,720.3	3,968.3	3,960.5	7.81	508.384	
1,300.0	1,286.9	2,480.8	2,438.2	3.9	7.6	134.55	24.8	-3,672.0	3,953.5	3,944.8	8.69	454.868	
1,400.0	1,384.7	2,590.3	2,542.0	4.4	8.3	134.63	11.9	-3,639.4	3,937.1	3,927.7	9.42	418.067	
1,500.0	1,482.5	2,657.0	2,605.1	4.8	8.7	134.68	3.9	-3,619.5	3,920.9	3,910.9	10.00	392.070	
1,600.0	1,580.3	2,730.0	2,674.4	5.3	9.1	134.73	-4.7	-3,598.2	3,905.4	3,894.8	10.59	368.615	
1,700.0	1,678.1	2,800.2	2,741.3	5.7	9.5	134.78	-12.7	-3,578.5	3,890.8	3,879.6	11.18	347.992	
1,800.0	1,776.0	2,919.1	2,854.8	6.2	10.1	134.89	-25.0	-3,545.4	3,876.6	3,864.7	11.91	325.383	
1,900.0	1,873.8	2,997.1	2,929.2	6.6	10.6	134.98	-32.2	-3,523.3	3,862.0	3,849.5	12.52	308.385	
2,000.0	1,971.6	3,069.6	2,998.6	7.1	11.0	135.06	-39.0	-3,503.3	3,848.2	3,835.1	13.11	293.447	
2,100.0	2,069.4	3,210.7	3,133.7	7.6	11.8	135.22	-52.2	-3,464.6	3,834.8	3,820.8	13.91	275.643	
2,200.0	2,167.2	3,271.5	3,191.7	8.0	12.1	135.28	-58.5	-3,447.6	3,820.6	3,806.1	14.48	263.911	
2,300.0	2,265.0	3,312.0	3,230.5	8.5	12.4	135.32	-62.7	-3,436.7	3,807.6	3,792.7	14.98	254.179	
2,400.0	2,362.8	3,406.0	3,320.9	9.0	12.9	135.43	-71.0	-3,412.4	3,795.6	3,780.0	15.63	242.910	
2,500.0	2,460.6	3,569.7	3,478.1	9.4	13.8	135.62	-85.7	-3,369.2	3,783.3	3,766.8	16.48	229.504	
2,600.0	2,558.5	3,675.8	3,579.6	9.9	14.4	135.75	-95.2	-3,339.8	3,769.5	3,752.3	17.18	219.456	
2,700.0	2,656.3	3,896.9	3,789.9	10.3	15.8	135.98	-117.9	-3,275.3	3,753.9	3,735.7	18.24	205.754	
2,800.0	2,754.1	3,967.0	3,856.1	10.8	16.2	136.04	-125.9	-3,254.0	3,737.1	3,718.3	18.85	198.270	
2,900.0	2,851.9	4,027.2	3,913.3	11.3	16.6	136.10	-132.7	-3,236.1	3,721.3	3,701.9	19.41	191.694	
3,000.0	2,949.7	4,126.4	4,007.7	11.7	17.2	136.19	-143.4	-3,207.9	3,706.5	3,686.4	20.10	184.430	
3,100.0	3,047.5	4,234.1	4,110.1	12.2	17.8	136.31	-154.7	-3,176.4	3,691.1	3,670.3	20.81	177.397	
3,200.0	3,145.3	4,341.0	4,211.7	12.7	18.5	136.42	-165.6	-3,144.9	3,675.3	3,653.8	21.51	170.849	
3,300.0	3,243.2	4,409.4	4,276.7	13.1	18.9	136.50	-172.8	-3,124.8	3,659.9	3,637.8	22.10	165.627	
3,400.0	3,341.0	4,561.2	4,421.0	13.6	19.9	136.66	-188.2	-3,080.4	3,644.5	3,621.6	22.93	158.908	
3,500.0	3,438.8	4,665.0	4,519.5	14.1	20.5	136.79	-198.4	-3,049.4	3,628.5	3,604.8	23.63	153.577	
3,600.0	3,536.6	4,762.9	4,612.2	14.5	21.2	136.91	-208.0	-3,019.5	3,611.8	3,587.5	24.29	148.663	
3,700.0	3,634.4	4,843.2	4,688.5	15.0	21.7	137.01	-215.4	-2,995.6	3,595.9	3,571.0	24.91	144.371	
3,800.0	3,732.2	4,905.0	4,747.2	15.5	22.1	137.09	-221.2	-2,977.0	3,580.1	3,554.6	25.46	140.595	
3,900.0	3,830.0	4,972.4	4,811.4	15.9	22.5	137.18	-227.6	-2,957.4	3,565.2	3,539.2	26.03	136.946	
4,000.0	3,927.9	4,999.0	4,836.8	16.4	22.6	137.21	-230.1	-2,950.1	3,552.2	3,525.7	26.49	134.117	
4,100.0	4,025.7	5,054.3	4,890.0	16.9	22.9	137.29	-234.9	-2,935.7	3,540.6	3,513.6	27.01	131.099	
4,200.0	4,123.5	5,092.0	4,926.5	17.3	23.1	137.34	-238.0	-2,926.6	3,530.8	3,503.3	27.48	128.480	
4,300.0	4,221.3	5,130.7	4,964.0	17.8	23.3	137.40	-240.9	-2,917.9	3,522.7	3,494.8	27.95	126.044	
4,400.0	4,319.1	5,186.0	5,018.1	18.2	23.5	137.49	-244.7	-2,906.6	3,516.6	3,488.1	28.45	123.591	
4,500.0	4,416.9	5,235.2	5,066.3	18.7	23.7	137.57	-247.7	-2,897.2	3,511.7	3,482.8	28.94	121.357	
4,600.0	4,514.7	5,279.0	5,109.2	19.2	23.9	137.64	-250.4	-2,888.9	3,507.7	3,478.3	29.41	119.275	
4,700.0	4,612.6	5,373.0	5,201.5	19.6	24.3	137.80	-256.0	-2,872.3	3,504.9	3,474.9	29.98	116.894	
4,793.8	4,704.3	5,373.0	5,201.5	20.1	24.3	137.80	-256.0	-2,872.3	3,503.6	3,473.3	30.33	115.501	
4,800.0	4,710.4	5,373.0	5,201.5	20.1	24.3	137.80	-256.0	-2,872.3	3,503.6	3,473.3	30.36	115.413	
4,900.0	4,808.2	5,433.3	5,261.1	20.6	24.5	137.90	-259.4	-2,863.4	3,504.0	3,473.1	30.85	113.585	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD RYLAND 44-20D - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 599-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,000.0	4,906.0	5,466.0	5,293.4	21.0	24.6	137.96	-261.0	-2,859.2	3,506.2	3,474.9	31.29	112.069	
5,100.0	5,003.8	5,518.8	5,345.9	21.5	24.7	138.06	-263.4	-2,853.2	3,509.9	3,478.2	31.75	110.548	
5,200.0	5,101.6	5,560.0	5,386.8	22.0	24.8	138.13	-264.9	-2,849.1	3,515.3	3,483.1	32.19	109.193	
5,300.0	5,199.4	5,608.6	5,435.2	22.4	24.9	138.23	-266.5	-2,845.1	3,522.3	3,489.6	32.64	107.914	
5,400.0	5,297.3	5,653.0	5,479.5	22.9	25.0	138.32	-267.7	-2,842.0	3,530.8	3,497.7	33.08	106.739	
5,476.5	5,372.1	5,708.9	5,535.3	23.3	25.1	138.43	-269.0	-2,838.7	3,538.1	3,504.7	33.44	105.803	
5,500.0	5,395.1	5,725.6	5,552.0	23.3	25.2	138.49	-269.4	-2,837.8	3,540.4	3,506.9	33.52	105.620	
5,600.0	5,493.4	5,796.1	5,622.3	23.7	25.3	138.73	-270.8	-2,834.3	3,548.9	3,515.2	33.79	105.032	
5,700.0	5,592.3	5,865.6	5,691.8	23.9	25.4	138.92	-271.8	-2,831.3	3,555.7	3,521.7	34.03	104.494	
5,800.0	5,691.6	5,933.0	5,759.1	24.1	25.5	139.06	-272.4	-2,829.0	3,560.8	3,526.6	34.24	104.010	
5,900.0	5,791.3	5,998.7	5,824.8	24.3	25.6	139.16	-272.8	-2,827.3	3,564.2	3,529.7	34.41	103.583	
6,000.0	5,891.2	6,083.4	5,909.5	24.5	25.7	139.21	-273.3	-2,825.9	3,565.7	3,531.1	34.59	103.098	
6,076.6	5,967.8	6,163.1	5,989.2	24.6	25.8	-81.18	-273.8	-2,824.6	3,565.2	3,518.8	46.38	76.862	
6,100.0	5,991.2	6,188.6	6,014.7	24.6	25.8	-81.18	-273.8	-2,824.1	3,564.7	3,518.3	46.44	76.753	
6,200.0	6,091.2	6,267.3	6,093.4	24.7	25.9	-81.18	-273.9	-2,822.8	3,563.1	3,516.4	46.66	76.366	
6,300.0	6,191.2	6,348.7	6,174.8	24.8	26.0	-81.18	-273.7	-2,822.0	3,562.2	3,515.3	46.87	75.997	
6,400.0	6,291.2	6,439.0	6,265.1	24.9	26.1	-81.17	-273.5	-2,821.4	3,561.5	3,514.5	47.09	75.626	
6,500.0	6,391.2	6,528.3	6,354.3	25.0	26.2	-81.17	-273.2	-2,821.1	3,561.3	3,514.0	47.31	75.268	
6,571.6	6,462.8	6,599.9	6,426.0	25.1	26.3	-81.16	-272.9	-2,821.0	3,561.2	3,513.7	47.48	75.004	
6,600.0	6,491.2	6,634.9	6,461.0	25.1	26.3	8.85	-272.8	-2,820.9	3,560.6	3,524.6	35.96	99.001	
6,650.0	6,541.1	6,690.8	6,516.8	25.1	26.4	8.91	-272.7	-2,820.6	3,556.6	3,521.0	35.64	99.782	
6,700.0	6,590.5	6,731.2	6,557.3	25.1	26.4	9.02	-272.6	-2,820.4	3,549.3	3,514.2	35.13	101.028	
6,750.0	6,639.4	6,773.0	6,599.1	25.1	26.5	9.18	-272.6	-2,820.4	3,538.8	3,504.3	34.46	102.689	
6,800.0	6,687.4	6,817.5	6,643.6	25.0	26.5	9.40	-272.6	-2,820.4	3,524.9	3,491.3	33.64	104.783	
6,850.0	6,734.3	6,863.1	6,689.2	25.0	26.6	9.68	-272.8	-2,820.4	3,507.9	3,475.2	32.67	107.358	
6,900.0	6,779.8	6,912.0	6,738.0	24.9	26.6	10.05	-273.0	-2,820.5	3,487.6	3,456.0	31.58	110.439	
6,950.0	6,823.8	6,959.5	6,785.6	24.8	26.7	10.50	-273.1	-2,820.5	3,464.2	3,433.8	30.36	114.100	
7,000.0	6,866.1	7,000.1	6,826.1	24.7	26.7	11.04	-273.1	-2,820.4	3,437.8	3,408.7	29.03	118.412	
7,050.0	6,906.4	7,038.6	6,864.6	24.6	26.8	11.70	-273.2	-2,820.4	3,408.5	3,380.9	27.63	123.381	
7,100.0	6,944.6	7,077.9	6,904.0	24.5	26.8	12.51	-273.2	-2,820.4	3,376.6	3,350.5	26.18	128.963	
7,150.0	6,980.4	7,116.9	6,942.9	24.4	26.8	13.51	-273.2	-2,820.4	3,342.2	3,317.4	24.75	135.032	
7,200.0	7,013.6	7,152.6	6,978.7	24.3	26.9	14.74	-273.3	-2,820.3	3,305.3	3,281.9	23.40	141.272	
7,250.0	7,044.2	7,183.1	7,009.2	24.2	26.9	16.26	-273.4	-2,820.3	3,266.3	3,244.0	22.22	147.007	
7,300.0	7,072.0	7,210.8	7,036.8	24.1	26.9	18.18	-273.3	-2,820.2	3,225.2	3,203.9	21.36	150.974	
7,350.0	7,096.8	7,235.4	7,061.5	24.0	27.0	20.63	-273.3	-2,820.1	3,182.4	3,161.4	21.03	151.309	
7,400.0	7,118.5	7,256.6	7,082.7	23.9	27.0	23.85	-273.2	-2,820.1	3,138.0	3,116.5	21.50	145.949	
7,450.0	7,137.0	7,274.6	7,100.7	23.8	27.0	28.17	-273.1	-2,820.0	3,092.2	3,069.1	23.12	133.769	
7,500.0	7,152.2	7,289.4	7,115.4	23.8	27.0	34.15	-273.1	-2,820.0	3,045.3	3,019.1	26.28	115.898	
7,550.0	7,164.1	7,300.9	7,127.0	23.8	27.0	42.65	-273.1	-2,819.9	2,997.6	2,966.2	31.32	95.708	
7,600.0	7,172.5	7,309.1	7,135.1	23.8	27.1	54.89	-273.1	-2,819.9	2,949.1	2,910.9	38.17	77.257	
7,650.0	7,177.5	7,313.9	7,139.9	23.9	27.1	71.76	-273.0	-2,819.9	2,900.2	2,854.9	45.33	63.980	
7,699.2	7,179.0	7,315.2	7,141.3	24.1	27.1	91.58	-273.0	-2,819.9	2,852.0	2,802.7	49.21	57.956	
7,700.0	7,179.0	7,315.2	7,141.3	24.1	27.1	91.57	-273.0	-2,819.9	2,851.2	2,802.0	49.22	57.927	
7,800.0	7,178.6	7,314.7	7,140.8	24.9	27.1	91.52	-273.0	-2,819.9	2,753.1	2,702.4	50.75	54.244	
7,900.0	7,178.3	7,314.1	7,140.2	26.4	27.1	91.46	-273.0	-2,819.9	2,655.2	2,602.7	52.51	50.565	
8,000.0	7,177.9	7,313.6	7,139.6	28.2	27.1	91.40	-273.0	-2,819.9	2,557.4	2,503.0	54.44	46.981	
8,100.0	7,177.5	7,313.0	7,139.1	30.3	27.1	91.34	-273.0	-2,819.9	2,459.8	2,403.3	56.50	43.538	
8,200.0	7,177.2	7,312.5	7,138.5	32.5	27.1	91.28	-273.0	-2,819.9	2,362.4	2,303.8	58.67	40.264	
8,300.0	7,176.8	7,311.9	7,138.0	34.8	27.1	91.22	-273.0	-2,819.9	2,265.3	2,204.3	60.94	37.173	
8,400.0	7,176.4	7,311.3	7,137.4	37.2	27.1	91.16	-273.0	-2,819.9	2,168.4	2,105.1	63.28	34.268	
8,500.0	7,176.1	7,310.8	7,136.8	39.6	27.1	91.11	-273.0	-2,819.9	2,071.8	2,006.1	65.68	31.544	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD RYLAND 44-20D - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 599-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,600.0	7,175.7	7,310.2	7,136.3	42.0	27.1	91.05	-273.1	-2,819.9	1,975.5	1,907.4	68.13	28.996	
8,700.0	7,175.3	7,309.6	7,135.7	44.6	27.1	90.99	-273.1	-2,819.9	1,879.6	1,809.0	70.62	26.615	
8,800.0	7,175.0	7,309.1	7,135.1	47.1	27.1	90.93	-273.1	-2,819.9	1,784.2	1,711.0	73.15	24.391	
8,900.0	7,174.6	7,308.5	7,134.6	49.7	27.1	90.87	-273.1	-2,819.9	1,689.3	1,613.6	75.71	22.313	
9,000.0	7,174.3	7,307.9	7,134.0	52.3	27.1	90.81	-273.1	-2,819.9	1,595.0	1,516.7	78.29	20.372	
9,100.0	7,173.9	7,307.4	7,133.4	54.9	27.1	90.75	-273.1	-2,819.9	1,501.4	1,420.5	80.90	18.560	
9,200.0	7,173.5	7,306.8	7,132.9	57.5	27.1	90.69	-273.1	-2,819.9	1,408.8	1,325.3	83.52	16.867	
9,300.0	7,173.2	7,306.2	7,132.3	60.1	27.0	90.63	-273.1	-2,819.9	1,317.2	1,231.0	86.16	15.287	
9,400.0	7,172.8	7,305.6	7,131.7	62.8	27.0	90.57	-273.1	-2,819.9	1,226.9	1,138.1	88.82	13.814	
9,500.0	7,172.4	7,305.1	7,131.1	65.5	27.0	90.51	-273.1	-2,819.9	1,138.3	1,046.8	91.49	12.442	
9,600.0	7,172.1	7,304.5	7,130.5	68.2	27.0	90.44	-273.1	-2,819.9	1,051.7	957.5	94.16	11.169	
9,700.0	7,171.7	7,303.9	7,130.0	70.9	27.0	90.38	-273.1	-2,819.9	967.7	870.8	96.85	9.991	
9,800.0	7,171.3	7,303.3	7,129.4	73.6	27.0	90.32	-273.1	-2,819.9	887.0	787.5	99.55	8.910	
9,900.0	7,171.0	7,302.7	7,128.8	76.3	27.0	90.26	-273.1	-2,819.9	810.6	708.4	102.26	7.928	
10,000.0	7,170.6	7,302.1	7,128.2	79.0	27.0	90.20	-273.1	-2,819.9	739.9	635.0	104.97	7.049	
10,100.0	7,170.3	7,301.6	7,127.6	81.7	27.0	90.14	-273.1	-2,819.9	676.6	569.0	107.69	6.283	
10,200.0	7,169.9	7,301.0	7,127.0	84.4	27.0	90.08	-273.1	-2,819.9	623.0	512.6	110.41	5.643	
10,300.0	7,169.5	7,300.4	7,126.4	87.2	27.0	90.01	-273.1	-2,819.9	581.8	468.7	113.14	5.143	
10,400.0	7,169.2	7,299.8	7,125.8	89.9	27.0	89.95	-273.1	-2,819.9	555.8	439.9	115.88	4.796	
10,498.3	7,168.8	7,299.2	7,125.3	92.6	27.0	89.89	-273.1	-2,819.9	547.0	428.4	118.57	4.614	CC
10,500.0	7,168.8	7,299.2	7,125.3	92.6	27.0	89.89	-273.1	-2,819.9	547.0	428.4	118.61	4.612	ES
10,600.0	7,168.4	7,298.6	7,124.7	95.4	27.0	89.83	-273.1	-2,819.9	556.4	435.0	121.36	4.585	SF
10,700.0	7,168.1	7,298.0	7,124.1	98.1	27.0	89.76	-273.1	-2,819.9	583.0	458.9	124.10	4.698	
10,800.0	7,167.7	7,297.4	7,123.5	100.9	27.0	89.70	-273.1	-2,820.0	624.7	497.9	126.85	4.925	
10,900.0	7,167.4	7,296.8	7,122.9	103.6	27.0	89.64	-273.1	-2,820.0	678.7	549.1	129.60	5.237	
11,000.0	7,167.0	7,296.2	7,122.3	106.4	27.0	89.58	-273.1	-2,820.0	742.3	609.9	132.36	5.608	
11,100.0	7,166.6	7,295.6	7,121.7	109.1	27.0	89.51	-273.1	-2,820.0	813.2	678.1	135.11	6.019	
11,200.0	7,166.3	7,295.0	7,121.0	111.9	27.0	89.45	-273.1	-2,820.0	889.7	751.9	137.87	6.453	
11,300.0	7,165.9	7,294.4	7,120.4	114.7	27.0	89.38	-273.1	-2,820.0	970.6	829.9	140.63	6.901	
11,400.0	7,165.5	7,293.8	7,119.8	117.4	27.0	89.32	-273.1	-2,820.0	1,054.7	911.3	143.39	7.355	
11,500.0	7,165.2	7,293.1	7,119.2	120.2	27.0	89.26	-273.1	-2,820.0	1,141.3	995.2	146.16	7.809	
11,600.0	7,164.8	7,292.5	7,118.6	123.0	27.0	89.19	-273.1	-2,820.0	1,230.0	1,081.1	148.92	8.259	
11,700.0	7,164.5	7,291.9	7,118.0	125.7	27.0	89.13	-273.1	-2,820.0	1,320.3	1,168.7	151.69	8.704	
11,800.0	7,164.1	7,291.3	7,117.4	128.5	27.0	89.06	-273.1	-2,820.0	1,412.0	1,257.5	154.46	9.141	
11,828.8	7,164.0	7,291.1	7,117.2	129.3	27.0	89.05	-273.1	-2,820.0	1,438.6	1,283.3	155.26	9.266	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD WALTERS #21ODU - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 703-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	1.5	1.5	0.0	0.0	-42.55	593.8	-545.1	806.1				
100.0	100.0	102.8	102.8	0.1	0.1	-42.55	593.7	-545.0	806.0	805.8	0.20	3,949.474	
200.0	200.0	204.1	204.1	0.3	0.2	-42.56	593.5	-544.9	805.7	805.2	0.53	1,508.519	
300.0	300.0	305.5	305.5	0.5	0.3	-42.57	593.1	-544.8	805.3	804.4	0.86	931.904	
314.8	314.8	320.4	320.4	0.6	0.3	177.82	593.0	-544.8	805.3	804.4	0.91	884.677	CC, ES
400.0	400.0	406.8	406.8	0.8	0.4	177.81	592.5	-544.6	806.5	805.3	1.17	686.472	
500.0	499.8	508.0	508.0	1.0	0.5	177.80	591.7	-544.3	811.0	809.5	1.48	546.453	
600.0	599.5	609.0	609.0	1.2	0.6	177.79	590.8	-544.0	818.8	817.0	1.81	451.305	
700.0	698.7	709.3	709.3	1.5	0.7	177.79	589.7	-543.6	829.9	827.7	2.17	382.358	
800.0	797.5	804.2	804.1	1.8	0.9	177.91	590.1	-542.0	844.8	842.1	2.60	324.758	
900.1	895.7	907.6	907.5	2.2	1.2	178.31	593.0	-537.5	863.0	859.9	3.05	282.757	
1,000.0	993.4	1,005.9	1,005.2	2.6	1.4	178.95	598.0	-529.7	882.3	878.8	3.51	251.643	
1,100.0	1,091.3	1,087.4	1,086.1	3.0	1.6	179.62	604.4	-522.1	902.9	898.9	3.95	228.330	
1,200.0	1,189.1	1,170.0	1,167.7	3.5	1.8	-179.55	613.9	-513.1	925.4	920.9	4.45	208.105	
1,300.0	1,286.9	1,252.8	1,249.1	3.9	2.1	-178.60	625.8	-503.1	949.5	944.5	4.98	190.833	
1,400.0	1,384.7	1,350.9	1,345.2	4.4	2.5	-177.46	641.0	-490.6	974.4	968.9	5.58	174.646	
1,500.0	1,482.5	1,435.4	1,427.7	4.8	2.8	-176.45	655.0	-479.0	1,000.0	993.8	6.16	162.232	
1,600.0	1,580.3	1,523.9	1,513.7	5.3	3.2	-175.34	671.2	-465.9	1,026.7	1,019.9	6.80	150.999	
1,700.0	1,678.1	1,614.6	1,601.0	5.7	3.6	-174.09	689.9	-450.3	1,054.3	1,046.8	7.49	140.717	
1,800.0	1,776.0	1,720.3	1,701.9	6.2	4.2	-172.51	713.3	-428.9	1,082.1	1,073.8	8.30	130.331	
1,900.0	1,873.8	1,805.0	1,782.3	6.6	4.7	-171.22	732.4	-410.2	1,110.0	1,101.0	9.04	122.795	
2,000.0	1,971.6	1,899.7	1,872.0	7.1	5.2	-169.83	754.3	-389.3	1,139.0	1,129.2	9.81	116.052	
2,100.0	2,069.4	1,993.0	1,960.5	7.6	5.8	-168.55	775.4	-369.0	1,168.3	1,157.8	10.58	110.413	
2,200.0	2,167.2	2,090.1	2,052.6	8.0	6.3	-167.26	797.5	-347.3	1,198.0	1,186.6	11.40	105.094	
2,300.0	2,265.0	2,187.1	2,144.8	8.5	6.9	-166.05	818.9	-326.0	1,227.8	1,215.6	12.18	100.769	
2,400.0	2,362.8	2,270.7	2,224.4	9.0	7.3	-165.11	837.0	-308.6	1,258.1	1,245.2	12.88	97.656	
2,500.0	2,460.6	2,376.1	2,324.8	9.4	7.9	-163.95	860.2	-286.0	1,288.9	1,275.2	13.73	93.886	
2,600.0	2,558.5	2,474.0	2,418.1	9.9	8.5	-162.92	880.7	-264.7	1,319.0	1,304.5	14.53	90.793	
2,700.0	2,656.3	2,553.6	2,494.2	10.3	8.9	-162.14	897.4	-247.9	1,349.8	1,334.6	15.23	88.623	
2,800.0	2,754.1	2,632.1	2,568.8	10.8	9.4	-161.37	915.0	-231.1	1,382.1	1,366.1	15.94	86.686	
2,900.0	2,851.9	2,714.8	2,647.4	11.3	9.9	-160.61	934.1	-214.1	1,415.4	1,398.7	16.67	84.918	
3,000.0	2,949.7	2,798.4	2,727.0	11.7	10.3	-159.90	953.6	-197.7	1,449.6	1,432.2	17.38	83.426	
3,100.0	3,047.5	2,886.3	2,811.1	12.2	10.8	-159.26	974.0	-182.3	1,484.4	1,466.3	18.09	82.049	
3,200.0	3,145.3	3,018.5	2,937.3	12.7	11.6	-158.27	1,004.3	-157.0	1,519.0	1,499.9	19.04	79.759	
3,300.0	3,243.2	3,102.3	3,017.1	13.1	12.1	-157.62	1,022.5	-139.3	1,551.9	1,532.1	19.78	78.456	
3,400.0	3,341.0	3,184.6	3,095.4	13.6	12.5	-157.00	1,041.2	-121.9	1,585.9	1,565.3	20.51	77.312	
3,500.0	3,438.8	3,284.9	3,190.7	14.1	13.1	-156.27	1,064.1	-100.7	1,620.2	1,598.9	21.34	75.924	
3,600.0	3,536.6	3,389.8	3,290.2	14.5	13.8	-155.50	1,087.5	-77.0	1,654.0	1,631.8	22.21	74.483	
3,700.0	3,634.4	3,468.3	3,364.5	15.0	14.3	-154.93	1,105.1	-58.9	1,687.9	1,664.9	22.94	73.568	
3,800.0	3,732.2	3,562.9	3,453.8	15.5	14.9	-154.24	1,127.1	-36.8	1,722.7	1,698.9	23.78	72.441	
3,900.0	3,830.0	3,672.5	3,557.0	15.9	15.6	-153.44	1,152.0	-9.7	1,756.9	1,732.2	24.72	71.084	
4,000.0	3,927.9	3,748.2	3,628.2	16.4	16.1	-152.89	1,169.1	9.4	1,791.2	1,765.7	25.46	70.357	
4,100.0	4,025.7	3,811.0	3,687.3	16.9	16.5	-152.46	1,184.0	24.9	1,826.8	1,800.7	26.14	69.893	
4,200.0	4,123.5	3,871.0	3,743.0	17.3	16.9	-152.01	1,199.6	40.6	1,864.4	1,837.6	26.81	69.542	
4,300.0	4,221.3	3,934.9	3,802.1	17.8	17.3	-151.53	1,217.2	57.5	1,903.5	1,876.0	27.51	69.191	
4,400.0	4,319.1	4,002.7	3,864.9	18.2	17.8	-151.07	1,236.3	74.3	1,943.9	1,915.6	28.23	68.869	
4,500.0	4,416.9	4,099.9	3,954.9	18.7	18.5	-150.45	1,264.6	97.8	1,985.3	1,956.2	29.09	68.248	
4,600.0	4,514.7	4,296.8	4,139.9	19.2	19.8	-149.37	1,314.1	143.8	2,022.8	1,992.4	30.44	66.453	
4,700.0	4,612.6	4,388.1	4,225.7	19.6	20.4	-148.86	1,335.2	166.8	2,058.8	2,027.5	31.27	65.843	
4,800.0	4,710.4	4,485.6	4,317.1	20.1	21.0	-148.32	1,358.0	191.6	2,095.2	2,063.1	32.13	65.208	
4,900.0	4,808.2	4,565.0	4,392.2	20.6	21.5	-147.95	1,376.0	209.9	2,131.4	2,098.5	32.87	64.847	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD WALTERS #21ODU - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 703-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,000.0	4,906.0	4,639.9	4,463.1	21.0	22.0	-147.64	1,394.0	226.4	2,168.9	2,135.3	33.56	64.620	
5,100.0	5,003.8	4,913.8	4,726.0	21.5	23.4	-146.77	1,447.5	280.6	2,202.5	2,167.4	35.09	62.765	
5,200.0	5,101.6	4,994.8	4,804.5	22.0	23.8	-146.55	1,460.2	296.1	2,232.8	2,197.0	35.77	62.427	
5,300.0	5,199.4	5,140.1	4,945.9	22.4	24.5	-146.24	1,481.9	321.7	2,262.5	2,225.8	36.67	61.701	
5,400.0	5,297.3	5,286.9	5,090.2	22.9	25.0	-146.10	1,499.4	341.9	2,289.8	2,252.3	37.48	61.086	
5,476.5	5,372.1	5,394.0	5,196.1	23.3	25.3	-146.09	1,510.0	353.3	2,309.4	2,271.3	38.04	60.712	
5,500.0	5,395.1	5,426.8	5,228.8	23.3	25.4	-146.16	1,512.9	356.5	2,315.1	2,276.9	38.24	60.548	
5,600.0	5,493.4	5,577.9	5,378.9	23.7	25.8	-146.45	1,523.8	368.7	2,336.5	2,297.5	39.00	59.906	
5,700.0	5,592.3	5,707.1	5,507.8	23.9	26.1	-146.70	1,530.1	376.0	2,352.9	2,313.3	39.62	59.393	
5,800.0	5,691.6	5,804.9	5,605.4	24.1	26.3	-146.88	1,534.2	380.2	2,366.1	2,326.0	40.09	59.018	
5,900.0	5,791.3	5,900.3	5,700.6	24.3	26.4	-147.02	1,538.2	382.6	2,376.5	2,336.0	40.48	58.701	
6,000.0	5,891.2	6,032.5	5,832.8	24.5	26.6	-147.14	1,542.8	383.2	2,383.6	2,342.8	40.84	58.368	
6,076.6	5,967.8	6,123.9	5,924.2	24.6	26.7	-7.58	1,544.8	383.1	2,386.2	2,343.8	42.38	56.304	
6,100.0	5,991.2	6,157.4	5,957.6	24.6	26.7	-7.58	1,545.4	382.9	2,386.6	2,344.2	42.45	56.216	
6,200.0	6,091.2	6,273.8	6,074.0	24.7	26.8	-7.60	1,546.4	382.3	2,387.6	2,344.9	42.71	55.898	
6,300.0	6,191.2	6,377.4	6,177.7	24.8	26.9	-7.61	1,547.1	381.8	2,388.3	2,345.3	42.95	55.602	
6,400.0	6,291.2	6,485.1	6,285.4	24.9	27.1	-7.61	1,547.6	381.4	2,388.7	2,345.5	43.20	55.295	
6,500.0	6,391.2	6,582.6	6,382.8	25.0	27.1	-7.62	1,547.9	381.2	2,389.1	2,345.7	43.43	55.006	
6,571.6	6,462.8	6,660.8	6,461.0	25.1	27.2	-7.63	1,548.1	380.8	2,389.3	2,345.7	43.61	54.786	
6,600.0	6,491.2	6,690.9	6,491.1	25.1	27.3	82.39	1,548.1	380.5	2,389.3	2,346.9	42.37	56.393	
6,650.0	6,541.1	6,743.4	6,543.6	25.1	27.3	82.51	1,548.0	380.2	2,388.8	2,346.3	42.45	56.275	
6,700.0	6,590.5	6,796.3	6,596.5	25.1	27.3	82.76	1,547.9	379.8	2,387.8	2,345.3	42.49	56.190	
6,750.0	6,639.4	6,848.9	6,649.1	25.1	27.4	83.13	1,547.7	379.4	2,386.3	2,343.8	42.51	56.136	
6,800.0	6,687.4	6,896.5	6,696.7	25.0	27.4	83.59	1,547.5	378.9	2,384.5	2,342.0	42.49	56.116	
6,850.0	6,734.3	6,942.8	6,743.0	25.0	27.5	84.13	1,547.3	378.5	2,382.3	2,339.9	42.45	56.120	
6,900.0	6,779.8	6,988.4	6,788.6	24.9	27.5	84.76	1,547.1	378.0	2,380.0	2,337.6	42.39	56.140	
6,950.0	6,823.8	7,032.5	6,832.7	24.8	27.6	85.45	1,546.9	377.6	2,377.5	2,335.2	42.32	56.173	
7,000.0	6,866.1	7,077.2	6,877.4	24.7	27.6	86.21	1,546.8	377.2	2,375.0	2,332.7	42.26	56.205	
7,050.0	6,906.4	7,120.2	6,920.4	24.6	27.6	87.01	1,546.5	376.9	2,372.5	2,330.4	42.19	56.231	
7,100.0	6,944.6	7,157.9	6,958.1	24.5	27.7	87.78	1,546.3	376.6	2,370.3	2,328.1	42.14	56.247	
7,150.0	6,980.4	7,192.2	6,992.4	24.4	27.7	88.51	1,546.1	376.4	2,368.4	2,326.3	42.11	56.240	
7,200.0	7,013.6	7,226.0	7,026.2	24.3	27.7	89.23	1,546.0	376.2	2,367.0	2,324.8	42.12	56.196	
7,250.0	7,044.2	7,254.4	7,054.6	24.2	27.8	89.84	1,545.9	376.1	2,366.1	2,323.9	42.17	56.104	
7,285.7	7,064.3	7,274.3	7,074.5	24.1	27.8	90.25	1,545.8	376.0	2,365.9	2,323.7	42.25	55.993	
7,300.0	7,072.0	7,281.9	7,082.1	24.1	27.8	90.40	1,545.8	376.0	2,366.0	2,323.7	42.29	55.952	
7,350.0	7,096.8	7,306.3	7,106.5	24.0	27.8	90.86	1,545.7	376.0	2,366.6	2,324.1	42.47	55.730	
7,400.0	7,118.5	7,327.5	7,127.6	23.9	27.8	91.20	1,545.6	376.0	2,368.1	2,325.4	42.72	55.431	
7,450.0	7,137.0	7,345.4	7,145.6	23.8	27.8	91.41	1,545.6	376.0	2,370.6	2,327.5	43.06	55.052	
7,500.0	7,152.2	7,360.1	7,160.3	23.8	27.9	91.47	1,545.5	376.1	2,374.1	2,330.6	43.48	54.598	
7,550.0	7,164.1	7,371.6	7,171.7	23.8	27.9	91.37	1,545.5	376.1	2,378.6	2,334.6	43.99	54.076	
7,600.0	7,172.5	7,379.7	7,179.9	23.8	27.9	91.11	1,545.5	376.1	2,384.3	2,339.7	44.56	53.503	
7,650.0	7,177.5	7,384.4	7,184.6	23.9	27.9	90.68	1,545.4	376.1	2,391.0	2,345.8	45.20	52.897	
7,699.2	7,179.0	7,385.8	7,186.0	24.1	27.9	90.10	1,545.4	376.1	2,398.6	2,352.8	45.87	52.292	
7,700.0	7,179.0	7,385.8	7,186.0	24.1	27.9	90.10	1,545.4	376.1	2,398.8	2,352.9	45.88	52.281	
7,800.0	7,178.6	7,385.2	7,185.4	24.9	27.9	90.08	1,545.4	376.1	2,417.4	2,369.9	47.42	50.981	
7,900.0	7,178.3	7,384.7	7,184.8	26.4	27.9	90.07	1,545.4	376.1	2,439.9	2,390.7	49.17	49.618	
8,000.0	7,177.9	7,384.1	7,184.3	28.2	27.9	90.06	1,545.4	376.1	2,466.3	2,415.2	51.10	48.262	
8,100.0	7,177.5	7,383.6	7,183.7	30.3	27.9	90.04	1,545.4	376.1	2,496.5	2,443.3	53.17	46.954	
8,200.0	7,177.2	7,383.0	7,183.2	32.5	27.9	90.03	1,545.4	376.1	2,530.2	2,474.8	55.35	45.716	
8,300.0	7,176.8	7,382.5	7,182.7	34.8	27.9	90.02	1,545.4	376.1	2,567.4	2,509.8	57.61	44.562	
8,400.0	7,176.4	7,381.9	7,182.1	37.2	27.9	90.00	1,545.5	376.1	2,607.9	2,547.9	59.96	43.497	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD WALTERS #21ODU - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 703-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,500.0	7,176.1	7,381.4	7,181.6	39.6	27.9	89.99	1,545.5	376.1	2,651.5	2,589.2	62.36	42.521	
8,600.0	7,175.7	7,380.8	7,181.0	42.0	27.9	89.98	1,545.5	376.1	2,698.2	2,633.4	64.81	41.631	
8,700.0	7,175.3	7,380.3	7,180.5	44.6	27.9	89.97	1,545.5	376.1	2,747.7	2,680.4	67.31	40.824	
8,800.0	7,175.0	7,379.8	7,180.0	47.1	27.9	89.95	1,545.5	376.1	2,799.9	2,730.0	69.84	40.092	
8,900.0	7,174.6	7,379.2	7,179.4	49.7	27.9	89.94	1,545.5	376.1	2,854.6	2,782.2	72.40	39.430	
9,000.0	7,174.3	7,378.7	7,178.9	52.3	27.9	89.93	1,545.5	376.1	2,911.8	2,836.8	74.98	38.832	
9,100.0	7,173.9	7,378.2	7,178.4	54.9	27.9	89.91	1,545.5	376.1	2,971.2	2,893.6	77.59	38.293	
9,200.0	7,173.5	7,377.7	7,177.9	57.5	27.9	89.90	1,545.5	376.1	3,032.7	2,952.5	80.22	37.807	
9,300.0	7,173.2	7,377.1	7,177.3	60.1	27.9	89.89	1,545.5	376.1	3,096.3	3,013.4	82.86	37.368	
9,400.0	7,172.8	7,376.6	7,176.8	62.8	27.9	89.88	1,545.5	376.1	3,161.7	3,076.2	85.52	36.972	
9,500.0	7,172.4	7,376.1	7,176.3	65.5	27.9	89.86	1,545.5	376.1	3,228.9	3,140.8	88.19	36.615	
9,600.0	7,172.1	7,375.6	7,175.8	68.2	27.9	89.85	1,545.5	376.1	3,297.8	3,207.0	90.87	36.292	
9,700.0	7,171.7	7,375.1	7,175.3	70.9	27.9	89.84	1,545.5	376.1	3,368.3	3,274.7	93.56	36.001	
9,800.0	7,171.3	7,374.5	7,174.7	73.6	27.9	89.83	1,545.5	376.1	3,440.2	3,343.9	96.26	35.738	
9,900.0	7,171.0	7,374.0	7,174.2	76.3	27.9	89.81	1,545.5	376.1	3,513.4	3,414.5	98.97	35.501	
10,000.0	7,170.6	7,373.5	7,173.7	79.0	27.9	89.80	1,545.5	376.1	3,588.0	3,486.3	101.68	35.287	
10,100.0	7,170.3	7,373.0	7,173.2	81.7	27.9	89.79	1,545.5	376.1	3,663.8	3,559.4	104.40	35.093	
10,200.0	7,169.9	7,372.5	7,172.7	84.4	27.9	89.78	1,545.5	376.1	3,740.7	3,633.6	107.13	34.918	
10,300.0	7,169.5	7,372.0	7,172.2	87.2	27.9	89.76	1,545.5	376.1	3,818.7	3,708.8	109.86	34.759	
10,400.0	7,169.2	7,371.5	7,171.7	89.9	27.9	89.75	1,545.5	376.1	3,897.7	3,785.1	112.60	34.616	
10,500.0	7,168.8	7,371.0	7,171.2	92.6	27.9	89.74	1,545.5	376.1	3,977.6	3,862.3	115.34	34.487	
10,600.0	7,168.4	7,370.5	7,170.7	95.4	27.9	89.73	1,545.5	376.1	4,058.5	3,940.4	118.08	34.370	
10,700.0	7,168.1	7,370.0	7,170.2	98.1	27.9	89.72	1,545.5	376.1	4,140.1	4,019.3	120.83	34.264	
10,800.0	7,167.7	7,369.5	7,169.7	100.9	27.9	89.70	1,545.5	376.1	4,222.6	4,099.0	123.58	34.168	
10,900.0	7,167.4	7,369.0	7,169.2	103.6	27.9	89.69	1,545.5	376.1	4,305.8	4,179.4	126.34	34.082	
11,000.0	7,167.0	7,368.5	7,168.7	106.4	27.9	89.68	1,545.5	376.1	4,389.7	4,260.6	129.09	34.004	
11,100.0	7,166.6	7,368.0	7,168.2	109.1	27.9	89.67	1,545.5	376.1	4,474.2	4,342.4	131.85	33.933	
11,200.0	7,166.3	7,367.5	7,167.7	111.9	27.9	89.66	1,545.5	376.1	4,559.4	4,424.8	134.62	33.870	
11,300.0	7,165.9	7,367.1	7,167.2	114.7	27.9	89.65	1,545.5	376.1	4,645.2	4,507.8	137.38	33.813	
11,400.0	7,165.5	7,366.6	7,166.8	117.4	27.9	89.63	1,545.5	376.1	4,731.5	4,591.4	140.15	33.761	
11,500.0	7,165.2	7,366.1	7,166.3	120.2	27.9	89.62	1,545.5	376.1	4,818.4	4,675.5	142.92	33.715	
11,600.0	7,164.8	7,365.6	7,165.8	123.0	27.9	89.61	1,545.5	376.1	4,905.8	4,760.1	145.69	33.673	
11,700.0	7,164.5	7,365.1	7,165.3	125.7	27.9	89.60	1,545.5	376.1	4,993.6	4,845.1	148.46	33.636	
11,800.0	7,164.1	7,364.6	7,164.8	128.5	27.9	89.59	1,545.5	376.1	5,081.9	4,930.7	151.23	33.603	
11,828.8	7,164.0	7,364.5	7,164.7	129.3	27.9	89.58	1,545.5	376.1	5,107.4	4,955.4	152.03	33.595	SF

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD WALTERS 21LDU - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 703-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-53.93	436.1	-598.6	740.6				
100.0	100.0	100.1	100.1	0.1	0.1	-53.94	436.0	-598.8	740.7	740.5	0.20	3,634.232	
200.0	200.0	198.7	198.7	0.3	0.2	-53.98	435.8	-599.3	741.0	740.5	0.53	1,388.646	
300.0	300.0	297.4	297.4	0.5	0.3	-54.04	435.4	-600.1	741.5	740.6	0.86	858.768	
400.0	400.0	395.9	395.9	0.8	0.4	166.29	434.9	-601.3	743.8	742.6	1.18	632.772	
500.0	499.8	494.4	494.4	1.0	0.5	166.25	434.2	-602.8	749.7	748.2	1.49	503.890	
600.0	599.5	592.5	592.5	1.2	0.6	166.23	433.4	-604.6	759.2	757.4	1.82	416.531	
700.0	698.7	690.3	690.2	1.5	0.7	166.23	432.5	-606.8	772.3	770.1	2.18	354.266	
800.0	797.5	814.0	813.8	1.8	1.0	166.14	428.3	-609.4	787.2	784.5	2.67	294.862	
900.1	895.7	930.1	929.4	2.2	1.3	165.71	418.4	-613.0	803.4	800.2	3.19	251.486	
1,000.0	993.4	1,064.0	1,061.9	2.6	1.7	164.96	399.1	-616.1	817.1	813.3	3.82	213.907	
1,100.0	1,091.3	1,166.7	1,162.6	3.0	2.1	164.08	379.4	-619.2	828.8	824.4	4.45	186.177	
1,200.0	1,189.1	1,287.4	1,279.7	3.5	2.6	162.72	350.7	-624.3	839.1	833.9	5.25	159.713	
1,300.0	1,286.9	1,401.4	1,389.3	3.9	3.2	161.23	319.7	-629.2	848.1	842.0	6.11	138.925	
1,400.0	1,384.7	1,505.1	1,488.3	4.4	3.8	159.80	288.9	-632.5	855.3	848.4	6.95	123.012	
1,500.0	1,482.5	1,596.4	1,574.8	4.8	4.3	158.40	260.2	-637.2	863.7	855.9	7.79	110.832	
1,600.0	1,580.3	1,708.7	1,680.9	5.3	5.0	156.66	223.9	-643.1	872.6	863.8	8.78	99.416	
1,700.0	1,678.1	1,799.2	1,766.4	5.7	5.5	155.30	194.4	-646.7	880.7	871.1	9.63	91.450	
1,800.0	1,776.0	1,909.4	1,870.4	6.2	6.1	153.64	158.3	-651.7	889.9	879.3	10.62	83.770	
1,900.0	1,873.8	1,997.2	1,953.3	6.6	6.6	152.39	129.8	-654.8	898.9	887.4	11.48	78.321	
2,000.0	1,971.6	2,109.5	2,059.4	7.1	7.3	150.80	93.0	-658.7	908.2	895.7	12.52	72.564	
2,100.0	2,069.4	2,194.0	2,139.2	7.6	7.8	149.63	65.4	-661.7	918.1	904.7	13.38	68.602	
2,200.0	2,167.2	2,289.2	2,229.2	8.0	8.3	148.35	34.7	-665.7	929.4	915.0	14.33	64.869	
2,300.0	2,265.0	2,381.0	2,315.8	8.5	8.9	147.10	4.3	-669.6	940.9	925.6	15.30	61.493	
2,400.0	2,362.8	2,461.5	2,391.4	9.0	9.4	145.97	-22.9	-674.1	954.0	937.8	16.23	58.780	
2,500.0	2,460.6	2,562.7	2,486.1	9.4	10.1	144.52	-57.9	-681.3	968.8	951.5	17.33	55.894	
2,600.0	2,558.5	2,666.7	2,583.1	9.9	10.8	143.02	-94.8	-687.9	983.3	964.8	18.47	53.228	
2,700.0	2,656.3	2,772.0	2,681.3	10.3	11.5	141.54	-132.5	-693.7	997.4	977.8	19.61	50.866	
2,800.0	2,754.1	2,863.7	2,767.3	10.8	12.0	140.39	-163.8	-698.2	1,011.9	991.3	20.60	49.114	
2,900.0	2,851.9	2,951.5	2,849.8	11.3	12.5	139.33	-193.4	-703.2	1,027.6	1,006.0	21.58	47.623	
3,000.0	2,949.7	3,050.4	2,942.5	11.7	13.2	138.12	-227.4	-709.1	1,043.9	1,021.3	22.68	46.033	
3,100.0	3,047.5	3,146.5	3,032.7	12.2	13.8	137.00	-260.1	-714.8	1,060.7	1,037.0	23.71	44.734	
3,200.0	3,145.3	3,249.3	3,129.9	12.7	14.4	135.98	-292.8	-720.1	1,077.4	1,052.6	24.74	43.551	
3,300.0	3,243.2	3,339.8	3,215.7	13.1	14.9	135.11	-321.5	-724.9	1,094.4	1,068.7	25.70	42.583	
3,400.0	3,341.0	3,435.6	3,306.8	13.6	15.4	134.28	-350.6	-730.5	1,112.4	1,085.7	26.68	41.700	
3,500.0	3,438.8	3,545.8	3,412.0	14.1	16.0	133.43	-382.9	-735.6	1,129.5	1,101.8	27.70	40.770	
3,600.0	3,536.6	3,637.1	3,499.3	14.5	16.5	132.76	-409.4	-739.8	1,146.8	1,118.1	28.63	40.055	
3,700.0	3,634.4	3,724.6	3,582.9	15.0	17.0	132.14	-434.6	-744.5	1,164.9	1,135.4	29.53	39.444	
3,800.0	3,732.2	3,810.8	3,665.3	15.5	17.5	131.55	-459.5	-749.8	1,184.1	1,153.6	30.44	38.900	
3,900.0	3,830.0	3,899.0	3,749.1	15.9	18.0	130.88	-486.3	-756.2	1,204.4	1,173.0	31.38	38.383	
4,000.0	3,927.9	4,007.3	3,851.8	16.4	18.7	130.07	-519.7	-763.8	1,224.8	1,192.3	32.44	37.750	
4,100.0	4,025.7	4,109.6	3,948.9	16.9	19.2	129.32	-551.4	-770.0	1,244.3	1,210.8	33.46	37.186	
4,200.0	4,123.5	4,206.1	4,040.6	17.3	19.8	128.67	-580.9	-776.0	1,264.1	1,229.7	34.43	36.712	
4,300.0	4,221.3	4,296.8	4,126.9	17.8	20.3	128.09	-608.1	-781.6	1,284.1	1,248.8	35.36	36.320	
4,400.0	4,319.1	4,387.2	4,213.3	18.2	20.8	127.58	-634.0	-788.0	1,305.0	1,268.8	36.27	35.980	
4,500.0	4,416.9	4,490.2	4,311.5	18.7	21.4	127.00	-664.1	-795.2	1,326.1	1,288.8	37.27	35.580	
4,600.0	4,514.7	4,586.1	4,402.9	19.2	21.9	126.44	-692.8	-801.5	1,346.8	1,308.5	38.25	35.212	
4,700.0	4,612.6	4,697.7	4,508.8	19.6	22.6	125.78	-726.9	-808.6	1,367.6	1,328.3	39.31	34.788	
4,800.0	4,710.4	4,837.1	4,642.5	20.1	23.3	125.14	-765.7	-814.8	1,386.4	1,345.9	40.45	34.270	
4,900.0	4,808.2	4,954.1	4,755.7	20.6	23.9	124.74	-795.5	-816.9	1,402.3	1,360.8	41.45	33.833	
5,000.0	4,906.0	5,052.1	4,850.5	21.0	24.4	124.42	-820.0	-818.7	1,418.3	1,376.0	42.33	33.504	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD WALTERS 21LDU - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 703-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.0	5,003.8	5,156.4	4,952.3	21.5	24.8	124.23	-842.8	-820.7	1,434.1	1,390.9	43.19	33.203	
5,200.0	5,101.6	5,273.5	5,067.6	22.0	25.2	124.23	-863.3	-822.4	1,449.2	1,405.1	44.02	32.919	
5,300.0	5,199.4	5,373.9	5,166.9	22.4	25.5	124.34	-877.8	-823.4	1,463.4	1,418.7	44.74	32.711	
5,400.0	5,297.3	5,466.7	5,259.0	22.9	25.8	124.53	-889.2	-824.7	1,477.9	1,432.5	45.40	32.556	
5,476.5	5,372.1	5,543.2	5,335.1	23.3	26.0	124.75	-896.8	-826.1	1,489.1	1,443.2	45.88	32.455	
5,500.0	5,395.1	5,566.7	5,358.5	23.3	26.0	124.89	-898.7	-826.5	1,492.5	1,446.5	46.02	32.428	
5,600.0	5,493.4	5,668.9	5,460.5	23.7	26.2	125.46	-905.0	-828.6	1,505.6	1,459.1	46.52	32.366	
5,700.0	5,592.3	5,771.0	5,562.6	23.9	26.3	126.03	-907.1	-830.5	1,516.4	1,469.5	46.91	32.328	
5,800.0	5,691.6	5,867.6	5,659.1	24.1	26.4	126.51	-907.4	-832.7	1,525.4	1,478.2	47.21	32.309	
5,900.0	5,791.3	5,974.9	5,766.4	24.3	26.5	126.87	-907.4	-834.8	1,532.1	1,484.6	47.48	32.267	
6,000.0	5,891.2	6,080.9	5,872.4	24.5	26.6	127.08	-907.4	-836.4	1,536.3	1,488.6	47.71	32.197	
6,076.6	5,967.8	6,160.6	5,952.1	24.6	26.7	-93.26	-907.6	-837.3	1,537.8	1,503.2	34.60	44.443	
6,100.0	5,991.2	6,184.6	5,976.1	24.6	26.7	-93.26	-907.6	-837.6	1,538.1	1,503.4	34.67	44.362	
6,200.0	6,091.2	6,286.7	6,078.2	24.7	26.8	-93.27	-907.9	-838.6	1,539.1	1,504.1	34.96	44.021	
6,300.0	6,191.2	6,389.5	6,181.0	24.8	26.9	-93.29	-908.4	-839.5	1,539.9	1,504.7	35.26	43.677	
6,400.0	6,291.2	6,490.8	6,282.3	24.9	27.0	-93.30	-908.7	-840.2	1,540.7	1,505.1	35.55	43.337	
6,500.0	6,391.2	6,592.2	6,383.7	25.0	27.1	-93.30	-908.8	-840.8	1,541.3	1,505.4	35.85	42.996	
6,571.6	6,462.8	6,659.9	6,451.4	25.1	27.2	-93.30	-908.8	-841.3	1,541.8	1,505.7	36.05	42.764	
6,600.0	6,491.2	6,686.8	6,478.3	25.1	27.2	-3.30	-908.8	-841.5	1,541.5	1,492.5	48.93	31.504	
6,650.0	6,541.1	6,734.1	6,525.6	25.1	27.3	-3.32	-908.8	-842.0	1,538.2	1,489.5	48.76	31.549	
6,700.0	6,590.5	6,784.1	6,575.5	25.1	27.3	-3.37	-908.9	-842.5	1,531.6	1,483.3	48.37	31.662	
6,750.0	6,639.4	6,838.2	6,629.7	25.1	27.4	-3.46	-909.2	-843.0	1,521.5	1,473.7	47.78	31.840	
6,800.0	6,687.4	6,886.0	6,677.5	25.0	27.4	-3.57	-909.5	-843.3	1,507.8	1,460.8	46.98	32.094	
6,850.0	6,734.3	6,930.1	6,721.6	25.0	27.5	-3.71	-909.7	-843.7	1,490.9	1,444.9	45.97	32.430	
6,900.0	6,779.8	6,975.8	6,767.2	24.9	27.5	-3.88	-909.8	-844.1	1,470.9	1,426.1	44.78	32.848	
6,950.0	6,823.8	7,021.8	6,813.3	24.8	27.6	-4.10	-910.0	-844.5	1,447.6	1,404.2	43.41	33.350	
7,000.0	6,866.1	7,064.8	6,856.3	24.7	27.6	-4.37	-910.1	-844.9	1,421.3	1,379.5	41.87	33.946	
7,050.0	6,906.4	7,105.0	6,896.5	24.6	27.7	-4.69	-910.2	-845.2	1,392.1	1,352.0	40.19	34.643	
7,100.0	6,944.6	7,143.4	6,934.8	24.5	27.7	-5.09	-910.1	-845.5	1,360.2	1,321.8	38.38	35.444	
7,150.0	6,980.4	7,180.3	6,971.7	24.4	27.8	-5.58	-910.1	-845.8	1,325.7	1,289.2	36.47	36.346	
7,200.0	7,013.6	7,214.5	7,006.0	24.3	27.8	-6.20	-910.1	-846.1	1,288.7	1,254.2	34.51	37.342	
7,250.0	7,044.2	7,246.3	7,037.8	24.2	27.8	-6.99	-910.2	-846.3	1,249.5	1,216.9	32.53	38.404	
7,300.0	7,072.0	7,275.2	7,066.7	24.1	27.9	-8.02	-910.2	-846.5	1,208.2	1,177.6	30.61	39.474	
7,350.0	7,096.8	7,301.1	7,092.5	24.0	27.9	-9.37	-910.1	-846.6	1,165.0	1,136.2	28.82	40.430	
7,400.0	7,118.5	7,323.8	7,115.2	23.9	27.9	-11.22	-910.1	-846.7	1,120.2	1,092.9	27.29	41.046	
7,450.0	7,137.0	7,343.5	7,135.0	23.8	27.9	-13.86	-910.0	-846.8	1,074.0	1,047.8	26.25	40.918	
7,500.0	7,152.2	7,359.7	7,151.1	23.8	28.0	-17.82	-910.0	-846.8	1,026.6	1,000.6	26.03	39.439	
7,550.0	7,164.1	7,372.2	7,163.7	23.8	28.0	-24.22	-910.0	-846.9	978.3	951.0	27.26	35.888	
7,600.0	7,172.5	7,381.2	7,172.6	23.8	28.0	-35.56	-910.0	-846.9	929.2	898.3	30.96	30.010	
7,650.0	7,177.5	7,386.4	7,177.9	23.9	28.0	-57.17	-910.0	-846.9	879.8	842.2	37.59	23.404	
7,699.2	7,179.0	7,388.1	7,179.5	24.1	28.0	-91.31	-910.0	-846.9	830.8	790.6	40.27	20.633	
7,700.0	7,179.0	7,388.1	7,179.5	24.1	28.0	-91.31	-910.0	-846.9	830.1	789.8	40.28	20.608	
7,800.0	7,178.6	7,387.8	7,179.3	24.9	28.0	-91.15	-910.0	-846.9	730.7	688.9	41.83	17.469	
7,900.0	7,178.3	7,387.6	7,179.0	26.4	28.0	-90.99	-910.0	-846.9	631.6	588.0	43.61	14.485	
8,000.0	7,177.9	7,387.3	7,178.8	28.2	28.0	-90.84	-910.0	-846.9	532.8	487.3	45.55	11.697	
8,100.0	7,177.5	7,387.1	7,178.6	30.3	28.0	-90.68	-910.0	-846.9	434.6	387.0	47.63	9.124	
8,200.0	7,177.2	7,386.9	7,178.3	32.5	28.0	-90.53	-910.0	-846.9	337.4	287.6	49.83	6.771	
8,300.0	7,176.8	7,386.6	7,178.1	34.8	28.0	-90.38	-910.0	-846.9	242.5	190.4	52.11	4.653	
8,400.0	7,176.4	7,386.4	7,177.8	37.2	28.0	-90.23	-910.0	-846.9	154.1	99.7	54.47	2.830	
8,500.0	7,176.1	7,386.2	7,177.6	39.6	28.0	-90.08	-910.0	-846.9	93.4	36.5	56.89	1.641	
8,525.2	7,176.0	7,386.1	7,177.5	40.2	28.0	-90.04	-910.0	-846.9	89.9	32.4	57.51	1.563	CC, ES, SF

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

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD WALTERS 21LDU - Wellbore #1 - Wellbore #1

Survey Program: 703-MWD

Offset Site Error: 0.0 usft

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,600.0	7,175.7	7,385.9	7,177.4	42.0	28.0	-89.93	-910.0	-846.9	117.0	57.6	59.35	1.971	
8,700.0	7,175.3	7,385.7	7,177.1	44.6	28.0	-89.79	-910.0	-846.9	196.6	134.7	61.86	3.178	
8,800.0	7,175.0	7,385.5	7,176.9	47.1	28.0	-89.64	-910.0	-846.9	289.1	224.7	64.40	4.490	
8,900.0	7,174.6	7,385.2	7,176.7	49.7	28.0	-89.50	-910.0	-846.9	385.4	318.5	66.98	5.755	
9,000.0	7,174.3	7,385.0	7,176.5	52.3	28.0	-89.36	-910.0	-846.9	483.2	413.7	69.57	6.946	
9,100.0	7,173.9	7,384.8	7,176.3	54.9	28.0	-89.22	-910.0	-846.9	581.8	509.6	72.19	8.059	
9,200.0	7,173.5	7,384.6	7,176.0	57.5	28.0	-89.08	-910.0	-846.9	680.8	605.9	74.83	9.098	
9,300.0	7,173.2	7,384.4	7,175.8	60.1	28.0	-88.95	-910.0	-846.9	780.0	702.5	77.48	10.067	
9,400.0	7,172.8	7,384.2	7,175.6	62.8	28.0	-88.81	-910.0	-846.9	879.4	799.3	80.15	10.973	
9,500.0	7,172.4	7,384.0	7,175.4	65.5	28.0	-88.68	-910.0	-846.9	978.9	896.1	82.82	11.820	
9,600.0	7,172.1	7,383.7	7,175.2	68.2	28.0	-88.55	-910.0	-846.9	1,078.6	993.1	85.51	12.613	
9,700.0	7,171.7	7,383.5	7,175.0	70.9	28.0	-88.42	-910.0	-846.9	1,178.2	1,090.0	88.21	13.357	
9,800.0	7,171.3	7,383.3	7,174.8	73.6	28.0	-88.29	-910.0	-846.9	1,278.0	1,187.1	90.91	14.057	
9,900.0	7,171.0	7,383.1	7,174.6	76.3	28.0	-88.16	-910.0	-846.9	1,377.7	1,284.1	93.63	14.715	
10,000.0	7,170.6	7,382.9	7,174.4	79.0	28.0	-88.03	-910.0	-846.9	1,477.5	1,381.2	96.34	15.336	
10,100.0	7,170.3	7,382.7	7,174.2	81.7	28.0	-87.91	-910.0	-846.9	1,577.4	1,478.3	99.07	15.922	
10,200.0	7,169.9	7,382.5	7,174.0	84.4	28.0	-87.79	-910.0	-846.9	1,677.2	1,575.4	101.80	16.476	
10,300.0	7,169.5	7,382.3	7,173.8	87.2	28.0	-87.66	-910.0	-846.9	1,777.1	1,672.6	104.53	17.001	
10,400.0	7,169.2	7,382.2	7,173.6	89.9	28.0	-87.54	-910.0	-846.9	1,877.0	1,769.7	107.26	17.499	
10,500.0	7,168.8	7,382.0	7,173.4	92.6	28.0	-87.42	-910.0	-846.9	1,976.9	1,866.9	110.00	17.971	
10,600.0	7,168.4	7,381.8	7,173.2	95.4	28.0	-87.30	-910.0	-846.9	2,076.8	1,964.0	112.75	18.420	
10,700.0	7,168.1	7,381.6	7,173.0	98.1	28.0	-87.19	-910.0	-846.9	2,176.7	2,061.2	115.49	18.847	
10,800.0	7,167.7	7,381.4	7,172.9	100.9	28.0	-87.07	-910.0	-846.9	2,276.6	2,158.3	118.24	19.254	
10,900.0	7,167.4	7,381.2	7,172.7	103.6	28.0	-86.96	-910.0	-846.9	2,376.5	2,255.5	120.99	19.643	
11,000.0	7,167.0	7,381.0	7,172.5	106.4	28.0	-86.84	-910.0	-846.9	2,476.4	2,352.7	123.74	20.013	
11,100.0	7,166.6	7,380.9	7,172.3	109.1	28.0	-86.73	-910.0	-846.9	2,576.4	2,449.9	126.49	20.368	
11,200.0	7,166.3	7,380.7	7,172.1	111.9	28.0	-86.62	-910.0	-846.9	2,676.3	2,547.1	129.25	20.707	
11,300.0	7,165.9	7,380.5	7,172.0	114.7	28.0	-86.51	-910.0	-846.9	2,776.3	2,644.3	132.00	21.032	
11,400.0	7,165.5	7,380.3	7,171.8	117.4	28.0	-86.40	-910.0	-846.9	2,876.2	2,741.5	134.76	21.344	
11,500.0	7,165.2	7,380.1	7,171.6	120.2	28.0	-86.29	-910.0	-846.9	2,976.2	2,838.7	137.52	21.642	
11,600.0	7,164.8	7,380.0	7,171.4	123.0	28.0	-86.18	-910.0	-846.9	3,076.1	2,935.8	140.27	21.930	
11,700.0	7,164.5	7,379.8	7,171.3	125.7	28.0	-86.08	-910.0	-846.9	3,176.1	3,033.0	143.03	22.205	
11,800.0	7,164.1	7,379.6	7,171.1	128.5	28.0	-85.97	-910.0	-846.9	3,276.0	3,130.3	145.79	22.471	
11,828.8	7,164.0	7,379.6	7,171.0	129.3	28.0	-85.94	-910.0	-846.9	3,304.8	3,158.3	146.58	22.546	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD WALTERS 21QDU - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 148-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	1.5	1.5	0.0	0.0	-49.57	494.4	-580.2	762.3				
100.0	100.0	103.2	103.2	0.1	0.1	-49.60	494.0	-580.4	762.2	762.0	0.17	4,410.548	
200.0	200.0	204.9	204.8	0.3	0.2	-49.69	492.9	-580.9	761.8	761.3	0.56	1,366.287	
300.0	300.0	324.9	324.8	0.5	0.5	-49.80	490.7	-580.5	760.5	759.4	1.04	728.802	
400.0	400.0	475.1	474.7	0.8	0.9	170.63	484.2	-573.3	755.7	754.1	1.59	475.177	
500.0	499.8	614.5	613.0	1.0	1.3	170.79	473.6	-559.7	748.4	746.3	2.11	354.527	
600.0	599.5	734.1	731.0	1.2	1.7	170.86	460.0	-545.4	740.5	737.9	2.61	284.023	
700.0	698.7	857.1	851.7	1.5	2.2	170.63	440.9	-531.7	734.0	730.9	3.13	234.421	
800.0	797.5	1,003.3	993.4	1.8	2.9	170.20	411.3	-511.4	725.6	721.8	3.77	192.360	
900.1	895.7	1,147.5	1,130.5	2.2	3.7	169.67	374.8	-485.6	714.0	709.5	4.47	159.624	
1,000.0	993.4	1,254.7	1,231.0	2.6	4.5	169.11	343.8	-464.6	700.5	695.4	5.11	137.138	
1,100.0	1,091.3	1,356.6	1,326.3	3.0	5.1	168.64	314.9	-443.7	686.5	680.8	5.72	120.068	
1,200.0	1,189.1	1,439.8	1,404.7	3.5	5.6	168.33	292.4	-426.5	673.5	667.3	6.24	107.889	
1,300.0	1,286.9	1,539.4	1,498.7	3.9	6.2	167.94	266.3	-406.9	661.8	655.0	6.84	96.748	
1,400.0	1,384.7	1,649.3	1,601.9	4.4	6.9	167.34	235.5	-385.5	649.1	641.6	7.53	86.185	
1,500.0	1,482.5	1,749.2	1,695.6	4.8	7.6	166.68	206.3	-366.1	635.8	627.6	8.20	77.588	
1,600.0	1,580.3	1,862.1	1,800.7	5.3	8.3	165.95	172.8	-342.6	621.0	612.1	8.93	69.530	
1,700.0	1,678.1	1,958.5	1,890.3	5.7	9.0	165.42	144.6	-320.8	605.2	595.6	9.60	63.021	
1,800.0	1,776.0	2,054.4	1,979.8	6.2	9.6	164.84	117.0	-300.2	590.6	580.3	10.28	57.448	
1,900.0	1,873.8	2,156.7	2,074.9	6.6	10.4	164.00	85.7	-278.7	575.4	564.4	11.04	52.101	
2,000.0	1,971.6	2,251.9	2,163.3	7.1	11.1	163.19	56.6	-258.8	560.4	548.6	11.80	47.506	
2,100.0	2,069.4	2,348.6	2,253.5	7.6	11.7	162.41	28.1	-238.5	546.2	533.6	12.55	43.525	
2,200.0	2,167.2	2,455.8	2,353.2	8.0	12.5	161.47	-3.9	-215.8	531.6	518.2	13.39	39.689	
2,300.0	2,265.0	2,552.2	2,442.3	8.5	13.2	160.43	-34.3	-195.2	516.0	501.8	14.25	36.211	
2,400.0	2,362.8	2,671.9	2,551.6	9.0	14.1	158.56	-76.4	-170.3	499.3	483.8	15.42	32.378	
2,500.0	2,460.6	2,770.4	2,640.2	9.4	15.0	156.71	-113.3	-148.5	480.3	463.8	16.57	28.988	
2,600.0	2,558.5	2,861.2	2,722.1	9.9	15.7	154.90	-147.1	-128.7	462.4	444.7	17.69	26.139	
2,700.0	2,656.3	2,944.1	2,797.9	10.3	16.3	153.27	-176.3	-111.9	447.4	428.7	18.74	23.882	
2,800.0	2,754.1	3,055.4	2,899.7	10.8	17.2	151.04	-214.8	-89.0	432.8	412.7	20.12	21.510	
2,900.0	2,851.9	3,157.5	2,992.4	11.3	18.0	148.83	-250.9	-66.1	416.8	395.3	21.53	19.358	
3,000.0	2,949.7	3,251.2	3,078.2	11.7	18.7	147.05	-281.5	-43.7	400.9	378.2	22.79	17.596	
3,100.0	3,047.5	3,340.8	3,161.1	12.2	19.4	145.41	-309.1	-24.0	387.9	363.9	23.98	16.174	
3,200.0	3,145.3	3,441.9	3,254.8	12.7	20.1	143.50	-339.8	-1.9	375.6	350.3	25.34	14.821	
3,300.0	3,243.2	3,542.4	3,348.4	13.1	20.8	141.81	-368.4	21.2	363.1	336.4	26.66	13.619	
3,400.0	3,341.0	3,640.3	3,439.5	13.6	21.5	140.12	-396.0	44.0	350.5	322.6	27.98	12.531	
3,500.0	3,438.8	3,735.6	3,528.7	14.1	22.1	138.57	-421.5	65.9	339.0	309.8	29.24	11.593	
3,600.0	3,536.6	3,827.7	3,615.2	14.5	22.7	136.99	-446.0	85.7	329.2	298.7	30.51	10.790	
3,700.0	3,634.4	3,924.3	3,706.1	15.0	23.4	135.02	-472.7	104.4	321.8	289.9	31.96	10.069	
3,800.0	3,732.2	4,022.6	3,797.5	15.5	24.0	132.21	-503.7	123.3	314.7	281.0	33.72	9.332	
3,900.0	3,830.0	4,133.9	3,900.8	15.9	24.8	128.95	-538.4	145.7	307.5	271.8	35.70	8.613	
4,000.0	3,927.9	4,228.1	3,987.7	16.4	25.5	126.03	-567.7	167.3	298.3	260.8	37.49	7.957	
4,100.0	4,025.7	4,323.8	4,076.8	16.9	26.2	123.22	-596.1	187.3	291.8	252.6	39.21	7.443	
4,200.0	4,123.5	4,421.6	4,168.3	17.3	26.9	120.38	-624.6	207.3	286.6	245.6	40.93	7.001	
4,300.0	4,221.3	4,523.6	4,263.1	17.8	27.6	117.07	-655.3	228.6	281.8	239.0	42.79	6.585	
4,400.0	4,319.1	4,621.2	4,354.1	18.2	28.3	113.92	-684.1	249.4	277.5	232.9	44.52	6.232	
4,500.0	4,416.9	4,720.7	4,446.3	18.7	29.0	110.31	-714.7	271.0	273.9	227.6	46.31	5.915	
4,600.0	4,514.7	4,815.7	4,533.9	19.2	29.7	106.57	-745.1	291.5	272.2	224.2	48.01	5.668	
4,626.7	4,540.9	4,841.3	4,557.6	19.3	29.9	105.61	-753.1	296.8	272.1	223.7	48.44	5.617	
4,700.0	4,612.6	4,911.2	4,622.6	19.6	30.4	103.13	-774.7	310.6	272.6	223.1	49.53	5.505	
4,800.0	4,710.4	5,005.3	4,711.3	20.1	31.0	100.48	-801.7	326.7	275.6	224.8	50.81	5.424	
4,900.0	4,808.2	5,102.9	4,803.8	20.6	31.6	98.07	-829.2	341.6	280.4	228.4	52.01	5.391	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD WALTERS 21QDU - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 148-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,000.0	4,906.0	5,205.6	4,901.5	21.0	32.1	95.91	-856.7	357.1	285.1	231.9	53.13	5.365	
5,100.0	5,003.8	5,306.5	4,998.5	21.5	32.7	94.56	-880.5	371.0	289.3	235.1	54.14	5.344	
5,200.0	5,101.6	5,407.1	5,096.5	22.0	33.1	94.22	-900.2	382.3	293.2	238.2	55.04	5.328	
5,300.0	5,199.4	5,508.0	5,195.7	22.4	33.5	94.73	-916.3	391.3	297.0	241.1	55.88	5.315	
5,400.0	5,297.3	5,608.9	5,295.6	22.9	33.8	95.98	-928.9	398.5	300.4	243.7	56.63	5.304	
5,476.5	5,372.1	5,687.0	5,373.3	23.3	34.0	97.50	-936.1	402.6	302.8	245.7	57.12	5.301	
5,500.0	5,395.1	5,711.3	5,397.5	23.3	34.0	98.05	-937.8	403.7	303.4	246.2	57.24	5.301	
5,600.0	5,493.4	5,812.9	5,498.8	23.7	34.2	100.39	-942.6	407.7	305.5	248.0	57.57	5.307	
5,700.0	5,592.3	5,912.3	5,598.2	23.9	34.3	102.59	-944.5	410.3	307.1	249.3	57.75	5.317	
5,800.0	5,691.6	6,004.3	5,690.2	24.1	34.4	104.38	-945.1	411.0	309.3	251.5	57.84	5.348	
5,900.0	5,791.3	6,102.1	5,788.0	24.3	34.5	105.83	-945.6	409.7	312.8	254.9	57.89	5.404	
6,000.0	5,891.2	6,201.9	5,887.8	24.5	34.5	106.63	-946.4	408.4	315.6	257.6	57.98	5.444	
6,076.6	5,967.8	6,277.6	5,963.5	24.6	34.6	-113.60	-947.1	407.3	317.2	283.5	33.66	9.422	
6,100.0	5,991.2	6,300.9	5,986.7	24.6	34.6	-113.61	-947.3	406.9	317.6	283.9	33.73	9.417	
6,200.0	6,091.2	6,403.2	6,089.0	24.7	34.7	-113.64	-948.1	405.6	319.1	285.1	34.01	9.385	
6,300.0	6,191.2	6,504.0	6,189.9	24.8	34.8	-113.69	-948.7	404.8	320.1	285.8	34.28	9.337	
6,400.0	6,291.2	6,603.8	6,289.6	24.9	34.8	-113.77	-949.5	404.1	321.1	286.5	34.55	9.292	
6,500.0	6,391.2	6,705.0	6,390.8	25.0	34.9	-113.87	-950.3	403.6	321.8	287.0	34.83	9.241	
6,571.6	6,462.8	6,776.7	6,462.6	25.1	35.0	-113.94	-950.8	403.4	322.2	287.2	35.03	9.199	
6,600.0	6,491.2	6,805.1	6,491.0	25.1	35.0	-24.01	-951.0	403.3	321.9	262.8	59.06	5.450	
6,650.0	6,541.1	6,855.0	6,540.8	25.1	35.1	-24.43	-951.3	403.1	318.7	259.8	58.91	5.410	
6,700.0	6,590.5	6,903.8	6,589.7	25.1	35.1	-25.21	-951.6	402.9	312.5	253.9	58.61	5.332	
6,750.0	6,639.4	6,952.1	6,637.9	25.1	35.1	-26.42	-952.0	402.6	303.3	245.2	58.17	5.215	
6,800.0	6,687.4	7,000.2	6,686.0	25.0	35.2	-28.14	-952.4	402.3	291.3	233.7	57.61	5.056	
6,850.0	6,734.3	7,047.2	6,733.0	25.0	35.2	-30.47	-952.7	402.0	276.4	219.5	56.95	4.854	
6,900.0	6,779.8	7,092.8	6,778.6	24.9	35.3	-33.57	-953.1	401.7	259.0	202.8	56.21	4.609	
6,950.0	6,823.8	7,136.9	6,822.7	24.8	35.3	-37.64	-953.6	401.4	239.5	184.1	55.40	4.323	
7,000.0	6,866.1	7,179.3	6,865.1	24.7	35.3	-42.92	-954.0	401.1	218.3	163.8	54.50	4.006	
7,050.0	6,906.4	7,219.9	6,905.7	24.6	35.4	-49.67	-954.2	400.7	196.3	142.8	53.45	3.672	
7,100.0	6,944.6	7,258.4	6,944.2	24.5	35.4	-58.08	-954.4	400.3	174.5	122.4	52.10	3.350	
7,150.0	6,980.4	7,294.5	6,980.3	24.4	35.4	-68.05	-954.7	400.0	154.9	104.7	50.21	3.086	
7,200.0	7,013.6	7,328.0	7,013.8	24.3	35.5	-78.92	-954.9	399.7	140.6	92.9	47.67	2.949 SF	
7,249.7	7,044.0	7,358.9	7,044.7	24.2	35.5	-89.55	-955.2	399.6	135.1	90.4	44.69	3.022 CC, ES	
7,250.0	7,044.2	7,359.1	7,044.9	24.2	35.5	-89.62	-955.2	399.6	135.1	90.4	44.67	3.024	
7,300.0	7,072.0	7,387.3	7,073.1	24.1	35.5	-98.94	-955.3	399.4	141.3	99.6	41.73	3.386	
7,350.0	7,096.8	7,412.5	7,098.3	24.0	35.5	-106.18	-955.4	399.3	159.5	120.1	39.36	4.051	
7,400.0	7,118.5	7,434.2	7,120.0	23.9	35.6	-111.03	-955.5	399.2	187.2	149.3	37.93	4.936	
7,450.0	7,137.0	7,452.6	7,138.4	23.8	35.6	-113.63	-955.5	399.2	221.8	184.3	37.54	5.909	
7,500.0	7,152.2	7,467.7	7,153.5	23.8	35.6	-114.02	-955.6	399.1	261.2	222.9	38.24	6.830	
7,550.0	7,164.1	7,479.5	7,165.3	23.8	35.6	-112.09	-955.6	399.1	303.8	263.7	40.02	7.591	
7,600.0	7,172.5	7,487.8	7,173.6	23.8	35.6	-107.53	-955.7	399.1	348.5	305.8	42.71	8.160	
7,650.0	7,177.5	7,492.8	7,178.6	23.9	35.6	-99.91	-955.7	399.1	394.9	349.0	45.85	8.611	
7,699.2	7,179.0	7,494.3	7,180.1	24.1	35.6	-89.17	-955.7	399.1	441.4	393.1	48.32	9.135	
7,700.0	7,179.0	7,494.3	7,180.1	24.1	35.6	-89.17	-955.7	399.1	442.1	393.8	48.33	9.148	
7,800.0	7,178.6	7,494.0	7,179.8	24.9	35.6	-89.04	-955.7	399.1	538.2	488.3	49.87	10.790	
7,900.0	7,178.3	7,493.7	7,179.5	26.4	35.6	-88.91	-955.7	399.1	635.4	583.8	51.64	12.305	
8,000.0	7,177.9	7,493.4	7,179.2	28.2	35.6	-88.79	-955.7	399.1	733.4	679.9	53.58	13.689	
8,100.0	7,177.5	7,493.1	7,178.9	30.3	35.6	-88.67	-955.7	399.1	831.9	776.3	55.65	14.948	
8,200.0	7,177.2	7,492.8	7,178.6	32.5	35.6	-88.54	-955.7	399.1	930.7	872.9	57.84	16.092	
8,300.0	7,176.8	7,492.5	7,178.3	34.8	35.6	-88.42	-955.7	399.1	1,029.8	969.7	60.11	17.131	
8,400.0	7,176.4	7,492.2	7,178.0	37.2	35.6	-88.30	-955.7	399.1	1,129.0	1,066.5	62.46	18.075	

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

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD WALTERS 21QDU - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 148-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,500.0	7,176.1	7,491.9	7,177.7	39.6	35.6	-88.18	-955.7	399.1	1,228.3	1,163.4	64.87	18.935	
8,600.0	7,175.7	7,491.7	7,177.5	42.0	35.6	-88.07	-955.7	399.1	1,327.7	1,260.4	67.33	19.721	
8,700.0	7,175.3	7,491.4	7,177.2	44.6	35.6	-87.95	-955.7	399.1	1,427.3	1,357.4	69.83	20.440	
8,800.0	7,175.0	7,491.1	7,176.9	47.1	35.6	-87.84	-955.7	399.1	1,526.8	1,454.5	72.36	21.101	
8,900.0	7,174.6	7,490.8	7,176.6	49.7	35.6	-87.72	-955.7	399.1	1,626.5	1,551.5	74.92	21.709	
9,000.0	7,174.3	7,490.6	7,176.4	52.3	35.6	-87.61	-955.7	399.1	1,726.1	1,648.6	77.51	22.270	
9,100.0	7,173.9	7,490.3	7,176.1	54.9	35.6	-87.50	-955.7	399.1	1,825.8	1,745.7	80.12	22.789	
9,200.0	7,173.5	7,490.0	7,175.8	57.5	35.6	-87.39	-955.7	399.1	1,925.6	1,842.8	82.74	23.271	
9,300.0	7,173.2	7,489.8	7,175.6	60.1	35.6	-87.28	-955.7	399.1	2,025.3	1,940.0	85.39	23.720	
9,400.0	7,172.8	7,489.5	7,175.3	62.8	35.6	-87.17	-955.7	399.1	2,125.1	2,037.1	88.04	24.137	
9,500.0	7,172.4	7,489.3	7,175.1	65.5	35.6	-87.06	-955.7	399.1	2,224.9	2,134.2	90.71	24.528	
9,600.0	7,172.1	7,489.0	7,174.8	68.2	35.6	-86.96	-955.7	399.1	2,324.8	2,231.4	93.39	24.893	
9,700.0	7,171.7	7,488.8	7,174.5	70.9	35.6	-86.85	-955.7	399.1	2,424.6	2,328.5	96.08	25.236	
9,800.0	7,171.3	7,488.5	7,174.3	73.6	35.6	-86.75	-955.7	399.1	2,524.4	2,425.7	98.77	25.559	
9,900.0	7,171.0	7,488.3	7,174.1	76.3	35.6	-86.65	-955.7	399.1	2,624.3	2,522.8	101.47	25.862	
10,000.0	7,170.6	7,488.0	7,173.8	79.0	35.6	-86.54	-955.7	399.1	2,724.2	2,620.0	104.18	26.149	
10,100.0	7,170.3	7,487.8	7,173.6	81.7	35.6	-86.44	-955.7	399.1	2,824.0	2,717.2	106.89	26.419	
10,200.0	7,169.9	7,487.5	7,173.3	84.4	35.6	-86.34	-955.7	399.1	2,923.9	2,814.3	109.61	26.675	
10,300.0	7,169.5	7,487.3	7,173.1	87.2	35.6	-86.24	-955.7	399.1	3,023.8	2,911.5	112.33	26.918	
10,400.0	7,169.2	7,487.1	7,172.8	89.9	35.6	-86.15	-955.7	399.1	3,123.7	3,008.7	115.06	27.148	
10,500.0	7,168.8	7,486.8	7,172.6	92.6	35.6	-86.05	-955.7	399.1	3,223.6	3,105.9	117.79	27.367	
10,600.0	7,168.4	7,486.6	7,172.4	95.4	35.6	-85.95	-955.7	399.1	3,323.6	3,203.0	120.52	27.576	
10,700.0	7,168.1	7,486.4	7,172.2	98.1	35.6	-85.86	-955.7	399.1	3,423.5	3,300.2	123.26	27.774	
10,800.0	7,167.7	7,486.1	7,171.9	100.9	35.6	-85.76	-955.7	399.1	3,523.4	3,397.4	126.00	27.964	
10,900.0	7,167.4	7,485.9	7,171.7	103.6	35.6	-85.67	-955.7	399.1	3,623.3	3,494.6	128.74	28.145	
11,000.0	7,167.0	7,485.7	7,171.5	106.4	35.6	-85.58	-955.7	399.1	3,723.3	3,591.8	131.48	28.318	
11,100.0	7,166.6	7,485.5	7,171.3	109.1	35.6	-85.49	-955.7	399.1	3,823.2	3,689.0	134.22	28.484	
11,200.0	7,166.3	7,485.2	7,171.0	111.9	35.6	-85.39	-955.7	399.1	3,923.1	3,786.2	136.97	28.642	
11,300.0	7,165.9	7,485.0	7,170.8	114.7	35.6	-85.31	-955.7	399.1	4,023.1	3,883.4	139.72	28.795	
11,400.0	7,165.5	7,484.8	7,170.6	117.4	35.6	-85.22	-955.7	399.1	4,123.0	3,980.6	142.46	28.941	
11,500.0	7,165.2	7,484.6	7,170.4	120.2	35.6	-85.13	-955.7	399.1	4,223.0	4,077.8	145.21	29.081	
11,600.0	7,164.8	7,484.4	7,170.2	123.0	35.6	-85.04	-955.7	399.1	4,322.9	4,175.0	147.96	29.216	
11,700.0	7,164.5	7,484.2	7,170.0	125.7	35.6	-84.95	-955.7	399.1	4,422.9	4,272.2	150.71	29.346	
11,800.0	7,164.1	7,484.0	7,169.8	128.5	35.6	-84.87	-955.7	399.1	4,522.8	4,369.4	153.46	29.472	
11,828.8	7,164.0	7,483.9	7,169.7	129.3	35.6	-84.84	-955.7	399.1	4,551.6	4,397.4	154.25	29.507	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD WALTERS 23-21DU - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 704-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-45.21	555.2	-559.3	788.1				
100.0	100.0	100.5	100.5	0.1	0.1	-45.21	555.2	-559.4	788.1	787.9	0.20	3,906.045	
200.0	200.0	199.6	199.6	0.3	0.2	-45.21	555.3	-559.5	788.3	787.8	0.53	1,488.642	
300.0	300.0	298.6	298.6	0.5	0.3	-45.22	555.5	-559.8	788.6	787.8	0.86	919.852	ES
400.0	400.0	397.6	397.6	0.8	0.4	175.18	555.8	-560.1	790.8	789.6	1.17	677.568	
500.0	499.8	496.5	496.5	1.0	0.5	175.20	556.1	-560.6	796.5	795.1	1.48	539.205	
600.0	599.5	595.1	595.1	1.2	0.6	175.22	556.5	-561.1	805.9	804.1	1.81	445.454	
700.0	698.7	693.3	693.3	1.5	0.7	175.26	556.9	-561.7	818.8	816.7	2.16	378.700	
800.0	797.5	789.1	789.1	1.8	0.9	175.31	557.5	-562.5	835.4	832.8	2.60	320.911	
900.1	895.7	887.0	886.9	2.2	1.1	175.37	558.2	-563.5	855.6	852.6	3.05	280.262	
1,000.0	993.4	983.0	983.0	2.6	1.3	175.45	558.8	-564.7	877.6	874.1	3.49	251.759	
1,100.0	1,091.3	1,082.7	1,082.7	3.0	1.5	175.51	559.1	-566.2	899.6	895.7	3.93	228.880	
1,200.0	1,189.1	1,186.3	1,186.3	3.5	1.7	175.69	560.5	-565.9	921.1	916.7	4.37	210.560	
1,300.0	1,286.9	1,287.7	1,287.5	3.9	2.0	176.15	564.8	-561.9	942.1	937.3	4.82	195.384	
1,400.0	1,384.7	1,379.8	1,379.1	4.4	2.2	176.76	571.0	-555.7	963.0	957.8	5.27	182.658	
1,500.0	1,482.5	1,458.5	1,457.3	4.8	2.3	177.37	578.3	-549.9	985.5	979.8	5.72	172.344	
1,600.0	1,580.3	1,548.1	1,545.9	5.3	2.6	178.19	589.3	-542.1	1,009.4	1,003.2	6.21	162.429	
1,700.0	1,678.1	1,639.6	1,635.8	5.7	2.9	179.17	602.8	-532.1	1,034.0	1,027.2	6.74	153.381	
1,800.0	1,776.0	1,743.2	1,737.2	6.2	3.2	-179.65	619.3	-518.9	1,058.5	1,051.1	7.33	144.314	
1,900.0	1,873.8	1,823.0	1,814.9	6.6	3.5	-178.69	633.5	-507.7	1,084.0	1,076.1	7.88	137.545	
2,000.0	1,971.6	1,932.6	1,921.6	7.1	3.9	-177.41	653.2	-492.1	1,110.0	1,101.5	8.53	130.081	
2,100.0	2,069.4	2,034.5	2,020.8	7.6	4.3	-176.25	670.4	-476.2	1,134.7	1,125.5	9.18	123.642	
2,200.0	2,167.2	2,104.7	2,088.9	8.0	4.6	-175.45	683.3	-465.2	1,160.9	1,151.2	9.73	119.356	
2,300.0	2,265.0	2,206.3	2,187.4	8.5	5.1	-174.33	702.7	-449.5	1,188.2	1,177.8	10.40	114.221	
2,400.0	2,362.8	2,305.8	2,284.0	9.0	5.5	-173.28	721.1	-434.0	1,215.3	1,204.3	11.08	109.732	
2,500.0	2,460.6	2,401.9	2,377.1	9.4	5.9	-172.30	738.9	-418.4	1,242.5	1,230.8	11.76	105.645	
2,600.0	2,558.5	2,501.6	2,473.7	9.9	6.4	-171.30	757.4	-401.9	1,269.8	1,257.3	12.47	101.813	
2,700.0	2,656.3	2,599.5	2,568.1	10.3	6.9	-170.28	775.9	-383.7	1,296.8	1,283.6	13.20	98.266	
2,800.0	2,754.1	2,684.8	2,650.2	10.8	7.3	-169.41	792.5	-367.8	1,324.6	1,310.7	13.87	95.512	
2,900.0	2,851.9	2,775.9	2,738.2	11.3	7.7	-168.58	809.9	-352.1	1,353.0	1,338.5	14.54	93.046	
3,000.0	2,949.7	2,872.1	2,831.7	11.7	8.1	-167.82	827.3	-337.3	1,381.7	1,366.5	15.22	90.765	
3,100.0	3,047.5	2,966.7	2,923.5	12.2	8.6	-167.08	844.6	-322.3	1,410.6	1,394.7	15.91	88.662	
3,200.0	3,145.3	3,066.1	3,020.0	12.7	9.0	-166.35	862.4	-306.8	1,439.4	1,422.8	16.61	86.659	
3,300.0	3,243.2	3,158.2	3,109.9	13.1	9.4	-165.78	877.9	-294.0	1,468.3	1,451.0	17.26	85.069	
3,400.0	3,341.0	3,274.3	3,223.3	13.6	9.9	-165.11	897.4	-278.3	1,497.5	1,479.5	18.00	83.202	
3,500.0	3,438.8	3,411.8	3,358.2	14.1	10.5	-164.43	915.9	-259.8	1,523.7	1,504.9	18.80	81.067	
3,600.0	3,536.6	3,518.5	3,463.2	14.5	10.9	-163.94	928.8	-245.2	1,548.9	1,529.4	19.48	79.520	
3,700.0	3,634.4	3,640.3	3,582.7	15.0	11.3	-163.33	942.5	-226.0	1,572.5	1,552.2	20.24	77.687	
3,800.0	3,732.2	3,723.4	3,664.2	15.5	11.7	-162.93	951.6	-212.9	1,596.0	1,575.2	20.85	76.548	
3,900.0	3,830.0	3,793.6	3,733.2	15.9	11.9	-162.63	959.9	-203.0	1,621.0	1,599.6	21.40	75.738	
4,000.0	3,927.9	3,872.0	3,810.2	16.4	12.2	-162.31	970.4	-192.6	1,647.7	1,625.7	21.98	74.948	
4,100.0	4,025.7	3,933.4	3,870.3	16.9	12.5	-162.05	979.7	-184.4	1,675.9	1,653.4	22.52	74.433	
4,200.0	4,123.5	4,026.9	3,961.8	17.3	12.9	-161.64	994.8	-171.7	1,705.2	1,682.0	23.17	73.585	
4,300.0	4,221.3	4,141.7	4,074.2	17.8	13.3	-161.20	1,012.0	-157.0	1,733.8	1,709.9	23.89	72.560	
4,400.0	4,319.1	4,231.1	4,162.0	18.2	13.7	-160.89	1,024.8	-145.9	1,762.0	1,737.5	24.52	71.870	
4,500.0	4,416.9	4,334.2	4,263.2	18.7	14.1	-160.51	1,040.0	-132.4	1,790.4	1,765.2	25.20	71.044	
4,600.0	4,514.7	4,431.3	4,358.3	19.2	14.5	-160.17	1,053.9	-119.6	1,818.4	1,792.6	25.86	70.317	
4,700.0	4,612.6	4,554.6	4,479.7	19.6	15.0	-159.82	1,070.0	-104.8	1,845.8	1,819.2	26.58	69.439	
4,800.0	4,710.4	4,682.4	4,606.4	20.1	15.4	-159.65	1,082.9	-94.2	1,871.7	1,844.5	27.25	68.693	
4,900.0	4,808.2	4,802.8	4,726.2	20.6	15.7	-159.60	1,092.1	-86.6	1,896.1	1,868.3	27.84	68.106	
5,000.0	4,906.0	4,949.2	4,872.2	21.0	16.0	-159.67	1,099.4	-80.3	1,918.7	1,890.3	28.43	67.482	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD WALTERS 23-21DU - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 704-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.0	5,003.8	5,068.1	4,991.1	21.5	16.2	-159.83	1,101.8	-77.7	1,939.4	1,910.4	28.93	67.047	
5,200.0	5,101.6	5,170.8	5,093.8	22.0	16.3	-160.02	1,102.7	-76.9	1,959.5	1,930.1	29.36	66.730	
5,300.0	5,199.4	5,269.0	5,192.0	22.4	16.5	-160.20	1,103.4	-76.5	1,979.6	1,949.8	29.79	66.445	
5,400.0	5,297.3	5,366.9	5,289.9	22.9	16.6	-160.39	1,103.9	-76.3	1,999.6	1,969.4	30.22	66.172	
5,476.5	5,372.1	5,441.1	5,364.1	23.3	16.7	-160.54	1,104.3	-76.3	2,015.0	1,984.5	30.54	65.976	
5,500.0	5,395.1	5,463.8	5,386.8	23.3	16.7	-160.62	1,104.4	-76.3	2,019.6	1,989.0	30.66	65.871	
5,600.0	5,493.4	5,562.7	5,485.7	23.7	16.9	-160.91	1,104.8	-76.5	2,037.4	2,006.3	31.12	65.474	
5,700.0	5,592.3	5,671.7	5,594.7	23.9	17.0	-161.15	1,105.0	-76.8	2,051.7	2,020.1	31.54	65.040	
5,800.0	5,691.6	5,778.7	5,701.7	24.1	17.2	-161.34	1,104.6	-77.0	2,062.2	2,030.3	31.93	64.593	
5,900.0	5,791.3	5,882.5	5,805.5	24.3	17.3	-161.47	1,103.9	-77.3	2,069.2	2,036.9	32.26	64.144	
6,000.0	5,891.2	5,983.2	5,906.2	24.5	17.4	-161.55	1,103.1	-77.5	2,072.7	2,040.2	32.54	63.691	
6,076.6	5,967.8	6,058.9	5,981.9	24.6	17.5	-21.97	1,102.5	-77.7	2,073.2	2,035.5	37.70	54.992	
6,100.0	5,991.2	6,082.1	6,005.1	24.6	17.6	-21.97	1,102.3	-77.7	2,073.0	2,035.3	37.76	54.895	
6,200.0	6,091.2	6,178.2	6,101.2	24.7	17.7	-21.98	1,101.7	-77.9	2,072.5	2,034.5	38.03	54.502	
6,300.0	6,191.2	6,273.5	6,196.5	24.8	17.8	-22.00	1,101.3	-78.3	2,072.2	2,033.9	38.29	54.119	
6,400.0	6,291.2	6,370.4	6,293.4	24.9	18.0	-22.02	1,100.9	-78.8	2,072.1	2,033.6	38.56	53.734	
6,424.7	6,315.9	6,394.4	6,317.4	24.9	18.0	-22.02	1,100.9	-79.0	2,072.1	2,033.5	38.63	53.640	
6,500.0	6,391.2	6,467.8	6,390.7	25.0	18.1	-22.03	1,100.8	-79.3	2,072.2	2,033.3	38.84	53.354	
6,571.6	6,462.8	6,540.2	6,463.2	25.1	18.2	-22.04	1,100.8	-79.5	2,072.2	2,033.2	39.04	53.076	
6,600.0	6,491.2	6,569.2	6,492.2	25.1	18.2	67.99	1,100.7	-79.7	2,072.0	2,037.8	34.24	60.510	
6,650.0	6,541.1	6,620.1	6,543.1	25.1	18.3	68.18	1,100.6	-79.9	2,070.6	2,036.3	34.33	60.322	
6,700.0	6,590.5	6,670.6	6,593.6	25.1	18.4	68.56	1,100.5	-80.2	2,067.9	2,033.5	34.39	60.133	
6,750.0	6,639.4	6,720.6	6,643.6	25.1	18.4	69.13	1,100.3	-80.5	2,064.0	2,029.5	34.44	59.931	
6,800.0	6,687.4	6,769.7	6,692.7	25.0	18.5	69.87	1,100.1	-80.9	2,058.8	2,024.3	34.48	59.706	
6,850.0	6,734.3	6,817.7	6,740.7	25.0	18.6	70.77	1,099.8	-81.2	2,052.5	2,018.0	34.53	59.447	
6,900.0	6,779.8	6,864.1	6,787.1	24.9	18.7	71.83	1,099.6	-81.5	2,045.2	2,010.6	34.58	59.144	
6,950.0	6,823.8	6,908.4	6,831.3	24.8	18.7	73.02	1,099.4	-81.8	2,037.0	2,002.4	34.65	58.790	
7,000.0	6,866.1	6,950.8	6,873.8	24.7	18.8	74.33	1,099.1	-82.0	2,028.1	1,993.4	34.74	58.376	
7,050.0	6,906.4	6,991.3	6,914.3	24.6	18.8	75.74	1,098.9	-82.3	2,018.6	1,983.8	34.86	57.899	
7,100.0	6,944.6	7,029.7	6,952.6	24.5	18.9	77.22	1,098.7	-82.5	2,008.7	1,973.7	35.02	57.360	
7,150.0	6,980.4	7,066.2	6,989.2	24.4	18.9	78.76	1,098.6	-82.6	1,998.6	1,963.3	35.21	56.760	
7,200.0	7,013.6	7,100.3	7,023.2	24.3	19.0	80.31	1,098.4	-82.7	1,988.3	1,952.9	35.44	56.107	
7,250.0	7,044.2	7,131.5	7,054.5	24.2	19.0	81.85	1,098.2	-82.8	1,978.2	1,942.5	35.70	55.411	
7,300.0	7,072.0	7,159.8	7,082.8	24.1	19.1	83.34	1,098.1	-82.9	1,968.3	1,932.3	36.00	54.678	
7,350.0	7,096.8	7,185.0	7,108.0	24.0	19.1	84.74	1,098.0	-82.9	1,958.9	1,922.6	36.33	53.912	
7,400.0	7,118.5	7,207.0	7,130.0	23.9	19.1	86.04	1,097.8	-82.9	1,950.1	1,913.4	36.71	53.117	
7,450.0	7,137.0	7,225.7	7,148.6	23.8	19.2	87.20	1,097.8	-82.9	1,942.2	1,905.0	37.14	52.295	
7,500.0	7,152.2	7,240.8	7,163.8	23.8	19.2	88.20	1,097.7	-82.8	1,935.2	1,897.6	37.62	51.446	
7,550.0	7,164.1	7,252.6	7,175.6	23.8	19.2	89.02	1,097.6	-82.8	1,929.2	1,891.1	38.15	50.576	
7,600.0	7,172.5	7,260.9	7,183.9	23.8	19.2	89.65	1,097.6	-82.8	1,924.4	1,885.7	38.73	49.690	
7,650.0	7,177.5	7,265.8	7,188.8	23.9	19.2	90.08	1,097.5	-82.8	1,920.9	1,881.5	39.37	48.797	
7,699.2	7,179.0	7,267.2	7,190.2	24.1	19.2	90.30	1,097.5	-82.8	1,918.7	1,878.6	40.04	47.922	
7,700.0	7,179.0	7,267.2	7,190.2	24.1	19.2	90.30	1,097.5	-82.8	1,918.6	1,878.6	40.05	47.907	
7,761.1	7,178.8	7,266.9	7,189.8	24.5	19.2	90.29	1,097.5	-82.8	1,917.7	1,876.7	40.99	46.788	
7,800.0	7,178.6	7,266.7	7,189.6	24.9	19.2	90.28	1,097.5	-82.8	1,918.1	1,876.5	41.58	46.125	
7,900.0	7,178.3	7,266.1	7,189.0	26.4	19.2	90.26	1,097.5	-82.8	1,922.7	1,879.4	43.34	44.362	
8,000.0	7,177.9	7,265.5	7,188.5	28.2	19.2	90.25	1,097.5	-82.8	1,932.5	1,887.2	45.27	42.690	
8,100.0	7,177.5	7,265.0	7,187.9	30.3	19.2	90.23	1,097.6	-82.8	1,947.4	1,900.1	47.33	41.142	
8,200.0	7,177.2	7,264.4	7,187.4	32.5	19.2	90.21	1,097.6	-82.8	1,967.3	1,917.7	49.51	39.735	
8,300.0	7,176.8	7,263.9	7,186.8	34.8	19.2	90.20	1,097.6	-82.8	1,992.0	1,940.2	51.78	38.472	
8,400.0	7,176.4	7,263.3	7,186.3	37.2	19.2	90.18	1,097.6	-82.8	2,021.3	1,967.2	54.12	37.350	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD WALTERS 23-21DU - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 704-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,500.0	7,176.1	7,262.8	7,185.7	39.6	19.2	90.16	1,097.6	-82.8	2,055.1	1,998.6	56.52	36.360	
8,600.0	7,175.7	7,262.2	7,185.2	42.0	19.2	90.15	1,097.6	-82.8	2,093.1	2,034.2	58.97	35.493	
8,700.0	7,175.3	7,261.7	7,184.6	44.6	19.2	90.13	1,097.6	-82.8	2,135.2	2,073.7	61.47	34.737	
8,800.0	7,175.0	7,261.1	7,184.1	47.1	19.2	90.11	1,097.6	-82.8	2,181.0	2,117.0	64.00	34.079	
8,900.0	7,174.6	7,260.6	7,183.6	49.7	19.2	90.10	1,097.6	-82.8	2,230.4	2,163.8	66.56	33.511	
9,000.0	7,174.3	7,260.1	7,183.0	52.3	19.2	90.08	1,097.6	-82.8	2,283.1	2,213.9	69.14	33.019	
9,100.0	7,173.9	7,259.5	7,182.5	54.9	19.2	90.07	1,097.6	-82.8	2,338.8	2,267.1	71.75	32.597	
9,200.0	7,173.5	7,259.0	7,182.0	57.5	19.2	90.05	1,097.6	-82.8	2,397.5	2,323.1	74.38	32.234	
9,300.0	7,173.2	7,258.5	7,181.4	60.1	19.2	90.04	1,097.6	-82.8	2,458.8	2,381.8	77.02	31.925	
9,400.0	7,172.8	7,258.0	7,180.9	62.8	19.2	90.02	1,097.6	-82.8	2,522.6	2,442.9	79.68	31.661	
9,500.0	7,172.4	7,257.4	7,180.4	65.5	19.2	90.00	1,097.6	-82.8	2,588.7	2,506.3	82.35	31.437	
9,600.0	7,172.1	7,256.9	7,179.9	68.2	19.2	89.99	1,097.6	-82.8	2,656.9	2,571.9	85.03	31.248	
9,700.0	7,171.7	7,256.4	7,179.4	70.9	19.2	89.97	1,097.6	-82.8	2,727.0	2,639.3	87.72	31.089	
9,800.0	7,171.3	7,255.9	7,178.9	73.6	19.2	89.96	1,097.6	-82.8	2,799.0	2,708.6	90.42	30.957	
9,900.0	7,171.0	7,255.4	7,178.3	76.3	19.2	89.94	1,097.6	-82.8	2,872.7	2,779.6	93.12	30.848	
10,000.0	7,170.6	7,254.9	7,177.8	79.0	19.2	89.93	1,097.6	-82.8	2,947.9	2,852.1	95.84	30.759	
10,100.0	7,170.3	7,254.4	7,177.3	81.7	19.2	89.91	1,097.6	-82.8	3,024.5	2,926.0	98.56	30.688	
10,200.0	7,169.9	7,253.9	7,176.8	84.4	19.2	89.90	1,097.6	-82.8	3,102.5	3,001.2	101.28	30.632	
10,300.0	7,169.5	7,253.4	7,176.3	87.2	19.2	89.88	1,097.6	-82.8	3,181.7	3,077.7	104.02	30.589	
10,400.0	7,169.2	7,252.9	7,175.8	89.9	19.2	89.87	1,097.6	-82.8	3,262.1	3,155.3	106.75	30.558	
10,500.0	7,168.8	7,252.4	7,175.3	92.6	19.2	89.85	1,097.6	-82.8	3,343.5	3,234.0	109.49	30.536	
10,600.0	7,168.4	7,251.9	7,174.8	95.4	19.2	89.84	1,097.6	-82.8	3,425.9	3,313.7	112.24	30.524	
10,700.0	7,168.1	7,251.4	7,174.3	98.1	19.2	89.82	1,097.6	-82.8	3,509.2	3,394.2	114.98	30.519 SF	
10,800.0	7,167.7	7,250.9	7,173.8	100.9	19.2	89.81	1,097.6	-82.8	3,593.4	3,475.6	117.74	30.521	
10,900.0	7,167.4	7,250.4	7,173.4	103.6	19.2	89.79	1,097.6	-82.8	3,678.3	3,557.8	120.49	30.528	
11,000.0	7,167.0	7,249.9	7,172.9	106.4	19.2	89.78	1,097.6	-82.8	3,764.0	3,640.8	123.25	30.541	
11,100.0	7,166.6	7,249.4	7,172.4	109.1	19.2	89.77	1,097.6	-82.8	3,850.4	3,724.4	126.01	30.557	
11,200.0	7,166.3	7,248.9	7,171.9	111.9	19.2	89.75	1,097.6	-82.8	3,937.4	3,808.7	128.77	30.578	
11,300.0	7,165.9	7,248.5	7,171.4	114.7	19.2	89.74	1,097.6	-82.8	4,025.1	3,893.5	131.53	30.601	
11,400.0	7,165.5	7,248.0	7,170.9	117.4	19.2	89.72	1,097.6	-82.8	4,113.3	3,979.0	134.30	30.628	
11,500.0	7,165.2	7,247.5	7,170.5	120.2	19.2	89.71	1,097.6	-82.8	4,202.0	4,064.9	137.07	30.657	
11,600.0	7,164.8	7,247.0	7,170.0	123.0	19.2	89.70	1,097.6	-82.8	4,291.2	4,151.4	139.84	30.687	
11,700.0	7,164.5	7,246.6	7,169.5	125.7	19.2	89.68	1,097.6	-82.8	4,380.9	4,238.3	142.61	30.720	
11,800.0	7,164.1	7,246.1	7,169.0	128.5	19.2	89.67	1,097.6	-82.8	4,471.0	4,325.6	145.38	30.754	
11,828.8	7,164.0	7,246.0	7,168.9	129.3	19.2	89.66	1,097.6	-82.8	4,497.0	4,350.9	146.18	30.764	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD WALTERS 24-21DU - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 735-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	1.5	1.5	0.0	0.0	-52.46	455.7	-593.1	747.9				
100.0	100.0	102.4	102.4	0.1	0.1	-52.46	455.7	-593.0	747.9	747.7	0.20	3,667.573	
200.0	200.0	203.3	203.3	0.3	0.2	-52.46	455.6	-592.9	747.7	747.2	0.53	1,400.684	
300.0	300.0	304.2	304.2	0.5	0.3	-52.47	455.3	-592.7	747.4	746.5	0.86	865.345	
310.8	310.8	315.1	315.1	0.6	0.3	167.93	455.3	-592.6	747.4	746.5	0.90	832.963	
400.0	400.0	405.0	405.0	0.8	0.4	167.95	455.0	-592.4	748.7	747.5	1.17	637.892	
500.0	499.8	505.8	505.8	1.0	0.5	168.01	454.6	-592.0	753.3	751.8	1.48	508.202	
600.0	599.5	606.4	606.4	1.2	0.6	168.11	454.2	-591.5	761.2	759.3	1.81	420.142	
700.0	698.7	706.6	706.6	1.5	0.7	168.24	453.6	-591.0	772.3	770.2	2.16	357.251	
800.0	797.5	805.8	805.8	1.8	0.9	168.41	453.0	-590.4	786.8	784.2	2.59	304.138	
900.1	895.7	914.2	914.2	2.2	1.1	168.61	451.7	-589.5	804.2	801.1	3.06	263.106	
1,000.0	993.4	1,040.0	1,039.9	2.6	1.4	168.76	446.5	-587.6	820.9	817.3	3.56	230.701	
1,100.0	1,091.3	1,171.0	1,170.4	3.0	1.8	168.72	435.9	-583.9	834.1	830.0	4.10	203.430	
1,200.0	1,189.1	1,300.0	1,298.3	3.5	2.1	168.54	420.8	-577.5	843.5	838.8	4.67	180.611	
1,300.0	1,286.9	1,415.2	1,412.2	3.9	2.5	168.35	405.1	-569.8	850.3	845.0	5.23	162.493	
1,400.0	1,384.7	1,527.0	1,522.3	4.4	2.9	168.07	387.6	-561.8	855.4	849.6	5.80	147.391	
1,500.0	1,482.5	1,649.6	1,642.4	4.8	3.4	167.59	365.1	-553.0	858.9	852.5	6.43	133.679	
1,600.0	1,580.3	1,769.9	1,759.7	5.3	3.9	167.10	340.6	-541.9	859.6	852.5	7.08	121.489	
1,700.0	1,678.1	1,892.9	1,878.8	5.7	4.5	166.50	312.7	-529.0	857.8	850.0	7.76	110.464	
1,800.0	1,776.0	2,008.4	1,990.3	6.2	5.0	166.07	286.7	-513.5	853.7	845.3	8.42	101.432	
1,900.0	1,873.8	2,106.5	2,084.6	6.6	5.5	165.63	263.2	-500.2	848.7	839.7	9.02	94.127	
2,000.0	1,971.6	2,198.2	2,172.9	7.1	5.9	165.26	242.1	-488.0	844.5	835.0	9.58	88.187	
2,100.0	2,069.4	2,287.6	2,259.4	7.6	6.2	164.93	222.4	-476.6	841.5	831.4	10.13	83.045	
2,200.0	2,167.2	2,392.1	2,360.6	8.0	6.7	164.47	199.1	-464.3	839.2	828.4	10.78	77.880	
2,300.0	2,265.0	2,508.0	2,472.2	8.5	7.4	163.90	171.6	-449.8	835.3	823.8	11.51	72.569	
2,400.0	2,362.8	2,617.6	2,577.1	9.0	8.0	163.24	143.2	-435.6	830.0	817.7	12.27	67.660	
2,500.0	2,460.6	2,719.3	2,674.0	9.4	8.6	162.52	115.2	-422.5	823.8	810.8	13.01	63.308	
2,600.0	2,558.5	2,811.2	2,761.8	9.9	9.0	161.89	90.5	-410.6	818.2	804.5	13.70	59.737	
2,700.0	2,656.3	2,901.2	2,848.1	10.3	9.5	161.33	67.7	-399.4	813.9	799.5	14.35	56.698	
2,800.0	2,754.1	2,995.8	2,938.9	10.8	10.0	160.73	44.0	-388.4	810.5	795.5	15.05	53.858	
2,900.0	2,851.9	3,089.4	3,029.0	11.3	10.4	160.12	20.4	-378.0	807.7	792.0	15.76	51.252	
3,000.0	2,949.7	3,178.9	3,115.5	11.7	10.9	159.62	-0.4	-368.4	806.3	789.8	16.44	49.057	
3,100.0	3,047.5	3,274.4	3,208.1	12.2	11.3	159.14	-21.7	-358.3	805.6	788.5	17.12	47.058	
3,135.5	3,082.2	3,307.4	3,240.1	12.4	11.4	158.98	-28.8	-354.9	805.5	788.2	17.36	46.408	
3,200.0	3,145.3	3,369.6	3,300.5	12.7	11.7	158.70	-42.1	-348.6	805.7	787.9	17.80	45.266	
3,300.0	3,243.2	3,466.3	3,394.6	13.1	12.1	158.33	-61.7	-338.3	806.1	787.6	18.47	43.633	
3,400.0	3,341.0	3,564.2	3,490.1	13.6	12.6	157.98	-81.0	-328.5	807.3	788.1	19.15	42.153	
3,500.0	3,438.8	3,671.3	3,594.5	14.1	13.0	157.64	-102.0	-316.6	807.6	787.7	19.87	40.646	
3,600.0	3,536.6	3,786.1	3,705.9	14.5	13.6	157.18	-126.1	-303.8	807.3	786.6	20.66	39.075	
3,700.0	3,634.4	3,898.4	3,814.3	15.0	14.2	156.59	-152.4	-289.9	804.7	783.2	21.50	37.423	
3,800.0	3,732.2	3,994.0	3,906.2	15.5	14.7	156.02	-175.8	-278.1	801.8	779.5	22.30	35.957	
3,900.0	3,830.0	4,087.0	3,995.7	15.9	15.2	155.45	-198.4	-267.2	799.5	776.4	23.08	34.639	
4,000.0	3,927.9	4,180.0	4,085.8	16.4	15.6	155.03	-218.7	-256.5	798.6	774.8	23.81	33.546	
4,100.0	4,025.7	4,279.8	4,182.8	16.9	16.1	154.67	-239.3	-244.9	798.3	773.7	24.55	32.517	
4,148.9	4,073.5	4,323.0	4,224.8	17.1	16.3	154.50	-248.3	-239.9	798.1	773.2	24.89	32.060	
4,200.0	4,123.5	4,365.0	4,265.6	17.3	16.5	154.34	-256.9	-235.3	798.3	773.1	25.24	31.627	
4,300.0	4,221.3	4,458.0	4,356.4	17.8	16.9	154.05	-274.7	-225.6	799.7	773.8	25.93	30.842	
4,400.0	4,319.1	4,546.5	4,443.2	18.2	17.2	153.89	-289.8	-216.8	802.5	775.9	26.56	30.219	
4,500.0	4,416.9	4,635.8	4,531.0	18.7	17.6	153.84	-303.2	-208.5	806.6	779.5	27.14	29.719	
4,600.0	4,514.7	4,718.8	4,613.1	19.2	17.8	153.96	-312.9	-200.9	812.4	784.8	27.63	29.403	
4,700.0	4,612.6	4,803.1	4,696.8	19.6	18.0	154.28	-319.5	-193.7	820.3	792.2	28.05	29.244	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD WALTERS 24-21DU - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 735-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,800.0	4,710.4	4,880.4	4,773.8	20.1	18.2	154.58	-324.7	-188.5	830.2	801.8	28.44	29.190	
4,900.0	4,808.2	4,956.6	4,849.8	20.6	18.4	154.90	-328.6	-185.3	843.1	814.3	28.82	29.256	
5,000.0	4,906.0	5,038.8	4,931.9	21.0	18.5	155.26	-331.6	-183.3	858.4	829.2	29.18	29.413	
5,100.0	5,003.8	5,126.4	5,019.4	21.5	18.6	155.71	-333.2	-181.9	875.2	845.7	29.52	29.649	
5,200.0	5,101.6	5,219.6	5,112.7	22.0	18.8	156.20	-334.1	-181.0	893.0	863.1	29.84	29.922	
5,300.0	5,199.4	5,315.9	5,208.9	22.4	18.9	156.68	-335.2	-180.5	911.1	881.0	30.18	30.191	
5,400.0	5,297.3	5,410.4	5,303.5	22.9	19.0	157.12	-336.2	-180.2	929.6	899.1	30.52	30.458	
5,476.5	5,372.1	5,480.7	5,373.7	23.3	19.1	157.43	-336.8	-180.3	944.1	913.4	30.79	30.669	
5,500.0	5,395.1	5,502.6	5,395.7	23.3	19.1	157.56	-337.0	-180.4	948.6	917.7	30.86	30.743	
5,600.0	5,493.4	5,598.0	5,491.1	23.7	19.2	158.00	-338.1	-181.4	965.8	934.7	31.13	31.028	
5,700.0	5,592.3	5,701.3	5,594.4	23.9	19.4	158.33	-339.7	-182.5	979.9	948.5	31.41	31.198	
5,800.0	5,691.6	5,807.4	5,700.4	24.1	19.5	158.57	-341.5	-182.8	989.9	958.3	31.68	31.251	
5,900.0	5,791.3	5,905.7	5,798.8	24.3	19.7	158.72	-342.7	-182.7	996.6	964.7	31.91	31.231	
6,000.0	5,891.2	6,002.9	5,895.9	24.5	19.8	158.80	-343.5	-182.6	1,000.3	968.1	32.12	31.143	
6,076.6	5,967.8	6,076.9	5,969.9	24.6	19.9	-61.59	-343.8	-182.6	1,001.1	959.6	41.44	24.155	
6,092.9	5,984.1	6,092.6	5,985.6	24.6	19.9	-61.60	-343.9	-182.7	1,001.1	959.6	41.48	24.133	
6,100.0	5,991.2	6,099.4	5,992.5	24.6	19.9	-61.60	-343.9	-182.7	1,001.1	959.6	41.50	24.123	
6,200.0	6,091.2	6,197.6	6,090.6	24.7	20.0	-61.63	-344.3	-183.0	1,001.2	959.5	41.73	23.992	
6,300.0	6,191.2	6,299.1	6,192.1	24.8	20.2	-61.66	-344.8	-183.5	1,001.4	959.4	41.97	23.860	
6,400.0	6,291.2	6,400.3	6,293.3	24.9	20.3	-61.69	-345.2	-183.7	1,001.4	959.2	42.21	23.722	
6,434.7	6,325.9	6,434.4	6,327.4	24.9	20.3	-61.70	-345.3	-183.7	1,001.4	959.1	42.30	23.675	
6,500.0	6,391.2	6,497.0	6,390.0	25.0	20.4	-61.71	-345.5	-183.9	1,001.4	959.0	42.45	23.590	
6,571.6	6,462.8	6,568.4	6,461.4	25.1	20.5	-61.73	-345.6	-184.3	1,001.7	959.0	42.63	23.498	
6,600.0	6,491.2	6,597.0	6,490.0	25.1	20.6	28.30	-345.7	-184.4	1,001.2	967.5	33.75	29.666	
6,650.0	6,541.1	6,645.3	6,538.4	25.1	20.6	28.50	-345.8	-184.6	998.1	964.6	33.50	29.794	
6,700.0	6,590.5	6,693.1	6,586.1	25.1	20.7	28.92	-345.9	-184.9	992.1	959.0	33.07	29.998	
6,750.0	6,639.4	6,742.8	6,635.8	25.1	20.7	29.57	-345.9	-185.3	983.0	950.5	32.47	30.272	
6,800.0	6,687.4	6,790.0	6,683.0	25.0	20.8	30.45	-346.0	-185.6	971.0	939.3	31.72	30.612	
6,850.0	6,734.3	6,835.5	6,728.5	25.0	20.9	31.58	-346.1	-185.9	956.2	925.4	30.84	31.007	
6,900.0	6,779.8	6,878.1	6,771.1	24.9	20.9	32.96	-346.1	-186.4	938.8	909.0	29.87	31.435	
6,950.0	6,823.8	6,924.3	6,817.3	24.8	21.0	34.73	-346.0	-186.9	918.9	890.1	28.85	31.850	
7,000.0	6,866.1	6,969.3	6,862.2	24.7	21.0	36.89	-346.0	-187.3	896.5	868.6	27.87	32.162	
7,050.0	6,906.4	7,010.3	6,903.3	24.6	21.1	39.40	-346.0	-187.6	871.7	844.7	27.03	32.247	
7,100.0	6,944.6	7,048.8	6,941.8	24.5	21.1	42.33	-346.1	-187.8	845.0	818.5	26.45	31.949	
7,150.0	6,980.4	7,084.8	6,977.8	24.4	21.2	45.70	-346.1	-188.1	816.5	790.3	26.24	31.111	
7,200.0	7,013.6	7,118.0	7,011.0	24.3	21.2	49.53	-346.1	-188.3	786.6	760.1	26.53	29.651	
7,250.0	7,044.2	7,148.6	7,041.6	24.2	21.3	53.79	-346.2	-188.5	755.6	728.2	27.34	27.635	
7,300.0	7,072.0	7,176.5	7,069.5	24.1	21.3	58.45	-346.1	-188.7	723.8	695.2	28.64	25.272	
7,350.0	7,096.8	7,201.6	7,094.6	24.0	21.3	63.37	-346.1	-188.9	691.7	661.4	30.29	22.834	
7,400.0	7,118.5	7,223.6	7,116.6	23.9	21.4	68.39	-346.1	-189.0	659.8	627.6	32.10	20.550	
7,450.0	7,137.0	7,242.3	7,135.3	23.8	21.4	73.30	-346.0	-189.1	628.4	594.5	33.89	18.546	
7,500.0	7,152.2	7,257.7	7,150.7	23.8	21.4	77.88	-346.0	-189.1	598.3	562.8	35.50	16.856	
7,550.0	7,164.1	7,269.7	7,162.7	23.8	21.4	81.95	-345.9	-189.2	570.1	533.2	36.88	15.459	
7,600.0	7,172.5	7,278.4	7,171.4	23.8	21.4	85.35	-345.9	-189.2	544.3	506.3	38.02	14.316	
7,650.0	7,177.5	7,283.5	7,176.5	23.9	21.4	87.99	-345.9	-189.2	521.7	482.7	38.98	13.384	
7,699.2	7,179.0	7,285.2	7,178.2	24.1	21.5	89.80	-345.9	-189.3	503.2	463.4	39.81	12.641	
7,700.0	7,179.0	7,285.2	7,178.2	24.1	21.5	89.80	-345.9	-189.3	502.9	463.1	39.82	12.630	
7,800.0	7,178.6	7,285.2	7,178.2	24.9	21.5	89.80	-345.9	-189.3	479.0	437.6	41.36	11.582	
7,867.6	7,178.4	7,285.3	7,178.2	25.9	21.5	89.80	-345.9	-189.3	474.2	431.7	42.54	11.146	CC, ES
7,900.0	7,178.3	7,285.3	7,178.3	26.4	21.5	89.80	-345.9	-189.3	475.3	432.2	43.11	11.025	
8,000.0	7,177.9	7,285.3	7,178.3	28.2	21.5	89.80	-345.9	-189.3	492.4	447.3	45.04	10.931	SF

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

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD WALTERS 24-21DU - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 735-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,100.0	7,177.5	7,285.3	7,178.3	30.3	21.5	89.81	-345.9	-189.3	528.1	481.0	47.11	11.210	
8,200.0	7,177.2	7,285.3	7,178.3	32.5	21.5	89.81	-345.9	-189.3	579.1	529.8	49.29	11.750	
8,300.0	7,176.8	7,285.3	7,178.3	34.8	21.5	89.81	-345.9	-189.3	641.8	590.2	51.56	12.448	
8,400.0	7,176.4	7,285.4	7,178.3	37.2	21.5	89.81	-345.9	-189.3	713.0	659.1	53.90	13.228	
8,500.0	7,176.1	7,285.4	7,178.4	39.6	21.5	89.82	-345.9	-189.3	790.5	734.2	56.30	14.040	
8,600.0	7,175.7	7,285.4	7,178.4	42.0	21.5	89.82	-345.9	-189.3	872.5	813.8	58.76	14.850	
8,700.0	7,175.3	7,285.4	7,178.4	44.6	21.5	89.82	-345.9	-189.3	958.0	896.8	61.25	15.640	
8,800.0	7,175.0	7,285.4	7,178.4	47.1	21.5	89.82	-345.9	-189.3	1,046.1	982.3	63.79	16.400	
8,900.0	7,174.6	7,285.4	7,178.4	49.7	21.5	89.83	-345.9	-189.3	1,136.1	1,069.8	66.35	17.124	
9,000.0	7,174.3	7,285.5	7,178.5	52.3	21.5	89.83	-345.9	-189.3	1,227.7	1,158.8	68.93	17.810	
9,100.0	7,173.9	7,285.5	7,178.5	54.9	21.5	89.83	-345.9	-189.3	1,320.5	1,249.0	71.54	18.458	
9,200.0	7,173.5	7,285.5	7,178.5	57.5	21.5	89.83	-345.9	-189.3	1,414.3	1,340.1	74.17	19.068	
9,300.0	7,173.2	7,285.5	7,178.5	60.1	21.5	89.84	-345.9	-189.3	1,508.9	1,432.1	76.81	19.643	
9,400.0	7,172.8	7,285.5	7,178.5	62.8	21.5	89.84	-345.9	-189.3	1,604.1	1,524.7	79.47	20.185	
9,500.0	7,172.4	7,285.6	7,178.6	65.5	21.5	89.84	-345.9	-189.3	1,699.9	1,617.8	82.14	20.694	
9,600.0	7,172.1	7,285.6	7,178.6	68.2	21.5	89.84	-345.9	-189.3	1,796.2	1,711.3	84.83	21.175	
9,700.0	7,171.7	7,285.6	7,178.6	70.9	21.5	89.85	-345.9	-189.3	1,892.8	1,805.3	87.52	21.628	
9,800.0	7,171.3	7,285.6	7,178.6	73.6	21.5	89.85	-345.9	-189.3	1,989.8	1,899.6	90.22	22.055	
9,900.0	7,171.0	7,285.6	7,178.6	76.3	21.5	89.85	-345.9	-189.3	2,087.0	1,994.1	92.93	22.459	
10,000.0	7,170.6	7,285.7	7,178.6	79.0	21.5	89.85	-345.9	-189.3	2,184.5	2,088.9	95.64	22.841	
10,100.0	7,170.3	7,285.7	7,178.7	81.7	21.5	89.86	-345.9	-189.3	2,282.2	2,183.9	98.36	23.202	
10,200.0	7,169.9	7,285.7	7,178.7	84.4	21.5	89.86	-345.9	-189.3	2,380.2	2,279.1	101.09	23.545	
10,300.0	7,169.5	7,285.7	7,178.7	87.2	21.5	89.86	-345.9	-189.3	2,478.2	2,374.4	103.82	23.869	
10,400.0	7,169.2	7,285.7	7,178.7	89.9	21.5	89.86	-345.9	-189.3	2,576.5	2,469.9	106.56	24.178	
10,500.0	7,168.8	7,285.8	7,178.7	92.6	21.5	89.87	-345.9	-189.3	2,674.8	2,565.5	109.30	24.471	
10,600.0	7,168.4	7,285.8	7,178.8	95.4	21.5	89.87	-345.9	-189.3	2,773.3	2,661.2	112.05	24.751	
10,700.0	7,168.1	7,285.8	7,178.8	98.1	21.5	89.87	-345.9	-189.3	2,871.9	2,757.1	114.80	25.017	
10,800.0	7,167.7	7,285.8	7,178.8	100.9	21.5	89.88	-345.9	-189.3	2,970.5	2,853.0	117.55	25.270	
10,900.0	7,167.4	7,285.8	7,178.8	103.6	21.5	89.88	-345.9	-189.3	3,069.3	2,949.0	120.31	25.512	
11,000.0	7,167.0	7,285.9	7,178.8	106.4	21.5	89.88	-345.9	-189.3	3,168.1	3,045.1	123.06	25.744	
11,100.0	7,166.6	7,285.9	7,178.9	109.1	21.5	89.88	-345.9	-189.3	3,267.0	3,141.2	125.83	25.965	
11,200.0	7,166.3	7,285.9	7,178.9	111.9	21.5	89.89	-345.9	-189.3	3,366.0	3,237.4	128.59	26.177	
11,300.0	7,165.9	7,285.9	7,178.9	114.7	21.5	89.89	-345.9	-189.3	3,465.0	3,333.7	131.35	26.379	
11,400.0	7,165.5	7,285.9	7,178.9	117.4	21.5	89.89	-345.9	-189.3	3,564.1	3,430.0	134.12	26.574	
11,500.0	7,165.2	7,286.0	7,178.9	120.2	21.5	89.90	-345.9	-189.3	3,663.3	3,526.4	136.89	26.760	
11,600.0	7,164.8	7,286.0	7,179.0	123.0	21.5	89.90	-345.9	-189.3	3,762.4	3,622.8	139.66	26.940	
11,700.0	7,164.5	7,286.0	7,179.0	125.7	21.5	89.90	-345.9	-189.3	3,861.7	3,719.2	142.44	27.112	
11,800.0	7,164.1	7,286.0	7,179.0	128.5	21.5	89.90	-345.9	-189.3	3,960.9	3,815.7	145.21	27.277	
11,828.8	7,164.0	7,286.0	7,179.0	129.3	21.5	89.91	-345.9	-189.3	3,989.5	3,843.5	146.01	27.324	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD WEDCO #13-21DU - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 705-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	1.5	1.5	0.0	0.0	-43.89	574.1	-552.3	796.7				
100.0	100.0	101.3	101.3	0.1	0.1	-43.90	574.1	-552.4	796.7	796.5	0.20	3,924.834	
200.0	200.0	201.1	201.1	0.3	0.2	-43.92	573.9	-552.6	796.7	796.2	0.53	1,497.704	
300.0	300.0	300.9	300.9	0.5	0.3	-43.95	573.6	-553.0	796.8	795.9	0.86	925.480	ES
400.0	400.0	400.7	400.7	0.8	0.4	176.40	573.2	-553.6	798.6	797.4	1.17	680.705	
500.0	499.8	500.4	500.4	1.0	0.5	176.35	572.6	-554.3	803.9	802.5	1.48	541.806	
600.0	599.5	599.8	599.8	1.2	0.6	176.30	572.0	-555.2	812.8	811.0	1.82	447.623	
700.0	698.7	698.8	698.8	1.5	0.7	176.25	571.2	-556.2	825.1	822.9	2.17	380.489	
800.0	797.5	796.6	796.5	1.8	0.9	176.21	570.4	-557.3	840.9	838.3	2.61	322.599	
900.1	895.7	892.0	892.0	2.2	1.1	176.17	569.7	-558.5	860.2	857.2	3.05	281.878	
1,000.0	993.4	978.5	978.4	2.6	1.3	176.22	570.0	-559.5	882.0	878.6	3.47	254.397	
1,100.0	1,091.3	1,052.4	1,052.3	3.0	1.5	176.32	572.0	-560.7	905.8	902.0	3.87	234.036	
1,200.0	1,189.1	1,122.6	1,122.4	3.5	1.6	176.42	575.4	-563.1	932.3	928.0	4.28	217.720	
1,300.0	1,286.9	1,190.6	1,190.1	3.9	1.8	176.43	579.2	-567.7	961.5	956.8	4.70	204.640	
1,400.0	1,384.7	1,266.0	1,265.0	4.4	2.0	176.36	584.2	-575.4	993.6	988.5	5.14	193.211	
1,500.0	1,482.5	1,328.6	1,326.8	4.8	2.1	176.26	588.9	-583.5	1,028.0	1,022.5	5.56	184.986	
1,600.0	1,580.3	1,408.3	1,405.3	5.3	2.4	176.06	594.9	-595.7	1,064.3	1,058.3	6.01	177.064	
1,700.0	1,678.1	1,480.8	1,476.6	5.7	2.6	175.78	599.7	-608.6	1,101.6	1,095.1	6.45	170.687	
1,800.0	1,776.0	1,545.0	1,539.2	6.2	2.9	175.51	604.7	-621.8	1,141.4	1,134.5	6.88	165.782	
1,900.0	1,873.8	1,604.7	1,597.0	6.6	3.2	175.24	610.0	-635.5	1,183.6	1,176.3	7.32	161.690	
2,000.0	1,971.6	1,670.5	1,660.5	7.1	3.5	174.92	616.3	-652.0	1,227.6	1,219.9	7.78	157.877	
2,100.0	2,069.4	1,732.0	1,719.3	7.6	3.8	174.59	622.3	-668.6	1,273.5	1,265.2	8.22	154.862	
2,200.0	2,167.2	1,807.4	1,791.1	8.0	4.2	174.19	630.0	-690.3	1,320.7	1,312.0	8.72	151.458	
2,300.0	2,265.0	1,888.6	1,868.3	8.5	4.7	173.78	638.8	-714.3	1,368.8	1,359.6	9.23	148.298	
2,400.0	2,362.8	1,999.7	1,973.7	9.0	5.3	173.22	649.9	-747.2	1,416.6	1,406.8	9.82	144.213	
2,500.0	2,460.6	2,073.7	2,044.1	9.4	5.7	172.83	656.3	-769.2	1,463.8	1,453.5	10.31	142.005	
2,600.0	2,558.5	2,159.5	2,125.5	9.9	6.2	172.45	664.9	-794.8	1,511.8	1,501.0	10.83	139.536	
2,700.0	2,656.3	2,253.1	2,214.4	10.3	6.8	172.02	673.2	-822.9	1,559.5	1,548.1	11.38	136.996	
2,800.0	2,754.1	2,340.9	2,297.9	10.8	7.3	171.65	681.1	-849.2	1,607.1	1,595.1	11.91	134.922	
2,900.0	2,851.9	2,426.7	2,379.4	11.3	7.7	171.32	689.2	-874.5	1,654.7	1,642.3	12.43	133.095	
3,000.0	2,949.7	2,500.2	2,449.4	11.7	8.2	171.11	697.3	-895.5	1,702.7	1,689.8	12.92	131.753	
3,100.0	3,047.5	2,570.0	2,515.5	12.2	8.6	170.93	705.9	-916.2	1,752.0	1,738.6	13.41	130.656	
3,200.0	3,145.3	2,619.1	2,561.8	12.7	9.0	170.80	712.5	-931.2	1,802.6	1,788.8	13.84	130.228	
3,300.0	3,243.2	2,687.4	2,625.9	13.1	9.4	170.65	722.2	-952.6	1,854.3	1,840.0	14.33	129.387	
3,400.0	3,341.0	2,784.3	2,716.8	13.6	10.1	170.46	736.8	-982.6	1,906.5	1,891.6	14.89	128.019	
3,500.0	3,438.8	2,903.3	2,829.4	14.1	10.8	170.27	753.7	-1,017.3	1,956.5	1,941.0	15.50	126.253	
3,600.0	3,536.6	2,992.6	2,913.9	14.5	11.4	170.13	766.2	-1,043.4	2,006.7	1,990.7	16.03	125.209	
3,700.0	3,634.4	3,101.5	3,017.3	15.0	12.0	169.97	781.0	-1,074.4	2,056.2	2,039.6	16.60	123.838	
3,800.0	3,732.2	3,221.0	3,131.1	15.5	12.7	169.81	796.3	-1,107.3	2,104.5	2,087.3	17.20	122.325	
3,900.0	3,830.0	3,290.7	3,197.6	15.9	13.1	169.71	804.8	-1,126.5	2,152.6	2,134.9	17.68	121.733	
4,000.0	3,927.9	3,381.3	3,283.8	16.4	13.7	169.59	816.1	-1,151.9	2,201.1	2,182.8	18.23	120.761	
4,100.0	4,025.7	3,452.4	3,351.4	16.9	14.1	169.47	824.4	-1,172.1	2,249.5	2,230.8	18.72	120.187	
4,200.0	4,123.5	3,518.5	3,414.1	17.3	14.5	169.38	832.9	-1,191.3	2,299.0	2,279.8	19.19	119.781	
4,300.0	4,221.3	3,620.3	3,510.7	17.8	15.2	169.25	846.1	-1,220.9	2,348.5	2,328.7	19.77	118.806	
4,400.0	4,319.1	3,811.7	3,693.9	18.2	16.3	169.11	870.3	-1,270.5	2,395.5	2,374.9	20.56	116.535	
4,500.0	4,416.9	3,874.0	3,753.8	18.7	16.6	169.08	878.1	-1,285.7	2,441.4	2,420.4	21.00	116.257	
4,600.0	4,514.7	3,941.8	3,818.8	19.2	17.0	169.05	887.3	-1,302.5	2,488.2	2,466.8	21.46	115.922	
4,700.0	4,612.6	4,015.0	3,889.0	19.6	17.4	169.04	897.8	-1,320.7	2,535.6	2,513.6	21.94	115.548	
4,800.0	4,710.4	4,117.1	3,986.7	20.1	18.0	169.01	912.3	-1,346.6	2,583.2	2,560.7	22.50	114.825	
4,900.0	4,808.2	4,275.3	4,138.8	20.6	18.9	168.92	931.0	-1,385.6	2,628.9	2,605.7	23.20	113.315	
5,000.0	4,906.0	4,388.6	4,248.0	21.0	19.5	168.81	942.1	-1,413.5	2,673.5	2,649.7	23.79	112.363	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD WEDCO #13-21DU - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 705-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.0	5,003.8	4,608.4	4,461.6	21.5	20.5	168.64	960.3	-1,462.0	2,715.5	2,690.8	24.65	110.155	
5,200.0	5,101.6	4,962.5	4,811.0	22.0	21.7	168.53	978.2	-1,515.6	2,749.5	2,723.8	25.75	106.792	
5,300.0	5,199.4	5,287.9	5,135.6	22.4	22.4	168.65	984.9	-1,536.8	2,775.9	2,749.2	26.64	104.200	
5,400.0	5,297.3	5,394.0	5,241.7	22.9	22.5	168.71	985.2	-1,539.6	2,798.4	2,771.3	27.10	103.252	
5,476.5	5,372.1	5,474.9	5,322.5	23.3	22.6	168.75	985.1	-1,541.6	2,815.5	2,788.0	27.46	102.537	
5,500.0	5,395.1	5,498.5	5,346.1	23.3	22.6	168.78	985.1	-1,542.2	2,820.6	2,793.0	27.60	102.196	
5,600.0	5,493.4	5,606.7	5,454.3	23.7	22.8	168.89	984.6	-1,544.9	2,840.2	2,812.0	28.16	100.846	
5,700.0	5,592.3	5,717.0	5,564.6	23.9	22.9	168.97	983.7	-1,547.3	2,855.9	2,827.2	28.69	99.548	
5,800.0	5,691.6	5,817.0	5,664.6	24.1	23.0	169.03	983.0	-1,549.1	2,868.1	2,838.9	29.15	98.387	
5,900.0	5,791.3	5,937.8	5,785.4	24.3	23.2	169.07	982.2	-1,550.8	2,876.5	2,846.9	29.60	97.169	
6,000.0	5,891.2	6,049.0	5,896.5	24.5	23.3	169.08	981.3	-1,551.6	2,880.9	2,850.9	29.99	96.052	
6,076.6	5,967.8	6,128.6	5,976.1	24.6	23.4	-51.33	980.6	-1,551.9	2,881.7	2,834.7	46.97	61.355	
6,100.0	5,991.2	6,152.4	5,999.9	24.6	23.4	-51.33	980.4	-1,552.0	2,881.7	2,834.6	47.02	61.288	
6,200.0	6,091.2	6,252.3	6,099.8	24.7	23.5	-51.35	979.5	-1,552.4	2,881.4	2,834.2	47.23	61.014	
6,300.0	6,191.2	6,353.3	6,200.8	24.8	23.6	-51.37	978.6	-1,552.8	2,881.2	2,833.7	47.44	60.738	
6,400.0	6,291.2	6,458.9	6,306.3	24.9	23.7	-51.39	977.4	-1,553.2	2,880.8	2,833.1	47.65	60.452	
6,500.0	6,391.2	6,561.7	6,409.1	25.0	23.8	-51.41	976.2	-1,553.5	2,880.3	2,832.4	47.87	60.166	
6,571.6	6,462.8	6,633.4	6,480.9	25.1	23.9	-51.43	975.4	-1,553.7	2,879.8	2,831.8	48.03	59.964	
6,600.0	6,491.2	6,661.8	6,509.3	25.1	24.0	38.60	975.0	-1,553.7	2,879.2	2,847.3	31.97	90.057	
6,650.0	6,541.1	6,708.6	6,556.1	25.1	24.0	38.79	974.5	-1,553.8	2,876.1	2,844.0	32.06	89.721	
6,700.0	6,590.5	6,754.7	6,602.1	25.1	24.1	39.17	974.1	-1,553.9	2,870.2	2,838.2	32.07	89.498	
6,750.0	6,639.4	6,805.2	6,652.7	25.1	24.1	39.73	973.7	-1,554.0	2,861.8	2,829.7	32.04	89.333	
6,800.0	6,687.4	6,855.6	6,703.1	25.0	24.2	40.50	973.1	-1,554.2	2,850.7	2,818.7	31.96	89.201	
6,850.0	6,734.3	6,901.5	6,748.9	25.0	24.2	41.45	972.5	-1,554.4	2,837.0	2,805.1	31.85	89.061	
6,900.0	6,779.8	6,947.0	6,794.4	24.9	24.3	42.62	971.9	-1,554.6	2,820.9	2,789.1	31.76	88.810	
6,950.0	6,823.8	6,995.0	6,842.4	24.8	24.3	44.04	971.2	-1,554.8	2,802.4	2,770.7	31.73	88.316	
7,000.0	6,866.1	7,040.0	6,887.4	24.7	24.4	45.69	970.4	-1,555.1	2,781.6	2,749.8	31.79	87.498	
7,050.0	6,906.4	7,077.3	6,924.7	24.6	24.4	47.54	969.8	-1,555.3	2,758.8	2,726.8	31.97	86.291	
7,100.0	6,944.6	7,111.1	6,958.5	24.5	24.5	49.63	969.1	-1,555.6	2,734.1	2,701.7	32.32	84.582	
7,150.0	6,980.4	7,144.6	6,992.0	24.4	24.5	51.99	968.5	-1,556.0	2,707.6	2,674.7	32.90	82.290	
7,200.0	7,013.6	7,178.9	7,026.3	24.3	24.5	54.68	967.9	-1,556.3	2,679.6	2,645.9	33.75	79.406	
7,250.0	7,044.2	7,210.4	7,057.8	24.2	24.6	57.64	967.4	-1,556.6	2,650.2	2,615.3	34.83	76.082	
7,300.0	7,072.0	7,239.4	7,086.7	24.1	24.6	60.87	966.9	-1,556.9	2,619.5	2,583.3	36.14	72.477	
7,350.0	7,096.8	7,265.6	7,113.0	24.0	24.6	64.35	966.5	-1,557.1	2,587.8	2,550.1	37.62	68.784	
7,400.0	7,118.5	7,288.6	7,136.0	23.9	24.7	68.03	966.0	-1,557.3	2,555.2	2,516.0	39.20	65.189	
7,450.0	7,137.0	7,308.3	7,155.7	23.8	24.7	71.86	965.7	-1,557.5	2,522.1	2,481.3	40.79	61.833	
7,500.0	7,152.2	7,324.5	7,171.8	23.8	24.7	75.78	965.4	-1,557.7	2,488.6	2,446.3	42.32	58.809	
7,550.0	7,164.1	7,336.8	7,184.2	23.8	24.7	79.71	965.1	-1,557.8	2,454.9	2,411.2	43.71	56.159	
7,600.0	7,172.5	7,345.7	7,193.1	23.8	24.7	83.57	965.0	-1,557.8	2,421.3	2,376.4	44.94	53.879	
7,650.0	7,177.5	7,351.2	7,198.5	23.9	24.8	87.32	964.9	-1,557.9	2,388.0	2,342.0	45.97	51.943	
7,699.2	7,179.0	7,353.1	7,200.5	24.1	24.8	90.82	964.8	-1,557.9	2,355.6	2,308.8	46.80	50.328	
7,700.0	7,179.0	7,353.1	7,200.5	24.1	24.8	90.82	964.8	-1,557.9	2,355.1	2,308.2	46.82	50.304	
7,800.0	7,178.6	7,353.6	7,201.0	24.9	24.8	90.84	964.8	-1,557.9	2,291.1	2,242.7	48.35	47.382	
7,900.0	7,178.3	7,354.1	7,201.4	26.4	24.8	90.85	964.8	-1,557.9	2,229.8	2,179.7	50.11	44.495	
8,000.0	7,177.9	7,354.6	7,201.9	28.2	24.8	90.87	964.8	-1,557.9	2,171.3	2,119.3	52.04	41.723	
8,100.0	7,177.5	7,355.0	7,202.4	30.3	24.8	90.88	964.8	-1,557.9	2,116.0	2,061.9	54.11	39.106	
8,200.0	7,177.2	7,355.5	7,202.9	32.5	24.8	90.90	964.8	-1,557.9	2,064.0	2,007.7	56.29	36.670	
8,300.0	7,176.8	7,356.0	7,203.3	34.8	24.8	90.91	964.8	-1,557.9	2,015.7	1,957.1	58.56	34.423	
8,400.0	7,176.4	7,356.5	7,203.8	37.2	24.8	90.93	964.8	-1,557.9	1,971.2	1,910.3	60.90	32.369	
8,500.0	7,176.1	7,356.9	7,204.3	39.6	24.8	90.94	964.8	-1,557.9	1,930.9	1,867.6	63.30	30.503	
8,600.0	7,175.7	7,357.4	7,204.8	42.0	24.8	90.96	964.8	-1,557.9	1,895.1	1,829.3	65.76	28.820	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD WEDCO #13-21DU - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 705-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,700.0	7,175.3	7,357.9	7,205.2	44.6	24.8	90.97	964.7	-1,557.9	1,863.9	1,795.6	68.25	27.309	
8,800.0	7,175.0	7,358.3	7,205.7	47.1	24.8	90.99	964.7	-1,557.9	1,837.6	1,766.8	70.78	25.961	
8,900.0	7,174.6	7,358.8	7,206.2	49.7	24.8	91.00	964.7	-1,557.9	1,816.5	1,743.1	73.34	24.767	
9,000.0	7,174.3	7,359.3	7,206.6	52.3	24.8	91.02	964.7	-1,558.0	1,800.7	1,724.7	75.93	23.715	
9,100.0	7,173.9	7,359.7	7,207.1	54.9	24.8	91.03	964.7	-1,558.0	1,790.3	1,711.7	78.54	22.795	
9,200.0	7,173.5	7,360.2	7,207.5	57.5	24.8	91.05	964.7	-1,558.0	1,785.5	1,704.3	81.17	21.998	
9,236.2	7,173.4	7,360.3	7,207.7	58.5	24.8	91.05	964.7	-1,558.0	1,785.1	1,703.0	82.12	21.737	
9,300.0	7,173.2	7,360.6	7,208.0	60.1	24.8	91.06	964.7	-1,558.0	1,786.2	1,702.4	83.81	21.313	
9,400.0	7,172.8	7,361.1	7,208.5	62.8	24.8	91.08	964.7	-1,558.0	1,792.6	1,706.1	86.47	20.732	
9,500.0	7,172.4	7,361.5	7,208.9	65.5	24.8	91.09	964.7	-1,558.0	1,804.5	1,715.4	89.14	20.244	
9,600.0	7,172.1	7,362.0	7,209.4	68.2	24.8	91.11	964.7	-1,558.0	1,821.8	1,730.0	91.82	19.841	
9,700.0	7,171.7	7,362.5	7,209.8	70.9	24.8	91.12	964.7	-1,558.0	1,844.4	1,749.9	94.51	19.515	
9,800.0	7,171.3	7,362.9	7,210.3	73.6	24.8	91.14	964.7	-1,558.0	1,872.0	1,774.8	97.21	19.257	
9,900.0	7,171.0	7,363.4	7,210.7	76.3	24.8	91.15	964.6	-1,558.0	1,904.5	1,804.6	99.92	19.061	
10,000.0	7,170.6	7,363.8	7,211.2	79.0	24.8	91.16	964.6	-1,558.0	1,941.7	1,839.0	102.63	18.918	
10,100.0	7,170.3	7,364.3	7,211.6	81.7	24.8	91.18	964.6	-1,558.0	1,983.1	1,877.8	105.35	18.823	
10,200.0	7,169.9	7,364.7	7,212.1	84.4	24.8	91.19	964.6	-1,558.0	2,028.7	1,920.6	108.08	18.770	
10,300.0	7,169.5	7,365.1	7,212.5	87.2	24.8	91.21	964.6	-1,558.0	2,078.1	1,967.2	110.81	18.753	SF
10,400.0	7,169.2	7,365.6	7,213.0	89.9	24.8	91.22	964.6	-1,558.0	2,131.0	2,017.4	113.55	18.767	
10,500.0	7,168.8	7,366.0	7,213.4	92.6	24.8	91.24	964.6	-1,558.0	2,187.2	2,070.9	116.29	18.808	
10,600.0	7,168.4	7,366.5	7,213.8	95.4	24.8	91.25	964.6	-1,558.0	2,246.5	2,127.4	119.04	18.872	
10,700.0	7,168.1	7,366.9	7,214.3	98.1	24.8	91.26	964.6	-1,558.0	2,308.5	2,186.8	121.78	18.956	
10,800.0	7,167.7	7,367.3	7,214.7	100.9	24.8	91.28	964.6	-1,558.0	2,373.2	2,248.7	124.54	19.057	
10,900.0	7,167.4	7,367.8	7,215.1	103.6	24.8	91.29	964.6	-1,558.0	2,440.3	2,313.0	127.29	19.171	
11,000.0	7,167.0	7,368.2	7,215.6	106.4	24.8	91.31	964.6	-1,558.0	2,509.5	2,379.5	130.05	19.297	
11,100.0	7,166.6	7,368.7	7,216.0	109.1	24.8	91.32	964.6	-1,558.0	2,580.8	2,448.0	132.81	19.433	
11,200.0	7,166.3	7,369.1	7,216.5	111.9	24.8	91.33	964.5	-1,558.0	2,653.9	2,518.3	135.57	19.576	
11,300.0	7,165.9	7,369.5	7,216.9	114.7	24.8	91.35	964.5	-1,558.0	2,728.7	2,590.4	138.33	19.726	
11,400.0	7,165.5	7,370.0	7,217.3	117.4	24.8	91.36	964.5	-1,558.0	2,805.1	2,664.0	141.10	19.880	
11,500.0	7,165.2	7,370.4	7,217.7	120.2	24.8	91.38	964.5	-1,558.0	2,882.9	2,739.1	143.87	20.039	
11,600.0	7,164.8	7,370.8	7,218.2	123.0	24.8	91.39	964.5	-1,558.0	2,962.1	2,815.5	146.64	20.200	
11,700.0	7,164.5	7,371.2	7,218.6	125.7	24.8	91.40	964.5	-1,558.1	3,042.5	2,893.1	149.41	20.364	
11,800.0	7,164.1	7,371.7	7,219.0	128.5	24.8	91.42	964.5	-1,558.1	3,124.0	2,971.9	152.18	20.528	
11,828.8	7,164.0	7,371.8	7,219.1	129.3	24.8	91.42	964.5	-1,558.1	3,147.7	2,994.7	152.98	20.576	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD WEDCO 14-21DU - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 704-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-48.09	514.8	-573.5	770.7				
100.0	100.0	100.9	100.9	0.1	0.1	-48.09	514.7	-573.6	770.7	770.5	0.20	3,809.716	
200.0	200.0	200.4	200.4	0.3	0.2	-48.11	514.7	-573.8	770.8	770.3	0.53	1,452.716	
300.0	300.0	299.8	299.8	0.5	0.3	-48.12	514.6	-574.1	771.0	770.1	0.86	897.652	
400.0	400.0	399.2	399.2	0.8	0.4	172.26	514.6	-574.5	773.0	771.8	1.17	661.056	
500.0	499.8	498.5	498.5	1.0	0.5	172.26	514.4	-575.0	778.5	777.0	1.48	526.204	
600.0	599.5	597.5	597.5	1.2	0.6	172.28	514.3	-575.7	787.5	785.7	1.81	434.768	
700.0	698.7	696.1	696.1	1.5	0.7	172.32	514.1	-576.5	800.1	797.9	2.16	369.604	
800.0	797.5	787.1	787.1	1.8	0.9	172.29	513.5	-578.2	816.5	813.9	2.61	313.407	
900.1	895.7	890.0	889.9	2.2	1.2	172.10	510.9	-582.2	836.6	833.5	3.08	271.343	
1,000.0	993.4	983.0	982.6	2.6	1.4	171.82	506.6	-587.6	858.4	854.9	3.54	242.304	
1,100.0	1,091.3	1,074.4	1,073.5	3.0	1.6	171.33	500.3	-595.5	880.8	876.8	4.04	218.087	
1,200.0	1,189.1	1,158.2	1,156.3	3.5	1.9	170.73	492.9	-605.1	904.3	899.7	4.55	198.659	
1,300.0	1,286.9	1,253.4	1,250.0	3.9	2.2	169.89	482.9	-618.5	928.7	923.6	5.14	180.746	
1,400.0	1,384.7	1,336.7	1,331.6	4.4	2.6	169.03	472.5	-632.2	953.9	948.2	5.73	166.529	
1,500.0	1,482.5	1,456.3	1,447.9	4.8	3.1	167.68	454.9	-653.5	979.2	972.8	6.48	151.061	
1,600.0	1,580.3	1,543.0	1,531.7	5.3	3.5	166.60	439.6	-669.7	1,003.9	996.7	7.15	140.358	
1,700.0	1,678.1	1,652.6	1,636.7	5.7	4.1	165.10	417.1	-691.8	1,028.4	1,020.4	8.00	128.509	
1,800.0	1,776.0	1,729.0	1,709.5	6.2	4.5	164.05	400.6	-707.7	1,053.5	1,044.8	8.69	121.266	
1,900.0	1,873.8	1,815.6	1,792.1	6.6	4.9	162.90	382.6	-726.5	1,080.1	1,070.7	9.42	114.608	
2,000.0	1,971.6	1,915.0	1,887.1	7.1	5.4	161.68	362.4	-748.2	1,107.6	1,097.4	10.21	108.520	
2,100.0	2,069.4	1,990.0	1,958.7	7.6	5.8	160.79	347.5	-764.8	1,135.9	1,125.0	10.89	104.332	
2,200.0	2,167.2	2,078.7	2,043.1	8.0	6.3	159.78	330.1	-785.5	1,165.7	1,154.1	11.68	99.816	
2,300.0	2,265.0	2,195.7	2,154.6	8.5	7.0	158.50	306.5	-812.1	1,195.3	1,182.6	12.61	94.762	
2,400.0	2,362.8	2,281.9	2,236.9	9.0	7.4	157.62	289.0	-830.9	1,224.2	1,210.9	13.36	91.635	
2,500.0	2,460.6	2,364.0	2,315.2	9.4	7.9	156.82	272.9	-849.3	1,254.2	1,240.1	14.10	88.925	
2,600.0	2,558.5	2,469.5	2,415.8	9.9	8.5	155.84	252.0	-873.2	1,284.7	1,269.7	14.98	85.739	
2,700.0	2,656.3	2,536.1	2,479.2	10.3	8.9	155.22	238.4	-888.6	1,315.7	1,300.0	15.67	83.979	
2,800.0	2,754.1	2,619.6	2,558.4	10.8	9.4	154.47	222.1	-909.3	1,348.7	1,332.2	16.44	82.019	
2,900.0	2,851.9	2,718.5	2,652.3	11.3	10.0	153.62	202.5	-933.6	1,381.5	1,364.2	17.30	79.840	
3,000.0	2,949.7	2,824.4	2,752.8	11.7	10.6	152.76	181.5	-959.1	1,414.2	1,396.0	18.18	77.775	
3,100.0	3,047.5	2,913.9	2,838.3	12.2	11.1	152.11	164.4	-979.7	1,446.5	1,427.5	18.97	76.256	
3,200.0	3,145.3	3,032.9	2,951.4	12.7	11.8	151.22	140.0	-1,007.5	1,478.8	1,458.9	19.95	74.142	
3,300.0	3,243.2	3,118.1	3,032.3	13.1	12.3	150.57	121.5	-1,026.9	1,510.4	1,489.6	20.74	72.824	
3,400.0	3,341.0	3,200.7	3,110.8	13.6	12.8	150.01	104.6	-1,045.8	1,542.7	1,521.2	21.50	71.766	
3,500.0	3,438.8	3,279.8	3,186.4	14.1	13.3	149.54	89.9	-1,064.2	1,575.9	1,553.7	22.23	70.906	
3,600.0	3,536.6	3,403.9	3,304.8	14.5	14.0	148.81	66.3	-1,093.0	1,609.4	1,586.2	23.19	69.395	
3,700.0	3,634.4	3,480.5	3,377.6	15.0	14.4	148.34	50.4	-1,110.5	1,642.0	1,618.0	23.94	68.587	
3,800.0	3,732.2	3,547.5	3,441.1	15.5	14.9	147.93	36.5	-1,126.7	1,675.9	1,651.2	24.64	68.002	
3,900.0	3,830.0	3,609.9	3,500.2	15.9	15.3	147.56	24.1	-1,142.7	1,711.5	1,686.1	25.32	67.588	
4,000.0	3,927.9	3,685.0	3,571.1	16.4	15.7	147.18	10.6	-1,163.1	1,749.0	1,723.0	26.06	67.125	
4,100.0	4,025.7	3,744.1	3,626.9	16.9	16.1	146.89	0.7	-1,179.8	1,787.8	1,761.1	26.70	66.957	
4,200.0	4,123.5	3,852.1	3,728.5	17.3	16.8	146.35	-18.8	-1,210.8	1,827.0	1,799.4	27.62	66.150	
4,300.0	4,221.3	3,976.2	3,844.9	17.8	17.6	145.65	-45.0	-1,245.3	1,864.7	1,836.1	28.63	65.142	
4,400.0	4,319.1	4,085.1	3,947.3	18.2	18.3	145.07	-68.1	-1,274.1	1,901.4	1,871.8	29.53	64.386	
4,500.0	4,416.9	4,171.7	4,028.9	18.7	18.8	144.64	-86.2	-1,296.4	1,937.6	1,907.3	30.32	63.906	
4,600.0	4,514.7	4,225.2	4,079.4	19.2	19.2	144.40	-96.6	-1,310.8	1,975.2	1,944.3	30.94	63.843	
4,700.0	4,612.6	4,346.5	4,193.6	19.6	20.0	143.87	-120.5	-1,344.2	2,013.6	1,981.7	31.92	63.089	
4,800.0	4,710.4	4,456.7	4,297.4	20.1	20.7	143.39	-143.0	-1,373.3	2,050.9	2,018.0	32.83	62.475	
4,900.0	4,808.2	4,624.3	4,457.1	20.6	21.6	142.78	-175.7	-1,412.5	2,085.2	2,051.3	33.97	61.390	
5,000.0	4,906.0	4,793.8	4,620.3	21.0	22.5	142.30	-206.8	-1,445.8	2,116.5	2,081.5	35.06	60.377	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD WEDCO 14-21DU - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 704-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.0	5,003.8	4,921.8	4,744.8	21.5	23.1	142.05	-227.5	-1,467.1	2,145.6	2,109.7	35.91	59.748	
5,200.0	5,101.6	5,039.0	4,859.3	22.0	23.6	141.87	-245.4	-1,485.3	2,173.8	2,137.1	36.71	59.223	
5,300.0	5,199.4	5,226.9	5,044.2	22.4	24.2	141.78	-268.6	-1,508.1	2,199.4	2,161.8	37.66	58.403	
5,400.0	5,297.3	5,377.0	5,193.3	22.9	24.6	141.91	-280.7	-1,519.7	2,221.7	2,183.3	38.38	57.881	
5,476.5	5,372.1	5,534.3	5,350.4	23.3	24.9	142.26	-286.3	-1,526.3	2,237.2	2,198.3	38.92	57.484	
5,500.0	5,395.1	5,572.2	5,388.3	23.3	24.9	142.43	-286.2	-1,526.5	2,241.2	2,202.1	39.07	57.361	
5,600.0	5,493.4	5,677.2	5,493.3	23.7	25.0	142.94	-285.4	-1,526.5	2,255.9	2,216.4	39.56	57.031	
5,700.0	5,592.3	5,768.0	5,584.1	23.9	25.1	143.31	-284.7	-1,526.5	2,268.0	2,228.1	39.98	56.733	
5,800.0	5,691.6	5,860.3	5,676.4	24.1	25.2	143.58	-284.5	-1,527.1	2,277.9	2,237.5	40.36	56.446	
5,900.0	5,791.3	5,963.1	5,779.2	24.3	25.3	143.78	-284.6	-1,527.8	2,284.8	2,244.1	40.70	56.143	
6,000.0	5,891.2	6,058.7	5,874.8	24.5	25.4	143.88	-285.1	-1,528.6	2,289.1	2,248.1	40.98	55.855	
6,076.6	5,967.8	6,136.4	5,952.4	24.6	25.5	-76.51	-285.6	-1,529.3	2,290.5	2,249.9	40.64	56.368	
6,100.0	5,991.2	6,161.1	5,977.2	24.6	25.5	-76.51	-285.8	-1,529.6	2,290.7	2,250.0	40.70	56.286	
6,200.0	6,091.2	6,264.8	6,080.9	24.7	25.6	-76.53	-286.5	-1,530.4	2,291.3	2,250.3	40.95	55.949	
6,300.0	6,191.2	6,367.5	6,183.6	24.8	25.7	-76.55	-287.1	-1,531.0	2,291.8	2,250.5	41.21	55.615	
6,400.0	6,291.2	6,468.3	6,284.4	24.9	25.8	-76.56	-287.5	-1,531.5	2,292.1	2,250.7	41.46	55.284	
6,500.0	6,391.2	6,565.2	6,381.3	25.0	25.9	-76.57	-287.7	-1,531.9	2,292.5	2,250.8	41.71	54.960	
6,571.6	6,462.8	6,633.3	6,449.3	25.1	26.0	-76.57	-287.7	-1,532.3	2,293.0	2,251.1	41.89	54.732	
6,600.0	6,491.2	6,660.2	6,476.2	25.1	26.1	13.43	-287.7	-1,532.5	2,292.6	2,250.2	42.43	54.028	
6,650.0	6,541.1	6,709.6	6,525.6	25.1	26.1	13.51	-287.9	-1,532.9	2,289.3	2,247.0	42.35	54.058	
6,700.0	6,590.5	6,759.1	6,575.2	25.1	26.2	13.67	-288.0	-1,533.4	2,282.7	2,240.6	42.09	54.230	
6,750.0	6,639.4	6,808.8	6,624.9	25.1	26.2	13.93	-288.1	-1,533.7	2,272.7	2,231.1	41.66	54.551	
6,800.0	6,687.4	6,858.0	6,674.1	25.0	26.3	14.28	-288.2	-1,534.1	2,259.4	2,218.4	41.06	55.022	
6,850.0	6,734.3	6,911.0	6,727.0	25.0	26.3	14.75	-288.2	-1,534.4	2,242.9	2,202.6	40.31	55.643	
6,900.0	6,779.8	6,960.8	6,776.8	24.9	26.4	15.35	-288.3	-1,534.6	2,223.0	2,183.6	39.40	56.427	
6,950.0	6,823.8	7,005.4	6,821.5	24.8	26.4	16.07	-288.4	-1,534.7	2,200.1	2,161.8	38.34	57.382	
7,000.0	6,866.1	7,048.2	6,864.2	24.7	26.5	16.95	-288.4	-1,534.8	2,174.3	2,137.1	37.17	58.501	
7,050.0	6,906.4	7,088.7	6,904.8	24.6	26.5	18.02	-288.5	-1,534.8	2,145.7	2,109.8	35.90	59.772	
7,100.0	6,944.6	7,127.2	6,943.2	24.5	26.6	19.31	-288.7	-1,534.9	2,114.5	2,079.9	34.57	61.164	
7,150.0	6,980.4	7,163.0	6,979.0	24.4	26.6	20.88	-288.9	-1,535.0	2,080.8	2,047.5	33.24	62.605	
7,200.0	7,013.6	7,196.2	7,012.2	24.3	26.7	22.78	-289.1	-1,535.1	2,044.7	2,012.8	31.97	63.959	
7,250.0	7,044.2	7,226.8	7,042.9	24.2	26.7	25.12	-289.2	-1,535.2	2,006.6	1,975.8	30.88	64.983	
7,300.0	7,072.0	7,257.1	7,073.1	24.1	26.7	28.05	-289.4	-1,535.3	1,966.6	1,936.5	30.13	65.267	
7,350.0	7,096.8	7,284.0	7,100.1	24.0	26.8	31.70	-289.5	-1,535.3	1,924.8	1,894.9	29.92	64.329	
7,400.0	7,118.5	7,307.5	7,123.5	23.9	26.8	36.26	-289.6	-1,535.3	1,881.5	1,851.1	30.47	61.748	
7,450.0	7,137.0	7,326.7	7,142.7	23.8	26.8	41.97	-289.7	-1,535.3	1,837.0	1,805.0	31.94	57.506	
7,500.0	7,152.2	7,341.5	7,157.6	23.8	26.8	49.06	-289.8	-1,535.3	1,791.4	1,757.0	34.38	52.111	
7,550.0	7,164.1	7,353.1	7,169.2	23.8	26.8	57.76	-289.8	-1,535.3	1,745.1	1,707.5	37.61	46.398	
7,600.0	7,172.5	7,361.4	7,177.4	23.8	26.9	68.06	-289.9	-1,535.3	1,698.2	1,657.0	41.16	41.260	
7,650.0	7,177.5	7,366.2	7,182.3	23.9	26.9	79.49	-289.9	-1,535.3	1,651.0	1,606.7	44.26	37.305	
7,699.2	7,179.0	7,367.7	7,183.7	24.1	26.9	90.95	-289.9	-1,535.3	1,604.5	1,558.3	46.20	34.729	
7,700.0	7,179.0	7,367.7	7,183.7	24.1	26.9	90.95	-289.9	-1,535.3	1,603.7	1,557.5	46.21	34.704	
7,800.0	7,178.6	7,367.3	7,183.3	24.9	26.9	90.90	-289.9	-1,535.3	1,509.7	1,462.0	47.75	31.620	
7,900.0	7,178.3	7,366.8	7,182.9	26.4	26.9	90.85	-289.9	-1,535.3	1,416.5	1,367.0	49.50	28.616	
8,000.0	7,177.9	7,366.4	7,182.4	28.2	26.9	90.81	-289.9	-1,535.3	1,324.3	1,272.9	51.43	25.752	
8,100.0	7,177.5	7,366.0	7,182.0	30.3	26.9	90.76	-289.9	-1,535.3	1,233.4	1,179.9	53.49	23.058	
8,200.0	7,177.2	7,365.6	7,181.6	32.5	26.9	90.72	-289.9	-1,535.3	1,143.9	1,088.2	55.66	20.550	
8,300.0	7,176.8	7,365.1	7,181.2	34.8	26.9	90.67	-289.9	-1,535.3	1,056.3	998.4	57.93	18.234	
8,400.0	7,176.4	7,364.7	7,180.8	37.2	26.9	90.63	-289.9	-1,535.3	971.1	910.8	60.27	16.113	
8,500.0	7,176.1	7,364.3	7,180.3	39.6	26.9	90.58	-289.9	-1,535.3	889.0	826.3	62.67	14.186	
8,600.0	7,175.7	7,363.9	7,179.9	42.0	26.9	90.53	-289.9	-1,535.3	810.9	745.8	65.12	12.453	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST DD WEDCO 14-21DU - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 704-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,700.0	7,175.3	7,363.5	7,179.5	44.6	26.9	90.49	-289.9	-1,535.3	738.2	670.6	67.61	10.918	
8,800.0	7,175.0	7,363.0	7,179.1	47.1	26.9	90.44	-289.9	-1,535.3	672.4	602.3	70.14	9.587	
8,900.0	7,174.6	7,362.6	7,178.6	49.7	26.9	90.40	-289.9	-1,535.3	616.0	543.3	72.70	8.474	
9,000.0	7,174.3	7,362.2	7,178.2	52.3	26.9	90.35	-289.9	-1,535.3	571.6	496.3	75.28	7.593	
9,100.0	7,173.9	7,361.8	7,177.8	54.9	26.9	90.30	-289.9	-1,535.3	542.3	464.4	77.89	6.962	
9,200.0	7,173.5	7,361.3	7,177.4	57.5	26.9	90.26	-289.9	-1,535.3	530.4	449.9	80.51	6.588	
9,213.6	7,173.5	7,361.3	7,177.3	57.9	26.9	90.25	-289.9	-1,535.3	530.2	449.4	80.87	6.557	CC, ES
9,300.0	7,173.2	7,360.9	7,176.9	60.1	26.9	90.21	-289.9	-1,535.3	537.2	454.1	83.15	6.461	SF
9,400.0	7,172.8	7,360.5	7,176.5	62.8	26.9	90.17	-289.9	-1,535.3	562.0	476.2	85.81	6.550	
9,500.0	7,172.4	7,360.0	7,176.1	65.5	26.9	90.12	-289.9	-1,535.3	602.6	514.2	88.47	6.812	
9,600.0	7,172.1	7,359.6	7,175.7	68.2	26.9	90.07	-289.9	-1,535.3	656.1	564.9	91.15	7.198	
9,700.0	7,171.7	7,359.2	7,175.2	70.9	26.9	90.03	-289.9	-1,535.3	719.5	625.7	93.84	7.668	
9,800.0	7,171.3	7,358.8	7,174.8	73.6	26.9	89.98	-289.9	-1,535.3	790.6	694.0	96.54	8.189	
9,900.0	7,171.0	7,358.3	7,174.4	76.3	26.8	89.93	-289.9	-1,535.3	867.4	768.1	99.24	8.740	
10,000.0	7,170.6	7,357.9	7,173.9	79.0	26.8	89.89	-289.9	-1,535.3	948.5	846.5	101.96	9.303	
10,100.0	7,170.3	7,357.5	7,173.5	81.7	26.8	89.84	-289.9	-1,535.3	1,032.9	928.2	104.67	9.868	
10,200.0	7,169.9	7,357.0	7,173.1	84.4	26.8	89.79	-289.9	-1,535.3	1,119.9	1,012.5	107.40	10.427	
10,300.0	7,169.5	7,356.6	7,172.6	87.2	26.8	89.75	-289.9	-1,535.3	1,208.9	1,098.8	110.13	10.977	
10,400.0	7,169.2	7,356.2	7,172.2	89.9	26.8	89.70	-289.9	-1,535.3	1,299.5	1,186.6	112.86	11.514	
10,500.0	7,168.8	7,355.7	7,171.8	92.6	26.8	89.66	-289.8	-1,535.3	1,391.4	1,275.8	115.60	12.036	
10,600.0	7,168.4	7,355.3	7,171.3	95.4	26.8	89.61	-289.8	-1,535.3	1,484.3	1,366.0	118.34	12.543	
10,700.0	7,168.1	7,354.9	7,170.9	98.1	26.8	89.56	-289.8	-1,535.3	1,578.2	1,457.1	121.09	13.033	
10,800.0	7,167.7	7,354.4	7,170.5	100.9	26.8	89.52	-289.8	-1,535.3	1,672.7	1,548.8	123.83	13.507	
10,900.0	7,167.4	7,354.0	7,170.0	103.6	26.8	89.47	-289.8	-1,535.3	1,767.8	1,641.2	126.59	13.965	
11,000.0	7,167.0	7,353.6	7,169.6	106.4	26.8	89.42	-289.8	-1,535.3	1,863.4	1,734.1	129.34	14.407	
11,100.0	7,166.6	7,353.1	7,169.2	109.1	26.8	89.37	-289.8	-1,535.3	1,959.5	1,827.4	132.10	14.834	
11,200.0	7,166.3	7,352.7	7,168.7	111.9	26.8	89.33	-289.8	-1,535.3	2,056.0	1,921.1	134.86	15.246	
11,300.0	7,165.9	7,352.3	7,168.3	114.7	26.8	89.28	-289.8	-1,535.3	2,152.7	2,015.1	137.62	15.643	
11,400.0	7,165.5	7,351.8	7,167.9	117.4	26.8	89.23	-289.8	-1,535.3	2,249.8	2,109.4	140.38	16.026	
11,500.0	7,165.2	7,351.4	7,167.4	120.2	26.8	89.19	-289.8	-1,535.3	2,347.1	2,203.9	143.14	16.397	
11,600.0	7,164.8	7,351.0	7,167.0	123.0	26.8	89.14	-289.8	-1,535.3	2,444.6	2,298.7	145.91	16.754	
11,700.0	7,164.5	7,350.5	7,166.5	125.7	26.8	89.09	-289.8	-1,535.3	2,542.3	2,393.6	148.68	17.099	
11,800.0	7,164.1	7,350.1	7,166.1	128.5	26.8	89.05	-289.8	-1,535.3	2,640.2	2,488.7	151.45	17.433	
11,828.8	7,164.0	7,349.9	7,166.0	129.3	26.8	89.03	-289.8	-1,535.3	2,668.4	2,516.2	152.24	17.527	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST VERT BUNYAN #1 - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 100-GYD_CT

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-35.34	753.4	-534.2	923.6				
100.0	100.0	85.1	85.1	0.1	0.1	-35.34	753.4	-534.2	923.6	923.5	0.15	6,069.857	CC
200.0	200.0	185.6	185.6	0.3	0.1	-35.35	753.4	-534.5	923.7	923.3	0.47	1,973.791	
300.0	300.0	287.4	287.4	0.5	0.2	-35.38	753.1	-534.9	923.8	923.0	0.78	1,191.167	
302.8	302.8	290.2	290.2	0.6	0.2	-174.99	753.1	-534.9	923.8	923.0	0.78	1,178.385	ES
400.0	400.0	385.6	385.6	0.8	0.3	-175.02	752.8	-535.3	925.5	924.4	1.05	881.061	
500.0	499.8	487.7	487.7	1.0	0.4	-175.11	752.2	-536.1	930.7	929.4	1.34	696.909	
600.0	599.5	582.7	582.6	1.2	0.4	-175.19	751.7	-536.9	939.4	937.8	1.63	577.214	
700.0	698.7	679.1	679.1	1.5	0.5	-175.30	751.4	-538.2	952.1	950.2	1.93	492.454	
800.0	797.5	785.6	785.5	1.8	0.5	-175.42	751.2	-539.2	968.0	965.8	2.24	432.942	
900.1	895.7	882.2	882.1	2.2	0.6	-175.54	750.4	-540.0	986.9	984.4	2.55	387.589	
1,000.0	993.4	983.1	983.1	2.6	0.6	-175.73	749.4	-541.2	1,007.6	1,004.7	2.82	356.906	
1,100.0	1,091.3	1,080.9	1,080.8	3.0	0.7	-175.89	748.3	-542.2	1,028.0	1,024.9	3.10	331.316	
1,200.0	1,189.1	1,171.8	1,171.8	3.5	0.7	-176.04	747.5	-543.2	1,048.7	1,045.3	3.39	309.565	
1,300.0	1,286.9	1,271.4	1,271.3	3.9	0.7	-176.19	747.1	-544.4	1,069.9	1,066.2	3.68	291.091	
1,400.0	1,384.7	1,366.7	1,366.6	4.4	0.8	-176.34	746.4	-545.7	1,090.8	1,086.8	3.96	275.384	
1,500.0	1,482.5	1,469.0	1,468.9	4.8	0.8	-176.47	745.9	-546.9	1,111.9	1,107.7	4.25	261.844	
1,600.0	1,580.3	1,565.3	1,565.2	5.3	0.9	-176.61	745.1	-548.0	1,132.6	1,128.1	4.53	249.938	
1,700.0	1,678.1	1,661.4	1,661.2	5.7	0.9	-176.75	744.3	-549.5	1,153.7	1,148.8	4.82	239.307	
1,800.0	1,776.0	1,755.2	1,755.1	6.2	0.9	-176.88	743.7	-550.9	1,174.8	1,169.7	5.11	229.846	
1,900.0	1,873.8	1,850.8	1,850.7	6.6	1.0	-176.98	743.7	-552.1	1,196.4	1,191.0	5.40	221.424	
2,000.0	1,971.6	1,951.5	1,951.4	7.1	1.0	-177.09	743.6	-553.4	1,217.8	1,212.1	5.69	213.883	
2,100.0	2,069.4	2,051.9	2,051.7	7.6	1.1	-177.22	742.9	-555.0	1,239.0	1,233.0	5.99	206.828	
2,200.0	2,167.2	2,152.0	2,151.8	8.0	1.1	-177.33	742.2	-556.3	1,260.0	1,253.7	6.30	200.050	
2,300.0	2,265.0	2,248.6	2,248.4	8.5	1.2	-177.42	741.7	-557.2	1,280.9	1,274.3	6.60	193.931	
2,400.0	2,362.8	2,341.7	2,341.5	9.0	1.2	-177.52	741.2	-558.4	1,302.1	1,295.2	6.91	188.443	
2,500.0	2,460.6	2,437.7	2,437.5	9.4	1.3	-177.62	740.9	-560.0	1,323.6	1,316.4	7.22	183.439	
2,600.0	2,558.5	2,538.9	2,538.7	9.9	1.3	-177.73	740.4	-561.6	1,345.0	1,337.4	7.52	178.784	
2,700.0	2,656.3	2,637.4	2,637.2	10.3	1.4	-177.82	739.8	-562.9	1,366.1	1,358.3	7.83	174.504	
2,800.0	2,754.1	2,731.5	2,731.3	10.8	1.4	-177.91	739.4	-564.3	1,387.4	1,379.3	8.13	170.625	
2,900.0	2,851.9	2,825.4	2,825.1	11.3	1.5	-178.00	739.1	-565.9	1,409.0	1,400.5	8.44	167.037	
3,000.0	2,949.7	2,918.6	2,918.3	11.7	1.5	-178.09	739.0	-567.6	1,430.8	1,422.1	8.74	163.706	
3,100.0	3,047.5	3,012.8	3,012.5	12.2	1.6	-178.17	739.2	-569.5	1,453.0	1,443.9	9.05	160.639	
3,200.0	3,145.3	3,115.1	3,114.8	12.7	1.6	-178.25	739.4	-571.5	1,475.0	1,465.7	9.35	157.745	
3,300.0	3,243.2	3,215.1	3,214.8	13.1	1.6	-178.33	739.2	-573.3	1,496.8	1,487.2	9.66	155.017	
3,400.0	3,341.0	3,303.5	3,303.2	13.6	1.7	-178.40	739.4	-574.9	1,518.9	1,508.9	9.96	152.565	
3,500.0	3,438.8	3,400.0	3,399.6	14.1	1.7	-178.46	740.2	-576.9	1,541.5	1,531.3	10.26	150.253	
3,600.0	3,536.6	3,484.0	3,483.7	14.5	1.7	-178.51	741.2	-578.8	1,564.6	1,554.1	10.56	148.111	
3,700.0	3,634.4	3,576.8	3,576.4	15.0	1.8	-178.57	742.5	-581.2	1,588.0	1,577.1	10.87	146.061	
3,800.0	3,732.2	3,670.4	3,669.9	15.5	1.8	-178.63	743.9	-583.7	1,611.7	1,600.5	11.18	144.155	
3,900.0	3,830.0	3,764.2	3,763.6	15.9	1.9	-178.67	745.7	-586.2	1,635.5	1,624.0	11.49	142.375	
4,000.0	3,927.9	3,861.9	3,861.3	16.4	1.9	-178.71	747.7	-588.8	1,659.5	1,647.7	11.80	140.691	
4,100.0	4,025.7	3,962.2	3,961.6	16.9	1.9	-178.77	749.3	-591.7	1,683.3	1,671.2	12.10	139.076	
4,200.0	4,123.5	4,067.4	4,066.7	17.3	2.0	-178.84	750.6	-594.8	1,706.8	1,694.4	12.41	137.515	
4,300.0	4,221.3	4,175.8	4,175.1	17.8	2.0	-178.89	751.9	-597.0	1,729.8	1,717.0	12.72	135.981	
4,400.0	4,319.1	4,275.3	4,274.6	18.2	2.0	-178.91	753.1	-598.3	1,752.3	1,739.3	13.03	134.502	
4,500.0	4,416.9	4,372.1	4,371.4	18.7	2.1	-178.94	754.2	-599.7	1,774.8	1,761.5	13.33	133.098	
4,600.0	4,514.7	4,474.9	4,474.1	19.2	2.1	-178.96	755.4	-601.1	1,797.3	1,783.6	13.64	131.719	
4,700.0	4,612.6	4,580.3	4,579.5	19.6	2.1	-178.98	756.3	-602.1	1,819.3	1,805.4	13.96	130.364	
4,800.0	4,710.4	4,676.3	4,675.5	20.1	2.2	-179.00	757.0	-602.9	1,841.2	1,826.9	14.26	129.100	
4,900.0	4,808.2	4,770.1	4,769.3	20.6	2.2	-179.03	757.4	-604.2	1,863.2	1,848.6	14.57	127.913	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST VERT BUNYAN #1 - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 100-GYD_CT

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,000.0	4,906.0	4,868.4	4,867.6	21.0	2.2	-179.07	757.8	-605.8	1,885.3	1,870.5	14.87	126.759	
5,100.0	5,003.8	4,968.9	4,968.1	21.5	2.3	-179.10	758.5	-607.0	1,907.3	1,892.2	15.18	125.635	
5,200.0	5,101.6	5,068.0	5,067.1	22.0	2.3	-179.11	759.3	-607.8	1,929.2	1,913.7	15.49	124.552	
5,300.0	5,199.4	5,166.3	5,165.5	22.4	2.3	-179.14	759.8	-608.9	1,951.1	1,935.3	15.80	123.514	
5,400.0	5,297.3	5,273.2	5,272.3	22.9	2.3	-179.17	760.0	-610.1	1,972.7	1,956.6	16.09	122.626	
5,476.5	5,372.1	5,358.5	5,357.6	23.3	2.3	-179.19	760.0	-610.5	1,988.9	1,972.6	16.30	121.990	
5,500.0	5,395.1	5,384.7	5,383.9	23.3	2.3	-179.19	759.9	-610.5	1,993.6	1,977.3	16.35	121.946	
5,600.0	5,493.4	5,481.2	5,480.4	23.7	2.3	-179.20	759.9	-610.4	2,011.8	1,995.3	16.50	121.904	
5,700.0	5,592.3	5,575.7	5,574.9	23.9	2.3	-179.21	760.1	-610.3	2,026.7	2,010.1	16.64	121.832	
5,800.0	5,691.6	5,676.6	5,675.8	24.1	2.3	-179.21	760.3	-610.4	2,038.3	2,021.5	16.75	121.686	
5,900.0	5,791.3	5,780.0	5,779.2	24.3	2.4	-179.23	759.9	-610.9	2,046.2	2,029.4	16.85	121.447	
6,000.0	5,891.2	5,874.4	5,873.6	24.5	2.4	-179.27	759.3	-611.6	2,050.6	2,033.7	16.94	121.031	
6,076.6	5,967.8	5,945.1	5,944.2	24.6	2.4	-39.68	759.1	-612.2	2,051.9	2,025.2	26.77	76.637	
6,100.0	5,991.2	5,966.7	5,965.8	24.6	2.4	-39.68	759.1	-612.4	2,052.1	2,025.3	26.81	76.554	
6,200.0	6,091.2	6,076.4	6,075.5	24.7	2.4	-39.70	759.2	-613.1	2,052.6	2,025.6	26.92	76.257	
6,300.0	6,191.2	6,195.9	6,195.1	24.8	2.4	-39.70	758.8	-612.9	2,052.2	2,025.2	27.02	75.946	
6,400.0	6,291.2	6,285.6	6,284.8	24.9	2.4	-39.69	758.5	-612.4	2,051.6	2,024.4	27.12	75.647	
6,462.3	6,353.5	6,340.8	6,340.0	24.9	2.4	-39.69	758.5	-612.3	2,051.5	2,024.3	27.18	75.470	
6,500.0	6,391.2	6,374.3	6,373.4	25.0	2.4	-39.69	758.5	-612.3	2,051.5	2,024.3	27.22	75.367	
6,571.6	6,462.8	6,447.5	6,446.6	25.1	2.4	-39.69	758.7	-612.3	2,051.7	2,024.4	27.29	75.170	
6,600.0	6,491.2	6,479.2	6,478.3	25.1	2.4	50.35	758.7	-612.3	2,051.3	2,033.5	17.82	115.126	
6,650.0	6,541.1	6,534.8	6,533.9	25.1	2.4	50.59	758.6	-612.3	2,048.9	2,031.1	17.79	115.160	
6,700.0	6,590.5	6,590.0	6,589.1	25.1	2.4	51.06	758.4	-612.2	2,044.1	2,026.3	17.77	115.009	
6,750.0	6,639.4	6,640.7	6,639.8	25.1	2.4	51.74	758.0	-612.1	2,037.0	2,019.3	17.77	114.623	
6,800.0	6,687.4	6,689.6	6,688.8	25.0	2.4	52.63	757.7	-612.1	2,027.9	2,010.1	17.79	114.014	
6,850.0	6,734.3	6,737.5	6,736.6	25.0	2.4	53.75	757.2	-612.0	2,016.7	1,998.8	17.82	113.159	
6,900.0	6,779.8	6,784.0	6,783.1	24.9	2.4	55.08	756.8	-611.9	2,003.6	1,985.7	17.89	112.020	
6,950.0	6,823.8	6,826.0	6,825.1	24.8	2.5	56.60	756.4	-611.9	1,988.7	1,970.7	17.99	110.572	
7,000.0	6,866.1	6,864.8	6,863.9	24.7	2.5	58.30	756.0	-612.0	1,972.2	1,954.1	18.13	108.785	
7,050.0	6,906.4	6,901.9	6,901.1	24.6	2.5	60.20	755.7	-612.2	1,954.4	1,936.1	18.33	106.634	
7,100.0	6,944.6	6,937.2	6,936.3	24.5	2.5	62.27	755.3	-612.4	1,935.3	1,916.7	18.59	104.128	
7,150.0	6,980.4	6,970.5	6,969.6	24.4	2.5	64.51	755.1	-612.6	1,915.2	1,896.3	18.90	101.308	
7,200.0	7,013.6	7,000.0	6,999.1	24.3	2.5	66.85	754.8	-612.9	1,894.2	1,874.9	19.28	98.266	
7,250.0	7,044.2	7,031.6	7,030.7	24.2	2.5	69.41	754.6	-613.2	1,872.5	1,852.8	19.71	95.023	
7,300.0	7,072.0	7,058.6	7,057.8	24.1	2.5	72.00	754.5	-613.5	1,850.3	1,830.2	20.17	91.735	
7,350.0	7,096.8	7,082.8	7,081.9	24.0	2.5	74.62	754.4	-613.6	1,827.9	1,807.3	20.67	88.455	
7,400.0	7,118.5	7,103.8	7,103.0	23.9	2.5	77.21	754.4	-613.7	1,805.5	1,784.3	21.19	85.224	
7,450.0	7,137.0	7,121.8	7,120.9	23.8	2.5	79.74	754.4	-613.8	1,783.2	1,761.5	21.73	82.062	
7,500.0	7,152.2	7,136.4	7,135.6	23.8	2.5	82.15	754.4	-613.9	1,761.4	1,739.1	22.31	78.967	
7,550.0	7,164.1	7,147.9	7,147.0	23.8	2.5	84.41	754.4	-613.9	1,740.2	1,717.3	22.92	75.933	
7,600.0	7,172.5	7,156.0	7,155.1	23.8	2.5	86.48	754.4	-613.9	1,719.8	1,696.2	23.57	72.959	
7,650.0	7,177.5	7,160.8	7,159.9	23.9	2.5	88.33	754.4	-613.9	1,700.4	1,676.2	24.27	70.057	
7,699.2	7,179.0	7,162.3	7,161.4	24.1	2.5	89.93	754.4	-613.9	1,682.5	1,657.5	25.00	67.293	
7,700.0	7,179.0	7,162.3	7,161.4	24.1	2.5	89.93	754.4	-613.9	1,682.2	1,657.2	25.01	67.250	
7,800.0	7,178.6	7,162.1	7,161.2	24.9	2.5	89.92	754.4	-613.9	1,649.6	1,623.1	26.55	62.135	
7,900.0	7,178.3	7,161.9	7,161.0	26.4	2.5	89.91	754.4	-613.9	1,622.6	1,594.3	28.31	57.321	
8,000.0	7,177.9	7,161.7	7,160.8	28.2	2.5	89.91	754.4	-613.9	1,601.4	1,571.2	30.24	52.963	
8,100.0	7,177.5	7,161.5	7,160.6	30.3	2.5	89.90	754.4	-613.9	1,586.2	1,553.9	32.30	49.105	
8,200.0	7,177.2	7,161.3	7,160.4	32.5	2.5	89.89	754.4	-613.9	1,577.2	1,542.7	34.48	45.742	
8,292.2	7,176.8	7,161.1	7,160.2	34.6	2.5	89.89	754.4	-613.9	1,574.5	1,537.9	36.57	43.052	
8,300.0	7,176.8	7,161.1	7,160.2	34.8	2.5	89.89	754.4	-613.9	1,574.5	1,537.8	36.75	42.846	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST VERT BUNYAN #1 - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 100-GYD_CT

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,400.0	7,176.4	7,160.9	7,160.0	37.2	2.5	89.88	754.4	-613.9	1,578.2	1,539.1	39.09	40.372	
8,500.0	7,176.1	7,160.7	7,159.8	39.6	2.5	89.87	754.4	-613.9	1,588.1	1,546.7	41.49	38.274	
8,600.0	7,175.7	7,160.5	7,159.6	42.0	2.5	89.86	754.4	-613.9	1,604.3	1,560.3	43.95	36.504	
8,700.0	7,175.3	7,160.3	7,159.4	44.6	2.5	89.86	754.4	-613.9	1,626.4	1,580.0	46.44	35.020	
8,800.0	7,175.0	7,160.1	7,159.2	47.1	2.5	89.85	754.4	-613.9	1,654.4	1,605.4	48.97	33.780	
8,900.0	7,174.6	7,159.9	7,159.0	49.7	2.5	89.84	754.4	-613.9	1,687.7	1,636.2	51.54	32.749	
9,000.0	7,174.3	7,159.7	7,158.8	52.3	2.5	89.84	754.4	-613.9	1,726.3	1,672.1	54.12	31.896	
9,100.0	7,173.9	7,159.6	7,158.7	54.9	2.5	89.83	754.4	-613.9	1,769.6	1,712.9	56.73	31.193	
9,200.0	7,173.5	7,159.4	7,158.5	57.5	2.5	89.82	754.4	-613.9	1,817.4	1,758.1	59.36	30.618	
9,300.0	7,173.2	7,159.2	7,158.3	60.1	2.5	89.82	754.4	-613.9	1,869.4	1,807.4	62.00	30.151	
9,400.0	7,172.8	7,159.0	7,158.1	62.8	2.5	89.81	754.4	-613.9	1,925.1	1,860.5	64.66	29.774	
9,500.0	7,172.4	7,158.8	7,158.0	65.5	2.5	89.80	754.4	-613.9	1,984.4	1,917.0	67.33	29.472	
9,600.0	7,172.1	7,158.7	7,157.8	68.2	2.5	89.80	754.4	-613.9	2,046.8	1,976.8	70.01	29.235	
9,700.0	7,171.7	7,158.5	7,157.6	70.9	2.5	89.79	754.4	-613.9	2,112.1	2,039.4	72.70	29.051	
9,800.0	7,171.3	7,158.3	7,157.4	73.6	2.5	89.79	754.4	-613.9	2,180.0	2,104.6	75.40	28.911	
9,900.0	7,171.0	7,158.2	7,157.3	76.3	2.5	89.78	754.4	-613.9	2,250.3	2,172.2	78.11	28.809	
10,000.0	7,170.6	7,158.0	7,157.1	79.0	2.5	89.77	754.4	-613.9	2,322.8	2,242.0	80.83	28.738	
10,100.0	7,170.3	7,157.8	7,156.9	81.7	2.5	89.77	754.4	-613.9	2,397.3	2,313.8	83.55	28.694	
10,200.0	7,169.9	7,157.7	7,156.8	84.4	2.5	89.76	754.4	-613.9	2,473.6	2,387.3	86.28	28.671	
10,300.0	7,169.5	7,157.5	7,156.6	87.2	2.5	89.76	754.4	-613.9	2,551.5	2,462.5	89.01	28.666	SF
10,400.0	7,169.2	7,157.3	7,156.5	89.9	2.5	89.75	754.4	-613.9	2,630.9	2,539.2	91.74	28.676	
10,500.0	7,168.8	7,157.2	7,156.3	92.6	2.5	89.75	754.4	-613.9	2,711.7	2,617.2	94.49	28.699	
10,600.0	7,168.4	7,157.0	7,156.1	95.4	2.5	89.74	754.4	-613.9	2,793.7	2,696.5	97.23	28.733	
10,700.0	7,168.1	7,156.9	7,156.0	98.1	2.5	89.73	754.4	-613.9	2,876.9	2,776.9	99.98	28.774	
10,800.0	7,167.7	7,156.7	7,155.8	100.9	2.5	89.73	754.4	-613.9	2,961.1	2,858.3	102.73	28.823	
10,900.0	7,167.4	7,156.6	7,155.7	103.6	2.5	89.72	754.4	-613.9	3,046.2	2,940.7	105.49	28.878	
11,000.0	7,167.0	7,156.4	7,155.5	106.4	2.5	89.72	754.4	-613.9	3,132.3	3,024.0	108.25	28.937	
11,100.0	7,166.6	7,156.3	7,155.4	109.1	2.5	89.71	754.4	-613.9	3,219.1	3,108.1	111.01	28.999	
11,200.0	7,166.3	7,156.1	7,155.2	111.9	2.5	89.71	754.4	-613.9	3,306.7	3,192.9	113.77	29.065	
11,300.0	7,165.9	7,156.0	7,155.1	114.7	2.5	89.70	754.4	-613.9	3,394.9	3,278.4	116.53	29.133	
11,400.0	7,165.5	7,155.8	7,155.0	117.4	2.5	89.70	754.4	-613.9	3,483.8	3,364.5	119.30	29.202	
11,500.0	7,165.2	7,155.7	7,154.8	120.2	2.5	89.69	754.4	-613.9	3,573.3	3,451.3	122.07	29.273	
11,600.0	7,164.8	7,155.6	7,154.7	123.0	2.5	89.69	754.4	-613.9	3,663.4	3,538.5	124.84	29.344	
11,700.0	7,164.5	7,155.4	7,154.5	125.7	2.5	89.68	754.4	-613.9	3,753.9	3,626.3	127.61	29.416	
11,800.0	7,164.1	7,155.3	7,154.4	128.5	2.5	89.68	754.4	-613.9	3,844.9	3,714.5	130.39	29.488	
11,828.8	7,164.0	7,155.2	7,154.3	129.3	2.5	89.68	754.4	-613.9	3,871.2	3,740.0	131.18	29.510	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST VERT EVANS-STROH 20-1 - Wellbore #1 - Design #1

Offset Site Error: 0.0 usft

Survey Program: 0-INC

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-85.98	264.0	-3,758.6	3,768.0				
100.0	100.0	75.5	75.5	0.1	0.7	-85.98	264.0	-3,758.6	3,767.9	3,767.1	0.82	4,589.760	
200.0	200.0	175.5	175.5	0.3	2.7	-85.98	264.0	-3,758.6	3,767.9	3,764.9	3.05	1,234.645	
300.0	300.0	275.5	275.5	0.5	4.9	-85.98	264.0	-3,758.6	3,767.9	3,762.5	5.42	694.819	
400.0	400.0	375.5	375.5	0.8	6.9	134.42	264.0	-3,758.6	3,769.1	3,761.5	7.68	491.040	
500.0	499.8	475.3	475.3	1.0	9.0	134.42	264.0	-3,758.6	3,772.8	3,762.9	9.90	381.206	
600.0	599.5	575.0	575.0	1.2	11.0	134.43	264.0	-3,758.6	3,778.9	3,766.8	12.12	311.839	
700.0	698.7	674.2	674.2	1.5	13.0	134.44	264.0	-3,758.6	3,787.5	3,773.1	14.34	264.115	
800.0	797.5	773.0	773.0	1.8	15.0	134.45	264.0	-3,758.6	3,798.5	3,781.9	16.56	229.324	
900.1	895.7	871.2	871.2	2.2	17.0	134.46	264.0	-3,758.6	3,812.0	3,793.2	18.79	202.864	
1,000.0	993.4	968.9	968.9	2.6	18.9	134.67	264.0	-3,758.6	3,826.7	3,805.7	21.08	181.538	
1,100.0	1,091.3	1,066.8	1,066.8	3.0	20.9	134.89	264.0	-3,758.6	3,841.5	3,818.2	23.38	164.317	
1,200.0	1,189.1	1,164.6	1,164.6	3.5	22.9	135.11	264.0	-3,758.6	3,856.4	3,830.7	25.68	150.152	
1,300.0	1,286.9	1,262.4	1,262.4	3.9	24.8	135.32	264.0	-3,758.6	3,871.3	3,843.3	27.99	138.308	
1,400.0	1,384.7	1,360.2	1,360.2	4.4	26.8	135.54	264.0	-3,758.6	3,886.3	3,856.0	30.30	128.262	
1,500.0	1,482.5	1,458.0	1,458.0	4.8	28.8	135.75	264.0	-3,758.6	3,901.3	3,868.7	32.61	119.638	
1,600.0	1,580.3	1,555.8	1,555.8	5.3	30.7	135.96	264.0	-3,758.6	3,916.4	3,881.5	34.92	112.157	
1,700.0	1,678.1	1,653.6	1,653.6	5.7	32.7	136.17	264.0	-3,758.6	3,931.5	3,894.3	37.23	105.605	
1,800.0	1,776.0	1,751.5	1,751.5	6.2	34.7	136.37	264.0	-3,758.6	3,946.7	3,907.2	39.54	99.822	
1,900.0	1,873.8	1,849.3	1,849.3	6.6	36.6	136.58	264.0	-3,758.6	3,962.0	3,920.1	41.85	94.680	
2,000.0	1,971.6	1,947.1	1,947.1	7.1	38.6	136.78	264.0	-3,758.6	3,977.2	3,933.1	44.15	90.079	
2,100.0	2,069.4	2,044.9	2,044.9	7.6	40.6	136.99	264.0	-3,758.6	3,992.6	3,946.1	46.46	85.938	
2,200.0	2,167.2	2,142.7	2,142.7	8.0	42.5	137.19	264.0	-3,758.6	4,008.0	3,959.2	48.76	82.191	
2,300.0	2,265.0	2,240.5	2,240.5	8.5	44.5	137.39	264.0	-3,758.6	4,023.4	3,972.3	51.07	78.785	
2,400.0	2,362.8	2,338.3	2,338.3	9.0	46.5	137.58	264.0	-3,758.6	4,038.9	3,985.5	53.37	75.676	
2,500.0	2,460.6	2,436.1	2,436.1	9.4	48.4	137.78	264.0	-3,758.6	4,054.4	3,998.7	55.67	72.826	
2,600.0	2,558.5	2,534.0	2,534.0	9.9	50.4	137.97	264.0	-3,758.6	4,070.0	4,012.0	57.97	70.205	
2,700.0	2,656.3	2,631.8	2,631.8	10.3	52.4	138.17	264.0	-3,758.6	4,085.6	4,025.3	60.27	67.786	
2,800.0	2,754.1	2,729.6	2,729.6	10.8	54.3	138.36	264.0	-3,758.6	4,101.3	4,038.7	62.57	65.548	
2,900.0	2,851.9	2,827.4	2,827.4	11.3	56.3	138.55	264.0	-3,758.6	4,117.0	4,052.1	64.87	63.469	
3,000.0	2,949.7	2,925.2	2,925.2	11.7	58.3	138.74	264.0	-3,758.6	4,132.7	4,065.6	67.16	61.535	
3,100.0	3,047.5	3,023.0	3,023.0	12.2	60.3	138.93	264.0	-3,758.6	4,148.5	4,079.1	69.45	59.730	
3,200.0	3,145.3	3,120.8	3,120.8	12.7	62.2	139.11	264.0	-3,758.6	4,164.4	4,092.6	71.75	58.043	
3,300.0	3,243.2	3,218.7	3,218.7	13.1	64.2	139.30	264.0	-3,758.6	4,180.3	4,106.2	74.04	56.461	
3,400.0	3,341.0	3,316.5	3,316.5	13.6	66.2	139.48	264.0	-3,758.6	4,196.2	4,119.9	76.33	54.976	
3,500.0	3,438.8	3,414.3	3,414.3	14.1	68.1	139.66	264.0	-3,758.6	4,212.2	4,133.6	78.62	53.579	
3,600.0	3,536.6	3,512.1	3,512.1	14.5	70.1	139.84	264.0	-3,758.6	4,228.2	4,147.3	80.90	52.262	
3,700.0	3,634.4	3,609.9	3,609.9	15.0	72.1	140.02	264.0	-3,758.6	4,244.3	4,161.1	83.19	51.019	
3,800.0	3,732.2	3,707.7	3,707.7	15.5	74.0	140.20	264.0	-3,758.6	4,260.4	4,174.9	85.48	49.843	
3,900.0	3,830.0	3,805.5	3,805.5	15.9	76.0	140.38	264.0	-3,758.6	4,276.5	4,188.7	87.76	48.730	
4,000.0	3,927.9	3,903.4	3,903.4	16.4	78.0	140.55	264.0	-3,758.6	4,292.7	4,202.6	90.04	47.675	
4,100.0	4,025.7	4,001.2	4,001.2	16.9	79.9	140.73	264.0	-3,758.6	4,308.9	4,216.6	92.32	46.672	
4,200.0	4,123.5	4,099.0	4,099.0	17.3	81.9	140.90	264.0	-3,758.6	4,325.2	4,230.6	94.60	45.720	
4,300.0	4,221.3	4,196.8	4,196.8	17.8	83.9	141.07	264.0	-3,758.6	4,341.5	4,244.6	96.88	44.812	
4,400.0	4,319.1	4,294.6	4,294.6	18.2	85.8	141.24	264.0	-3,758.6	4,357.8	4,258.6	99.16	43.948	
4,500.0	4,416.9	4,392.4	4,392.4	18.7	87.8	141.41	264.0	-3,758.6	4,374.2	4,272.7	101.43	43.123	
4,600.0	4,514.7	4,490.2	4,490.2	19.2	89.8	141.58	264.0	-3,758.6	4,390.6	4,286.9	103.71	42.335	
4,700.0	4,612.6	4,588.1	4,588.1	19.6	91.7	141.75	264.0	-3,758.6	4,407.0	4,301.0	105.98	41.582	
4,800.0	4,710.4	4,685.9	4,685.9	20.1	93.7	141.91	264.0	-3,758.6	4,423.5	4,315.3	108.26	40.861	
4,900.0	4,808.2	4,783.7	4,783.7	20.6	95.7	142.08	264.0	-3,758.6	4,440.0	4,329.5	110.53	40.171	
5,000.0	4,906.0	4,881.5	4,881.5	21.0	97.6	142.24	264.0	-3,758.6	4,456.6	4,343.8	112.80	39.509	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST VERT EVANS-STROH 20-1 - Wellbore #1 - Design #1

Offset Site Error: 0.0 usft

Survey Program: 0-INC

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.0	5,003.8	4,979.3	4,979.3	21.5	99.6	142.40	264.0	-3,758.6	4,473.2	4,358.1	115.07	38.874	
5,200.0	5,101.6	5,077.1	5,077.1	22.0	101.6	142.56	264.0	-3,758.6	4,489.8	4,372.5	117.34	38.264	
5,300.0	5,199.4	5,174.9	5,174.9	22.4	103.5	142.72	264.0	-3,758.6	4,506.5	4,386.9	119.60	37.678	
5,400.0	5,297.3	5,272.8	5,272.8	22.9	105.5	142.88	264.0	-3,758.6	4,523.2	4,401.3	121.87	37.115	
5,476.5	5,372.1	5,347.6	5,347.6	23.3	107.0	143.00	264.0	-3,758.6	4,536.0	4,412.4	123.60	36.698	
5,500.0	5,395.1	5,370.6	5,370.6	23.3	107.5	143.08	264.0	-3,758.6	4,539.8	4,415.6	124.23	36.544	
5,600.0	5,493.4	5,468.9	5,468.9	23.7	109.4	143.40	264.0	-3,758.6	4,554.5	4,427.7	126.80	35.918	
5,700.0	5,592.3	5,567.8	5,567.8	23.9	111.4	143.65	264.0	-3,758.6	4,566.5	4,437.2	129.31	35.315	
5,800.0	5,691.6	5,667.1	5,667.1	24.1	113.4	143.84	264.0	-3,758.6	4,575.7	4,444.0	131.73	34.736	
5,900.0	5,791.3	5,766.8	5,766.8	24.3	115.4	143.98	264.0	-3,758.6	4,582.1	4,448.1	134.05	34.181	
6,000.0	5,891.2	5,866.7	5,866.7	24.5	117.4	144.05	264.0	-3,758.6	4,585.7	4,449.4	136.28	33.649	
6,076.6	5,967.8	5,943.3	5,943.3	24.6	119.0	-76.33	264.0	-3,758.6	4,586.5	4,445.9	140.58	32.625	
6,100.0	5,991.2	5,966.7	5,966.7	24.6	119.5	-76.33	264.0	-3,758.6	4,586.5	4,445.4	141.08	32.510	
6,200.0	6,091.2	6,066.7	6,066.7	24.7	121.5	-76.33	264.0	-3,758.6	4,586.5	4,443.3	143.21	32.027	
6,300.0	6,191.2	6,166.7	6,166.7	24.8	123.5	-76.33	264.0	-3,758.6	4,586.5	4,441.2	145.33	31.558	
6,400.0	6,291.2	6,266.7	6,266.7	24.9	125.5	-76.33	264.0	-3,758.6	4,586.5	4,439.1	147.46	31.103	
6,500.0	6,391.2	6,366.7	6,366.7	25.0	127.5	-76.33	264.0	-3,758.6	4,586.5	4,436.9	149.59	30.660	
6,571.6	6,462.8	6,438.3	6,438.3	25.1	128.9	-76.33	264.0	-3,758.6	4,586.5	4,435.4	151.12	30.350	
6,600.0	6,491.2	6,466.7	6,466.7	25.1	129.5	13.68	264.0	-3,758.6	4,586.0	4,437.0	148.93	30.793	
6,650.0	6,541.1	6,516.6	6,516.6	25.1	130.5	13.76	264.0	-3,758.6	4,582.4	4,433.2	149.14	30.725	
6,700.0	6,590.5	6,566.0	6,566.0	25.1	131.5	13.92	264.0	-3,758.6	4,575.4	4,426.7	148.64	30.782	
6,750.0	6,639.4	6,614.9	6,614.9	25.1	132.5	14.16	264.0	-3,758.6	4,565.0	4,417.6	147.42	30.967	
6,800.0	6,687.4	6,662.9	6,662.9	25.0	133.5	14.48	264.0	-3,758.6	4,551.4	4,406.0	145.48	31.285	
6,850.0	6,734.3	6,709.8	6,709.8	25.0	134.4	14.90	264.0	-3,758.6	4,534.6	4,391.8	142.85	31.743	
6,900.0	6,779.8	6,755.3	6,755.3	24.9	135.3	15.42	264.0	-3,758.6	4,514.7	4,375.1	139.56	32.350	
6,950.0	6,823.8	6,799.3	6,799.3	24.8	136.2	16.07	264.0	-3,758.6	4,491.7	4,356.0	135.64	33.114	
7,000.0	6,866.1	6,841.6	6,841.6	24.7	137.0	16.85	264.0	-3,758.6	4,465.8	4,334.6	131.18	34.044	
7,050.0	6,906.4	6,881.9	6,881.9	24.6	137.9	17.79	264.0	-3,758.6	4,437.1	4,310.8	126.26	35.142	
7,100.0	6,944.6	6,920.1	6,920.1	24.5	138.6	18.94	264.0	-3,758.6	4,405.8	4,284.7	121.05	36.397	
7,150.0	6,980.4	6,955.9	6,955.9	24.4	139.3	20.32	264.0	-3,758.6	4,372.0	4,256.2	115.74	37.774	
7,200.0	7,013.6	6,989.1	6,989.1	24.3	140.0	22.00	264.0	-3,758.6	4,335.8	4,225.2	110.65	39.186	
7,250.0	7,044.2	7,019.7	7,019.7	24.2	140.6	24.06	264.0	-3,758.6	4,297.6	4,191.4	106.20	40.466	
7,300.0	7,072.0	7,047.5	7,047.5	24.1	141.2	26.60	264.0	-3,758.6	4,257.3	4,154.3	103.01	41.328	
7,350.0	7,096.8	7,072.3	7,072.3	24.0	141.7	29.77	264.0	-3,758.6	4,215.4	4,113.5	101.88	41.374	
7,400.0	7,118.5	7,094.0	7,094.0	23.9	142.1	33.77	264.0	-3,758.6	4,171.9	4,068.1	103.74	40.215	
7,450.0	7,137.0	7,112.5	7,112.5	23.8	142.5	38.89	264.0	-3,758.6	4,127.0	4,017.6	109.44	37.710	
7,500.0	7,152.2	7,127.7	7,127.7	23.8	142.8	45.47	264.0	-3,758.6	4,081.1	3,961.7	119.42	34.175	
7,550.0	7,164.1	7,139.6	7,139.6	23.8	143.0	53.92	264.0	-3,758.6	4,034.3	3,901.2	133.15	30.300	
7,600.0	7,172.5	7,148.0	7,148.0	23.8	143.2	64.55	264.0	-3,758.6	3,986.9	3,838.4	148.45	26.857	
7,650.0	7,177.5	7,153.0	7,153.0	23.9	143.3	77.20	264.0	-3,758.6	3,939.0	3,777.9	161.10	24.451	
7,699.2	7,179.0	7,154.5	7,154.5	24.1	143.3	90.72	264.0	-3,758.6	3,891.8	3,725.4	166.35	23.395	
7,700.0	7,179.0	7,154.5	7,154.5	24.1	143.3	90.72	264.0	-3,758.6	3,891.0	3,724.7	166.36	23.389	
7,800.0	7,178.6	7,154.1	7,154.1	24.9	143.3	90.70	264.0	-3,758.6	3,795.1	3,627.2	167.89	22.604	
7,900.0	7,178.3	7,153.8	7,153.8	26.4	143.3	90.68	264.0	-3,758.6	3,699.4	3,529.7	169.64	21.807	
8,000.0	7,177.9	7,153.4	7,153.4	28.2	143.3	90.66	264.0	-3,758.6	3,603.9	3,432.3	171.56	21.006	
8,100.0	7,177.5	7,153.0	7,153.0	30.3	143.3	90.64	264.0	-3,758.6	3,508.6	3,335.0	173.62	20.208	
8,200.0	7,177.2	7,152.7	7,152.7	32.5	143.3	90.62	264.0	-3,758.6	3,413.7	3,237.9	175.79	19.419	
8,300.0	7,176.8	7,152.3	7,152.3	34.8	143.3	90.60	264.0	-3,758.6	3,319.0	3,140.9	178.05	18.640	
8,400.0	7,176.4	7,151.9	7,151.9	37.2	143.3	90.59	264.0	-3,758.6	3,224.7	3,044.3	180.39	17.876	
8,500.0	7,176.1	7,151.6	7,151.6	39.6	143.3	90.57	264.0	-3,758.6	3,130.7	2,947.9	182.78	17.128	
8,600.0	7,175.7	7,151.2	7,151.2	42.0	143.3	90.55	264.0	-3,758.6	3,037.0	2,851.8	185.23	16.396	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - EXIST VERT EVANS-STROH 20-1 - Wellbore #1 - Design #1

Offset Site Error: 0.0 usft

Survey Program: 0-INC

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,700.0	7,175.3	7,150.8	7,150.8	44.6	143.3	90.53	264.0	-3,758.6	2,943.8	2,756.1	187.72	15.682	
8,800.0	7,175.0	7,150.5	7,150.5	47.1	143.3	90.51	264.0	-3,758.6	2,851.1	2,660.9	190.24	14.987	
8,900.0	7,174.6	7,150.1	7,150.1	49.7	143.3	90.49	264.0	-3,758.6	2,758.9	2,566.1	192.79	14.310	
9,000.0	7,174.3	7,149.8	7,149.8	52.3	143.2	90.47	264.0	-3,758.6	2,667.2	2,471.8	195.37	13.652	
9,100.0	7,173.9	7,149.4	7,149.4	54.9	143.2	90.45	264.0	-3,758.6	2,576.2	2,378.2	197.97	13.013	
9,200.0	7,173.5	7,149.0	7,149.0	57.5	143.2	90.43	264.0	-3,758.6	2,485.8	2,285.2	200.59	12.392	
9,300.0	7,173.2	7,148.7	7,148.7	60.1	143.2	90.41	264.0	-3,758.6	2,396.2	2,193.0	203.23	11.791	
9,400.0	7,172.8	7,148.3	7,148.3	62.8	143.2	90.39	264.0	-3,758.6	2,307.5	2,101.6	205.88	11.208	
9,500.0	7,172.4	7,147.9	7,147.9	65.5	143.2	90.37	264.0	-3,758.6	2,219.7	2,011.2	208.54	10.644	
9,600.0	7,172.1	7,147.6	7,147.6	68.2	143.2	90.35	264.0	-3,758.6	2,133.0	1,921.8	211.22	10.099	
9,700.0	7,171.7	7,147.2	7,147.2	70.9	143.2	90.33	264.0	-3,758.6	2,047.5	1,833.6	213.90	9.572	
9,800.0	7,171.3	7,146.8	7,146.8	73.6	143.2	90.31	264.0	-3,758.6	1,963.4	1,746.8	216.59	9.065	
9,900.0	7,171.0	7,146.5	7,146.5	76.3	143.2	90.29	264.0	-3,758.6	1,880.8	1,661.5	219.30	8.577	
10,000.0	7,170.6	7,146.1	7,146.1	79.0	143.2	90.28	264.0	-3,758.6	1,800.0	1,578.0	222.00	8.108	
10,100.0	7,170.3	7,145.8	7,145.8	81.7	143.2	90.26	264.0	-3,758.6	1,721.3	1,496.6	224.72	7.660	
10,200.0	7,169.9	7,145.4	7,145.4	84.4	143.2	90.24	264.0	-3,758.6	1,644.8	1,417.4	227.44	7.232	
10,300.0	7,169.5	7,145.0	7,145.0	87.2	143.1	90.22	264.0	-3,758.6	1,571.0	1,340.8	230.16	6.826	
10,400.0	7,169.2	7,144.7	7,144.7	89.9	143.1	90.20	264.0	-3,758.6	1,500.2	1,267.3	232.89	6.442	
10,500.0	7,168.8	7,144.3	7,144.3	92.6	143.1	90.18	264.0	-3,758.6	1,432.9	1,197.3	235.62	6.081	
10,600.0	7,168.4	7,143.9	7,143.9	95.4	143.1	90.16	264.0	-3,758.6	1,369.6	1,131.2	238.36	5.746	
10,700.0	7,168.1	7,143.6	7,143.6	98.1	143.1	90.14	264.0	-3,758.6	1,310.9	1,069.8	241.10	5.437	
10,800.0	7,167.7	7,143.2	7,143.2	100.9	143.1	90.12	264.0	-3,758.6	1,257.4	1,013.5	243.85	5.156	
10,900.0	7,167.4	7,142.9	7,142.9	103.6	143.1	90.10	264.0	-3,758.6	1,209.8	963.2	246.60	4.906	
11,000.0	7,167.0	7,142.5	7,142.5	106.4	143.1	90.08	264.0	-3,758.6	1,168.9	919.5	249.35	4.688	
11,100.0	7,166.6	7,142.1	7,142.1	109.1	143.1	90.06	264.0	-3,758.6	1,135.3	883.2	252.10	4.503	
11,200.0	7,166.3	7,141.8	7,141.8	111.9	143.1	90.05	264.0	-3,758.6	1,109.7	854.9	254.85	4.354	
11,300.0	7,165.9	7,141.4	7,141.4	114.7	143.1	90.03	264.0	-3,758.6	1,092.7	835.1	257.61	4.242	
11,400.0	7,165.5	7,141.0	7,141.0	117.4	143.1	90.01	264.0	-3,758.6	1,084.7	824.4	260.37	4.166	
11,437.0	7,165.4	7,140.9	7,140.9	118.5	143.1	90.00	264.0	-3,758.6	1,084.1	822.7	261.39	4.147	CC, ES
11,500.0	7,165.2	7,140.7	7,140.7	120.2	143.1	89.99	264.0	-3,758.6	1,085.9	822.8	263.13	4.127	
11,600.0	7,164.8	7,140.3	7,140.3	123.0	143.1	89.97	264.0	-3,758.6	1,096.3	830.4	265.90	4.123	SF
11,700.0	7,164.5	7,140.0	7,140.0	125.7	143.0	89.95	264.0	-3,758.6	1,115.6	846.9	268.66	4.152	
11,800.0	7,164.1	7,139.6	7,139.6	128.5	143.0	89.93	264.0	-3,758.6	1,143.3	871.8	271.43	4.212	
11,828.8	7,164.0	7,139.5	7,139.5	129.3	143.0	89.93	264.0	-3,758.6	1,152.7	880.5	272.22	4.235	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - WALTERS 21P-204 - ORIGINAL WELLBORE - PROPOSAL #1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	0.36	90.0	0.6	90.0				
100.0	100.0	99.0	99.0	0.1	0.1	0.36	90.0	0.6	90.0	89.8	0.19	465.115	
200.0	200.0	199.0	199.0	0.3	0.3	0.36	90.0	0.6	90.0	89.3	0.64	140.215	
300.0	300.0	299.0	299.0	0.5	0.5	0.36	90.0	0.6	90.0	88.9	1.09	82.454	CC, ES
400.0	400.0	399.0	399.0	0.8	0.8	-139.94	90.0	0.6	91.3	89.8	1.52	59.985	
500.0	499.8	497.5	497.5	1.0	1.0	-140.98	90.7	2.0	96.1	94.1	1.94	49.412	
600.0	599.5	595.7	595.5	1.2	1.2	-141.32	92.9	6.6	105.0	102.6	2.39	43.904	
700.0	698.7	693.3	692.7	1.5	1.4	-141.08	96.6	14.0	118.0	115.1	2.87	41.063	
800.0	797.5	790.0	788.8	1.8	1.7	-140.45	101.6	24.4	135.1	131.7	3.40	39.716	
900.1	895.7	885.8	883.4	2.2	2.0	-139.57	108.1	37.4	156.2	152.2	3.98	39.200	
1,000.0	993.4	980.4	976.4	2.6	2.3	-138.55	115.8	53.2	180.0	175.4	4.62	38.946	
1,100.0	1,091.3	1,076.5	1,070.5	3.0	2.7	-137.19	124.5	71.1	204.9	199.6	5.31	38.599	
1,200.0	1,189.1	1,173.3	1,165.1	3.5	3.1	-136.10	133.4	89.1	229.9	223.9	6.02	38.203	
1,300.0	1,286.9	1,270.0	1,259.7	3.9	3.5	-135.22	142.3	107.2	254.9	248.2	6.74	37.817	
1,400.0	1,384.7	1,366.8	1,354.4	4.4	3.9	-134.50	151.1	125.3	280.0	272.6	7.48	37.451	
1,500.0	1,482.5	1,463.5	1,449.0	4.8	4.3	-133.90	160.0	143.3	305.2	297.0	8.22	37.123	
1,600.0	1,580.3	1,560.3	1,543.6	5.3	4.8	-133.39	168.8	161.4	330.4	321.4	8.97	36.828	
1,700.0	1,678.1	1,657.0	1,638.3	5.7	5.2	-132.96	177.7	179.4	355.5	345.8	9.72	36.563	
1,800.0	1,776.0	1,753.7	1,732.9	6.2	5.6	-132.58	186.5	197.5	380.8	370.3	10.48	36.325	
1,900.0	1,873.8	1,850.5	1,827.5	6.6	6.0	-132.25	195.4	215.6	406.0	394.7	11.24	36.111	
2,000.0	1,971.6	1,947.2	1,922.1	7.1	6.5	-131.95	204.2	233.6	431.2	419.2	12.01	35.918	
2,100.0	2,069.4	2,044.0	2,016.8	7.6	6.9	-131.69	213.1	251.7	456.4	443.7	12.77	35.744	
2,200.0	2,167.2	2,140.7	2,111.4	8.0	7.3	-131.46	222.0	269.8	481.7	468.2	13.54	35.586	
2,300.0	2,265.0	2,237.5	2,206.0	8.5	7.8	-131.25	230.8	287.8	506.9	492.6	14.30	35.443	
2,400.0	2,362.8	2,334.2	2,300.6	9.0	8.2	-131.06	239.7	305.9	532.2	517.1	15.07	35.311	
2,500.0	2,460.6	2,430.9	2,395.3	9.4	8.6	-130.88	248.5	324.0	557.5	541.6	15.84	35.191	
2,600.0	2,558.5	2,527.7	2,489.9	9.9	9.1	-130.73	257.4	342.0	582.7	566.1	16.61	35.080	
2,700.0	2,656.3	2,624.4	2,584.5	10.3	9.5	-130.58	266.2	360.1	608.0	590.6	17.38	34.978	
2,800.0	2,754.1	2,721.2	2,679.2	10.8	10.0	-130.45	275.1	378.2	633.3	615.1	18.15	34.884	
2,900.0	2,851.9	2,817.9	2,773.8	11.3	10.4	-130.33	284.0	396.2	658.6	639.7	18.93	34.797	
3,000.0	2,949.7	2,914.6	2,868.4	11.7	10.8	-130.21	292.8	414.3	683.9	664.2	19.70	34.715	
3,100.0	3,047.5	3,011.4	2,963.0	12.2	11.3	-130.11	301.7	432.3	709.1	688.7	20.47	34.639	
3,200.0	3,145.3	3,108.1	3,057.7	12.7	11.7	-130.01	310.5	450.4	734.4	713.2	21.25	34.569	
3,300.0	3,243.2	3,204.9	3,152.3	13.1	12.1	-129.91	319.4	468.5	759.7	737.7	22.02	34.502	
3,400.0	3,341.0	3,301.6	3,246.9	13.6	12.6	-129.83	328.2	486.5	785.0	762.2	22.79	34.440	
3,500.0	3,438.8	3,398.4	3,341.5	14.1	13.0	-129.75	337.1	504.6	810.3	786.7	23.57	34.382	
3,600.0	3,536.6	3,495.1	3,436.2	14.5	13.5	-129.67	346.0	522.7	835.6	811.3	24.34	34.327	
3,700.0	3,634.4	3,591.8	3,530.8	15.0	13.9	-129.60	354.8	540.7	860.9	835.8	25.12	34.275	
3,800.0	3,732.2	3,688.6	3,625.4	15.5	14.3	-129.53	363.7	558.8	886.2	860.3	25.89	34.226	
3,900.0	3,830.0	3,785.3	3,720.1	15.9	14.8	-129.47	372.5	576.9	911.5	884.8	26.67	34.179	
4,000.0	3,927.9	3,882.1	3,814.7	16.4	15.2	-129.41	381.4	594.9	936.8	909.4	27.44	34.135	
4,100.0	4,025.7	3,978.8	3,909.3	16.9	15.7	-129.35	390.2	613.0	962.1	933.9	28.22	34.094	
4,200.0	4,123.5	4,079.6	4,007.9	17.3	16.1	-129.30	399.4	631.7	987.4	958.4	29.00	34.047	
4,300.0	4,221.3	4,201.2	4,127.5	17.8	16.5	-129.40	409.1	651.4	1,011.1	981.4	29.73	34.006	
4,400.0	4,319.1	4,323.9	4,249.1	18.2	16.8	-129.74	416.5	666.6	1,032.4	1,002.0	30.40	33.958	
4,500.0	4,416.9	4,447.4	4,371.9	18.7	17.1	-130.30	421.7	677.2	1,051.4	1,020.4	31.02	33.895	
4,600.0	4,514.7	4,571.0	4,495.4	19.2	17.3	-131.08	424.6	683.0	1,068.1	1,036.5	31.58	33.823	
4,700.0	4,612.6	4,687.2	4,611.6	19.6	17.4	-131.99	425.2	684.3	1,082.6	1,050.6	32.08	33.752	
4,800.0	4,710.4	4,785.0	4,709.4	20.1	17.6	-132.79	425.2	684.3	1,096.8	1,064.3	32.56	33.691	
4,900.0	4,808.2	4,882.8	4,807.2	20.6	17.7	-133.57	425.2	684.3	1,111.2	1,078.2	33.03	33.642	
5,000.0	4,906.0	4,980.6	4,905.0	21.0	17.8	-134.33	425.2	684.3	1,125.8	1,092.3	33.50	33.605	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - WALTERS 21P-204 - ORIGINAL WELLBORE - PROPOSAL #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.0	5,003.8	5,078.5	5,002.8	21.5	17.9	-135.06	425.2	684.3	1,140.6	1,106.6	33.97	33.580	
5,200.0	5,101.6	5,176.3	5,100.6	22.0	18.1	-135.78	425.2	684.3	1,155.6	1,121.2	34.43	33.565	
5,300.0	5,199.4	5,274.1	5,198.4	22.4	18.2	-136.49	425.2	684.3	1,170.7	1,135.8	34.89	33.560	
5,400.0	5,297.3	5,371.9	5,296.3	22.9	18.3	-137.17	425.2	684.3	1,186.1	1,150.7	35.34	33.562	
5,476.5	5,372.1	5,446.7	5,371.1	23.3	18.4	-137.68	425.2	684.3	1,197.9	1,162.2	35.68	33.570	
5,500.0	5,395.1	5,469.7	5,394.1	23.3	18.5	-137.89	425.2	684.3	1,201.5	1,165.7	35.80	33.564	
5,600.0	5,493.4	5,568.0	5,492.4	23.7	18.6	-138.64	425.2	684.3	1,215.2	1,179.0	36.22	33.553	
5,700.0	5,592.3	5,666.9	5,591.3	23.9	18.7	-139.25	425.2	684.3	1,226.5	1,189.8	36.61	33.502	
5,800.0	5,691.6	5,766.3	5,690.6	24.1	18.9	-139.70	425.2	684.3	1,235.1	1,198.2	36.97	33.413	
5,900.0	5,791.3	5,866.0	5,790.3	24.3	19.0	-140.02	425.2	684.3	1,241.2	1,203.9	37.29	33.284	
6,000.0	5,891.2	5,965.9	5,890.2	24.5	19.2	-140.19	425.2	684.3	1,244.6	1,207.0	37.58	33.115	
6,076.6	5,967.8	6,042.4	5,966.8	24.6	19.3	-0.63	425.2	684.3	1,245.3	1,209.2	36.16	34.444	
6,100.0	5,991.2	6,065.9	5,990.2	24.6	19.3	-0.63	425.2	684.3	1,245.3	1,209.1	36.23	34.376	
6,200.0	6,091.2	6,165.9	6,090.2	24.7	19.5	-0.63	425.2	684.3	1,245.3	1,208.8	36.52	34.099	
6,300.0	6,191.2	6,265.9	6,190.2	24.8	19.6	-0.63	425.2	684.3	1,245.3	1,208.5	36.82	33.824	
6,400.0	6,291.2	6,365.9	6,290.2	24.9	19.8	-0.63	425.2	684.3	1,245.3	1,208.2	37.12	33.551	
6,452.6	6,343.8	6,418.4	6,342.8	24.9	19.8	-0.63	425.2	684.3	1,245.3	1,208.1	37.28	33.408	
6,500.0	6,391.2	6,465.3	6,389.6	25.0	19.9	-0.66	425.2	683.6	1,245.4	1,207.9	37.41	33.286	
6,571.6	6,462.8	6,534.9	6,458.9	25.1	19.9	-0.94	425.2	677.4	1,245.4	1,207.8	37.62	33.104	
6,600.0	6,491.2	6,562.2	6,485.9	25.1	19.9	88.88	425.2	673.1	1,245.5	1,206.4	39.11	31.846	
6,650.0	6,541.1	6,609.8	6,532.5	25.1	19.9	88.57	425.2	663.1	1,245.7	1,206.6	39.09	31.869	
6,700.0	6,590.5	6,657.1	6,577.9	25.1	19.9	88.27	425.2	650.2	1,245.9	1,206.8	39.01	31.934	
6,750.0	6,639.4	6,704.0	6,622.1	25.1	19.8	87.97	425.2	634.5	1,246.1	1,207.2	38.90	32.036	
6,800.0	6,687.4	6,750.0	6,664.3	25.0	19.8	87.70	425.2	616.3	1,246.3	1,207.6	38.74	32.167	
6,850.0	6,734.3	6,796.7	6,706.0	25.0	19.7	87.42	425.2	595.0	1,246.6	1,208.0	38.57	32.322	
6,900.0	6,779.8	6,842.6	6,745.4	24.9	19.6	87.16	425.2	571.6	1,246.8	1,208.4	38.38	32.489	
6,950.0	6,823.8	6,888.2	6,783.0	24.8	19.5	86.92	425.2	545.8	1,247.1	1,208.9	38.19	32.657	
7,000.0	6,866.1	6,933.5	6,818.7	24.7	19.4	86.69	425.2	517.9	1,247.4	1,209.4	38.01	32.814	
7,050.0	6,906.4	6,978.6	6,852.4	24.6	19.4	86.47	425.2	488.0	1,247.7	1,209.8	37.87	32.945	
7,100.0	6,944.6	7,023.4	6,883.9	24.5	19.3	86.27	425.2	456.1	1,247.9	1,210.2	37.78	33.035	
7,150.0	6,980.4	7,068.1	6,913.3	24.4	19.3	86.09	425.2	422.5	1,248.2	1,210.5	37.75	33.067	
7,200.0	7,013.6	7,112.5	6,940.5	24.3	19.3	85.92	425.2	387.3	1,248.5	1,210.7	37.80	33.025	
7,250.0	7,044.2	7,156.8	6,965.3	24.2	19.3	85.77	425.2	350.6	1,248.7	1,210.7	37.96	32.896	
7,300.0	7,072.0	7,200.0	6,987.2	24.1	19.4	85.64	425.2	313.5	1,248.9	1,210.7	38.22	32.674	
7,350.0	7,096.8	7,245.0	7,007.7	24.0	19.6	85.53	425.2	273.4	1,249.1	1,210.4	38.63	32.332	
7,400.0	7,118.5	7,288.9	7,025.2	23.9	19.8	85.44	425.2	233.1	1,249.2	1,210.1	39.18	31.887	
7,450.0	7,137.0	7,332.8	7,040.1	23.8	20.1	85.37	425.2	191.9	1,249.4	1,209.5	39.86	31.343	
7,500.0	7,152.2	7,376.6	7,052.5	23.8	20.4	85.32	425.2	149.9	1,249.4	1,208.8	40.69	30.710	
7,550.0	7,164.1	7,420.3	7,062.3	23.8	20.9	85.29	425.2	107.3	1,249.5	1,207.9	41.65	30.003	
7,600.0	7,172.5	7,464.0	7,069.5	23.8	21.3	85.28	425.2	64.2	1,249.5	1,206.8	42.73	29.239	
7,650.0	7,177.5	7,507.7	7,074.1	23.9	21.9	85.29	425.2	20.7	1,249.5	1,205.6	43.94	28.439	
7,699.2	7,179.0	7,550.0	7,075.9	24.1	22.5	85.31	425.2	-21.5	1,249.5	1,204.2	45.21	27.638	
7,700.0	7,179.0	7,551.5	7,076.0	24.1	22.5	85.32	425.2	-23.0	1,249.4	1,204.2	45.24	27.618	
7,729.2	7,178.9	7,578.9	7,075.9	24.3	22.9	85.32	425.2	-50.4	1,249.4	1,203.3	46.10	27.103	
7,800.0	7,178.6	7,649.7	7,075.6	24.9	24.0	85.32	425.2	-121.2	1,249.4	1,201.1	48.34	25.848	
7,900.0	7,178.3	7,749.7	7,075.1	26.4	25.8	85.31	425.2	-221.2	1,249.5	1,197.6	51.86	24.092	
8,000.0	7,177.9	7,849.7	7,074.6	28.2	27.7	85.30	425.2	-321.2	1,249.5	1,193.7	55.73	22.421	
8,100.0	7,177.5	7,949.7	7,074.1	30.3	29.8	85.30	425.2	-421.2	1,249.5	1,189.6	59.87	20.871	
8,200.0	7,177.2	8,049.7	7,073.6	32.5	32.0	85.29	425.2	-521.2	1,249.5	1,185.3	64.23	19.454	
8,300.0	7,176.8	8,149.7	7,073.2	34.8	34.3	85.29	425.2	-621.2	1,249.5	1,180.7	68.77	18.169	
8,400.0	7,176.4	8,249.7	7,072.7	37.2	36.7	85.28	425.2	-721.2	1,249.5	1,176.0	73.46	17.010	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - WALTERS 21P-204 - ORIGINAL WELLBORE - PROPOSAL #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,500.0	7,176.1	8,349.7	7,072.2	39.6	39.1	85.28	425.2	-821.2	1,249.5	1,171.2	78.27	15.965	
8,600.0	7,175.7	8,449.7	7,071.7	42.0	41.6	85.27	425.2	-921.2	1,249.5	1,166.4	83.17	15.023	
8,700.0	7,175.3	8,549.7	7,071.2	44.6	44.1	85.27	425.2	-1,021.2	1,249.5	1,161.4	88.16	14.173	
8,800.0	7,175.0	8,649.7	7,070.7	47.1	46.6	85.26	425.2	-1,121.2	1,249.5	1,156.3	93.22	13.404	
8,900.0	7,174.6	8,749.7	7,070.2	49.7	49.2	85.25	425.2	-1,221.2	1,249.6	1,151.2	98.34	12.706	
9,000.0	7,174.3	8,849.7	7,069.8	52.3	51.8	85.25	425.2	-1,321.2	1,249.6	1,146.1	103.51	12.072	
9,100.0	7,173.9	8,949.7	7,069.3	54.9	54.4	85.24	425.2	-1,421.2	1,249.6	1,140.9	108.72	11.494	
9,200.0	7,173.5	9,049.7	7,068.8	57.5	57.1	85.24	425.2	-1,521.2	1,249.6	1,135.6	113.97	10.964	
9,300.0	7,173.2	9,149.7	7,068.3	60.1	59.7	85.23	425.2	-1,621.2	1,249.6	1,130.3	119.25	10.479	
9,400.0	7,172.8	9,249.7	7,067.8	62.8	62.4	85.23	425.2	-1,721.2	1,249.6	1,125.1	124.55	10.033	
9,500.0	7,172.4	9,349.7	7,067.3	65.5	65.1	85.22	425.2	-1,821.2	1,249.6	1,119.7	129.88	9.621	
9,600.0	7,172.1	9,449.7	7,066.8	68.2	67.8	85.22	425.2	-1,921.2	1,249.6	1,114.4	135.24	9.240	
9,700.0	7,171.7	9,549.7	7,066.4	70.9	70.4	85.21	425.2	-2,021.2	1,249.6	1,109.0	140.61	8.887	
9,800.0	7,171.3	9,649.7	7,065.9	73.6	73.2	85.20	425.2	-2,121.2	1,249.6	1,103.6	146.00	8.559	
9,900.0	7,171.0	9,749.7	7,065.4	76.3	75.9	85.20	425.2	-2,221.2	1,249.7	1,098.2	151.40	8.254	
10,000.0	7,170.6	9,849.7	7,064.9	79.0	78.6	85.19	425.2	-2,321.2	1,249.7	1,092.8	156.82	7.969	
10,100.0	7,170.3	9,949.7	7,064.4	81.7	81.3	85.19	425.2	-2,421.2	1,249.7	1,087.4	162.25	7.702	
10,200.0	7,169.9	10,049.7	7,063.9	84.4	84.0	85.18	425.2	-2,521.2	1,249.7	1,082.0	167.69	7.452	
10,300.0	7,169.5	10,149.7	7,063.4	87.2	86.8	85.18	425.2	-2,621.2	1,249.7	1,076.5	173.14	7.218	
10,400.0	7,169.2	10,249.7	7,063.0	89.9	89.5	85.17	425.2	-2,721.2	1,249.7	1,071.1	178.60	6.997	
10,500.0	7,168.8	10,349.7	7,062.5	92.6	92.3	85.17	425.2	-2,821.2	1,249.7	1,065.6	184.07	6.789	
10,600.0	7,168.4	10,449.7	7,062.0	95.4	95.0	85.16	425.2	-2,921.2	1,249.7	1,060.2	189.55	6.593	
10,700.0	7,168.1	10,549.7	7,061.5	98.1	97.8	85.15	425.2	-3,021.2	1,249.7	1,054.7	195.03	6.408	
10,800.0	7,167.7	10,649.7	7,061.0	100.9	100.5	85.15	425.2	-3,121.2	1,249.7	1,049.2	200.52	6.233	
10,900.0	7,167.4	10,749.7	7,060.5	103.6	103.3	85.14	425.2	-3,221.2	1,249.7	1,043.7	206.01	6.066	
11,000.0	7,167.0	10,849.7	7,060.0	106.4	106.0	85.14	425.2	-3,321.2	1,249.8	1,038.2	211.51	5.909	
11,100.0	7,166.6	10,949.7	7,059.6	109.1	108.8	85.13	425.2	-3,421.2	1,249.8	1,032.7	217.02	5.759	
11,200.0	7,166.3	11,049.7	7,059.1	111.9	111.6	85.13	425.2	-3,521.2	1,249.8	1,027.2	222.53	5.616	
11,300.0	7,165.9	11,149.7	7,058.6	114.7	114.3	85.12	425.2	-3,621.2	1,249.8	1,021.7	228.04	5.481	
11,400.0	7,165.5	11,249.7	7,058.1	117.4	117.1	85.11	425.2	-3,721.2	1,249.8	1,016.2	233.56	5.351	
11,500.0	7,165.2	11,349.7	7,057.6	120.2	119.9	85.11	425.2	-3,821.2	1,249.8	1,010.7	239.08	5.228	
11,600.0	7,164.8	11,449.7	7,057.1	123.0	122.6	85.10	425.2	-3,921.2	1,249.8	1,005.2	244.60	5.110	
11,700.0	7,164.5	11,549.7	7,056.7	125.7	125.4	85.10	425.2	-4,021.2	1,249.8	999.7	250.13	4.997	
11,800.0	7,164.1	11,650.4	7,056.2	128.5	128.2	85.09	425.1	-4,121.8	1,249.8	994.1	255.68	4.888	
11,828.8	7,164.0	11,679.2	7,056.0	129.3	129.0	85.09	425.1	-4,150.6	1,249.8	992.5	257.27	4.858	SF

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - WALTERS 21P-234 - ORIGINAL WELLBORE - PROPOSAL #1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	0.35	45.2	0.3	45.2				
100.0	100.0	100.0	100.0	0.1	0.1	0.35	45.2	0.3	45.2	45.0	0.19	232.310	
200.0	200.0	200.0	200.0	0.3	0.3	0.35	45.2	0.3	45.2	44.5	0.64	70.139	
300.0	300.0	300.0	300.0	0.5	0.5	0.35	45.2	0.3	45.2	44.1	1.09	41.305	CC, ES
400.0	400.0	400.0	400.0	0.8	0.8	-140.64	45.2	0.3	46.5	45.0	1.52	30.505	
500.0	499.8	499.8	499.8	1.0	1.0	-144.34	45.2	0.3	50.7	48.7	1.95	25.933	
600.0	599.5	599.5	599.5	1.2	1.2	-149.29	45.2	0.3	58.0	55.6	2.40	24.168	
700.0	698.7	700.1	700.1	1.5	1.4	-153.25	44.5	1.9	67.7	64.9	2.84	23.890	
800.0	797.5	800.9	800.8	1.8	1.6	-155.18	42.6	6.9	78.8	75.5	3.27	24.082	
900.1	895.7	902.1	901.5	2.2	1.9	-155.72	39.5	15.1	91.0	87.2	3.74	24.320	
1,000.0	993.4	1,003.4	1,002.1	2.6	2.1	-155.03	35.0	26.8	102.6	98.3	4.26	24.107	
1,100.0	1,091.3	1,105.1	1,102.5	3.0	2.4	-152.99	29.3	41.7	112.2	107.4	4.84	23.204	
1,200.0	1,189.1	1,206.7	1,202.2	3.5	2.8	-149.84	22.3	60.0	120.0	114.5	5.50	21.825	
1,300.0	1,286.9	1,306.2	1,299.5	3.9	3.2	-146.54	14.8	79.3	127.4	121.2	6.23	20.448	
1,400.0	1,384.7	1,405.6	1,396.8	4.4	3.6	-143.60	7.4	98.7	135.2	128.1	7.01	19.288	
1,500.0	1,482.5	1,505.1	1,494.1	4.8	4.0	-140.98	0.0	118.0	143.2	135.4	7.82	18.320	
1,600.0	1,580.3	1,604.6	1,591.4	5.3	4.4	-138.65	-7.4	137.3	151.6	142.9	8.66	17.512	
1,700.0	1,678.1	1,704.1	1,688.7	5.7	4.8	-136.57	-14.8	156.6	160.1	150.6	9.51	16.836	
1,800.0	1,776.0	1,803.5	1,786.0	6.2	5.3	-134.69	-22.2	175.9	168.9	158.5	10.38	16.267	
1,900.0	1,873.8	1,903.0	1,883.2	6.6	5.7	-133.01	-29.6	195.2	177.8	166.5	11.26	15.784	
2,000.0	1,971.6	2,002.5	1,980.5	7.1	6.2	-131.48	-37.0	214.5	186.9	174.7	12.16	15.373	
2,100.0	2,069.4	2,101.9	2,077.8	7.6	6.6	-130.10	-44.4	233.9	196.0	183.0	13.05	15.019	
2,200.0	2,167.2	2,201.4	2,175.1	8.0	7.0	-128.84	-51.8	253.2	205.3	191.4	13.95	14.713	
2,300.0	2,265.0	2,300.9	2,272.4	8.5	7.5	-127.69	-59.2	272.5	214.7	199.8	14.86	14.447	
2,400.0	2,362.8	2,400.4	2,369.7	9.0	8.0	-126.64	-66.6	291.8	224.1	208.4	15.77	14.214	
2,500.0	2,460.6	2,499.8	2,467.0	9.4	8.4	-125.67	-74.0	311.1	233.6	217.0	16.68	14.009	
2,600.0	2,558.5	2,599.3	2,564.3	9.9	8.9	-124.78	-81.5	330.4	243.2	225.6	17.59	13.827	
2,700.0	2,656.3	2,698.8	2,661.6	10.3	9.3	-123.95	-88.9	349.7	252.9	234.3	18.50	13.665	
2,800.0	2,754.1	2,798.2	2,758.9	10.8	9.8	-123.19	-96.3	369.1	262.5	243.1	19.42	13.521	
2,900.0	2,851.9	2,897.7	2,856.2	11.3	10.2	-122.48	-103.7	388.4	272.3	251.9	20.33	13.391	
3,000.0	2,949.7	2,997.2	2,953.5	11.7	10.7	-121.82	-111.1	407.7	282.0	260.8	21.25	13.273	
3,100.0	3,047.5	3,096.7	3,050.8	12.2	11.1	-121.20	-118.5	427.0	291.8	269.6	22.16	13.167	
3,200.0	3,145.3	3,196.1	3,148.1	12.7	11.6	-120.62	-125.9	446.3	301.6	278.6	23.08	13.071	
3,300.0	3,243.2	3,295.6	3,245.4	13.1	12.1	-120.08	-133.3	465.6	311.5	287.5	23.99	12.983	
3,400.0	3,341.0	3,395.1	3,342.7	13.6	12.5	-119.58	-140.7	484.9	321.4	296.5	24.91	12.902	
3,500.0	3,438.8	3,494.5	3,440.0	14.1	13.0	-119.10	-148.1	504.3	331.3	305.5	25.82	12.828	
3,600.0	3,536.6	3,594.0	3,537.3	14.5	13.4	-118.65	-155.5	523.6	341.2	314.5	26.74	12.760	
3,700.0	3,634.4	3,693.5	3,634.6	15.0	13.9	-118.23	-162.9	542.9	351.1	323.5	27.65	12.697	
3,800.0	3,732.2	3,793.0	3,731.9	15.5	14.3	-117.83	-170.3	562.2	361.1	332.5	28.57	12.639	
3,900.0	3,830.0	3,892.4	3,829.2	15.9	14.8	-117.45	-177.7	581.5	371.1	341.6	29.49	12.585	
4,000.0	3,927.9	3,991.9	3,926.5	16.4	15.3	-117.09	-185.2	600.8	381.1	350.7	30.40	12.535	
4,100.0	4,025.7	4,091.4	4,023.8	16.9	15.7	-116.75	-192.6	620.1	391.1	359.8	31.32	12.489	
4,200.0	4,123.5	4,191.0	4,121.2	17.3	16.2	-116.45	-199.9	639.3	401.1	368.9	32.21	12.454	
4,300.0	4,221.3	4,290.9	4,219.5	17.8	16.5	-116.54	-206.4	656.1	411.1	378.1	32.94	12.477	
4,400.0	4,319.1	4,390.6	4,318.2	18.2	16.8	-117.10	-211.6	669.7	420.9	387.3	33.59	12.530	
4,500.0	4,416.9	4,490.0	4,416.9	18.7	17.0	-118.09	-215.5	680.0	430.8	396.7	34.16	12.613	
4,600.0	4,514.7	4,588.7	4,515.4	19.2	17.2	-119.48	-218.2	687.0	440.9	406.3	34.63	12.733	
4,700.0	4,612.6	4,686.6	4,613.2	19.6	17.3	-121.22	-219.7	690.9	451.4	416.4	35.00	12.899	
4,800.0	4,710.4	4,783.8	4,710.4	20.1	17.4	-123.26	-220.0	691.8	462.6	427.4	35.27	13.116	
4,900.0	4,808.2	4,881.6	4,808.2	20.6	17.6	-125.33	-220.0	691.8	474.5	439.0	35.51	13.363	
5,000.0	4,906.0	4,979.5	4,906.0	21.0	17.7	-127.30	-220.0	691.8	487.0	451.3	35.73	13.630	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - WALTERS 21P-234 - ORIGINAL WELLBORE - PROPOSAL #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.0	5,003.8	5,077.3	5,003.8	21.5	17.8	-129.17	-220.0	691.8	500.1	464.1	35.94	13.914	
5,200.0	5,101.6	5,175.1	5,101.6	22.0	17.9	-130.95	-220.0	691.8	513.6	477.5	36.14	14.211	
5,300.0	5,199.4	5,272.9	5,199.4	22.4	18.0	-132.63	-220.0	691.8	527.6	491.3	36.34	14.521	
5,400.0	5,297.3	5,370.7	5,297.3	22.9	18.2	-134.23	-220.0	691.8	542.1	505.6	36.53	14.839	
5,476.5	5,372.1	5,445.5	5,372.1	23.3	18.3	-135.40	-220.0	691.8	553.5	516.8	36.68	15.088	
5,500.0	5,395.1	5,468.5	5,395.1	23.3	18.3	-135.79	-220.0	691.8	556.9	520.2	36.72	15.167	
5,600.0	5,493.4	5,566.9	5,493.4	23.7	18.4	-137.24	-220.0	691.8	570.3	533.4	36.84	15.478	
5,700.0	5,592.3	5,665.7	5,592.3	23.9	18.6	-138.38	-220.0	691.8	581.3	544.3	36.99	15.714	
5,800.0	5,691.6	5,765.1	5,691.6	24.1	18.7	-139.22	-220.0	691.8	589.9	552.7	37.16	15.874	
5,900.0	5,791.3	5,864.8	5,791.3	24.3	18.8	-139.80	-220.0	691.8	595.9	558.6	37.35	15.956	
6,000.0	5,891.2	5,964.7	5,891.2	24.5	19.0	-140.11	-220.0	691.8	599.3	561.8	37.55	15.961	
6,076.6	5,967.8	6,041.3	5,967.8	24.6	19.1	-0.58	-220.0	691.8	600.1	564.3	35.77	16.777	
6,100.0	5,991.2	6,064.7	5,991.2	24.6	19.1	-0.58	-220.0	691.8	600.1	564.3	35.84	16.744	
6,200.0	6,091.2	6,164.7	6,091.2	24.7	19.3	-0.58	-220.0	691.8	600.1	564.0	36.13	16.610	
6,300.0	6,191.2	6,264.7	6,191.2	24.8	19.4	-0.58	-220.0	691.8	600.1	563.7	36.42	16.476	
6,400.0	6,291.2	6,364.7	6,291.2	24.9	19.6	-0.58	-220.0	691.8	600.1	563.4	36.72	16.344	
6,452.5	6,343.7	6,417.1	6,343.7	24.9	19.6	-0.58	-220.0	691.8	600.1	563.2	36.87	16.274	
6,500.0	6,391.2	6,464.4	6,390.9	25.0	19.7	-0.65	-220.0	691.1	600.1	563.1	37.02	16.209	
6,571.6	6,462.8	6,534.7	6,460.9	25.1	19.7	-1.27	-220.0	684.6	600.2	562.9	37.34	16.072	
6,600.0	6,491.2	6,562.2	6,488.1	25.1	19.7	88.35	-220.0	680.2	600.3	561.5	38.82	15.463	
6,650.0	6,541.1	6,610.3	6,535.1	25.1	19.7	87.70	-220.0	670.0	600.6	561.9	38.68	15.526	
6,700.0	6,590.5	6,658.0	6,580.9	25.1	19.7	87.06	-220.0	656.8	600.9	562.4	38.49	15.609	
6,750.0	6,639.4	6,705.3	6,625.4	25.1	19.6	86.43	-220.0	640.7	601.3	563.0	38.27	15.710	
6,800.0	6,687.4	6,752.2	6,668.3	25.0	19.5	85.82	-220.0	621.9	601.7	563.7	38.03	15.823	
6,850.0	6,734.3	6,800.0	6,710.7	25.0	19.5	85.22	-220.0	599.9	602.2	564.4	37.76	15.948	
6,900.0	6,779.8	6,845.0	6,749.2	24.9	19.4	84.68	-220.0	576.7	602.7	565.2	37.50	16.070	
6,950.0	6,823.8	6,890.9	6,786.9	24.8	19.3	84.14	-220.0	550.5	603.3	566.0	37.26	16.192	
7,000.0	6,866.1	6,936.4	6,822.6	24.7	19.3	83.63	-220.0	522.2	603.8	566.8	37.04	16.302	
7,050.0	6,906.4	6,981.8	6,856.2	24.6	19.2	83.16	-220.0	491.8	604.4	567.5	36.87	16.393	
7,100.0	6,944.6	7,026.8	6,887.7	24.5	19.2	82.71	-220.0	459.6	605.0	568.2	36.76	16.457	
7,150.0	6,980.4	7,071.7	6,917.0	24.4	19.2	82.30	-220.0	425.6	605.6	568.8	36.73	16.485	
7,200.0	7,013.6	7,116.3	6,943.9	24.3	19.3	81.92	-220.0	390.0	606.1	569.3	36.80	16.469	
7,250.0	7,044.2	7,160.8	6,968.5	24.2	19.4	81.58	-220.0	353.0	606.6	569.7	36.98	16.403	
7,300.0	7,072.0	7,205.1	6,990.7	24.1	19.5	81.27	-220.0	314.6	607.1	569.8	37.29	16.281	
7,350.0	7,096.8	7,250.0	7,010.7	24.0	19.7	81.00	-220.0	274.4	607.6	569.8	37.74	16.099	
7,400.0	7,118.5	7,293.2	7,027.5	23.9	20.0	80.78	-220.0	234.6	607.9	569.6	38.33	15.862	
7,450.0	7,137.0	7,337.1	7,042.1	23.8	20.3	80.59	-220.0	193.2	608.3	569.2	39.07	15.570	
7,500.0	7,152.2	7,381.0	7,054.2	23.8	20.7	80.44	-220.0	151.1	608.5	568.6	39.94	15.234	
7,550.0	7,164.1	7,424.7	7,063.6	23.8	21.1	80.33	-220.0	108.3	608.7	567.8	40.96	14.862	
7,600.0	7,172.5	7,468.5	7,070.4	23.8	21.6	80.27	-220.0	65.1	608.8	566.7	42.10	14.462	
7,650.0	7,177.5	7,512.2	7,074.5	23.9	22.2	80.24	-220.0	21.6	608.9	565.5	43.35	14.047	
7,699.2	7,179.0	7,555.2	7,076.0	24.1	22.8	80.26	-220.0	-21.4	608.8	564.2	44.67	13.631	
7,700.0	7,179.0	7,555.9	7,076.0	24.1	22.8	80.26	-220.0	-22.0	608.8	564.2	44.69	13.624	
7,722.9	7,178.9	7,578.0	7,075.9	24.2	23.1	80.26	-220.0	-44.1	608.8	563.5	45.37	13.420	
7,800.0	7,178.6	7,655.0	7,075.5	24.9	24.3	80.25	-220.0	-121.2	608.9	561.1	47.78	12.742	
7,900.0	7,178.3	7,755.0	7,075.1	26.4	26.1	80.24	-220.0	-221.2	608.9	557.6	51.29	11.872	
8,000.0	7,177.9	7,855.0	7,074.6	28.2	28.1	80.23	-220.0	-321.2	608.9	553.8	55.13	11.045	
8,100.0	7,177.5	7,955.0	7,074.1	30.3	30.2	80.22	-220.0	-421.2	608.9	549.7	59.24	10.279	
8,200.0	7,177.2	8,055.0	7,073.6	32.5	32.4	80.21	-220.0	-521.2	608.9	545.4	63.56	9.580	
8,300.0	7,176.8	8,155.0	7,073.1	34.8	34.7	80.20	-220.0	-621.2	609.0	540.9	68.07	8.946	
8,400.0	7,176.4	8,255.0	7,072.6	37.2	37.0	80.19	-220.0	-721.2	609.0	536.3	72.71	8.375	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - WALTERS 21P-234 - ORIGINAL WELLBORE - PROPOSAL #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,500.0	7,176.1	8,355.0	7,072.2	39.6	39.5	80.18	-220.0	-821.2	609.0	531.5	77.48	7.860	
8,600.0	7,175.7	8,455.0	7,071.7	42.0	41.9	80.16	-220.0	-921.2	609.0	526.7	82.34	7.396	
8,700.0	7,175.3	8,555.0	7,071.2	44.6	44.5	80.15	-220.0	-1,021.2	609.0	521.8	87.28	6.978	
8,800.0	7,175.0	8,655.0	7,070.7	47.1	47.0	80.14	-220.0	-1,121.2	609.1	516.8	92.29	6.599	
8,900.0	7,174.6	8,755.0	7,070.2	49.7	49.6	80.13	-220.0	-1,221.2	609.1	511.7	97.36	6.256	
9,000.0	7,174.3	8,855.0	7,069.7	52.3	52.2	80.12	-220.0	-1,321.2	609.1	506.6	102.47	5.944	
9,100.0	7,173.9	8,955.0	7,069.3	54.9	54.8	80.11	-220.0	-1,421.2	609.1	501.5	107.63	5.659	
9,200.0	7,173.5	9,055.0	7,068.8	57.5	57.4	80.10	-220.0	-1,521.2	609.1	496.3	112.82	5.399	
9,300.0	7,173.2	9,155.0	7,068.3	60.1	60.1	80.09	-220.0	-1,621.2	609.2	491.1	118.05	5.160	
9,400.0	7,172.8	9,255.0	7,067.8	62.8	62.7	80.08	-220.0	-1,721.2	609.2	485.9	123.30	4.941	
9,500.0	7,172.4	9,355.0	7,067.3	65.5	65.4	80.06	-220.0	-1,821.2	609.2	480.6	128.57	4.738	
9,600.0	7,172.1	9,455.0	7,066.8	68.2	68.1	80.05	-220.0	-1,921.2	609.2	475.3	133.87	4.551	
9,700.0	7,171.7	9,555.0	7,066.4	70.9	70.8	80.04	-220.0	-2,021.2	609.2	470.1	139.18	4.377	
9,800.0	7,171.3	9,655.0	7,065.9	73.6	73.5	80.03	-220.0	-2,121.2	609.3	464.7	144.51	4.216	
9,900.0	7,171.0	9,755.0	7,065.4	76.3	76.2	80.02	-220.0	-2,221.2	609.3	459.4	149.86	4.066	
10,000.0	7,170.6	9,855.0	7,064.9	79.0	79.0	80.01	-220.0	-2,321.2	609.3	454.1	155.21	3.926	
10,100.0	7,170.3	9,955.0	7,064.4	81.7	81.7	80.00	-220.0	-2,421.2	609.3	448.7	160.58	3.794	
10,200.0	7,169.9	10,055.0	7,063.9	84.4	84.4	79.99	-220.0	-2,521.2	609.3	443.4	165.96	3.672	
10,300.0	7,169.5	10,155.0	7,063.4	87.2	87.1	79.97	-220.0	-2,621.2	609.4	438.0	171.35	3.556	
10,400.0	7,169.2	10,255.0	7,063.0	89.9	89.9	79.96	-220.0	-2,721.2	609.4	432.6	176.75	3.448	
10,500.0	7,168.8	10,355.0	7,062.5	92.6	92.6	79.95	-220.0	-2,821.2	609.4	427.2	182.15	3.345	
10,600.0	7,168.4	10,455.0	7,062.0	95.4	95.4	79.94	-220.0	-2,921.2	609.4	421.9	187.57	3.249	
10,700.0	7,168.1	10,555.0	7,061.5	98.1	98.1	79.93	-220.0	-3,021.2	609.4	416.5	192.99	3.158	
10,800.0	7,167.7	10,655.0	7,061.0	100.9	100.9	79.92	-220.0	-3,121.2	609.5	411.0	198.41	3.072	
10,900.0	7,167.4	10,755.0	7,060.5	103.6	103.6	79.91	-220.0	-3,221.2	609.5	405.6	203.84	2.990	
11,000.0	7,167.0	10,855.0	7,060.1	106.4	106.4	79.90	-220.0	-3,321.2	609.5	400.2	209.28	2.912	
11,100.0	7,166.6	10,955.0	7,059.6	109.1	109.2	79.88	-220.0	-3,421.2	609.5	394.8	214.72	2.839	
11,200.0	7,166.3	11,055.0	7,059.1	111.9	111.9	79.87	-220.0	-3,521.2	609.5	389.4	220.16	2.769	
11,300.0	7,165.9	11,155.0	7,058.6	114.7	114.7	79.86	-220.0	-3,621.2	609.6	383.9	225.61	2.702	
11,400.0	7,165.5	11,255.0	7,058.1	117.4	117.5	79.85	-220.0	-3,721.2	609.6	378.5	231.06	2.638	
11,500.0	7,165.2	11,355.0	7,057.6	120.2	120.2	79.84	-220.0	-3,821.2	609.6	373.1	236.51	2.577	
11,600.0	7,164.8	11,455.0	7,057.2	123.0	123.0	79.83	-220.0	-3,921.2	609.6	367.6	241.97	2.519	
11,700.0	7,164.5	11,555.0	7,056.7	125.7	125.8	79.82	-220.0	-4,021.2	609.6	362.2	247.43	2.464	
11,800.0	7,164.1	11,655.1	7,056.2	128.5	128.6	79.80	-220.0	-4,121.3	609.6	356.8	252.90	2.411	
11,828.8	7,164.0	11,684.0	7,056.0	129.3	129.4	79.80	-220.1	-4,150.1	609.6	355.2	254.47	2.396	SF

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - WALTERS 21P-304 - ORIGINAL WELLBORE - PROPOSAL #1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	0.43	75.0	0.6	75.0				
100.0	100.0	99.0	99.0	0.1	0.1	0.43	75.0	0.6	75.0	74.8	0.19	387.905	
200.0	200.0	199.0	199.0	0.3	0.3	0.43	75.0	0.6	75.0	74.4	0.64	116.939	
300.0	300.0	299.0	299.0	0.5	0.5	0.43	75.0	0.6	75.0	73.9	1.09	68.766	CC, ES
400.0	400.0	399.0	399.0	0.8	0.8	-140.02	75.0	0.6	76.4	74.8	1.52	50.172	
500.0	499.8	498.8	498.8	1.0	1.0	-142.36	75.0	0.6	80.5	78.5	1.95	41.235	
600.0	599.5	598.3	598.3	1.2	1.2	-144.65	75.3	2.2	87.6	85.2	2.39	36.690	
700.0	698.7	697.6	697.4	1.5	1.4	-145.65	76.1	7.3	97.9	95.1	2.84	34.463	
800.0	797.5	796.5	796.0	1.8	1.7	-145.62	77.4	15.7	111.2	107.9	3.33	33.386	
900.1	895.7	895.1	893.8	2.2	1.9	-144.88	79.2	27.4	127.5	123.7	3.87	32.916	
1,000.0	993.4	993.0	990.6	2.6	2.2	-143.51	81.5	42.4	145.5	141.0	4.48	32.467	
1,100.0	1,091.3	1,090.7	1,086.5	3.0	2.5	-141.26	84.2	60.5	163.8	158.6	5.16	31.748	
1,200.0	1,189.1	1,188.6	1,182.3	3.5	2.9	-138.84	87.3	80.6	182.6	176.7	5.90	30.966	
1,300.0	1,286.9	1,286.5	1,278.1	3.9	3.3	-136.87	90.4	100.8	201.7	195.0	6.66	30.273	
1,400.0	1,384.7	1,384.5	1,373.9	4.4	3.7	-135.24	93.5	120.9	221.0	213.5	7.45	29.677	
1,500.0	1,482.5	1,482.4	1,469.7	4.8	4.1	-133.87	96.6	141.0	240.4	232.1	8.24	29.170	
1,600.0	1,580.3	1,580.4	1,565.5	5.3	4.6	-132.70	99.7	161.1	259.9	250.9	9.04	28.736	
1,700.0	1,678.1	1,678.3	1,661.3	5.7	5.0	-131.70	102.8	181.2	279.5	269.7	9.86	28.364	
1,800.0	1,776.0	1,776.3	1,757.1	6.2	5.4	-130.83	105.9	201.4	299.2	288.6	10.67	28.043	
1,900.0	1,873.8	1,874.2	1,852.9	6.6	5.9	-130.07	109.0	221.5	319.0	307.5	11.49	27.763	
2,000.0	1,971.6	1,972.1	1,948.7	7.1	6.3	-129.39	112.0	241.6	338.8	326.5	12.31	27.519	
2,100.0	2,069.4	2,070.1	2,044.5	7.6	6.7	-128.79	115.1	261.7	358.6	345.5	13.13	27.303	
2,200.0	2,167.2	2,168.0	2,140.3	8.0	7.2	-128.26	118.2	281.9	378.5	364.5	13.96	27.112	
2,300.0	2,265.0	2,266.0	2,236.1	8.5	7.6	-127.77	121.3	302.0	398.4	383.6	14.79	26.942	
2,400.0	2,362.8	2,363.9	2,332.0	9.0	8.1	-127.33	124.4	322.1	418.3	402.7	15.61	26.789	
2,500.0	2,460.6	2,461.9	2,427.8	9.4	8.5	-126.94	127.5	342.2	438.3	421.8	16.44	26.651	
2,600.0	2,558.5	2,559.8	2,523.6	9.9	9.0	-126.57	130.6	362.3	458.2	440.9	17.27	26.527	
2,700.0	2,656.3	2,657.8	2,619.4	10.3	9.4	-126.24	133.7	382.5	478.2	460.1	18.10	26.414	
2,800.0	2,754.1	2,755.7	2,715.2	10.8	9.8	-125.94	136.8	402.6	498.2	479.3	18.94	26.310	
2,900.0	2,851.9	2,853.7	2,811.0	11.3	10.3	-125.65	139.8	422.7	518.2	498.4	19.77	26.215	
3,000.0	2,949.7	2,951.6	2,906.8	11.7	10.7	-125.39	142.9	442.8	538.2	517.6	20.60	26.128	
3,100.0	3,047.5	3,049.6	3,002.6	12.2	11.2	-125.15	146.0	463.0	558.3	536.8	21.43	26.048	
3,200.0	3,145.3	3,147.5	3,098.4	12.7	11.6	-124.92	149.1	483.1	578.3	556.0	22.26	25.974	
3,300.0	3,243.2	3,245.5	3,194.2	13.1	12.1	-124.71	152.2	503.2	598.3	575.2	23.10	25.905	
3,400.0	3,341.0	3,343.4	3,290.0	13.6	12.5	-124.52	155.3	523.3	618.4	594.5	23.93	25.841	
3,500.0	3,438.8	3,441.4	3,385.8	14.1	13.0	-124.33	158.4	543.4	638.5	613.7	24.76	25.781	
3,600.0	3,536.6	3,539.3	3,481.7	14.5	13.4	-124.16	161.5	563.6	658.5	632.9	25.60	25.726	
3,700.0	3,634.4	3,637.2	3,577.5	15.0	13.9	-123.99	164.6	583.7	678.6	652.2	26.43	25.673	
3,800.0	3,732.2	3,735.2	3,673.3	15.5	14.3	-123.84	167.6	603.8	698.7	671.4	27.27	25.624	
3,900.0	3,830.0	3,833.1	3,769.1	15.9	14.8	-123.69	170.7	623.9	718.7	690.6	28.10	25.578	
4,000.0	3,927.9	3,942.0	3,876.0	16.4	15.1	-123.68	173.9	644.4	738.1	709.3	28.87	25.565	
4,100.0	4,025.7	4,051.8	3,984.5	16.9	15.5	-123.97	176.4	661.0	756.0	726.5	29.56	25.575	
4,200.0	4,123.5	4,161.8	4,093.7	17.3	15.7	-124.53	178.3	673.5	772.4	742.2	30.19	25.583	
4,300.0	4,221.3	4,271.6	4,203.2	17.8	15.9	-125.35	179.6	681.8	787.5	756.7	30.77	25.595	
4,400.0	4,319.1	4,381.0	4,312.5	18.2	16.1	-126.41	180.3	685.9	801.3	770.0	31.28	25.619	
4,500.0	4,416.9	4,484.4	4,415.9	18.7	16.2	-127.60	180.3	686.5	814.1	782.4	31.73	25.658	
4,600.0	4,514.7	4,582.3	4,513.7	19.2	16.3	-128.73	180.3	686.5	827.2	795.0	32.18	25.707	
4,700.0	4,612.6	4,680.1	4,611.6	19.6	16.5	-129.82	180.3	686.5	840.5	807.9	32.61	25.770	
4,800.0	4,710.4	4,777.9	4,709.4	20.1	16.6	-130.88	180.3	686.5	854.1	821.1	33.05	25.846	
4,900.0	4,808.2	4,875.7	4,807.2	20.6	16.7	-131.90	180.3	686.5	868.1	834.6	33.47	25.934	
5,000.0	4,906.0	4,973.5	4,905.0	21.0	16.9	-132.90	180.3	686.5	882.2	848.4	33.89	26.033	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - WALTERS 21P-304 - ORIGINAL WELLBORE - PROPOSAL #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.0	5,003.8	5,071.3	5,002.8	21.5	17.0	-133.86	180.3	686.5	896.7	862.4	34.30	26.140	
5,200.0	5,101.6	5,169.1	5,100.6	22.0	17.1	-134.79	180.3	686.5	911.4	876.7	34.71	26.256	
5,300.0	5,199.4	5,267.0	5,198.4	22.4	17.3	-135.69	180.3	686.5	926.3	891.2	35.11	26.379	
5,400.0	5,297.3	5,364.8	5,296.3	22.9	17.4	-136.57	180.3	686.5	941.5	905.9	35.51	26.509	
5,476.5	5,372.1	5,439.6	5,371.1	23.3	17.5	-137.22	180.3	686.5	953.2	917.4	35.82	26.612	
5,500.0	5,395.1	5,462.6	5,394.1	23.3	17.5	-137.46	180.3	686.5	956.8	920.8	35.91	26.641	
5,600.0	5,493.4	5,560.9	5,492.4	23.7	17.7	-138.37	180.3	686.5	970.4	934.2	36.26	26.763	
5,700.0	5,592.3	5,659.8	5,591.3	23.9	17.8	-139.09	180.3	686.5	981.6	945.0	36.59	26.829	
5,800.0	5,691.6	5,759.1	5,690.6	24.1	18.0	-139.63	180.3	686.5	990.3	953.4	36.90	26.840	
5,900.0	5,791.3	5,858.8	5,790.3	24.3	18.1	-140.00	180.3	686.5	996.3	959.1	37.18	26.795	
6,000.0	5,891.2	5,958.7	5,890.2	24.5	18.3	-140.21	180.3	686.5	999.7	962.3	37.45	26.694	
6,076.6	5,967.8	6,035.3	5,966.8	24.6	18.4	-0.66	180.3	686.5	1,000.5	965.6	34.93	28.643	
6,100.0	5,991.2	6,058.7	5,990.2	24.6	18.4	-0.66	180.3	686.5	1,000.5	965.5	35.00	28.582	
6,200.0	6,091.2	6,158.7	6,090.2	24.7	18.6	-0.66	180.3	686.5	1,000.5	965.2	35.31	28.332	
6,300.0	6,191.2	6,258.7	6,190.2	24.8	18.8	-0.66	180.3	686.5	1,000.5	964.9	35.62	28.085	
6,400.0	6,291.2	6,358.7	6,290.2	24.9	18.9	-0.66	180.3	686.5	1,000.5	964.6	35.94	27.839	
6,500.0	6,391.2	6,458.7	6,390.2	25.0	19.1	-0.66	180.3	686.5	1,000.5	964.2	36.25	27.597	
6,571.6	6,462.8	6,530.3	6,461.8	25.1	19.2	-0.66	180.3	686.5	1,000.5	964.0	36.48	27.424	
6,600.0	6,491.2	6,558.3	6,489.8	25.1	19.2	89.35	180.3	685.9	1,000.5	961.4	39.14	25.559	
6,650.0	6,541.1	6,607.5	6,538.9	25.1	19.3	89.35	180.3	682.4	1,000.5	961.3	39.21	25.517	
6,700.0	6,590.5	6,656.7	6,587.6	25.1	19.3	89.37	180.3	675.5	1,000.5	961.3	39.22	25.512	
6,750.0	6,639.4	6,706.0	6,635.7	25.1	19.2	89.38	180.3	665.3	1,000.5	961.3	39.17	25.541	
6,800.0	6,687.4	6,755.2	6,683.1	25.0	19.2	89.39	180.3	651.7	1,000.5	961.4	39.08	25.601	
6,850.0	6,734.3	6,804.5	6,729.4	25.0	19.2	89.41	180.3	635.0	1,000.5	961.5	38.95	25.685	
6,900.0	6,779.8	6,853.8	6,774.5	24.9	19.1	89.44	180.3	615.1	1,000.5	961.7	38.80	25.787	
6,950.0	6,823.8	6,903.2	6,818.2	24.8	19.0	89.46	180.3	592.1	1,000.5	961.9	38.63	25.899	
7,000.0	6,866.1	6,952.5	6,860.2	24.7	18.9	89.49	180.3	566.1	1,000.5	962.0	38.46	26.011	
7,050.0	6,906.4	7,001.9	6,900.3	24.6	18.9	89.52	180.3	537.3	1,000.5	962.2	38.31	26.113	
7,100.0	6,944.6	7,051.4	6,938.4	24.5	18.8	89.55	180.3	505.8	1,000.5	962.3	38.20	26.190	
7,150.0	6,980.4	7,100.8	6,974.2	24.4	18.8	89.59	180.3	471.7	1,000.5	962.3	38.15	26.228	
7,200.0	7,013.6	7,150.4	7,007.6	24.3	18.8	89.62	180.3	435.2	1,000.5	962.3	38.17	26.212	
7,250.0	7,044.2	7,200.0	7,038.5	24.2	18.9	89.66	180.3	396.3	1,000.5	962.2	38.29	26.128	
7,300.0	7,072.0	7,249.5	7,066.6	24.1	19.0	89.70	180.3	355.5	1,000.5	961.9	38.53	25.964	
7,350.0	7,096.8	7,299.2	7,091.8	24.0	19.2	89.74	180.3	312.8	1,000.4	961.5	38.91	25.712	
7,400.0	7,118.5	7,348.9	7,114.0	23.9	19.5	89.78	180.3	268.3	1,000.4	961.0	39.44	25.369	
7,450.0	7,137.0	7,398.7	7,133.2	23.8	19.9	89.83	180.3	222.4	1,000.4	960.3	40.12	24.938	
7,500.0	7,152.2	7,448.5	7,149.1	23.8	20.3	89.87	180.3	175.2	1,000.4	959.5	40.96	24.425	
7,550.0	7,164.1	7,498.3	7,161.7	23.8	20.8	89.92	180.3	127.0	1,000.4	958.5	41.95	23.846	
7,600.0	7,172.5	7,548.3	7,170.9	23.8	21.4	89.96	180.3	77.9	1,000.4	957.3	43.10	23.214	
7,640.0	7,176.8	7,588.2	7,175.8	23.9	21.9	90.00	180.3	38.2	1,000.4	956.3	44.12	22.678	
7,650.0	7,177.5	7,598.2	7,176.7	23.9	22.0	90.01	180.3	28.3	1,000.4	956.1	44.37	22.547	
7,699.2	7,179.0	7,647.5	7,179.0	24.1	22.7	90.05	180.3	-20.9	1,000.4	954.7	45.74	21.873	
7,700.0	7,179.0	7,648.3	7,179.0	24.1	22.8	90.06	180.3	-21.7	1,000.4	954.7	45.76	21.862	
7,800.0	7,178.6	7,748.3	7,178.7	24.9	24.4	90.06	180.3	-121.7	1,000.4	951.5	48.91	20.456	
7,900.0	7,178.3	7,848.3	7,178.3	26.4	26.1	90.06	180.3	-221.7	1,000.4	948.0	52.45	19.073	
8,000.0	7,177.9	7,948.3	7,177.9	28.2	28.1	90.06	180.3	-321.7	1,000.4	944.1	56.34	17.758	
8,100.0	7,177.5	8,048.3	7,177.6	30.3	30.2	90.06	180.3	-421.7	1,000.4	939.9	60.49	16.538	
8,200.0	7,177.2	8,148.3	7,177.2	32.5	32.4	90.06	180.3	-521.7	1,000.4	935.6	64.87	15.422	
8,300.0	7,176.8	8,248.3	7,176.9	34.8	34.7	90.06	180.3	-621.7	1,000.4	931.0	69.43	14.410	
8,400.0	7,176.4	8,348.3	7,176.5	37.2	37.0	90.06	180.3	-721.7	1,000.4	926.3	74.13	13.496	
8,500.0	7,176.1	8,448.3	7,176.1	39.6	39.5	90.06	180.3	-821.7	1,000.4	921.5	78.95	12.672	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - WALTERS 21P-304 - ORIGINAL WELLBORE - PROPOSAL #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,600.0	7,175.7	8,548.3	7,175.8	42.0	41.9	90.06	180.3	-921.7	1,000.4	916.6	83.87	11.928	
8,700.0	7,175.3	8,648.3	7,175.4	44.6	44.4	90.06	180.3	-1,021.7	1,000.4	911.6	88.88	11.257	
8,800.0	7,175.0	8,748.3	7,175.0	47.1	47.0	90.06	180.3	-1,121.7	1,000.4	906.5	93.95	10.649	
8,900.0	7,174.6	8,848.3	7,174.7	49.7	49.5	90.06	180.3	-1,221.7	1,000.4	901.4	99.08	10.097	
9,000.0	7,174.3	8,948.3	7,174.3	52.3	52.1	90.06	180.3	-1,321.7	1,000.4	896.2	104.26	9.595	
9,100.0	7,173.9	9,048.3	7,173.9	54.9	54.8	90.06	180.3	-1,421.7	1,000.4	890.9	109.49	9.137	
9,200.0	7,173.5	9,148.3	7,173.6	57.5	57.4	90.06	180.3	-1,521.7	1,000.4	885.7	114.75	8.718	
9,300.0	7,173.2	9,248.3	7,173.2	60.1	60.0	90.06	180.3	-1,621.7	1,000.4	880.4	120.05	8.334	
9,400.0	7,172.8	9,348.3	7,172.8	62.8	62.7	90.06	180.3	-1,721.7	1,000.4	875.1	125.37	7.980	
9,500.0	7,172.4	9,448.3	7,172.5	65.5	65.4	90.06	180.3	-1,821.7	1,000.4	869.7	130.71	7.654	
9,600.0	7,172.1	9,548.3	7,172.1	68.2	68.1	90.06	180.3	-1,921.7	1,000.4	864.3	136.08	7.352	
9,700.0	7,171.7	9,648.3	7,171.7	70.9	70.8	90.06	180.3	-2,021.7	1,000.4	859.0	141.47	7.072	
9,800.0	7,171.3	9,748.3	7,171.4	73.6	73.5	90.06	180.3	-2,121.7	1,000.4	853.6	146.88	6.811	
9,900.0	7,171.0	9,848.3	7,171.0	76.3	76.2	90.06	180.3	-2,221.7	1,000.4	848.1	152.30	6.569	
10,000.0	7,170.6	9,948.3	7,170.7	79.0	78.9	90.06	180.3	-2,321.7	1,000.4	842.7	157.73	6.343	
10,100.0	7,170.3	10,048.3	7,170.3	81.7	81.6	90.06	180.3	-2,421.7	1,000.4	837.2	163.18	6.131	
10,200.0	7,169.9	10,148.3	7,169.9	84.4	84.4	90.06	180.3	-2,521.7	1,000.4	831.8	168.64	5.932	
10,300.0	7,169.5	10,248.3	7,169.6	87.2	87.1	90.06	180.3	-2,621.7	1,000.4	826.3	174.10	5.746	
10,400.0	7,169.2	10,348.3	7,169.2	89.9	89.8	90.06	180.3	-2,721.7	1,000.4	820.8	179.58	5.571	
10,500.0	7,168.8	10,448.3	7,168.8	92.6	92.6	90.06	180.3	-2,821.7	1,000.4	815.4	185.07	5.406	
10,600.0	7,168.4	10,548.3	7,168.5	95.4	95.3	90.06	180.3	-2,921.7	1,000.4	809.9	190.56	5.250	
10,700.0	7,168.1	10,648.3	7,168.1	98.1	98.1	90.06	180.3	-3,021.7	1,000.4	804.4	196.06	5.103	
10,800.0	7,167.7	10,748.3	7,167.7	100.9	100.8	90.06	180.3	-3,121.7	1,000.4	798.9	201.57	4.963	
10,900.0	7,167.4	10,848.3	7,167.4	103.6	103.6	90.06	180.3	-3,221.7	1,000.4	793.3	207.08	4.831	
11,000.0	7,167.0	10,948.3	7,167.0	106.4	106.4	90.06	180.3	-3,321.7	1,000.4	787.8	212.60	4.706	
11,100.0	7,166.6	11,048.3	7,166.6	109.1	109.1	90.06	180.3	-3,421.7	1,000.4	782.3	218.12	4.586	
11,200.0	7,166.3	11,148.3	7,166.3	111.9	111.9	90.06	180.3	-3,521.7	1,000.4	776.8	223.65	4.473	
11,300.0	7,165.9	11,248.3	7,165.9	114.7	114.6	90.06	180.3	-3,621.7	1,000.4	771.2	229.18	4.365	
11,400.0	7,165.5	11,348.3	7,165.5	117.4	117.4	90.06	180.3	-3,721.7	1,000.4	765.7	234.72	4.262	
11,500.0	7,165.2	11,448.3	7,165.2	120.2	120.2	90.06	180.3	-3,821.7	1,000.4	760.2	240.26	4.164	
11,600.0	7,164.8	11,548.3	7,164.8	123.0	123.0	90.06	180.3	-3,921.7	1,000.4	754.6	245.80	4.070	
11,700.0	7,164.5	11,648.3	7,164.4	125.7	125.7	90.06	180.3	-4,021.7	1,000.4	749.1	251.35	3.980	
11,800.0	7,164.1	11,748.6	7,164.1	128.5	128.5	90.06	180.3	-4,122.0	1,000.4	743.5	256.91	3.894	
11,828.8	7,164.0	11,777.4	7,164.0	129.3	129.3	90.06	180.3	-4,150.8	1,000.4	741.9	258.50	3.870	SF

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - WALTERS 21P-314 - ORIGINAL WELLBORE - PROPOSAL #1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	0.46	104.9	0.8	104.9				
100.0	100.0	98.0	98.0	0.1	0.1	0.46	104.9	0.8	104.9	104.7	0.19	545.073	
200.0	200.0	198.0	198.0	0.3	0.3	0.46	104.9	0.8	104.9	104.3	0.64	164.068	
300.0	300.0	298.0	298.0	0.5	0.5	0.46	104.9	0.8	104.9	103.8	1.09	96.341	CC, ES
400.0	400.0	395.6	395.6	0.8	0.8	-139.07	106.0	2.0	107.3	105.8	1.51	70.886	
500.0	499.8	492.9	492.7	1.0	1.0	-138.81	109.2	5.7	114.6	112.7	1.95	58.861	
600.0	599.5	589.4	588.9	1.2	1.2	-138.41	114.5	11.9	126.7	124.3	2.41	52.521	
700.0	698.7	684.9	683.8	1.5	1.5	-137.93	121.9	20.3	143.7	140.8	2.92	49.281	
800.0	797.5	779.1	776.9	1.8	1.8	-137.42	131.1	31.0	165.3	161.9	3.46	47.786	
900.1	895.7	871.8	868.0	2.2	2.1	-136.90	142.2	43.8	191.7	187.6	4.05	47.289	
1,000.0	993.4	966.1	960.3	2.6	2.5	-136.63	155.0	58.5	220.8	216.1	4.68	47.134	
1,100.0	1,091.3	1,061.7	1,053.8	3.0	2.9	-136.40	168.0	73.5	250.0	244.6	5.34	46.842	
1,200.0	1,189.1	1,157.3	1,147.3	3.5	3.3	-136.22	181.1	88.5	279.2	273.2	6.00	46.508	
1,300.0	1,286.9	1,253.0	1,240.9	3.9	3.7	-136.07	194.1	103.5	308.4	301.7	6.68	46.174	
1,400.0	1,384.7	1,348.6	1,334.4	4.4	4.1	-135.95	207.2	118.5	337.7	330.3	7.37	45.815	
1,500.0	1,482.5	1,444.2	1,428.0	4.8	4.5	-135.85	220.2	133.5	366.9	358.8	8.06	45.508	
1,600.0	1,580.3	1,539.9	1,521.5	5.3	4.9	-135.76	233.3	148.5	396.1	387.4	8.76	45.221	
1,700.0	1,678.1	1,635.5	1,615.0	5.7	5.4	-135.69	246.3	163.5	425.3	415.9	9.46	44.959	
1,800.0	1,776.0	1,731.1	1,708.6	6.2	5.8	-135.62	259.3	178.5	454.6	444.4	10.17	44.719	
1,900.0	1,873.8	1,826.8	1,802.1	6.6	6.2	-135.56	272.4	193.6	483.8	472.9	10.87	44.501	
2,000.0	1,971.6	1,922.4	1,895.7	7.1	6.6	-135.51	285.4	208.6	513.0	501.5	11.58	44.302	
2,100.0	2,069.4	2,018.0	1,989.2	7.6	7.1	-135.47	298.5	223.6	542.3	530.0	12.29	44.120	
2,200.0	2,167.2	2,113.7	2,082.7	8.0	7.5	-135.42	311.5	238.6	571.5	558.5	13.00	43.954	
2,300.0	2,265.0	2,209.3	2,176.3	8.5	7.9	-135.39	324.6	253.6	600.7	587.0	13.72	43.801	
2,400.0	2,362.8	2,304.9	2,269.8	9.0	8.3	-135.35	337.6	268.6	630.0	615.5	14.43	43.660	
2,500.0	2,460.6	2,400.5	2,363.4	9.4	8.8	-135.32	350.7	283.6	659.2	644.1	15.14	43.530	
2,600.0	2,558.5	2,496.2	2,456.9	9.9	9.2	-135.29	363.7	298.6	688.4	672.6	15.86	43.410	
2,700.0	2,656.3	2,591.8	2,550.5	10.3	9.6	-135.27	376.7	313.6	717.7	701.1	16.57	43.298	
2,800.0	2,754.1	2,687.4	2,644.0	10.8	10.1	-135.25	389.8	328.6	746.9	729.6	17.29	43.195	
2,900.0	2,851.9	2,783.1	2,737.5	11.3	10.5	-135.22	402.8	343.7	776.1	758.1	18.01	43.098	
3,000.0	2,949.7	2,878.7	2,831.1	11.7	10.9	-135.20	415.9	358.7	805.4	786.6	18.73	43.008	
3,100.0	3,047.5	2,974.3	2,924.6	12.2	11.3	-135.18	428.9	373.7	834.6	815.2	19.44	42.923	
3,200.0	3,145.3	3,070.0	3,018.2	12.7	11.8	-135.17	442.0	388.7	863.8	843.7	20.16	42.844	
3,300.0	3,243.2	3,165.6	3,111.7	13.1	12.2	-135.15	455.0	403.7	893.1	872.2	20.88	42.769	
3,400.0	3,341.0	3,261.2	3,205.2	13.6	12.6	-135.13	468.1	418.7	922.3	900.7	21.60	42.699	
3,500.0	3,438.8	3,356.9	3,298.8	14.1	13.1	-135.12	481.1	433.7	951.5	929.2	22.32	42.633	
3,600.0	3,536.6	3,452.5	3,392.3	14.5	13.5	-135.11	494.1	448.7	980.8	957.7	23.04	42.570	
3,700.0	3,634.4	3,548.1	3,485.9	15.0	13.9	-135.09	507.2	463.7	1,010.0	986.2	23.76	42.511	
3,800.0	3,732.2	3,643.8	3,579.4	15.5	14.4	-135.08	520.2	478.7	1,039.2	1,014.8	24.48	42.455	
3,900.0	3,830.0	3,739.4	3,672.9	15.9	14.8	-135.07	533.3	493.8	1,068.5	1,043.3	25.20	42.401	
4,000.0	3,927.9	3,835.0	3,766.5	16.4	15.2	-135.06	546.3	508.8	1,097.7	1,071.8	25.92	42.351	
4,100.0	4,025.7	3,930.6	3,860.0	16.9	15.6	-135.05	559.4	523.8	1,126.9	1,100.3	26.64	42.303	
4,200.0	4,123.5	4,026.3	3,953.6	17.3	16.1	-135.04	572.4	538.8	1,156.2	1,128.8	27.36	42.257	
4,300.0	4,221.3	4,121.9	4,047.1	17.8	16.5	-135.03	585.4	553.8	1,185.4	1,157.3	28.08	42.213	
4,400.0	4,319.1	4,217.5	4,140.6	18.2	16.9	-135.02	598.5	568.8	1,214.6	1,185.8	28.80	42.171	
4,500.0	4,416.9	4,313.2	4,234.2	18.7	17.4	-135.01	611.5	583.8	1,243.9	1,214.4	29.52	42.131	
4,600.0	4,514.7	4,408.8	4,327.7	19.2	17.8	-135.00	624.6	598.8	1,273.1	1,242.9	30.25	42.093	
4,700.0	4,612.6	4,504.4	4,421.3	19.6	18.2	-135.00	637.6	613.8	1,302.4	1,271.4	30.97	42.056	
4,800.0	4,710.4	4,600.1	4,514.8	20.1	18.7	-134.99	650.7	628.9	1,331.6	1,299.9	31.69	42.021	
4,900.0	4,808.2	4,729.8	4,642.1	20.6	19.2	-135.04	667.2	647.9	1,360.0	1,327.5	32.46	41.898	
5,000.0	4,906.0	4,875.1	4,785.8	21.0	19.6	-135.30	681.3	664.0	1,385.1	1,351.9	33.16	41.768	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - WALTERS 21P-314 - ORIGINAL WELLBORE - PROPOSAL #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.0	5,003.8	5,022.3	4,932.2	21.5	19.9	-135.77	690.6	674.8	1,406.8	1,373.0	33.80	41.615	
5,200.0	5,101.6	5,170.6	5,080.3	22.0	20.1	-136.45	695.0	679.9	1,425.1	1,390.7	34.38	41.451	
5,300.0	5,199.4	5,287.7	5,197.4	22.4	20.3	-137.11	695.4	680.3	1,440.6	1,405.8	34.88	41.307	
5,400.0	5,297.3	5,385.5	5,295.3	22.9	20.4	-137.66	695.4	680.3	1,456.1	1,420.7	35.36	41.177	
5,476.5	5,372.1	5,460.3	5,370.1	23.3	20.5	-138.08	695.4	680.3	1,468.0	1,432.3	35.73	41.084	
5,500.0	5,395.1	5,483.3	5,393.1	23.3	20.5	-138.25	695.4	680.3	1,471.6	1,435.7	35.86	41.037	
5,600.0	5,493.4	5,581.6	5,491.4	23.7	20.6	-138.90	695.4	680.3	1,485.4	1,449.1	36.34	40.873	
5,700.0	5,592.3	5,680.5	5,590.3	23.9	20.7	-139.42	695.4	680.3	1,496.7	1,459.9	36.78	40.690	
5,800.0	5,691.6	5,779.9	5,689.6	24.1	20.9	-139.81	695.4	680.3	1,505.4	1,468.2	37.18	40.488	
5,900.0	5,791.3	5,879.5	5,789.3	24.3	21.0	-140.08	695.4	680.3	1,511.4	1,473.9	37.54	40.265	
6,000.0	5,891.2	5,979.4	5,889.2	24.5	21.1	-140.23	695.4	680.3	1,514.8	1,477.0	37.85	40.020	
6,076.6	5,967.8	6,056.0	5,965.8	24.6	21.2	-0.66	695.4	680.3	1,515.6	1,476.9	38.69	39.169	
6,100.0	5,991.2	6,079.4	5,989.2	24.6	21.3	-0.66	695.4	680.3	1,515.6	1,476.9	38.76	39.103	
6,200.0	6,091.2	6,179.4	6,089.2	24.7	21.4	-0.66	695.4	680.3	1,515.6	1,476.6	39.03	38.835	
6,300.0	6,191.2	6,279.4	6,189.2	24.8	21.5	-0.66	695.4	680.3	1,515.6	1,476.3	39.30	38.568	
6,400.0	6,291.2	6,379.4	6,289.2	24.9	21.7	-0.66	695.4	680.3	1,515.6	1,476.0	39.57	38.302	
6,500.0	6,391.2	6,479.4	6,389.2	25.0	21.8	-0.66	695.4	680.3	1,515.6	1,475.8	39.85	38.036	
6,571.6	6,462.8	6,551.0	6,460.8	25.1	21.9	-0.66	695.4	680.3	1,515.6	1,475.6	40.05	37.846	
6,600.0	6,491.2	6,578.8	6,488.6	25.1	21.9	89.34	695.4	679.9	1,515.6	1,476.1	39.55	38.317	
6,650.0	6,541.1	6,627.6	6,537.3	25.1	22.0	89.35	695.4	676.5	1,515.6	1,476.0	39.62	38.253	
6,700.0	6,590.5	6,676.5	6,585.6	25.1	22.0	89.36	695.4	669.7	1,515.6	1,476.0	39.63	38.248	
6,750.0	6,639.4	6,725.3	6,633.4	25.1	22.0	89.37	695.4	659.7	1,515.6	1,476.0	39.58	38.295	
6,800.0	6,687.4	6,774.2	6,680.5	25.0	21.9	89.39	695.4	646.5	1,515.6	1,476.1	39.48	38.389	
6,850.0	6,734.3	6,823.1	6,726.5	25.0	21.9	89.41	695.4	630.0	1,515.6	1,476.2	39.34	38.522	
6,900.0	6,779.8	6,872.1	6,771.4	24.9	21.8	89.44	695.4	610.4	1,515.6	1,476.4	39.18	38.686	
6,950.0	6,823.8	6,921.1	6,814.8	24.8	21.7	89.46	695.4	587.8	1,515.6	1,476.6	38.99	38.868	
7,000.0	6,866.1	6,970.1	6,856.7	24.7	21.6	89.49	695.4	562.3	1,515.6	1,476.8	38.81	39.055	
7,050.0	6,906.4	7,019.2	6,896.7	24.6	21.5	89.52	695.4	533.9	1,515.6	1,476.9	38.63	39.232	
7,100.0	6,944.6	7,068.4	6,934.8	24.5	21.4	89.56	695.4	502.8	1,515.6	1,477.1	38.49	39.377	
7,150.0	6,980.4	7,117.6	6,970.7	24.4	21.2	89.59	695.4	469.1	1,515.6	1,477.2	38.40	39.469	
7,200.0	7,013.6	7,166.8	7,004.2	24.3	21.1	89.63	695.4	433.0	1,515.5	1,477.2	38.38	39.487	
7,250.0	7,044.2	7,216.2	7,035.2	24.2	21.0	89.67	695.4	394.6	1,515.5	1,477.1	38.46	39.407	
7,300.0	7,072.0	7,265.6	7,063.5	24.1	21.0	89.71	695.4	354.1	1,515.5	1,476.9	38.65	39.211	
7,350.0	7,096.8	7,315.1	7,089.0	24.0	20.9	89.75	695.4	311.7	1,515.5	1,476.5	38.98	38.883	
7,400.0	7,118.5	7,364.7	7,111.5	23.9	20.9	89.79	695.4	267.6	1,515.5	1,476.1	39.45	38.418	
7,450.0	7,137.0	7,414.3	7,131.0	23.8	21.0	89.84	695.4	221.9	1,515.5	1,475.4	40.08	37.816	
7,500.0	7,152.2	7,464.1	7,147.3	23.8	21.1	89.88	695.4	174.9	1,515.5	1,474.7	40.86	37.088	
7,550.0	7,164.1	7,513.9	7,160.3	23.8	21.3	89.93	695.4	126.9	1,515.5	1,473.7	41.81	36.249	
7,600.0	7,172.5	7,563.8	7,169.9	23.8	21.6	89.98	695.4	77.9	1,515.5	1,472.6	42.90	35.324	
7,624.3	7,175.4	7,588.1	7,173.4	23.8	21.8	90.00	695.4	53.9	1,515.5	1,472.0	43.49	34.845	
7,650.0	7,177.5	7,613.8	7,176.1	23.9	22.0	90.02	695.4	28.3	1,515.5	1,471.4	44.13	34.339	
7,699.2	7,179.0	7,663.1	7,178.8	24.1	22.6	90.07	695.4	-20.9	1,515.5	1,470.1	45.46	33.336	
7,700.0	7,179.0	7,663.8	7,178.9	24.1	22.6	90.07	695.4	-21.7	1,515.5	1,470.0	45.48	33.319	
7,800.0	7,178.6	7,763.9	7,178.7	24.9	24.0	90.08	695.4	-121.7	1,515.5	1,467.0	48.56	31.211	
7,900.0	7,178.3	7,863.9	7,178.3	26.4	25.7	90.08	695.4	-221.7	1,515.5	1,463.5	52.03	29.128	
8,000.0	7,177.9	7,963.9	7,178.0	28.2	27.6	90.08	695.4	-321.7	1,515.5	1,459.7	55.85	27.137	
8,100.0	7,177.5	8,063.9	7,177.6	30.3	29.7	90.08	695.4	-421.7	1,515.5	1,455.6	59.95	25.281	
8,200.0	7,177.2	8,163.9	7,177.2	32.5	31.8	90.08	695.4	-521.7	1,515.5	1,451.2	64.28	23.577	
8,300.0	7,176.8	8,263.9	7,176.9	34.8	34.1	90.08	695.4	-621.7	1,515.5	1,446.7	68.80	22.029	
8,400.0	7,176.4	8,363.9	7,176.5	37.2	36.5	90.08	695.4	-721.7	1,515.5	1,442.0	73.47	20.629	
8,500.0	7,176.1	8,463.9	7,176.1	39.6	38.9	90.08	695.4	-821.7	1,515.5	1,437.3	78.26	19.365	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - WALTERS 21P-314 - ORIGINAL WELLBORE - PROPOSAL #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,600.0	7,175.7	8,563.9	7,175.8	42.0	41.3	90.08	695.4	-921.7	1,515.5	1,432.4	83.16	18.224	
8,700.0	7,175.3	8,663.9	7,175.4	44.6	43.8	90.08	695.4	-1,021.7	1,515.5	1,427.4	88.14	17.194	
8,800.0	7,175.0	8,763.9	7,175.0	47.1	46.3	90.08	695.4	-1,121.7	1,515.5	1,422.3	93.20	16.261	
8,900.0	7,174.6	8,863.9	7,174.7	49.7	48.9	90.08	695.4	-1,221.7	1,515.5	1,417.2	98.32	15.415	
9,000.0	7,174.3	8,963.9	7,174.3	52.3	51.5	90.08	695.4	-1,321.7	1,515.5	1,412.0	103.48	14.645	
9,100.0	7,173.9	9,063.9	7,173.9	54.9	54.1	90.08	695.4	-1,421.7	1,515.5	1,406.8	108.70	13.942	
9,200.0	7,173.5	9,163.9	7,173.6	57.5	56.7	90.08	695.4	-1,521.7	1,515.5	1,401.6	113.95	13.300	
9,300.0	7,173.2	9,263.9	7,173.2	60.1	59.3	90.08	695.4	-1,621.7	1,515.5	1,396.3	119.23	12.710	
9,400.0	7,172.8	9,363.9	7,172.8	62.8	62.0	90.08	695.4	-1,721.7	1,515.5	1,391.0	124.55	12.168	
9,500.0	7,172.4	9,463.9	7,172.5	65.5	64.7	90.08	695.4	-1,821.7	1,515.5	1,385.6	129.89	11.668	
9,600.0	7,172.1	9,563.9	7,172.1	68.2	67.4	90.08	695.4	-1,921.7	1,515.5	1,380.3	135.25	11.205	
9,700.0	7,171.7	9,663.9	7,171.8	70.9	70.0	90.08	695.4	-2,021.7	1,515.5	1,374.9	140.63	10.776	
9,800.0	7,171.3	9,763.9	7,171.4	73.6	72.7	90.08	695.4	-2,121.7	1,515.5	1,369.5	146.03	10.378	
9,900.0	7,171.0	9,863.9	7,171.0	76.3	75.4	90.08	695.4	-2,221.7	1,515.5	1,364.1	151.45	10.007	
10,000.0	7,170.6	9,963.9	7,170.7	79.0	78.2	90.08	695.4	-2,321.7	1,515.5	1,358.6	156.88	9.660	
10,100.0	7,170.3	10,063.9	7,170.3	81.7	80.9	90.08	695.4	-2,421.7	1,515.5	1,353.2	162.32	9.337	
10,200.0	7,169.9	10,163.9	7,169.9	84.4	83.6	90.08	695.4	-2,521.7	1,515.5	1,347.7	167.77	9.033	
10,300.0	7,169.5	10,263.9	7,169.6	87.2	86.3	90.08	695.4	-2,621.7	1,515.5	1,342.3	173.24	8.748	
10,400.0	7,169.2	10,363.9	7,169.2	89.9	89.1	90.08	695.4	-2,721.7	1,515.5	1,336.8	178.71	8.480	
10,500.0	7,168.8	10,463.9	7,168.8	92.6	91.8	90.08	695.4	-2,821.7	1,515.5	1,331.3	184.20	8.228	
10,600.0	7,168.4	10,563.9	7,168.5	95.4	94.6	90.08	695.4	-2,921.7	1,515.5	1,325.8	189.69	7.990	
10,700.0	7,168.1	10,663.9	7,168.1	98.1	97.3	90.08	695.4	-3,021.7	1,515.5	1,320.3	195.18	7.765	
10,800.0	7,167.7	10,763.9	7,167.8	100.9	100.1	90.08	695.4	-3,121.7	1,515.5	1,314.8	200.69	7.552	
10,900.0	7,167.4	10,863.9	7,167.4	103.6	102.8	90.08	695.4	-3,221.7	1,515.5	1,309.3	206.20	7.350	
11,000.0	7,167.0	10,963.9	7,167.0	106.4	105.6	90.08	695.4	-3,321.7	1,515.5	1,303.8	211.71	7.158	
11,100.0	7,166.6	11,063.9	7,166.7	109.1	108.3	90.08	695.4	-3,421.7	1,515.5	1,298.3	217.24	6.976	
11,200.0	7,166.3	11,163.9	7,166.3	111.9	111.1	90.08	695.4	-3,521.7	1,515.5	1,292.7	222.76	6.803	
11,300.0	7,165.9	11,263.9	7,165.9	114.7	113.8	90.08	695.4	-3,621.7	1,515.5	1,287.2	228.29	6.638	
11,400.0	7,165.5	11,363.9	7,165.6	117.4	116.6	90.08	695.4	-3,721.7	1,515.5	1,281.7	233.83	6.481	
11,500.0	7,165.2	11,463.9	7,165.2	120.2	119.4	90.08	695.4	-3,821.7	1,515.5	1,276.1	239.37	6.331	
11,600.0	7,164.8	11,563.9	7,164.9	123.0	122.1	90.08	695.4	-3,921.7	1,515.5	1,270.6	244.91	6.188	
11,700.0	7,164.5	11,663.9	7,164.5	125.7	124.9	90.08	695.4	-4,021.7	1,515.5	1,265.1	250.45	6.051	
11,800.0	7,164.1	11,763.9	7,164.1	128.5	127.7	90.08	695.4	-4,121.7	1,515.5	1,259.5	256.00	5.920	
11,828.8	7,164.0	11,792.7	7,164.0	129.3	128.5	90.08	695.4	-4,150.5	1,515.5	1,257.9	257.60	5.883	SF

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - WALTERS 21P-434 - ORIGINAL WELLBORE - PROPOSAL #1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	0.27	60.1	0.3	60.1				
100.0	100.0	99.0	99.0	0.1	0.1	0.27	60.1	0.3	60.1	59.9	0.19	310.687	
200.0	200.0	199.0	199.0	0.3	0.3	0.27	60.1	0.3	60.1	59.5	0.64	93.661	
300.0	300.0	299.0	299.0	0.5	0.5	0.27	60.1	0.3	60.1	59.0	1.09	55.077	CC, ES
400.0	400.0	399.0	399.0	0.8	0.8	-140.38	60.1	0.3	61.4	59.9	1.52	40.361	
500.0	499.8	498.8	498.8	1.0	1.0	-143.25	60.1	0.3	65.6	63.6	1.95	33.599	
600.0	599.5	598.5	598.5	1.2	1.2	-147.28	60.1	0.3	72.7	70.3	2.40	30.344	
700.0	698.7	697.7	697.7	1.5	1.4	-151.71	60.1	0.3	83.3	80.4	2.85	29.182	
800.0	797.5	797.7	797.7	1.8	1.7	-155.09	59.9	1.9	96.7	93.4	3.30	29.278	
900.1	895.7	898.0	897.9	2.2	1.9	-156.67	59.3	7.1	112.2	108.4	3.76	29.868	
1,000.0	993.4	998.4	997.9	2.6	2.1	-156.82	58.3	15.7	127.8	123.6	4.24	30.154	
1,100.0	1,091.3	1,099.3	1,098.0	3.0	2.3	-155.63	56.9	27.9	142.1	137.3	4.77	29.792	
1,200.0	1,189.1	1,200.3	1,197.7	3.5	2.6	-153.43	55.0	43.5	155.1	149.7	5.36	28.925	
1,300.0	1,286.9	1,301.0	1,296.6	3.9	3.0	-150.43	52.8	62.7	167.2	161.2	6.04	27.694	
1,400.0	1,384.7	1,399.9	1,393.3	4.4	3.3	-147.37	50.4	83.1	179.2	172.5	6.78	26.452	
1,500.0	1,482.5	1,498.7	1,490.0	4.8	3.7	-144.69	48.0	103.5	191.7	184.2	7.55	25.384	
1,600.0	1,580.3	1,597.6	1,586.7	5.3	4.1	-142.34	45.6	123.9	204.6	196.2	8.36	24.478	
1,700.0	1,678.1	1,696.4	1,683.4	5.7	4.5	-140.27	43.2	144.3	217.7	208.5	9.18	23.712	
1,800.0	1,776.0	1,795.3	1,780.1	6.2	5.0	-138.44	40.8	164.7	231.1	221.1	10.02	23.063	
1,900.0	1,873.8	1,894.1	1,876.7	6.6	5.4	-136.81	38.4	185.1	244.7	233.8	10.87	22.511	
2,000.0	1,971.6	1,992.9	1,973.4	7.1	5.8	-135.35	36.0	205.5	258.5	246.7	11.73	22.039	
2,100.0	2,069.4	2,091.8	2,070.1	7.6	6.3	-134.04	33.6	226.0	272.4	259.8	12.59	21.632	
2,200.0	2,167.2	2,190.6	2,166.8	8.0	6.7	-132.86	31.2	246.4	286.4	273.0	13.46	21.280	
2,300.0	2,265.0	2,289.5	2,263.5	8.5	7.1	-131.78	28.9	266.8	300.6	286.3	14.33	20.973	
2,400.0	2,362.8	2,388.3	2,360.2	9.0	7.6	-130.81	26.5	287.2	314.8	299.6	15.21	20.704	
2,500.0	2,460.6	2,487.2	2,456.8	9.4	8.0	-129.91	24.1	307.6	329.2	313.1	16.08	20.466	
2,600.0	2,558.5	2,586.0	2,553.5	9.9	8.5	-129.10	21.7	328.0	343.6	326.6	16.96	20.256	
2,700.0	2,656.3	2,684.9	2,650.2	10.3	8.9	-128.35	19.3	348.4	358.0	340.2	17.84	20.069	
2,800.0	2,754.1	2,783.7	2,746.9	10.8	9.4	-127.65	16.9	368.8	372.6	353.8	18.72	19.901	
2,900.0	2,851.9	2,882.5	2,843.6	11.3	9.8	-127.01	14.5	389.2	387.1	367.5	19.60	19.750	
3,000.0	2,949.7	2,981.4	2,940.3	11.7	10.3	-126.42	12.1	409.6	401.7	381.3	20.48	19.614	
3,100.0	3,047.5	3,080.2	3,036.9	12.2	10.7	-125.86	9.7	430.1	416.4	395.0	21.36	19.490	
3,200.0	3,145.3	3,179.1	3,133.6	12.7	11.2	-125.35	7.3	450.5	431.1	408.8	22.25	19.378	
3,300.0	3,243.2	3,277.9	3,230.3	13.1	11.6	-124.87	4.9	470.9	445.8	422.7	23.13	19.276	
3,400.0	3,341.0	3,376.8	3,327.0	13.6	12.1	-124.42	2.5	491.3	460.6	436.6	24.01	19.182	
3,500.0	3,438.8	3,475.6	3,423.7	14.1	12.5	-123.99	0.1	511.7	475.3	450.5	24.89	19.096	
3,600.0	3,536.6	3,574.4	3,520.4	14.5	13.0	-123.60	-2.3	532.1	490.1	464.4	25.78	19.016	
3,700.0	3,634.4	3,673.3	3,617.0	15.0	13.4	-123.22	-4.7	552.5	505.0	478.3	26.66	18.943	
3,800.0	3,732.2	3,772.1	3,713.7	15.5	13.9	-122.87	-7.1	572.9	519.8	492.3	27.54	18.875	
3,900.0	3,830.0	3,871.0	3,810.4	15.9	14.3	-122.54	-9.4	593.3	534.7	506.3	28.42	18.812	
4,000.0	3,927.9	3,969.8	3,907.1	16.4	14.8	-122.22	-11.8	613.8	549.6	520.3	29.30	18.753	
4,100.0	4,025.7	4,070.8	4,006.0	16.9	15.2	-121.98	-14.2	634.0	564.3	534.2	30.15	18.720	
4,200.0	4,123.5	4,173.4	4,107.1	17.3	15.5	-122.08	-16.2	651.2	578.6	547.7	30.87	18.740	
4,300.0	4,221.3	4,276.0	4,208.7	17.8	15.8	-122.53	-17.8	664.9	592.2	560.6	31.52	18.789	
4,400.0	4,319.1	4,378.2	4,310.5	18.2	16.0	-123.30	-19.0	674.9	605.2	573.2	32.09	18.862	
4,500.0	4,416.9	4,480.0	4,412.1	18.7	16.2	-124.37	-19.8	681.3	617.9	585.3	32.59	18.963	
4,600.0	4,514.7	4,581.0	4,513.0	19.2	16.3	-125.71	-20.1	684.0	630.4	597.4	33.01	19.099	
4,700.0	4,612.6	4,679.5	4,611.6	19.6	16.5	-127.19	-20.1	684.2	642.9	609.6	33.38	19.264	
4,800.0	4,710.4	4,777.3	4,709.4	20.1	16.6	-128.62	-20.1	684.2	655.9	622.2	33.73	19.443	
4,900.0	4,808.2	4,875.2	4,807.2	20.6	16.7	-129.99	-20.1	684.2	669.2	635.1	34.09	19.634	
5,000.0	4,906.0	4,973.0	4,905.0	21.0	16.8	-131.31	-20.1	684.2	683.0	648.5	34.43	19.836	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - WALTERS 21P-434 - ORIGINAL WELLBORE - PROPOSAL #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.0	5,003.8	5,070.8	5,002.8	21.5	17.0	-132.58	-20.1	684.2	697.0	662.3	34.77	20.049	
5,200.0	5,101.6	5,168.6	5,100.6	22.0	17.1	-133.80	-20.1	684.2	711.4	676.3	35.10	20.269	
5,300.0	5,199.4	5,266.4	5,198.4	22.4	17.2	-134.97	-20.1	684.2	726.1	690.7	35.43	20.497	
5,400.0	5,297.3	5,364.2	5,296.3	22.9	17.4	-136.10	-20.1	684.2	741.1	705.4	35.75	20.731	
5,476.5	5,372.1	5,439.1	5,371.1	23.3	17.5	-136.93	-20.1	684.2	752.8	716.8	36.00	20.913	
5,500.0	5,395.1	5,462.1	5,394.1	23.3	17.5	-137.22	-20.1	684.2	756.3	720.3	36.07	20.970	
5,600.0	5,493.4	5,560.4	5,492.4	23.7	17.7	-138.32	-20.1	684.2	770.0	733.6	36.33	21.195	
5,700.0	5,592.3	5,659.3	5,591.3	23.9	17.8	-139.19	-20.1	684.2	781.2	744.6	36.59	21.352	
5,800.0	5,691.6	5,758.6	5,690.6	24.1	17.9	-139.84	-20.1	684.2	789.9	753.0	36.84	21.441	
5,900.0	5,791.3	5,858.3	5,790.3	24.3	18.1	-140.28	-20.1	684.2	795.9	758.8	37.08	21.463	
6,000.0	5,891.2	5,958.2	5,890.2	24.5	18.2	-140.53	-20.1	684.2	799.3	762.0	37.32	21.416	
6,076.6	5,967.8	6,034.8	5,966.8	24.6	18.4	-0.98	-20.1	684.2	800.1	765.2	34.95	22.893	
6,100.0	5,991.2	6,058.2	5,990.2	24.6	18.4	-0.98	-20.1	684.2	800.1	765.1	35.02	22.845	
6,200.0	6,091.2	6,158.2	6,090.2	24.7	18.5	-0.98	-20.1	684.2	800.1	764.8	35.33	22.647	
6,300.0	6,191.2	6,258.2	6,190.2	24.8	18.7	-0.98	-20.1	684.2	800.1	764.5	35.64	22.451	
6,400.0	6,291.2	6,358.2	6,290.2	24.9	18.9	-0.98	-20.1	684.2	800.1	764.2	35.95	22.257	
6,500.0	6,391.2	6,458.2	6,390.2	25.0	19.0	-0.98	-20.1	684.2	800.1	763.9	36.26	22.065	
6,571.6	6,462.8	6,529.8	6,461.8	25.1	19.1	-0.98	-20.1	684.2	800.1	763.6	36.49	21.929	
6,600.0	6,491.2	6,558.2	6,490.2	25.1	19.2	89.06	-20.1	684.2	800.1	761.1	39.02	20.507	
6,650.0	6,541.1	6,608.0	6,540.1	25.1	19.3	89.33	-20.1	684.2	800.1	760.9	39.17	20.423	
6,700.0	6,590.5	6,657.4	6,589.5	25.1	19.3	89.82	-20.1	683.9	800.0	760.7	39.33	20.339	
6,716.6	6,606.8	6,673.8	6,605.8	25.1	19.3	90.00	-20.1	683.3	800.0	760.6	39.37	20.320	
6,750.0	6,639.4	6,706.9	6,638.9	25.1	19.4	90.36	-20.1	680.8	800.0	760.6	39.44	20.285	
6,800.0	6,687.4	6,757.0	6,688.5	25.0	19.4	90.90	-20.1	674.3	800.1	760.6	39.49	20.262	
6,850.0	6,734.3	6,807.6	6,738.0	25.0	19.4	91.43	-20.1	664.1	800.3	760.8	39.48	20.268	
6,900.0	6,779.8	6,858.7	6,787.3	24.9	19.3	91.97	-20.1	650.4	800.5	761.1	39.43	20.301	
6,950.0	6,823.8	6,910.4	6,835.9	24.8	19.3	92.49	-20.1	632.9	800.8	761.4	39.34	20.354	
7,000.0	6,866.1	6,962.7	6,883.7	24.7	19.2	93.01	-20.1	611.7	801.1	761.9	39.23	20.424	
7,050.0	6,906.4	7,015.6	6,930.4	24.6	19.1	93.51	-20.1	586.8	801.5	762.4	39.10	20.501	
7,100.0	6,944.6	7,069.1	6,975.5	24.5	19.1	94.00	-20.1	558.2	802.0	763.0	38.97	20.577	
7,150.0	6,980.4	7,123.2	7,018.9	24.4	19.0	94.47	-20.1	525.9	802.5	763.6	38.88	20.641	
7,200.0	7,013.6	7,177.8	7,060.1	24.3	19.0	94.92	-20.1	490.0	803.0	764.2	38.83	20.679	
7,250.0	7,044.2	7,233.1	7,098.9	24.2	19.0	95.34	-20.1	450.7	803.5	764.7	38.86	20.677	
7,300.0	7,072.0	7,288.8	7,134.8	24.1	19.1	95.74	-20.1	408.1	804.1	765.1	38.99	20.621	
7,350.0	7,096.8	7,345.1	7,167.6	24.0	19.2	96.11	-20.1	362.3	804.6	765.4	39.25	20.499	
7,400.0	7,118.5	7,401.9	7,197.0	23.9	19.4	96.45	-20.1	313.7	805.1	765.5	39.66	20.300	
7,450.0	7,137.0	7,459.2	7,222.6	23.8	19.7	96.76	-20.1	262.6	805.6	765.4	40.25	20.015	
7,500.0	7,152.2	7,516.9	7,244.2	23.8	20.2	97.02	-20.1	209.1	806.1	765.1	41.02	19.651	
7,550.0	7,164.1	7,574.9	7,261.5	23.8	20.7	97.25	-20.1	153.7	806.5	764.5	41.97	19.214	
7,600.0	7,172.5	7,633.2	7,274.3	23.8	21.3	97.44	-20.1	96.8	806.8	763.7	43.11	18.716	
7,650.0	7,177.5	7,691.8	7,282.5	23.9	22.1	97.58	-20.1	38.8	807.1	762.7	44.41	18.174	
7,699.2	7,179.0	7,749.7	7,285.9	24.1	22.9	97.68	-20.1	-19.0	807.2	761.4	45.83	17.613	
7,700.0	7,179.0	7,750.6	7,285.9	24.1	22.9	97.68	-20.1	-19.9	807.2	761.4	45.86	17.603	
7,800.0	7,178.6	7,852.2	7,286.2	24.9	24.5	97.73	-20.1	-121.4	807.3	758.3	48.99	16.478	
7,900.0	7,178.3	7,952.2	7,286.5	26.4	26.3	97.78	-20.1	-221.4	807.4	754.9	52.50	15.380	
8,000.0	7,177.9	8,052.2	7,286.8	28.2	28.2	97.82	-20.1	-321.4	807.5	751.2	56.33	14.335	
8,100.0	7,177.5	8,152.2	7,287.0	30.3	30.3	97.86	-20.1	-421.4	807.6	747.2	60.44	13.362	
8,200.0	7,177.2	8,252.2	7,287.3	32.5	32.5	97.91	-20.1	-521.4	807.7	742.9	64.76	12.472	
8,300.0	7,176.8	8,352.2	7,287.6	34.8	34.8	97.95	-20.1	-621.4	807.8	738.5	69.26	11.663	
8,400.0	7,176.4	8,452.1	7,287.8	37.2	37.1	98.00	-20.1	-721.4	807.9	734.0	73.91	10.931	
8,500.0	7,176.1	8,552.1	7,288.1	39.6	39.6	98.04	-20.1	-821.4	807.9	729.3	78.67	10.271	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - WALTERS 21P-434 - ORIGINAL WELLBORE - PROPOSAL #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,600.0	7,175.7	8,652.1	7,288.4	42.0	42.0	98.09	-20.1	-921.4	808.0	724.5	83.53	9.674	
8,700.0	7,175.3	8,752.1	7,288.6	44.6	44.5	98.13	-20.1	-1,021.4	808.1	719.7	88.47	9.135	
8,800.0	7,175.0	8,852.1	7,288.9	47.1	47.1	98.17	-20.1	-1,121.4	808.2	714.7	93.48	8.646	
8,900.0	7,174.6	8,952.1	7,289.2	49.7	49.6	98.22	-20.1	-1,221.4	808.3	709.8	98.54	8.203	
9,000.0	7,174.3	9,052.1	7,289.4	52.3	52.2	98.26	-20.1	-1,321.4	808.4	704.7	103.66	7.799	
9,100.0	7,173.9	9,152.1	7,289.7	54.9	54.8	98.31	-20.1	-1,421.4	808.5	699.7	108.81	7.430	
9,200.0	7,173.5	9,252.1	7,290.0	57.5	57.5	98.35	-20.1	-1,521.4	808.6	694.6	114.01	7.092	
9,300.0	7,173.2	9,352.1	7,290.2	60.1	60.1	98.39	-20.1	-1,621.4	808.7	689.4	119.23	6.782	
9,400.0	7,172.8	9,452.1	7,290.5	62.8	62.8	98.44	-20.1	-1,721.4	808.8	684.3	124.48	6.497	
9,500.0	7,172.4	9,552.1	7,290.8	65.5	65.4	98.48	-20.1	-1,821.4	808.9	679.1	129.76	6.234	
9,600.0	7,172.1	9,652.1	7,291.0	68.2	68.1	98.53	-20.1	-1,921.4	808.9	673.9	135.05	5.990	
9,700.0	7,171.7	9,752.1	7,291.3	70.9	70.8	98.57	-20.1	-2,021.4	809.0	668.7	140.37	5.764	
9,800.0	7,171.3	9,852.1	7,291.6	73.6	73.5	98.62	-20.1	-2,121.4	809.1	663.4	145.70	5.554	
9,900.0	7,171.0	9,952.1	7,291.8	76.3	76.2	98.66	-20.1	-2,221.4	809.2	658.2	151.04	5.358	
10,000.0	7,170.6	10,052.1	7,292.1	79.0	79.0	98.70	-20.1	-2,321.4	809.3	652.9	156.39	5.175	
10,100.0	7,170.3	10,152.1	7,292.4	81.7	81.7	98.75	-20.1	-2,421.3	809.4	647.7	161.76	5.004	
10,200.0	7,169.9	10,252.1	7,292.6	84.4	84.4	98.79	-20.1	-2,521.3	809.5	642.4	167.14	4.843	
10,300.0	7,169.5	10,352.1	7,292.9	87.2	87.1	98.84	-20.1	-2,621.3	809.6	637.1	172.53	4.693	
10,400.0	7,169.2	10,452.1	7,293.2	89.9	89.9	98.88	-20.1	-2,721.3	809.7	631.8	177.92	4.551	
10,500.0	7,168.8	10,552.1	7,293.4	92.6	92.6	98.92	-20.1	-2,821.3	809.8	626.5	183.32	4.417	
10,600.0	7,168.4	10,652.1	7,293.7	95.4	95.4	98.97	-20.1	-2,921.3	809.9	621.2	188.73	4.291	
10,700.0	7,168.1	10,752.1	7,294.0	98.1	98.1	99.01	-20.1	-3,021.3	810.0	615.9	194.14	4.172	
10,800.0	7,167.7	10,852.1	7,294.2	100.9	100.9	99.06	-20.1	-3,121.3	810.1	610.5	199.56	4.059	
10,900.0	7,167.4	10,952.1	7,294.5	103.6	103.6	99.10	-20.1	-3,221.3	810.2	605.2	204.98	3.953	
11,000.0	7,167.0	11,052.1	7,294.8	106.4	106.4	99.14	-20.1	-3,321.3	810.3	599.9	210.41	3.851	
11,100.0	7,166.6	11,152.1	7,295.0	109.1	109.2	99.19	-20.1	-3,421.3	810.4	594.6	215.84	3.755	
11,200.0	7,166.3	11,252.1	7,295.3	111.9	111.9	99.23	-20.1	-3,521.3	810.5	589.2	221.27	3.663	
11,300.0	7,165.9	11,352.1	7,295.6	114.7	114.7	99.28	-20.1	-3,621.3	810.6	583.9	226.71	3.576	
11,400.0	7,165.5	11,452.1	7,295.8	117.4	117.5	99.32	-20.1	-3,721.3	810.7	578.6	232.15	3.492	
11,500.0	7,165.2	11,552.1	7,296.1	120.2	120.2	99.36	-20.1	-3,821.3	810.8	573.2	237.59	3.413	
11,600.0	7,164.8	11,652.1	7,296.4	123.0	123.0	99.41	-20.1	-3,921.3	810.9	567.9	243.04	3.337	
11,700.0	7,164.5	11,752.1	7,296.6	125.7	125.8	99.45	-20.1	-4,021.3	811.0	562.5	248.48	3.264	
11,800.0	7,164.1	11,852.1	7,296.9	128.5	128.5	99.49	-20.1	-4,121.3	811.1	557.2	253.93	3.194	
11,828.8	7,164.0	11,880.9	7,297.0	129.3	129.3	99.51	-20.1	-4,150.1	811.2	555.7	255.50	3.175 SF	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - WALTERS 21Q-214 - ORIGINAL WELLBORE - PROPOSAL #1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	0.00	14.9	0.0	14.9				
100.0	100.0	100.0	100.0	0.1	0.1	0.00	14.9	0.0	14.9	14.7	0.19	76.782	
200.0	200.0	200.0	200.0	0.3	0.3	0.00	14.9	0.0	14.9	14.3	0.64	23.182	
300.0	300.0	300.0	300.0	0.5	0.5	0.00	14.9	0.0	14.9	13.8	1.09	13.652	CC
400.0	400.0	400.0	400.0	0.8	0.8	-143.57	14.9	0.0	16.3	14.8	1.52	10.689	
500.0	499.8	500.4	500.4	1.0	1.0	-149.20	13.7	1.3	19.3	17.4	1.93	10.017	
600.0	599.5	600.9	600.8	1.2	1.2	-152.28	10.2	5.2	22.7	20.4	2.34	9.707	
700.0	698.7	701.6	701.0	1.5	1.4	-153.69	4.2	11.7	26.4	23.6	2.78	9.480	
800.0	797.5	802.3	801.0	1.8	1.7	-154.00	-4.1	20.8	30.2	26.9	3.25	9.284	
900.1	895.7	903.3	900.7	2.2	2.0	-153.56	-14.8	32.6	34.2	30.5	3.77	9.087	
1,000.0	993.4	1,004.1	999.7	2.6	2.4	-151.40	-27.8	46.9	36.9	32.6	4.36	8.476	
1,100.0	1,091.3	1,104.1	1,097.5	3.0	2.8	-148.08	-41.8	62.3	38.4	33.4	5.02	7.648	
1,200.0	1,189.1	1,204.1	1,195.2	3.5	3.2	-145.01	-55.9	77.6	40.0	34.2	5.73	6.970	
1,300.0	1,286.9	1,304.0	1,293.0	3.9	3.6	-142.18	-69.9	93.0	41.6	35.1	6.49	6.414	
1,400.0	1,384.7	1,404.0	1,390.8	4.4	4.1	-139.58	-83.9	108.3	43.4	36.1	7.29	5.958	
1,500.0	1,482.5	1,504.0	1,488.6	4.8	4.5	-137.19	-97.9	123.7	45.3	37.2	8.11	5.581	
1,600.0	1,580.3	1,603.9	1,586.4	5.3	5.0	-134.98	-111.9	139.1	47.2	38.2	8.96	5.267	
1,700.0	1,678.1	1,703.9	1,684.1	5.7	5.4	-132.96	-125.9	154.4	49.2	39.4	9.84	5.004	
1,800.0	1,776.0	1,803.9	1,781.9	6.2	5.9	-131.09	-139.9	169.8	51.3	40.5	10.72	4.781	
1,900.0	1,873.8	1,903.8	1,879.7	6.6	6.3	-129.38	-153.9	185.1	53.4	41.7	11.62	4.592	
2,000.0	1,971.6	2,003.8	1,977.5	7.1	6.8	-127.79	-167.9	200.5	55.5	43.0	12.53	4.430	
2,100.0	2,069.4	2,103.8	2,075.3	7.6	7.3	-126.32	-181.9	215.9	57.7	44.3	13.45	4.290	
2,200.0	2,167.2	2,203.7	2,173.0	8.0	7.7	-124.96	-195.9	231.2	59.9	45.6	14.38	4.169	
2,300.0	2,265.0	2,303.7	2,270.8	8.5	8.2	-123.70	-209.9	246.6	62.2	46.9	15.31	4.063	
2,400.0	2,362.8	2,403.7	2,368.6	9.0	8.6	-122.52	-223.9	261.9	64.5	48.2	16.24	3.970	
2,500.0	2,460.6	2,503.6	2,466.4	9.4	9.1	-121.43	-238.0	277.3	66.8	49.6	17.18	3.888	
2,600.0	2,558.5	2,603.6	2,564.2	9.9	9.6	-120.41	-252.0	292.7	69.1	51.0	18.12	3.815	
2,700.0	2,656.3	2,703.6	2,661.9	10.3	10.0	-119.46	-266.0	308.0	71.5	52.4	19.06	3.750	
2,800.0	2,754.1	2,803.5	2,759.7	10.8	10.5	-118.57	-280.0	323.4	73.8	53.8	20.00	3.692	
2,900.0	2,851.9	2,903.5	2,857.5	11.3	10.9	-117.73	-294.0	338.7	76.2	55.3	20.94	3.639	
3,000.0	2,949.7	3,003.5	2,955.3	11.7	11.4	-116.94	-308.0	354.1	78.6	56.7	21.89	3.592	
3,100.0	3,047.5	3,103.4	3,053.1	12.2	11.9	-116.21	-322.0	369.5	81.0	58.2	22.83	3.549	
3,200.0	3,145.3	3,203.4	3,150.8	12.7	12.3	-115.51	-336.0	384.8	83.5	59.7	23.78	3.510	
3,300.0	3,243.2	3,303.3	3,248.6	13.1	12.8	-114.85	-350.0	400.2	85.9	61.2	24.72	3.474	
3,400.0	3,341.0	3,403.3	3,346.4	13.6	13.3	-114.23	-364.0	415.5	88.3	62.7	25.67	3.442	
3,500.0	3,438.8	3,503.3	3,444.2	14.1	13.7	-113.65	-378.0	430.9	90.8	64.2	26.62	3.412	
3,600.0	3,536.6	3,603.2	3,542.0	14.5	14.2	-113.09	-392.0	446.3	93.3	65.7	27.56	3.384	
3,700.0	3,634.4	3,703.2	3,639.7	15.0	14.7	-112.57	-406.1	461.6	95.8	67.2	28.51	3.359	
3,800.0	3,732.2	3,803.2	3,737.5	15.5	15.1	-112.07	-420.1	477.0	98.2	68.8	29.45	3.336	
3,900.0	3,830.0	3,903.1	3,835.3	15.9	15.6	-111.59	-434.1	492.3	100.7	70.3	30.40	3.314	
4,000.0	3,927.9	4,003.1	3,933.1	16.4	16.1	-111.14	-448.1	507.7	103.2	71.9	31.34	3.294	
4,100.0	4,025.7	4,103.1	4,030.9	16.9	16.5	-110.71	-462.1	523.1	105.7	73.4	32.29	3.275	
4,200.0	4,123.5	4,203.0	4,128.6	17.3	17.0	-110.30	-476.1	538.4	108.2	75.0	33.23	3.257	
4,300.0	4,221.3	4,303.0	4,226.4	17.8	17.4	-109.90	-490.1	553.8	110.8	76.6	34.18	3.241	
4,400.0	4,319.1	4,403.0	4,324.2	18.2	17.9	-109.53	-504.1	569.1	113.3	78.2	35.12	3.226	
4,500.0	4,416.9	4,502.9	4,422.0	18.7	18.4	-109.17	-518.1	584.5	115.8	79.7	36.06	3.211	
4,600.0	4,514.7	4,602.9	4,519.8	19.2	18.8	-108.83	-532.1	599.9	118.3	81.3	37.01	3.198	
4,700.0	4,612.6	4,702.9	4,617.5	19.6	19.3	-108.50	-546.1	615.2	120.9	82.9	37.95	3.185	
4,800.0	4,710.4	4,802.8	4,715.3	20.1	19.8	-108.18	-560.1	630.6	123.4	84.5	38.89	3.173	
4,900.0	4,808.2	4,902.8	4,813.1	20.6	20.2	-107.88	-574.2	645.9	126.0	86.1	39.84	3.162	
5,000.0	4,906.0	5,002.1	4,910.5	21.0	20.6	-108.00	-587.5	660.5	128.7	88.0	40.67	3.164	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - WALTERS 21Q-214 - ORIGINAL WELLBORE - PROPOSAL #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.0	5,003.8	5,101.1	5,008.1	21.5	20.9	-109.51	-598.5	672.7	132.1	90.9	41.21	3.205	
5,200.0	5,101.6	5,200.0	5,106.1	22.0	21.2	-112.35	-607.3	682.3	136.4	94.9	41.48	3.289	
5,300.0	5,199.4	5,297.7	5,203.2	22.4	21.4	-116.25	-613.8	689.4	142.2	100.7	41.45	3.431	
5,400.0	5,297.3	5,394.8	5,300.1	22.9	21.5	-120.99	-617.9	694.0	149.9	108.9	41.07	3.650	
5,476.5	5,372.1	5,468.3	5,373.7	23.3	21.6	-124.96	-619.6	695.8	157.6	117.0	40.57	3.884	
5,500.0	5,395.1	5,490.8	5,396.2	23.3	21.7	-126.23	-619.9	696.1	160.2	119.8	40.37	3.969	
5,600.0	5,493.4	5,588.1	5,493.4	23.7	21.8	-131.16	-620.1	696.3	171.6	132.1	39.47	4.347	
5,700.0	5,592.3	5,687.0	5,592.3	23.9	21.9	-134.80	-620.1	696.3	181.8	143.0	38.80	4.685	
5,800.0	5,691.6	5,786.3	5,691.6	24.1	22.0	-137.34	-620.1	696.3	190.0	151.6	38.38	4.951	
5,900.0	5,791.3	5,886.0	5,791.3	24.3	22.1	-138.99	-620.1	696.3	195.9	157.7	38.17	5.132	
6,000.0	5,891.2	5,985.9	5,891.2	24.5	22.2	-139.86	-620.1	696.3	199.3	161.1	38.14	5.224	
6,076.6	5,967.8	6,062.5	5,967.8	24.6	22.3	-0.46	-620.1	696.3	200.0	160.3	39.76	5.031	
6,100.0	5,991.2	6,085.9	5,991.2	24.6	22.3	-0.46	-620.1	696.3	200.0	160.2	39.82	5.023	
6,200.0	6,091.2	6,185.9	6,091.2	24.7	22.4	-0.46	-620.1	696.3	200.0	160.0	40.06	4.993	
6,300.0	6,191.2	6,285.9	6,191.2	24.8	22.5	-0.46	-620.1	696.3	200.0	159.7	40.30	4.963	
6,400.0	6,291.2	6,385.9	6,291.2	24.9	22.7	-0.46	-620.1	696.3	200.0	159.5	40.55	4.933	
6,454.5	6,345.7	6,440.4	6,345.7	24.9	22.7	-0.46	-620.1	696.3	200.0	159.3	40.69	4.916	
6,500.0	6,391.2	6,485.8	6,391.1	25.0	22.8	-0.65	-620.1	695.6	200.0	159.2	40.85	4.896	
6,571.6	6,462.8	6,556.5	6,461.5	25.1	22.8	-2.54	-620.1	689.0	200.2	158.7	41.54	4.820	
6,600.0	6,491.2	6,584.2	6,488.9	25.1	22.8	86.33	-620.1	684.6	200.4	161.9	38.57	5.197	
6,650.0	6,541.1	6,632.6	6,536.1	25.1	22.8	84.35	-620.1	674.3	201.0	163.0	37.98	5.292	
6,700.0	6,590.5	6,680.6	6,582.2	25.1	22.7	82.43	-620.1	660.9	201.8	164.5	37.37	5.401	
6,750.0	6,639.4	6,728.1	6,626.9	25.1	22.7	80.56	-620.1	644.6	202.8	166.1	36.74	5.520	
6,800.0	6,687.4	6,775.3	6,670.0	25.0	22.6	78.76	-620.1	625.6	204.0	167.9	36.12	5.648	
6,850.0	6,734.3	6,822.0	6,711.5	25.0	22.5	77.03	-620.1	604.0	205.3	169.8	35.51	5.783	
6,900.0	6,779.8	6,868.5	6,751.1	24.9	22.4	75.39	-620.1	579.9	206.8	171.9	34.93	5.920	
6,950.0	6,823.8	6,914.6	6,788.9	24.8	22.3	73.84	-620.1	553.5	208.4	174.0	34.39	6.058	
7,000.0	6,866.1	6,960.3	6,824.7	24.7	22.2	72.39	-620.1	524.9	210.0	176.1	33.91	6.193	
7,050.0	6,906.4	7,005.8	6,858.3	24.6	22.1	71.03	-620.1	494.3	211.6	178.1	33.49	6.320	
7,100.0	6,944.6	7,050.0	6,889.0	24.5	22.1	69.80	-620.1	462.6	213.3	180.1	33.15	6.434	
7,150.0	6,980.4	7,096.1	6,919.0	24.4	22.0	68.62	-620.1	427.6	214.9	182.0	32.91	6.532	
7,200.0	7,013.6	7,140.8	6,945.8	24.3	21.9	67.57	-620.1	391.8	216.5	183.7	32.78	6.605	
7,250.0	7,044.2	7,185.4	6,970.3	24.2	21.9	66.62	-620.1	354.6	218.0	185.2	32.79	6.650	
7,300.0	7,072.0	7,229.8	6,992.3	24.1	21.8	65.78	-620.1	316.0	219.4	186.5	32.93	6.662	
7,350.0	7,096.8	7,274.0	7,011.9	24.0	21.8	65.04	-620.1	276.4	220.7	187.5	33.24	6.640	
7,400.0	7,118.5	7,318.1	7,028.9	23.9	21.9	64.41	-620.1	235.7	221.8	188.1	33.70	6.582	
7,450.0	7,137.0	7,362.1	7,043.3	23.8	21.9	63.88	-620.1	194.1	222.8	188.5	34.34	6.489	
7,500.0	7,152.2	7,406.0	7,055.1	23.8	22.0	63.45	-620.1	151.9	223.6	188.5	35.13	6.365	
7,550.0	7,164.1	7,450.0	7,064.3	23.8	22.2	63.12	-620.1	108.9	224.3	188.2	36.09	6.213	
7,600.0	7,172.5	7,493.6	7,070.9	23.8	22.4	62.90	-620.1	65.8	224.7	187.5	37.21	6.039	
7,650.0	7,177.5	7,537.3	7,074.8	23.9	22.8	62.78	-620.1	22.2	224.9	186.5	38.45	5.850	
7,699.2	7,179.0	7,580.4	7,076.0	24.1	23.2	62.76	-620.1	-20.8	225.0	185.2	39.79	5.654	
7,700.0	7,179.0	7,583.0	7,076.0	24.1	23.2	62.76	-620.1	-23.4	225.0	185.2	39.83	5.648	
7,702.1	7,179.0	7,583.0	7,076.0	24.1	23.2	62.76	-620.1	-23.4	225.0	185.1	39.86	5.644	
7,725.7	7,178.9	7,606.4	7,075.9	24.2	23.5	62.75	-620.1	-46.9	225.0	184.5	40.50	5.556	
7,800.0	7,178.6	7,680.8	7,075.5	24.9	24.5	62.73	-620.1	-121.2	225.0	182.5	42.57	5.286	
7,900.0	7,178.3	7,780.8	7,075.0	26.4	26.2	62.70	-620.1	-221.2	225.1	179.4	45.73	4.922	
8,000.0	7,177.9	7,880.8	7,074.5	28.2	28.1	62.67	-620.1	-321.2	225.2	176.0	49.20	4.576	
8,100.0	7,177.5	7,980.8	7,074.0	30.3	30.1	62.64	-620.1	-421.2	225.2	172.3	52.92	4.256	
8,200.0	7,177.2	8,080.8	7,073.6	32.5	32.3	62.62	-620.1	-521.2	225.3	168.4	56.84	3.963	
8,300.0	7,176.8	8,180.8	7,073.1	34.8	34.6	62.59	-620.1	-621.2	225.3	164.4	60.92	3.699	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - WALTERS 21Q-214 - ORIGINAL WELLBORE - PROPOSAL #1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,400.0	7,176.4	8,280.8	7,072.6	37.2	37.0	62.56	-620.1	-721.2	225.4	160.3	65.13	3.460	
8,500.0	7,176.1	8,380.8	7,072.1	39.6	39.4	62.53	-620.1	-821.2	225.4	156.0	69.45	3.246	
8,600.0	7,175.7	8,480.8	7,071.6	42.0	41.9	62.50	-620.1	-921.2	225.5	151.6	73.86	3.053	
8,700.0	7,175.3	8,580.8	7,071.1	44.6	44.4	62.47	-620.1	-1,021.2	225.6	147.2	78.33	2.880	
8,800.0	7,175.0	8,680.8	7,070.6	47.1	47.0	62.45	-620.1	-1,121.2	225.6	142.7	82.87	2.723	
8,900.0	7,174.6	8,780.8	7,070.1	49.7	49.5	62.42	-620.1	-1,221.2	225.7	138.2	87.46	2.580	
9,000.0	7,174.3	8,880.8	7,069.6	52.3	52.1	62.39	-620.1	-1,321.2	225.7	133.6	92.08	2.451	
9,100.0	7,173.9	8,980.8	7,069.2	54.9	54.8	62.36	-620.1	-1,421.2	225.8	129.0	96.75	2.334	
9,200.0	7,173.5	9,080.8	7,068.7	57.5	57.4	62.34	-620.1	-1,521.2	225.8	124.4	101.44	2.226	
9,300.0	7,173.2	9,180.8	7,068.2	60.1	60.1	62.31	-620.1	-1,621.2	225.9	119.7	106.17	2.128	
9,400.0	7,172.8	9,280.8	7,067.7	62.8	62.7	62.28	-620.1	-1,721.2	226.0	115.0	110.91	2.037	
9,500.0	7,172.4	9,380.8	7,067.2	65.5	65.4	62.25	-620.1	-1,821.2	226.0	110.3	115.67	1.954	
9,600.0	7,172.1	9,480.8	7,066.7	68.2	68.1	62.23	-620.1	-1,921.2	226.1	105.6	120.45	1.877	
9,700.0	7,171.7	9,580.8	7,066.2	70.9	70.8	62.20	-620.1	-2,021.2	226.1	100.9	125.25	1.805	
9,800.0	7,171.3	9,680.8	7,065.8	73.6	73.5	62.17	-620.1	-2,121.2	226.2	96.1	130.06	1.739	
9,900.0	7,171.0	9,780.8	7,065.3	76.3	76.2	62.14	-620.1	-2,221.2	226.2	91.4	134.87	1.677	
10,000.0	7,170.6	9,880.8	7,064.8	79.0	78.9	62.12	-620.1	-2,321.2	226.3	86.6	139.70	1.620	
10,100.0	7,170.3	9,980.8	7,064.3	81.7	81.6	62.09	-620.1	-2,421.2	226.3	81.8	144.54	1.566	
10,200.0	7,169.9	10,080.8	7,063.8	84.4	84.4	62.06	-620.1	-2,521.2	226.4	77.0	149.39	1.516	
10,300.0	7,169.5	10,180.8	7,063.3	87.2	87.1	62.04	-620.1	-2,621.2	226.5	72.2	154.24	1.468	Level 3
10,400.0	7,169.2	10,280.8	7,062.9	89.9	89.9	62.01	-620.1	-2,721.2	226.5	67.4	159.09	1.424	Level 3
10,500.0	7,168.8	10,380.8	7,062.4	92.6	92.6	61.98	-620.1	-2,821.2	226.6	62.6	163.96	1.382	Level 3
10,600.0	7,168.4	10,480.8	7,061.9	95.4	95.3	61.96	-620.1	-2,921.2	226.6	57.8	168.82	1.342	Level 3
10,700.0	7,168.1	10,580.8	7,061.4	98.1	98.1	61.93	-620.1	-3,021.2	226.7	53.0	173.69	1.305	Level 3
10,800.0	7,167.7	10,680.8	7,060.9	100.9	100.8	61.90	-620.1	-3,121.2	226.7	48.2	178.57	1.270	Level 3
10,900.0	7,167.4	10,780.8	7,060.5	103.6	103.6	61.88	-620.1	-3,221.2	226.8	43.3	183.44	1.236	Level 2
11,000.0	7,167.0	10,880.8	7,060.0	106.4	106.4	61.85	-620.1	-3,321.2	226.8	38.5	188.32	1.205	Level 2
11,100.0	7,166.6	10,980.8	7,059.5	109.1	109.1	61.82	-620.1	-3,421.2	226.9	33.7	193.21	1.174	Level 2
11,200.0	7,166.3	11,080.8	7,059.0	111.9	111.9	61.80	-620.1	-3,521.2	227.0	28.9	198.09	1.146	Level 2
11,300.0	7,165.9	11,180.8	7,058.5	114.7	114.7	61.77	-620.1	-3,621.2	227.0	24.0	202.97	1.118	Level 2
11,400.0	7,165.5	11,280.8	7,058.1	117.4	117.4	61.74	-620.1	-3,721.2	227.1	19.2	207.86	1.092	Level 2
11,500.0	7,165.2	11,380.8	7,057.6	120.2	120.2	61.72	-620.1	-3,821.2	227.1	14.4	212.75	1.068	Level 2
11,600.0	7,164.8	11,480.8	7,057.1	123.0	123.0	61.69	-620.1	-3,921.2	227.2	9.5	217.64	1.044	Level 2
11,700.0	7,164.5	11,580.8	7,056.6	125.7	125.7	61.67	-620.1	-4,021.2	227.2	4.7	222.53	1.021	Level 2
11,800.0	7,164.1	11,680.8	7,056.1	128.5	128.5	61.64	-620.1	-4,121.2	227.3	-0.1	227.42	0.999	Level 1
11,828.8	7,164.0	11,709.6	7,056.0	129.3	129.3	61.63	-620.1	-4,150.0	227.3	-1.5	228.82	0.993	Level 1, ES, SF

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - WALTERS 21Q-314 - ORIGINAL WELLBORE - PROPOSAL #1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	0.53	30.2	0.3	30.2				
100.0	100.0	100.0	100.0	0.1	0.1	0.53	30.2	0.3	30.2	30.0	0.19	155.488	
200.0	200.0	200.0	200.0	0.3	0.3	0.53	30.2	0.3	30.2	29.6	0.64	46.945	
300.0	300.0	300.0	300.0	0.5	0.5	0.53	30.2	0.3	30.2	29.1	1.09	27.646	CC, ES
400.0	400.0	400.0	400.0	0.8	0.8	-141.13	30.2	0.3	31.6	30.0	1.52	20.708	
500.0	499.8	499.8	499.8	1.0	1.0	-146.35	30.2	0.3	35.8	33.8	1.95	18.324	
600.0	599.5	600.5	600.5	1.2	1.2	-151.08	29.3	1.8	42.1	39.7	2.38	17.708	
700.0	698.7	701.4	701.2	1.5	1.4	-153.55	26.4	6.2	49.1	46.3	2.80	17.547	
800.0	797.5	802.5	801.9	1.8	1.6	-154.50	21.5	13.7	56.8	53.5	3.25	17.452	
900.1	895.7	903.8	902.5	2.2	1.9	-154.44	14.7	24.1	64.9	61.2	3.74	17.342	
1,000.0	993.4	1,005.3	1,002.7	2.6	2.2	-153.15	6.0	37.5	72.0	67.8	4.29	16.777	
1,100.0	1,091.3	1,106.8	1,102.3	3.0	2.6	-150.22	-4.7	54.0	76.7	71.8	4.93	15.573	
1,200.0	1,189.1	1,206.7	1,200.0	3.5	3.0	-146.86	-16.0	71.4	80.5	74.9	5.63	14.311	
1,300.0	1,286.9	1,306.5	1,297.6	3.9	3.4	-143.81	-27.3	88.8	84.6	78.2	6.38	13.262	
1,400.0	1,384.7	1,406.3	1,395.2	4.4	3.8	-141.05	-38.6	106.2	88.9	81.7	7.17	12.396	
1,500.0	1,482.5	1,506.1	1,492.9	4.8	4.2	-138.55	-49.9	123.6	93.4	85.4	8.00	11.678	
1,600.0	1,580.3	1,605.9	1,590.5	5.3	4.7	-136.29	-61.2	141.0	98.1	89.2	8.85	11.082	
1,700.0	1,678.1	1,705.8	1,688.2	5.7	5.1	-134.23	-72.5	158.3	102.8	93.1	9.72	10.583	
1,800.0	1,776.0	1,805.6	1,785.8	6.2	5.6	-132.35	-83.8	175.7	107.7	97.1	10.60	10.163	
1,900.0	1,873.8	1,905.4	1,883.4	6.6	6.0	-130.64	-95.1	193.1	112.8	101.3	11.50	9.806	
2,000.0	1,971.6	2,005.2	1,981.1	7.1	6.5	-129.08	-106.4	210.5	117.9	105.5	12.40	9.502	
2,100.0	2,069.4	2,105.0	2,078.7	7.6	6.9	-127.65	-117.7	227.9	123.1	109.7	13.32	9.240	
2,200.0	2,167.2	2,204.9	2,176.4	8.0	7.4	-126.33	-129.0	245.3	128.3	114.1	14.24	9.013	
2,300.0	2,265.0	2,304.7	2,274.0	8.5	7.8	-125.12	-140.3	262.7	133.6	118.5	15.16	8.815	
2,400.0	2,362.8	2,404.5	2,371.6	9.0	8.3	-124.00	-151.6	280.1	139.0	122.9	16.09	8.641	
2,500.0	2,460.6	2,504.3	2,469.3	9.4	8.8	-122.97	-162.9	297.5	144.4	127.4	17.01	8.488	
2,600.0	2,558.5	2,604.1	2,566.9	9.9	9.2	-122.01	-174.3	314.9	149.9	131.9	17.94	8.352	
2,700.0	2,656.3	2,704.0	2,664.6	10.3	9.7	-121.11	-185.6	332.3	155.4	136.5	18.88	8.231	
2,800.0	2,754.1	2,803.8	2,762.2	10.8	10.1	-120.28	-196.9	349.7	160.9	141.1	19.81	8.123	
2,900.0	2,851.9	2,903.6	2,859.8	11.3	10.6	-119.51	-208.2	367.1	166.5	145.7	20.74	8.026	
3,000.0	2,949.7	3,003.4	2,957.5	11.7	11.1	-118.78	-219.5	384.5	172.1	150.4	21.68	7.938	
3,100.0	3,047.5	3,103.2	3,055.1	12.2	11.5	-118.10	-230.8	401.9	177.7	155.1	22.61	7.859	
3,200.0	3,145.3	3,203.1	3,152.8	12.7	12.0	-117.46	-242.1	419.3	183.4	159.8	23.55	7.787	
3,300.0	3,243.2	3,302.9	3,250.4	13.1	12.4	-116.87	-253.4	436.7	189.0	164.5	24.48	7.721	
3,400.0	3,341.0	3,402.7	3,348.0	13.6	12.9	-116.30	-264.7	454.1	194.7	169.3	25.42	7.660	
3,500.0	3,438.8	3,502.5	3,445.7	14.1	13.4	-115.77	-276.0	471.5	200.4	174.1	26.35	7.605	
3,600.0	3,536.6	3,602.3	3,543.3	14.5	13.8	-115.27	-287.3	488.9	206.2	178.9	27.29	7.554	
3,700.0	3,634.4	3,702.2	3,641.0	15.0	14.3	-114.79	-298.6	506.3	211.9	183.7	28.22	7.507	
3,800.0	3,732.2	3,802.0	3,738.6	15.5	14.8	-114.34	-309.9	523.7	217.6	188.5	29.16	7.464	
3,900.0	3,830.0	3,901.8	3,836.2	15.9	15.2	-113.91	-321.2	541.1	223.4	193.3	30.09	7.423	
4,000.0	3,927.9	4,001.6	3,933.9	16.4	15.7	-113.51	-332.5	558.5	229.2	198.2	31.03	7.386	
4,100.0	4,025.7	4,101.4	4,031.5	16.9	16.1	-113.12	-343.8	575.9	235.0	203.0	31.96	7.351	
4,200.0	4,123.5	4,201.3	4,129.2	17.3	16.6	-112.75	-355.2	593.3	240.8	207.9	32.90	7.319	
4,300.0	4,221.3	4,301.1	4,226.8	17.8	17.1	-112.40	-366.5	610.7	246.6	212.7	33.83	7.288	
4,400.0	4,319.1	4,400.9	4,324.4	18.2	17.5	-112.07	-377.8	628.1	252.4	217.6	34.77	7.260	
4,500.0	4,416.9	4,500.5	4,421.9	18.7	18.0	-111.78	-389.0	645.3	258.2	222.5	35.68	7.238	
4,600.0	4,514.7	4,599.4	4,519.1	19.2	18.3	-112.05	-398.8	660.4	264.3	227.9	36.40	7.262	
4,700.0	4,612.6	4,698.1	4,616.7	19.6	18.6	-113.02	-406.7	672.6	270.8	233.8	37.00	7.319	
4,800.0	4,710.4	4,796.3	4,714.3	20.1	18.8	-114.63	-412.8	682.0	277.8	240.3	37.47	7.414	
4,900.0	4,808.2	4,893.8	4,811.5	20.6	19.0	-116.82	-417.0	688.5	285.7	247.9	37.80	7.557	
5,000.0	4,906.0	4,990.4	4,908.0	21.0	19.1	-119.48	-419.4	692.2	294.7	256.7	37.97	7.760	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - WALTERS 21Q-314 - ORIGINAL WELLBORE - PROPOSAL #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.0	5,003.8	5,086.2	5,003.8	21.5	19.2	-122.54	-420.1	693.2	305.3	267.3	37.99	8.035	
5,200.0	5,101.6	5,184.1	5,101.6	22.0	19.3	-125.67	-420.1	693.2	317.1	279.2	37.92	8.361	
5,300.0	5,199.4	5,281.9	5,199.4	22.4	19.5	-128.56	-420.1	693.2	329.8	292.0	37.84	8.717	
5,400.0	5,297.3	5,379.7	5,297.3	22.9	19.6	-131.25	-420.1	693.2	343.3	305.6	37.75	9.095	
5,476.5	5,372.1	5,454.5	5,372.1	23.3	19.7	-133.16	-420.1	693.2	354.2	316.5	37.69	9.397	
5,500.0	5,395.1	5,477.5	5,395.1	23.3	19.7	-133.76	-420.1	693.2	357.5	319.8	37.66	9.494	
5,600.0	5,493.4	5,575.8	5,493.4	23.7	19.8	-135.97	-420.1	693.2	370.5	333.0	37.53	9.873	
5,700.0	5,592.3	5,674.7	5,592.3	23.9	19.9	-137.66	-420.1	693.2	381.4	343.9	37.47	10.177	
5,800.0	5,691.6	5,774.1	5,691.6	24.1	20.0	-138.89	-420.1	693.2	389.9	352.4	37.49	10.400	
5,900.0	5,791.3	5,873.8	5,791.3	24.3	20.2	-139.72	-420.1	693.2	395.9	358.3	37.57	10.538	
6,000.0	5,891.2	5,973.6	5,891.2	24.5	20.3	-140.17	-420.1	693.2	399.3	361.6	37.70	10.589	
6,076.6	5,967.8	6,050.2	5,967.8	24.6	20.4	-0.68	-420.1	693.2	400.1	362.6	37.49	10.672	
6,100.0	5,991.2	6,073.6	5,991.2	24.6	20.4	-0.68	-420.1	693.2	400.1	362.5	37.55	10.654	
6,200.0	6,091.2	6,173.6	6,091.2	24.7	20.5	-0.68	-420.1	693.2	400.1	362.2	37.82	10.579	
6,300.0	6,191.2	6,273.6	6,191.2	24.8	20.7	-0.68	-420.1	693.2	400.1	362.0	38.08	10.504	
6,400.0	6,291.2	6,373.6	6,291.2	24.9	20.8	-0.68	-420.1	693.2	400.1	361.7	38.36	10.430	
6,500.0	6,391.2	6,473.6	6,391.2	25.0	20.9	-0.68	-420.1	693.2	400.1	361.4	38.63	10.356	
6,571.6	6,462.8	6,545.2	6,462.8	25.1	21.0	-0.68	-420.1	693.2	400.1	361.2	38.83	10.303	
6,600.0	6,491.2	6,573.5	6,491.0	25.1	21.1	89.32	-420.1	692.6	400.1	360.8	39.28	10.184	
6,650.0	6,541.1	6,623.1	6,540.5	25.1	21.1	89.33	-420.1	688.9	400.1	360.7	39.34	10.168	
6,700.0	6,590.5	6,672.8	6,589.7	25.1	21.1	89.33	-420.1	681.8	400.1	360.7	39.35	10.168	
6,750.0	6,639.4	6,722.5	6,638.2	25.1	21.1	89.34	-420.1	671.4	400.1	360.8	39.29	10.181	
6,800.0	6,687.4	6,772.2	6,686.0	25.0	21.0	89.36	-420.1	657.5	400.1	360.9	39.20	10.206	
6,850.0	6,734.3	6,821.9	6,732.6	25.0	21.0	89.37	-420.1	640.4	400.1	361.0	39.06	10.241	
6,900.0	6,779.8	6,871.6	6,778.0	24.9	20.9	89.39	-420.1	620.1	400.1	361.1	38.90	10.283	
6,950.0	6,823.8	6,921.3	6,821.8	24.8	20.8	89.42	-420.1	596.7	400.0	361.3	38.73	10.329	
7,000.0	6,866.1	6,971.0	6,863.9	24.7	20.7	89.44	-420.1	570.3	400.0	361.5	38.56	10.375	
7,050.0	6,906.4	7,020.7	6,904.1	24.6	20.6	89.47	-420.1	541.0	400.0	361.6	38.41	10.416	
7,100.0	6,944.6	7,070.5	6,942.2	24.5	20.6	89.50	-420.1	509.1	400.0	361.8	38.29	10.447	
7,150.0	6,980.4	7,120.2	6,978.0	24.4	20.5	89.53	-420.1	474.5	400.0	361.8	38.23	10.463	
7,200.0	7,013.6	7,170.0	7,011.3	24.3	20.4	89.57	-420.1	437.5	400.0	361.8	38.26	10.457	
7,250.0	7,044.2	7,219.8	7,042.0	24.2	20.4	89.60	-420.1	398.3	400.0	361.7	38.38	10.424	
7,300.0	7,072.0	7,269.6	7,069.9	24.1	20.4	89.64	-420.1	357.0	400.0	361.4	38.62	10.359	
7,350.0	7,096.8	7,319.5	7,094.8	24.0	20.5	89.68	-420.1	313.9	400.0	361.0	39.00	10.258	
7,400.0	7,118.5	7,369.3	7,116.7	23.9	20.6	89.73	-420.1	269.1	400.0	360.5	39.52	10.122	
7,450.0	7,137.0	7,419.2	7,135.5	23.8	20.8	89.77	-420.1	222.9	400.0	359.8	40.20	9.950	
7,500.0	7,152.2	7,469.1	7,150.9	23.8	21.1	89.81	-420.1	175.5	400.0	359.0	41.04	9.747	
7,550.0	7,164.1	7,519.0	7,163.1	23.8	21.4	89.86	-420.1	127.1	400.0	358.0	42.03	9.517	
7,600.0	7,172.5	7,569.0	7,171.9	23.8	21.9	89.91	-420.1	77.9	400.0	356.9	43.17	9.266	
7,650.0	7,177.5	7,618.9	7,177.2	23.9	22.4	89.95	-420.1	28.2	400.0	355.6	44.44	9.002	
7,699.1	7,179.0	7,668.0	7,179.0	24.1	23.0	90.00	-420.1	-20.8	400.0	354.2	45.79	8.736	
7,699.2	7,179.0	7,668.1	7,179.0	24.1	23.0	90.00	-420.1	-20.9	400.0	354.2	45.79	8.735	
7,700.0	7,179.0	7,668.9	7,179.0	24.1	23.0	90.00	-420.1	-21.7	400.0	354.2	45.82	8.731	
7,800.0	7,178.6	7,768.9	7,178.6	24.9	24.5	90.00	-420.1	-121.7	400.0	351.1	48.95	8.171	
7,900.0	7,178.3	7,868.9	7,178.3	26.4	26.2	90.00	-420.1	-221.7	400.0	347.5	52.50	7.620	
8,000.0	7,177.9	7,968.9	7,177.9	28.2	28.2	90.00	-420.1	-321.7	400.0	343.6	56.38	7.095	
8,100.0	7,177.5	8,068.9	7,177.5	30.3	30.2	90.00	-420.1	-421.7	400.0	339.5	60.54	6.607	
8,200.0	7,177.2	8,168.9	7,177.2	32.5	32.4	90.00	-420.1	-521.7	400.0	335.1	64.92	6.162	
8,300.0	7,176.8	8,268.9	7,176.8	34.8	34.7	90.00	-420.1	-621.7	400.0	330.6	69.48	5.758	
8,400.0	7,176.4	8,368.9	7,176.4	37.2	37.1	90.00	-420.1	-721.7	400.0	325.8	74.18	5.393	
8,500.0	7,176.1	8,468.9	7,176.1	39.6	39.5	90.00	-420.1	-821.7	400.0	321.0	79.00	5.064	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Offset Design SE SW SEC. 21 T4N R67W 6th P.M. - WALTERS 21Q-314 - ORIGINAL WELLBORE - PROPOSAL #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

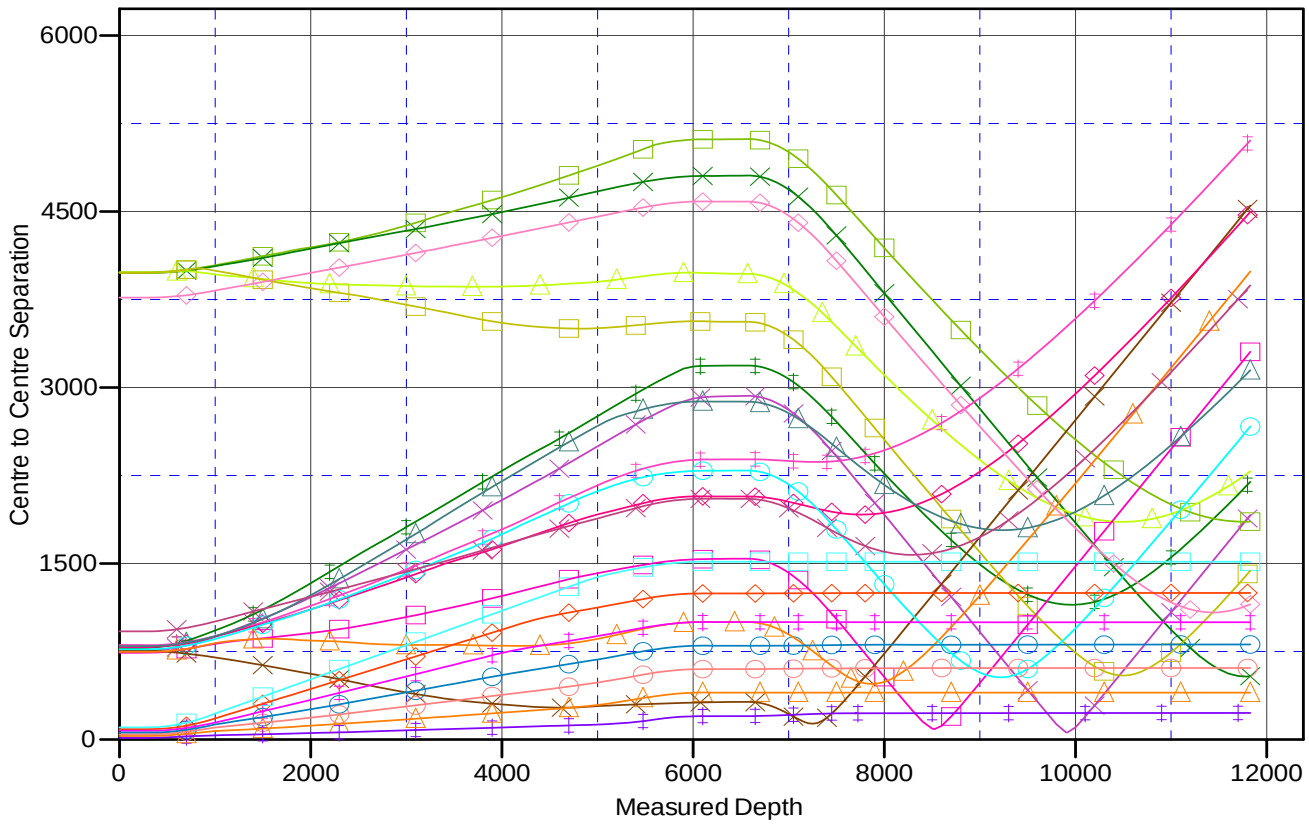
Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,600.0	7,175.7	8,568.9	7,175.7	42.0	42.0	90.00	-420.1	-921.7	400.0	316.1	83.92	4.767	
8,700.0	7,175.3	8,668.9	7,175.3	44.6	44.5	90.00	-420.1	-1,021.7	400.0	311.1	88.93	4.498	
8,800.0	7,175.0	8,768.9	7,175.0	47.1	47.0	90.00	-420.1	-1,121.7	400.0	306.0	94.00	4.256	
8,900.0	7,174.6	8,868.9	7,174.6	49.7	49.6	90.00	-420.1	-1,221.7	400.0	300.9	99.13	4.035	
9,000.0	7,174.3	8,968.9	7,174.2	52.3	52.2	90.00	-420.1	-1,321.7	400.0	295.7	104.31	3.835	
9,100.0	7,173.9	9,068.9	7,173.9	54.9	54.8	90.00	-420.1	-1,421.7	400.0	290.5	109.54	3.652	
9,200.0	7,173.5	9,168.9	7,173.5	57.5	57.5	90.00	-420.1	-1,521.7	400.0	285.2	114.80	3.485	
9,300.0	7,173.2	9,268.9	7,173.2	60.1	60.1	90.00	-420.1	-1,621.7	400.0	279.9	120.10	3.331	
9,400.0	7,172.8	9,368.9	7,172.8	62.8	62.8	90.00	-420.1	-1,721.7	400.0	274.6	125.42	3.190	
9,500.0	7,172.4	9,468.9	7,172.4	65.5	65.5	90.00	-420.1	-1,821.7	400.0	269.3	130.76	3.059	
9,600.0	7,172.1	9,568.9	7,172.1	68.2	68.2	90.00	-420.1	-1,921.7	400.0	263.9	136.13	2.938	
9,700.0	7,171.7	9,668.9	7,171.7	70.9	70.9	90.00	-420.1	-2,021.7	400.0	258.5	141.52	2.827	
9,800.0	7,171.3	9,768.9	7,171.3	73.6	73.6	90.00	-420.1	-2,121.7	400.0	253.1	146.93	2.723	
9,900.0	7,171.0	9,868.9	7,171.0	76.3	76.3	90.00	-420.1	-2,221.7	400.0	247.7	152.35	2.626	
10,000.0	7,170.6	9,968.9	7,170.6	79.0	79.0	90.00	-420.1	-2,321.7	400.0	242.2	157.78	2.535	
10,100.0	7,170.3	10,068.9	7,170.2	81.7	81.7	90.00	-420.1	-2,421.7	400.0	236.8	163.23	2.451	
10,200.0	7,169.9	10,168.9	7,169.9	84.4	84.4	90.00	-420.1	-2,521.7	400.0	231.3	168.69	2.371	
10,300.0	7,169.5	10,268.9	7,169.5	87.2	87.2	90.00	-420.1	-2,621.7	400.0	225.9	174.15	2.297	
10,400.0	7,169.2	10,368.9	7,169.2	89.9	89.9	90.00	-420.1	-2,721.7	400.0	220.4	179.63	2.227	
10,500.0	7,168.8	10,468.9	7,168.8	92.6	92.7	90.00	-420.1	-2,821.7	400.0	214.9	185.12	2.161	
10,600.0	7,168.4	10,568.9	7,168.4	95.4	95.4	90.00	-420.1	-2,921.7	400.0	209.4	190.61	2.099	
10,700.0	7,168.1	10,668.9	7,168.1	98.1	98.2	90.00	-420.1	-3,021.7	400.0	203.9	196.11	2.040	
10,800.0	7,167.7	10,768.9	7,167.7	100.9	100.9	90.00	-420.1	-3,121.7	400.0	198.4	201.62	1.984	
10,900.0	7,167.4	10,868.9	7,167.3	103.6	103.7	90.00	-420.1	-3,221.7	400.0	192.9	207.13	1.931	
11,000.0	7,167.0	10,968.9	7,167.0	106.4	106.4	90.00	-420.1	-3,321.7	400.0	187.4	212.65	1.881	
11,100.0	7,166.6	11,068.9	7,166.6	109.1	109.2	90.00	-420.1	-3,421.7	400.0	181.8	218.17	1.833	
11,200.0	7,166.3	11,168.9	7,166.3	111.9	112.0	90.00	-420.1	-3,521.7	400.0	176.3	223.70	1.788	
11,300.0	7,165.9	11,268.9	7,165.9	114.7	114.7	90.00	-420.1	-3,621.7	400.0	170.8	229.23	1.745	
11,400.0	7,165.5	11,368.9	7,165.5	117.4	117.5	90.00	-420.1	-3,721.7	400.0	165.2	234.77	1.704	
11,500.0	7,165.2	11,468.9	7,165.2	120.2	120.3	90.00	-420.1	-3,821.7	400.0	159.7	240.31	1.665	
11,600.0	7,164.8	11,568.9	7,164.8	123.0	123.0	90.00	-420.1	-3,921.7	400.0	154.2	245.85	1.627	
11,700.0	7,164.5	11,668.9	7,164.5	125.7	125.8	90.00	-420.1	-4,021.7	400.0	148.6	251.40	1.591	
11,800.0	7,164.1	11,768.9	7,164.1	128.5	128.6	90.00	-420.1	-4,121.7	400.0	143.1	256.95	1.557	
11,828.8	7,164.0	11,797.7	7,164.0	129.3	129.4	90.00	-420.1	-4,150.5	400.0	141.5	258.55	1.547 SF	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to KB-EST @ 4952.5usft (Original Well E
Coordinates are relative to: WALTERS 21Q-304 - Slot WALTERS 21Q-304
Offset Depths are relative to Offset Datum
Coordinate System is US State Plane 1983, Colorado Northern Zone
Central Meridian is -105.500000
Grid Convergence at Surface is: 0.39°

Ladder Plot

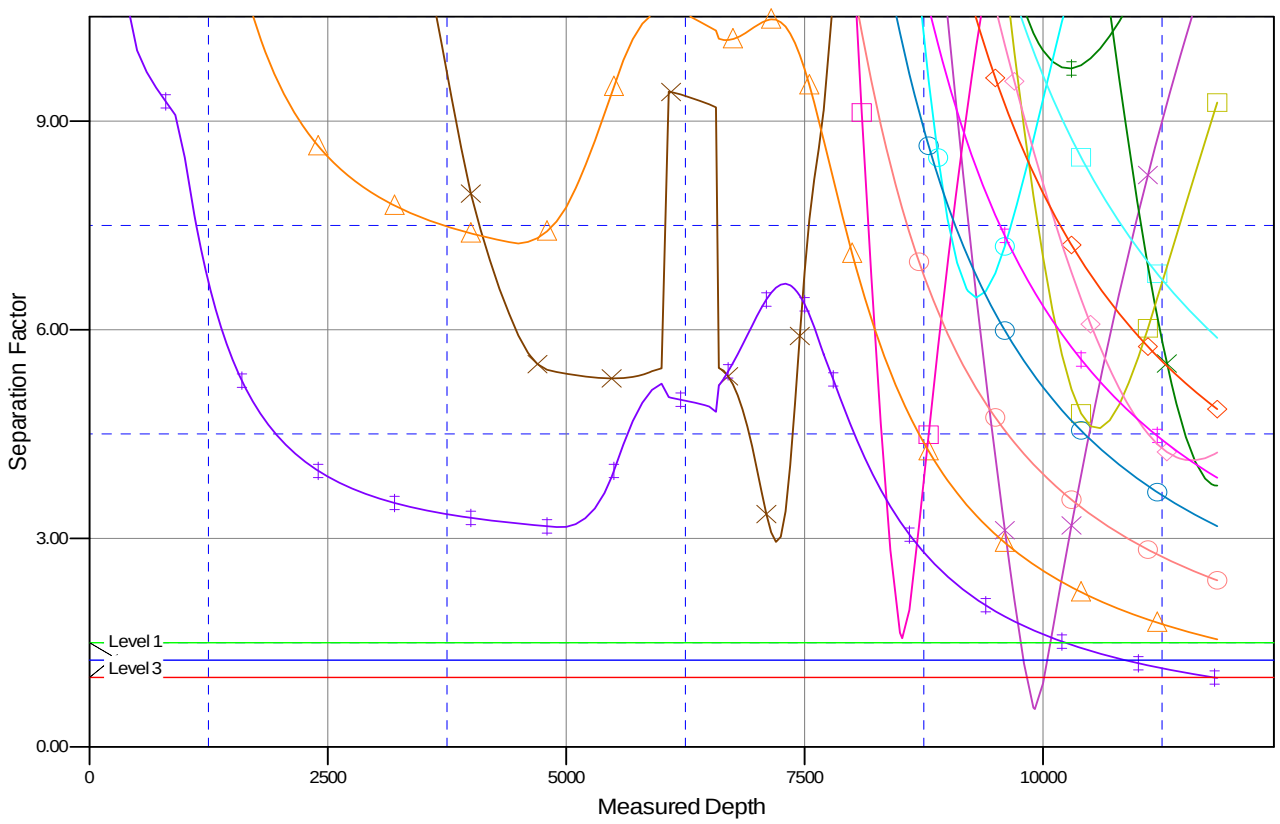


L E G E N D

)XD, Wellbore #1, Wellbore #1 V0
)YD, Wellbore #1, Wellbore #1 V0
3-20D, Wellbore #1, Wellbore #1 V0
I-20D, Wellbore #1, Wellbore #1 V0
3-20D, Wellbore #1, Wellbore #1 V0
I-20D, Wellbore #1, Wellbore #1 V0
¥21ODU, Wellbore #1, Wellbore #1 V0
21LDU, Wellbore #1, Wellbore #1 V0
EXIST DD WALTERS 21QDU, Wellbore #1, Wellbore #1 V0
EXIST DD WALTERS 23-21DU, Wellbore #1, Wellbore #1 V0
EXIST DD WALTERS 24-21DU, Wellbore #1, Wellbore #1 V0
EXIST DD WEDCO #13-21DU, Wellbore #1, Wellbore #1 V0
EXIST DD WEDCO 14-21DU, Wellbore #1, Wellbore #1 V0
EXIST VERT BUNYAN #1, Wellbore #1, Wellbore #1 V0
EXIST VERT EVANS-STROH 20-1, Wellbore #1, Design #1 V0
WALTERS 21P-204, ORIGINAL WELLBORE, PROPOSAL #1 V0
WALTERS 21P-234, ORIGINAL WEI
WALTERS 21P-304, ORIGINAL WEI
WALTERS 21P-314, ORIGINAL WEI
WALTERS 21P-434, ORIGINAL WEI
WALTERS 21Q-214, ORIGINAL WE
WALTERS 21Q-314, ORIGINAL WE

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21Q-304 - Slot WALTERS 21Q-304
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4952.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21Q-304	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to KB-EST @ 4952.5usft (Original Well E Coordinates are relative to: WALTERS 21Q-304 - Slot WALTERS 21Q-304
Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, Colorado Northern Zone
Central Meridian is -105.500000 Grid Convergence at Surface is: 0.39°



LEGEND

)XD, Wellbore #1, Wellbore #1 V0
)YD, Wellbore #1, Wellbore #1 V0
3-20D, Wellbore #1, Wellbore #1 V0
1-20D, Wellbore #1, Wellbore #1 V0
3-20D, Wellbore #1, Wellbore #1 V0
1-20D, Wellbore #1, Wellbore #1 V0
#21ODU, Wellbore #1, Wellbore #1 V0
21LDU, Wellbore #1, Wellbore #1 V0
EXIST DD WALTERS 21QDU, Wellbore #1, Wellbore #1 V0
EXIST DD WALTERS 23-21DU, Wellbore #1, Wellbore #1 V0
EXIST DD WALTERS 24-21DU, Wellbore #1, Wellbore #1 V0
EXIST DD WEDCO #13-21DU, Wellbore #1, Wellbore #1 V0
EXIST DD WEDCO 14-21DU, Wellbore #1, Wellbore #1 V0
EXIST VERT BUNYAN #1, Wellbore #1, Wellbore #1 V0
EXIST VERT EVANS-STROH 20-1, Wellbore #1, Design #1 V0
WALTERS 21P-204, ORIGINAL WELLBORE, PROPOSAL #1 V0
WALTERS 21P-234, ORIGINAL WEI
WALTERS 21P-304, ORIGINAL WEI
WALTERS 21P-314, ORIGINAL WEI
WALTERS 21P-434, ORIGINAL WEI
WALTERS 21Q-214, ORIGINAL WE
WALTERS 21Q-314, ORIGINAL WE