PDC ENERGY

WELD COUNTY, COLORADO
SE SW SEC. 21 T4N R67W 6th P.M.
WALTERS 21P-204

ORIGINAL WELLBORE
PROPOSAL #1

Anticollision Report

26 March, 2016

total

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are 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	11,686.6	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	9,805.9	7,354.5	96.0	-17.2	0.848	Level 1, CC, ES, SF
EXIST DD RYLAND 20YD - Wellbore #1 - Wellbore #1	191.7	194.2	701.8	701.3	1,406.769	CC
EXIST DD RYLAND 20YD - Wellbore #1 - Wellbore #1	200.0	201.6	701.8	701.2	1,316.682	ES
EXIST DD RYLAND 20YD - Wellbore #1 - Wellbore #1	10,200.0	7,493.2	1,376.5	1,253.3	11.173	SF
EXIST DD RYLAND 33-20D - Wellbore #1 - Wellbore #1	11,607.4	7,125.3	610.5	468.2	4.288	CC, ES
EXIST DD RYLAND 33-20D - Wellbore #1 - Wellbore #1	11,686.6	7,125.5	615.7	471.1	4.259	SF
EXIST DD RYLAND 34-20D - Wellbore #1 - Wellbore #1	11,615.3	7,042.7	706.4	564.8	4.988	CC, ES
EXIST DD RYLAND 34-20D - Wellbore #1 - Wellbore #1	11,686.6	7,043.4	710.0	566.4	4.943	SF
EXIST DD RYLAND 43-20D - Wellbore #1 - Wellbore #1	10,341.6	7,252.4	612.4	494.2	5.180	CC, ES
EXIST DD RYLAND 43-20D - Wellbore #1 - Wellbore #1	10,400.0	7,253.0	615.2	495.3	5.134	SF
EXIST DD RYLAND 44-20D - Wellbore #1 - Wellbore #1	10,348.8	7,195.4	698.5	580.3	5.908	CC, ES
EXIST DD RYLAND 44-20D - Wellbore #1 - Wellbore #1	10,500.0	7,194.2	714.7	592.3	5.840	SF
EXIST DD WALTERS #21ODU - Wellbore #1 - Wellbore	456.7	464.5	741.2	739.8	537.588	CC
EXIST DD WALTERS #21ODU - Wellbore #1 - Wellbore	500.0	508.3	741.3	739.8	488.191	ES
EXIST DD WALTERS #21ODU - Wellbore #1 - Wellbore	6,550.0	6,674.0	1,160.9	1,116.4	26.113	SF
EXIST DD WALTERS 21LDU - Wellbore #1 - Wellbore #	0.0	0.0	692.0			
EXIST DD WALTERS 21LDU - Wellbore #1 - Wellbore #	100.0	101.0	692.1	691.9	3,416.124	ES
EXIST DD WALTERS 21LDU - Wellbore #1 - Wellbore #	9,200.0	7,284.8	1,569.6	1,491.4	20.057	SF
EXIST DD WALTERS 21QDU - Wellbore #1 - Wellbore #	1,827.0	1,982.5	540.0	527.4	42.754	CC, ES
EXIST DD WALTERS 21QDU - Wellbore #1 - Wellbore #	8,600.0	7,388.8	2,017.3	1,946.8	28.622	SF
EXIST DD WALTERS 23-21DU - Wellbore #1 - Wellbore	7,611.3	7,158.7	672.9	632.7	16.733	CC, ES
EXIST DD WALTERS 23-21DU - Wellbore #1 - Wellbore	7,800.0	7,158.0	698.9	655.3	16.036	SF
EXIST DD WALTERS 24-21DU - Wellbore #1 - Wellbore	426.7	432.6	696.3	695.0	543.585	CC, ES
EXIST DD WALTERS 24-21DU - Wellbore #1 - Wellbore	8,000.0	7,186.0	821.5	773.9	17.269	SF
EXIST DD WEDCO #13-21DU - Wellbore #1 - Wellbore	9,085.3	7,233.0	541.9	460.4	6.644	CC
EXIST DD WEDCO #13-21DU - Wellbore #1 - Wellbore	9,100.0	7,233.0	542.1	460.2	6.615	ES
EXIST DD WEDCO #13-21DU - Wellbore #1 - Wellbore	9,200.0	7,233.4	553.9	469.3	6.547	SF
EXIST DD WEDCO 14-21DU - Wellbore #1 - Wellbore #	0.0	2.5	714.2			
EXIST DD WEDCO 14-21DU - Wellbore #1 - Wellbore #	9,100.0	7,251.7	715.4	634.1	8.792	ES
EXIST DD WEDCO 14-21DU - Wellbore #1 - Wellbore #	9,200.0	7,251.4	727.4	643.4	8.656	SF
EXIST VERT BUNYAN #1 - Wellbore #1 - Wellbore #1	8,142.0	7,062.8	329.3	293.2	9.112	CC, ES
EXIST VERT BUNYAN #1 - Wellbore #1 - Wellbore #1	8,200.0	7,063.0	334.4	296.9	8.920	SF
EXIST VERT EVANS-STROH 20-1 - Wellbore #1 - Desig	11,287.2	7,034.4	161.1	-97.9	0.622	Level 1, CC, ES, SF
WALTERS 21P-234 - ORIGINAL WELLBORE - PROPOS	400.0	401.0	44.8	43.3	28.998	CC, ES
WALTERS 21P-234 - ORIGINAL WELLBORE - PROPOS	11,686.6	11,688.2	645.2	386.5	2.494	SF
WALTERS 21P-304 - ORIGINAL WELLBORE - PROPOS	400.0	400.0	14.9	13.4	9.680	CC, ES
WALTERS 21P-304 - ORIGINAL WELLBORE - PROPOS	11,686.6	11,783.3	267.6	28.5	1.119	Level 2, SF

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 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are 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-314 - ORIGINAL WELLBORE - PROPOS	300.0	299.0	14.9	13.8	13.690	CC, ES
WALTERS 21P-314 - ORIGINAL WELLBORE - PROPOS	11,686.6	11,800.7	291.5	51.8	1.216	Level 2, SF
WALTERS 21P-434 - ORIGINAL WELLBORE - PROPOS	400.0	400.0	29.9	28.3	19.361	CC, ES
WALTERS 21P-434 - ORIGINAL WELLBORE - PROPOS	11,686.6	11,886.1	506.2	275.6	2.195	SF
WALTERS 21Q-214 - ORIGINAL WELLBORE - PROPO	366.3	367.3	75.0	73.7	53.841	CC
WALTERS 21Q-214 - ORIGINAL WELLBORE - PROPO	400.0	401.0	75.0	73.5	48.575	ES
WALTERS 21Q-214 - ORIGINAL WELLBORE - PROPO	11,686.6	11,711.5	1,045.2	786.7	4.043	SF
WALTERS 21Q-304 - ORIGINAL WELLBORE - PROPO	266.3	267.3	90.0	89.0	95.276	CC
WALTERS 21Q-304 - ORIGINAL WELLBORE - PROPO	300.0	300.0	90.0	88.9	82.289	ES
WALTERS 21Q-304 - ORIGINAL WELLBORE - PROPO	11,686.6	11,828.8	1,249.8	992.3	4.854	SF
WALTERS 21Q-314 - ORIGINAL WELLBORE - PROPO	400.0	401.0	59.7	58.2	38.664	CC, ES
WALTERS 21Q-314 - ORIGINAL WELLBORE - PROPO	11,686.6	11,800.2	851.9	595.2	3.318	SF

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

Survey Program: 152-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
0.0	0.0	2.5	2.5	0.0	0.0	-51.87	445.2	-567.1	721.0				
100.0	100.0	101.5	101.5	0.1	0.1	-51.94	444.5	-567.7	721.0	720.9	0.18	4,000.597	
200.0	200.0	194.0	193.9	0.3	0.2	-52.12	443.0	-569.4	721.5	721.0	0.53	1,351.343	
300.0	300.0	275.9	275.8	0.5	0.4	-52.31	442.2	-572.4	723.8	722.8	0.94	771.137	
400.0	400.0	354.7	354.4	0.8	0.6	-52.49	442.9	-577.0	729.0	727.7	1.34	544.212	
500.0	500.0	436.9	436.4	1.0	0.8	-116.49	445.1	-583.4	737.5	735.7	1.78	413.369	
600.0	599.8	518.0	517.0	1.2	1.0	-116.75	448.2	-591.5	750.2	747.9	2.21	338.975	
700.0	699.5	607.4	605.6	1.5	1.3	-117.35	450.8	-603.0	766.2	763.6	2.68	286.003	
800.0	798.7	704.6	701.8	1.7	1.6	-118.38	451.6	-617.5	784.7	781.5	3.18	246.509	
900.0	897.5	804.8	800.8	2.0	1.9	-119.65	451.4	-632.6	804.9	801.2	3.72	216.371	
1,000.0	995.6	906.8	901.6	2.4	2.3	-121.20	449.0	-647.9	826.3	822.0	4.30	192.064	
1,000.1	995.8	906.9	901.7	2.4	2.3	-121.20	449.0	-648.0	826.3	822.0	4.30	192.037	
1,100.0	1,093.4	984.0	977.6	2.8	2.6	-122.78	446.4	-661.4	850.9	846.0	4.86	175.042	
1,200.0	1,191.3	1,050.4	1,042.5	3.2	2.9	-124.17	443.8	-675.0	878.6	873.1	5.42	162.068	
1,300.0	1,289.1	1,120.4	1,110.6	3.6	3.2	-125.63	440.7	-690.8	909.0	903.0	6.00	151.389	
1,400.0	1,386.9	1,185.3	1,173.5	4.1	3.5	-126.92	438.6	-706.9	942.7	936.2	6.57	143.470	
1,500.0	1,484.7	1,245.9	1,231.6	4.5	3.8	-128.09	436.9	-723.7	979.8	972.7	7.13	137.459	
1,600.0	1,582.5	1,312.4	1,295.1	4.9	4.2	-129.35	435.1	-743.8	1,020.0	1,012.3	7.70	132.388	
1,700.0	1,680.3	1,384.6	1,363.4	5.4	4.7	-130.66	433.2	-766.9	1,062.3	1,054.1	8.29	128.125	
1,800.0	1,778.1	1,450.0	1,425.0	5.8	5.1	-131.84	430.8	-788.7	1,106.3	1,097.5	8.85	125.009	
1,900.0	1,875.9	1,523.4	1,493.7	6.3	5.6	-133.13	427.6	-814.2	1,152.1	1,142.7	9.43	122.130	
2,000.0	1,973.8	1,581.5	1,547.7	6.7	6.1	-134.10	425.2	-835.6	1,200.2	1,190.3	9.97	120.359	
2,100.0	2,071.6	1,637.0	1,598.8	7.2	6.5	-134.99	423.0	-857.2	1,250.8	1,240.3	10.50	119.135	
2,200.0	2,169.4	1,714.8	1,670.0	7.6	7.2	-136.19	419.7	-888.5	1,302.9	1,291.9	11.08	117.584	
2,300.0	2,267.2	1,814.2	1,761.0	8.1	7.9	-137.64	414.7	-928.2	1,355.2	1,343.5	11.68	116.049	
2,400.0	2,365.0	1,914.8	1,853.6	8.5	8.6	-138.98	409.6	-967.0	1,406.7	1,394.4	12.24	114.955	
2,500.0	2,462.8	2,028.9	1,959.5	9.0	9.4	-140.40	402.7	-1,008.8	1,456.6	1,443.8	12.82	113.632	
2,600.0	2,560.6	2,088.1	2,014.5	9.4	9.8	-141.08	399.3	-1,030.6	1,507.2	1,493.9	13.30	113.360	
2,700.0	2,658.5	2,202.6	2,120.9	9.9	10.6	-142.21	395.3	-1,072.6	1,558.3	1,544.4	13.88	112.300	
2,800.0	2,756.3	2,325.5	2,236.6	10.3	11.4	-143.31	390.6	-1,113.8	1,606.4	1,592.0	14.44	111.231	
2,900.0	2,854.1	2,382.0	2,289.8	10.8	11.8	-143.77	389.0	-1,132.9	1,655.3	1,640.4	14.89	111.154	

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 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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
3,000.0	2,951.9	2,457.3	2,360.3	11.2	12.4	-144.35	387.1	-1,159.1	1,705.4	1,690.0	15.39	110.789	
3,100.0	3,049.7	2,536.9	2,434.6	11.7	12.9	-144.96	384.1	-1,187.4	1,756.1	1,740.2	15.90	110.437	
3,200.0	3,147.5	2,618.1	2,510.4	12.1	13.5	-145.60	380.1	-1,216.5	1,807.2	1,790.8	16.41	110.161	
3,300.0	3,245.3	2,699.6	2,586.4	12.6	14.1	-146.18	376.6	-1,245.7	1,858.6	1,841.7	16.90	109.953	
3,400.0	3,343.2	2,807.3	2,687.0	13.0	14.9	-146.86	373.6	-1,284.1	1,910.1	1,892.6	17.45	109.478	
3,500.0	3,441.0	2,926.7	2,799.3	13.5	15.7	-147.55	370.1	-1,324.4	1,959.7	1,941.7	18.00	108.857	
3,600.0	3,538.8	2,984.4	2,853.6	13.9	16.0	-147.88	368.1	-1,343.7	2,009.5	1,991.0	18.45	108.944	
3,700.0	3,636.6	3,034.0	2,900.1	14.4	16.4	-148.14	367.0	-1,361.1	2,060.8	2,041.9	18.88	109.175	
3,800.0	3,734.4	3,103.9	2,965.1	14.8	16.9	-148.46	366.1	-1,386.5	2,113.2	2,093.9	19.35	109.183	
3,900.0	3,832.2	3,220.0	3,073.5	15.3	17.8	-149.03	363.0	-1,428.1	2,165.3	2,145.4	19.92	108.685	
4,000.0	3,930.0	3,281.1	3,130.6	15.7	18.2	-149.35	360.4	-1,449.8	2,217.1	2,196.7	20.37	108.818	
4,059.3	3,988.0	3,313.0	3,160.2	16.0	18.4	-149.50	359.2	-1,461.5	2,248.5	2,227.8	20.63	108.971	
4,100.0	4,027.9	3,365.2	3,208.8	16.2	18.8	-149.99	357.3	-1,480.6	2,269.9	2,249.0	20.86	108.826	
4,200.0	4,126.3	3,482.3	3,318.1	16.5	19.6	-151.04	352.0	-1,522.2	2,319.4	2,298.1	21.36	108.602	
4,300.0	4,225.3	3,624.3	3,451.6	16.8	20.6	-152.00	345.6	-1,570.3	2,364.9	2,343.0	21.92	107.885	
4,400.0	4,324.7	3,741.5	3,562.2	17.0	21.4	-152.78	338.6	-1,608.1	2,406.1	2,383.7	22.43	107.291	
4,500.0	4,424.4	3,836.7	3,652.4	17.2	22.0	-153.37	333.2	-1,638.2	2,443.8	2,421.0	22.87	106.838	
4,600.0	4,524.4	3,872.0	3,685.8	17.3	22.2	-153.79	331.0	-1,649.3	2,479.5	2,456.3	23.14	107.138	
4,659.4	4,583.8	3,919.5	3,730.6	17.4	22.5	-90.18	327.9	-1,665.0	2,499.7	2,460.8	38.89	64.274	
4,700.0	4,624.4	3,935.8	3,745.8	17.5	22.6	-90.20	326.9	-1,670.6	2,513.8	2,474.7	39.06	64.364	
4,800.0	4,724.4	3,989.7	3,796.0	17.6	23.0	-90.28	323.4	-1,690.0	2,549.8	2,510.2	39.58	64.414	
4,900.0	4,824.4	4,058.0	3,859.4	17.7	23.5	-90.40	318.5	-1,714.9	2,586.4	2,546.1	40.24	64.278	
5,000.0	4,924.4	4,127.9	3,924.1	17.8	24.1	-90.51	313.4	-1,740.9	2,623.9	2,582.9	40.92	64.121	
5,100.0	5,024.4	4,376.9	4,157.0	18.0	25.8	-90.76	301.9	-1,827.9	2,658.1	2,615.3	42.82	62.075	
5,200.0	5,124.4	4,431.0	4,208.0	18.1	26.2	-90.78	300.8	-1,845.9	2,691.6	2,648.3	43.32	62.133	
5,300.0	5,224.4	4,488.9	4,262.3	18.2	26.6	-90.81	299.2	-1,866.1	2,726.3	2,682.5	43.88	62.131	
5,400.0	5,324.4	4,620.6	4,385.4	18.4	27.5	-90.91	293.8	-1,912.4	2,761.8	2,716.8	44.97	61.420	
5,500.0	5,424.4	4,724.4	4,483.0	18.5	28.2	-90.97	290.5	-1,947.6	2,795.8	2,750.0	45.81	61.026	
5,600.0	5,524.4	4,831.5	4,584.0	18.6	28.9	-91.03	287.1	-1,983.0	2,828.9	2,782.2	46.68	60.601	
5,700.0	5,624.4	4,896.0	4,644.6	18.8	29.4	-91.07	285.0	-2,005.0	2,862.9	2,815.7	47.27	60.565	
5,800.0	5,724.4	4,978.7	4,722.2	18.9	30.0	-91.11	282.7	-2,033.7	2,897.7	2,849.7	48.00	60.365	
5,900.0	5,824.4	5,031.3	4,771.3	19.1	30.3	-91.13	281.1	-2,052.2	2,933.0	2,884.4	48.54	60.426	
6,000.0	5,924.4	5,907.1	5,620.5	19.2	34.4	-91.67	249.7	-2,250.9	2,951.8	2,899.0	52.79	55.912	
6,100.0	6,024.4	6,295.0	6,007.5	19.4	35.1	-91.77	243.6	-2,273.3	2,958.5	2,904.9	53.60	55.199	
6,200.0	6,124.4	6,394.9	6,107.4	19.5	35.1	-91.78	243.3	-2,273.9	2,959.1	2,905.3	53.84	54.964	
6,300.0	6,224.4	6,495.3	6,207.8	19.7	35.2	-91.78	243.1	-2,274.6	2,959.8	2,905.7	54.08	54.728	
6,400.0	6,324.4	6,596.5	6,309.0	19.8	35.3	-91.79	242.8	-2,275.2	2,960.4	2,906.1	54.33	54.491	
6,435.4	6,359.8	6,632.4	6,344.9	19.9	35.4	-91.79	242.6	-2,275.4	2,960.6	2,906.2	54.42	54.406	
6,450.0	6,374.4	6,647.1	6,359.6	19.9	35.4	-1.79	242.6	-2,275.5	2,960.6	2,927.3	33.31	88.876	
6,500.0	6,424.3	6,698.7	6,411.2	19.9	35.4	-1.81	242.3	-2,275.8	2,958.1	2,924.5	33.58	88.078	
6,550.0	6,473.9	6,750.6	6,463.1	19.9	35.5	-1.83	242.1	-2,276.0	2,952.1	2,918.4	33.71	87.568	
6,600.0	6,522.9	6,802.0	6,514.5	19.9	35.5	-1.86	241.9	-2,276.2	2,942.6	2,908.9	33.69	87.342	
6,650.0	6,571.2	6,852.5	6,565.0	19.9	35.5	-1.91	241.7	-2,276.4	2,929.7	2,896.2	33.52	87.396	
6,700.0	6,618.4	6,899.1	6,611.6	19.8	35.6	-1.97	241.5	-2,276.5	2,913.5	2,880.3	33.20	87.742	
6,750.0	6,664.3	6,944.5	6,657.0	19.8	35.6	-2.05	241.3	-2,276.7	2,894.0	2,861.2	32.75	88.371	
6,800.0	6,708.8	6,988.4	6,700.8	19.7	35.7	-2.15	241.1	-2,276.8	2,871.3	2,839.1	32.16	89.290	
6,850.0	6,751.6	7,030.6	6,743.1	19.6	35.7	-2.26	241.0	-2,277.0	2,845.6	2,814.2	31.44	90.508	
6,900.0	6,792.5	7,071.6	6,784.1	19.5	35.7	-2.40	240.8	-2,277.1	2,817.0	2,786.4	30.61	92.029	
6,950.0	6,831.2	7,110.6	6,823.1	19.4	35.8	-2.57	240.6	-2,277.3	2,785.6	2,755.9	29.68	93.866	
7,000.0	6,867.7	7,147.3	6,859.8	19.3	35.8	-2.79	240.5	-2,277.4	2,751.5	2,722.9	28.65	96.024	
7,050.0	6,901.7	7,181.6	6,894.0	19.3	35.8	-3.05	240.3	-2,277.5	2,715.0	2,687.5	27.56	98.497	
7,100.0	6,933.0	7,213.2	6,925.6	19.3	35.9	-3.38	240.1	-2,277.7	2,676.2	2,649.8	26.43	101.260	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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
7,150.0	6,961.6	7,243.0	6,955.5	19.3	35.9	-3.80	239.9	-2,277.8	2,635.3	2,610.1	25.28	104.243	
7,200.0	6,987.2	7,270.6	6,983.1	19.4	35.9	-4.35	239.8	-2,277.8	2,592.5	2,568.4	24.16	107.322	
7,250.0	7,009.8	7,294.8	7,007.3	19.6	35.9	-5.09	239.6	-2,277.9	2,548.0	2,524.9	23.11	110.268	
7,300.0	7,029.2	7,315.6	7,028.1	19.9	36.0	-6.12	239.5	-2,277.9	2,502.0	2,479.8	22.21	112.645	
7,350.0	7,045.3	7,332.8	7,045.3	20.2	36.0	-7.66	239.4	-2,277.9	2,454.7	2,433.1	21.61	113.610	
7,400.0	7,058.1	7,346.5	7,059.0	20.6	36.0	-10.15	239.3	-2,277.9	2,406.5	2,384.9	21.60	111.395	
7,450.0	7,067.5	7,356.5	7,069.0	21.2	36.0	-14.82	239.2	-2,277.9	2,357.4	2,334.3	23.12	101.973	
7,500.0	7,073.5	7,362.8	7,075.3	21.8	36.0	-26.22	239.2	-2,277.9	2,307.8	2,278.0	29.86	77.295	
7,550.0	7,075.9	7,365.5	7,078.0	22.5	36.0	-70.81	239.1	-2,277.9	2,257.9	2,202.9	55.03	41.028	
7,563.9	7,076.0	7,365.5	7,078.0	22.7	36.0	-96.18	239.1	-2,277.9	2,244.0	2,185.8	58.22	38.545	
7,600.0	7,075.8	7,365.4	7,077.8	23.2	36.0	-96.07	239.1	-2,277.9	2,208.0	2,149.2	58.78	37.566	
7,700.0	7,075.3	7,364.8	7,077.3	24.9	36.0	-95.76	239.1	-2,277.9	2,108.1	2,047.6	60.48	34.858	
7,800.0	7,074.9	7,364.3	7,076.8	26.7	36.0	-95.46	239.2	-2,277.9	2,008.2	1,945.8	62.36	32.201	
7,900.0	7,074.4	7,363.8	7,076.3	28.8	36.0	-95.16	239.2	-2,277.9	1,908.3	1,843.9	64.40	29.631	
8,000.0	7,073.9	7,363.3	7,075.8	30.9	36.0	-94.85	239.2	-2,277.9	1,808.4	1,741.9	66.56	27.168	
8,100.0	7,073.4	7,362.8	7,075.3	33.2	36.0	-94.55	239.2	-2,277.9	1,708.6	1,639.8	68.82	24.825	
8,200.0	7,072.9	7,362.3	7,074.8	35.5	36.0	-94.25	239.2	-2,277.9	1,608.8	1,537.6	71.16	22.606	
8,300.0	7,072.4	7,361.8	7,074.3	37.9	36.0	-93.95	239.2	-2,277.9	1,509.0	1,435.4	73.57	20.510	
8,400.0	7,071.9	7,361.3	7,073.8	40.3	36.0	-93.66	239.2	-2,277.9	1,409.2	1,333.1	76.03	18.535	
8,500.0	7,071.5	7,360.8	7,073.3	42.8	36.0	-93.36	239.2	-2,277.9	1,309.4	1,230.9	78.53	16.674	
8,600.0	7,071.0	7,360.3	7,072.8	45.4	36.0	-93.07	239.2	-2,277.9	1,209.7	1,128.6	81.07	14.922	
8,700.0	7,070.5	7,359.8	7,072.3	47.9	36.0	-92.77	239.2	-2,277.9	1,110.1	1,026.4	83.64	13.272	
8,800.0	7,070.0	7,359.3	7,071.8	50.5	36.0	-92.48	239.2	-2,277.9	1,010.5	924.2	86.24	11.717	
8,900.0	7,069.5	7,358.8	7,071.3	53.1	36.0	-92.19	239.2	-2,277.9	911.0	822.1	88.86	10.252	
9,000.0	7,069.0	7,358.3	7,070.8	55.8	36.0	-91.90	239.2	-2,277.9	811.6	720.1	91.49	8.871	
9,100.0	7,068.5	7,357.8	7,070.3	58.4	36.0	-91.61	239.2	-2,277.9	712.4	618.3	94.15	7.567	
9,200.0	7,068.1	7,357.4	7,069.8	61.1	36.0	-91.33	239.2	-2,277.9	613.5	516.7	96.81	6.337	
9,300.0	7,067.6	7,356.9	7,069.4	63.7	36.0	-91.04	239.2	-2,277.9	514.9	415.4	99.49	5.176	
9,400.0	7,067.1	7,356.4	7,068.9	66.4	36.0	-90.76	239.2	-2,277.9	417.1	314.9	102.17	4.082	
9,500.0	7,066.6	7,355.9	7,068.4	69.1	36.0	-90.48	239.2	-2,277.9	320.6	215.8	104.87	3.057	
9,600.0	7,066.1	7,355.5	7,067.9	71.8	36.0	-90.19	239.2	-2,277.9	227.2	119.6	107.57	2.112	
9,700.0	7,065.6	7,355.0	7,067.5	74.5	36.0	-89.92	239.2	-2,277.9	142.9	32.7	110.27	1.296	Level 3
9,800.0	7,065.1	7,354.5	7,067.0	77.2	36.0	-89.64	239.2	-2,277.9	96.2	-16.8	112.98	0.851	Level 1
9,805.9	7,065.1	7,354.5	7,067.0	77.4	36.0	-89.62	239.2	-2,277.9	96.0	-17.2	113.14	0.848	Level 1, CC, ES, SF
9,900.0	7,064.7	7,354.1	7,066.5	80.0	36.0	-89.36	239.2	-2,277.9	134.4	18.7	115.70	1.162	Level 2
10,000.0	7,064.2	7,353.6	7,066.1	82.7	36.0	-89.09	239.2	-2,277.9	216.5	98.1	118.42	1.828	
10,100.0	7,063.7	7,353.1	7,065.6	85.4	36.0	-88.81	239.2	-2,277.9	309.3	188.2	121.14	2.554	
10,200.0	7,063.2	7,352.7	7,065.2	88.2	36.0	-88.54	239.2	-2,277.9	405.6	281.7	123.86	3.275	
10,300.0	7,062.7	7,352.2	7,064.7	90.9	36.0	-88.27	239.2	-2,277.9	503.3	376.7	126.58	3.976	
10,400.0	7,062.2	7,351.8	7,064.3	93.6	36.0	-88.00	239.2	-2,277.9	601.8	472.5	129.31	4.654	
10,500.0	7,061.7	7,351.3	7,063.8	96.4	36.0	-87.73	239.2	-2,277.9	700.7	568.7	132.03	5.307	
10,600.0	7,061.3	7,350.9	7,063.4	99.2	36.0	-87.46	239.2	-2,277.9	799.9	665.1	134.75	5.936	
10,700.0	7,060.8	7,350.4	7,062.9	101.9	36.0	-87.20	239.2	-2,277.9	899.2	761.7	137.48	6.541	
10,800.0	7,060.3	7,350.0	7,062.5	104.7	36.0	-86.93	239.2	-2,277.9	998.7	858.5	140.20	7.123	
10,900.0	7,059.8	7,349.6	7,062.0	107.4	36.0	-86.67	239.2	-2,277.9	1,098.3	955.4	142.92	7.685	
11,000.0	7,059.3	7,349.1	7,061.6	110.2	36.0	-86.41	239.3	-2,277.9	1,197.9	1,052.3	145.64	8.225	
11,100.0	7,058.8	7,348.7	7,061.2	113.0	36.0	-86.15	239.3	-2,277.9	1,297.6	1,149.3	148.35	8.747	
11,200.0	7,058.3	7,348.2	7,060.7	115.7	36.0	-85.89	239.3	-2,277.9	1,397.4	1,246.3	151.07	9.250	
11,300.0	7,057.9	7,347.8	7,060.3	118.5	36.0	-85.64	239.3	-2,277.9	1,497.1	1,343.4	153.78	9.735	
11,400.0	7,057.4	7,347.4	7,059.9	121.3	36.0	-85.38	239.3	-2,277.9	1,597.0	1,440.5	156.49	10.205	
11,500.0	7,056.9	7,347.0	7,059.4	124.0	36.0	-85.13	239.3	-2,277.9	1,696.8	1,537.6	159.20	10.658	
11,600.0	7,056.4	7,346.5	7,059.0	126.8	36.0	-84.87	239.3	-2,277.9	1,796.6	1,634.7	161.90	11.097	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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
11,686.6	7,056.0	7,346.2	7,058.7	129.2	36.0	-84.65	239.3	-2,277.9	1,883.1	1,718.9	164.24	11.466	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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	2.6	2.6	0.0	0.0	-56.76	385.1	-587.5	702.4				
100.0	100.0	105.7	105.7	0.1	0.1	-56.76	384.9	-587.3	702.2	702.0	0.18	4,007.973	
191.7	191.7	194.2	194.2	0.3	0.2	-56.78	384.5	-587.1	701.8	701.3	0.50	1,406.769	CC
200.0	200.0	201.6	201.6	0.3	0.2	-56.79	384.4	-587.1	701.8	701.2	0.53	1,316.682	ES
300.0	300.0	286.1	286.1	0.5	0.4	-56.91	383.6	-588.7	702.9	701.9	0.94	747.146	
400.0	400.0	368.0	367.9	0.8	0.6	-57.17	382.6	-593.0	706.6	705.2	1.35	522.014	
500.0	500.0	455.1	454.7	1.0	0.8	-121.47	380.9	-600.2	713.4	711.6	1.80	396.573	
600.0	599.8	548.3	547.2	1.2	1.1	-122.34	376.9	-610.5	723.3	721.1	2.28	317.467	
700.0	699.5	646.9	644.7	1.5	1.4	-123.66	370.3	-623.4	736.0	733.2	2.81	262.254	
800.0	798.7	749.5	746.1	1.7	1.7	-125.32	361.3	-636.6	750.1	746.7	3.37	222.710	
900.0	897.5	828.0	823.0	2.0	2.0	-126.83	352.3	-649.3	768.6	764.7	3.92	196.097	
1,000.0	995.6	903.7	896.3	2.4	2.4	-128.53	341.0	-664.3	792.3	787.8	4.55	173.977	
1,000.1	995.8	903.8	896.4	2.4	2.4	-128.53	341.0	-664.3	792.4	787.8	4.56	173.949	
1,100.0	1,093.4	984.4	973.7	2.8	2.8	-130.91	326.7	-681.8	819.5	814.3	5.24	156.261	
1,200.0	1,191.3	1,061.2	1,046.9	3.2	3.3	-133.19	311.6	-699.9	849.6	843.6	5.94	143.076	
1,300.0	1,289.1	1,136.8	1,118.4	3.6	3.8	-135.39	296.0	-718.9	882.5	875.9	6.63	133.032	
1,400.0	1,386.9	1,213.9	1,190.7	4.1	4.3	-137.60	278.8	-739.3	918.0	910.7	7.34	125.158	
1,500.0	1,484.7	1,294.0	1,265.4	4.5	4.9	-139.83	259.9	-761.1	955.7	947.7	8.05	118.761	
1,600.0	1,582.5	1,367.9	1,333.9	4.9	5.4	-141.83	241.6	-781.9	995.5	986.8	8.73	114.074	
1,700.0	1,680.3	1,441.8	1,402.1	5.4	6.0	-143.73	223.0	-803.4	1,037.7	1,028.3	9.36	110.837	
1,800.0	1,778.1	1,514.7	1,469.3	5.8	6.5	-145.48	204.9	-825.1	1,081.7	1,071.7	9.98	108.420	
1,900.0	1,875.9	1,583.6	1,532.1	6.3	7.0	-147.15	186.0	-846.4	1,127.8	1,117.3	10.57	106.713	
2,000.0	1,973.8	1,650.4	1,592.4	6.7	7.6	-148.72	166.7	-867.6	1,176.0	1,164.8	11.18	105.198	
2,100.0	2,071.6	1,731.0	1,665.1	7.2	8.2	-150.49	143.6	-893.8	1,225.8	1,214.0	11.79	103.966	
2,200.0	2,169.4	1,806.2	1,733.0	7.6	8.8	-152.01	122.7	-918.2	1,276.4	1,264.0	12.35	103.323	
2,300.0	2,267.2	1,887.7	1,806.7	8.1	9.4	-153.53	100.3	-945.1	1,328.2	1,315.3	12.92	102.829	
2,400.0	2,365.0	1,985.8	1,896.1	8.5	10.2	-155.14	75.1	-976.6	1,379.8	1,366.3	13.50	102.181	
2,500.0	2,462.8	2,061.2	1,964.9	9.0	10.7	-156.29	55.8	-1,000.4	1,431.5	1,417.5	14.01	102.161	
2,600.0	2,560.6	2,118.0	2,016.4	9.4	11.2	-157.15	40.4	-1,018.9	1,484.7	1,470.2	14.49	102.497	
2,700.0	2,658.5	2,202.2	2,092.2	9.9	11.9	-158.39	16.6	-1,046.8	1,539.1	1,524.1	15.04	102.358	
2,800.0	2,756.3	2,310.1	2,189.8	10.3	12.7	-159.86	-13.7	-1,081.4	1,593.1	1,577.5	15.62	101.973	
2,900.0	2,854.1	2,386.2	2,259.0	10.8	13.3	-160.81	-34.4	-1,105.2	1,646.7	1,630.6	16.11	102.207	
3,000.0	2,951.9	2,457.6	2,324.0	11.2	13.8	-161.61	-53.0	-1,128.2	1,701.1	1,684.5	16.60	102.485	
3,100.0	3,049.7	2,539.9	2,398.7	11.7	14.5	-162.50	-74.8	-1,154.9	1,756.2	1,739.1	17.11	102.611	
3,200.0	3,147.5	2,634.4	2,484.7	12.1	15.3	-163.48	-100.4	-1,184.6	1,810.8	1,793.2	17.66	102.532	
3,300.0	3,245.3	2,713.0	2,555.9	12.6	15.9	-164.30	-123.1	-1,208.8	1,865.6	1,847.5	18.16	102.743	
3,400.0	3,343.2	2,788.4	2,624.3	13.0	16.5	-165.05	-145.0	-1,232.2	1,920.9	1,902.2	18.65	102.986	
3,500.0	3,441.0	2,873.5	2,701.3	13.5	17.2	-165.86	-169.7	-1,258.5	1,976.4	1,957.2	19.17	103.116	
3,600.0	3,538.8	2,969.0	2,788.0	13.9	17.9	-166.72	-197.6	-1,287.4	2,031.6	2,011.9	19.70	103.102	
3,700.0	3,636.6	3,028.4	2,841.9	14.4	18.4	-167.23	-215.0	-1,305.4	2,087.2	2,067.0	20.15	103.584	
3,800.0	3,734.4	3,087.6	2,895.3	14.8	18.9	-167.71	-232.2	-1,324.1	2,144.0	2,123.4	20.59	104.126	
3,900.0	3,832.2	3,156.0	2,957.2	15.3	19.4	-168.20	-250.8	-1,346.6	2,201.4	2,180.4	21.06	104.537	
4,000.0	3,930.0	3,324.8	3,111.2	15.7	20.7	-169.31	-295.5	-1,399.1	2,257.0	2,235.2	21.76	103.699	
4,059.3	3,988.0	3,342.0	3,127.0	16.0	20.9	-169.42	-300.0	-1,404.2	2,289.6	2,267.7	21.97	104.211	
4,100.0	4,027.9	3,379.8	3,161.6	16.2	21.2	-169.75	-310.0	-1,415.5	2,311.8	2,289.6	22.21	104.099	
4,200.0	4,126.3	3,435.0	3,212.0	16.5	21.6	-170.27	-324.3	-1,433.1	2,365.8	2,343.1	22.66	104.391	
4,300.0	4,225.3	3,548.4	3,315.6	16.8	22.5	-170.99	-352.6	-1,469.3	2,416.7	2,393.4	23.26	103.877	
4,400.0	4,324.7	3,622.0	3,382.9	17.0	23.0	-171.46	-371.0	-1,492.8	2,464.7	2,440.9	23.74	103.819	
4,500.0	4,424.4	3,707.1	3,460.6	17.2	23.7	-171.93	-392.0	-1,520.3	2,510.0	2,485.7	24.23	103.582	
4,600.0	4,524.4	3,766.4	3,514.9	17.3	24.2	-172.25	-406.3	-1,539.8	2,552.4	2,527.8	24.62	103.663	
4,659.4	4,583.8	3,806.0	3,550.8	17.4	24.5	-108.56	-416.0	-1,553.1	2,576.8	2,536.3	40.51	63.616	
4,700.0	4,624.4	3,900.0	3,636.5	17.5	25.3	-108.86	-439.3	-1,584.0	2,592.9	2,551.6	41.32	62.757	

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 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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
4,800.0	4,724.4	3,944.3	3,676.9	17.6	25.6	-109.00	-450.6	-1,598.2	2,631.9	2,590.1	41.81	62.953	
4,900.0	4,824.4	3,993.0	3,720.9	17.7	26.0	-109.16	-463.5	-1,614.6	2,672.7	2,630.3	42.34	63.126	
5,000.0	4,924.4	4,057.5	3,778.8	17.8	26.6	-109.38	-481.2	-1,636.8	2,714.6	2,671.6	43.04	63.080	
5,100.0	5,024.4	4,114.5	3,829.8	18.0	27.1	-109.58	-497.4	-1,656.6	2,757.4	2,713.7	43.68	63.128	
5,200.0	5,124.4	4,179.0	3,886.9	18.1	27.7	-109.81	-516.1	-1,680.0	2,801.6	2,757.2	44.40	63.095	
5,300.0	5,224.4	4,267.2	3,965.0	18.2	28.5	-110.09	-541.2	-1,712.6	2,846.5	2,801.1	45.34	62.775	
5,400.0	5,324.4	4,459.0	4,137.4	18.4	30.1	-110.65	-592.7	-1,778.8	2,887.8	2,840.7	47.09	61.321	
5,500.0	5,424.4	4,508.2	4,181.7	18.5	30.5	-110.78	-605.8	-1,795.6	2,929.7	2,882.0	47.66	61.475	
5,600.0	5,524.4	4,660.2	4,318.3	18.6	31.8	-111.21	-647.1	-1,848.0	2,972.4	2,923.3	49.10	60.531	
5,700.0	5,624.4	4,739.0	4,389.5	18.8	32.4	-111.43	-668.9	-1,873.9	3,013.4	2,963.5	49.90	60.385	
5,800.0	5,724.4	4,802.4	4,446.5	18.9	33.0	-111.63	-687.0	-1,894.8	3,055.0	3,004.4	50.59	60.387	
5,900.0	5,824.4	4,966.6	4,595.3	19.1	34.3	-112.08	-732.3	-1,947.4	3,095.0	3,042.9	52.09	59.417	
6,000.0	5,924.4	5,018.0	4,641.9	19.2	34.7	-112.21	-745.8	-1,964.2	3,135.5	3,082.8	52.65	59.552	
6,100.0	6,024.4	5,510.8	5,098.6	19.4	38.2	-113.31	-865.9	-2,103.2	3,173.5	3,117.2	56.33	56.339	
6,200.0	6,124.4	6,420.5	5,992.5	19.5	41.3	-113.99	-958.2	-2,222.7	3,184.0	3,124.4	59.63	53.396	
6,300.0	6,224.4	6,560.7	6,132.6	19.7	41.5	-114.01	-961.4	-2,226.6	3,187.5	3,127.5	59.95	53.165	
6,400.0	6,324.4	6,680.0	6,251.8	19.8	41.6	-114.03	-963.6	-2,229.1	3,190.1	3,129.9	60.24	52.957	
6,435.4	6,359.8	6,725.6	6,297.4	19.9	41.7	-114.03	-964.1	-2,230.0	3,190.9	3,130.6	60.34	52.882	
6,450.0	6,374.4	6,745.0	6,316.9	19.9	41.7	-24.03	-964.3	-2,230.3	3,191.1	3,154.8	36.24	88.058	
6,500.0	6,424.3	6,806.2	6,378.0	19.9	41.8	-24.11	-964.9	-2,231.2	3,189.4	3,152.9	36.51	87.355	
6,550.0	6,473.9	6,855.7	6,427.5	19.9	41.8	-24.33	-965.5	-2,231.7	3,184.5	3,147.9	36.58	87.063	
6,600.0	6,522.9	6,905.5	6,477.3	19.9	41.8	-24.68	-966.2	-2,232.3	3,176.4	3,139.9	36.46	87.119	
6,650.0	6,571.2	6,955.8	6,527.6	19.9	41.9	-25.18	-966.8	-2,232.8	3,165.2	3,129.0	36.18	87.487	
6,700.0	6,618.4	7,007.7	6,579.5	19.8	41.9	-25.84	-967.4	-2,233.3	3,150.9	3,115.1	35.76	88.120	
6,750.0	6,664.3	7,060.1	6,631.9	19.8	42.0	-26.67	-968.0	-2,233.8	3,133.5	3,098.3	35.23	88.954	
6,800.0	6,708.8	7,102.8	6,674.6	19.7	42.0	-27.67	-968.4	-2,234.1	3,113.3	3,078.7	34.63	89.914	
6,850.0	6,751.6	7,142.1	6,713.9	19.6	42.1	-28.85	-968.7	-2,234.5	3,090.4	3,056.3	34.02	90.851	
6,900.0	6,792.5	7,185.1	6,756.8	19.5	42.1	-30.29	-969.1	-2,234.9	3,064.8	3,031.3	33.48	91.536	
6,950.0	6,831.2	7,232.1	6,803.8	19.4	42.1	-32.05	-969.4	-2,235.4	3,036.7	3,003.6	33.13	91.664	
7,000.0	6,867.7	7,271.1	6,842.8	19.3	42.2	-34.08	-969.6	-2,235.7	3,006.2	2,973.2	33.05	90.960	
7,050.0	6,901.7	7,301.9	6,873.6	19.3	42.2	-36.40	-969.8	-2,235.9	2,973.6	2,940.2	33.35	89.156	
7,100.0	6,933.0	7,330.4	6,902.2	19.3	42.2	-39.11	-970.0	-2,236.1	2,939.0	2,904.8	34.17	86.021	
7,150.0	6,961.6	7,358.7	6,930.5	19.3	42.3	-42.31	-970.2	-2,236.4	2,902.6	2,867.0	35.60	81.537	
7,200.0	6,987.2	7,390.2	6,962.0	19.4	42.3	-46.15	-970.4	-2,236.7	2,864.6	2,826.9	37.74	75.896	
7,250.0	7,009.8	7,417.8	6,989.6	19.6	42.3	-50.59	-970.6	-2,236.9	2,825.2	2,784.7	40.52	69.730	
7,300.0	7,029.2	7,441.5	7,013.2	19.9	42.3	-55.66	-970.7	-2,237.0	2,784.5	2,740.8	43.78	63.601	
7,350.0	7,045.3	7,458.2	7,030.0	20.2	42.3	-61.28	-970.8	-2,237.1	2,742.9	2,695.7	47.26	58.035	
7,400.0	7,058.1	7,471.4	7,043.2	20.6	42.3	-67.46	-970.8	-2,237.2	2,700.6	2,649.9	50.70	53.267	
7,450.0	7,067.5	7,481.2	7,053.0	21.2	42.4	-74.08	-970.9	-2,237.2	2,657.8	2,604.1	53.75	49.450	
7,500.0	7,073.5	7,487.5	7,059.3	21.8	42.4	-80.97	-970.9	-2,237.3	2,614.8	2,558.7	56.08	46.624	
7,550.0	7,075.9	7,490.3	7,062.1	22.5	42.4	-87.86	-970.9	-2,237.3	2,571.6	2,514.2	57.48	44.736	
7,563.9	7,076.0	7,490.5	7,062.2	22.7	42.4	-89.75	-970.9	-2,237.3	2,559.6	2,501.9	57.70	44.363	
7,600.0	7,075.8	7,490.5	7,062.3	23.2	42.4	-89.76	-970.9	-2,237.3	2,528.7	2,470.4	58.25	43.411	
7,700.0	7,075.3	7,490.6	7,062.4	24.9	42.4	-89.76	-970.9	-2,237.3	2,443.6	2,383.7	59.93	40.773	
7,800.0	7,074.9	7,490.7	7,062.5	26.7	42.4	-89.77	-970.9	-2,237.3	2,359.7	2,297.9	61.81	38.180	
7,900.0	7,074.4	7,490.8	7,062.6	28.8	42.4	-89.77	-970.9	-2,237.3	2,277.1	2,213.3	63.83	35.674	
8,000.0	7,073.9	7,490.9	7,062.7	30.9	42.4	-89.77	-970.9	-2,237.3	2,195.9	2,129.9	65.98	33.282	
8,100.0	7,073.4	7,491.0	7,062.8	33.2	42.4	-89.78	-970.9	-2,237.3	2,116.4	2,048.1	68.23	31.020	
8,200.0	7,072.9	7,491.1	7,062.9	35.5	42.4	-89.78	-970.9	-2,237.3	2,038.6	1,968.1	70.55	28.895	
8,300.0	7,072.4	7,491.2	7,063.0	37.9	42.4	-89.79	-970.9	-2,237.3	1,962.9	1,889.9	72.95	26.909	
8,400.0	7,071.9	7,491.3	7,063.1	40.3	42.4	-89.79	-970.9	-2,237.3	1,889.4	1,814.0	75.39	25.061	
8,500.0	7,071.5	7,491.4	7,063.2	42.8	42.4	-89.80	-970.9	-2,237.3	1,818.5	1,740.6	77.88	23.349	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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	7,071.0	7,491.5	7,063.3	45.4	42.4	-89.80	-970.9	-2,237.3	1,750.4	1,669.9	80.41	21.768	
8,700.0	7,070.5	7,491.6	7,063.4	47.9	42.4	-89.81	-970.9	-2,237.3	1,685.4	1,602.5	82.97	20.314	
8,800.0	7,070.0	7,491.7	7,063.5	50.5	42.4	-89.81	-970.9	-2,237.3	1,624.1	1,538.5	85.55	18.983	
8,900.0	7,069.5	7,491.8	7,063.6	53.1	42.4	-89.81	-970.9	-2,237.3	1,566.7	1,478.6	88.16	17.771	
9,000.0	7,069.0	7,491.9	7,063.7	55.8	42.4	-89.82	-970.9	-2,237.3	1,513.8	1,423.0	90.79	16.673	
9,100.0	7,068.5	7,492.0	7,063.8	58.4	42.4	-89.82	-970.9	-2,237.3	1,465.8	1,372.3	93.43	15.688	
9,200.0	7,068.1	7,492.1	7,063.9	61.1	42.4	-89.83	-970.9	-2,237.3	1,423.2	1,327.1	96.09	14.810	
9,300.0	7,067.6	7,492.3	7,064.0	63.7	42.4	-89.83	-970.9	-2,237.3	1,386.5	1,287.7	98.77	14.038	
9,400.0	7,067.1	7,492.4	7,064.1	66.4	42.4	-89.84	-970.9	-2,237.3	1,356.2	1,254.8	101.45	13.368	
9,500.0	7,066.6	7,492.5	7,064.2	69.1	42.4	-89.84	-970.9	-2,237.3	1,332.8	1,228.6	104.14	12.797	
9,600.0	7,066.1	7,492.6	7,064.3	71.8	42.4	-89.85	-970.9	-2,237.3	1,316.5	1,209.7	106.84	12.322	
9,700.0	7,065.6	7,492.7	7,064.4	74.5	42.4	-89.85	-970.9	-2,237.3	1,307.7	1,198.2	109.55	11.937	
9,765.3	7,065.3	7,492.8	7,064.5	76.3	42.4	-89.86	-970.9	-2,237.3	1,306.1	1,194.8	111.33	11.732	
9,800.0	7,065.1	7,492.8	7,064.5	77.2	42.4	-89.86	-970.9	-2,237.3	1,306.6	1,194.3	112.27	11.637	
9,900.0	7,064.7	7,492.9	7,064.7	80.0	42.4	-89.86	-970.9	-2,237.3	1,313.0	1,198.0	115.00	11.418	
10,000.0	7,064.2	7,493.0	7,064.8	82.7	42.4	-89.87	-970.9	-2,237.3	1,327.0	1,209.3	117.72	11.272	
10,100.0	7,063.7	7,493.1	7,064.9	85.4	42.4	-89.87	-970.9	-2,237.3	1,348.3	1,227.8	120.46	11.193	
10,200.0	7,063.2	7,493.2	7,065.0	88.2	42.4	-89.88	-970.9	-2,237.3	1,376.5	1,253.3	123.20	11.173	SF
10,300.0	7,062.7	7,493.4	7,065.1	90.9	42.4	-89.88	-970.9	-2,237.3	1,411.3	1,285.4	125.94	11.206	
10,400.0	7,062.2	7,493.5	7,065.2	93.6	42.4	-89.89	-970.9	-2,237.3	1,452.2	1,323.5	128.69	11.284	
10,500.0	7,061.7	7,493.6	7,065.3	96.4	42.4	-89.89	-970.9	-2,237.3	1,498.6	1,367.1	131.44	11.401	
10,600.0	7,061.3	7,493.7	7,065.5	99.2	42.4	-89.90	-970.9	-2,237.3	1,550.0	1,415.9	134.19	11.551	
10,700.0	7,060.8	7,493.8	7,065.6	101.9	42.4	-89.90	-970.9	-2,237.3	1,606.1	1,469.2	136.95	11.728	
10,800.0	7,060.3	7,493.9	7,065.7	104.7	42.4	-89.91	-970.9	-2,237.3	1,666.3	1,526.6	139.71	11.927	
10,900.0	7,059.8	7,494.0	7,065.8	107.4	42.4	-89.91	-970.9	-2,237.3	1,730.2	1,587.7	142.47	12.144	
11,000.0	7,059.3	7,494.2	7,065.9	110.2	42.4	-89.92	-970.9	-2,237.3	1,797.3	1,652.1	145.23	12.375	
11,100.0	7,058.8	7,494.3	7,066.0	113.0	42.4	-89.92	-970.9	-2,237.3	1,867.5	1,719.5	148.00	12.618	
11,200.0	7,058.3	7,494.4	7,066.2	115.7	42.4	-89.93	-970.9	-2,237.3	1,940.2	1,789.4	150.77	12.869	
11,300.0	7,057.9	7,494.5	7,066.3	118.5	42.4	-89.93	-970.9	-2,237.3	2,015.3	1,861.7	153.54	13.125	
11,400.0	7,057.4	7,494.6	7,066.4	121.3	42.4	-89.94	-970.9	-2,237.3	2,092.4	1,936.1	156.31	13.386	
11,500.0	7,056.9	7,494.8	7,066.5	124.0	42.4	-89.94	-970.9	-2,237.3	2,171.4	2,012.4	159.09	13.649	
11,600.0	7,056.4	7,494.9	7,066.6	126.8	42.4	-89.95	-970.9	-2,237.3	2,252.1	2,090.3	161.86	13.914	
11,686.6	7,056.0	7,495.0	7,066.8	129.2	42.4	-89.95	-970.9	-2,237.3	2,323.2	2,159.0	164.27	14.143	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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	-89.01	68.8	-3,981.5	3,982.4				
100.0	100.0	56.5	56.5	0.1	0.1	-89.01	68.8	-3,981.6	3,982.2	3,982.0	0.16	N/A	
200.0	200.0	153.2	153.2	0.3	0.2	-89.01	68.8	-3,981.6	3,982.2	3,981.8	0.49	8,107.652	
300.0	300.0	249.9	249.9	0.5	0.3	-89.01	68.7	-3,981.8	3,982.4	3,981.6	0.82	4,840.766	
400.0	400.0	346.5	346.5	0.8	0.4	-89.01	68.6	-3,982.1	3,982.7	3,981.5	1.15	3,450.609	
500.0	500.0	443.2	443.2	1.0	0.5	-152.89	68.5	-3,982.4	3,984.6	3,983.1	1.48	2,686.496	
600.0	599.8	539.7	539.7	1.2	0.6	-152.88	68.4	-3,982.8	3,989.7	3,987.8	1.82	2,194.827	
700.0	699.5	640.2	640.2	1.5	0.8	-152.86	68.3	-3,983.3	3,997.9	3,995.7	2.23	1,792.049	
800.0	798.7	751.5	751.5	1.7	1.0	-152.85	68.6	-3,983.6	4,009.1	4,006.4	2.68	1,494.366	
900.0	897.5	832.4	832.4	2.0	1.2	-152.80	68.6	-3,983.9	4,023.4	4,020.3	3.10	1,297.768	
1,000.0	995.6	926.8	926.8	2.4	1.4	-152.75	68.6	-3,984.6	4,041.1	4,037.5	3.56	1,134.638	
1,000.1	995.8	927.0	927.0	2.4	1.4	-152.75	68.6	-3,984.6	4,041.1	4,037.5	3.56	1,134.433	
1,100.0	1,093.4	1,030.9	1,030.9	2.8	1.6	-152.89	68.6	-3,985.2	4,060.2	4,056.2	4.04	1,005.470	
1,200.0	1,191.3	1,116.2	1,116.2	3.2	1.8	-153.01	68.6	-3,985.7	4,079.5	4,075.0	4.49	907.949	
1,300.0	1,289.1	1,205.6	1,205.6	3.6	1.9	-153.13	68.7	-3,986.6	4,099.0	4,094.1	4.97	825.576	
1,400.0	1,386.9	1,309.2	1,309.2	4.1	2.2	-153.26	69.2	-3,987.6	4,118.7	4,113.2	5.46	753.733	
1,500.0	1,484.7	1,418.5	1,418.4	4.5	2.4	-153.40	69.4	-3,988.4	4,138.0	4,132.1	5.97	692.874	
1,600.0	1,582.5	1,505.4	1,505.4	4.9	2.6	-153.51	69.9	-3,989.0	4,157.4	4,151.0	6.44	645.104	
1,700.0	1,680.3	1,597.0	1,597.0	5.4	2.8	-153.62	70.6	-3,989.8	4,177.0	4,170.0	6.93	602.582	
1,800.0	1,778.1	1,690.0	1,690.0	5.8	3.0	-153.73	71.0	-3,990.8	4,196.7	4,189.3	7.42	565.542	
1,900.0	1,875.9	1,943.9	1,943.7	6.3	3.5	-153.97	76.9	-3,989.4	4,215.2	4,207.0	8.23	512.449	
2,000.0	1,973.8	2,032.6	2,032.1	6.7	3.7	-153.98	84.3	-3,987.1	4,231.4	4,222.7	8.72	485.328	
2,100.0	2,071.6	2,065.0	2,064.3	7.2	3.8	-153.98	87.8	-3,986.4	4,248.4	4,239.3	9.09	467.186	
2,200.0	2,169.4	2,124.9	2,123.7	7.6	3.9	-153.95	95.0	-3,985.9	4,266.4	4,256.9	9.54	447.138	
2,300.0	2,267.2	2,168.9	2,167.3	8.1	4.0	-153.92	101.0	-3,986.4	4,285.9	4,276.0	9.95	430.569	
2,400.0	2,365.0	2,296.9	2,293.6	8.5	4.3	-153.80	121.4	-3,988.2	4,306.1	4,295.5	10.60	406.361	
2,500.0	2,462.8	2,388.6	2,383.5	9.0	4.6	-153.67	139.6	-3,988.6	4,325.1	4,314.0	11.17	387.112	
2,600.0	2,560.6	2,439.0	2,432.6	9.4	4.8	-153.58	150.9	-3,989.4	4,345.3	4,333.7	11.64	373.354	
2,700.0	2,658.5	2,484.6	2,476.9	9.9	4.9	-153.49	162.1	-3,990.6	4,366.6	4,354.5	12.11	360.448	
2,800.0	2,756.3	2,532.0	2,522.4	10.3	5.1	-153.37	174.9	-3,992.4	4,389.0	4,376.4	12.60	348.369	
2,900.0	2,854.1	2,614.7	2,601.3	10.8	5.5	-153.14	199.3	-3,996.1	4,412.1	4,398.9	13.26	332.764	
3,000.0	2,951.9	2,687.3	2,670.4	11.2	5.8	-152.94	221.5	-3,999.6	4,435.8	4,421.9	13.88	319.523	
3,100.0	3,049.7	2,791.6	2,769.9	11.7	6.2	-152.66	252.3	-4,004.9	4,459.8	4,445.1	14.63	304.778	
3,200.0	3,147.5	2,994.0	2,964.3	12.1	7.1	-152.17	308.4	-4,012.2	4,482.2	4,466.4	15.81	283.523	
3,300.0	3,245.3	3,133.3	3,098.9	12.6	7.7	-151.88	344.0	-4,015.0	4,503.1	4,486.4	16.73	269.215	
3,400.0	3,343.2	3,220.5	3,183.2	13.0	8.1	-151.70	366.4	-4,016.5	4,523.9	4,506.5	17.43	259.547	
3,500.0	3,441.0	3,302.8	3,262.8	13.5	8.4	-151.54	386.8	-4,018.2	4,545.1	4,527.0	18.11	250.956	
3,600.0	3,538.8	3,442.9	3,398.7	13.9	9.0	-151.27	421.1	-4,020.9	4,566.3	4,547.3	19.05	239.750	
3,700.0	3,636.6	3,562.0	3,514.0	14.4	9.6	-151.05	450.8	-4,021.9	4,586.4	4,566.5	19.91	230.392	
3,800.0	3,734.4	3,629.8	3,579.6	14.8	9.9	-150.91	468.2	-4,022.6	4,606.7	4,586.1	20.54	224.251	
3,900.0	3,832.2	3,694.6	3,642.1	15.3	10.2	-150.78	484.9	-4,023.7	4,627.7	4,606.6	21.17	218.591	
4,000.0	3,930.0	3,749.0	3,694.5	15.7	10.5	-150.66	499.6	-4,024.9	4,649.5	4,627.8	21.75	213.737	
4,059.3	3,988.0	3,803.0	3,746.3	16.0	10.7	-150.55	514.5	-4,026.3	4,662.7	4,640.5	22.22	209.869	
4,100.0	4,027.9	3,843.0	3,784.7	16.2	10.9	-150.54	525.7	-4,027.6	4,671.6	4,649.1	22.56	207.110	
4,200.0	4,126.3	3,904.1	3,843.4	16.5	11.3	-150.60	542.9	-4,029.6	4,691.9	4,668.7	23.16	202.597	
4,300.0	4,225.3	3,987.3	3,923.1	16.8	11.7	-150.55	566.5	-4,032.8	4,709.7	4,685.8	23.84	197.537	
4,400.0	4,324.7	4,246.0	4,171.5	17.0	13.0	-149.98	638.0	-4,039.3	4,723.8	4,698.4	25.39	186.034	
4,500.0	4,424.4	4,310.0	4,232.9	17.2	13.3	-149.88	656.3	-4,039.8	4,733.0	4,707.0	25.92	182.598	
4,600.0	4,524.4	4,426.8	4,344.5	17.3	13.9	-149.55	690.7	-4,040.6	4,739.1	4,712.4	26.72	177.342	
4,659.4	4,583.8	4,459.5	4,375.6	17.4	14.1	-85.58	700.7	-4,040.8	4,741.6	4,715.7	25.90	183.103	
4,700.0	4,624.4	4,497.0	4,411.2	17.5	14.3	-85.43	712.6	-4,041.3	4,743.1	4,717.1	26.04	182.118	
4,800.0	4,724.4	4,550.9	4,462.3	17.6	14.6	-85.23	729.6	-4,042.2	4,747.4	4,721.1	26.32	180.351	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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
4,900.0	4,824.4	4,624.5	4,532.2	17.7	15.1	-84.96	752.5	-4,043.7	4,752.4	4,725.7	26.66	178.271	
5,000.0	4,924.4	4,687.0	4,591.6	17.8	15.4	-84.72	772.2	-4,045.2	4,758.0	4,731.0	26.97	176.437	
5,100.0	5,024.4	4,768.8	4,669.3	18.0	15.9	-84.42	797.6	-4,047.7	4,764.2	4,736.9	27.33	174.298	
5,200.0	5,124.4	4,839.1	4,736.3	18.1	16.3	-84.17	818.6	-4,050.2	4,771.2	4,743.5	27.67	172.431	
5,300.0	5,224.4	5,063.7	4,953.7	18.2	17.3	-83.51	874.3	-4,058.0	4,777.8	4,749.4	28.40	168.220	
5,400.0	5,324.4	5,162.8	5,051.2	18.4	17.7	-83.31	891.4	-4,060.8	4,782.6	4,753.8	28.79	166.130	
5,500.0	5,424.4	5,465.1	5,351.2	18.5	18.6	-82.90	927.1	-4,065.8	4,786.3	4,756.7	29.61	161.664	
5,600.0	5,524.4	5,571.3	5,457.2	18.6	18.8	-82.80	935.2	-4,065.3	4,786.8	4,756.8	29.97	159.715	
5,700.0	5,624.4	5,659.9	5,545.6	18.8	19.0	-82.73	940.8	-4,065.2	4,787.5	4,757.2	30.30	158.002	
5,800.0	5,724.4	5,747.2	5,632.8	18.9	19.2	-82.68	945.3	-4,065.4	4,788.4	4,757.8	30.63	156.346	
5,900.0	5,824.4	5,830.4	5,715.9	19.1	19.3	-82.65	948.0	-4,066.0	4,789.6	4,758.6	30.94	154.780	
6,000.0	5,924.4	5,919.1	5,804.5	19.2	19.4	-82.63	949.9	-4,067.3	4,791.2	4,760.0	31.27	153.212	
6,100.0	6,024.4	6,078.9	5,964.4	19.4	19.6	-82.64	949.4	-4,068.4	4,791.6	4,759.9	31.72	151.056	
6,200.0	6,124.4	6,181.0	6,066.5	19.5	19.8	-82.64	948.8	-4,068.7	4,791.9	4,759.8	32.06	149.452	
6,300.0	6,224.4	6,275.0	6,160.5	19.7	19.9	-82.65	948.5	-4,069.2	4,792.3	4,759.9	32.40	147.934	
6,400.0	6,324.4	6,338.0	6,223.4	19.8	20.0	-82.65	948.2	-4,069.8	4,793.3	4,760.6	32.68	146.691	
6,435.4	6,359.8	6,368.0	6,253.4	19.9	20.0	-82.66	948.0	-4,070.3	4,793.7	4,760.9	32.79	146.196	
6,450.0	6,374.4	6,368.0	6,253.4	19.9	20.0	7.34	948.0	-4,070.3	4,793.8	4,757.8	36.00	133.179	
6,500.0	6,424.3	6,417.0	6,302.5	19.9	20.1	7.36	947.7	-4,071.1	4,791.9	4,755.9	35.95	133.285	
6,550.0	6,473.9	6,462.0	6,347.4	19.9	20.1	7.42	947.5	-4,071.9	4,786.5	4,750.8	35.75	133.885	
6,600.0	6,522.9	6,539.6	6,425.0	19.9	20.2	7.54	947.2	-4,073.1	4,777.7	4,742.3	35.44	134.798	
6,650.0	6,571.2	6,591.1	6,476.5	19.9	20.3	7.69	947.0	-4,073.7	4,765.3	4,730.3	34.96	136.307	
6,700.0	6,618.4	6,634.7	6,520.1	19.8	20.3	7.89	947.0	-4,074.2	4,749.5	4,715.2	34.33	138.354	
6,750.0	6,664.3	6,673.3	6,558.8	19.8	20.4	8.15	947.0	-4,074.7	4,730.6	4,697.0	33.56	140.945	
6,800.0	6,708.8	6,709.0	6,594.4	19.7	20.4	8.46	946.9	-4,075.3	4,708.6	4,676.0	32.68	144.097	
6,850.0	6,751.6	6,743.8	6,629.2	19.6	20.5	8.84	946.8	-4,075.8	4,683.7	4,652.0	31.69	147.815	
6,900.0	6,792.5	6,814.9	6,700.3	19.5	20.6	9.36	946.4	-4,076.9	4,655.7	4,625.1	30.66	151.847	
6,950.0	6,831.2	6,861.6	6,747.0	19.4	20.6	9.96	946.2	-4,077.4	4,624.8	4,595.3	29.54	156.559	
7,000.0	6,867.7	6,896.9	6,782.3	19.3	20.7	10.68	946.0	-4,077.7	4,591.2	4,562.9	28.37	161.836	
7,050.0	6,901.7	6,930.0	6,815.4	19.3	20.7	11.56	945.8	-4,078.1	4,555.2	4,528.0	27.20	167.486	
7,100.0	6,933.0	6,973.0	6,858.4	19.3	20.8	12.70	945.6	-4,078.5	4,516.9	4,490.8	26.09	173.099	
7,150.0	6,961.6	7,012.3	6,897.7	19.3	20.8	14.13	945.5	-4,078.8	4,476.5	4,451.4	25.10	178.327	
7,200.0	6,987.2	7,037.8	6,923.2	19.4	20.9	15.93	945.4	-4,078.9	4,434.1	4,409.8	24.29	182.581	
7,250.0	7,009.8	7,056.7	6,942.1	19.6	20.9	18.26	945.4	-4,079.0	4,390.0	4,366.2	23.77	184.682	
7,300.0	7,029.2	7,073.0	6,958.4	19.9	20.9	21.40	945.5	-4,079.1	4,344.5	4,320.8	23.74	183.034	
7,350.0	7,045.3	7,086.7	6,972.0	20.2	21.0	25.80	945.5	-4,079.2	4,297.8	4,273.4	24.43	175.940	
7,400.0	7,058.1	7,097.6	6,983.0	20.6	21.0	32.25	945.6	-4,079.3	4,250.1	4,223.9	26.20	162.232	
7,450.0	7,067.5	7,105.7	6,991.1	21.2	21.0	42.20	945.6	-4,079.3	4,201.6	4,172.1	29.46	142.621	
7,500.0	7,073.5	7,117.0	7,002.4	21.8	21.0	58.39	945.7	-4,079.4	4,152.5	4,118.2	34.26	121.205	
7,550.0	7,075.9	7,117.0	7,002.4	22.5	21.0	81.49	945.7	-4,079.4	4,103.1	4,065.3	37.87	108.340	
7,563.9	7,076.0	7,117.0	7,002.4	22.7	21.0	88.83	945.7	-4,079.4	4,089.4	4,051.3	38.03	107.540	
7,600.0	7,075.8	7,117.0	7,002.4	23.2	21.0	88.83	945.7	-4,079.4	4,053.7	4,015.1	38.58	105.077	
7,700.0	7,075.3	7,117.0	7,002.4	24.9	21.0	88.83	945.7	-4,079.4	3,954.9	3,914.6	40.26	98.230	
7,800.0	7,074.9	7,117.0	7,002.4	26.7	21.0	88.83	945.7	-4,079.4	3,856.1	3,814.0	42.13	91.521	
7,900.0	7,074.4	7,117.0	7,002.4	28.8	21.0	88.83	945.7	-4,079.4	3,757.4	3,713.2	44.16	85.089	
8,000.0	7,073.9	7,117.0	7,002.4	30.9	21.0	88.83	945.7	-4,079.4	3,658.8	3,612.5	46.31	79.013	
8,100.0	7,073.4	7,117.0	7,002.4	33.2	21.0	88.83	945.7	-4,079.4	3,560.2	3,511.7	48.55	73.328	
8,200.0	7,072.9	7,117.0	7,002.4	35.5	21.0	88.83	945.7	-4,079.4	3,461.7	3,410.9	50.88	68.039	
8,300.0	7,072.4	7,117.0	7,002.4	37.9	21.0	88.83	945.7	-4,079.4	3,363.4	3,310.1	53.27	63.138	
8,400.0	7,071.9	7,117.0	7,002.4	40.3	21.0	88.83	945.7	-4,079.4	3,265.1	3,209.3	55.72	58.603	
8,500.0	7,071.5	7,117.0	7,002.4	42.8	21.0	88.83	945.7	-4,079.4	3,166.9	3,108.7	58.21	54.409	
8,600.0	7,071.0	7,117.0	7,002.4	45.4	21.0	88.83	945.7	-4,079.4	3,068.8	3,008.1	60.73	50.530	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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	7,070.5	7,117.0	7,002.4	47.9	21.0	88.83	945.7	-4,079.4	2,970.9	2,907.6	63.29	46.940	
8,800.0	7,070.0	7,117.0	7,002.4	50.5	21.0	88.83	945.7	-4,079.4	2,873.1	2,807.2	65.88	43.614	
8,900.0	7,069.5	7,117.0	7,002.4	53.1	21.0	88.83	945.7	-4,079.4	2,775.5	2,707.0	68.48	40.528	
9,000.0	7,069.0	7,117.3	7,002.7	55.8	21.0	88.86	945.7	-4,079.4	2,678.0	2,606.9	71.11	37.660	
9,100.0	7,068.5	7,117.7	7,003.1	58.4	21.0	88.89	945.7	-4,079.4	2,580.7	2,507.0	73.75	34.991	
9,200.0	7,068.1	7,118.0	7,003.4	61.1	21.0	88.93	945.7	-4,079.4	2,483.7	2,407.3	76.41	32.504	
9,300.0	7,067.6	7,118.4	7,003.8	63.7	21.0	88.96	945.7	-4,079.4	2,386.9	2,307.8	79.08	30.182	
9,400.0	7,067.1	7,118.8	7,004.1	66.4	21.0	88.99	945.7	-4,079.4	2,290.4	2,208.6	81.77	28.011	
9,500.0	7,066.6	7,119.1	7,004.5	69.1	21.0	89.03	945.7	-4,079.4	2,194.1	2,109.7	84.46	25.979	
9,600.0	7,066.1	7,119.4	7,004.8	71.8	21.0	89.06	945.7	-4,079.4	2,098.3	2,011.1	87.16	24.074	
9,700.0	7,065.6	7,119.8	7,005.2	74.5	21.0	89.09	945.7	-4,079.4	2,002.8	1,912.9	89.87	22.286	
9,800.0	7,065.1	7,120.1	7,005.5	77.2	21.0	89.12	945.7	-4,079.4	1,907.8	1,815.2	92.59	20.606	
9,900.0	7,064.7	7,120.4	7,005.8	80.0	21.0	89.15	945.7	-4,079.4	1,813.4	1,718.0	95.31	19.026	
10,000.0	7,064.2	7,120.8	7,006.1	82.7	21.0	89.18	945.7	-4,079.4	1,719.5	1,621.5	98.04	17.539	
10,100.0	7,063.7	7,121.1	7,006.5	85.4	21.0	89.21	945.7	-4,079.4	1,626.4	1,525.7	100.77	16.140	
10,200.0	7,063.2	7,121.4	7,006.8	88.2	21.0	89.24	945.7	-4,079.4	1,534.2	1,430.7	103.51	14.822	
10,300.0	7,062.7	7,121.7	7,007.1	90.9	21.0	89.27	945.7	-4,079.4	1,443.0	1,336.8	106.25	13.581	
10,400.0	7,062.2	7,122.0	7,007.4	93.6	21.0	89.30	945.7	-4,079.4	1,353.1	1,244.1	109.00	12.414	
10,500.0	7,061.7	7,122.3	7,007.7	96.4	21.0	89.33	945.7	-4,079.4	1,264.6	1,152.9	111.75	11.317	
10,600.0	7,061.3	7,122.6	7,008.0	99.2	21.0	89.35	945.7	-4,079.4	1,178.0	1,063.5	114.50	10.288	
10,700.0	7,060.8	7,122.9	7,008.3	101.9	21.0	89.38	945.7	-4,079.4	1,093.7	976.5	117.26	9.328	
10,800.0	7,060.3	7,123.2	7,008.5	104.7	21.0	89.41	945.7	-4,079.5	1,012.3	892.3	120.02	8.435	
10,900.0	7,059.8	7,123.5	7,008.8	107.4	21.0	89.43	945.7	-4,079.5	934.5	811.7	122.78	7.611	
11,000.0	7,059.3	7,123.7	7,009.1	110.2	21.0	89.46	945.7	-4,079.5	861.3	735.7	125.54	6.860	
11,100.0	7,058.8	7,124.0	7,009.4	113.0	21.0	89.48	945.7	-4,079.5	793.9	665.6	128.31	6.187	
11,200.0	7,058.3	7,124.3	7,009.7	115.7	21.0	89.51	945.7	-4,079.5	734.0	603.0	131.08	5.600	
11,300.0	7,057.9	7,124.5	7,009.9	118.5	21.0	89.53	945.7	-4,079.5	683.6	549.8	133.85	5.107	
11,400.0	7,057.4	7,124.8	7,010.2	121.3	21.0	89.56	945.7	-4,079.5	644.8	508.2	136.62	4.720	
11,500.0	7,056.9	7,125.1	7,010.4	124.0	21.0	89.58	945.7	-4,079.5	619.9	480.5	139.39	4.447	
11,600.0	7,056.4	7,125.3	7,010.7	126.8	21.0	89.61	945.7	-4,079.5	610.6	468.4	142.17	4.295	
11,607.4	7,056.4	7,125.3	7,010.7	127.0	21.0	89.61	945.7	-4,079.5	610.5	468.2	142.38	4.288	CC, ES
11,686.6	7,056.0	7,125.5	7,010.9	129.2	21.0	89.63	945.7	-4,079.5	615.7	471.1	144.57	4.259	SF

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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	-89.95	3.6	-3,977.4	3,977.6				
100.0	100.0	58.5	58.5	0.1	0.1	-89.95	3.6	-3,977.4	3,977.4	3,977.2	0.16	N/A	
200.0	200.0	158.5	158.5	0.3	0.2	-89.95	3.6	-3,977.4	3,977.4	3,976.9	0.50	8,003.904	
300.0	300.0	258.5	258.5	0.5	0.3	-89.95	3.6	-3,977.4	3,977.4	3,976.5	0.83	4,780.067	
400.0	400.0	358.5	358.5	0.8	0.4	-89.95	3.6	-3,977.4	3,977.4	3,976.2	1.17	3,407.560	
500.0	500.0	458.5	458.5	1.0	0.5	-153.83	3.6	-3,977.4	3,978.9	3,977.4	1.50	2,654.664	
600.0	599.8	558.3	558.3	1.2	0.6	-153.82	3.6	-3,977.4	3,983.6	3,981.8	1.84	2,169.049	
700.0	699.5	655.4	655.4	1.5	0.8	-153.80	3.6	-3,977.4	3,991.5	3,989.2	2.27	1,760.741	
800.0	798.7	749.2	749.2	1.7	1.0	-153.78	3.5	-3,977.5	4,002.6	3,999.9	2.70	1,484.557	
900.0	897.5	851.5	851.5	2.0	1.2	-153.75	3.8	-3,977.7	4,016.8	4,013.7	3.16	1,271.667	
1,000.0	995.6	950.9	950.9	2.4	1.4	-153.72	3.9	-3,977.8	4,034.1	4,030.4	3.62	1,114.882	
1,000.1	995.8	951.0	951.0	2.4	1.4	-153.72	3.9	-3,977.8	4,034.1	4,030.5	3.62	1,114.692	
1,100.0	1,093.4	1,051.3	1,051.3	2.8	1.6	-153.85	3.5	-3,977.8	4,052.9	4,048.8	4.08	993.454	
1,200.0	1,191.3	1,146.1	1,146.1	3.2	1.8	-153.98	3.3	-3,977.9	4,071.7	4,067.1	4.54	896.233	
1,300.0	1,289.1	1,252.9	1,252.9	3.6	2.0	-154.13	2.8	-3,977.9	4,090.4	4,085.4	5.04	811.381	
1,400.0	1,386.9	1,335.1	1,335.1	4.1	2.2	-154.23	2.7	-3,977.9	4,109.3	4,103.8	5.50	747.142	
1,500.0	1,484.7	1,427.4	1,427.4	4.5	2.4	-154.36	2.4	-3,978.2	4,128.4	4,122.5	5.98	690.425	
1,600.0	1,582.5	1,506.4	1,506.4	4.9	2.6	-154.46	2.0	-3,978.7	4,147.8	4,141.4	6.44	644.503	
1,700.0	1,680.3	1,584.5	1,584.5	5.4	2.7	-154.56	1.9	-3,979.5	4,167.8	4,160.9	6.90	604.456	
1,800.0	1,778.1	1,698.7	1,698.7	5.8	3.0	-154.70	2.2	-3,981.0	4,187.9	4,180.5	7.43	563.913	
1,900.0	1,875.9	1,790.0	1,790.0	6.3	3.2	-154.80	2.7	-3,981.8	4,207.7	4,199.8	7.91	531.999	
2,000.0	1,973.8	1,886.6	1,886.6	6.7	3.4	-154.92	3.2	-3,982.9	4,227.7	4,219.3	8.40	503.103	
2,100.0	2,071.6	2,001.9	2,001.9	7.2	3.6	-155.06	3.1	-3,983.9	4,247.5	4,238.6	8.93	475.773	
2,200.0	2,169.4	2,076.8	2,076.7	7.6	3.8	-155.15	3.1	-3,984.6	4,267.3	4,258.0	9.38	455.016	
2,300.0	2,267.2	2,161.7	2,161.6	8.1	3.9	-155.25	3.2	-3,985.8	4,287.6	4,277.8	9.85	435.224	
2,400.0	2,365.0	2,277.0	2,277.0	8.5	4.2	-155.38	3.1	-3,987.4	4,308.0	4,297.6	10.38	414.956	
2,500.0	2,462.8	2,360.5	2,360.4	9.0	4.4	-155.48	2.9	-3,988.4	4,328.2	4,317.3	10.85	398.970	
2,600.0	2,560.6	2,434.2	2,434.1	9.4	4.5	-155.58	2.1	-3,989.6	4,348.8	4,337.5	11.30	384.924	
2,700.0	2,658.5	2,657.0	2,656.7	9.9	5.0	-155.96	-7.4	-3,991.1	4,369.1	4,357.0	12.03	363.047	
2,800.0	2,756.3	2,729.9	2,729.3	10.3	5.1	-156.12	-13.3	-3,990.3	4,387.4	4,374.9	12.48	351.475	
2,900.0	2,854.1	2,796.9	2,796.0	10.8	5.3	-156.29	-20.2	-3,989.9	4,406.6	4,393.6	12.92	340.940	
3,000.0	2,951.9	2,844.0	2,842.7	11.2	5.4	-156.41	-26.0	-3,989.9	4,426.5	4,413.1	13.33	332.182	
3,100.0	3,049.7	2,914.5	2,912.5	11.7	5.6	-156.62	-36.2	-3,990.4	4,447.2	4,433.4	13.79	322.602	
3,200.0	3,147.5	2,977.0	2,974.1	12.1	5.7	-156.82	-46.4	-3,991.4	4,468.9	4,454.7	14.23	314.000	
3,300.0	3,245.3	3,032.0	3,028.3	12.6	5.9	-157.00	-55.8	-3,992.6	4,491.3	4,476.7	14.66	306.289	
3,400.0	3,343.2	3,105.5	3,100.6	13.0	6.1	-157.25	-69.0	-3,994.6	4,514.5	4,499.3	15.15	297.969	
3,500.0	3,441.0	3,216.8	3,209.9	13.5	6.4	-157.63	-89.5	-3,998.0	4,538.2	4,522.4	15.72	288.601	
3,600.0	3,538.8	3,288.1	3,280.1	13.9	6.6	-157.85	-101.7	-4,000.1	4,561.8	4,545.6	16.19	281.757	
3,700.0	3,636.6	3,383.6	3,374.3	14.4	6.9	-158.14	-117.3	-4,003.5	4,586.0	4,569.2	16.72	274.270	
3,800.0	3,734.4	3,500.0	3,489.0	14.8	7.2	-158.50	-136.7	-4,007.0	4,609.8	4,592.5	17.32	266.221	
3,900.0	3,832.2	3,573.0	3,560.8	15.3	7.4	-158.73	-149.4	-4,009.2	4,633.8	4,616.0	17.81	260.112	
4,000.0	3,930.0	3,687.0	3,673.0	15.7	7.8	-159.09	-169.8	-4,012.6	4,658.0	4,639.6	18.43	252.719	
4,059.3	3,988.0	3,722.7	3,708.0	16.0	7.9	-159.20	-176.5	-4,013.6	4,672.4	4,653.7	18.71	249.684	
4,100.0	4,027.9	3,744.2	3,729.1	16.2	8.0	-159.35	-180.7	-4,014.3	4,682.2	4,663.3	18.90	247.743	
4,200.0	4,126.3	3,817.2	3,800.5	16.5	8.3	-159.74	-195.6	-4,017.0	4,704.6	4,685.2	19.38	242.735	
4,300.0	4,225.3	3,929.3	3,910.0	16.8	8.6	-160.23	-219.1	-4,020.9	4,723.8	4,703.8	19.96	236.642	
4,400.0	4,324.7	4,009.1	3,988.1	17.0	8.9	-160.57	-235.5	-4,023.6	4,739.8	4,719.4	20.40	232.336	
4,500.0	4,424.4	4,075.0	4,052.7	17.2	9.1	-160.83	-248.5	-4,026.3	4,753.3	4,732.5	20.76	228.913	
4,600.0	4,524.4	4,155.0	4,131.1	17.3	9.4	-161.09	-263.8	-4,030.1	4,764.1	4,743.0	21.15	225.304	
4,659.4	4,583.8	4,198.9	4,174.1	17.4	9.6	-97.34	-272.2	-4,032.3	4,769.2	4,743.8	25.44	187.476	
4,700.0	4,624.4	4,232.2	4,206.7	17.5	9.7	-97.41	-278.7	-4,034.1	4,772.4	4,746.8	25.58	186.599	
4,800.0	4,724.4	4,336.2	4,308.5	17.6	10.1	-97.65	-299.2	-4,039.5	4,780.3	4,754.3	25.98	183.985	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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
4,900.0	4,824.4	4,430.4	4,400.8	17.7	10.4	-97.86	-317.5	-4,044.4	4,788.2	4,761.8	26.36	181.626	
5,000.0	4,924.4	4,598.2	4,566.0	17.8	11.0	-98.18	-345.7	-4,052.2	4,795.1	4,768.2	26.93	178.077	
5,100.0	5,024.4	4,947.4	4,914.0	18.0	11.8	-98.39	-365.0	-4,065.0	4,800.6	4,772.7	27.84	172.420	
5,200.0	5,124.4	5,060.5	5,027.1	18.1	12.0	-98.38	-364.3	-4,066.4	4,801.7	4,773.5	28.20	170.253	
5,300.0	5,224.4	5,168.1	5,134.7	18.2	12.2	-98.37	-363.7	-4,067.8	4,802.9	4,774.3	28.56	168.189	
5,400.0	5,324.4	5,261.5	5,228.1	18.4	12.3	-98.36	-363.3	-4,068.8	4,803.9	4,775.0	28.88	166.320	
5,500.0	5,424.4	5,383.2	5,349.8	18.5	12.5	-98.35	-362.6	-4,070.1	4,804.9	4,775.6	29.27	164.168	
5,600.0	5,524.4	5,489.4	5,456.0	18.6	12.7	-98.34	-361.9	-4,070.8	4,805.4	4,775.8	29.62	162.231	
5,700.0	5,624.4	5,577.5	5,544.1	18.8	12.9	-98.34	-361.6	-4,071.5	4,806.1	4,776.2	29.94	160.516	
5,800.0	5,724.4	5,679.0	5,645.6	18.9	13.0	-98.33	-361.5	-4,072.3	4,806.9	4,776.6	30.29	158.680	
5,900.0	5,824.4	5,769.0	5,735.6	19.1	13.2	-98.33	-361.6	-4,073.1	4,807.8	4,777.2	30.62	156.999	
6,000.0	5,924.4	5,875.6	5,842.2	19.2	13.4	-98.33	-361.5	-4,074.0	4,808.7	4,777.7	30.99	155.173	
6,100.0	6,024.4	5,971.0	5,937.5	19.4	13.6	-98.34	-362.2	-4,074.8	4,809.6	4,778.2	31.34	153.489	
6,200.0	6,124.4	6,065.0	6,031.6	19.5	13.8	-98.35	-363.2	-4,075.6	4,810.5	4,778.9	31.68	151.839	
6,300.0	6,224.4	6,153.0	6,119.6	19.7	13.9	-98.36	-364.2	-4,076.5	4,811.7	4,779.7	32.02	150.278	
6,400.0	6,324.4	6,246.7	6,213.3	19.8	14.1	-98.37	-365.3	-4,077.7	4,813.1	4,780.8	32.37	148.690	
6,435.4	6,359.8	6,280.2	6,246.8	19.9	14.2	-98.37	-365.7	-4,078.1	4,813.7	4,781.2	32.50	148.132	
6,450.0	6,374.4	6,294.0	6,260.5	19.9	14.2	-8.37	-365.9	-4,078.3	4,813.7	4,784.6	29.10	165.397	
6,500.0	6,424.3	6,356.7	6,323.2	19.9	14.3	-8.41	-366.6	-4,079.1	4,811.7	4,782.6	29.13	165.197	
6,550.0	6,473.9	6,414.1	6,380.6	19.9	14.5	-8.50	-367.3	-4,079.6	4,806.1	4,777.1	29.02	165.630	
6,600.0	6,522.9	6,453.0	6,419.5	19.9	14.5	-8.63	-367.8	-4,080.0	4,797.1	4,768.3	28.75	166.851	
6,650.0	6,571.2	6,493.0	6,459.5	19.9	14.6	-8.80	-368.3	-4,080.5	4,784.8	4,756.4	28.37	168.658	
6,700.0	6,618.4	6,543.4	6,509.9	19.8	14.7	-9.04	-368.8	-4,081.2	4,769.3	4,741.4	27.90	170.966	
6,750.0	6,664.3	6,593.5	6,560.0	19.8	14.8	-9.35	-369.1	-4,081.8	4,750.4	4,723.1	27.32	173.897	
6,800.0	6,708.8	6,635.9	6,602.4	19.7	14.9	-9.72	-369.4	-4,082.3	4,728.5	4,701.9	26.63	177.556	
6,850.0	6,751.6	6,676.6	6,643.1	19.6	15.0	-10.17	-369.8	-4,082.9	4,703.5	4,677.6	25.86	181.887	
6,900.0	6,792.5	6,718.3	6,684.8	19.5	15.1	-10.73	-370.1	-4,083.4	4,675.6	4,650.6	25.02	186.847	
6,950.0	6,831.2	6,758.1	6,724.6	19.4	15.1	-11.40	-370.3	-4,083.9	4,645.0	4,620.8	24.14	192.421	
7,000.0	6,867.7	6,797.4	6,763.9	19.3	15.2	-12.22	-370.3	-4,084.5	4,611.7	4,588.4	23.24	198.473	
7,050.0	6,901.7	6,835.2	6,801.7	19.3	15.3	-13.23	-370.4	-4,085.0	4,575.9	4,553.6	22.35	204.769	
7,100.0	6,933.0	6,870.4	6,836.9	19.3	15.3	-14.49	-370.5	-4,085.4	4,537.8	4,516.3	21.52	210.881	
7,150.0	6,961.6	6,905.3	6,871.8	19.3	15.4	-16.08	-370.6	-4,085.8	4,497.6	4,476.8	20.82	215.998	
7,200.0	6,987.2	6,936.5	6,903.0	19.4	15.5	-18.11	-370.7	-4,086.1	4,455.5	4,435.2	20.34	219.001	
7,250.0	7,009.8	6,961.0	6,927.5	19.6	15.5	-20.72	-370.8	-4,086.3	4,411.7	4,391.5	20.20	218.368	
7,300.0	7,029.2	6,976.4	6,942.9	19.9	15.5	-24.15	-370.8	-4,086.5	4,366.4	4,345.8	20.56	212.421	
7,350.0	7,045.3	6,987.9	6,954.4	20.2	15.6	-28.85	-370.9	-4,086.6	4,319.9	4,298.2	21.65	199.571	
7,400.0	7,058.1	6,997.2	6,963.6	20.6	15.6	-35.56	-370.9	-4,086.7	4,272.4	4,248.6	23.79	179.586	
7,450.0	7,067.5	7,004.1	6,970.6	21.2	15.6	-45.48	-370.9	-4,086.8	4,224.1	4,196.8	27.31	154.682	
7,500.0	7,073.5	7,008.7	6,975.2	21.8	15.6	-60.26	-371.0	-4,086.8	4,175.2	4,143.2	32.08	130.136	
7,550.0	7,075.9	7,010.9	6,977.3	22.5	15.6	-80.64	-371.0	-4,086.8	4,126.1	4,089.8	36.31	113.624	
7,563.9	7,076.0	7,011.0	6,977.5	22.7	15.6	-86.98	-371.0	-4,086.8	4,112.4	4,075.4	36.92	111.374	
7,600.0	7,075.8	7,011.3	6,977.7	23.2	15.6	-86.99	-371.0	-4,086.9	4,076.8	4,039.4	37.48	108.785	
7,700.0	7,075.3	7,011.8	6,978.3	24.9	15.6	-87.04	-371.0	-4,086.9	3,978.4	3,939.2	39.16	101.594	
7,800.0	7,074.9	7,012.4	6,978.9	26.7	15.6	-87.09	-371.0	-4,086.9	3,880.0	3,839.0	41.03	94.559	
7,900.0	7,074.4	7,013.0	6,979.5	28.8	15.6	-87.13	-371.0	-4,086.9	3,781.7	3,738.7	43.06	87.826	
8,000.0	7,073.9	7,013.6	6,980.1	30.9	15.6	-87.18	-371.0	-4,086.9	3,683.5	3,638.3	45.21	81.479	
8,100.0	7,073.4	7,014.2	6,980.7	33.2	15.6	-87.23	-371.0	-4,086.9	3,585.5	3,538.0	47.46	75.552	
8,200.0	7,072.9	7,014.9	6,981.3	35.5	15.6	-87.28	-371.0	-4,086.9	3,487.5	3,437.7	49.79	70.050	
8,300.0	7,072.4	7,015.5	6,982.0	37.9	15.6	-87.33	-371.0	-4,086.9	3,389.6	3,337.4	52.18	64.961	
8,400.0	7,071.9	7,016.1	6,982.6	40.3	15.6	-87.39	-371.0	-4,086.9	3,291.9	3,237.3	54.63	60.261	
8,500.0	7,071.5	7,016.8	6,983.2	42.8	15.6	-87.44	-371.0	-4,086.9	3,194.3	3,137.2	57.12	55.923	
8,600.0	7,071.0	7,017.4	6,983.9	45.4	15.6	-87.49	-371.0	-4,086.9	3,096.8	3,037.2	59.65	51.918	

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 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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	7,070.5	7,018.1	6,984.6	47.9	15.6	-87.55	-371.0	-4,086.9	2,999.6	2,937.4	62.21	48.217	
8,800.0	7,070.0	7,018.8	6,985.2	50.5	15.6	-87.60	-371.0	-4,087.0	2,902.5	2,837.7	64.80	44.793	
8,900.0	7,069.5	7,019.5	6,985.9	53.1	15.6	-87.66	-371.0	-4,087.0	2,805.6	2,738.2	67.41	41.621	
9,000.0	7,069.0	7,020.1	6,986.6	55.8	15.6	-87.71	-371.0	-4,087.0	2,708.9	2,638.9	70.04	38.678	
9,100.0	7,068.5	7,020.8	6,987.3	58.4	15.6	-87.77	-371.0	-4,087.0	2,612.5	2,539.8	72.68	35.943	
9,200.0	7,068.1	7,021.6	6,988.0	61.1	15.6	-87.83	-371.1	-4,087.0	2,516.4	2,441.1	75.35	33.398	
9,300.0	7,067.6	7,022.3	6,988.8	63.7	15.6	-87.89	-371.1	-4,087.0	2,420.6	2,342.6	78.02	31.025	
9,400.0	7,067.1	7,023.0	6,989.5	66.4	15.6	-87.95	-371.1	-4,087.0	2,325.1	2,244.4	80.71	28.809	
9,500.0	7,066.6	7,023.8	6,990.2	69.1	15.6	-88.01	-371.1	-4,087.0	2,230.1	2,146.7	83.40	26.738	
9,600.0	7,066.1	7,024.5	6,991.0	71.8	15.6	-88.07	-371.1	-4,087.0	2,135.5	2,049.4	86.11	24.799	
9,700.0	7,065.6	7,025.3	6,991.8	74.5	15.6	-88.13	-371.1	-4,087.0	2,041.4	1,952.5	88.82	22.982	
9,800.0	7,065.1	7,026.1	6,992.6	77.2	15.6	-88.19	-371.1	-4,087.1	1,947.9	1,856.3	91.54	21.278	
9,900.0	7,064.7	7,026.9	6,993.3	80.0	15.6	-88.26	-371.1	-4,087.1	1,855.0	1,760.8	94.27	19.678	
10,000.0	7,064.2	7,027.7	6,994.2	82.7	15.6	-88.32	-371.1	-4,087.1	1,763.0	1,666.0	97.00	18.174	
10,100.0	7,063.7	7,028.5	6,995.0	85.4	15.7	-88.39	-371.1	-4,087.1	1,671.8	1,572.1	99.74	16.762	
10,200.0	7,063.2	7,029.3	6,995.8	88.2	15.7	-88.46	-371.1	-4,087.1	1,581.8	1,479.3	102.48	15.434	
10,300.0	7,062.7	7,030.2	6,996.6	90.9	15.7	-88.52	-371.1	-4,087.1	1,493.0	1,387.7	105.23	14.187	
10,400.0	7,062.2	7,031.0	6,997.5	93.6	15.7	-88.59	-371.1	-4,087.1	1,405.7	1,297.7	107.98	13.017	
10,500.0	7,061.7	7,031.9	6,998.4	96.4	15.7	-88.66	-371.1	-4,087.1	1,320.2	1,209.4	110.74	11.922	
10,600.0	7,061.3	7,032.8	6,999.3	99.2	15.7	-88.74	-371.1	-4,087.2	1,236.9	1,123.4	113.50	10.898	
10,700.0	7,060.8	7,033.7	7,000.2	101.9	15.7	-88.81	-371.1	-4,087.2	1,156.2	1,039.9	116.26	9.945	
10,800.0	7,060.3	7,034.6	7,001.1	104.7	15.7	-88.88	-371.1	-4,087.2	1,078.8	959.7	119.02	9.064	
10,900.0	7,059.8	7,035.5	7,002.0	107.4	15.7	-88.96	-371.2	-4,087.2	1,005.3	883.5	121.79	8.255	
11,000.0	7,059.3	7,036.5	7,002.9	110.2	15.7	-89.04	-371.2	-4,087.2	936.8	812.3	124.56	7.521	
11,100.0	7,058.8	7,037.4	7,003.9	113.0	15.7	-89.11	-371.2	-4,087.2	874.4	747.1	127.33	6.867	
11,200.0	7,058.3	7,038.4	7,004.9	115.7	15.7	-89.19	-371.2	-4,087.2	819.5	689.4	130.10	6.299	
11,300.0	7,057.9	7,039.4	7,005.9	118.5	15.7	-89.27	-371.2	-4,087.3	773.6	640.7	132.88	5.822	
11,400.0	7,057.4	7,040.4	7,006.9	121.3	15.7	-89.36	-371.2	-4,087.3	738.5	602.9	135.65	5.444	
11,500.0	7,056.9	7,041.5	7,007.9	124.0	15.7	-89.44	-371.2	-4,087.3	715.8	577.4	138.43	5.171	
11,600.0	7,056.4	7,042.5	7,009.0	126.8	15.7	-89.52	-371.2	-4,087.3	706.6	565.4	141.21	5.004	
11,615.3	7,056.3	7,042.7	7,009.1	127.2	15.7	-89.54	-371.2	-4,087.3	706.4	564.8	141.64	4.988	CC, ES
11,686.6	7,056.0	7,043.4	7,009.9	129.2	15.7	-89.60	-371.2	-4,087.3	710.0	566.4	143.62	4.943	SF

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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	-89.32	47.0	-3,979.3	3,979.8				
100.0	100.0	59.0	59.0	0.1	0.1	-89.32	47.0	-3,979.3	3,979.6	3,979.4	0.16	N/A	
200.0	200.0	159.8	159.8	0.3	0.2	-89.32	47.0	-3,979.3	3,979.6	3,979.1	0.50	7,982.053	
300.0	300.0	260.6	260.6	0.5	0.3	-89.32	47.0	-3,979.2	3,979.5	3,978.7	0.83	4,767.373	
400.0	400.0	361.4	361.4	0.8	0.4	-89.32	47.1	-3,979.2	3,979.5	3,978.3	1.17	3,398.580	
402.4	402.4	363.8	363.8	0.8	0.4	-153.20	47.1	-3,979.2	3,979.5	3,978.3	1.18	3,376.635	
500.0	500.0	462.2	462.2	1.0	0.5	-153.20	47.2	-3,979.1	3,980.9	3,979.4	1.50	2,649.145	
600.0	599.8	562.9	562.9	1.2	0.6	-153.19	47.3	-3,979.0	3,985.5	3,983.7	1.84	2,166.545	
700.0	699.5	1,318.7	1,314.0	1.5	2.5	-153.23	74.1	-3,920.0	3,989.0	3,985.2	3.76	1,061.884	
800.0	798.7	1,775.7	1,754.5	1.7	4.7	-152.65	143.8	-3,821.8	3,976.2	3,970.7	5.54	718.145	
900.0	897.5	1,868.2	1,842.1	2.0	5.3	-152.57	162.2	-3,798.5	3,964.8	3,958.6	6.16	643.941	
1,000.0	995.6	1,982.0	1,949.8	2.4	6.0	-152.44	185.7	-3,769.9	3,956.7	3,949.8	6.90	573.722	
1,000.1	995.8	1,982.3	1,950.0	2.4	6.0	-152.44	185.7	-3,769.9	3,956.7	3,949.8	6.90	573.612	
1,100.0	1,093.4	2,048.4	2,012.4	2.8	6.4	-152.32	199.7	-3,753.2	3,950.1	3,942.6	7.46	529.225	
1,200.0	1,191.3	2,105.6	2,066.7	3.2	6.7	-152.22	211.7	-3,739.4	3,944.6	3,936.6	8.00	493.286	
1,300.0	1,289.1	2,291.2	2,243.2	3.6	7.7	-151.93	247.8	-3,694.7	3,939.7	3,930.6	9.05	435.234	
1,400.0	1,386.9	2,404.2	2,350.0	4.1	8.4	-151.76	269.3	-3,665.3	3,932.2	3,922.4	9.85	399.061	
1,500.0	1,484.7	2,496.9	2,437.7	4.5	8.9	-151.61	287.6	-3,641.4	3,925.1	3,914.5	10.58	371.044	
1,600.0	1,582.5	2,650.0	2,581.7	4.9	9.9	-151.34	319.3	-3,600.3	3,916.8	3,905.1	11.63	336.838	
1,700.0	1,680.3	2,710.6	2,638.7	5.4	10.3	-151.22	332.4	-3,584.0	3,908.6	3,896.4	12.24	319.452	
1,800.0	1,778.1	2,751.0	2,676.7	5.8	10.6	-151.15	341.1	-3,573.5	3,901.7	3,888.9	12.74	306.144	
1,900.0	1,875.9	2,808.7	2,731.2	6.3	10.9	-151.04	353.4	-3,559.3	3,896.0	3,882.6	13.32	292.423	
2,000.0	1,973.8	2,899.5	2,817.6	6.7	11.5	-150.88	372.0	-3,538.2	3,891.6	3,877.5	14.07	276.683	
2,100.0	2,071.6	3,012.1	2,924.2	7.2	12.1	-150.67	396.0	-3,511.1	3,886.5	3,871.5	14.93	260.338	
2,200.0	2,169.4	3,082.7	2,991.1	7.6	12.5	-150.54	410.9	-3,494.4	3,881.8	3,866.2	15.58	249.147	
2,300.0	2,267.2	3,154.6	3,059.6	8.1	12.9	-150.42	425.8	-3,478.0	3,878.0	3,861.7	16.24	238.855	
2,400.0	2,365.0	3,258.1	3,158.2	8.5	13.5	-150.24	446.7	-3,454.8	3,874.6	3,857.6	17.03	227.466	
2,500.0	2,462.8	3,381.4	3,276.1	9.0	14.2	-150.07	469.2	-3,426.4	3,870.6	3,852.7	17.90	216.184	
2,600.0	2,560.6	3,481.3	3,371.5	9.4	14.8	-149.93	487.3	-3,403.3	3,866.4	3,847.7	18.68	206.997	
2,700.0	2,658.5	3,622.1	3,505.6	9.9	15.6	-149.70	514.6	-3,369.6	3,861.5	3,841.9	19.68	196.230	
2,800.0	2,756.3	3,710.3	3,589.4	10.3	16.1	-149.57	531.5	-3,348.5	3,856.6	3,836.2	20.42	188.851	
2,900.0	2,854.1	3,854.3	3,726.5	10.8	17.0	-149.35	558.5	-3,313.2	3,851.2	3,829.8	21.43	179.678	
3,000.0	2,951.9	3,939.5	3,807.3	11.2	17.5	-149.21	574.7	-3,291.8	3,845.3	3,823.1	22.17	173.414	
3,100.0	3,049.7	4,009.0	3,873.3	11.7	17.9	-149.10	588.1	-3,274.8	3,840.1	3,817.2	22.84	168.143	
3,200.0	3,147.5	4,083.1	3,943.9	12.1	18.4	-148.98	602.5	-3,257.3	3,835.7	3,812.2	23.52	163.070	
3,300.0	3,245.3	4,199.4	4,055.0	12.6	19.0	-148.82	623.6	-3,230.1	3,831.5	3,807.1	24.40	157.047	
3,400.0	3,343.2	4,379.5	4,225.9	13.0	20.1	-148.53	657.9	-3,184.8	3,825.2	3,799.6	25.62	149.286	
3,500.0	3,441.0	4,441.8	4,285.0	13.5	20.5	-148.43	669.5	-3,169.0	3,819.2	3,792.9	26.26	145.421	
3,600.0	3,538.8	4,576.1	4,412.2	13.9	21.3	-148.20	696.0	-3,134.8	3,813.0	3,785.7	27.29	139.741	
3,700.0	3,636.6	4,669.1	4,500.0	14.4	21.9	-148.04	714.6	-3,110.7	3,806.5	3,778.4	28.10	135.439	
3,800.0	3,734.4	4,757.7	4,583.9	14.8	22.5	-147.88	732.1	-3,088.2	3,800.4	3,771.5	28.90	131.517	
3,900.0	3,832.2	4,844.7	4,666.2	15.3	23.0	-147.73	749.5	-3,066.1	3,794.5	3,764.8	29.69	127.816	
4,000.0	3,930.0	4,905.0	4,723.4	15.7	23.4	-147.62	761.7	-3,051.1	3,789.3	3,759.0	30.34	124.893	
4,059.3	3,988.0	4,949.0	4,765.1	16.0	23.7	-147.54	770.7	-3,040.5	3,786.6	3,755.9	30.77	123.071	
4,100.0	4,027.9	4,975.1	4,789.9	16.2	23.8	-147.47	776.0	-3,034.4	3,784.8	3,753.7	31.04	121.937	
4,200.0	4,126.3	5,055.9	4,866.9	16.5	24.3	-147.25	792.1	-3,015.8	3,778.7	3,746.9	31.74	119.049	
4,300.0	4,225.3	5,161.4	4,967.6	16.8	24.9	-146.93	812.0	-2,991.7	3,769.8	3,737.3	32.53	115.879	
4,400.0	4,324.7	5,299.7	5,099.7	17.0	25.7	-146.47	837.0	-2,959.2	3,757.4	3,723.9	33.48	112.215	
4,500.0	4,424.4	5,373.0	5,169.5	17.2	26.1	-146.09	851.1	-2,941.6	3,741.7	3,707.6	34.09	109.751	
4,600.0	4,524.4	5,431.9	5,225.7	17.3	26.5	-145.71	862.1	-2,927.9	3,724.1	3,689.6	34.58	107.694	
4,659.4	4,583.8	5,466.0	5,258.4	17.4	26.7	-81.59	868.1	-2,920.4	3,713.0	3,676.2	36.80	100.898	
4,700.0	4,624.4	5,466.0	5,258.4	17.5	26.7	-81.59	868.1	-2,920.4	3,705.4	3,668.6	36.85	100.552	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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	4,724.4	5,528.1	5,318.3	17.6	27.0	-81.40	878.2	-2,907.8	3,687.5	3,650.3	37.17	99.200	
4,900.0	4,824.4	5,560.0	5,349.3	17.7	27.1	-81.31	883.1	-2,901.7	3,671.0	3,633.6	37.41	98.133	
5,000.0	4,924.4	5,624.8	5,412.4	17.8	27.4	-81.14	892.3	-2,890.3	3,655.7	3,618.0	37.72	96.912	
5,100.0	5,024.4	5,686.9	5,473.2	18.0	27.7	-80.99	900.2	-2,880.5	3,641.9	3,603.8	38.03	95.773	
5,200.0	5,124.4	5,746.0	5,531.3	18.1	27.9	-80.87	906.4	-2,871.6	3,628.7	3,590.4	38.32	94.689	
5,300.0	5,224.4	5,840.0	5,624.0	18.2	28.2	-80.70	915.3	-2,858.6	3,616.4	3,577.7	38.70	93.451	
5,400.0	5,324.4	5,884.1	5,667.6	18.4	28.4	-80.62	919.3	-2,853.0	3,605.2	3,566.2	38.95	92.568	
5,500.0	5,424.4	5,946.6	5,729.4	18.5	28.6	-80.51	924.9	-2,845.7	3,595.0	3,555.8	39.23	91.630	
5,600.0	5,524.4	6,025.0	5,807.0	18.6	28.8	-80.38	932.0	-2,837.2	3,585.8	3,546.2	39.55	90.670	
5,700.0	5,624.4	6,079.0	5,860.5	18.8	29.0	-80.29	936.7	-2,831.9	3,577.4	3,537.6	39.80	89.880	
5,800.0	5,724.4	6,140.1	5,921.2	18.9	29.1	-80.20	941.5	-2,826.6	3,570.2	3,530.2	40.07	89.100	
5,900.0	5,824.4	6,212.0	5,992.7	19.1	29.3	-80.11	946.3	-2,821.3	3,564.0	3,523.7	40.35	88.326	
6,000.0	5,924.4	6,267.9	6,048.4	19.2	29.4	-80.05	949.2	-2,817.8	3,558.8	3,518.2	40.60	87.664	
6,100.0	6,024.4	6,331.4	6,111.8	19.4	29.5	-80.01	951.6	-2,814.8	3,554.7	3,513.9	40.85	87.010	
6,200.0	6,124.4	6,399.0	6,179.4	19.5	29.6	-79.98	952.8	-2,812.4	3,551.5	3,510.4	41.12	86.377	
6,300.0	6,224.4	6,472.3	6,252.7	19.7	29.7	-79.97	953.2	-2,810.6	3,549.2	3,507.8	41.38	85.769	
6,400.0	6,324.4	6,552.0	6,332.4	19.8	29.8	-79.96	953.5	-2,809.2	3,547.5	3,505.9	41.65	85.175	
6,435.4	6,359.8	6,586.0	6,366.3	19.9	29.9	-79.96	953.6	-2,808.7	3,547.1	3,505.3	41.75	84.954	
6,450.0	6,374.4	6,586.0	6,366.3	19.9	29.9	10.05	953.6	-2,808.7	3,546.8	3,505.6	41.10	86.293	
6,500.0	6,424.3	6,629.9	6,410.3	19.9	29.9	10.10	953.5	-2,808.3	3,543.5	3,502.6	40.92	86.594	
6,550.0	6,473.9	6,667.0	6,447.3	19.9	29.9	10.20	953.3	-2,808.1	3,537.1	3,496.5	40.59	87.148	
6,600.0	6,522.9	6,708.3	6,488.7	19.9	30.0	10.36	953.0	-2,808.0	3,527.4	3,487.3	40.12	87.930	
6,650.0	6,571.2	6,751.5	6,531.8	19.9	30.0	10.58	952.6	-2,808.0	3,514.5	3,475.0	39.52	88.936	
6,700.0	6,618.4	6,794.2	6,574.5	19.8	30.0	10.88	952.3	-2,808.1	3,498.4	3,459.6	38.80	90.167	
6,750.0	6,664.3	6,836.1	6,616.5	19.8	30.1	11.25	952.1	-2,808.2	3,479.1	3,441.1	37.98	91.614	
6,800.0	6,708.8	6,877.2	6,657.5	19.7	30.1	11.71	951.8	-2,808.3	3,456.7	3,419.6	37.06	93.263	
6,850.0	6,751.6	6,918.1	6,698.4	19.6	30.1	12.28	951.5	-2,808.5	3,431.4	3,395.3	36.09	95.087	
6,900.0	6,792.5	6,957.2	6,737.5	19.5	30.2	12.96	951.1	-2,808.8	3,403.2	3,368.1	35.07	97.040	
6,950.0	6,831.2	6,986.3	6,766.6	19.4	30.2	13.77	950.7	-2,809.0	3,372.4	3,338.3	34.03	99.098	
7,000.0	6,867.7	7,013.0	6,793.4	19.3	30.2	14.75	950.4	-2,809.3	3,339.1	3,306.0	33.02	101.113	
7,050.0	6,901.7	7,038.1	6,818.4	19.3	30.2	15.94	950.2	-2,809.6	3,303.4	3,271.3	32.10	102.903	
7,100.0	6,933.0	7,062.4	6,842.7	19.3	30.3	17.40	950.1	-2,810.0	3,265.6	3,234.3	31.34	104.207	
7,150.0	6,961.6	7,086.7	6,867.0	19.3	30.3	19.24	949.9	-2,810.4	3,225.8	3,195.0	30.82	104.663	
7,200.0	6,987.2	7,108.7	6,889.0	19.4	30.3	21.55	949.6	-2,810.8	3,184.1	3,153.4	30.65	103.870	
7,250.0	7,009.8	7,128.3	6,908.6	19.6	30.3	24.50	949.4	-2,811.2	3,140.8	3,109.8	30.98	101.385	
7,300.0	7,029.2	7,148.0	6,928.3	19.9	30.3	28.42	949.2	-2,811.7	3,096.0	3,064.0	31.99	96.775	
7,350.0	7,045.3	7,166.6	6,946.9	20.2	30.3	33.72	949.0	-2,812.1	3,049.9	3,016.0	33.91	89.947	
7,400.0	7,058.1	7,184.8	6,965.1	20.6	30.3	41.10	948.7	-2,812.5	3,002.9	2,965.9	36.96	81.240	
7,450.0	7,067.5	7,198.4	6,978.7	21.2	30.3	51.33	948.5	-2,812.7	2,955.0	2,913.9	41.10	71.890	
7,500.0	7,073.5	7,207.4	6,987.7	21.8	30.3	65.18	948.3	-2,812.9	2,906.5	2,860.9	45.63	63.700	
7,550.0	7,075.9	7,211.9	6,992.1	22.5	30.3	82.29	948.3	-2,813.0	2,857.8	2,809.1	48.66	58.728	
7,563.9	7,076.0	7,212.3	6,992.6	22.7	30.3	87.34	948.2	-2,813.0	2,844.2	2,795.2	48.95	58.107	
7,600.0	7,075.8	7,213.0	6,993.2	23.2	30.3	87.41	948.2	-2,813.0	2,809.0	2,759.5	49.50	56.748	
7,700.0	7,075.3	7,214.8	6,995.0	24.9	30.3	87.57	948.2	-2,813.1	2,711.5	2,660.3	51.18	52.979	
7,800.0	7,074.9	7,216.5	6,996.8	26.7	30.3	87.74	948.2	-2,813.1	2,614.2	2,561.1	53.05	49.277	
7,900.0	7,074.4	7,218.3	6,998.5	28.8	30.3	87.90	948.1	-2,813.1	2,517.1	2,462.0	55.07	45.704	
8,000.0	7,073.9	7,220.0	7,000.3	30.9	30.3	88.06	948.1	-2,813.2	2,420.2	2,363.0	57.22	42.297	
8,100.0	7,073.4	7,221.7	7,001.9	33.2	30.3	88.22	948.1	-2,813.2	2,323.6	2,264.2	59.46	39.076	
8,200.0	7,072.9	7,223.3	7,003.6	35.5	30.4	88.37	948.0	-2,813.2	2,227.3	2,165.5	61.79	36.048	
8,300.0	7,072.4	7,225.0	7,005.2	37.9	30.4	88.53	948.0	-2,813.2	2,131.4	2,067.2	64.18	33.210	
8,400.0	7,071.9	7,226.6	7,006.9	40.3	30.4	88.68	948.0	-2,813.3	2,035.8	1,969.2	66.62	30.557	
8,500.0	7,071.5	7,228.2	7,008.4	42.8	30.4	88.82	948.0	-2,813.3	1,940.7	1,871.6	69.11	28.081	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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
8,600.0	7,071.0	7,229.7	7,010.0	45.4	30.4	88.97	947.9	-2,813.3	1,846.1	1,774.4	71.63	25.770	
8,700.0	7,070.5	7,231.3	7,011.5	47.9	30.4	89.11	947.9	-2,813.4	1,752.0	1,677.8	74.19	23.615	
8,800.0	7,070.0	7,232.8	7,013.0	50.5	30.4	89.25	947.9	-2,813.4	1,658.7	1,581.9	76.77	21.605	
8,900.0	7,069.5	7,234.3	7,014.5	53.1	30.4	89.39	947.8	-2,813.4	1,566.2	1,486.9	79.38	19.731	
9,000.0	7,069.0	7,235.7	7,016.0	55.8	30.4	89.53	947.8	-2,813.4	1,474.7	1,392.7	82.00	17.984	
9,100.0	7,068.5	7,237.2	7,017.4	58.4	30.4	89.67	947.8	-2,813.5	1,384.4	1,299.7	84.64	16.355	
9,200.0	7,068.1	7,238.6	7,018.9	61.1	30.4	89.80	947.8	-2,813.5	1,295.5	1,208.2	87.30	14.839	
9,300.0	7,067.6	7,240.0	7,020.3	63.7	30.4	89.93	947.7	-2,813.5	1,208.3	1,118.3	89.97	13.430	
9,400.0	7,067.1	7,241.4	7,021.6	66.4	30.4	90.06	947.7	-2,813.5	1,123.2	1,030.6	92.65	12.124	
9,500.0	7,066.6	7,242.6	7,022.8	69.1	30.4	90.17	947.7	-2,813.6	1,040.8	945.5	95.34	10.917	
9,600.0	7,066.1	7,243.8	7,024.1	71.8	30.4	90.28	947.7	-2,813.6	961.8	863.7	98.03	9.811	
9,700.0	7,065.6	7,245.0	7,025.3	74.5	30.4	90.40	947.6	-2,813.6	887.0	786.2	100.74	8.804	
9,800.0	7,065.1	7,246.2	7,026.4	77.2	30.4	90.51	947.6	-2,813.6	817.5	714.1	103.45	7.903	
9,900.0	7,064.7	7,247.4	7,027.6	80.0	30.4	90.62	947.6	-2,813.6	755.0	648.9	106.17	7.112	
10,000.0	7,064.2	7,248.5	7,028.8	82.7	30.4	90.73	947.6	-2,813.7	701.2	592.4	108.89	6.440	
10,100.0	7,063.7	7,249.7	7,029.9	85.4	30.4	90.83	947.5	-2,813.7	658.3	546.7	111.62	5.898	
10,200.0	7,063.2	7,250.8	7,031.0	88.2	30.4	90.94	947.5	-2,813.7	628.6	514.2	114.35	5.497	
10,300.0	7,062.7	7,251.9	7,032.2	90.9	30.4	91.04	947.5	-2,813.7	613.8	496.7	117.09	5.242	
10,341.6	7,062.5	7,252.4	7,032.6	92.0	30.4	91.09	947.5	-2,813.7	612.4	494.2	118.23	5.180	CC, ES
10,400.0	7,062.2	7,253.0	7,033.3	93.6	30.4	91.15	947.5	-2,813.7	615.2	495.3	119.83	5.134	SF
10,500.0	7,061.7	7,254.1	7,034.4	96.4	30.4	91.25	947.5	-2,813.7	632.5	510.0	122.57	5.161	
10,600.0	7,061.3	7,255.2	7,035.5	99.2	30.4	91.35	947.4	-2,813.8	664.7	539.3	125.31	5.304	
10,700.0	7,060.8	7,256.3	7,036.5	101.9	30.4	91.45	947.4	-2,813.8	709.5	581.5	128.06	5.541	
10,800.0	7,060.3	7,257.3	7,037.6	104.7	30.4	91.55	947.4	-2,813.8	764.9	634.1	130.81	5.847	
10,900.0	7,059.8	7,258.4	7,038.7	107.4	30.4	91.65	947.4	-2,813.8	828.7	695.1	133.56	6.205	
11,000.0	7,059.3	7,259.4	7,039.7	110.2	30.4	91.75	947.4	-2,813.8	899.1	762.8	136.32	6.596	
11,100.0	7,058.8	7,260.5	7,040.7	113.0	30.4	91.84	947.3	-2,813.8	974.7	835.6	139.07	7.009	
11,200.0	7,058.3	7,261.5	7,041.7	115.7	30.4	91.94	947.3	-2,813.9	1,054.4	912.5	141.83	7.434	
11,300.0	7,057.9	7,262.5	7,042.8	118.5	30.4	92.03	947.3	-2,813.9	1,137.3	992.7	144.59	7.865	
11,400.0	7,057.4	7,263.5	7,043.8	121.3	30.4	92.13	947.3	-2,813.9	1,222.7	1,075.4	147.35	8.298	
11,500.0	7,056.9	7,264.5	7,044.7	124.0	30.4	92.22	947.3	-2,813.9	1,310.2	1,160.1	150.11	8.728	
11,600.0	7,056.4	7,265.5	7,045.7	126.8	30.4	92.31	947.2	-2,813.9	1,399.4	1,246.5	152.87	9.154	
11,686.6	7,056.0	7,266.3	7,046.6	129.2	30.4	92.39	947.2	-2,813.9	1,477.8	1,322.5	155.26	9.518	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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	-89.63	25.8	-3,976.8	3,977.1				
100.0	100.0	49.9	49.9	0.1	0.1	-89.63	25.9	-3,976.9	3,977.0	3,976.8	0.15	N/A	
200.0	200.0	135.1	135.1	0.3	0.2	-89.62	26.2	-3,977.2	3,977.4	3,976.9	0.48	8,341.556	
300.0	300.0	220.3	220.3	0.5	0.3	-89.61	26.8	-3,977.9	3,978.1	3,977.3	0.80	4,977.283	
400.0	400.0	305.5	305.5	0.8	0.3	-89.60	27.6	-3,978.8	3,979.3	3,978.2	1.12	3,547.571	
500.0	500.0	390.7	390.7	1.0	0.4	-153.45	28.8	-3,980.1	3,982.4	3,980.9	1.44	2,773.837	
600.0	599.8	475.7	475.7	1.2	0.5	-153.40	30.2	-3,981.7	3,988.9	3,987.2	1.76	2,265.394	
700.0	699.5	599.0	598.9	1.5	0.7	-153.35	32.8	-3,984.6	3,999.2	3,997.0	2.15	1,861.707	
800.0	798.7	765.3	765.2	1.7	1.0	-153.34	35.2	-3,985.5	4,010.6	4,007.9	2.69	1,491.899	
900.0	897.5	2,035.0	2,012.6	2.0	5.1	-155.45	-24.1	-3,798.7	4,008.5	4,002.6	5.90	679.313	
1,000.0	995.6	2,106.9	2,081.3	2.4	5.5	-155.73	-30.7	-3,778.2	3,997.0	3,990.7	6.36	628.688	
1,000.1	995.8	2,107.0	2,081.4	2.4	5.5	-155.73	-30.7	-3,778.1	3,997.0	3,990.7	6.36	628.621	
1,100.0	1,093.4	2,189.0	2,159.8	2.8	5.9	-155.93	-37.2	-3,755.2	3,987.8	3,980.9	6.86	581.057	
1,200.0	1,191.3	2,297.9	2,263.9	3.2	6.5	-156.20	-46.0	-3,724.7	3,978.6	3,971.1	7.47	532.497	
1,300.0	1,289.1	2,429.3	2,389.4	3.6	7.2	-156.58	-59.3	-3,687.7	3,969.4	3,961.2	8.19	484.665	
1,400.0	1,386.9	2,568.4	2,521.2	4.1	8.1	-157.00	-75.4	-3,646.5	3,958.6	3,949.6	8.98	440.920	
1,500.0	1,484.7	2,657.0	2,605.1	4.5	8.7	-157.28	-86.0	-3,620.0	3,947.8	3,938.3	9.58	412.056	
1,600.0	1,582.5	2,714.9	2,660.0	4.9	9.0	-157.46	-92.9	-3,603.1	3,937.8	3,927.7	10.07	391.166	
1,700.0	1,680.3	2,779.6	2,721.7	5.4	9.3	-157.66	-100.3	-3,584.8	3,928.8	3,918.2	10.58	371.422	
1,800.0	1,778.1	2,878.5	2,816.1	5.8	9.9	-157.95	-111.0	-3,557.4	3,920.5	3,909.2	11.21	349.802	
1,900.0	1,875.9	2,983.3	2,916.0	6.3	10.5	-158.25	-120.9	-3,527.7	3,911.6	3,899.7	11.86	329.798	
2,000.0	1,973.8	3,052.0	2,981.8	6.7	10.9	-158.44	-127.3	-3,508.6	3,903.4	3,891.0	12.39	315.108	
2,100.0	2,071.6	3,143.9	3,069.8	7.2	11.4	-158.69	-135.7	-3,483.7	3,895.9	3,882.9	12.99	299.832	
2,200.0	2,169.4	3,255.7	3,176.6	7.6	12.0	-159.02	-146.9	-3,452.5	3,887.7	3,874.0	13.69	284.017	
2,300.0	2,267.2	3,312.0	3,230.5	8.1	12.4	-159.18	-152.7	-3,437.3	3,880.6	3,866.4	14.19	273.548	
2,400.0	2,365.0	3,378.1	3,294.0	8.5	12.7	-159.37	-158.8	-3,420.1	3,874.4	3,859.7	14.70	263.522	
2,500.0	2,462.8	3,508.7	3,419.7	9.0	13.4	-159.72	-169.9	-3,386.2	3,868.6	3,853.2	15.45	250.447	
2,600.0	2,560.6	3,653.7	3,558.5	9.4	14.3	-160.13	-183.3	-3,346.5	3,861.2	3,844.9	16.27	237.348	
2,700.0	2,658.5	3,838.1	3,734.3	9.9	15.4	-160.67	-201.2	-3,293.7	3,853.0	3,835.8	17.27	223.149	
2,800.0	2,756.3	3,948.0	3,838.2	10.3	16.1	-161.03	-213.7	-3,260.3	3,843.0	3,825.0	18.01	213.386	
2,900.0	2,854.1	4,006.5	3,893.5	10.8	16.4	-161.22	-220.4	-3,242.8	3,833.6	3,815.0	18.53	206.840	
3,000.0	2,951.9	4,061.0	3,945.4	11.2	16.8	-161.39	-226.3	-3,227.1	3,825.5	3,806.4	19.04	200.918	
3,100.0	3,049.7	4,199.8	4,077.5	11.7	17.6	-161.83	-241.3	-3,187.0	3,817.3	3,797.4	19.89	191.918	
3,200.0	3,147.5	4,312.8	4,184.9	12.1	18.3	-162.17	-252.5	-3,153.8	3,808.7	3,788.1	20.64	184.544	
3,300.0	3,245.3	4,386.9	4,255.2	12.6	18.8	-162.41	-260.5	-3,131.9	3,800.1	3,778.9	21.23	179.005	
3,400.0	3,343.2	4,511.2	4,373.6	13.0	19.6	-162.79	-272.8	-3,096.0	3,792.4	3,770.4	22.03	172.165	
3,500.0	3,441.0	4,612.7	4,469.8	13.5	20.2	-163.11	-283.4	-3,065.6	3,783.6	3,760.8	22.74	166.372	
3,600.0	3,538.8	4,740.3	4,590.8	13.9	21.0	-163.51	-295.8	-3,026.9	3,774.4	3,750.8	23.57	160.163	
3,700.0	3,636.6	4,812.0	4,658.9	14.4	21.5	-163.73	-302.5	-3,005.4	3,765.5	3,741.4	24.15	155.907	
3,800.0	3,734.4	4,905.0	4,747.2	14.8	22.1	-164.01	-311.2	-2,977.6	3,757.0	3,732.2	24.83	151.321	
3,900.0	3,832.2	4,955.5	4,795.2	15.3	22.4	-164.17	-316.0	-2,962.7	3,749.2	3,723.9	25.32	148.063	
4,000.0	3,930.0	4,999.0	4,836.8	15.7	22.6	-164.30	-320.0	-2,950.7	3,743.0	3,717.2	25.79	145.153	
4,059.3	3,988.0	4,999.0	4,836.8	16.0	22.6	-164.30	-320.0	-2,950.7	3,740.3	3,714.3	25.95	144.108	
4,100.0	4,027.9	5,039.1	4,875.3	16.2	22.8	-164.40	-323.6	-2,940.1	3,738.1	3,711.9	26.23	142.503	
4,200.0	4,126.3	5,092.0	4,926.5	16.5	23.1	-164.51	-328.0	-2,927.2	3,732.0	3,705.4	26.69	139.853	
4,300.0	4,225.3	5,092.0	4,926.5	16.8	23.1	-164.47	-328.0	-2,927.2	3,724.4	3,697.5	26.89	138.487	
4,400.0	4,324.7	5,156.4	4,989.1	17.0	23.4	-164.56	-332.7	-2,913.1	3,714.6	3,687.4	27.28	136.190	
4,500.0	4,424.4	5,208.1	5,039.7	17.2	23.6	-164.59	-336.0	-2,903.0	3,703.4	3,675.8	27.56	134.365	
4,600.0	4,524.4	5,279.0	5,109.2	17.3	23.9	-164.64	-340.4	-2,889.4	3,689.4	3,661.5	27.86	132.445	
4,659.4	4,583.8	5,318.6	5,148.0	17.4	24.1	-100.77	-342.8	-2,882.1	3,679.9	3,640.9	38.94	94.489	
4,700.0	4,624.4	5,336.7	5,165.8	17.5	24.1	-100.79	-343.9	-2,878.9	3,673.3	3,634.3	39.05	94.057	
4,800.0	4,724.4	5,373.0	5,201.5	17.6	24.3	-100.84	-346.0	-2,872.9	3,658.2	3,618.9	39.31	93.068	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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
4,900.0	4,824.4	5,422.2	5,250.1	17.7	24.4	-100.91	-348.7	-2,865.5	3,644.6	3,605.0	39.58	92.084	
5,000.0	4,924.4	5,466.0	5,293.4	17.8	24.6	-100.96	-351.0	-2,859.7	3,632.5	3,592.7	39.84	91.184	
5,100.0	5,024.4	5,510.8	5,337.9	18.0	24.7	-101.01	-353.0	-2,854.6	3,622.0	3,581.9	40.08	90.373	
5,200.0	5,124.4	5,560.0	5,386.8	18.1	24.8	-101.05	-354.9	-2,849.7	3,612.9	3,572.6	40.33	89.578	
5,300.0	5,224.4	5,606.2	5,432.8	18.2	24.9	-101.09	-356.4	-2,845.8	3,605.3	3,564.7	40.56	88.884	
5,400.0	5,324.4	5,653.0	5,479.5	18.4	25.0	-101.12	-357.7	-2,842.6	3,599.1	3,558.3	40.79	88.225	
5,500.0	5,424.4	5,729.1	5,555.4	18.5	25.2	-101.16	-359.5	-2,838.2	3,593.9	3,552.8	41.07	87.515	
5,600.0	5,524.4	5,805.6	5,631.8	18.6	25.3	-101.19	-360.9	-2,834.4	3,589.4	3,548.1	41.33	86.839	
5,700.0	5,624.4	5,879.5	5,705.6	18.8	25.4	-101.22	-361.9	-2,831.4	3,585.6	3,544.0	41.59	86.206	
5,800.0	5,724.4	5,949.6	5,775.7	18.9	25.5	-101.23	-362.5	-2,829.1	3,582.6	3,540.8	41.84	85.621	
5,900.0	5,824.4	6,025.0	5,851.1	19.1	25.6	-101.25	-363.0	-2,827.4	3,580.5	3,538.4	42.09	85.064	
6,000.0	5,924.4	6,108.6	5,934.7	19.2	25.7	-101.26	-363.4	-2,826.0	3,579.0	3,536.6	42.35	84.519	
6,100.0	6,024.4	6,212.0	6,038.1	19.4	25.9	-101.27	-363.9	-2,824.2	3,577.3	3,534.7	42.63	83.921	
6,200.0	6,124.4	6,292.9	6,119.0	19.5	26.0	-101.27	-363.8	-2,823.0	3,575.9	3,533.0	42.88	83.390	
6,300.0	6,224.4	6,382.8	6,208.9	19.7	26.1	-101.27	-363.6	-2,822.3	3,575.1	3,531.9	43.14	82.865	
6,400.0	6,324.4	6,472.2	6,298.3	19.8	26.2	-101.27	-363.4	-2,821.8	3,574.5	3,531.1	43.40	82.354	
6,435.4	6,359.8	6,504.3	6,330.3	19.9	26.2	-101.27	-363.3	-2,821.7	3,574.4	3,530.9	43.50	82.176	
6,450.0	6,374.4	6,518.0	6,344.1	19.9	26.2	-11.27	-363.2	-2,821.7	3,574.2	3,540.7	33.47	106.798	
6,500.0	6,424.3	6,565.0	6,391.1	19.9	26.2	-11.32	-363.0	-2,821.6	3,571.3	3,538.1	33.27	107.329	
6,550.0	6,473.9	6,619.5	6,445.5	19.9	26.3	-11.44	-362.9	-2,821.5	3,565.1	3,532.1	32.98	108.108	
6,600.0	6,522.9	6,679.4	6,505.4	19.9	26.4	-11.64	-362.7	-2,821.2	3,555.3	3,522.8	32.58	109.135	
6,650.0	6,571.2	6,717.9	6,543.9	19.9	26.4	-11.89	-362.6	-2,821.0	3,542.3	3,510.2	32.04	110.544	
6,700.0	6,618.4	6,755.4	6,581.4	19.8	26.4	-12.22	-362.5	-2,820.9	3,526.1	3,494.6	31.42	112.237	
6,750.0	6,664.3	6,794.7	6,620.8	19.8	26.5	-12.64	-362.6	-2,820.9	3,506.8	3,476.1	30.71	114.177	
6,800.0	6,708.8	6,835.4	6,661.5	19.7	26.5	-13.16	-362.6	-2,821.0	3,484.5	3,454.5	29.95	116.331	
6,850.0	6,751.6	6,876.4	6,702.5	19.6	26.6	-13.81	-362.8	-2,821.0	3,459.2	3,430.1	29.16	118.645	
6,900.0	6,792.5	6,922.9	6,748.9	19.5	26.6	-14.61	-363.0	-2,821.0	3,431.1	3,402.7	28.36	120.967	
6,950.0	6,831.2	6,966.0	6,792.1	19.4	26.7	-15.58	-363.1	-2,821.0	3,400.2	3,372.6	27.60	123.213	
7,000.0	6,867.7	7,001.5	6,827.6	19.3	26.7	-16.74	-363.1	-2,821.0	3,366.7	3,339.8	26.89	125.203	
7,050.0	6,901.7	7,034.6	6,860.7	19.3	26.7	-18.16	-363.1	-2,821.0	3,330.8	3,304.5	26.32	126.556	
7,100.0	6,933.0	7,065.9	6,892.0	19.3	26.8	-19.90	-363.1	-2,821.0	3,292.8	3,266.8	25.97	126.800	
7,150.0	6,961.6	7,095.6	6,921.7	19.3	26.8	-22.08	-363.2	-2,821.0	3,252.7	3,226.7	25.95	125.360	
7,200.0	6,987.2	7,122.2	6,948.3	19.4	26.8	-24.83	-363.2	-2,820.9	3,210.7	3,184.3	26.38	121.689	
7,250.0	7,009.8	7,145.6	6,971.7	19.6	26.9	-28.35	-363.3	-2,820.9	3,167.2	3,139.7	27.45	115.395	
7,300.0	7,029.2	7,166.8	6,992.9	19.9	26.9	-32.95	-363.3	-2,820.8	3,122.2	3,092.9	29.33	106.448	
7,350.0	7,045.3	7,184.5	7,010.6	20.2	26.9	-39.05	-363.3	-2,820.8	3,076.1	3,043.9	32.21	95.501	
7,400.0	7,058.1	7,198.5	7,024.6	20.6	26.9	-47.19	-363.3	-2,820.8	3,029.0	2,992.9	36.17	83.753	
7,450.0	7,067.5	7,208.8	7,034.8	21.2	26.9	-58.00	-363.3	-2,820.7	2,981.3	2,940.3	40.95	72.800	
7,500.0	7,073.5	7,215.2	7,041.2	21.8	26.9	-71.71	-363.3	-2,820.7	2,933.0	2,887.4	45.59	64.333	
7,550.0	7,075.9	7,217.7	7,043.8	22.5	26.9	-87.42	-363.3	-2,820.7	2,884.5	2,836.1	48.40	59.600	
7,563.9	7,076.0	7,217.8	7,043.8	22.7	26.9	-91.87	-363.3	-2,820.7	2,871.0	2,822.4	48.67	58.993	
7,600.0	7,075.8	7,217.5	7,043.5	23.2	26.9	-91.85	-363.3	-2,820.7	2,836.1	2,786.8	49.22	57.621	
7,700.0	7,075.3	7,216.6	7,042.7	24.9	26.9	-91.78	-363.3	-2,820.7	2,739.3	2,688.3	50.90	53.815	
7,800.0	7,074.9	7,215.8	7,041.9	26.7	26.9	-91.71	-363.3	-2,820.7	2,642.7	2,589.9	52.77	50.076	
7,900.0	7,074.4	7,215.0	7,041.0	28.8	26.9	-91.65	-363.3	-2,820.7	2,546.4	2,491.6	54.80	46.469	
8,000.0	7,073.9	7,214.2	7,040.2	30.9	26.9	-91.58	-363.3	-2,820.7	2,450.4	2,393.4	56.94	43.031	
8,100.0	7,073.4	7,213.3	7,039.4	33.2	26.9	-91.51	-363.3	-2,820.7	2,354.7	2,295.5	59.19	39.782	
8,200.0	7,072.9	7,212.5	7,038.6	35.5	26.9	-91.44	-363.3	-2,820.7	2,259.4	2,197.9	61.52	36.728	
8,300.0	7,072.4	7,211.7	7,037.8	37.9	26.9	-91.38	-363.3	-2,820.7	2,164.5	2,100.6	63.91	33.870	
8,400.0	7,071.9	7,210.9	7,036.9	40.3	26.9	-91.31	-363.3	-2,820.7	2,070.1	2,003.8	66.35	31.199	
8,500.0	7,071.5	7,210.1	7,036.1	42.8	26.9	-91.24	-363.3	-2,820.7	1,976.3	1,907.4	68.84	28.707	
8,600.0	7,071.0	7,209.2	7,035.3	45.4	26.9	-91.18	-363.3	-2,820.7	1,883.1	1,811.7	71.37	26.385	

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 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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
8,700.0	7,070.5	7,208.4	7,034.5	47.9	26.9	-91.11	-363.3	-2,820.7	1,790.6	1,716.7	73.93	24.221	
8,800.0	7,070.0	7,207.6	7,033.7	50.5	26.9	-91.04	-363.3	-2,820.8	1,699.0	1,622.5	76.51	22.205	
8,900.0	7,069.5	7,206.8	7,032.9	53.1	26.9	-90.98	-363.3	-2,820.8	1,608.3	1,529.2	79.12	20.328	
9,000.0	7,069.0	7,206.0	7,032.1	55.8	26.9	-90.91	-363.3	-2,820.8	1,518.9	1,437.1	81.75	18.580	
9,100.0	7,068.5	7,205.2	7,031.3	58.4	26.9	-90.84	-363.3	-2,820.8	1,430.8	1,346.4	84.39	16.955	
9,200.0	7,068.1	7,204.4	7,030.5	61.1	26.9	-90.78	-363.3	-2,820.8	1,344.4	1,257.4	87.05	15.445	
9,300.0	7,067.6	7,203.6	7,029.7	63.7	26.9	-90.71	-363.3	-2,820.8	1,260.1	1,170.4	89.72	14.044	
9,400.0	7,067.1	7,202.8	7,028.9	66.4	26.9	-90.65	-363.3	-2,820.8	1,178.2	1,085.8	92.40	12.750	
9,500.0	7,066.6	7,202.0	7,028.1	69.1	26.9	-90.58	-363.3	-2,820.8	1,099.2	1,004.1	95.10	11.559	
9,600.0	7,066.1	7,201.2	7,027.3	71.8	26.9	-90.52	-363.3	-2,820.8	1,024.0	926.2	97.80	10.470	
9,700.0	7,065.6	7,200.5	7,026.5	74.5	26.9	-90.45	-363.3	-2,820.8	953.3	852.8	100.51	9.485	
9,800.0	7,065.1	7,199.7	7,025.7	77.2	26.9	-90.39	-363.3	-2,820.8	888.3	785.1	103.22	8.606	
9,900.0	7,064.7	7,198.9	7,025.0	80.0	26.9	-90.33	-363.3	-2,820.8	830.3	724.3	105.95	7.837	
10,000.0	7,064.2	7,198.1	7,024.2	82.7	26.9	-90.26	-363.3	-2,820.8	780.8	672.1	108.67	7.184	
10,100.0	7,063.7	7,197.3	7,023.4	85.4	26.9	-90.20	-363.3	-2,820.8	741.5	630.1	111.41	6.656	
10,200.0	7,063.2	7,196.6	7,022.6	88.2	26.9	-90.13	-363.3	-2,820.8	714.2	600.1	114.15	6.257	
10,300.0	7,062.7	7,195.8	7,021.9	90.9	26.9	-90.07	-363.3	-2,820.8	700.2	583.3	116.89	5.991	
10,348.8	7,062.5	7,195.4	7,021.5	92.2	26.9	-90.04	-363.3	-2,820.8	698.5	580.3	118.23	5.908	CC, ES
10,400.0	7,062.2	7,195.0	7,021.1	93.6	26.9	-90.01	-363.3	-2,820.8	700.4	580.8	119.63	5.855	
10,500.0	7,061.7	7,194.2	7,020.3	96.4	26.9	-89.95	-363.3	-2,820.8	714.7	592.3	122.38	5.840	SF
10,600.0	7,061.3	7,193.5	7,019.5	99.2	26.9	-89.88	-363.3	-2,820.8	742.3	617.2	125.13	5.932	
10,700.0	7,060.8	7,192.7	7,018.8	101.9	26.9	-89.82	-363.3	-2,820.8	781.9	654.0	127.89	6.114	
10,800.0	7,060.3	7,191.9	7,018.0	104.7	26.9	-89.76	-363.3	-2,820.8	831.6	701.0	130.65	6.365	
10,900.0	7,059.8	7,191.2	7,017.3	107.4	26.9	-89.69	-363.3	-2,820.8	889.8	756.4	133.41	6.670	
11,000.0	7,059.3	7,190.4	7,016.5	110.2	26.9	-89.63	-363.3	-2,820.8	955.0	818.8	136.17	7.013	
11,100.0	7,058.8	7,189.7	7,015.7	113.0	26.9	-89.57	-363.3	-2,820.8	1,025.8	886.9	138.93	7.383	
11,200.0	7,058.3	7,188.9	7,015.0	115.7	26.9	-89.51	-363.3	-2,820.8	1,101.1	959.4	141.70	7.771	
11,300.0	7,057.9	7,188.2	7,014.2	118.5	26.9	-89.45	-363.3	-2,820.8	1,180.2	1,035.7	144.47	8.169	
11,400.0	7,057.4	7,187.4	7,013.5	121.3	26.9	-89.38	-363.3	-2,820.8	1,262.1	1,114.9	147.24	8.572	
11,500.0	7,056.9	7,186.7	7,012.7	124.0	26.9	-89.32	-363.3	-2,820.8	1,346.6	1,196.6	150.01	8.977	
11,600.0	7,056.4	7,185.9	7,012.0	126.8	26.9	-89.26	-363.3	-2,820.8	1,433.0	1,280.2	152.78	9.380	
11,686.6	7,056.0	7,185.3	7,011.4	129.2	26.9	-89.21	-363.3	-2,820.8	1,509.2	1,354.0	155.18	9.725	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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	2.5	2.5	0.0	0.0	-47.28	503.8	-545.6	742.7				
100.0	100.0	103.7	103.7	0.1	0.1	-47.28	503.8	-545.6	742.6	742.4	0.21	3,609.947	
200.0	200.0	204.9	204.9	0.3	0.2	-47.29	503.5	-545.5	742.4	741.8	0.54	1,384.156	
300.0	300.0	306.0	306.0	0.5	0.3	-47.31	503.1	-545.3	742.0	741.1	0.87	855.840	
400.0	400.0	407.2	407.2	0.8	0.4	-47.33	502.5	-545.1	741.4	740.2	1.20	619.105	
456.7	456.7	464.5	464.5	0.9	0.5	-111.27	502.1	-545.0	741.2	739.8	1.38	537.588	CC
500.0	500.0	508.3	508.3	1.0	0.5	-111.37	501.7	-544.9	741.3	739.8	1.52	488.191	ES
600.0	599.8	609.3	609.3	1.2	0.6	-111.77	500.8	-544.5	742.4	740.6	1.84	402.723	
700.0	699.5	709.9	709.8	1.5	0.7	-112.39	499.7	-544.1	744.7	742.5	2.19	339.617	
800.0	798.7	809.0	809.0	1.7	1.0	-113.06	500.2	-542.4	748.4	745.8	2.66	281.817	
900.0	897.5	917.5	917.3	2.0	1.2	-113.74	503.4	-537.4	753.1	749.9	3.17	237.476	
1,000.0	995.6	1,019.3	1,018.6	2.4	1.4	-114.27	508.9	-529.0	758.1	754.3	3.74	202.639	
1,000.1	995.8	1,019.5	1,018.7	2.4	1.4	-114.27	508.9	-529.0	758.1	754.3	3.74	202.598	
1,100.0	1,093.4	1,108.8	1,107.4	2.8	1.6	-114.69	516.6	-520.5	764.8	760.4	4.34	176.320	
1,200.0	1,191.3	1,200.9	1,198.1	3.2	1.9	-114.82	528.2	-510.0	772.6	767.6	5.00	154.501	
1,300.0	1,289.1	1,298.4	1,293.8	3.6	2.3	-114.79	542.8	-498.0	781.3	775.5	5.73	136.246	
1,400.0	1,386.9	1,398.7	1,391.9	4.1	2.6	-114.65	558.7	-484.6	789.6	783.1	6.52	121.099	
1,500.0	1,484.7	1,496.3	1,486.9	4.5	3.1	-114.38	576.0	-470.7	798.4	791.1	7.34	108.716	
1,600.0	1,582.5	1,602.1	1,589.1	4.9	3.6	-113.83	597.2	-453.1	806.9	798.6	8.27	97.525	
1,700.0	1,680.3	1,717.2	1,698.9	5.4	4.2	-112.93	622.6	-430.1	814.2	804.8	9.32	87.330	
1,800.0	1,778.1	1,814.4	1,791.2	5.8	4.8	-112.06	644.6	-408.7	820.5	810.2	10.32	79.479	
1,900.0	1,875.9	1,913.2	1,884.8	6.3	5.3	-111.18	667.4	-387.0	827.3	816.0	11.31	73.117	
2,000.0	1,973.8	2,014.9	1,981.3	6.7	5.9	-110.30	690.5	-364.7	834.1	821.8	12.33	67.639	
2,100.0	2,071.6	2,117.3	2,078.4	7.2	6.5	-109.41	713.6	-341.7	840.7	827.3	13.38	62.817	
2,200.0	2,169.4	2,212.8	2,169.2	7.6	7.0	-108.67	734.4	-321.1	847.4	833.1	14.35	59.049	
2,300.0	2,267.2	2,308.8	2,260.8	8.1	7.5	-107.98	755.4	-301.3	855.0	839.7	15.32	55.803	
2,400.0	2,365.0	2,419.8	2,366.4	8.5	8.2	-107.12	779.6	-276.8	861.7	845.3	16.41	52.504	
2,500.0	2,462.8	2,514.5	2,456.9	9.0	8.7	-106.51	799.0	-256.8	868.3	850.9	17.39	49.922	
2,600.0	2,560.6	2,604.6	2,542.6	9.4	9.2	-105.85	818.8	-237.5	875.9	857.5	18.36	47.702	
2,700.0	2,658.5	2,694.7	2,628.3	9.9	9.8	-105.19	839.5	-218.7	884.7	865.4	19.34	45.748	
2,800.0	2,756.3	2,783.9	2,713.1	10.3	10.3	-104.58	860.3	-200.9	894.5	874.2	20.29	44.091	
2,900.0	2,854.1	2,874.6	2,799.9	10.8	10.8	-104.08	881.3	-185.0	905.8	884.6	21.23	42.668	
3,000.0	2,951.9	2,998.9	2,918.6	11.2	11.5	-103.34	910.1	-161.6	916.6	894.2	22.37	40.966	
3,100.0	3,049.7	3,101.8	3,016.7	11.7	12.1	-102.69	932.4	-139.9	924.7	901.3	23.42	39.485	
3,200.0	3,147.5	3,194.1	3,104.4	12.1	12.6	-102.08	953.4	-120.4	933.8	909.4	24.41	38.252	
3,300.0	3,245.3	3,304.0	3,208.8	12.6	13.3	-101.35	978.4	-97.0	942.9	917.4	25.51	36.965	
3,400.0	3,343.2	3,410.6	3,309.9	13.0	13.9	-100.60	1,002.2	-72.8	950.9	924.3	26.60	35.749	
3,500.0	3,441.0	3,500.0	3,394.4	13.5	14.5	-99.95	1,022.5	-52.2	959.2	931.6	27.60	34.756	
3,600.0	3,538.8	3,612.8	3,500.9	13.9	15.2	-99.09	1,048.5	-25.2	967.5	938.7	28.76	33.640	
3,700.0	3,636.6	3,715.1	3,597.1	14.4	15.8	-98.27	1,071.6	0.6	974.7	944.8	29.86	32.642	
3,800.0	3,734.4	3,798.7	3,675.8	14.8	16.4	-97.61	1,091.0	21.3	983.0	952.2	30.84	31.872	
3,900.0	3,832.2	3,882.6	3,753.8	15.3	17.0	-96.82	1,112.8	43.2	993.0	961.1	31.85	31.176	
4,000.0	3,930.0	3,964.0	3,829.1	15.7	17.6	-96.03	1,135.3	64.2	1,004.8	972.0	32.85	30.588	
4,059.3	3,988.0	4,011.6	3,873.1	16.0	17.9	-95.59	1,148.9	75.9	1,012.8	979.4	33.43	30.297	
4,100.0	4,027.9	4,045.3	3,904.3	16.2	18.1	-95.39	1,158.7	84.1	1,018.6	984.7	33.81	30.123	
4,200.0	4,126.3	4,170.0	4,020.4	16.5	19.0	-94.40	1,193.7	113.7	1,032.1	997.2	34.90	29.570	
4,300.0	4,225.3	4,298.3	4,141.3	16.8	19.8	-93.29	1,224.5	143.6	1,042.3	1,006.4	35.91	29.029	
4,400.0	4,324.7	4,399.6	4,236.4	17.0	20.4	-92.19	1,247.9	169.2	1,051.1	1,014.4	36.72	28.621	
4,500.0	4,424.4	4,493.4	4,324.5	17.2	21.1	-91.03	1,269.8	192.9	1,060.5	1,023.1	37.43	28.333	
4,600.0	4,524.4	4,574.9	4,401.6	17.3	21.6	-90.06	1,288.4	211.6	1,071.0	1,033.0	37.99	28.195	
4,659.4	4,583.8	4,619.4	4,443.6	17.4	21.8	-25.62	1,299.0	221.4	1,078.4	1,054.2	24.26	44.448	
4,700.0	4,624.4	4,665.9	4,487.8	17.5	22.1	-24.89	1,310.1	231.3	1,083.7	1,059.1	24.61	44.042	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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
4,800.0	4,724.4	4,804.3	4,620.3	17.6	22.9	-22.94	1,339.1	258.7	1,095.4	1,069.8	25.58	42.823	
4,900.0	4,824.4	4,929.5	4,741.3	17.7	23.5	-21.36	1,359.9	283.0	1,103.6	1,077.2	26.43	41.751	
5,000.0	4,924.4	5,023.9	4,832.8	17.8	23.9	-20.21	1,374.9	301.0	1,111.9	1,084.7	27.13	40.989	
5,100.0	5,024.4	5,134.0	4,939.9	18.0	24.4	-19.00	1,391.1	320.2	1,120.1	1,092.2	27.88	40.172	
5,200.0	5,124.4	5,244.4	5,048.3	18.1	24.9	-18.00	1,404.8	336.1	1,127.4	1,098.8	28.58	39.446	
5,300.0	5,224.4	5,354.4	5,157.0	18.2	25.2	-17.21	1,416.3	348.8	1,134.0	1,104.7	29.22	38.811	
5,400.0	5,324.4	5,467.1	5,268.7	18.4	25.6	-16.55	1,426.2	359.6	1,139.6	1,109.8	29.82	38.222	
5,500.0	5,424.4	5,583.2	5,384.2	18.5	25.8	-16.00	1,434.2	368.5	1,144.1	1,113.7	30.37	37.670	
5,600.0	5,524.4	5,693.3	5,494.0	18.6	26.1	-15.63	1,439.5	374.8	1,147.2	1,116.3	30.85	37.181	
5,700.0	5,624.4	5,791.1	5,591.6	18.8	26.2	-15.36	1,443.6	379.1	1,150.1	1,118.8	31.28	36.765	
5,800.0	5,724.4	5,885.0	5,685.3	18.9	26.4	-15.18	1,447.6	381.8	1,153.4	1,121.7	31.68	36.405	
5,900.0	5,824.4	5,993.4	5,793.7	19.1	26.5	-15.09	1,451.7	382.7	1,156.9	1,124.8	32.08	36.058	
6,000.0	5,924.4	6,102.3	5,902.6	19.2	26.7	-15.06	1,454.4	382.5	1,159.3	1,126.8	32.46	35.718	
6,100.0	6,024.4	6,215.6	6,015.8	19.4	26.8	-15.06	1,456.0	382.1	1,160.8	1,127.9	32.82	35.370	
6,200.0	6,124.4	6,317.8	6,118.0	19.5	26.9	-15.08	1,456.8	381.5	1,161.6	1,128.5	33.15	35.038	
6,300.0	6,224.4	6,420.4	6,220.6	19.7	27.0	-15.09	1,457.4	381.1	1,162.3	1,128.8	33.49	34.706	
6,400.0	6,324.4	6,522.1	6,322.3	19.8	27.1	-15.10	1,457.7	380.8	1,162.7	1,128.8	33.83	34.372	
6,435.4	6,359.8	6,556.8	6,357.0	19.9	27.1	-15.10	1,457.8	380.7	1,162.8	1,128.9	33.94	34.257	
6,450.0	6,374.4	6,571.1	6,371.3	19.9	27.1	74.90	1,457.9	380.6	1,162.9	1,118.4	44.42	26.180	
6,500.0	6,424.3	6,622.7	6,422.9	19.9	27.2	75.07	1,458.1	380.4	1,162.3	1,117.9	44.49	26.129	
6,550.0	6,473.9	6,674.0	6,474.2	19.9	27.2	75.47	1,458.1	380.1	1,160.9	1,116.4	44.46	26.113	SF
6,600.0	6,522.9	6,724.3	6,524.5	19.9	27.3	76.10	1,458.1	379.8	1,158.5	1,114.2	44.33	26.132	
6,650.0	6,571.2	6,773.9	6,574.1	19.9	27.3	76.96	1,458.0	379.4	1,155.4	1,111.2	44.13	26.181	
6,700.0	6,618.4	6,822.7	6,622.9	19.8	27.4	78.01	1,457.9	379.0	1,151.6	1,107.7	43.86	26.258	
6,750.0	6,664.3	6,869.6	6,669.8	19.8	27.4	79.24	1,457.7	378.6	1,147.2	1,103.7	43.53	26.355	
6,800.0	6,708.8	6,913.9	6,714.1	19.7	27.5	80.58	1,457.5	378.2	1,142.6	1,099.4	43.17	26.469	
6,850.0	6,751.6	6,956.7	6,756.9	19.6	27.5	82.04	1,457.3	377.8	1,137.9	1,095.1	42.79	26.594	
6,900.0	6,792.5	6,997.8	6,798.0	19.5	27.5	83.57	1,457.1	377.4	1,133.4	1,091.0	42.41	26.724	
6,950.0	6,831.2	7,036.8	6,837.0	19.4	27.6	85.13	1,457.0	377.0	1,129.2	1,087.2	42.06	26.851	
7,000.0	6,867.7	7,074.5	6,874.7	19.3	27.6	86.72	1,456.8	376.7	1,125.7	1,083.9	41.74	26.969	
7,050.0	6,901.7	7,109.8	6,910.0	19.3	27.6	88.24	1,456.6	376.4	1,123.0	1,081.5	41.49	27.069	
7,100.0	6,933.0	7,141.7	6,941.9	19.3	27.7	89.63	1,456.4	376.2	1,121.4	1,080.1	41.32	27.139	
7,130.7	6,950.9	7,159.3	6,959.5	19.3	27.7	90.38	1,456.3	376.1	1,121.1	1,079.9	41.28	27.159	
7,150.0	6,961.6	7,169.8	6,970.0	19.3	27.7	90.81	1,456.3	376.0	1,121.3	1,080.0	41.26	27.172	
7,200.0	6,987.2	7,195.1	6,995.3	19.4	27.7	91.80	1,456.1	375.9	1,122.7	1,081.4	41.33	27.167	
7,250.0	7,009.8	7,217.4	7,017.6	19.6	27.7	92.55	1,456.0	375.7	1,126.0	1,084.5	41.52	27.122	
7,300.0	7,029.2	7,236.6	7,036.8	19.9	27.7	93.03	1,456.0	375.6	1,131.2	1,089.4	41.84	27.037	
7,350.0	7,045.3	7,252.7	7,052.8	20.2	27.8	93.21	1,455.9	375.5	1,138.5	1,096.2	42.30	26.918	
7,400.0	7,058.1	7,265.3	7,065.5	20.6	27.8	93.07	1,455.9	375.5	1,148.0	1,105.1	42.88	26.773	
7,450.0	7,067.5	7,274.6	7,074.8	21.2	27.8	92.58	1,455.8	375.5	1,159.6	1,116.0	43.56	26.618	
7,500.0	7,073.5	7,280.5	7,080.7	21.8	27.8	91.74	1,455.8	375.5	1,173.3	1,129.0	44.33	26.467	
7,550.0	7,075.9	7,283.0	7,083.2	22.5	27.8	90.54	1,455.8	375.5	1,189.0	1,143.9	45.14	26.341	
7,563.9	7,076.0	7,283.1	7,083.2	22.7	27.8	90.14	1,455.8	375.5	1,193.8	1,148.4	45.37	26.313	
7,600.0	7,075.8	7,282.9	7,083.1	23.2	27.8	90.14	1,455.8	375.5	1,206.7	1,160.7	45.92	26.277	
7,700.0	7,075.3	7,282.6	7,082.8	24.9	27.8	90.12	1,455.8	375.5	1,247.2	1,199.6	47.60	26.200	
7,800.0	7,074.9	7,282.4	7,082.5	26.7	27.8	90.10	1,455.8	375.5	1,294.2	1,244.8	49.48	26.159	
7,900.0	7,074.4	7,282.1	7,082.2	28.8	27.8	90.09	1,455.8	375.5	1,347.0	1,295.5	51.50	26.155	
8,000.0	7,073.9	7,281.8	7,082.0	30.9	27.8	90.07	1,455.8	375.5	1,405.0	1,351.4	53.65	26.188	
8,100.0	7,073.4	7,281.5	7,081.7	33.2	27.8	90.06	1,455.8	375.5	1,467.5	1,411.6	55.90	26.253	
8,200.0	7,072.9	7,281.2	7,081.4	35.5	27.8	90.05	1,455.8	375.5	1,534.0	1,475.7	58.23	26.345	
8,300.0	7,072.4	7,280.9	7,081.1	37.9	27.8	90.03	1,455.8	375.5	1,603.9	1,543.3	60.62	26.459	
8,400.0	7,071.9	7,280.6	7,080.8	40.3	27.8	90.02	1,455.8	375.5	1,676.9	1,613.9	63.06	26.591	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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	7,071.5	7,280.4	7,080.6	42.8	27.8	90.00	1,455.8	375.5	1,752.6	1,687.0	65.56	26.735	
8,600.0	7,071.0	7,280.1	7,080.3	45.4	27.8	89.99	1,455.8	375.5	1,830.6	1,762.5	68.08	26.888	
8,700.0	7,070.5	7,279.8	7,080.0	47.9	27.8	89.98	1,455.8	375.5	1,910.6	1,840.0	70.64	27.047	
8,800.0	7,070.0	7,279.6	7,079.8	50.5	27.8	89.96	1,455.8	375.5	1,992.5	1,919.3	73.23	27.209	
8,900.0	7,069.5	7,279.3	7,079.5	53.1	27.8	89.95	1,455.8	375.5	2,076.0	2,000.1	75.84	27.374	
9,000.0	7,069.0	7,279.1	7,079.3	55.8	27.8	89.94	1,455.8	375.5	2,160.8	2,082.3	78.47	27.538	
9,100.0	7,068.5	7,278.8	7,079.0	58.4	27.8	89.92	1,455.8	375.5	2,246.9	2,165.8	81.11	27.702	
9,200.0	7,068.1	7,278.6	7,078.8	61.1	27.8	89.91	1,455.8	375.5	2,334.1	2,250.3	83.77	27.864	
9,300.0	7,067.6	7,278.3	7,078.5	63.7	27.8	89.90	1,455.8	375.5	2,422.3	2,335.9	86.44	28.023	
9,400.0	7,067.1	7,278.1	7,078.3	66.4	27.8	89.89	1,455.8	375.5	2,511.4	2,422.3	89.13	28.178	
9,500.0	7,066.6	7,277.9	7,078.0	69.1	27.8	89.87	1,455.8	375.5	2,601.3	2,509.4	91.82	28.330	
9,600.0	7,066.1	7,277.6	7,077.8	71.8	27.8	89.86	1,455.8	375.5	2,691.9	2,597.3	94.52	28.479	
9,700.0	7,065.6	7,277.4	7,077.6	74.5	27.8	89.85	1,455.8	375.5	2,783.1	2,685.9	97.23	28.623	
9,800.0	7,065.1	7,277.2	7,077.3	77.2	27.8	89.84	1,455.8	375.5	2,874.9	2,775.0	99.95	28.764	
9,900.0	7,064.7	7,276.9	7,077.1	80.0	27.8	89.83	1,455.8	375.5	2,967.3	2,864.6	102.67	28.900	
10,000.0	7,064.2	7,276.7	7,076.9	82.7	27.8	89.82	1,455.8	375.5	3,060.1	2,954.7	105.40	29.033	
10,100.0	7,063.7	7,276.5	7,076.7	85.4	27.8	89.80	1,455.8	375.5	3,153.3	3,045.2	108.14	29.161	
10,200.0	7,063.2	7,276.3	7,076.5	88.2	27.8	89.79	1,455.8	375.5	3,247.0	3,136.1	110.87	29.285	
10,300.0	7,062.7	7,276.0	7,076.2	90.9	27.8	89.78	1,455.8	375.5	3,341.1	3,227.4	113.62	29.406	
10,400.0	7,062.2	7,275.8	7,076.0	93.6	27.8	89.77	1,455.8	375.5	3,435.4	3,319.1	116.37	29.523	
10,500.0	7,061.7	7,275.6	7,075.8	96.4	27.8	89.76	1,455.8	375.5	3,530.1	3,411.0	119.12	29.636	
10,600.0	7,061.3	7,275.4	7,075.6	99.2	27.8	89.75	1,455.8	375.5	3,625.1	3,503.2	121.87	29.745	
10,700.0	7,060.8	7,275.2	7,075.4	101.9	27.8	89.74	1,455.8	375.5	3,720.3	3,595.7	124.63	29.852	
10,800.0	7,060.3	7,275.0	7,075.2	104.7	27.8	89.73	1,455.8	375.5	3,815.8	3,688.4	127.39	29.954	
10,900.0	7,059.8	7,274.8	7,075.0	107.4	27.8	89.72	1,455.8	375.5	3,911.5	3,781.3	130.15	30.054	
11,000.0	7,059.3	7,274.6	7,074.8	110.2	27.8	89.71	1,455.8	375.5	4,007.4	3,874.5	132.91	30.150	
11,100.0	7,058.8	7,274.4	7,074.6	113.0	27.8	89.70	1,455.8	375.5	4,103.5	3,967.8	135.68	30.244	
11,200.0	7,058.3	7,274.2	7,074.4	115.7	27.8	89.69	1,455.8	375.5	4,199.8	4,061.3	138.45	30.335	
11,300.0	7,057.9	7,274.0	7,074.2	118.5	27.8	89.68	1,455.8	375.5	4,296.2	4,155.0	141.22	30.422	
11,400.0	7,057.4	7,273.8	7,074.0	121.3	27.8	89.67	1,455.8	375.5	4,392.8	4,248.9	143.99	30.508	
11,500.0	7,056.9	7,273.6	7,073.8	124.0	27.8	89.66	1,455.8	375.5	4,489.6	4,342.8	146.77	30.590	
11,600.0	7,056.4	7,273.4	7,073.6	126.8	27.8	89.65	1,455.8	375.5	4,586.5	4,437.0	149.54	30.671	
11,686.6	7,056.0	7,273.3	7,073.5	129.2	27.8	89.64	1,455.8	375.5	4,670.6	4,518.6	151.95	30.738	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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	-59.99	346.1	-599.2	692.0				
100.0	100.0	101.0	101.0	0.1	0.1	-60.00	346.0	-599.4	692.1	691.9	0.20	3,416.124	ES
200.0	200.0	199.5	199.5	0.3	0.2	-60.04	345.8	-599.9	692.4	691.9	0.53	1,306.026	
300.0	300.0	297.9	297.9	0.5	0.3	-60.10	345.4	-600.7	693.0	692.1	0.86	807.895	
400.0	400.0	396.4	396.4	0.8	0.4	-60.18	344.9	-601.9	693.7	692.5	1.19	585.279	
500.0	500.0	494.8	494.8	1.0	0.5	-124.26	344.3	-603.4	695.7	694.2	1.52	458.516	
600.0	599.8	593.0	593.0	1.2	0.6	-124.67	343.5	-605.2	699.9	698.0	1.84	379.419	
700.0	699.5	690.9	690.8	1.5	0.7	-125.28	342.5	-607.3	706.3	704.2	2.19	322.703	
800.0	798.7	808.0	807.8	1.7	1.0	-126.46	338.7	-609.8	713.9	711.2	2.69	265.659	
900.0	897.5	910.1	909.5	2.0	1.2	-128.03	330.6	-612.9	722.6	719.3	3.21	224.765	
1,000.0	995.6	1,031.2	1,029.5	2.4	1.6	-130.52	314.7	-615.9	731.6	727.7	3.86	189.646	
1,000.1	995.8	1,031.4	1,029.7	2.4	1.6	-130.52	314.6	-615.9	731.6	727.7	3.86	189.605	
1,100.0	1,093.4	1,128.4	1,125.1	2.8	1.9	-133.01	297.1	-618.4	741.2	736.7	4.51	164.479	
1,200.0	1,191.3	1,225.1	1,219.5	3.2	2.3	-135.69	276.4	-622.2	752.4	747.2	5.21	144.312	
1,300.0	1,289.1	1,321.0	1,312.0	3.6	2.8	-138.55	251.8	-626.3	764.6	758.6	5.97	128.150	
1,400.0	1,386.9	1,426.6	1,413.4	4.1	3.3	-141.76	222.4	-630.6	778.1	771.3	6.79	114.672	
1,500.0	1,484.7	1,509.4	1,492.3	4.5	3.8	-144.31	197.6	-633.3	792.6	785.1	7.51	105.542	
1,600.0	1,582.5	1,588.9	1,567.7	4.9	4.3	-146.78	172.6	-637.3	810.8	802.6	8.23	98.464	
1,700.0	1,680.3	1,686.6	1,660.0	5.4	4.8	-149.76	141.1	-642.7	831.4	822.4	9.03	92.052	
1,800.0	1,778.1	1,776.4	1,744.9	5.8	5.4	-152.38	111.9	-646.2	852.6	842.9	9.76	87.395	
1,900.0	1,875.9	1,865.5	1,829.0	6.3	5.9	-154.90	82.7	-650.6	876.7	866.2	10.46	83.807	
2,000.0	1,973.8	1,959.9	1,918.1	6.7	6.4	-157.43	51.9	-653.9	901.2	890.1	11.17	80.685	
2,100.0	2,071.6	2,049.9	2,003.2	7.2	6.9	-159.71	22.6	-657.5	927.9	916.0	11.85	78.300	
2,200.0	2,169.4	2,140.6	2,088.7	7.6	7.5	-161.93	-7.2	-660.2	955.1	942.6	12.53	76.244	
2,300.0	2,267.2	2,220.6	2,164.4	8.1	7.9	-163.77	-33.2	-663.4	984.7	971.5	13.15	74.901	
2,400.0	2,365.0	2,310.1	2,249.0	8.5	8.4	-165.71	-62.1	-667.1	1,015.5	1,001.7	13.80	73.582	
2,500.0	2,462.8	2,381.0	2,315.8	9.0	8.9	-167.21	-85.7	-670.1	1,047.9	1,033.5	14.39	72.817	
2,600.0	2,560.6	2,456.0	2,386.2	9.4	9.4	-168.74	-111.0	-674.3	1,082.6	1,067.6	15.01	72.144	
2,700.0	2,658.5	2,537.4	2,462.5	9.9	9.9	-170.31	-139.0	-680.1	1,119.6	1,104.0	15.65	71.563	
2,800.0	2,756.3	2,628.2	2,547.2	10.3	10.5	-172.03	-171.1	-686.1	1,157.5	1,141.2	16.32	70.921	
2,900.0	2,854.1	2,723.9	2,636.4	10.8	11.1	-173.75	-205.2	-691.8	1,195.8	1,178.8	17.01	70.299	
3,000.0	2,951.9	2,827.8	2,733.5	11.2	11.8	-175.49	-241.7	-697.0	1,234.0	1,216.3	17.70	69.715	
3,100.0	3,049.7	2,906.7	2,807.8	11.7	12.3	-176.68	-268.2	-701.1	1,272.4	1,254.1	18.28	69.600	
3,200.0	3,147.5	2,986.8	2,882.9	12.1	12.8	-177.83	-295.4	-705.9	1,312.2	1,293.3	18.88	69.487	
3,300.0	3,245.3	3,075.1	2,965.6	12.6	13.4	-179.05	-325.9	-711.1	1,352.8	1,333.3	19.52	69.298	
3,400.0	3,343.2	3,188.1	3,071.9	13.0	14.0	179.52	-363.7	-717.6	1,393.3	1,373.1	20.21	68.931	
3,500.0	3,441.0	3,279.9	3,159.0	13.5	14.6	178.50	-392.5	-722.2	1,432.7	1,411.9	20.82	68.803	
3,600.0	3,538.8	3,366.9	3,241.4	13.9	15.1	177.58	-419.9	-727.0	1,472.8	1,451.4	21.42	68.769	
3,700.0	3,636.6	3,484.9	3,353.9	14.4	15.7	176.47	-455.1	-733.5	1,512.7	1,490.6	22.10	68.434	
3,800.0	3,734.4	3,578.1	3,442.9	14.8	16.2	175.65	-482.2	-737.6	1,551.4	1,528.7	22.70	68.338	
3,900.0	3,832.2	3,659.5	3,520.7	15.3	16.7	174.98	-505.8	-741.5	1,590.7	1,567.4	23.26	68.376	
4,000.0	3,930.0	3,741.2	3,598.8	15.7	17.1	174.35	-529.4	-746.0	1,630.6	1,606.8	23.82	68.444	
4,059.3	3,988.0	3,779.0	3,635.0	16.0	17.3	174.07	-540.2	-748.3	1,654.7	1,630.6	24.12	68.604	
4,100.0	4,027.9	3,812.4	3,666.8	16.2	17.5	173.87	-549.9	-750.4	1,671.1	1,646.7	24.40	68.483	
4,200.0	4,126.3	3,874.8	3,726.2	16.5	17.9	173.51	-568.8	-754.9	1,710.6	1,685.6	24.97	68.495	
4,300.0	4,225.3	3,977.5	3,823.6	16.8	18.5	172.86	-600.5	-762.4	1,747.4	1,721.8	25.66	68.090	
4,400.0	4,324.7	4,081.7	3,922.4	17.0	19.1	172.19	-632.8	-768.9	1,780.6	1,754.3	26.32	67.654	
4,500.0	4,424.4	4,178.2	4,014.0	17.2	19.6	171.60	-662.3	-774.8	1,810.4	1,783.4	26.91	67.283	
4,600.0	4,524.4	4,277.9	4,108.9	17.3	20.2	171.01	-692.5	-780.9	1,836.8	1,809.3	27.46	66.900	
4,659.4	4,583.8	4,338.0	4,166.3	17.4	20.5	-125.44	-709.9	-785.0	1,850.9	1,817.2	33.70	54.924	
4,700.0	4,624.4	4,373.1	4,199.9	17.5	20.7	-125.65	-720.0	-787.5	1,860.2	1,826.2	33.94	54.814	
4,800.0	4,724.4	4,464.7	4,287.3	17.6	21.2	-126.21	-746.6	-794.1	1,883.4	1,848.8	34.56	54.493	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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
4,900.0	4,824.4	4,555.1	4,373.4	17.7	21.8	-126.76	-773.3	-800.0	1,906.8	1,871.6	35.20	54.174	
5,000.0	4,924.4	4,642.1	4,455.9	17.8	22.3	-127.32	-800.2	-805.8	1,931.2	1,895.4	35.82	53.910	
5,100.0	5,024.4	4,877.4	4,681.5	18.0	23.5	-128.69	-866.2	-816.3	1,952.6	1,915.5	37.15	52.557	
5,200.0	5,124.4	4,974.5	4,775.4	18.1	24.0	-129.23	-890.7	-817.9	1,970.0	1,932.3	37.73	52.207	
5,300.0	5,224.4	5,136.7	4,933.0	18.2	24.7	-130.04	-928.9	-820.8	1,986.9	1,948.3	38.57	51.514	
5,400.0	5,324.4	5,330.2	5,123.7	18.4	25.4	-130.71	-961.7	-823.5	1,998.8	1,959.4	39.37	50.773	
5,500.0	5,424.4	5,459.3	5,251.7	18.5	25.8	-131.04	-978.4	-825.2	2,008.2	1,968.3	39.87	50.364	
5,600.0	5,524.4	5,625.3	5,417.0	18.6	26.1	-131.29	-992.7	-828.2	2,015.3	1,974.9	40.39	49.890	
5,700.0	5,624.4	5,796.4	5,587.9	18.8	26.4	-131.33	-997.3	-831.6	2,018.2	1,977.4	40.79	49.472	
5,800.0	5,724.4	5,904.2	5,695.8	18.9	26.5	-131.28	-997.3	-834.0	2,019.9	1,978.9	41.07	49.188	
5,900.0	5,824.4	6,011.4	5,802.9	19.1	26.6	-131.25	-997.4	-835.9	2,021.3	1,979.9	41.33	48.900	
6,000.0	5,924.4	6,114.1	5,905.7	19.2	26.7	-131.22	-997.5	-837.4	2,022.4	1,980.8	41.60	48.615	
6,100.0	6,024.4	6,217.2	6,008.7	19.4	26.8	-131.21	-997.7	-838.5	2,023.3	1,981.5	41.87	48.326	
6,200.0	6,124.4	6,315.3	6,106.7	19.5	26.9	-131.20	-998.0	-839.4	2,024.3	1,982.2	42.14	48.043	
6,300.0	6,224.4	6,419.6	6,211.1	19.7	27.0	-131.19	-998.5	-840.2	2,025.2	1,982.8	42.41	47.750	
6,400.0	6,324.4	6,525.2	6,316.7	19.8	27.1	-131.18	-998.7	-841.0	2,025.8	1,983.1	42.69	47.456	
6,435.4	6,359.8	6,562.4	6,353.9	19.9	27.1	-131.18	-998.7	-841.2	2,026.0	1,983.2	42.79	47.351	
6,450.0	6,374.4	6,576.0	6,367.5	19.9	27.1	-41.18	-998.7	-841.2	2,025.9	1,989.9	36.00	56.275	
6,500.0	6,424.3	6,624.5	6,416.0	19.9	27.2	-41.32	-998.7	-841.5	2,024.1	1,988.0	36.05	56.139	
6,550.0	6,473.9	6,669.0	6,460.5	19.9	27.2	-41.65	-998.7	-841.9	2,019.7	1,983.7	35.97	56.154	
6,600.0	6,522.9	6,716.5	6,508.0	19.9	27.3	-42.19	-998.8	-842.3	2,012.8	1,977.1	35.76	56.295	
6,650.0	6,571.2	6,763.0	6,554.5	19.9	27.3	-42.94	-998.9	-842.9	2,003.5	1,968.1	35.43	56.545	
6,700.0	6,618.4	6,810.3	6,601.8	19.8	27.4	-43.91	-999.0	-843.4	1,991.8	1,956.8	35.02	56.869	
6,750.0	6,664.3	6,858.2	6,649.6	19.8	27.4	-45.13	-999.3	-843.7	1,977.7	1,943.1	34.56	57.228	
6,800.0	6,708.8	6,902.3	6,693.8	19.7	27.5	-46.58	-999.5	-844.0	1,961.3	1,927.2	34.06	57.574	
6,850.0	6,751.6	6,945.0	6,736.4	19.6	27.5	-48.26	-999.7	-844.4	1,942.8	1,909.2	33.59	57.840	
6,900.0	6,792.5	6,986.6	6,778.0	19.5	27.6	-50.20	-999.8	-844.8	1,922.3	1,889.1	33.17	57.945	
6,950.0	6,831.2	7,026.1	6,817.5	19.4	27.6	-52.40	-999.9	-845.1	1,900.1	1,867.2	32.87	57.807	
7,000.0	6,867.7	7,064.7	6,856.2	19.3	27.6	-54.88	-1,000.1	-845.4	1,876.2	1,843.5	32.72	57.340	
7,050.0	6,901.7	7,101.8	6,893.3	19.3	27.7	-57.64	-1,000.1	-845.7	1,850.9	1,818.1	32.76	56.491	
7,100.0	6,933.0	7,135.0	6,926.5	19.3	27.7	-60.60	-1,000.1	-846.0	1,824.3	1,791.3	33.01	55.262	
7,150.0	6,961.6	7,164.0	6,955.5	19.3	27.7	-63.73	-1,000.1	-846.3	1,796.7	1,763.2	33.46	53.701	
7,200.0	6,987.2	7,189.3	6,980.7	19.4	27.8	-66.99	-1,000.1	-846.4	1,768.4	1,734.3	34.08	51.893	
7,250.0	7,009.8	7,211.5	7,003.0	19.6	27.8	-70.35	-1,000.1	-846.6	1,739.6	1,704.8	34.83	49.939	
7,300.0	7,029.2	7,231.1	7,022.5	19.9	27.8	-73.77	-1,000.1	-846.7	1,710.5	1,674.8	35.68	47.943	
7,350.0	7,045.3	7,249.0	7,040.5	20.2	27.8	-77.22	-1,000.1	-846.9	1,681.4	1,644.9	36.56	45.989	
7,400.0	7,058.1	7,263.3	7,054.8	20.6	27.9	-80.56	-1,000.1	-846.9	1,652.6	1,615.1	37.43	44.157	
7,450.0	7,067.5	7,273.9	7,065.3	21.2	27.9	-83.73	-1,000.1	-847.0	1,624.2	1,585.9	38.24	42.475	
7,500.0	7,073.5	7,280.6	7,072.1	21.8	27.9	-86.67	-1,000.1	-847.0	1,596.4	1,557.5	38.99	40.947	
7,550.0	7,075.9	7,283.6	7,075.1	22.5	27.9	-89.34	-1,000.1	-847.1	1,569.6	1,530.0	39.68	39.560	
7,563.9	7,076.0	7,283.8	7,075.2	22.7	27.9	-90.03	-1,000.1	-847.1	1,562.4	1,522.5	39.86	39.195	
7,600.0	7,075.8	7,283.8	7,075.3	23.2	27.9	-90.03	-1,000.1	-847.1	1,543.9	1,503.5	40.41	38.204	
7,700.0	7,075.3	7,283.9	7,075.3	24.9	27.9	-90.03	-1,000.1	-847.1	1,496.3	1,454.2	42.10	35.544	
7,800.0	7,074.9	7,283.9	7,075.4	26.7	27.9	-90.04	-1,000.1	-847.1	1,453.9	1,409.9	43.97	33.066	
7,900.0	7,074.4	7,284.0	7,075.5	28.8	27.9	-90.04	-1,000.1	-847.1	1,417.3	1,371.3	45.99	30.815	
8,000.0	7,073.9	7,284.1	7,075.5	30.9	27.9	-90.04	-1,000.1	-847.1	1,387.0	1,338.9	48.14	28.810	
8,100.0	7,073.4	7,284.1	7,075.6	33.2	27.9	-90.04	-1,000.1	-847.1	1,363.4	1,313.0	50.39	27.057	
8,200.0	7,072.9	7,284.2	7,075.6	35.5	27.9	-90.05	-1,000.1	-847.1	1,346.8	1,294.0	52.72	25.547	
8,300.0	7,072.4	7,284.3	7,075.7	37.9	27.9	-90.05	-1,000.1	-847.1	1,337.4	1,282.3	55.11	24.269	
8,375.0	7,072.1	7,284.3	7,075.8	39.7	27.9	-90.05	-1,000.1	-847.1	1,335.3	1,278.4	56.94	23.450	
8,400.0	7,071.9	7,284.3	7,075.8	40.3	27.9	-90.05	-1,000.1	-847.1	1,335.6	1,278.0	57.55	23.205	
8,500.0	7,071.5	7,284.4	7,075.8	42.8	27.9	-90.05	-1,000.1	-847.1	1,341.2	1,281.1	60.05	22.336	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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
8,600.0	7,071.0	7,284.4	7,075.9	45.4	27.9	-90.06	-1,000.1	-847.1	1,354.2	1,291.6	62.57	21.641	
8,700.0	7,070.5	7,284.5	7,076.0	47.9	27.9	-90.06	-1,000.1	-847.1	1,374.3	1,309.2	65.13	21.100	
8,800.0	7,070.0	7,284.6	7,076.0	50.5	27.9	-90.06	-1,000.1	-847.1	1,401.3	1,333.6	67.72	20.694	
8,900.0	7,069.5	7,284.6	7,076.1	53.1	27.9	-90.07	-1,000.1	-847.1	1,434.8	1,364.5	70.33	20.403	
9,000.0	7,069.0	7,284.7	7,076.1	55.8	27.9	-90.07	-1,000.1	-847.1	1,474.4	1,401.4	72.95	20.209	
9,100.0	7,068.5	7,284.7	7,076.2	58.4	27.9	-90.07	-1,000.1	-847.1	1,519.4	1,443.8	75.60	20.099	
9,200.0	7,068.1	7,284.8	7,076.3	61.1	27.9	-90.07	-1,000.1	-847.1	1,569.6	1,491.4	78.26	20.057	SF
9,300.0	7,067.6	7,284.9	7,076.3	63.7	27.9	-90.08	-1,000.1	-847.1	1,624.4	1,543.5	80.93	20.072	
9,400.0	7,067.1	7,284.9	7,076.4	66.4	27.9	-90.08	-1,000.1	-847.1	1,683.4	1,599.7	83.61	20.133	
9,500.0	7,066.6	7,285.0	7,076.4	69.1	27.9	-90.08	-1,000.1	-847.1	1,746.1	1,659.7	86.31	20.231	
9,600.0	7,066.1	7,285.0	7,076.5	71.8	27.9	-90.08	-1,000.1	-847.1	1,812.1	1,723.1	89.01	20.359	
9,700.0	7,065.6	7,285.1	7,076.6	74.5	27.9	-90.09	-1,000.1	-847.1	1,881.1	1,789.4	91.72	20.510	
9,800.0	7,065.1	7,285.2	7,076.6	77.2	27.9	-90.09	-1,000.1	-847.1	1,952.9	1,858.4	94.44	20.679	
9,900.0	7,064.7	7,285.2	7,076.7	80.0	27.9	-90.09	-1,000.1	-847.1	2,027.0	1,929.8	97.16	20.863	
10,000.0	7,064.2	7,285.3	7,076.7	82.7	27.9	-90.09	-1,000.1	-847.1	2,103.3	2,003.4	99.89	21.056	
10,100.0	7,063.7	7,285.3	7,076.8	85.4	27.9	-90.10	-1,000.1	-847.1	2,181.4	2,078.8	102.62	21.257	
10,200.0	7,063.2	7,285.4	7,076.8	88.2	27.9	-90.10	-1,000.1	-847.1	2,261.3	2,156.0	105.36	21.463	
10,300.0	7,062.7	7,285.4	7,076.9	90.9	27.9	-90.10	-1,000.1	-847.1	2,342.8	2,234.7	108.10	21.672	
10,400.0	7,062.2	7,285.5	7,077.0	93.6	27.9	-90.10	-1,000.1	-847.1	2,425.6	2,314.8	110.85	21.882	
10,500.0	7,061.7	7,285.6	7,077.0	96.4	27.9	-90.11	-1,000.1	-847.1	2,509.7	2,396.1	113.60	22.092	
10,600.0	7,061.3	7,285.6	7,077.1	99.2	27.9	-90.11	-1,000.1	-847.1	2,594.9	2,478.6	116.35	22.302	
10,700.0	7,060.8	7,285.7	7,077.1	101.9	27.9	-90.11	-1,000.1	-847.1	2,681.2	2,562.1	119.11	22.510	
10,800.0	7,060.3	7,285.7	7,077.2	104.7	27.9	-90.11	-1,000.1	-847.1	2,768.3	2,646.5	121.87	22.715	
10,900.0	7,059.8	7,285.8	7,077.2	107.4	27.9	-90.11	-1,000.1	-847.1	2,856.3	2,731.7	124.63	22.918	
11,000.0	7,059.3	7,285.8	7,077.3	110.2	27.9	-90.12	-1,000.1	-847.1	2,945.1	2,817.7	127.40	23.117	
11,100.0	7,058.8	7,285.9	7,077.3	113.0	27.9	-90.12	-1,000.1	-847.1	3,034.6	2,904.4	130.16	23.313	
11,200.0	7,058.3	7,285.9	7,077.4	115.7	27.9	-90.12	-1,000.1	-847.1	3,124.7	2,991.7	132.93	23.506	
11,300.0	7,057.9	7,286.0	7,077.5	118.5	27.9	-90.12	-1,000.1	-847.1	3,215.4	3,079.7	135.70	23.694	
11,400.0	7,057.4	7,286.1	7,077.5	121.3	27.9	-90.13	-1,000.1	-847.1	3,306.6	3,168.1	138.48	23.879	
11,500.0	7,056.9	7,286.1	7,077.6	124.0	27.9	-90.13	-1,000.1	-847.1	3,398.3	3,257.1	141.25	24.059	
11,600.0	7,056.4	7,286.2	7,077.6	126.8	27.9	-90.13	-1,000.1	-847.1	3,490.5	3,346.5	144.03	24.235	
11,686.6	7,056.0	7,286.2	7,077.7	129.2	27.9	-90.13	-1,000.1	-847.1	3,570.7	3,424.3	146.43	24.385	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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	2.5	2.5	0.0	0.0	-55.15	404.4	-580.8	707.7				
100.0	100.0	103.5	103.5	0.1	0.1	-55.19	404.0	-581.0	707.6	707.5	0.17	4,088.581	
200.0	200.0	204.7	204.6	0.3	0.2	-55.28	402.9	-581.5	707.4	706.9	0.56	1,269.812	
300.0	300.0	323.3	323.2	0.5	0.5	-55.41	400.7	-581.1	706.2	705.2	1.04	678.456	
400.0	400.0	468.8	468.5	0.8	0.8	-55.51	394.6	-574.3	699.9	698.3	1.61	434.194	
500.0	500.0	604.0	602.7	1.0	1.2	-119.84	384.6	-561.5	688.7	686.6	2.15	320.148	
600.0	599.8	720.7	717.8	1.2	1.6	-120.77	371.8	-547.6	675.3	672.6	2.66	254.201	
700.0	699.5	829.7	824.9	1.5	2.0	-122.30	355.7	-535.4	662.4	659.2	3.17	209.141	
800.0	798.7	963.1	954.7	1.7	2.7	-124.90	330.1	-518.2	647.8	644.0	3.83	169.308	
900.0	897.5	1,095.1	1,081.0	2.0	3.4	-128.21	299.0	-496.0	630.4	625.8	4.60	137.177	
1,000.0	995.6	1,204.4	1,183.8	2.4	4.1	-131.73	268.4	-475.1	612.2	606.8	5.39	113.488	
1,000.1	995.8	1,204.5	1,184.0	2.4	4.1	-131.74	268.4	-475.1	612.2	606.8	5.40	113.460	
1,100.0	1,093.4	1,300.8	1,274.1	2.8	4.8	-134.92	240.6	-455.9	595.9	589.7	6.20	96.084	
1,200.0	1,191.3	1,392.1	1,359.7	3.2	5.3	-137.95	215.2	-436.7	580.9	573.9	6.98	83.235	
1,300.0	1,289.1	1,477.3	1,440.1	3.6	5.8	-140.81	192.7	-419.7	569.1	561.4	7.72	73.685	
1,400.0	1,386.9	1,572.4	1,529.9	4.1	6.4	-144.13	167.4	-401.0	559.8	551.2	8.57	65.295	
1,500.0	1,484.7	1,666.8	1,618.3	4.5	7.0	-147.70	140.4	-382.7	552.2	542.8	9.48	58.237	
1,600.0	1,582.5	1,762.6	1,708.1	4.9	7.6	-151.46	112.4	-364.1	547.2	536.8	10.41	52.549	
1,700.0	1,680.3	1,867.2	1,805.5	5.4	8.4	-155.68	81.3	-342.0	543.0	531.6	11.44	47.461	
1,800.0	1,778.1	1,960.0	1,891.8	5.8	9.0	-159.41	54.2	-321.0	540.2	527.8	12.40	43.576	
1,827.0	1,804.5	1,982.5	1,912.8	5.9	9.2	-160.31	47.7	-316.0	540.0	527.4	12.63	42.754	CC, ES
1,900.0	1,875.9	2,046.4	1,972.4	6.3	9.6	-162.85	29.4	-302.4	541.1	527.8	13.30	40.684	
2,000.0	1,973.8	2,136.7	2,056.2	6.7	10.2	-166.56	1.9	-283.5	545.2	530.9	14.27	38.199	
2,100.0	2,071.6	2,229.2	2,142.2	7.2	10.9	-170.33	-26.5	-264.1	552.2	536.9	15.29	36.121	
2,200.0	2,169.4	2,322.5	2,229.1	7.6	11.5	-173.94	-54.2	-244.5	561.6	545.3	16.27	34.520	
2,300.0	2,267.2	2,416.1	2,316.3	8.1	12.2	-177.43	-81.9	-225.0	573.4	556.2	17.26	33.227	
2,400.0	2,365.0	2,504.8	2,398.5	8.5	12.8	179.27	-109.0	-205.6	587.2	568.9	18.25	32.170	
2,500.0	2,462.8	2,581.6	2,469.5	9.0	13.4	176.44	-134.1	-189.9	605.2	586.1	19.16	31.581	
2,600.0	2,560.6	2,671.3	2,551.0	9.4	14.1	173.05	-166.1	-171.0	626.5	606.3	20.23	30.968	
2,700.0	2,658.5	2,758.9	2,629.9	9.9	14.9	169.76	-199.0	-151.6	650.3	629.0	21.32	30.500	
2,800.0	2,756.3	2,849.1	2,711.2	10.3	15.6	166.60	-232.7	-131.8	676.5	654.1	22.37	30.235	
2,900.0	2,854.1	2,939.6	2,793.7	10.8	16.3	163.84	-264.7	-113.4	704.5	681.1	23.34	30.188	
3,000.0	2,951.9	3,036.6	2,882.6	11.2	17.0	161.16	-298.2	-93.6	733.4	709.0	24.36	30.104	
3,100.0	3,049.7	3,128.5	2,966.1	11.7	17.8	158.65	-330.7	-73.3	763.3	737.9	25.40	30.046	
3,200.0	3,147.5	3,248.5	3,075.6	12.1	18.7	155.67	-370.6	-44.9	791.9	765.3	26.58	29.787	
3,300.0	3,245.3	3,336.3	3,156.9	12.6	19.3	153.83	-397.7	-25.5	820.9	793.4	27.48	29.875	
3,400.0	3,343.2	3,438.4	3,251.6	13.0	20.1	151.87	-428.7	-3.2	850.6	822.1	28.46	29.888	
3,500.0	3,441.0	3,546.3	3,352.0	13.5	20.8	149.96	-459.5	21.5	878.9	849.4	29.47	29.820	
3,600.0	3,538.8	3,645.1	3,444.0	13.9	21.5	148.31	-487.2	44.6	907.4	877.0	30.42	29.828	
3,700.0	3,636.6	3,741.0	3,533.8	14.4	22.2	146.89	-512.9	66.5	935.6	904.3	31.32	29.874	
3,800.0	3,734.4	3,824.2	3,611.9	14.8	22.7	145.78	-535.0	84.5	964.8	932.7	32.11	30.042	
3,900.0	3,832.2	3,896.7	3,680.3	15.3	23.2	144.93	-554.7	98.5	995.8	962.9	32.85	30.311	
4,000.0	3,930.0	3,965.0	3,744.0	15.7	23.6	144.11	-575.3	111.7	1,029.7	996.2	33.58	30.668	
4,059.3	3,988.0	4,013.0	3,788.6	16.0	24.0	143.54	-590.7	120.9	1,050.9	1,016.8	34.05	30.862	
4,100.0	4,027.9	4,054.2	3,826.9	16.2	24.3	143.24	-603.6	128.6	1,065.1	1,030.7	34.47	30.898	
4,200.0	4,126.3	4,166.7	3,931.0	16.5	25.1	142.19	-638.7	152.9	1,097.4	1,061.9	35.52	30.898	
4,300.0	4,225.3	4,260.4	4,017.7	16.8	25.8	141.31	-667.5	173.6	1,126.8	1,090.4	36.40	30.954	
4,400.0	4,324.7	4,363.8	4,114.3	17.0	26.5	140.34	-697.6	194.9	1,153.3	1,116.0	37.24	30.967	
4,500.0	4,424.4	4,444.3	4,189.4	17.2	27.0	139.59	-721.4	211.3	1,178.1	1,140.2	37.91	31.079	
4,600.0	4,524.4	4,543.4	4,281.6	17.3	27.7	138.49	-751.3	232.3	1,201.3	1,162.7	38.62	31.107	
4,659.4	4,583.8	4,609.0	4,342.7	17.4	28.2	-158.41	-770.5	246.2	1,213.8	1,180.0	33.82	35.890	
4,700.0	4,624.4	4,639.6	4,371.3	17.5	28.4	-158.86	-779.4	252.7	1,222.1	1,188.0	34.09	35.848	

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 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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
4,800.0	4,724.4	4,711.0	4,437.3	17.6	28.9	-159.93	-801.5	268.3	1,244.4	1,209.6	34.75	35.806	
4,900.0	4,824.4	4,797.1	4,516.7	17.7	29.6	-161.19	-829.1	287.1	1,268.6	1,233.0	35.56	35.677	
5,000.0	4,924.4	4,901.6	4,613.6	17.8	30.3	-162.58	-861.8	308.3	1,293.0	1,256.5	36.47	35.450	
5,100.0	5,024.4	5,017.6	4,723.0	18.0	31.0	-163.87	-895.1	328.0	1,316.2	1,278.8	37.42	35.178	
5,200.0	5,124.4	5,110.9	4,811.3	18.1	31.6	-164.80	-921.4	342.3	1,339.9	1,301.7	38.19	35.086	
5,300.0	5,224.4	5,263.1	4,956.6	18.2	32.5	-166.17	-960.7	364.7	1,361.7	1,322.4	39.29	34.656	
5,400.0	5,324.4	5,443.5	5,132.3	18.4	33.3	-167.37	-996.3	385.2	1,378.4	1,338.0	40.34	34.166	
5,500.0	5,424.4	5,614.2	5,300.8	18.5	33.8	-168.10	-1,019.5	398.2	1,390.1	1,349.0	41.13	33.803	
5,600.0	5,524.4	5,804.7	5,490.7	18.6	34.2	-168.55	-1,032.4	406.8	1,395.8	1,354.0	41.73	33.450	
5,700.0	5,624.4	5,936.3	5,622.2	18.8	34.3	-168.71	-1,034.7	410.2	1,396.9	1,354.8	42.08	33.200	
5,800.0	5,724.4	6,030.7	5,716.6	18.9	34.4	-168.71	-1,035.2	410.2	1,397.4	1,355.1	42.34	33.009	
5,900.0	5,824.4	6,127.1	5,813.0	19.1	34.5	-168.66	-1,035.8	408.8	1,398.3	1,355.7	42.59	32.830	
6,000.0	5,924.4	6,225.2	5,911.1	19.2	34.5	-168.62	-1,036.6	407.5	1,399.4	1,356.5	42.86	32.653	
6,100.0	6,024.4	6,325.0	6,010.8	19.4	34.6	-168.56	-1,037.5	406.0	1,400.6	1,357.5	43.12	32.478	
6,200.0	6,124.4	6,430.0	6,115.8	19.5	34.7	-168.52	-1,038.2	404.8	1,401.5	1,358.1	43.40	32.293	
6,300.0	6,224.4	6,528.6	6,214.5	19.7	34.8	-168.50	-1,038.9	404.1	1,402.3	1,358.6	43.67	32.109	
6,400.0	6,324.4	6,627.8	6,313.6	19.8	34.9	-168.48	-1,039.7	403.4	1,403.3	1,359.3	43.95	31.927	
6,435.4	6,359.8	6,664.3	6,350.2	19.9	34.9	-168.47	-1,040.0	403.2	1,403.6	1,359.5	44.05	31.860	
6,450.0	6,374.4	6,679.3	6,365.1	19.9	34.9	-78.47	-1,040.1	403.1	1,403.7	1,357.6	46.03	30.492	
6,500.0	6,424.3	6,730.6	6,416.4	19.9	34.9	-78.59	-1,040.5	403.0	1,403.5	1,357.4	46.11	30.439	
6,550.0	6,473.9	6,781.1	6,466.9	19.9	35.0	-78.91	-1,040.8	402.8	1,402.6	1,356.5	46.10	30.427	
6,600.0	6,522.9	6,830.2	6,516.0	19.9	35.0	-79.40	-1,041.1	402.7	1,401.1	1,355.1	46.01	30.453	
6,650.0	6,571.2	6,877.7	6,563.6	19.9	35.1	-80.06	-1,041.4	402.5	1,399.1	1,353.2	45.85	30.513	
6,700.0	6,618.4	6,923.5	6,609.3	19.8	35.1	-80.86	-1,041.8	402.3	1,396.6	1,351.0	45.64	30.602	
6,750.0	6,664.3	6,968.8	6,654.6	19.8	35.1	-81.79	-1,042.1	402.0	1,393.8	1,348.5	45.38	30.715	
6,800.0	6,708.8	7,013.4	6,699.2	19.7	35.2	-82.85	-1,042.5	401.7	1,390.9	1,345.8	45.09	30.848	
6,850.0	6,751.6	7,055.8	6,741.7	19.6	35.2	-83.97	-1,042.8	401.4	1,388.0	1,343.2	44.79	30.990	
6,900.0	6,792.5	7,095.4	6,781.2	19.5	35.3	-85.12	-1,043.1	401.1	1,385.2	1,340.7	44.49	31.133	
6,950.0	6,831.2	7,132.9	6,818.7	19.4	35.3	-86.28	-1,043.5	400.9	1,382.8	1,338.6	44.22	31.270	
7,000.0	6,867.7	7,172.5	6,858.3	19.3	35.3	-87.54	-1,043.9	400.6	1,381.0	1,337.0	43.97	31.405	
7,050.0	6,901.7	7,210.0	6,895.8	19.3	35.4	-88.77	-1,044.1	400.2	1,379.8	1,336.0	43.78	31.516	
7,089.5	6,926.7	7,236.5	6,922.3	19.3	35.4	-89.64	-1,044.3	399.9	1,379.5	1,335.8	43.69	31.574	
7,100.0	6,933.0	7,242.6	6,928.4	19.3	35.4	-89.84	-1,044.3	399.9	1,379.5	1,335.9	43.67	31.587	
7,150.0	6,961.6	7,269.9	6,955.7	19.3	35.4	-90.69	-1,044.5	399.6	1,380.4	1,336.7	43.67	31.607	
7,200.0	6,987.2	7,294.3	6,980.1	19.4	35.4	-91.38	-1,044.6	399.4	1,382.6	1,338.8	43.78	31.580	
7,250.0	7,009.8	7,315.8	7,001.6	19.6	35.5	-91.88	-1,044.8	399.3	1,386.2	1,342.2	44.00	31.502	
7,300.0	7,029.2	7,336.2	7,022.0	19.9	35.5	-92.24	-1,045.0	399.1	1,391.5	1,347.2	44.34	31.381	
7,350.0	7,045.3	7,354.1	7,039.9	20.2	35.5	-92.38	-1,045.1	399.0	1,398.4	1,353.6	44.80	31.215	
7,400.0	7,058.1	7,368.4	7,054.2	20.6	35.5	-92.25	-1,045.2	399.0	1,407.0	1,361.6	45.37	31.011	
7,450.0	7,067.5	7,378.9	7,064.7	21.2	35.5	-91.83	-1,045.2	398.9	1,417.4	1,371.3	46.04	30.786	
7,500.0	7,073.5	7,385.7	7,071.5	21.8	35.5	-91.11	-1,045.3	398.9	1,429.5	1,382.7	46.78	30.558	
7,550.0	7,075.9	7,388.6	7,074.4	22.5	35.5	-90.09	-1,045.3	398.9	1,443.2	1,395.7	47.55	30.352	
7,563.9	7,076.0	7,388.8	7,074.6	22.7	35.5	-89.75	-1,045.3	398.9	1,447.4	1,399.6	47.77	30.301	
7,600.0	7,075.8	7,388.8	7,074.6	23.2	35.5	-89.75	-1,045.3	398.9	1,458.6	1,410.3	48.32	30.188	
7,700.0	7,075.3	7,388.8	7,074.6	24.9	35.5	-89.75	-1,045.3	398.9	1,493.9	1,443.9	50.00	29.877	
7,800.0	7,074.9	7,388.8	7,074.6	26.7	35.5	-89.75	-1,045.3	398.9	1,534.9	1,483.0	51.87	29.589	
7,900.0	7,074.4	7,388.8	7,074.6	28.8	35.5	-89.75	-1,045.3	398.9	1,581.2	1,527.3	53.90	29.336	
8,000.0	7,073.9	7,388.8	7,074.6	30.9	35.5	-89.75	-1,045.3	398.9	1,632.3	1,576.2	56.05	29.123	
8,100.0	7,073.4	7,388.8	7,074.6	33.2	35.5	-89.75	-1,045.3	398.9	1,687.7	1,629.4	58.29	28.952	
8,200.0	7,072.9	7,388.8	7,074.6	35.5	35.5	-89.75	-1,045.3	398.9	1,747.2	1,686.5	60.62	28.821	
8,300.0	7,072.4	7,388.8	7,074.6	37.9	35.5	-89.75	-1,045.3	398.9	1,810.2	1,747.2	63.01	28.727	
8,400.0	7,071.9	7,388.8	7,074.6	40.3	35.5	-89.75	-1,045.3	398.9	1,876.4	1,811.0	65.46	28.665	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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	7,071.5	7,388.8	7,074.6	42.8	35.5	-89.75	-1,045.3	398.9	1,945.5	1,877.6	67.95	28.632	
8,600.0	7,071.0	7,388.8	7,074.6	45.4	35.5	-89.75	-1,045.3	398.9	2,017.3	1,946.8	70.48	28.622	SF
8,700.0	7,070.5	7,388.8	7,074.6	47.9	35.5	-89.75	-1,045.3	398.9	2,091.3	2,018.3	73.04	28.633	
8,800.0	7,070.0	7,388.8	7,074.6	50.5	35.5	-89.75	-1,045.3	398.9	2,167.4	2,091.8	75.62	28.661	
8,900.0	7,069.5	7,388.8	7,074.6	53.1	35.5	-89.75	-1,045.3	398.9	2,245.4	2,167.2	78.23	28.702	
9,000.0	7,069.0	7,388.8	7,074.6	55.8	35.5	-89.75	-1,045.3	398.9	2,325.1	2,244.2	80.86	28.755	
9,100.0	7,068.5	7,388.8	7,074.6	58.4	35.5	-89.75	-1,045.3	398.9	2,406.3	2,322.8	83.50	28.817	
9,200.0	7,068.1	7,388.8	7,074.6	61.1	35.5	-89.75	-1,045.3	398.9	2,488.9	2,402.7	86.16	28.886	
9,300.0	7,067.6	7,388.8	7,074.6	63.7	35.5	-89.75	-1,045.3	398.9	2,572.7	2,483.8	88.83	28.960	
9,400.0	7,067.1	7,388.8	7,074.6	66.4	35.5	-89.75	-1,045.3	398.9	2,657.6	2,566.1	91.52	29.039	
9,500.0	7,066.6	7,388.8	7,074.6	69.1	35.5	-89.75	-1,045.3	398.9	2,743.5	2,649.3	94.21	29.121	
9,600.0	7,066.1	7,388.8	7,074.6	71.8	35.5	-89.75	-1,045.3	398.9	2,830.4	2,733.5	96.91	29.205	
9,700.0	7,065.6	7,388.8	7,074.6	74.5	35.5	-89.75	-1,045.3	398.9	2,918.1	2,818.5	99.62	29.291	
9,800.0	7,065.1	7,388.8	7,074.6	77.2	35.5	-89.75	-1,045.3	398.9	3,006.6	2,904.2	102.34	29.378	
9,900.0	7,064.7	7,388.8	7,074.6	80.0	35.5	-89.75	-1,045.3	398.9	3,095.7	2,990.7	105.06	29.465	
10,000.0	7,064.2	7,388.8	7,074.6	82.7	35.5	-89.75	-1,045.3	398.9	3,185.6	3,077.8	107.79	29.553	
10,100.0	7,063.7	7,388.9	7,074.6	85.4	35.5	-89.75	-1,045.3	398.9	3,276.0	3,165.4	110.53	29.640	
10,200.0	7,063.2	7,388.9	7,074.7	88.2	35.5	-89.75	-1,045.3	398.9	3,366.9	3,253.7	113.27	29.726	
10,300.0	7,062.7	7,388.9	7,074.7	90.9	35.5	-89.75	-1,045.3	398.9	3,458.4	3,342.4	116.01	29.811	
10,400.0	7,062.2	7,388.9	7,074.7	93.6	35.5	-89.75	-1,045.3	398.9	3,550.3	3,431.5	118.76	29.896	
10,500.0	7,061.7	7,388.9	7,074.7	96.4	35.5	-89.75	-1,045.3	398.9	3,642.6	3,521.1	121.51	29.979	
10,600.0	7,061.3	7,388.9	7,074.7	99.2	35.5	-89.75	-1,045.3	398.9	3,735.4	3,611.1	124.26	30.061	
10,700.0	7,060.8	7,388.9	7,074.7	101.9	35.5	-89.75	-1,045.3	398.9	3,828.5	3,701.4	127.02	30.141	
10,800.0	7,060.3	7,388.9	7,074.7	104.7	35.5	-89.75	-1,045.3	398.9	3,921.9	3,792.1	129.78	30.220	
10,900.0	7,059.8	7,388.9	7,074.7	107.4	35.5	-89.75	-1,045.3	398.9	4,015.6	3,883.1	132.54	30.298	
11,000.0	7,059.3	7,388.9	7,074.7	110.2	35.5	-89.75	-1,045.3	398.9	4,109.7	3,974.4	135.30	30.374	
11,100.0	7,058.8	7,388.9	7,074.7	113.0	35.5	-89.75	-1,045.3	398.9	4,204.0	4,065.9	138.07	30.449	
11,200.0	7,058.3	7,388.9	7,074.7	115.7	35.5	-89.75	-1,045.3	398.9	4,298.6	4,157.8	140.84	30.522	
11,300.0	7,057.9	7,388.9	7,074.7	118.5	35.5	-89.75	-1,045.3	398.9	4,393.4	4,249.8	143.61	30.593	
11,400.0	7,057.4	7,388.9	7,074.7	121.3	35.5	-89.75	-1,045.3	398.9	4,488.5	4,342.1	146.38	30.663	
11,500.0	7,056.9	7,388.9	7,074.7	124.0	35.5	-89.75	-1,045.3	398.9	4,583.7	4,434.6	149.15	30.731	
11,600.0	7,056.4	7,388.9	7,074.7	126.8	35.5	-89.75	-1,045.3	398.9	4,679.2	4,527.2	151.93	30.798	
11,686.6	7,056.0	7,388.9	7,074.7	129.2	35.5	-89.75	-1,045.3	398.9	4,762.0	4,607.7	154.34	30.855	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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	-50.27	465.2	-559.9	727.9				
100.0	100.0	101.6	101.6	0.1	0.1	-50.27	465.3	-559.9	728.0	727.8	0.20	3,592.423	
200.0	200.0	200.7	200.7	0.3	0.2	-50.28	465.4	-560.1	728.2	727.6	0.53	1,373.206	
300.0	300.0	299.8	299.8	0.5	0.3	-50.28	465.5	-560.3	728.5	727.6	0.86	849.147	
400.0	400.0	398.9	398.9	0.8	0.4	-50.28	465.8	-560.7	728.9	727.7	1.19	614.845	
500.0	500.0	498.0	498.0	1.0	0.5	-114.27	466.1	-561.1	730.2	728.7	1.51	484.285	
600.0	599.8	596.9	596.9	1.2	0.6	-114.59	466.5	-561.7	733.0	731.2	1.83	400.115	
700.0	699.5	695.6	695.6	1.5	0.7	-115.12	466.9	-562.3	737.5	735.3	2.17	339.229	
800.0	798.7	792.3	792.2	1.7	0.9	-115.83	467.5	-563.1	743.8	741.2	2.64	281.522	
900.0	897.5	890.0	890.0	2.0	1.1	-116.74	468.2	-564.1	752.0	748.9	3.14	239.425	
1,000.0	995.6	986.5	986.5	2.4	1.3	-117.82	468.9	-565.3	762.3	758.6	3.67	207.488	
1,000.1	995.8	986.7	986.7	2.4	1.3	-117.82	468.9	-565.3	762.3	758.6	3.67	207.449	
1,100.0	1,093.4	1,086.7	1,086.6	2.8	1.6	-119.23	469.2	-566.8	773.8	769.6	4.23	182.843	
1,200.0	1,191.3	1,197.1	1,197.1	3.2	1.8	-120.58	470.8	-566.2	784.8	780.0	4.81	163.321	
1,300.0	1,289.1	1,307.8	1,307.5	3.6	2.0	-121.52	476.0	-561.3	794.4	789.0	5.39	147.288	
1,400.0	1,386.9	1,403.6	1,402.8	4.1	2.2	-122.06	483.0	-554.5	803.4	797.4	5.98	134.307	
1,500.0	1,484.7	1,498.4	1,496.8	4.5	2.4	-122.38	492.9	-547.3	813.4	806.8	6.60	123.169	
1,600.0	1,582.5	1,602.2	1,599.1	4.9	2.7	-122.43	507.1	-537.0	823.3	816.0	7.29	112.910	
1,700.0	1,680.3	1,714.6	1,709.2	5.4	3.1	-122.26	524.7	-523.3	832.3	824.2	8.05	103.367	
1,800.0	1,778.1	1,808.0	1,800.4	5.8	3.5	-121.99	540.7	-510.4	840.6	831.8	8.80	95.562	
1,900.0	1,875.9	1,914.4	1,903.9	6.3	3.9	-121.59	560.1	-495.3	849.2	839.5	9.61	88.397	
2,000.0	1,973.8	2,028.0	2,014.4	6.7	4.3	-121.22	579.3	-477.8	856.0	845.5	10.46	81.865	
2,100.0	2,071.6	2,112.4	2,096.3	7.2	4.7	-120.87	594.9	-464.5	863.4	852.2	11.23	76.910	
2,200.0	2,169.4	2,215.5	2,196.3	7.6	5.1	-120.42	614.4	-448.7	871.5	859.4	12.08	72.116	
2,300.0	2,267.2	2,319.7	2,297.4	8.1	5.6	-119.99	633.7	-432.3	879.1	866.1	12.96	67.838	
2,400.0	2,365.0	2,422.5	2,397.0	8.5	6.0	-119.55	652.8	-415.6	886.3	872.4	13.85	63.977	
2,500.0	2,462.8	2,533.8	2,504.7	9.0	6.6	-119.06	673.4	-396.7	893.0	878.2	14.80	60.320	
2,600.0	2,560.6	2,634.2	2,601.4	9.4	7.0	-118.51	692.6	-377.7	898.4	882.7	15.73	57.119	
2,700.0	2,658.5	2,723.9	2,687.9	9.9	7.5	-118.04	710.0	-361.4	904.8	888.2	16.59	54.535	
2,800.0	2,756.3	2,815.5	2,776.6	10.3	7.9	-117.66	727.2	-346.4	912.2	894.8	17.44	52.316	
2,900.0	2,854.1	2,917.1	2,875.3	10.8	8.3	-117.33	745.5	-330.8	920.1	901.8	18.33	50.198	
3,000.0	2,951.9	3,017.0	2,972.2	11.2	8.8	-116.97	763.8	-314.9	927.7	908.4	19.23	48.253	
3,100.0	3,049.7	3,109.4	3,062.2	11.7	9.2	-116.72	779.8	-301.2	935.7	915.6	20.06	46.646	
3,200.0	3,147.5	3,203.4	3,154.0	12.1	9.6	-116.54	795.7	-288.5	944.4	923.5	20.89	45.210	
3,300.0	3,245.3	3,324.4	3,272.4	12.6	10.1	-116.39	814.7	-272.1	952.5	930.7	21.82	43.655	
3,400.0	3,343.2	3,432.3	3,378.4	13.0	10.5	-116.41	828.4	-257.6	958.8	936.2	22.65	42.333	
3,500.0	3,441.0	3,549.1	3,493.2	13.5	11.0	-116.46	842.4	-241.2	964.3	940.8	23.51	41.012	
3,600.0	3,538.8	3,659.1	3,601.1	13.9	11.4	-116.46	854.6	-223.5	967.5	943.1	24.36	39.713	
3,700.0	3,636.6	3,742.9	3,683.4	14.4	11.7	-116.49	863.8	-210.6	971.3	946.2	25.10	38.700	
3,800.0	3,734.4	3,824.3	3,763.4	14.8	12.0	-116.51	873.8	-199.4	977.1	951.3	25.83	37.833	
3,900.0	3,832.2	3,912.1	3,849.5	15.3	12.4	-116.47	886.4	-187.8	984.6	958.0	26.60	37.012	
4,000.0	3,930.0	4,007.7	3,942.9	15.7	12.8	-116.33	901.8	-174.8	992.7	965.3	27.43	36.189	
4,059.3	3,988.0	4,066.2	4,000.2	16.0	13.0	-116.28	910.9	-167.1	997.7	969.8	27.93	35.723	
4,100.0	4,027.9	4,109.1	4,042.3	16.2	13.2	-116.30	917.3	-161.7	1,000.9	972.7	28.25	35.426	
4,200.0	4,126.3	4,208.8	4,140.1	16.5	13.6	-116.23	931.6	-149.2	1,007.6	978.6	28.97	34.782	
4,300.0	4,225.3	4,315.5	4,244.8	16.8	14.0	-115.92	947.2	-135.5	1,012.7	983.0	29.70	34.100	
4,400.0	4,324.7	4,412.2	4,339.6	17.0	14.4	-115.43	961.3	-122.6	1,015.8	985.4	30.36	33.457	
4,500.0	4,424.4	4,514.0	4,439.7	17.2	14.8	-114.78	975.1	-110.0	1,017.7	986.7	31.00	32.836	
4,600.0	4,524.4	4,601.4	4,525.9	17.3	15.1	-114.21	985.2	-100.9	1,018.7	987.2	31.49	32.351	
4,659.4	4,583.8	4,660.3	4,584.5	17.4	15.3	-49.95	991.0	-96.3	1,019.1	996.5	22.58	45.138	
4,700.0	4,624.4	4,703.0	4,626.8	17.5	15.4	-49.67	994.7	-93.2	1,019.1	996.4	22.71	44.881	
4,800.0	4,724.4	4,798.1	4,721.5	17.6	15.7	-49.16	1,001.8	-87.4	1,019.4	996.3	23.03	44.257	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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
4,900.0	4,824.4	4,906.4	4,829.5	17.7	15.9	-48.72	1,007.8	-82.5	1,019.5	996.1	23.39	43.587	
5,000.0	4,924.4	5,007.4	4,930.5	17.8	16.1	-48.47	1,010.8	-79.3	1,019.1	995.4	23.74	42.923	
5,080.0	5,004.4	5,083.7	5,006.7	17.9	16.2	-48.38	1,012.0	-78.1	1,019.0	995.0	24.02	42.416	
5,100.0	5,024.4	5,103.6	5,026.6	18.0	16.2	-48.37	1,012.2	-77.9	1,019.0	994.9	24.10	42.290	
5,200.0	5,124.4	5,202.8	5,125.8	18.1	16.4	-48.31	1,013.0	-77.3	1,019.1	994.6	24.46	41.666	
5,300.0	5,224.4	5,301.8	5,224.8	18.2	16.5	-48.27	1,013.6	-77.0	1,019.2	994.4	24.82	41.060	
5,400.0	5,324.4	5,400.7	5,323.7	18.4	16.7	-48.25	1,014.1	-76.9	1,019.5	994.3	25.19	40.471	
5,500.0	5,424.4	5,499.4	5,422.4	18.5	16.8	-48.23	1,014.6	-76.9	1,019.9	994.3	25.56	39.900	
5,600.0	5,524.4	5,600.6	5,523.6	18.6	16.9	-48.22	1,015.0	-77.1	1,020.3	994.4	25.94	39.339	
5,700.0	5,624.4	5,704.0	5,627.0	18.8	17.1	-48.23	1,014.9	-77.4	1,020.5	994.1	26.32	38.773	
5,800.0	5,724.4	5,806.0	5,729.0	18.9	17.2	-48.26	1,014.4	-77.7	1,020.3	993.6	26.70	38.214	
5,900.0	5,824.4	5,907.5	5,830.5	19.1	17.3	-48.30	1,013.7	-77.9	1,020.0	993.0	27.08	37.665	
6,000.0	5,924.4	6,007.6	5,930.5	19.2	17.5	-48.35	1,012.9	-78.2	1,019.7	992.2	27.46	37.133	
6,100.0	6,024.4	6,106.0	6,029.0	19.4	17.6	-48.38	1,012.2	-78.3	1,019.3	991.5	27.83	36.622	
6,200.0	6,124.4	6,204.6	6,127.6	19.5	17.7	-48.42	1,011.6	-78.6	1,019.1	990.9	28.21	36.125	
6,225.0	6,149.4	6,228.9	6,151.9	19.6	17.8	-48.42	1,011.5	-78.7	1,019.1	990.8	28.30	36.005	
6,300.0	6,224.4	6,301.9	6,224.9	19.7	17.9	-48.45	1,011.2	-79.0	1,019.2	990.6	28.58	35.654	
6,400.0	6,324.4	6,401.6	6,324.6	19.8	18.0	-48.48	1,010.9	-79.6	1,019.4	990.4	28.97	35.191	
6,435.4	6,359.8	6,436.9	6,359.9	19.9	18.0	-48.49	1,010.9	-79.7	1,019.5	990.4	29.10	35.030	
6,450.0	6,374.4	6,451.4	6,374.4	19.9	18.1	41.52	1,010.8	-79.8	1,019.4	982.2	37.19	27.410	
6,500.0	6,424.3	6,501.3	6,424.3	19.9	18.1	41.72	1,010.8	-79.9	1,017.4	980.2	37.24	27.322	
6,550.0	6,473.9	6,550.9	6,473.9	19.9	18.2	42.18	1,010.8	-80.2	1,012.9	975.7	37.21	27.223	
6,600.0	6,522.9	6,600.0	6,523.0	19.9	18.3	42.93	1,010.7	-80.4	1,005.8	968.7	37.10	27.109	
6,650.0	6,571.2	6,648.4	6,571.3	19.9	18.3	43.95	1,010.6	-80.7	996.3	959.4	36.94	26.973	
6,700.0	6,618.4	6,695.9	6,618.8	19.8	18.4	45.27	1,010.4	-80.9	984.4	947.7	36.73	26.804	
6,750.0	6,664.3	6,742.2	6,665.2	19.8	18.5	46.91	1,010.2	-81.2	970.3	933.8	36.49	26.592	
6,800.0	6,708.8	6,787.1	6,710.1	19.7	18.5	48.86	1,010.0	-81.5	954.1	917.8	36.24	26.327	
6,850.0	6,751.6	6,830.3	6,753.3	19.6	18.6	51.14	1,009.8	-81.8	936.0	900.0	36.01	25.997	
6,900.0	6,792.5	6,871.6	6,794.5	19.5	18.7	53.74	1,009.6	-82.1	916.3	880.5	35.81	25.591	
6,950.0	6,831.2	6,910.7	6,833.7	19.4	18.7	56.66	1,009.4	-82.4	895.2	859.6	35.66	25.105	
7,000.0	6,867.7	6,947.5	6,870.5	19.3	18.8	59.87	1,009.2	-82.6	873.1	837.5	35.59	24.536	
7,050.0	6,901.7	6,981.8	6,904.8	19.3	18.8	63.32	1,009.0	-82.8	850.3	814.7	35.59	23.892	
7,100.0	6,933.0	7,013.5	6,936.4	19.3	18.9	66.93	1,008.8	-82.9	827.1	791.4	35.67	23.187	
7,150.0	6,961.6	7,042.4	6,965.3	19.3	18.9	70.62	1,008.7	-83.1	803.9	768.1	35.82	22.441	
7,200.0	6,987.2	7,068.5	6,991.5	19.4	18.9	74.28	1,008.6	-83.2	781.2	745.2	36.04	21.676	
7,250.0	7,009.8	7,091.6	7,014.5	19.6	19.0	77.79	1,008.5	-83.3	759.5	723.2	36.32	20.914	
7,300.0	7,029.2	7,111.3	7,034.3	19.9	19.0	81.03	1,008.4	-83.3	739.3	702.6	36.64	20.175	
7,350.0	7,045.3	7,127.7	7,050.7	20.2	19.0	83.89	1,008.3	-83.4	720.9	683.9	37.03	19.471	
7,400.0	7,058.1	7,140.7	7,063.7	20.6	19.0	86.29	1,008.2	-83.4	705.0	667.5	37.47	18.814	
7,450.0	7,067.5	7,150.2	7,073.2	21.2	19.1	88.16	1,008.2	-83.4	691.9	653.9	37.99	18.212	
7,500.0	7,073.5	7,156.3	7,079.2	21.8	19.1	89.48	1,008.1	-83.4	682.1	643.5	38.59	17.674	
7,550.0	7,075.9	7,158.8	7,081.8	22.5	19.1	90.21	1,008.1	-83.4	675.7	636.4	39.27	17.207	
7,563.9	7,076.0	7,158.9	7,081.9	22.7	19.1	90.31	1,008.1	-83.4	674.6	635.1	39.47	17.091	
7,600.0	7,075.8	7,158.8	7,081.7	23.2	19.1	90.29	1,008.1	-83.4	673.0	633.0	40.02	16.816	
7,611.3	7,075.8	7,158.7	7,081.7	23.4	19.1	90.29	1,008.1	-83.4	672.9	632.7	40.21	16.733	CC, ES
7,700.0	7,075.3	7,158.4	7,081.3	24.9	19.1	90.26	1,008.1	-83.4	678.7	637.0	41.71	16.274	
7,800.0	7,074.9	7,158.0	7,081.0	26.7	19.1	90.23	1,008.1	-83.4	698.9	655.3	43.58	16.036	SF
7,900.0	7,074.4	7,157.6	7,080.6	28.8	19.1	90.20	1,008.1	-83.4	732.2	686.6	45.61	16.055	
8,000.0	7,073.9	7,157.3	7,080.2	30.9	19.1	90.17	1,008.1	-83.4	777.1	729.3	47.75	16.273	
8,100.0	7,073.4	7,156.9	7,079.8	33.2	19.1	90.13	1,008.1	-83.4	831.6	781.6	50.00	16.632	
8,200.0	7,072.9	7,156.5	7,079.5	35.5	19.1	90.10	1,008.1	-83.4	894.1	841.7	52.33	17.085	
8,300.0	7,072.4	7,156.2	7,079.1	37.9	19.1	90.07	1,008.1	-83.4	962.8	908.1	54.72	17.595	

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 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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
8,400.0	7,071.9	7,155.8	7,078.7	40.3	19.1	90.04	1,008.1	-83.4	1,036.7	979.5	57.17	18.134	
8,500.0	7,071.5	7,155.4	7,078.4	42.8	19.1	90.01	1,008.1	-83.4	1,114.7	1,055.0	59.66	18.684	
8,600.0	7,071.0	7,155.1	7,078.0	45.4	19.1	89.98	1,008.1	-83.4	1,195.9	1,133.7	62.19	19.231	
8,700.0	7,070.5	7,154.7	7,077.7	47.9	19.1	89.95	1,008.1	-83.4	1,279.8	1,215.1	64.75	19.766	
8,800.0	7,070.0	7,154.4	7,077.3	50.5	19.1	89.92	1,008.1	-83.4	1,365.9	1,298.6	67.33	20.285	
8,900.0	7,069.5	7,154.0	7,077.0	53.1	19.1	89.89	1,008.1	-83.4	1,453.8	1,383.8	69.94	20.785	
9,000.0	7,069.0	7,153.7	7,076.6	55.8	19.1	89.86	1,008.1	-83.4	1,543.1	1,470.5	72.57	21.263	
9,100.0	7,068.5	7,153.3	7,076.3	58.4	19.1	89.83	1,008.1	-83.4	1,633.7	1,558.5	75.22	21.720	
9,200.0	7,068.1	7,153.0	7,075.9	61.1	19.1	89.80	1,008.1	-83.4	1,725.3	1,647.4	77.88	22.154	
9,300.0	7,067.6	7,152.6	7,075.6	63.7	19.1	89.77	1,008.1	-83.4	1,817.8	1,737.2	80.55	22.568	
9,400.0	7,067.1	7,152.3	7,075.2	66.4	19.1	89.74	1,008.2	-83.4	1,911.0	1,827.8	83.23	22.961	
9,500.0	7,066.6	7,151.9	7,074.9	69.1	19.1	89.71	1,008.2	-83.4	2,004.9	1,919.0	85.92	23.334	
9,600.0	7,066.1	7,151.6	7,074.6	71.8	19.1	89.68	1,008.2	-83.4	2,099.4	2,010.8	88.63	23.688	
9,700.0	7,065.6	7,151.3	7,074.2	74.5	19.1	89.65	1,008.2	-83.4	2,194.4	2,103.0	91.34	24.025	
9,800.0	7,065.1	7,150.9	7,073.9	77.2	19.1	89.63	1,008.2	-83.4	2,289.7	2,195.7	94.05	24.345	
9,900.0	7,064.7	7,150.6	7,073.5	80.0	19.1	89.60	1,008.2	-83.4	2,385.5	2,288.7	96.78	24.649	
10,000.0	7,064.2	7,150.3	7,073.2	82.7	19.1	89.57	1,008.2	-83.4	2,481.6	2,382.1	99.51	24.939	
10,100.0	7,063.7	7,149.9	7,072.9	85.4	19.1	89.54	1,008.2	-83.4	2,578.0	2,475.8	102.24	25.215	
10,200.0	7,063.2	7,149.6	7,072.6	88.2	19.1	89.51	1,008.2	-83.4	2,674.7	2,569.7	104.98	25.478	
10,300.0	7,062.7	7,149.3	7,072.2	90.9	19.1	89.49	1,008.2	-83.4	2,771.6	2,663.8	107.72	25.729	
10,400.0	7,062.2	7,149.0	7,071.9	93.6	19.1	89.46	1,008.2	-83.4	2,868.7	2,758.2	110.47	25.968	
10,500.0	7,061.7	7,148.6	7,071.6	96.4	19.1	89.43	1,008.2	-83.4	2,966.0	2,852.8	113.22	26.197	
10,600.0	7,061.3	7,148.3	7,071.3	99.2	19.1	89.40	1,008.2	-83.4	3,063.5	2,947.5	115.97	26.415	
10,700.0	7,060.8	7,148.0	7,071.0	101.9	19.1	89.38	1,008.2	-83.4	3,161.1	3,042.4	118.73	26.624	
10,800.0	7,060.3	7,147.7	7,070.6	104.7	19.1	89.35	1,008.2	-83.4	3,258.9	3,137.4	121.49	26.824	
10,900.0	7,059.8	7,147.4	7,070.3	107.4	19.1	89.32	1,008.2	-83.4	3,356.8	3,232.5	124.25	27.016	
11,000.0	7,059.3	7,147.1	7,070.0	110.2	19.1	89.30	1,008.2	-83.4	3,454.8	3,327.8	127.02	27.200	
11,100.0	7,058.8	7,146.8	7,069.7	113.0	19.1	89.27	1,008.2	-83.4	3,552.9	3,423.2	129.78	27.376	
11,200.0	7,058.3	7,146.4	7,069.4	115.7	19.1	89.25	1,008.2	-83.4	3,651.2	3,518.6	132.55	27.546	
11,300.0	7,057.9	7,146.1	7,069.1	118.5	19.1	89.22	1,008.2	-83.4	3,749.5	3,614.2	135.32	27.709	
11,400.0	7,057.4	7,145.8	7,068.8	121.3	19.1	89.19	1,008.2	-83.4	3,847.9	3,709.8	138.09	27.865	
11,500.0	7,056.9	7,145.5	7,068.5	124.0	19.1	89.17	1,008.2	-83.4	3,946.4	3,805.6	140.86	28.016	
11,600.0	7,056.4	7,145.2	7,068.2	126.8	19.1	89.14	1,008.2	-83.4	4,045.0	3,901.3	143.64	28.161	
11,686.6	7,056.0	7,145.0	7,067.9	129.2	19.1	89.12	1,008.2	-83.4	4,130.5	3,984.4	146.04	28.282	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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	2.5	2.5	0.0	0.0	-58.36	365.8	-593.6	697.3				
100.0	100.0	103.3	103.3	0.1	0.1	-58.36	365.7	-593.6	697.2	697.0	0.21	3,395.993	
200.0	200.0	204.1	204.1	0.3	0.2	-58.36	365.6	-593.4	697.0	696.5	0.54	1,301.580	
300.0	300.0	304.9	304.9	0.5	0.3	-58.37	365.4	-593.2	696.7	695.9	0.87	804.780	
400.0	400.0	405.7	405.7	0.8	0.4	-58.38	365.1	-592.9	696.3	695.1	1.20	582.229	
426.7	426.7	432.6	432.6	0.8	0.5	-122.27	365.0	-592.8	696.3	695.0	1.28	543.585	CC, ES
500.0	500.0	506.5	506.5	1.0	0.5	-122.39	364.7	-592.6	696.7	695.2	1.52	459.069	
600.0	599.8	607.2	607.2	1.2	0.6	-122.73	364.2	-592.1	698.9	697.1	1.84	379.311	
700.0	699.5	707.6	707.6	1.5	0.7	-123.28	363.6	-591.6	702.9	700.7	2.18	321.891	
800.0	798.7	807.3	807.2	1.7	0.9	-124.02	363.0	-590.9	708.9	706.2	2.62	270.435	
900.0	897.5	913.7	913.7	2.0	1.1	-125.05	361.8	-590.1	716.5	713.4	3.13	229.270	
1,000.0	995.6	1,030.4	1,030.3	2.4	1.4	-126.63	357.1	-588.4	724.6	721.0	3.69	196.391	
1,000.1	995.8	1,030.6	1,030.4	2.4	1.4	-126.63	357.1	-588.4	724.7	721.0	3.69	196.350	
1,100.0	1,093.4	1,149.0	1,148.5	2.8	1.7	-128.69	348.0	-585.2	731.7	727.5	4.29	170.517	
1,200.0	1,191.3	1,269.3	1,267.9	3.2	2.0	-130.96	334.7	-579.8	736.5	731.5	4.92	149.608	
1,300.0	1,289.1	1,379.3	1,376.7	3.6	2.4	-133.11	320.2	-572.8	739.5	734.0	5.55	133.239	
1,400.0	1,386.9	1,483.9	1,479.9	4.1	2.8	-135.23	304.7	-565.4	742.2	736.0	6.18	120.064	
1,500.0	1,484.7	1,581.3	1,575.5	4.5	3.1	-137.37	287.9	-558.7	745.4	738.5	6.81	109.526	
1,600.0	1,582.5	1,698.1	1,689.9	4.9	3.6	-140.04	265.6	-549.2	747.8	740.3	7.51	99.548	
1,700.0	1,680.3	1,803.9	1,792.8	5.4	4.0	-142.57	243.2	-539.1	749.8	741.6	8.22	91.197	
1,800.0	1,778.1	1,921.4	1,906.4	5.8	4.6	-145.48	216.3	-526.0	751.2	742.2	8.98	83.609	
1,900.0	1,875.9	2,022.1	2,003.4	6.3	5.1	-147.92	193.5	-512.2	751.6	741.9	9.68	77.612	
2,000.0	1,973.8	2,114.8	2,092.6	6.7	5.5	-150.25	171.2	-499.7	753.5	743.1	10.35	72.826	
2,100.0	2,071.6	2,207.2	2,181.7	7.2	5.9	-152.49	150.1	-487.3	756.9	746.0	10.97	69.000	
2,200.0	2,169.4	2,291.6	2,263.3	7.6	6.3	-154.46	131.6	-476.6	762.4	750.9	11.57	65.895	
2,300.0	2,267.2	2,387.6	2,356.2	8.1	6.7	-156.69	110.1	-465.4	770.1	757.9	12.25	62.864	
2,400.0	2,365.0	2,487.9	2,452.9	8.5	7.2	-159.07	86.5	-452.9	778.4	765.4	13.00	59.863	
2,500.0	2,462.8	2,581.8	2,542.9	9.0	7.8	-161.37	62.7	-440.8	787.6	773.8	13.76	57.246	
2,600.0	2,560.6	2,672.7	2,629.6	9.4	8.3	-163.66	38.2	-429.0	798.4	783.9	14.52	54.988	
2,700.0	2,658.5	2,767.3	2,719.8	9.9	8.8	-166.00	12.2	-416.8	810.9	795.6	15.27	53.091	
2,800.0	2,756.3	2,859.6	2,808.1	10.3	9.3	-168.14	-11.9	-405.1	824.6	808.7	15.97	51.642	
2,900.0	2,854.1	2,947.9	2,892.9	10.8	9.7	-170.06	-34.0	-394.4	839.9	823.3	16.64	50.466	
3,000.0	2,951.9	3,036.9	2,978.5	11.2	10.2	-171.92	-56.4	-384.3	857.0	839.7	17.34	49.423	
3,100.0	3,049.7	3,133.3	3,071.4	11.7	10.6	-173.81	-80.0	-373.8	875.3	857.3	18.06	48.460	
3,200.0	3,147.5	3,229.5	3,164.5	12.1	11.1	-175.51	-101.7	-363.6	894.1	875.4	18.76	47.670	
3,300.0	3,245.3	3,324.0	3,256.2	12.6	11.5	-177.07	-122.4	-353.8	913.6	894.2	19.44	47.006	
3,400.0	3,343.2	3,429.5	3,358.8	13.0	12.0	-178.67	-144.3	-342.8	933.4	913.2	20.16	46.299	
3,500.0	3,441.0	3,517.7	3,444.7	13.5	12.4	-179.90	-161.8	-333.7	953.4	932.6	20.80	45.825	
3,600.0	3,538.8	3,628.2	3,552.5	13.9	12.8	178.62	-183.5	-322.1	973.6	952.0	21.56	45.164	
3,700.0	3,636.6	3,714.0	3,636.0	14.4	13.2	177.49	-200.6	-312.5	993.9	971.7	22.22	44.738	
3,800.0	3,734.4	3,807.0	3,726.2	14.8	13.7	176.22	-220.9	-301.9	1,015.3	992.4	22.95	44.250	
3,900.0	3,832.2	3,901.0	3,816.8	15.3	14.2	174.87	-243.0	-290.2	1,037.3	1,013.6	23.72	43.736	
4,000.0	3,930.0	3,983.5	3,896.1	15.7	14.6	173.70	-263.1	-279.9	1,060.3	1,035.9	24.44	43.393	
4,059.3	3,988.0	4,041.8	3,952.1	16.0	14.9	172.90	-277.5	-273.1	1,074.7	1,049.8	24.90	43.155	
4,100.0	4,027.9	4,084.4	3,993.2	16.2	15.2	172.36	-287.8	-268.1	1,084.2	1,058.9	25.27	42.909	
4,200.0	4,126.3	4,198.7	4,104.0	16.5	15.7	171.09	-312.5	-254.9	1,104.3	1,078.2	26.11	42.290	
4,300.0	4,225.3	4,292.4	4,195.1	16.8	16.1	170.09	-331.9	-244.0	1,120.9	1,094.1	26.83	41.780	
4,400.0	4,324.7	4,386.7	4,286.8	17.0	16.6	169.12	-351.2	-233.6	1,134.9	1,107.4	27.50	41.264	
4,500.0	4,424.4	4,497.7	4,395.2	17.2	17.0	168.07	-371.6	-222.2	1,145.1	1,116.9	28.17	40.650	
4,600.0	4,524.4	4,609.2	4,504.8	17.3	17.5	167.11	-389.4	-211.5	1,151.3	1,122.6	28.76	40.035	
4,659.4	4,583.8	4,693.8	4,588.3	17.4	17.7	-129.65	-400.3	-203.7	1,152.6	1,124.5	28.16	40.930	
4,700.0	4,624.4	4,751.2	4,645.3	17.5	17.9	-130.02	-405.6	-198.6	1,152.2	1,123.8	28.34	40.661	

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 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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	4,724.4	4,842.9	4,736.4	17.6	18.1	-130.51	-412.3	-191.3	1,150.9	1,122.3	28.65	40.171	
4,869.1	4,793.5	4,902.7	4,796.0	17.7	18.3	-130.76	-416.0	-187.9	1,150.6	1,121.8	28.86	39.872	
4,900.0	4,824.4	4,929.9	4,823.1	17.7	18.3	-130.85	-417.4	-186.7	1,150.7	1,121.7	28.95	39.745	
5,000.0	4,924.4	5,026.5	4,919.6	17.8	18.5	-131.08	-421.3	-184.1	1,151.2	1,122.0	29.26	39.339	
5,100.0	5,024.4	5,136.5	5,029.6	18.0	18.7	-131.21	-423.3	-182.4	1,151.2	1,121.7	29.59	38.907	
5,153.6	5,077.9	5,187.3	5,080.4	18.0	18.7	-131.25	-423.8	-181.8	1,151.2	1,121.4	29.75	38.697	
5,200.0	5,124.4	5,231.8	5,124.9	18.1	18.8	-131.28	-424.2	-181.5	1,151.2	1,121.3	29.89	38.518	
5,300.0	5,224.4	5,328.8	5,221.9	18.2	18.9	-131.33	-425.3	-181.0	1,151.5	1,121.3	30.19	38.138	
5,400.0	5,324.4	5,426.4	5,319.5	18.4	19.0	-131.38	-426.3	-180.8	1,152.1	1,121.6	30.50	37.769	
5,500.0	5,424.4	5,519.8	5,412.9	18.5	19.2	-131.40	-427.1	-181.1	1,152.9	1,122.1	30.81	37.422	
5,600.0	5,524.4	5,612.0	5,505.0	18.6	19.3	-131.41	-428.3	-182.1	1,154.6	1,123.5	31.12	37.105	
5,700.0	5,624.4	5,715.7	5,608.7	18.8	19.4	-131.43	-429.9	-183.2	1,156.4	1,124.9	31.45	36.769	
5,800.0	5,724.4	5,823.5	5,716.5	18.9	19.5	-131.49	-431.7	-183.4	1,157.6	1,125.8	31.79	36.412	
5,900.0	5,824.4	5,927.4	5,820.4	19.1	19.7	-131.54	-432.9	-183.2	1,158.3	1,126.2	32.12	36.056	
6,000.0	5,924.4	6,030.7	5,923.7	19.2	19.8	-131.57	-433.6	-183.2	1,158.7	1,126.3	32.46	35.701	
6,100.0	6,024.4	6,128.1	6,021.2	19.4	19.9	-131.58	-434.0	-183.3	1,159.0	1,126.3	32.78	35.361	
6,200.0	6,124.4	6,225.9	6,118.9	19.5	20.1	-131.58	-434.4	-183.7	1,159.6	1,126.5	33.10	35.030	
6,300.0	6,224.4	6,328.3	6,221.3	19.7	20.2	-131.58	-434.9	-184.1	1,160.2	1,126.8	33.44	34.694	
6,400.0	6,324.4	6,430.1	6,323.1	19.8	20.3	-131.59	-435.3	-184.3	1,160.6	1,126.8	33.78	34.360	
6,435.4	6,359.8	6,464.7	6,357.7	19.9	20.4	-131.59	-435.4	-184.4	1,160.7	1,126.9	33.89	34.245	
6,450.0	6,374.4	6,478.9	6,371.9	19.9	20.4	-41.60	-435.4	-184.4	1,160.7	1,125.5	35.19	32.981	
6,500.0	6,424.3	6,528.0	6,421.0	19.9	20.5	-41.79	-435.5	-184.6	1,158.9	1,123.7	35.21	32.917	
6,550.0	6,473.9	6,577.5	6,470.5	19.9	20.5	-42.22	-435.6	-184.9	1,154.5	1,119.3	35.14	32.857	
6,600.0	6,522.9	6,626.5	6,519.5	19.9	20.6	-42.92	-435.8	-185.1	1,147.5	1,112.5	34.99	32.795	
6,650.0	6,571.2	6,674.8	6,567.8	19.9	20.7	-43.89	-435.8	-185.4	1,138.1	1,103.3	34.79	32.716	
6,700.0	6,618.4	6,721.7	6,614.7	19.8	20.7	-45.12	-435.8	-185.7	1,126.4	1,091.8	34.54	32.606	
6,750.0	6,664.3	6,766.9	6,659.9	19.8	20.8	-46.63	-435.9	-186.0	1,112.4	1,078.1	34.28	32.447	
6,800.0	6,708.8	6,810.9	6,703.9	19.7	20.8	-48.43	-436.0	-186.3	1,096.3	1,062.3	34.03	32.216	
6,850.0	6,751.6	6,853.4	6,746.4	19.6	20.9	-50.53	-436.0	-186.7	1,078.4	1,044.6	33.82	31.889	
6,900.0	6,792.5	6,894.6	6,787.6	19.5	20.9	-52.94	-436.0	-187.1	1,058.8	1,025.1	33.67	31.444	
6,950.0	6,831.2	6,934.5	6,827.5	19.4	21.0	-55.67	-436.0	-187.5	1,037.6	1,004.0	33.62	30.863	
7,000.0	6,867.7	6,972.0	6,865.0	19.3	21.0	-58.68	-436.0	-187.9	1,015.3	981.6	33.68	30.145	
7,050.0	6,901.7	7,006.2	6,899.2	19.3	21.1	-61.90	-436.0	-188.1	992.0	958.1	33.85	29.304	
7,100.0	6,933.0	7,037.6	6,930.6	19.3	21.1	-65.30	-436.0	-188.3	968.1	934.0	34.13	28.364	
7,150.0	6,961.6	7,066.3	6,959.3	19.3	21.2	-68.80	-436.1	-188.5	944.0	909.5	34.51	27.359	
7,200.0	6,987.2	7,092.6	6,985.5	19.4	21.2	-72.34	-436.1	-188.7	920.1	885.1	34.96	26.322	
7,250.0	7,009.8	7,115.7	7,008.7	19.6	21.2	-75.80	-436.1	-188.8	896.6	861.2	35.45	25.290	
7,300.0	7,029.2	7,135.7	7,028.7	19.9	21.3	-79.06	-436.1	-189.0	874.1	838.1	35.99	24.291	
7,350.0	7,045.3	7,152.4	7,045.4	20.2	21.3	-82.05	-436.1	-189.1	852.9	816.4	36.54	23.342	
7,400.0	7,058.1	7,165.8	7,058.8	20.6	21.3	-84.67	-436.1	-189.2	833.5	796.4	37.12	22.453	
7,450.0	7,067.5	7,175.8	7,068.8	21.2	21.3	-86.87	-436.1	-189.3	816.1	778.4	37.73	21.630	
7,500.0	7,073.5	7,182.3	7,075.3	21.8	21.3	-88.59	-436.1	-189.3	801.3	762.9	38.38	20.876	
7,550.0	7,075.9	7,185.1	7,078.1	22.5	21.3	-89.80	-436.1	-189.3	789.2	750.2	39.08	20.193	
7,563.9	7,076.0	7,185.3	7,078.3	22.7	21.3	-90.04	-436.1	-189.3	786.4	747.1	39.29	20.017	
7,600.0	7,075.8	7,185.4	7,078.4	23.2	21.3	-90.04	-436.1	-189.3	780.2	740.3	39.84	19.583	
7,700.0	7,075.3	7,185.5	7,078.5	24.9	21.3	-90.06	-436.1	-189.3	771.5	730.0	41.52	18.580	
7,717.3	7,075.3	7,185.5	7,078.5	25.2	21.3	-90.06	-436.1	-189.3	771.3	729.5	41.85	18.432	
7,800.0	7,074.9	7,185.7	7,078.6	26.7	21.3	-90.07	-436.1	-189.3	775.7	732.3	43.40	17.876	
7,900.0	7,074.4	7,185.8	7,078.8	28.8	21.3	-90.08	-436.1	-189.3	792.7	747.2	45.42	17.451	
8,000.0	7,073.9	7,186.0	7,078.9	30.9	21.3	-90.09	-436.1	-189.3	821.5	773.9	47.57	17.269 SF	
8,100.0	7,073.4	7,186.1	7,079.1	33.2	21.3	-90.10	-436.1	-189.3	861.0	811.2	49.82	17.284	
8,200.0	7,072.9	7,186.2	7,079.2	35.5	21.3	-90.11	-436.1	-189.3	909.9	857.8	52.14	17.450	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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
8,300.0	7,072.4	7,186.4	7,079.4	37.9	21.3	-90.12	-436.1	-189.3	966.7	912.2	54.54	17.726	
8,400.0	7,071.9	7,186.5	7,079.5	40.3	21.3	-90.13	-436.1	-189.3	1,030.1	973.1	56.98	18.077	
8,500.0	7,071.5	7,186.7	7,079.7	42.8	21.3	-90.14	-436.1	-189.3	1,098.9	1,039.4	59.47	18.477	
8,600.0	7,071.0	7,186.8	7,079.8	45.4	21.3	-90.15	-436.1	-189.3	1,172.2	1,110.2	62.00	18.907	
8,700.0	7,070.5	7,187.0	7,080.0	47.9	21.3	-90.16	-436.1	-189.3	1,249.3	1,184.7	64.56	19.351	
8,800.0	7,070.0	7,187.1	7,080.1	50.5	21.3	-90.17	-436.1	-189.3	1,329.4	1,262.2	67.15	19.798	
8,900.0	7,069.5	7,187.2	7,080.2	53.1	21.3	-90.18	-436.1	-189.3	1,412.0	1,342.3	69.75	20.243	
9,000.0	7,069.0	7,187.4	7,080.4	55.8	21.3	-90.19	-436.1	-189.3	1,496.8	1,424.4	72.38	20.679	
9,100.0	7,068.5	7,187.5	7,080.5	58.4	21.3	-90.20	-436.1	-189.3	1,583.3	1,508.3	75.03	21.103	
9,200.0	7,068.1	7,187.7	7,080.6	61.1	21.3	-90.21	-436.1	-189.3	1,671.3	1,593.7	77.69	21.514	
9,300.0	7,067.6	7,187.8	7,080.8	63.7	21.3	-90.22	-436.1	-189.3	1,760.7	1,680.3	80.36	21.910	
9,400.0	7,067.1	7,187.9	7,080.9	66.4	21.3	-90.23	-436.1	-189.3	1,851.1	1,768.0	83.04	22.291	
9,500.0	7,066.6	7,188.1	7,081.1	69.1	21.3	-90.24	-436.1	-189.3	1,942.4	1,856.7	85.73	22.656	
9,600.0	7,066.1	7,188.2	7,081.2	71.8	21.3	-90.25	-436.1	-189.3	2,034.6	1,946.2	88.44	23.006	
9,700.0	7,065.6	7,188.3	7,081.3	74.5	21.3	-90.26	-436.1	-189.3	2,127.5	2,036.3	91.15	23.341	
9,800.0	7,065.1	7,188.5	7,081.5	77.2	21.3	-90.27	-436.1	-189.3	2,221.0	2,127.1	93.86	23.662	
9,900.0	7,064.7	7,188.6	7,081.6	80.0	21.3	-90.28	-436.1	-189.3	2,315.0	2,218.4	96.59	23.968	
10,000.0	7,064.2	7,188.7	7,081.7	82.7	21.3	-90.29	-436.1	-189.3	2,409.5	2,310.2	99.32	24.261	
10,100.0	7,063.7	7,188.9	7,081.8	85.4	21.3	-90.30	-436.1	-189.3	2,504.5	2,402.4	102.05	24.541	
10,200.0	7,063.2	7,189.0	7,082.0	88.2	21.3	-90.31	-436.1	-189.3	2,599.8	2,495.0	104.79	24.810	
10,300.0	7,062.7	7,189.1	7,082.1	90.9	21.3	-90.32	-436.1	-189.3	2,695.4	2,587.9	107.53	25.066	
10,400.0	7,062.2	7,189.2	7,082.2	93.6	21.3	-90.33	-436.1	-189.3	2,791.4	2,681.1	110.28	25.312	
10,500.0	7,061.7	7,189.4	7,082.4	96.4	21.3	-90.34	-436.1	-189.3	2,887.6	2,774.6	113.03	25.548	
10,600.0	7,061.3	7,189.5	7,082.5	99.2	21.3	-90.35	-436.1	-189.3	2,984.1	2,868.3	115.78	25.773	
10,700.0	7,060.8	7,189.6	7,082.6	101.9	21.3	-90.36	-436.1	-189.3	3,080.8	2,962.3	118.54	25.990	
10,800.0	7,060.3	7,189.8	7,082.7	104.7	21.3	-90.37	-436.1	-189.3	3,177.8	3,056.5	121.30	26.197	
10,900.0	7,059.8	7,189.9	7,082.9	107.4	21.3	-90.38	-436.1	-189.3	3,274.9	3,150.8	124.06	26.397	
11,000.0	7,059.3	7,190.0	7,083.0	110.2	21.3	-90.39	-436.1	-189.3	3,372.1	3,245.3	126.83	26.588	
11,100.0	7,058.8	7,190.1	7,083.1	113.0	21.3	-90.40	-436.1	-189.3	3,469.5	3,340.0	129.59	26.773	
11,200.0	7,058.3	7,190.2	7,083.2	115.7	21.3	-90.41	-436.1	-189.3	3,567.1	3,434.8	132.36	26.950	
11,300.0	7,057.9	7,190.4	7,083.4	118.5	21.3	-90.42	-436.1	-189.4	3,664.8	3,529.7	135.13	27.120	
11,400.0	7,057.4	7,190.5	7,083.5	121.3	21.3	-90.43	-436.1	-189.4	3,762.6	3,624.7	137.90	27.284	
11,500.0	7,056.9	7,190.6	7,083.6	124.0	21.3	-90.43	-436.1	-189.4	3,860.6	3,719.9	140.68	27.443	
11,600.0	7,056.4	7,190.7	7,083.7	126.8	21.3	-90.44	-436.1	-189.4	3,958.6	3,815.1	143.45	27.595	
11,686.6	7,056.0	7,190.8	7,083.8	129.2	21.3	-90.45	-436.1	-189.4	4,043.6	3,897.7	145.86	27.723	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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	2.5	2.5	0.0	0.0	-48.79	484.2	-552.9	734.9				
100.0	100.0	102.2	102.2	0.1	0.1	-48.80	484.1	-553.0	734.9	734.7	0.20	3,609.780	
200.0	200.0	201.9	201.9	0.3	0.2	-48.82	483.9	-553.2	735.0	734.5	0.53	1,381.183	
300.0	300.0	301.6	301.6	0.5	0.3	-48.86	483.6	-553.6	735.1	734.2	0.86	854.068	
400.0	400.0	401.3	401.3	0.8	0.4	-48.91	483.2	-554.2	735.2	734.0	1.19	618.239	
500.0	500.0	501.0	501.0	1.0	0.5	-112.97	482.7	-554.9	736.1	734.6	1.52	485.783	
600.0	599.8	600.5	600.4	1.2	0.6	-113.38	482.0	-555.7	738.4	736.6	1.84	401.191	
700.0	699.5	699.6	699.6	1.5	0.7	-114.02	481.2	-556.7	742.2	740.0	2.18	339.936	
800.0	798.7	798.0	798.0	1.7	0.9	-114.87	480.5	-557.9	747.7	745.0	2.65	282.366	
900.0	897.5	892.0	892.0	2.0	1.1	-115.85	479.7	-559.0	754.9	751.8	3.14	240.335	
1,000.0	995.6	986.0	985.9	2.4	1.3	-116.91	480.1	-560.1	764.7	761.1	3.67	208.551	
1,000.1	995.8	986.0	985.9	2.4	1.3	-116.91	480.1	-560.1	764.8	761.1	3.67	208.527	
1,100.0	1,093.4	1,061.1	1,061.0	2.8	1.5	-117.87	482.4	-561.4	777.7	773.5	4.18	186.006	
1,200.0	1,191.3	1,133.2	1,132.9	3.2	1.6	-118.74	485.9	-564.2	793.8	789.0	4.71	168.424	
1,300.0	1,289.1	1,202.9	1,202.4	3.6	1.8	-119.63	489.9	-569.4	813.5	808.2	5.25	154.889	
1,400.0	1,386.9	1,266.0	1,265.0	4.1	2.0	-120.44	494.2	-575.9	836.7	830.9	5.79	144.624	
1,500.0	1,484.7	1,346.1	1,344.1	4.5	2.2	-121.46	500.3	-586.5	862.9	856.6	6.36	135.772	
1,600.0	1,582.5	1,426.1	1,422.8	4.9	2.5	-122.52	506.2	-599.3	891.6	884.6	6.92	128.869	
1,700.0	1,680.3	1,494.4	1,489.9	5.4	2.7	-123.45	510.7	-611.8	922.4	914.9	7.46	123.700	
1,800.0	1,778.1	1,557.4	1,551.2	5.8	2.9	-124.28	515.8	-625.1	956.5	948.5	7.98	119.803	
1,900.0	1,875.9	1,626.2	1,617.8	6.3	3.2	-125.14	522.0	-641.3	993.5	984.9	8.53	116.490	
2,000.0	1,973.8	1,693.0	1,682.0	6.7	3.6	-125.94	528.5	-658.5	1,032.8	1,023.7	9.07	113.921	
2,100.0	2,071.6	1,762.3	1,748.2	7.2	3.9	-126.76	535.3	-677.8	1,074.4	1,064.8	9.60	111.869	
2,200.0	2,169.4	1,838.8	1,820.9	7.6	4.4	-127.61	543.4	-700.1	1,117.7	1,107.5	10.15	110.084	
2,300.0	2,267.2	1,926.5	1,904.2	8.1	4.9	-128.50	552.9	-726.0	1,161.6	1,150.9	10.72	108.374	
2,400.0	2,365.0	2,024.2	1,997.1	8.5	5.4	-129.51	561.9	-755.0	1,205.3	1,194.0	11.28	106.818	
2,500.0	2,462.8	2,105.0	2,073.8	9.0	5.9	-130.28	569.5	-779.0	1,249.4	1,237.6	11.82	105.728	
2,600.0	2,560.6	2,192.8	2,157.2	9.4	6.4	-131.05	577.9	-805.4	1,294.0	1,281.6	12.37	104.612	
2,700.0	2,658.5	2,283.1	2,242.9	9.9	6.9	-131.83	585.9	-832.5	1,338.5	1,325.6	12.91	103.644	
2,800.0	2,756.3	2,373.5	2,328.8	10.3	7.4	-132.55	594.1	-859.4	1,383.2	1,369.7	13.46	102.773	
2,900.0	2,854.1	2,472.8	2,423.3	10.8	8.0	-133.23	604.2	-888.3	1,427.6	1,413.6	14.03	101.786	
3,000.0	2,951.9	2,536.7	2,484.0	11.2	8.4	-133.60	611.7	-906.7	1,472.4	1,457.9	14.54	101.291	
3,100.0	3,049.7	2,602.5	2,546.2	11.7	8.8	-133.94	620.3	-926.7	1,518.9	1,503.9	15.06	100.865	
3,200.0	3,147.5	2,675.4	2,614.6	12.1	9.3	-134.28	630.4	-949.3	1,566.5	1,550.9	15.60	100.395	
3,300.0	3,245.3	2,770.7	2,704.0	12.6	10.0	-134.67	644.8	-979.0	1,614.5	1,598.3	16.20	99.680	
3,400.0	3,343.2	2,893.6	2,820.2	13.0	10.8	-135.13	662.3	-1,015.1	1,660.4	1,643.6	16.84	98.599	
3,500.0	3,441.0	2,980.1	2,902.1	13.5	11.3	-135.45	674.5	-1,040.3	1,706.4	1,689.0	17.41	98.020	
3,600.0	3,538.8	3,087.7	3,004.1	13.9	11.9	-135.83	689.1	-1,071.1	1,751.9	1,733.9	18.02	97.194	
3,700.0	3,636.6	3,196.0	3,107.2	14.4	12.6	-136.20	703.3	-1,101.1	1,796.3	1,777.7	18.64	96.388	
3,800.0	3,734.4	3,278.8	3,186.2	14.8	13.1	-136.50	713.3	-1,123.8	1,840.4	1,821.2	19.20	95.877	
3,900.0	3,832.2	3,360.7	3,264.2	15.3	13.6	-136.76	723.7	-1,146.6	1,885.1	1,865.4	19.76	95.409	
4,000.0	3,930.0	3,439.9	3,339.6	15.7	14.1	-137.04	732.9	-1,169.1	1,930.0	1,909.7	20.31	95.007	
4,059.3	3,988.0	3,481.0	3,378.6	16.0	14.3	-137.17	738.0	-1,181.0	1,957.1	1,936.4	20.63	94.857	
4,100.0	4,027.9	3,512.2	3,408.2	16.2	14.5	-137.54	742.1	-1,190.1	1,975.6	1,954.7	20.85	94.756	
4,200.0	4,126.3	3,616.2	3,506.7	16.5	15.2	-138.40	755.6	-1,220.2	2,019.4	1,998.0	21.41	94.304	
4,300.0	4,225.3	3,808.1	3,690.4	16.8	16.3	-139.16	779.9	-1,270.2	2,057.8	2,035.6	22.19	92.728	
4,400.0	4,324.7	3,878.0	3,757.6	17.0	16.6	-139.65	788.7	-1,287.2	2,092.3	2,069.7	22.63	92.456	
4,500.0	4,424.4	3,967.0	3,843.0	17.2	17.1	-140.02	800.9	-1,309.3	2,125.0	2,101.9	23.11	91.945	
4,600.0	4,524.4	4,045.4	3,918.1	17.3	17.6	-140.31	812.1	-1,329.0	2,155.7	2,132.2	23.54	91.592	
4,659.4	4,583.8	4,120.6	3,990.0	17.4	18.0	-76.51	822.8	-1,348.0	2,172.8	2,139.7	33.14	65.561	
4,700.0	4,624.4	4,173.6	4,040.9	17.5	18.3	-76.40	830.0	-1,361.0	2,183.8	2,150.3	33.48	65.236	
4,800.0	4,724.4	4,277.8	4,141.2	17.6	18.9	-76.26	841.3	-1,386.7	2,210.4	2,176.2	34.16	64.707	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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
4,900.0	4,824.4	4,399.0	4,258.1	17.7	19.5	-76.15	853.1	-1,416.6	2,236.7	2,201.8	34.93	64.029	
5,000.0	4,924.4	4,585.5	4,439.3	17.8	20.4	-76.01	868.6	-1,458.0	2,260.3	2,224.4	35.95	62.868	
5,100.0	5,024.4	4,860.0	4,709.3	18.0	21.4	-75.91	884.3	-1,503.9	2,277.7	2,240.5	37.11	61.373	
5,200.0	5,124.4	5,116.8	4,964.7	18.1	22.1	-75.86	893.0	-1,529.6	2,288.2	2,250.3	37.91	60.355	
5,300.0	5,224.4	5,318.0	5,165.6	18.2	22.4	-75.86	895.1	-1,538.2	2,292.1	2,253.8	38.39	59.706	
5,400.0	5,324.4	5,423.7	5,271.3	18.4	22.5	-75.87	895.2	-1,540.9	2,294.7	2,256.0	38.69	59.315	
5,500.0	5,424.4	5,524.6	5,372.2	18.5	22.7	-75.89	895.0	-1,543.4	2,297.1	2,258.1	38.98	58.935	
5,600.0	5,524.4	5,632.3	5,479.8	18.6	22.8	-75.92	894.4	-1,546.1	2,299.3	2,260.0	39.28	58.543	
5,700.0	5,624.4	5,743.1	5,590.7	18.8	22.9	-75.96	893.5	-1,548.4	2,301.1	2,261.5	39.58	58.144	
5,800.0	5,724.4	5,846.0	5,693.6	18.9	23.1	-75.98	892.8	-1,550.2	2,302.7	2,262.8	39.86	57.764	
5,900.0	5,824.4	5,965.7	5,813.2	19.1	23.2	-76.01	892.0	-1,551.6	2,303.6	2,263.5	40.17	57.353	
6,000.0	5,924.4	6,074.1	5,921.6	19.2	23.3	-76.04	891.1	-1,552.3	2,304.0	2,263.6	40.45	56.959	
6,100.0	6,024.4	6,175.6	6,023.1	19.4	23.4	-76.06	890.2	-1,552.6	2,304.2	2,263.5	40.73	56.577	
6,200.0	6,124.4	6,275.7	6,123.2	19.5	23.5	-76.09	889.3	-1,553.0	2,304.4	2,263.4	41.00	56.201	
6,300.0	6,224.4	6,374.8	6,222.3	19.7	23.6	-76.11	888.4	-1,553.4	2,304.5	2,263.3	41.28	55.827	
6,400.0	6,324.4	6,479.6	6,327.1	19.8	23.8	-76.14	887.2	-1,553.9	2,304.6	2,263.1	41.57	55.445	
6,435.4	6,359.8	6,515.6	6,363.1	19.9	23.8	-76.15	886.8	-1,554.0	2,304.6	2,263.0	41.67	55.311	
6,450.0	6,374.4	6,530.4	6,377.9	19.9	23.8	13.85	886.6	-1,554.0	2,304.5	2,272.8	31.65	72.814	
6,500.0	6,424.3	6,581.0	6,428.5	19.9	23.9	13.90	886.0	-1,554.1	2,301.8	2,270.0	31.81	72.356	
6,550.0	6,473.9	6,630.6	6,478.1	19.9	23.9	14.04	885.4	-1,554.2	2,295.7	2,263.8	31.85	72.082	
6,600.0	6,522.9	6,679.6	6,527.0	19.9	24.0	14.27	884.8	-1,554.3	2,286.3	2,254.5	31.76	71.981	
6,650.0	6,571.2	6,727.6	6,575.0	19.9	24.0	14.60	884.4	-1,554.4	2,273.5	2,242.0	31.56	72.041	
6,700.0	6,618.4	6,774.1	6,621.6	19.8	24.1	15.04	884.0	-1,554.5	2,257.6	2,226.3	31.25	72.247	
6,750.0	6,664.3	6,818.5	6,666.0	19.8	24.1	15.60	883.6	-1,554.6	2,238.5	2,207.7	30.84	72.581	
6,800.0	6,708.8	6,861.7	6,709.2	19.7	24.2	16.28	883.1	-1,554.7	2,216.4	2,186.1	30.36	73.011	
6,850.0	6,751.6	6,903.8	6,751.2	19.6	24.2	17.11	882.5	-1,554.9	2,191.4	2,161.6	29.82	73.490	
6,900.0	6,792.5	6,944.0	6,791.5	19.5	24.3	18.13	882.0	-1,555.1	2,163.6	2,134.4	29.26	73.952	
6,950.0	6,831.2	6,983.9	6,831.3	19.4	24.3	19.37	881.4	-1,555.3	2,133.1	2,104.4	28.72	74.286	
7,000.0	6,867.7	7,021.5	6,869.0	19.3	24.4	20.87	880.8	-1,555.5	2,100.1	2,071.9	28.24	74.359	
7,050.0	6,901.7	7,054.4	6,901.9	19.3	24.4	22.68	880.2	-1,555.7	2,064.8	2,036.9	27.90	74.000	
7,100.0	6,933.0	7,082.6	6,930.1	19.3	24.4	24.86	879.7	-1,555.9	2,027.3	1,999.5	27.78	72.985	
7,150.0	6,961.6	7,108.5	6,955.9	19.3	24.5	27.53	879.2	-1,556.1	1,987.9	1,959.9	27.98	71.038	
7,200.0	6,987.2	7,133.0	6,980.4	19.4	24.5	30.86	878.8	-1,556.4	1,946.8	1,918.1	28.66	67.922	
7,250.0	7,009.8	7,155.4	7,002.8	19.6	24.5	35.02	878.4	-1,556.6	1,904.1	1,874.1	29.95	63.582	
7,300.0	7,029.2	7,175.8	7,023.2	19.9	24.5	40.27	878.0	-1,556.8	1,860.1	1,828.1	31.96	58.194	
7,350.0	7,045.3	7,192.9	7,040.3	20.2	24.6	46.84	877.7	-1,557.0	1,814.9	1,780.2	34.72	52.267	
7,400.0	7,058.1	7,206.5	7,053.9	20.6	24.6	54.94	877.5	-1,557.1	1,768.9	1,730.9	38.07	46.460	
7,450.0	7,067.5	7,216.6	7,064.0	21.2	24.6	64.63	877.3	-1,557.2	1,722.3	1,680.7	41.57	41.431	
7,500.0	7,073.5	7,223.2	7,070.6	21.8	24.6	75.62	877.2	-1,557.3	1,675.3	1,630.8	44.48	37.662	
7,550.0	7,075.9	7,226.2	7,073.6	22.5	24.6	87.12	877.2	-1,557.3	1,628.1	1,582.0	46.08	35.333	
7,563.9	7,076.0	7,226.4	7,073.8	22.7	24.6	90.28	877.2	-1,557.3	1,615.0	1,568.8	46.24	34.926	
7,600.0	7,075.8	7,226.6	7,074.0	23.2	24.6	90.30	877.2	-1,557.3	1,581.1	1,534.3	46.79	33.790	
7,700.0	7,075.3	7,227.0	7,074.4	24.9	24.6	90.35	877.1	-1,557.3	1,487.5	1,439.0	48.47	30.687	
7,800.0	7,074.9	7,227.4	7,074.8	26.7	24.6	90.39	877.1	-1,557.3	1,394.9	1,344.5	50.35	27.706	
7,900.0	7,074.4	7,227.9	7,075.3	28.8	24.6	90.44	877.1	-1,557.3	1,303.3	1,250.9	52.37	24.887	
8,000.0	7,073.9	7,228.3	7,075.7	30.9	24.6	90.48	877.1	-1,557.3	1,213.1	1,158.6	54.52	22.252	
8,100.0	7,073.4	7,228.7	7,076.1	33.2	24.6	90.53	877.1	-1,557.3	1,124.5	1,067.7	56.76	19.811	
8,200.0	7,072.9	7,229.2	7,076.5	35.5	24.6	90.57	877.1	-1,557.3	1,038.0	978.9	59.09	17.567	
8,300.0	7,072.4	7,229.6	7,077.0	37.9	24.6	90.62	877.1	-1,557.4	954.1	892.7	61.48	15.520	
8,400.0	7,071.9	7,230.0	7,077.4	40.3	24.6	90.66	877.1	-1,557.4	873.7	809.8	63.92	13.668	
8,500.0	7,071.5	7,230.4	7,077.8	42.8	24.6	90.71	877.1	-1,557.4	797.7	731.2	66.41	12.011	
8,600.0	7,071.0	7,230.9	7,078.3	45.4	24.6	90.76	877.1	-1,557.4	727.5	658.5	68.94	10.552	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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	7,070.5	7,231.3	7,078.7	47.9	24.6	90.80	877.1	-1,557.4	664.9	593.4	71.50	9.300	
8,800.0	7,070.0	7,231.7	7,079.1	50.5	24.6	90.85	877.1	-1,557.4	612.4	538.4	74.08	8.267	
8,900.0	7,069.5	7,232.2	7,079.5	53.1	24.6	90.89	877.1	-1,557.4	572.7	496.0	76.69	7.468	
9,000.0	7,069.0	7,232.6	7,080.0	55.8	24.6	90.94	877.0	-1,557.4	548.6	469.3	79.31	6.917	
9,085.3	7,068.6	7,233.0	7,080.3	58.0	24.6	90.98	877.0	-1,557.4	541.9	460.4	81.57	6.644	CC
9,100.0	7,068.5	7,233.0	7,080.4	58.4	24.6	90.98	877.0	-1,557.4	542.1	460.2	81.96	6.615	ES
9,200.0	7,068.1	7,233.4	7,080.8	61.1	24.6	91.03	877.0	-1,557.4	553.9	469.3	84.61	6.547	SF
9,300.0	7,067.6	7,233.9	7,081.3	63.7	24.6	91.07	877.0	-1,557.4	582.9	495.6	87.28	6.678	
9,400.0	7,067.1	7,234.3	7,081.7	66.4	24.6	91.12	877.0	-1,557.4	626.7	536.7	89.96	6.966	
9,500.0	7,066.6	7,234.7	7,082.1	69.1	24.6	91.16	877.0	-1,557.4	682.4	589.7	92.65	7.365	
9,600.0	7,066.1	7,235.2	7,082.6	71.8	24.6	91.21	877.0	-1,557.4	747.4	652.0	95.35	7.838	
9,700.0	7,065.6	7,235.6	7,083.0	74.5	24.6	91.25	877.0	-1,557.4	819.5	721.4	98.06	8.357	
9,800.0	7,065.1	7,236.0	7,083.4	77.2	24.6	91.30	877.0	-1,557.4	896.9	796.1	100.77	8.900	
9,900.0	7,064.7	7,236.4	7,083.8	80.0	24.6	91.35	877.0	-1,557.4	978.5	875.0	103.50	9.454	
10,000.0	7,064.2	7,236.9	7,084.3	82.7	24.6	91.39	877.0	-1,557.4	1,063.2	956.9	106.22	10.009	
10,100.0	7,063.7	7,237.3	7,084.7	85.4	24.6	91.44	877.0	-1,557.4	1,150.3	1,041.4	108.95	10.558	
10,200.0	7,063.2	7,237.7	7,085.1	88.2	24.6	91.48	877.0	-1,557.4	1,239.4	1,127.7	111.69	11.097	
10,300.0	7,062.7	7,238.2	7,085.6	90.9	24.6	91.53	877.0	-1,557.4	1,330.1	1,215.7	114.43	11.624	
10,400.0	7,062.2	7,238.6	7,086.0	93.6	24.6	91.57	876.9	-1,557.4	1,422.0	1,304.8	117.17	12.136	
10,500.0	7,061.7	7,239.0	7,086.4	96.4	24.6	91.62	876.9	-1,557.4	1,514.9	1,395.0	119.92	12.633	
10,600.0	7,061.3	7,239.4	7,086.8	99.2	24.6	91.66	876.9	-1,557.4	1,608.7	1,486.0	122.67	13.115	
10,700.0	7,060.8	7,239.9	7,087.3	101.9	24.6	91.71	876.9	-1,557.4	1,703.2	1,577.8	125.42	13.580	
10,800.0	7,060.3	7,240.3	7,087.7	104.7	24.6	91.75	876.9	-1,557.4	1,798.3	1,670.1	128.17	14.030	
10,900.0	7,059.8	7,240.7	7,088.1	107.4	24.6	91.80	876.9	-1,557.5	1,893.9	1,762.9	130.93	14.465	
11,000.0	7,059.3	7,241.2	7,088.5	110.2	24.6	91.84	876.9	-1,557.5	1,989.9	1,856.2	133.69	14.884	
11,100.0	7,058.8	7,241.6	7,089.0	113.0	24.6	91.89	876.9	-1,557.5	2,086.3	1,949.8	136.45	15.290	
11,200.0	7,058.3	7,242.0	7,089.4	115.7	24.6	91.93	876.9	-1,557.5	2,183.0	2,043.8	139.21	15.681	
11,300.0	7,057.9	7,242.4	7,089.8	118.5	24.6	91.98	876.9	-1,557.5	2,280.0	2,138.0	141.98	16.059	
11,400.0	7,057.4	7,242.9	7,090.3	121.3	24.6	92.02	876.9	-1,557.5	2,377.3	2,232.5	144.74	16.424	
11,500.0	7,056.9	7,243.3	7,090.7	124.0	24.6	92.07	876.9	-1,557.5	2,474.7	2,327.2	147.51	16.777	
11,600.0	7,056.4	7,243.7	7,091.1	126.8	24.6	92.11	876.9	-1,557.5	2,572.4	2,422.1	150.28	17.117	
11,686.6	7,056.0	7,244.1	7,091.5	129.2	24.6	92.15	876.9	-1,557.5	2,657.2	2,504.5	152.68	17.403	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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	2.5	2.5	0.0	0.0	-53.50	424.8	-574.1	714.2				
100.0	100.0	101.9	101.9	0.1	0.1	-53.50	424.8	-574.1	714.2	714.0	0.20	3,518.608	
200.0	200.0	201.3	201.3	0.3	0.2	-53.52	424.7	-574.3	714.3	713.8	0.53	1,345.419	
300.0	300.0	300.7	300.7	0.5	0.3	-53.53	424.7	-574.6	714.5	713.7	0.86	831.931	
400.0	400.0	400.1	400.1	0.8	0.4	-53.56	424.6	-575.1	714.8	713.6	1.19	602.291	
500.0	500.0	499.5	499.5	1.0	0.5	-117.58	424.5	-575.6	716.0	714.5	1.51	473.956	
600.0	599.8	598.8	598.8	1.2	0.6	-117.93	424.3	-576.3	718.9	717.1	1.84	391.666	
700.0	699.5	697.7	697.7	1.5	0.7	-118.50	424.2	-577.0	723.6	721.4	2.18	332.275	
800.0	798.7	787.5	787.5	1.7	0.9	-119.26	423.5	-578.8	730.7	728.0	2.64	277.226	
900.0	897.5	887.6	887.5	2.0	1.2	-120.48	421.0	-582.7	740.4	737.3	3.15	234.766	
1,000.0	995.6	975.0	974.6	2.4	1.4	-121.82	417.0	-587.6	752.8	749.1	3.69	204.123	
1,000.1	995.8	975.1	974.7	2.4	1.4	-121.82	417.0	-587.6	752.8	749.1	3.69	204.086	
1,100.0	1,093.4	1,061.3	1,060.5	2.8	1.6	-123.60	411.3	-594.7	768.1	763.8	4.26	180.254	
1,200.0	1,191.3	1,141.4	1,139.8	3.2	1.8	-125.38	404.5	-603.5	785.8	780.9	4.84	162.196	
1,300.0	1,289.1	1,225.2	1,222.4	3.6	2.1	-127.31	396.2	-614.9	806.1	800.7	5.46	147.714	
1,400.0	1,386.9	1,305.6	1,301.2	4.1	2.4	-129.23	386.5	-627.4	828.6	822.6	6.08	136.379	
1,500.0	1,484.7	1,392.8	1,386.2	4.5	2.8	-131.34	374.9	-642.9	853.9	847.2	6.72	127.092	
1,600.0	1,582.5	1,487.0	1,477.6	4.9	3.2	-133.66	359.7	-659.5	879.5	872.1	7.38	119.151	
1,700.0	1,680.3	1,565.6	1,553.5	5.4	3.6	-135.63	345.4	-674.8	907.6	899.6	8.01	113.310	
1,800.0	1,778.1	1,656.5	1,640.4	5.8	4.1	-137.95	326.2	-693.2	937.2	928.5	8.69	107.836	
1,900.0	1,875.9	1,733.6	1,713.9	6.3	4.5	-139.85	309.6	-709.3	968.7	959.4	9.30	104.122	
2,000.0	1,973.8	1,812.5	1,789.2	6.7	4.9	-141.67	293.2	-726.4	1,002.4	992.5	9.90	101.251	
2,100.0	2,071.6	1,906.2	1,878.6	7.2	5.4	-143.68	274.2	-746.8	1,037.5	1,027.0	10.50	98.779	
2,200.0	2,169.4	1,979.6	1,948.7	7.6	5.8	-145.16	259.5	-763.0	1,073.8	1,062.8	11.05	97.212	
2,300.0	2,267.2	2,058.7	2,024.1	8.1	6.2	-146.65	244.1	-781.4	1,112.2	1,100.6	11.62	95.749	
2,400.0	2,365.0	2,157.8	2,118.4	8.5	6.8	-148.43	224.3	-804.3	1,151.3	1,139.1	12.23	94.149	
2,500.0	2,462.8	2,251.2	2,207.5	9.0	7.3	-150.02	205.2	-824.8	1,190.0	1,177.2	12.79	93.032	
2,600.0	2,560.6	2,332.0	2,284.6	9.4	7.7	-151.29	189.1	-842.6	1,229.7	1,216.3	13.32	92.337	
2,700.0	2,658.5	2,416.3	2,365.1	9.9	8.2	-152.53	172.7	-861.8	1,270.4	1,256.6	13.85	91.699	
2,800.0	2,756.3	2,499.0	2,443.9	10.3	8.7	-153.71	155.9	-880.4	1,311.6	1,297.2	14.38	91.212	
2,900.0	2,854.1	2,569.0	2,510.4	10.8	9.1	-154.64	142.0	-897.2	1,354.6	1,339.7	14.87	91.079	
3,000.0	2,951.9	2,650.5	2,587.7	11.2	9.6	-155.66	126.1	-917.5	1,398.7	1,383.4	15.38	90.924	
3,100.0	3,049.7	2,737.7	2,670.5	11.7	10.1	-156.71	108.6	-938.9	1,443.1	1,427.2	15.90	90.751	
3,200.0	3,147.5	2,848.0	2,775.4	12.1	10.7	-157.94	87.0	-965.0	1,487.0	1,470.6	16.46	90.362	
3,300.0	3,245.3	2,925.2	2,849.1	12.6	11.2	-158.73	72.3	-982.9	1,530.8	1,513.9	16.93	90.405	
3,400.0	3,343.2	3,019.8	2,939.0	13.0	11.8	-159.70	52.9	-1,005.0	1,575.3	1,557.8	17.47	90.192	
3,500.0	3,441.0	3,104.9	3,019.7	13.5	12.3	-160.58	34.3	-1,024.4	1,619.7	1,601.7	17.97	90.146	
3,600.0	3,538.8	3,198.7	3,109.0	13.9	12.8	-161.45	15.0	-1,045.9	1,664.4	1,645.9	18.48	90.086	
3,700.0	3,636.6	3,279.3	3,185.9	14.4	13.3	-162.10	0.0	-1,064.6	1,709.2	1,690.2	18.95	90.204	
3,800.0	3,734.4	3,373.1	3,275.4	14.8	13.8	-162.82	-17.4	-1,086.6	1,754.5	1,735.0	19.46	90.179	
3,900.0	3,832.2	3,452.3	3,350.8	15.3	14.3	-163.46	-33.7	-1,104.5	1,799.6	1,779.7	19.93	90.287	
4,000.0	3,930.0	3,517.6	3,412.8	15.7	14.7	-163.96	-47.3	-1,119.9	1,845.8	1,825.4	20.38	90.576	
4,059.3	3,988.0	3,555.0	3,448.2	16.0	14.9	-164.24	-55.0	-1,129.1	1,873.8	1,853.2	20.64	90.776	
4,100.0	4,027.9	3,592.0	3,483.2	16.2	15.1	-164.61	-62.4	-1,138.5	1,893.1	1,872.2	20.86	90.750	
4,200.0	4,126.3	3,646.8	3,535.0	16.5	15.5	-165.20	-72.7	-1,153.1	1,939.0	1,917.7	21.26	91.224	
4,300.0	4,225.3	3,718.8	3,603.1	16.8	15.9	-165.78	-85.0	-1,173.2	1,983.0	1,961.3	21.68	91.470	
4,400.0	4,324.7	3,796.7	3,676.5	17.0	16.5	-166.32	-98.2	-1,195.5	2,024.5	2,002.4	22.10	91.615	
4,500.0	4,424.4	3,873.9	3,748.9	17.2	17.0	-166.86	-113.3	-1,217.5	2,063.7	2,041.2	22.50	91.715	
4,600.0	4,524.4	4,003.2	3,870.2	17.3	17.8	-167.60	-140.7	-1,253.0	2,099.1	2,076.1	23.03	91.144	
4,659.4	4,583.8	4,069.0	3,932.2	17.4	18.2	-104.07	-154.7	-1,270.4	2,118.1	2,084.0	34.14	62.040	
4,700.0	4,624.4	4,117.8	3,978.1	17.5	18.5	-104.27	-165.0	-1,283.1	2,130.6	2,096.1	34.49	61.771	
4,800.0	4,724.4	4,198.4	4,054.2	17.6	19.0	-104.57	-181.5	-1,304.0	2,161.1	2,126.0	35.13	61.523	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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
4,900.0	4,824.4	4,273.9	4,125.3	17.7	19.5	-104.80	-195.6	-1,325.0	2,192.9	2,157.1	35.74	61.353	
5,000.0	4,924.4	4,384.3	4,229.1	17.8	20.2	-105.19	-218.4	-1,354.8	2,224.6	2,188.0	36.60	60.783	
5,100.0	5,024.4	4,574.9	4,410.0	18.0	21.3	-105.82	-255.9	-1,402.0	2,253.9	2,216.0	37.88	59.500	
5,200.0	5,124.4	4,795.8	4,622.2	18.1	22.5	-106.53	-297.1	-1,446.7	2,278.8	2,239.6	39.18	58.165	
5,300.0	5,224.4	4,953.3	4,775.6	18.2	23.2	-106.96	-322.3	-1,472.6	2,299.1	2,259.0	40.02	57.441	
5,400.0	5,324.4	5,248.0	5,065.2	18.4	24.3	-107.59	-360.6	-1,510.6	2,316.8	2,275.5	41.27	56.143	
5,500.0	5,424.4	5,617.6	5,433.7	18.5	25.0	-107.83	-375.9	-1,527.1	2,322.4	2,280.3	42.09	55.174	
5,600.0	5,524.4	5,716.5	5,532.5	18.6	25.0	-107.81	-375.0	-1,527.0	2,322.0	2,279.7	42.32	54.871	
5,641.8	5,566.1	5,752.6	5,568.6	18.7	25.1	-107.80	-374.8	-1,527.0	2,321.9	2,279.5	42.41	54.750	
5,700.0	5,624.4	5,799.5	5,615.6	18.8	25.1	-107.80	-374.5	-1,527.2	2,322.1	2,279.5	42.54	54.586	
5,800.0	5,724.4	5,896.8	5,712.9	18.9	25.2	-107.79	-374.5	-1,527.9	2,322.8	2,280.0	42.79	54.289	
5,900.0	5,824.4	5,990.2	5,806.3	19.1	25.3	-107.79	-374.7	-1,528.5	2,323.4	2,280.4	43.03	53.992	
6,000.0	5,924.4	6,084.6	5,900.6	19.2	25.4	-107.80	-375.2	-1,529.4	2,324.5	2,281.2	43.29	53.696	
6,100.0	6,024.4	6,187.9	6,004.0	19.4	25.5	-107.81	-375.9	-1,530.3	2,325.6	2,282.0	43.56	53.387	
6,200.0	6,124.4	6,292.3	6,108.3	19.5	25.7	-107.82	-376.6	-1,531.1	2,326.5	2,282.6	43.83	53.078	
6,300.0	6,224.4	6,396.5	6,212.5	19.7	25.8	-107.83	-377.2	-1,531.7	2,327.2	2,283.1	44.10	52.769	
6,400.0	6,324.4	6,499.1	6,315.2	19.8	25.9	-107.83	-377.6	-1,532.2	2,327.7	2,283.3	44.37	52.462	
6,435.4	6,359.8	6,534.7	6,350.8	19.9	25.9	-107.83	-377.6	-1,532.3	2,327.9	2,283.4	44.46	52.354	
6,450.0	6,374.4	6,549.3	6,365.4	19.9	25.9	-17.83	-377.6	-1,532.4	2,327.8	2,296.0	31.84	73.106	
6,500.0	6,424.3	6,597.3	6,413.4	19.9	26.0	-17.91	-377.6	-1,532.7	2,325.4	2,293.5	31.94	72.804	
6,550.0	6,473.9	6,642.6	6,458.7	19.9	26.0	-18.09	-377.7	-1,533.0	2,319.8	2,288.0	31.88	72.757	
6,600.0	6,522.9	6,689.2	6,505.2	19.9	26.1	-18.39	-377.8	-1,533.3	2,311.0	2,279.4	31.68	72.943	
6,650.0	6,571.2	6,737.6	6,553.6	19.9	26.1	-18.81	-377.9	-1,533.7	2,299.0	2,267.7	31.34	73.348	
6,700.0	6,618.4	6,786.1	6,602.1	19.8	26.2	-19.36	-378.1	-1,534.1	2,283.8	2,253.0	30.88	73.964	
6,750.0	6,664.3	6,834.6	6,650.6	19.8	26.3	-20.06	-378.1	-1,534.5	2,265.5	2,235.2	30.30	74.767	
6,800.0	6,708.8	6,882.5	6,698.6	19.7	26.3	-20.94	-378.2	-1,534.8	2,244.2	2,214.5	29.64	75.719	
6,850.0	6,751.6	6,929.3	6,745.4	19.6	26.4	-22.02	-378.2	-1,535.0	2,219.9	2,190.9	28.92	76.758	
6,900.0	6,792.5	6,972.7	6,788.7	19.5	26.4	-23.31	-378.3	-1,535.2	2,192.7	2,164.6	28.19	77.783	
6,950.0	6,831.2	7,013.0	6,829.0	19.4	26.5	-24.86	-378.4	-1,535.2	2,163.0	2,135.5	27.51	78.629	
7,000.0	6,867.7	7,049.7	6,865.8	19.3	26.5	-26.70	-378.4	-1,535.3	2,130.8	2,103.9	26.95	79.056	
7,050.0	6,901.7	7,081.5	6,897.5	19.3	26.5	-28.88	-378.5	-1,535.4	2,096.4	2,069.8	26.62	78.767	
7,100.0	6,933.0	7,110.8	6,926.8	19.3	26.6	-31.49	-378.6	-1,535.5	2,060.0	2,033.3	26.62	77.391	
7,150.0	6,961.6	7,137.9	6,954.0	19.3	26.6	-34.62	-378.7	-1,535.5	2,021.7	1,994.6	27.09	74.625	
7,200.0	6,987.2	7,164.2	6,980.2	19.4	26.6	-38.43	-378.9	-1,535.6	1,981.7	1,953.5	28.17	70.349	
7,250.0	7,009.8	7,187.4	7,003.4	19.6	26.7	-43.00	-379.0	-1,535.7	1,940.2	1,910.3	29.92	64.854	
7,300.0	7,029.2	7,207.3	7,023.3	19.9	26.7	-48.45	-379.1	-1,535.7	1,897.6	1,865.3	32.33	58.702	
7,350.0	7,045.3	7,223.9	7,039.9	20.2	26.7	-54.85	-379.2	-1,535.8	1,853.9	1,818.6	35.26	52.572	
7,400.0	7,058.1	7,237.5	7,053.6	20.6	26.7	-62.23	-379.3	-1,535.8	1,809.5	1,771.0	38.46	47.044	
7,450.0	7,067.5	7,247.6	7,063.7	21.2	26.7	-70.42	-379.3	-1,535.8	1,764.5	1,723.0	41.50	42.518	
7,500.0	7,073.5	7,254.1	7,070.1	21.8	26.7	-79.09	-379.3	-1,535.8	1,719.2	1,675.3	43.92	39.143	
7,550.0	7,075.9	7,256.8	7,072.8	22.5	26.7	-87.78	-379.3	-1,535.8	1,674.0	1,628.6	45.41	36.865	
7,563.9	7,076.0	7,256.8	7,072.9	22.7	26.7	-90.13	-379.3	-1,535.8	1,661.4	1,615.7	45.64	36.403	
7,600.0	7,075.8	7,256.7	7,072.8	23.2	26.7	-90.12	-379.3	-1,535.8	1,628.9	1,582.7	46.19	35.264	
7,700.0	7,075.3	7,256.4	7,072.4	24.9	26.7	-90.10	-379.3	-1,535.8	1,539.7	1,491.8	47.87	32.161	
7,800.0	7,074.9	7,256.0	7,072.1	26.7	26.7	-90.07	-379.3	-1,535.8	1,451.8	1,402.1	49.75	29.185	
7,900.0	7,074.4	7,255.7	7,071.7	28.8	26.7	-90.04	-379.3	-1,535.8	1,365.7	1,313.9	51.77	26.379	
8,000.0	7,073.9	7,255.3	7,071.4	30.9	26.7	-90.01	-379.3	-1,535.8	1,281.5	1,227.6	53.92	23.767	
8,100.0	7,073.4	7,255.0	7,071.0	33.2	26.7	-89.98	-379.3	-1,535.8	1,199.8	1,143.6	56.17	21.362	
8,200.0	7,072.9	7,254.7	7,070.7	35.5	26.7	-89.96	-379.3	-1,535.8	1,121.0	1,062.5	58.49	19.166	
8,300.0	7,072.4	7,254.3	7,070.4	37.9	26.7	-89.93	-379.3	-1,535.8	1,045.9	985.0	60.88	17.179	
8,400.0	7,071.9	7,254.0	7,070.0	40.3	26.7	-89.90	-379.3	-1,535.8	975.3	912.0	63.33	15.400	
8,500.0	7,071.5	7,253.7	7,069.7	42.8	26.7	-89.88	-379.3	-1,535.8	910.2	844.4	65.82	13.828	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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
8,600.0	7,071.0	7,253.3	7,069.4	45.4	26.7	-89.85	-379.3	-1,535.8	851.9	783.5	68.35	12.464	
8,700.0	7,070.5	7,253.0	7,069.0	47.9	26.7	-89.83	-379.3	-1,535.8	801.8	730.9	70.91	11.308	
8,800.0	7,070.0	7,252.7	7,068.7	50.5	26.7	-89.80	-379.3	-1,535.8	761.7	688.2	73.49	10.364	
8,900.0	7,069.5	7,252.4	7,068.4	53.1	26.7	-89.77	-379.3	-1,535.8	733.1	657.0	76.10	9.633	
9,000.0	7,069.0	7,252.1	7,068.1	55.8	26.7	-89.75	-379.3	-1,535.8	717.4	638.6	78.73	9.112	
9,063.8	7,068.7	7,251.9	7,067.9	57.4	26.7	-89.73	-379.3	-1,535.8	714.5	634.1	80.41	8.886	
9,100.0	7,068.5	7,251.7	7,067.8	58.4	26.7	-89.72	-379.3	-1,535.8	715.4	634.1	81.37	8.792	ES
9,200.0	7,068.1	7,251.4	7,067.5	61.1	26.7	-89.70	-379.3	-1,535.8	727.4	643.4	84.03	8.656	SF
9,300.0	7,067.6	7,251.1	7,067.2	63.7	26.7	-89.67	-379.3	-1,535.8	752.5	665.8	86.70	8.680	
9,400.0	7,067.1	7,250.8	7,066.9	66.4	26.7	-89.65	-379.3	-1,535.8	789.7	700.3	89.38	8.834	
9,500.0	7,066.6	7,250.5	7,066.5	69.1	26.7	-89.63	-379.3	-1,535.8	837.1	745.1	92.08	9.092	
9,600.0	7,066.1	7,250.2	7,066.2	71.8	26.7	-89.60	-379.3	-1,535.8	893.3	798.5	94.78	9.425	
9,700.0	7,065.6	7,249.9	7,065.9	74.5	26.7	-89.58	-379.3	-1,535.8	956.7	859.2	97.49	9.813	
9,800.0	7,065.1	7,249.6	7,065.6	77.2	26.7	-89.55	-379.3	-1,535.8	1,025.9	925.7	100.20	10.238	
9,900.0	7,064.7	7,249.3	7,065.4	80.0	26.7	-89.53	-379.3	-1,535.8	1,099.9	997.0	102.93	10.686	
10,000.0	7,064.2	7,249.0	7,065.1	82.7	26.7	-89.51	-379.3	-1,535.8	1,177.7	1,072.0	105.66	11.147	
10,100.0	7,063.7	7,248.7	7,064.8	85.4	26.7	-89.48	-379.3	-1,535.8	1,258.6	1,150.3	108.39	11.612	
10,200.0	7,063.2	7,248.4	7,064.5	88.2	26.7	-89.46	-379.3	-1,535.8	1,342.2	1,231.0	111.13	12.078	
10,300.0	7,062.7	7,248.2	7,064.2	90.9	26.7	-89.44	-379.3	-1,535.8	1,427.8	1,313.9	113.87	12.539	
10,400.0	7,062.2	7,247.9	7,063.9	93.6	26.7	-89.41	-379.3	-1,535.8	1,515.2	1,398.6	116.62	12.993	
10,500.0	7,061.7	7,247.6	7,063.6	96.4	26.7	-89.39	-379.3	-1,535.8	1,604.1	1,484.7	119.37	13.438	
10,600.0	7,061.3	7,247.3	7,063.4	99.2	26.7	-89.37	-379.3	-1,535.8	1,694.2	1,572.1	122.12	13.873	
10,700.0	7,060.8	7,247.0	7,063.1	101.9	26.7	-89.35	-379.3	-1,535.8	1,785.4	1,660.5	124.87	14.297	
10,800.0	7,060.3	7,246.8	7,062.8	104.7	26.7	-89.32	-379.3	-1,535.8	1,877.5	1,749.8	127.63	14.710	
10,900.0	7,059.8	7,246.5	7,062.5	107.4	26.7	-89.30	-379.3	-1,535.8	1,970.3	1,839.9	130.39	15.110	
11,000.0	7,059.3	7,246.2	7,062.3	110.2	26.7	-89.28	-379.3	-1,535.8	2,063.8	1,930.6	133.16	15.499	
11,100.0	7,058.8	7,245.9	7,062.0	113.0	26.7	-89.26	-379.3	-1,535.8	2,157.9	2,022.0	135.92	15.876	
11,200.0	7,058.3	7,245.7	7,061.7	115.7	26.7	-89.24	-379.3	-1,535.8	2,252.5	2,113.8	138.69	16.241	
11,300.0	7,057.9	7,245.4	7,061.5	118.5	26.7	-89.22	-379.3	-1,535.8	2,347.5	2,206.1	141.46	16.595	
11,400.0	7,057.4	7,245.2	7,061.2	121.3	26.7	-89.20	-379.3	-1,535.8	2,443.0	2,298.8	144.23	16.938	
11,500.0	7,056.9	7,244.9	7,060.9	124.0	26.7	-89.17	-379.3	-1,535.8	2,538.8	2,391.8	147.00	17.270	
11,600.0	7,056.4	7,244.6	7,060.7	126.8	26.7	-89.15	-379.3	-1,535.8	2,634.9	2,485.1	149.78	17.592	
11,686.6	7,056.0	7,244.4	7,060.5	129.2	26.7	-89.14	-379.3	-1,535.8	2,718.4	2,566.2	152.18	17.863	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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	-38.87	663.4	-534.7	852.2				
100.0	100.0	86.2	86.2	0.1	0.1	-38.87	663.5	-534.8	852.2	852.0	0.15	5,593.282	
200.0	200.0	186.4	186.4	0.3	0.1	-38.89	663.4	-535.1	852.3	851.8	0.47	1,814.536	
300.0	300.0	288.2	288.2	0.5	0.2	-38.92	663.2	-535.5	852.3	851.6	0.78	1,093.879	
348.1	348.1	335.6	335.6	0.7	0.3	-38.93	663.1	-535.5	852.3	851.4	0.92	927.720	
400.0	400.0	386.1	386.1	0.8	0.3	-38.95	662.9	-535.8	852.4	851.3	1.07	799.229	
500.0	500.0	488.3	488.3	1.0	0.4	-103.01	662.3	-536.7	852.8	851.5	1.34	634.322	
600.0	599.8	583.5	583.5	1.2	0.4	-103.37	661.7	-537.5	854.1	852.5	1.62	528.118	
700.0	699.5	680.8	680.7	1.5	0.5	-103.95	661.5	-538.8	856.8	854.9	1.91	449.216	
800.0	798.7	787.1	787.1	1.7	0.5	-104.79	661.2	-539.8	860.3	858.1	2.22	388.305	
900.0	897.5	883.5	883.5	2.0	0.6	-105.74	660.4	-540.6	864.4	861.8	2.56	337.860	
1,000.0	995.6	984.3	984.2	2.4	0.6	-106.96	659.4	-541.8	870.0	867.0	2.95	295.105	
1,000.1	995.8	984.4	984.4	2.4	0.6	-106.97	659.4	-541.8	870.0	867.0	2.95	295.051	
1,100.0	1,093.4	1,081.7	1,081.6	2.8	0.7	-108.33	658.3	-542.7	876.3	872.9	3.36	260.657	
1,200.0	1,191.3	1,173.7	1,173.6	3.2	0.7	-109.59	657.5	-543.7	883.4	879.6	3.78	233.472	
1,300.0	1,289.1	1,272.5	1,272.4	3.6	0.7	-110.91	657.1	-545.0	891.3	887.1	4.21	211.631	
1,400.0	1,386.9	1,368.2	1,368.1	4.1	0.8	-112.19	656.4	-546.3	899.6	895.0	4.64	193.899	
1,500.0	1,484.7	1,469.5	1,469.4	4.5	0.8	-113.49	656.0	-547.5	908.5	903.4	5.07	179.361	
1,600.0	1,582.5	1,565.2	1,565.1	4.9	0.9	-114.72	655.1	-548.5	917.4	911.9	5.49	167.180	
1,700.0	1,680.3	1,661.0	1,660.9	5.4	0.9	-115.94	654.3	-550.0	927.2	921.3	5.91	156.898	
1,800.0	1,778.1	1,756.7	1,756.5	5.8	0.9	-117.12	653.7	-551.5	937.5	931.2	6.33	148.138	
1,900.0	1,875.9	1,853.7	1,853.6	6.3	1.0	-118.25	653.7	-552.7	948.4	941.7	6.75	140.606	
2,000.0	1,973.8	1,952.1	1,951.9	6.7	1.0	-119.38	653.6	-554.0	959.6	952.4	7.16	134.074	
2,100.0	2,071.6	2,050.8	2,050.6	7.2	1.1	-120.53	652.9	-555.6	971.1	963.6	7.57	128.264	
2,200.0	2,169.4	2,151.5	2,151.3	7.6	1.1	-121.66	652.3	-556.8	982.8	974.8	7.99	122.987	
2,300.0	2,267.2	2,248.4	2,248.2	8.1	1.2	-122.71	651.7	-557.7	994.5	986.1	8.40	118.337	
2,400.0	2,365.0	2,341.5	2,341.3	8.5	1.2	-123.70	651.3	-558.9	1,007.0	998.2	8.81	114.284	
2,500.0	2,462.8	2,437.2	2,437.0	9.0	1.3	-124.70	650.9	-560.6	1,020.2	1,011.0	9.21	110.724	
2,600.0	2,560.6	2,537.7	2,537.5	9.4	1.3	-125.73	650.4	-562.2	1,033.5	1,023.9	9.61	107.535	
2,700.0	2,658.5	2,636.0	2,635.8	9.9	1.4	-126.71	649.8	-563.5	1,046.9	1,036.9	10.00	104.662	
2,800.0	2,756.3	2,730.7	2,730.4	10.3	1.4	-127.62	649.4	-564.9	1,060.8	1,050.4	10.39	102.105	
2,900.0	2,854.1	2,825.3	2,825.1	10.8	1.5	-128.52	649.1	-566.5	1,075.2	1,064.4	10.77	99.814	
3,000.0	2,951.9	2,920.2	2,920.0	11.2	1.5	-129.38	649.0	-568.2	1,090.1	1,079.0	11.15	97.745	
3,100.0	3,049.7	3,016.0	3,015.7	11.7	1.6	-130.21	649.2	-570.1	1,105.5	1,094.0	11.53	95.885	
3,200.0	3,147.5	3,116.1	3,115.8	12.1	1.6	-131.07	649.4	-572.0	1,121.1	1,109.2	11.90	94.205	
3,300.0	3,245.3	3,215.0	3,214.7	12.6	1.6	-131.90	649.2	-573.8	1,136.6	1,124.4	12.27	92.662	
3,400.0	3,343.2	3,307.8	3,307.4	13.0	1.7	-132.65	649.4	-575.6	1,152.6	1,140.0	12.63	91.267	
3,500.0	3,441.0	3,400.0	3,399.6	13.5	1.7	-133.35	650.2	-577.4	1,169.1	1,156.2	12.99	90.001	
3,600.0	3,538.8	3,494.2	3,493.8	13.9	1.7	-134.03	651.4	-579.6	1,186.3	1,172.9	13.35	88.831	
3,700.0	3,636.6	3,587.7	3,587.3	14.4	1.8	-134.68	652.6	-582.0	1,203.8	1,190.1	13.71	87.776	
3,800.0	3,734.4	3,684.5	3,684.0	14.8	1.8	-135.34	654.2	-584.7	1,221.8	1,207.7	14.07	86.828	
3,900.0	3,832.2	3,782.0	3,781.4	15.3	1.9	-135.96	656.1	-587.3	1,239.9	1,225.5	14.43	85.947	
4,000.0	3,930.0	3,878.0	3,877.4	15.7	1.9	-136.55	658.0	-589.8	1,258.2	1,243.4	14.78	85.136	
4,059.3	3,988.0	3,934.6	3,934.0	16.0	1.9	-136.90	659.0	-591.4	1,269.2	1,254.2	14.99	84.695	
4,100.0	4,027.9	3,973.5	3,972.9	16.2	1.9	-137.24	659.5	-592.6	1,276.6	1,261.5	15.09	84.572	
4,200.0	4,126.3	4,080.3	4,079.6	16.5	2.0	-138.02	660.8	-595.7	1,292.8	1,277.5	15.31	84.422	
4,300.0	4,225.3	4,192.3	4,191.6	16.8	2.0	-138.63	662.2	-597.8	1,305.7	1,290.1	15.52	84.141	
4,400.0	4,324.7	4,291.5	4,290.8	17.0	2.0	-139.03	663.3	-599.1	1,315.4	1,299.7	15.70	83.760	
4,500.0	4,424.4	4,390.0	4,389.3	17.2	2.1	-139.30	664.5	-600.5	1,322.6	1,306.7	15.87	83.318	
4,600.0	4,524.4	4,495.6	4,494.8	17.3	2.1	-139.44	665.6	-601.9	1,327.0	1,311.0	16.03	82.785	
4,659.4	4,583.8	4,558.8	4,558.1	17.4	2.1	-75.57	666.1	-602.5	1,328.2	1,311.2	16.97	78.272	
4,700.0	4,624.4	4,600.0	4,599.2	17.5	2.1	-75.56	666.5	-602.8	1,328.5	1,311.5	17.03	78.016	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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
4,800.0	4,724.4	4,695.2	4,694.4	17.6	2.2	-75.54	667.1	-603.7	1,329.6	1,312.4	17.19	77.351	
4,900.0	4,824.4	4,788.7	4,787.9	17.7	2.2	-75.54	667.5	-605.1	1,331.1	1,313.8	17.35	76.712	
5,000.0	4,924.4	4,893.9	4,893.1	17.8	2.2	-75.54	668.0	-606.7	1,332.8	1,315.3	17.52	76.076	
5,100.0	5,024.4	5,000.0	4,999.2	18.0	2.3	-75.52	668.8	-607.8	1,334.0	1,316.3	17.69	75.421	
5,200.0	5,124.4	5,097.6	5,096.8	18.1	2.3	-75.50	669.5	-608.6	1,335.0	1,317.1	17.85	74.773	
5,300.0	5,224.4	5,194.5	5,193.7	18.2	2.3	-75.49	669.9	-609.8	1,336.2	1,318.2	18.02	74.135	
5,400.0	5,324.4	5,305.2	5,304.4	18.4	2.3	-75.50	670.0	-610.9	1,337.2	1,319.0	18.18	73.534	
5,500.0	5,424.4	5,414.8	5,414.0	18.5	2.3	-75.51	669.9	-611.1	1,337.3	1,319.0	18.35	72.894	
5,600.0	5,524.4	5,513.7	5,512.8	18.6	2.3	-75.50	669.9	-610.9	1,337.2	1,318.7	18.51	72.255	
5,680.1	5,604.4	5,592.8	5,591.9	18.8	2.3	-75.49	670.1	-610.9	1,337.2	1,318.6	18.64	71.753	
5,700.0	5,624.4	5,612.2	5,611.3	18.8	2.3	-75.49	670.2	-610.8	1,337.2	1,318.5	18.67	71.631	
5,800.0	5,724.4	5,708.4	5,707.5	18.9	2.3	-75.49	670.3	-611.0	1,337.4	1,318.5	18.83	71.026	
5,900.0	5,824.4	5,804.7	5,803.9	19.1	2.4	-75.52	669.7	-611.6	1,337.8	1,318.8	19.00	70.429	
6,000.0	5,924.4	5,902.9	5,902.0	19.2	2.4	-75.55	669.2	-612.4	1,338.5	1,319.3	19.18	69.783	
6,100.0	6,024.4	6,001.2	6,000.3	19.4	2.4	-75.56	669.2	-613.2	1,339.3	1,319.9	19.37	69.159	
6,200.0	6,124.4	6,113.7	6,112.9	19.5	2.4	-75.56	669.2	-613.7	1,339.7	1,320.2	19.53	68.580	
6,300.0	6,224.4	6,221.9	6,221.0	19.7	2.4	-75.58	668.7	-613.3	1,339.2	1,319.5	19.71	67.960	
6,400.0	6,324.4	6,315.6	6,314.7	19.8	2.4	-75.58	668.5	-612.9	1,338.7	1,318.9	19.87	67.359	
6,435.4	6,359.8	6,348.8	6,348.0	19.9	2.4	-75.58	668.5	-612.8	1,338.7	1,318.8	19.93	67.154	
6,450.0	6,374.4	6,362.5	6,361.6	19.9	2.4	14.42	668.5	-612.8	1,338.6	1,319.3	19.28	69.410	
6,500.0	6,424.3	6,410.2	6,409.4	19.9	2.4	14.51	668.7	-612.9	1,335.9	1,316.7	19.29	69.251	
6,550.0	6,473.9	6,461.8	6,460.9	19.9	2.4	14.70	668.8	-612.9	1,330.0	1,310.6	19.31	68.866	
6,600.0	6,522.9	6,512.8	6,511.9	19.9	2.4	15.01	668.7	-612.9	1,320.6	1,301.2	19.34	68.273	
6,650.0	6,571.2	6,562.9	6,562.0	19.9	2.4	15.44	668.6	-612.8	1,307.8	1,288.5	19.38	67.501	
6,700.0	6,618.4	6,611.4	6,610.6	19.8	2.4	15.99	668.3	-612.7	1,291.8	1,272.4	19.40	66.577	
6,750.0	6,664.3	6,657.3	6,656.4	19.8	2.4	16.69	667.9	-612.7	1,272.7	1,253.2	19.42	65.521	
6,800.0	6,708.8	6,701.6	6,700.8	19.7	2.4	17.56	667.6	-612.6	1,250.5	1,231.1	19.43	64.353	
6,850.0	6,751.6	6,744.3	6,743.5	19.6	2.4	18.63	667.2	-612.5	1,225.4	1,206.0	19.43	63.066	
6,900.0	6,792.5	6,785.1	6,784.2	19.5	2.4	19.93	666.8	-612.5	1,197.6	1,178.2	19.43	61.640	
6,950.0	6,831.2	6,822.3	6,821.4	19.4	2.4	21.50	666.4	-612.5	1,167.2	1,147.7	19.44	60.053	
7,000.0	6,867.7	6,856.5	6,855.6	19.3	2.5	23.40	666.1	-612.5	1,134.4	1,114.9	19.47	58.261	
7,050.0	6,901.7	6,888.5	6,887.6	19.3	2.5	25.71	665.8	-612.7	1,099.4	1,079.8	19.56	56.208	
7,100.0	6,933.0	6,918.2	6,917.3	19.3	2.5	28.52	665.5	-612.8	1,062.4	1,042.6	19.73	53.843	
7,150.0	6,961.6	6,945.4	6,944.5	19.3	2.5	31.96	665.3	-613.0	1,023.5	1,003.5	20.02	51.133	
7,200.0	6,987.2	6,969.9	6,969.0	19.4	2.5	36.15	665.1	-613.2	983.1	962.7	20.45	48.085	
7,250.0	7,009.8	6,991.7	6,990.8	19.6	2.5	41.23	664.9	-613.4	941.4	920.4	21.02	44.775	
7,300.0	7,029.2	7,011.4	7,010.5	19.9	2.5	47.40	664.8	-613.6	898.5	876.8	21.73	41.341	
7,350.0	7,045.3	7,028.5	7,027.6	20.2	2.5	54.68	664.7	-613.8	854.8	832.3	22.49	38.005	
7,400.0	7,058.1	7,042.0	7,041.1	20.6	2.5	62.86	664.6	-613.9	810.5	787.3	23.17	34.978	
7,450.0	7,067.5	7,052.0	7,051.1	21.2	2.5	71.53	664.6	-614.0	765.9	742.2	23.68	32.346	
7,500.0	7,073.5	7,058.5	7,057.6	21.8	2.5	80.10	664.5	-614.0	721.5	697.4	24.05	30.001	
7,550.0	7,075.9	7,061.4	7,060.5	22.5	2.5	87.98	664.5	-614.0	677.4	652.9	24.48	27.674	
7,563.9	7,076.0	7,061.5	7,060.6	22.7	2.5	89.99	664.5	-614.0	665.3	640.6	24.64	27.002	
7,600.0	7,075.8	7,061.6	7,060.7	23.2	2.5	90.01	664.5	-614.0	634.2	609.0	25.19	25.177	
7,700.0	7,075.3	7,061.8	7,061.0	24.9	2.5	90.05	664.5	-614.0	551.2	524.3	26.87	20.512	
7,800.0	7,074.9	7,062.1	7,061.2	26.7	2.5	90.09	664.5	-614.0	474.8	446.0	28.74	16.517	
7,900.0	7,074.4	7,062.3	7,061.4	28.8	2.5	90.13	664.5	-614.0	408.7	377.9	30.77	13.282	
8,000.0	7,073.9	7,062.5	7,061.6	30.9	2.5	90.16	664.5	-614.0	358.6	325.7	32.92	10.895	
8,100.0	7,073.4	7,062.7	7,061.9	33.2	2.5	90.20	664.5	-614.0	332.0	296.8	35.16	9.441	
8,142.0	7,073.2	7,062.8	7,062.0	34.1	2.5	90.22	664.5	-614.0	329.3	293.2	36.14	9.112	CC, ES
8,200.0	7,072.9	7,063.0	7,062.1	35.5	2.5	90.24	664.5	-614.0	334.4	296.9	37.49	8.920	SF
8,300.0	7,072.4	7,063.2	7,062.3	37.9	2.5	90.28	664.5	-614.0	365.3	325.4	39.88	9.159	

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 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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	7,071.9	7,063.4	7,062.5	40.3	2.5	90.32	664.5	-614.1	418.3	376.0	42.33	9.884	
8,500.0	7,071.5	7,063.6	7,062.7	42.8	2.5	90.35	664.5	-614.1	486.4	441.6	44.82	10.854	
8,600.0	7,071.0	7,063.8	7,062.9	45.4	2.5	90.39	664.5	-614.1	564.1	516.8	47.34	11.915	
8,700.0	7,070.5	7,064.0	7,063.1	47.9	2.5	90.43	664.5	-614.1	647.9	598.0	49.90	12.984	
8,800.0	7,070.0	7,064.2	7,063.4	50.5	2.5	90.46	664.5	-614.1	735.8	683.3	52.49	14.019	
8,900.0	7,069.5	7,064.4	7,063.6	53.1	2.5	90.50	664.5	-614.1	826.4	771.4	55.09	15.001	
9,000.0	7,069.0	7,064.6	7,063.8	55.8	2.5	90.53	664.5	-614.1	919.0	861.3	57.72	15.922	
9,100.0	7,068.5	7,064.8	7,064.0	58.4	2.5	90.57	664.5	-614.1	1,013.0	952.7	60.36	16.782	
9,200.0	7,068.1	7,065.0	7,064.2	61.1	2.5	90.60	664.5	-614.1	1,108.1	1,045.0	63.02	17.582	
9,300.0	7,067.6	7,065.2	7,064.3	63.7	2.5	90.64	664.5	-614.1	1,203.9	1,138.2	65.69	18.326	
9,400.0	7,067.1	7,065.4	7,064.5	66.4	2.5	90.67	664.5	-614.1	1,300.4	1,232.0	68.38	19.018	
9,500.0	7,066.6	7,065.6	7,064.7	69.1	2.5	90.70	664.5	-614.1	1,397.4	1,326.3	71.07	19.662	
9,600.0	7,066.1	7,065.8	7,064.9	71.8	2.5	90.74	664.5	-614.1	1,494.7	1,421.0	73.77	20.262	
9,700.0	7,065.6	7,066.0	7,065.1	74.5	2.5	90.77	664.5	-614.1	1,592.4	1,515.9	76.48	20.822	
9,800.0	7,065.1	7,066.2	7,065.3	77.2	2.5	90.80	664.5	-614.1	1,690.4	1,611.2	79.19	21.345	
9,900.0	7,064.7	7,066.4	7,065.5	80.0	2.5	90.83	664.5	-614.1	1,788.6	1,706.7	81.92	21.834	
10,000.0	7,064.2	7,066.5	7,065.7	82.7	2.5	90.86	664.5	-614.1	1,887.0	1,802.3	84.64	22.293	
10,100.0	7,063.7	7,066.7	7,065.8	85.4	2.5	90.90	664.5	-614.1	1,985.5	1,898.1	87.38	22.723	
10,200.0	7,063.2	7,066.9	7,066.0	88.2	2.5	90.93	664.5	-614.1	2,084.2	1,994.1	90.11	23.128	
10,300.0	7,062.7	7,067.1	7,066.2	90.9	2.5	90.96	664.5	-614.1	2,183.0	2,090.1	92.86	23.509	
10,400.0	7,062.2	7,067.3	7,066.4	93.6	2.5	90.99	664.5	-614.1	2,281.9	2,186.3	95.60	23.869	
10,500.0	7,061.7	7,067.4	7,066.5	96.4	2.5	91.02	664.5	-614.1	2,380.9	2,282.5	98.35	24.208	
10,600.0	7,061.3	7,067.6	7,066.7	99.2	2.5	91.05	664.5	-614.1	2,480.0	2,378.9	101.10	24.529	
10,700.0	7,060.8	7,067.8	7,066.9	101.9	2.5	91.08	664.5	-614.1	2,579.1	2,475.2	103.86	24.833	
10,800.0	7,060.3	7,067.9	7,067.0	104.7	2.5	91.11	664.5	-614.1	2,678.3	2,571.7	106.62	25.121	
10,900.0	7,059.8	7,068.1	7,067.2	107.4	2.5	91.13	664.5	-614.1	2,777.6	2,668.2	109.38	25.395	
11,000.0	7,059.3	7,068.3	7,067.4	110.2	2.5	91.16	664.5	-614.1	2,876.9	2,764.8	112.14	25.655	
11,100.0	7,058.8	7,068.4	7,067.5	113.0	2.5	91.19	664.5	-614.1	2,976.3	2,861.4	114.90	25.902	
11,200.0	7,058.3	7,068.6	7,067.7	115.7	2.5	91.22	664.5	-614.1	3,075.7	2,958.0	117.67	26.138	
11,300.0	7,057.9	7,068.7	7,067.9	118.5	2.5	91.25	664.5	-614.1	3,175.1	3,054.7	120.44	26.363	
11,400.0	7,057.4	7,068.9	7,068.0	121.3	2.5	91.27	664.5	-614.1	3,274.6	3,151.4	123.21	26.577	
11,500.0	7,056.9	7,069.1	7,068.2	124.0	2.5	91.30	664.5	-614.1	3,374.1	3,248.1	125.98	26.783	
11,600.0	7,056.4	7,069.2	7,068.3	126.8	2.5	91.33	664.5	-614.1	3,473.6	3,344.9	128.75	26.979	
11,686.6	7,056.0	7,069.4	7,068.5	129.2	2.5	91.35	664.5	-614.1	3,559.9	3,428.7	131.16	27.142	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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	-87.35	174.1	-3,759.2	3,763.3				
100.0	100.0	76.5	76.5	0.1	0.7	-87.35	174.1	-3,759.2	3,763.2	3,762.4	0.83	4,531.154	
200.0	200.0	176.5	176.5	0.3	2.8	-87.35	174.1	-3,759.2	3,763.2	3,760.2	3.08	1,223.705	
300.0	300.0	276.5	276.5	0.5	4.9	-87.35	174.1	-3,759.2	3,763.2	3,757.8	5.44	691.303	
400.0	400.0	376.5	376.5	0.8	6.9	-87.35	174.1	-3,759.2	3,763.2	3,755.5	7.72	487.448	
500.0	500.0	476.5	476.5	1.0	9.0	-151.23	174.1	-3,759.2	3,764.8	3,754.8	9.97	377.751	
600.0	599.8	576.3	576.3	1.2	11.0	-151.22	174.1	-3,759.2	3,769.3	3,757.2	12.19	309.286	
700.0	699.5	676.0	676.0	1.5	13.0	-151.21	174.1	-3,759.2	3,777.0	3,762.6	14.39	262.514	
800.0	798.7	775.2	775.2	1.7	15.0	-151.20	174.1	-3,759.2	3,787.7	3,771.1	16.56	228.663	
900.0	897.5	874.0	874.0	2.0	17.0	-151.18	174.1	-3,759.2	3,801.4	3,782.7	18.71	203.130	
1,000.0	995.6	972.1	972.1	2.4	19.0	-151.15	174.1	-3,759.2	3,818.2	3,797.4	20.83	183.269	
1,000.1	995.8	972.3	972.3	2.4	19.0	-151.15	174.1	-3,759.2	3,818.3	3,797.4	20.84	183.244	
1,100.0	1,093.4	1,069.9	1,069.9	2.8	21.0	-151.30	174.1	-3,759.2	3,836.5	3,813.5	23.05	166.447	
1,200.0	1,191.3	1,167.8	1,167.8	3.2	22.9	-151.45	174.1	-3,759.2	3,854.9	3,829.6	25.27	152.533	
1,300.0	1,289.1	1,265.6	1,265.6	3.6	24.9	-151.59	174.1	-3,759.2	3,873.3	3,845.8	27.50	140.847	
1,400.0	1,386.9	1,363.4	1,363.4	4.1	26.9	-151.74	174.1	-3,759.2	3,891.7	3,861.9	29.73	130.900	
1,500.0	1,484.7	1,461.2	1,461.2	4.5	28.8	-151.88	174.1	-3,759.2	3,910.1	3,878.1	31.96	122.333	
1,600.0	1,582.5	1,559.0	1,559.0	4.9	30.8	-152.03	174.1	-3,759.2	3,928.5	3,894.3	34.20	114.882	
1,700.0	1,680.3	1,656.8	1,656.8	5.4	32.8	-152.17	174.1	-3,759.2	3,947.0	3,910.6	36.43	108.342	
1,800.0	1,778.1	1,754.6	1,754.6	5.8	34.7	-152.31	174.1	-3,759.2	3,965.5	3,926.8	38.67	102.558	
1,900.0	1,875.9	1,852.4	1,852.4	6.3	36.7	-152.44	174.1	-3,759.2	3,984.0	3,943.1	40.90	97.405	
2,000.0	1,973.8	1,950.3	1,950.3	6.7	38.7	-152.58	174.1	-3,759.2	4,002.5	3,959.4	43.14	92.788	
2,100.0	2,071.6	2,048.1	2,048.1	7.2	40.6	-152.72	174.1	-3,759.2	4,021.1	3,975.7	45.37	88.625	
2,200.0	2,169.4	2,145.9	2,145.9	7.6	42.6	-152.85	174.1	-3,759.2	4,039.7	3,992.0	47.61	84.855	
2,300.0	2,267.2	2,243.7	2,243.7	8.1	44.6	-152.99	174.1	-3,759.2	4,058.3	4,008.4	49.84	81.424	
2,400.0	2,365.0	2,341.5	2,341.5	8.5	46.5	-153.12	174.1	-3,759.2	4,076.9	4,024.8	52.08	78.288	
2,500.0	2,462.8	2,439.3	2,439.3	9.0	48.5	-153.25	174.1	-3,759.2	4,095.5	4,041.2	54.31	75.411	
2,600.0	2,560.6	2,537.1	2,537.1	9.4	50.5	-153.38	174.1	-3,759.2	4,114.2	4,057.6	56.54	72.762	
2,700.0	2,658.5	2,635.0	2,635.0	9.9	52.4	-153.51	174.1	-3,759.2	4,132.9	4,074.1	58.78	70.316	
2,800.0	2,756.3	2,732.8	2,732.8	10.3	54.4	-153.63	174.1	-3,759.2	4,151.6	4,090.6	61.01	68.050	
2,900.0	2,854.1	2,830.6	2,830.6	10.8	56.4	-153.76	174.1	-3,759.2	4,170.3	4,107.0	63.24	65.944	
3,000.0	2,951.9	2,928.4	2,928.4	11.2	58.3	-153.89	174.1	-3,759.2	4,189.0	4,123.6	65.47	63.983	
3,100.0	3,049.7	3,026.2	3,026.2	11.7	60.3	-154.01	174.1	-3,759.2	4,207.8	4,140.1	67.70	62.152	
3,200.0	3,147.5	3,124.0	3,124.0	12.1	62.3	-154.13	174.1	-3,759.2	4,226.6	4,156.6	69.93	60.439	
3,300.0	3,245.3	3,221.8	3,221.8	12.6	64.2	-154.25	174.1	-3,759.2	4,245.4	4,173.2	72.16	58.832	
3,400.0	3,343.2	3,319.7	3,319.7	13.0	66.2	-154.38	174.1	-3,759.2	4,264.2	4,189.8	74.39	57.322	
3,500.0	3,441.0	3,417.5	3,417.5	13.5	68.2	-154.50	174.1	-3,759.2	4,283.0	4,206.4	76.62	55.901	
3,600.0	3,538.8	3,515.3	3,515.3	13.9	70.2	-154.61	174.1	-3,759.2	4,301.9	4,223.0	78.85	54.561	
3,700.0	3,636.6	3,613.1	3,613.1	14.4	72.1	-154.73	174.1	-3,759.2	4,320.7	4,239.7	81.07	53.295	
3,800.0	3,734.4	3,710.9	3,710.9	14.8	74.1	-154.85	174.1	-3,759.2	4,339.6	4,256.3	83.30	52.097	
3,900.0	3,832.2	3,808.7	3,808.7	15.3	76.1	-154.96	174.1	-3,759.2	4,358.5	4,273.0	85.53	50.962	
4,000.0	3,930.0	3,906.5	3,906.5	15.7	78.0	-155.08	174.1	-3,759.2	4,377.5	4,289.7	87.75	49.885	
4,059.3	3,988.0	3,964.5	3,964.5	16.0	79.2	-155.15	174.1	-3,759.2	4,388.7	4,299.6	89.07	49.273	
4,100.0	4,027.9	4,004.4	4,004.4	16.2	80.0	-155.26	174.1	-3,759.2	4,396.2	4,306.0	90.15	48.766	
4,200.0	4,126.3	4,102.8	4,102.8	16.5	82.0	-155.49	174.1	-3,759.2	4,412.3	4,319.5	92.73	47.584	
4,300.0	4,225.3	4,201.8	4,201.8	16.8	84.0	-155.67	174.1	-3,759.2	4,425.3	4,330.0	95.23	46.467	
4,400.0	4,324.7	4,301.2	4,301.2	17.0	86.0	-155.81	174.1	-3,759.2	4,435.1	4,337.4	97.66	45.414	
4,500.0	4,424.4	4,400.9	4,400.9	17.2	88.0	-155.90	174.1	-3,759.2	4,441.8	4,341.8	99.99	44.421	
4,600.0	4,524.4	4,500.9	4,500.9	17.3	90.0	-155.95	174.1	-3,759.2	4,445.3	4,343.0	102.22	43.486	
4,659.4	4,583.8	4,560.3	4,560.3	17.4	91.2	-92.08	174.1	-3,759.2	4,445.8	4,338.0	107.77	41.251	
4,700.0	4,624.4	4,600.9	4,600.9	17.5	92.0	-92.08	174.1	-3,759.2	4,445.8	4,337.2	108.64	40.923	
4,800.0	4,724.4	4,700.9	4,700.9	17.6	94.0	-92.08	174.1	-3,759.2	4,445.8	4,335.0	110.78	40.131	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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
4,900.0	4,824.4	4,800.9	4,800.9	17.7	96.0	-92.08	174.1	-3,759.2	4,445.8	4,332.9	112.93	39.369	
5,000.0	4,924.4	4,900.9	4,900.9	17.8	98.0	-92.08	174.1	-3,759.2	4,445.8	4,330.8	115.07	38.635	
5,100.0	5,024.4	5,000.9	5,000.9	18.0	100.0	-92.08	174.1	-3,759.2	4,445.8	4,328.6	117.22	37.927	
5,200.0	5,124.4	5,100.9	5,100.9	18.1	102.0	-92.08	174.1	-3,759.2	4,445.8	4,326.5	119.37	37.243	
5,300.0	5,224.4	5,200.9	5,200.9	18.2	104.1	-92.08	174.1	-3,759.2	4,445.8	4,324.3	121.52	36.584	
5,400.0	5,324.4	5,300.9	5,300.9	18.4	106.1	-92.08	174.1	-3,759.2	4,445.8	4,322.1	123.68	35.947	
5,500.0	5,424.4	5,400.9	5,400.9	18.5	108.1	-92.08	174.1	-3,759.2	4,445.8	4,320.0	125.83	35.331	
5,600.0	5,524.4	5,500.9	5,500.9	18.6	110.1	-92.08	174.1	-3,759.2	4,445.8	4,317.8	127.99	34.735	
5,700.0	5,624.4	5,600.9	5,600.9	18.8	112.1	-92.08	174.1	-3,759.2	4,445.8	4,315.7	130.15	34.159	
5,800.0	5,724.4	5,700.9	5,700.9	18.9	114.1	-92.08	174.1	-3,759.2	4,445.8	4,313.5	132.31	33.601	
5,900.0	5,824.4	5,800.9	5,800.9	19.1	116.1	-92.08	174.1	-3,759.2	4,445.8	4,311.4	134.47	33.061	
6,000.0	5,924.4	5,900.9	5,900.9	19.2	118.1	-92.08	174.1	-3,759.2	4,445.8	4,309.2	136.64	32.537	
6,100.0	6,024.4	6,000.9	6,000.9	19.4	120.1	-92.08	174.1	-3,759.2	4,445.8	4,307.0	138.80	32.030	
6,200.0	6,124.4	6,100.9	6,100.9	19.5	122.1	-92.08	174.1	-3,759.2	4,445.8	4,304.9	140.97	31.538	
6,300.0	6,224.4	6,200.9	6,200.9	19.7	124.2	-92.08	174.1	-3,759.2	4,445.8	4,302.7	143.14	31.060	
6,400.0	6,324.4	6,300.9	6,300.9	19.8	126.2	-92.08	174.1	-3,759.2	4,445.8	4,300.5	145.31	30.596	
6,435.4	6,359.8	6,336.3	6,336.3	19.9	126.9	-92.08	174.1	-3,759.2	4,445.8	4,299.7	146.07	30.435	
6,450.0	6,374.4	6,350.9	6,350.9	19.9	127.2	-2.08	174.1	-3,759.2	4,445.7	4,303.0	142.65	31.164	
6,500.0	6,424.3	6,400.8	6,400.8	19.9	128.2	-2.09	174.1	-3,759.2	4,442.9	4,299.8	143.10	31.048	
6,550.0	6,473.9	6,450.4	6,450.4	19.9	129.2	-2.11	174.1	-3,759.2	4,436.7	4,293.9	142.83	31.063	
6,600.0	6,522.9	6,499.4	6,499.4	19.9	130.2	-2.14	174.1	-3,759.2	4,427.0	4,285.2	141.84	31.210	
6,650.0	6,571.2	6,547.7	6,547.7	19.9	131.1	-2.19	174.1	-3,759.2	4,413.9	4,273.8	140.13	31.498	
6,700.0	6,618.4	6,594.9	6,594.9	19.8	132.1	-2.25	174.1	-3,759.2	4,397.5	4,259.9	137.69	31.938	
6,750.0	6,664.3	6,640.8	6,640.8	19.8	133.0	-2.33	174.1	-3,759.2	4,377.9	4,243.4	134.53	32.543	
6,800.0	6,708.8	6,685.3	6,685.3	19.7	133.9	-2.43	174.1	-3,759.2	4,355.1	4,224.4	130.65	33.335	
6,850.0	6,751.6	6,728.1	6,728.1	19.6	134.8	-2.55	174.1	-3,759.2	4,329.2	4,203.2	126.07	34.340	
6,900.0	6,792.5	6,769.0	6,769.0	19.5	135.6	-2.69	174.1	-3,759.2	4,300.5	4,179.6	120.82	35.594	
6,950.0	6,831.2	6,807.7	6,807.7	19.4	136.4	-2.87	174.1	-3,759.2	4,268.9	4,154.0	114.92	37.146	
7,000.0	6,867.7	6,844.2	6,844.2	19.3	137.1	-3.09	174.1	-3,759.2	4,234.7	4,126.3	108.42	39.058	
7,050.0	6,901.7	6,878.2	6,878.2	19.3	137.8	-3.36	174.1	-3,759.2	4,198.1	4,096.7	101.37	41.414	
7,100.0	6,933.0	6,909.5	6,909.5	19.3	138.4	-3.70	174.1	-3,759.2	4,159.2	4,065.4	93.83	44.329	
7,150.0	6,961.6	6,938.1	6,938.1	19.3	139.0	-4.13	174.1	-3,759.2	4,118.2	4,032.3	85.88	47.954	
7,200.0	6,987.2	6,963.7	6,963.7	19.4	139.5	-4.69	174.1	-3,759.2	4,075.3	3,997.7	77.64	52.490	
7,250.0	7,009.8	6,986.3	6,986.3	19.6	140.0	-5.44	174.1	-3,759.2	4,030.7	3,961.5	69.29	58.170	
7,300.0	7,029.2	7,005.7	7,005.7	19.9	140.3	-6.49	174.1	-3,759.2	3,984.7	3,923.5	61.16	65.149	
7,350.0	7,045.3	7,021.8	7,021.8	20.2	140.7	-8.05	174.1	-3,759.2	3,937.4	3,883.5	53.96	72.973	
7,400.0	7,058.1	7,034.6	7,034.6	20.6	140.9	-10.57	174.1	-3,759.2	3,889.2	3,839.7	49.48	78.607	
7,450.0	7,067.5	7,044.0	7,044.0	21.2	141.1	-15.29	174.1	-3,759.2	3,840.1	3,787.5	52.57	73.042	
7,500.0	7,073.5	7,050.0	7,050.0	21.8	141.2	-26.78	174.1	-3,759.2	3,790.5	3,714.0	76.55	49.518	
7,550.0	7,075.9	7,052.4	7,052.4	22.5	141.3	-71.29	174.1	-3,759.2	3,740.6	3,585.7	154.92	24.146	
7,563.9	7,076.0	7,052.5	7,052.5	22.7	141.3	-96.40	174.1	-3,759.2	3,726.7	3,563.7	163.05	22.856	
7,600.0	7,075.8	7,052.3	7,052.3	23.2	141.3	-96.34	174.1	-3,759.2	3,690.7	3,527.1	163.62	22.557	
7,700.0	7,075.3	7,051.8	7,051.8	24.9	141.3	-96.17	174.1	-3,759.2	3,590.8	3,425.4	165.33	21.719	
7,800.0	7,074.9	7,051.4	7,051.4	26.7	141.3	-96.00	174.1	-3,759.2	3,490.9	3,323.6	167.23	20.875	
7,900.0	7,074.4	7,050.9	7,050.9	28.8	141.3	-95.83	174.1	-3,759.2	3,391.0	3,221.7	169.28	20.032	
8,000.0	7,073.9	7,050.4	7,050.4	30.9	141.2	-95.66	174.1	-3,759.2	3,291.1	3,119.7	171.45	19.195	
8,100.0	7,073.4	7,049.9	7,049.9	33.2	141.2	-95.48	174.1	-3,759.2	3,191.2	3,017.5	173.73	18.369	
8,200.0	7,072.9	7,049.4	7,049.4	35.5	141.2	-95.31	174.1	-3,759.2	3,091.4	2,915.3	176.08	17.557	
8,300.0	7,072.4	7,048.9	7,048.9	37.9	141.2	-95.14	174.1	-3,759.2	2,991.5	2,813.0	178.49	16.760	
8,400.0	7,071.9	7,048.4	7,048.4	40.3	141.2	-94.97	174.1	-3,759.2	2,891.7	2,710.7	180.96	15.979	
8,500.0	7,071.5	7,048.0	7,048.0	42.8	141.2	-94.80	174.1	-3,759.2	2,791.8	2,608.3	183.48	15.216	
8,600.0	7,071.0	7,047.5	7,047.5	45.4	141.2	-94.63	174.1	-3,759.2	2,692.0	2,506.0	186.03	14.471	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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	7,070.5	7,047.0	7,047.0	47.9	141.2	-94.46	174.1	-3,759.2	2,592.2	2,403.6	188.61	13.744	
8,800.0	7,070.0	7,046.5	7,046.5	50.5	141.2	-94.28	174.1	-3,759.2	2,492.4	2,301.2	191.21	13.034	
8,900.0	7,069.5	7,046.0	7,046.0	53.1	141.2	-94.11	174.1	-3,759.2	2,392.6	2,198.8	193.84	12.343	
9,000.0	7,069.0	7,045.5	7,045.5	55.8	141.1	-93.94	174.1	-3,759.2	2,292.8	2,096.3	196.49	11.669	
9,100.0	7,068.5	7,045.0	7,045.0	58.4	141.1	-93.77	174.1	-3,759.2	2,193.1	1,993.9	199.16	11.012	
9,200.0	7,068.1	7,044.6	7,044.6	61.1	141.1	-93.60	174.1	-3,759.2	2,093.4	1,891.5	201.84	10.372	
9,300.0	7,067.6	7,044.1	7,044.1	63.7	141.1	-93.43	174.1	-3,759.2	1,993.7	1,789.2	204.53	9.748	
9,400.0	7,067.1	7,043.6	7,043.6	66.4	141.1	-93.25	174.1	-3,759.2	1,894.0	1,686.8	207.23	9.140	
9,500.0	7,066.6	7,043.1	7,043.1	69.1	141.1	-93.08	174.1	-3,759.2	1,794.4	1,584.5	209.94	8.547	
9,600.0	7,066.1	7,042.6	7,042.6	71.8	141.1	-92.91	174.1	-3,759.2	1,694.9	1,482.2	212.65	7.970	
9,700.0	7,065.6	7,042.1	7,042.1	74.5	141.1	-92.74	174.1	-3,759.2	1,595.3	1,380.0	215.38	7.407	
9,800.0	7,065.1	7,041.6	7,041.6	77.2	141.1	-92.57	174.1	-3,759.2	1,495.9	1,277.8	218.11	6.858	
9,900.0	7,064.7	7,041.2	7,041.2	80.0	141.1	-92.39	174.1	-3,759.2	1,396.5	1,175.7	220.85	6.323	
10,000.0	7,064.2	7,040.7	7,040.7	82.7	141.0	-92.22	174.1	-3,759.2	1,297.2	1,073.6	223.59	5.802	
10,100.0	7,063.7	7,040.2	7,040.2	85.4	141.0	-92.05	174.1	-3,759.2	1,198.1	971.7	226.33	5.293	
10,200.0	7,063.2	7,039.7	7,039.7	88.2	141.0	-91.88	174.1	-3,759.2	1,099.1	870.0	229.08	4.798	
10,300.0	7,062.7	7,039.2	7,039.2	90.9	141.0	-91.70	174.1	-3,759.2	1,000.3	768.4	231.83	4.315	
10,400.0	7,062.2	7,038.7	7,038.7	93.6	141.0	-91.53	174.1	-3,759.2	901.7	667.1	234.58	3.844	
10,500.0	7,061.7	7,038.2	7,038.2	96.4	141.0	-91.36	174.1	-3,759.2	803.5	566.2	237.33	3.386	
10,600.0	7,061.3	7,037.8	7,037.8	99.2	141.0	-91.19	174.1	-3,759.2	705.8	465.7	240.09	2.940	
10,700.0	7,060.8	7,037.3	7,037.3	101.9	141.0	-91.01	174.1	-3,759.2	608.9	366.1	242.85	2.507	
10,800.0	7,060.3	7,036.8	7,036.8	104.7	141.0	-90.84	174.1	-3,759.2	513.1	267.5	245.60	2.089	
10,900.0	7,059.8	7,036.3	7,036.3	107.4	141.0	-90.67	174.1	-3,759.2	419.4	171.0	248.36	1.689	
11,000.0	7,059.3	7,035.8	7,035.8	110.2	141.0	-90.50	174.1	-3,759.2	329.3	78.2	251.12	1.311	Level 3
11,100.0	7,058.8	7,035.3	7,035.3	113.0	140.9	-90.32	174.1	-3,759.2	247.0	-6.9	253.88	0.973	Level 1
11,200.0	7,058.3	7,034.8	7,034.8	115.7	140.9	-90.15	174.1	-3,759.2	183.2	-73.4	256.64	0.714	Level 1
11,287.2	7,057.9	7,034.4	7,034.4	118.1	140.9	-90.00	174.1	-3,759.2	161.1	-97.9	259.05	0.622	Level 1, CC, ES, SF
11,300.0	7,057.9	7,034.4	7,034.4	118.5	140.9	-89.98	174.1	-3,759.2	161.6	-97.7	259.40	0.623	Level 1
11,400.0	7,057.4	7,033.9	7,033.9	121.3	140.9	-89.81	174.1	-3,759.2	196.7	-65.5	262.16	0.750	Level 1
11,500.0	7,056.9	7,033.4	7,033.4	124.0	140.9	-89.63	174.1	-3,759.2	266.9	2.0	264.91	1.008	Level 2
11,600.0	7,056.4	7,032.9	7,032.9	126.8	140.9	-89.46	174.1	-3,759.2	351.9	84.2	267.67	1.315	Level 3
11,686.6	7,056.0	7,032.5	7,032.5	129.2	140.9	-89.31	174.1	-3,759.2	430.7	160.6	270.06	1.595	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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	1.0	1.0	0.0	0.0	-179.64	-44.8	-0.3	44.8				
100.0	100.0	101.0	101.0	0.1	0.1	-179.64	-44.8	-0.3	44.8	44.6	0.20	227.845	
200.0	200.0	201.0	201.0	0.3	0.3	-179.64	-44.8	-0.3	44.8	44.2	0.65	69.344	
300.0	300.0	301.0	301.0	0.5	0.5	-179.64	-44.8	-0.3	44.8	43.7	1.10	40.895	
400.0	400.0	401.0	401.0	0.8	0.8	-179.64	-44.8	-0.3	44.8	43.3	1.55	28.998	CC, ES
500.0	500.0	501.0	501.0	1.0	1.0	118.42	-44.8	-0.3	45.6	43.6	1.99	22.929	
600.0	599.8	600.8	600.8	1.2	1.2	123.84	-44.8	-0.3	48.3	45.9	2.44	19.836	
700.0	699.5	700.2	700.2	1.5	1.4	129.61	-45.4	1.4	53.9	51.0	2.88	18.708	
800.0	798.7	799.6	799.4	1.7	1.6	133.35	-47.3	6.2	62.5	59.1	3.33	18.743	
900.0	897.5	898.8	898.3	2.0	1.9	135.30	-50.4	14.3	73.8	70.0	3.83	19.296	
1,000.0	995.6	997.8	996.5	2.4	2.1	135.97	-54.7	25.5	87.8	83.4	4.38	20.067	
1,000.1	995.8	997.9	996.7	2.4	2.1	135.97	-54.7	25.5	87.8	83.4	4.38	20.068	
1,100.0	1,093.4	1,096.6	1,094.1	2.8	2.4	135.36	-60.2	39.8	103.1	98.1	4.99	20.638	
1,200.0	1,191.3	1,195.2	1,190.9	3.2	2.7	133.24	-66.9	57.2	118.4	112.8	5.69	20.823	
1,300.0	1,289.1	1,293.8	1,287.3	3.6	3.1	130.81	-74.2	76.4	134.1	127.7	6.44	20.818	
1,400.0	1,386.9	1,392.4	1,383.8	4.1	3.5	128.89	-81.6	95.5	150.0	142.8	7.23	20.761	
1,500.0	1,484.7	1,491.0	1,480.3	4.5	3.9	127.33	-88.9	114.7	166.0	158.0	8.03	20.685	
1,600.0	1,582.5	1,589.6	1,576.7	4.9	4.3	126.05	-96.2	133.8	182.1	173.3	8.84	20.604	
1,700.0	1,680.3	1,688.2	1,673.2	5.4	4.8	124.98	-103.6	153.0	198.3	188.7	9.66	20.525	
1,800.0	1,778.1	1,786.9	1,769.7	5.8	5.2	124.07	-110.9	172.1	214.6	204.1	10.49	20.450	
1,900.0	1,875.9	1,885.5	1,866.1	6.3	5.6	123.28	-118.3	191.3	230.8	219.5	11.33	20.381	
2,000.0	1,973.8	1,984.1	1,962.6	6.7	6.1	122.61	-125.6	210.4	247.2	235.0	12.17	20.317	
2,100.0	2,071.6	2,082.7	2,059.0	7.2	6.5	122.01	-133.0	229.6	263.5	250.5	13.01	20.260	
2,200.0	2,169.4	2,181.3	2,155.5	7.6	7.0	121.48	-140.3	248.7	279.9	266.1	13.85	20.207	
2,300.0	2,267.2	2,280.0	2,252.0	8.1	7.4	121.02	-147.6	267.9	296.3	281.6	14.70	20.159	
2,400.0	2,365.0	2,378.6	2,348.4	8.5	7.9	120.60	-155.0	287.0	312.7	297.2	15.55	20.115	
2,500.0	2,462.8	2,477.2	2,444.9	9.0	8.3	120.22	-162.3	306.2	329.1	312.7	16.40	20.074	
2,600.0	2,560.6	2,575.8	2,541.4	9.4	8.8	119.88	-169.7	325.3	345.6	328.3	17.25	20.037	
2,700.0	2,658.5	2,674.4	2,637.8	9.9	9.2	119.57	-177.0	344.5	362.0	343.9	18.10	20.003	
2,800.0	2,756.3	2,773.1	2,734.3	10.3	9.7	119.29	-184.4	363.6	378.5	359.5	18.95	19.972	
2,900.0	2,854.1	2,871.7	2,830.8	10.8	10.1	119.03	-191.7	382.8	395.0	375.2	19.81	19.943	
3,000.0	2,951.9	2,970.3	2,927.2	11.2	10.6	118.79	-199.1	401.9	411.4	390.8	20.66	19.916	
3,100.0	3,049.7	3,068.9	3,023.7	11.7	11.0	118.57	-206.4	421.1	427.9	406.4	21.51	19.891	
3,200.0	3,147.5	3,167.5	3,120.1	12.1	11.5	118.37	-213.7	440.2	444.4	422.1	22.37	19.868	
3,300.0	3,245.3	3,266.2	3,216.6	12.6	11.9	118.18	-221.1	459.4	460.9	437.7	23.22	19.846	
3,400.0	3,343.2	3,364.8	3,313.1	13.0	12.4	118.00	-228.4	478.5	477.4	453.3	24.08	19.826	
3,500.0	3,441.0	3,463.4	3,409.5	13.5	12.8	117.84	-235.8	497.7	493.9	469.0	24.94	19.807	
3,600.0	3,538.8	3,562.0	3,506.0	13.9	13.3	117.68	-243.1	516.8	510.4	484.6	25.79	19.789	
3,700.0	3,636.6	3,660.6	3,602.5	14.4	13.7	117.54	-250.5	536.0	526.9	500.3	26.65	19.772	
3,800.0	3,734.4	3,759.2	3,698.9	14.8	14.2	117.40	-257.8	555.1	543.5	515.9	27.51	19.757	
3,900.0	3,832.2	3,857.9	3,795.4	15.3	14.6	117.28	-265.1	574.3	560.0	531.6	28.36	19.742	
4,000.0	3,930.0	3,956.5	3,891.8	15.7	15.1	117.16	-272.5	593.4	576.5	547.3	29.22	19.728	
4,059.3	3,988.0	4,015.0	3,949.0	16.0	15.4	117.09	-276.8	604.8	586.3	556.6	29.73	19.720	
4,100.0	4,027.9	4,055.1	3,988.3	16.2	15.6	117.14	-279.8	612.6	592.9	562.8	30.07	19.717	
4,200.0	4,126.3	4,153.9	4,084.9	16.5	16.0	117.03	-287.2	631.7	608.0	577.2	30.82	19.725	
4,300.0	4,225.3	4,260.3	4,189.3	16.8	16.4	116.73	-294.5	650.7	621.0	589.5	31.47	19.736	
4,400.0	4,324.7	4,367.8	4,295.6	17.0	16.7	116.43	-300.4	666.3	631.2	599.2	32.00	19.723	
4,500.0	4,424.4	4,475.9	4,402.9	17.2	17.0	116.12	-305.0	678.1	638.6	606.2	32.46	19.676	
4,600.0	4,524.4	4,584.5	4,511.1	17.3	17.2	115.81	-308.1	686.2	643.2	610.4	32.82	19.595	
4,659.4	4,583.8	4,649.2	4,575.7	17.4	17.3	179.51	-309.3	689.2	644.5	619.9	24.61	26.190	
4,700.0	4,624.4	4,693.3	4,619.9	17.5	17.3	179.39	-309.7	690.5	645.0	620.3	24.75	26.066	
4,800.0	4,724.4	4,798.8	4,725.4	17.6	17.5	179.33	-310.0	691.2	645.3	620.2	25.08	25.727	

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 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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
4,900.0	4,824.4	4,898.8	4,825.4	17.7	17.6	179.33	-310.0	691.2	645.3	619.8	25.41	25.394	
5,000.0	4,924.4	4,998.8	4,925.4	17.8	17.7	179.33	-310.0	691.2	645.3	619.5	25.74	25.067	
5,100.0	5,024.4	5,098.8	5,025.4	18.0	17.8	179.33	-310.0	691.2	645.3	619.2	26.08	24.744	
5,200.0	5,124.4	5,198.8	5,125.4	18.1	18.0	179.33	-310.0	691.2	645.3	618.8	26.42	24.427	
5,300.0	5,224.4	5,298.8	5,225.4	18.2	18.1	179.33	-310.0	691.2	645.3	618.5	26.76	24.114	
5,400.0	5,324.4	5,398.8	5,325.4	18.4	18.2	179.33	-310.0	691.2	645.3	618.1	27.10	23.807	
5,500.0	5,424.4	5,498.8	5,425.4	18.5	18.3	179.33	-310.0	691.2	645.3	617.8	27.45	23.505	
5,600.0	5,524.4	5,598.8	5,525.4	18.6	18.5	179.33	-310.0	691.2	645.3	617.4	27.80	23.208	
5,700.0	5,624.4	5,698.8	5,625.4	18.8	18.6	179.33	-310.0	691.2	645.3	617.1	28.16	22.916	
5,800.0	5,724.4	5,798.8	5,725.4	18.9	18.8	179.33	-310.0	691.2	645.3	616.7	28.51	22.629	
5,900.0	5,824.4	5,898.8	5,825.4	19.1	18.9	179.33	-310.0	691.2	645.3	616.4	28.87	22.347	
6,000.0	5,924.4	5,998.8	5,925.4	19.2	19.0	179.33	-310.0	691.2	645.3	616.0	29.24	22.071	
6,100.0	6,024.4	6,098.8	6,025.4	19.4	19.2	179.33	-310.0	691.2	645.3	615.7	29.60	21.799	
6,200.0	6,124.4	6,198.8	6,125.4	19.5	19.3	179.33	-310.0	691.2	645.3	615.3	29.97	21.533	
6,300.0	6,224.4	6,298.8	6,225.4	19.7	19.5	179.33	-310.0	691.2	645.3	614.9	30.34	21.271	
6,400.0	6,324.4	6,398.8	6,325.4	19.8	19.6	179.33	-310.0	691.2	645.3	614.5	30.71	21.014	
6,435.4	6,359.8	6,434.3	6,360.8	19.9	19.7	179.33	-310.0	691.2	645.3	614.4	30.84	20.924	
6,450.0	6,374.4	6,449.0	6,375.5	19.9	19.7	-90.67	-310.0	691.0	645.3	607.1	38.14	16.918	
6,500.0	6,424.3	6,499.5	6,426.0	19.9	19.7	-90.66	-310.0	688.2	645.3	607.0	38.22	16.881	
6,550.0	6,473.9	6,550.0	6,476.0	19.9	19.7	-90.64	-310.0	681.7	645.3	607.0	38.25	16.870	
6,600.0	6,522.9	6,600.5	6,525.6	19.9	19.7	-90.63	-310.0	671.8	645.2	607.0	38.22	16.884	
6,650.0	6,571.2	6,651.0	6,574.2	19.9	19.7	-90.61	-310.0	658.4	645.2	607.1	38.14	16.920	
6,700.0	6,618.4	6,701.5	6,621.8	19.8	19.6	-90.59	-310.0	641.6	645.2	607.2	38.02	16.973	
6,750.0	6,664.3	6,751.9	6,668.1	19.8	19.5	-90.57	-310.0	621.5	645.2	607.4	37.87	17.039	
6,800.0	6,708.8	6,802.4	6,712.8	19.7	19.5	-90.54	-310.0	598.2	645.2	607.5	37.71	17.112	
6,850.0	6,751.6	6,852.8	6,755.8	19.6	19.4	-90.51	-310.0	571.8	645.2	607.7	37.54	17.186	
6,900.0	6,792.5	6,903.2	6,796.7	19.5	19.3	-90.48	-310.0	542.5	645.2	607.8	37.40	17.252	
6,950.0	6,831.2	6,953.6	6,835.5	19.4	19.3	-90.44	-310.0	510.4	645.2	607.9	37.29	17.301	
7,000.0	6,867.7	7,003.9	6,871.9	19.3	19.2	-90.41	-310.0	475.7	645.2	608.0	37.25	17.323	
7,050.0	6,901.7	7,054.2	6,905.8	19.3	19.2	-90.37	-310.0	438.5	645.2	607.9	37.28	17.307	
7,100.0	6,933.0	7,104.5	6,937.0	19.3	19.3	-90.33	-310.0	399.1	645.2	607.8	37.42	17.244	
7,150.0	6,961.6	7,154.7	6,965.3	19.3	19.3	-90.28	-310.0	357.6	645.2	607.5	37.67	17.126	
7,200.0	6,987.2	7,204.9	6,990.6	19.4	19.5	-90.24	-310.0	314.2	645.2	607.1	38.07	16.947	
7,250.0	7,009.8	7,255.1	7,012.8	19.6	19.7	-90.20	-310.0	269.2	645.2	606.6	38.62	16.706	
7,300.0	7,029.2	7,305.2	7,031.8	19.9	20.0	-90.15	-310.0	222.8	645.2	605.9	39.33	16.404	
7,350.0	7,045.3	7,355.3	7,047.4	20.2	20.4	-90.10	-310.0	175.3	645.2	605.0	40.20	16.049	
7,400.0	7,058.1	7,405.4	7,059.7	20.6	20.9	-90.06	-310.0	126.8	645.2	604.0	41.23	15.650	
7,450.0	7,067.5	7,455.4	7,068.6	21.2	21.5	-90.01	-310.0	77.5	645.2	602.8	42.40	15.217	
7,462.1	7,069.3	7,467.5	7,070.3	21.3	21.6	-90.00	-310.0	65.6	645.2	602.5	42.71	15.105	
7,500.0	7,073.5	7,505.4	7,074.1	21.8	22.1	-89.96	-310.0	27.8	645.2	601.5	43.71	14.762	
7,550.0	7,075.9	7,555.3	7,076.0	22.5	22.8	-89.92	-310.0	-22.1	645.2	600.1	45.12	14.299	
7,563.9	7,076.0	7,569.3	7,076.0	22.7	23.0	-89.91	-310.0	-36.0	645.2	599.7	45.54	14.168	
7,600.0	7,075.8	7,605.3	7,075.8	23.2	23.5	-89.91	-310.0	-72.0	645.2	598.6	46.66	13.829	
7,700.0	7,075.3	7,705.3	7,075.3	24.9	25.2	-89.91	-310.0	-172.0	645.2	595.2	50.04	12.893	
7,800.0	7,074.9	7,805.3	7,074.8	26.7	27.1	-89.91	-310.0	-272.0	645.2	591.4	53.81	11.992	
7,900.0	7,074.4	7,905.3	7,074.3	28.8	29.1	-89.91	-310.0	-372.0	645.2	587.3	57.87	11.150	
8,000.0	7,073.9	8,005.3	7,073.9	30.9	31.3	-89.91	-310.0	-472.0	645.2	583.0	62.17	10.377	
8,100.0	7,073.4	8,105.3	7,073.4	33.2	33.5	-89.91	-310.0	-572.0	645.2	578.5	66.68	9.677	
8,200.0	7,072.9	8,205.3	7,072.9	35.5	35.8	-89.91	-310.0	-672.0	645.2	573.9	71.34	9.045	
8,300.0	7,072.4	8,305.3	7,072.4	37.9	38.2	-89.91	-310.0	-772.0	645.2	569.1	76.13	8.476	
8,400.0	7,071.9	8,405.3	7,071.9	40.3	40.7	-89.91	-310.0	-872.0	645.2	564.2	81.02	7.963	
8,500.0	7,071.5	8,505.3	7,071.4	42.8	43.2	-89.91	-310.0	-972.0	645.2	559.2	86.01	7.502	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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
8,600.0	7,071.0	8,605.3	7,070.9	45.4	45.7	-89.91	-310.0	-1,072.0	645.2	554.1	91.06	7.085	
8,700.0	7,070.5	8,705.3	7,070.5	47.9	48.3	-89.91	-310.0	-1,172.0	645.2	549.0	96.18	6.708	
8,800.0	7,070.0	8,805.3	7,070.0	50.5	50.9	-89.91	-310.0	-1,272.0	645.2	543.9	101.36	6.366	
8,900.0	7,069.5	8,905.3	7,069.5	53.1	53.5	-89.91	-310.0	-1,372.0	645.2	538.6	106.57	6.054	
9,000.0	7,069.0	9,005.3	7,069.0	55.8	56.1	-89.91	-310.0	-1,472.0	645.2	533.4	111.83	5.770	
9,100.0	7,068.5	9,105.3	7,068.5	58.4	58.8	-89.91	-310.0	-1,572.0	645.2	528.1	117.12	5.509	
9,200.0	7,068.1	9,205.3	7,068.0	61.1	61.4	-89.91	-310.0	-1,672.0	645.2	522.8	122.44	5.270	
9,300.0	7,067.6	9,305.3	7,067.6	63.7	64.1	-89.91	-310.0	-1,772.0	645.2	517.4	127.78	5.049	
9,400.0	7,067.1	9,405.3	7,067.1	66.4	66.8	-89.91	-310.0	-1,872.0	645.2	512.1	133.15	4.846	
9,500.0	7,066.6	9,505.3	7,066.6	69.1	69.5	-89.91	-310.0	-1,972.0	645.2	506.7	138.54	4.657	
9,600.0	7,066.1	9,605.3	7,066.1	71.8	72.2	-89.91	-310.0	-2,072.0	645.2	501.3	143.94	4.482	
9,700.0	7,065.6	9,705.3	7,065.6	74.5	74.9	-89.91	-310.0	-2,172.0	645.2	495.8	149.36	4.320	
9,800.0	7,065.1	9,805.3	7,065.1	77.2	77.6	-89.91	-310.0	-2,272.0	645.2	490.4	154.79	4.168	
9,900.0	7,064.7	9,905.3	7,064.7	80.0	80.3	-89.91	-310.0	-2,372.0	645.2	485.0	160.24	4.026	
10,000.0	7,064.2	10,005.3	7,064.2	82.7	83.1	-89.91	-310.0	-2,472.0	645.2	479.5	165.70	3.894	
10,100.0	7,063.7	10,105.3	7,063.7	85.4	85.8	-89.91	-310.0	-2,572.0	645.2	474.0	171.17	3.769	
10,200.0	7,063.2	10,205.3	7,063.2	88.2	88.5	-89.91	-310.0	-2,672.0	645.2	468.6	176.65	3.653	
10,300.0	7,062.7	10,305.3	7,062.7	90.9	91.3	-89.91	-310.0	-2,772.0	645.2	463.1	182.13	3.543	
10,400.0	7,062.2	10,405.3	7,062.2	93.6	94.0	-89.91	-310.0	-2,872.0	645.2	457.6	187.63	3.439	
10,500.0	7,061.7	10,505.3	7,061.8	96.4	96.8	-89.91	-310.0	-2,972.0	645.2	452.1	193.13	3.341	
10,600.0	7,061.3	10,605.3	7,061.3	99.2	99.5	-89.91	-310.0	-3,072.0	645.2	446.6	198.63	3.248	
10,700.0	7,060.8	10,705.3	7,060.8	101.9	102.3	-89.91	-310.0	-3,172.0	645.2	441.1	204.15	3.161	
10,800.0	7,060.3	10,805.3	7,060.3	104.7	105.0	-89.91	-310.0	-3,272.0	645.2	435.5	209.67	3.077	
10,900.0	7,059.8	10,905.3	7,059.8	107.4	107.8	-89.91	-310.0	-3,372.0	645.2	430.0	215.19	2.998	
11,000.0	7,059.3	11,005.3	7,059.3	110.2	110.6	-89.91	-310.0	-3,472.0	645.2	424.5	220.72	2.923	
11,100.0	7,058.8	11,105.3	7,058.8	113.0	113.3	-89.91	-310.0	-3,572.0	645.2	419.0	226.25	2.852	
11,200.0	7,058.3	11,205.3	7,058.4	115.7	116.1	-89.91	-310.0	-3,672.0	645.2	413.4	231.79	2.784	
11,300.0	7,057.9	11,305.3	7,057.9	118.5	118.9	-89.91	-310.0	-3,772.0	645.2	407.9	237.33	2.719	
11,400.0	7,057.4	11,405.3	7,057.4	121.3	121.6	-89.91	-310.0	-3,872.0	645.2	402.3	242.88	2.657	
11,500.0	7,056.9	11,505.3	7,056.9	124.0	124.4	-89.91	-310.0	-3,972.0	645.2	396.8	248.42	2.597	
11,567.8	7,056.6	11,573.1	7,056.6	125.9	126.3	-89.91	-310.0	-4,039.8	645.2	393.0	252.18	2.558	
11,600.0	7,056.4	11,605.2	7,056.4	126.8	127.2	-89.91	-310.0	-4,071.8	645.2	391.2	253.97	2.541	
11,659.9	7,056.1	11,665.1	7,056.1	128.5	128.8	-89.91	-310.0	-4,131.8	645.2	387.9	257.30	2.508	
11,686.6	7,056.0	11,688.2	7,056.0	129.2	129.5	-89.91	-310.0	-4,154.8	645.2	386.5	258.68	2.494	SF

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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	180.00	-14.9	0.0	14.9				
100.0	100.0	100.0	100.0	0.1	0.1	180.00	-14.9	0.0	14.9	14.7	0.19	76.825	
200.0	200.0	200.0	200.0	0.3	0.3	180.00	-14.9	0.0	14.9	14.3	0.64	23.195	
300.0	300.0	300.0	300.0	0.5	0.5	180.00	-14.9	0.0	14.9	13.8	1.09	13.660	
400.0	400.0	400.0	400.0	0.8	0.8	180.00	-14.9	0.0	14.9	13.4	1.54	9.680	CC, ES
500.0	500.0	500.0	500.0	1.0	1.0	121.80	-14.9	0.0	15.8	13.8	1.99	7.942	
600.0	599.8	600.1	600.1	1.2	1.2	130.43	-14.7	1.7	18.3	15.9	2.42	7.556	
700.0	699.5	700.3	700.2	1.5	1.4	135.13	-13.9	6.9	22.0	19.1	2.87	7.664	
800.0	798.7	800.6	800.1	1.7	1.7	136.98	-12.5	15.6	26.6	23.2	3.35	7.945	
900.0	897.5	901.0	899.7	2.0	1.9	137.04	-10.7	27.7	32.0	28.1	3.87	8.269	
1,000.0	995.6	1,001.4	998.8	2.4	2.2	136.05	-8.3	43.3	38.3	33.8	4.46	8.570	
1,000.1	995.8	1,001.5	999.0	2.4	2.2	136.05	-8.3	43.3	38.3	33.8	4.47	8.570	
1,100.0	1,093.4	1,101.9	1,097.4	2.8	2.6	132.98	-5.4	62.3	44.1	39.0	5.16	8.556	
1,200.0	1,191.3	1,201.7	1,195.1	3.2	3.0	128.87	-2.2	82.8	49.4	43.5	5.93	8.333	
1,300.0	1,289.1	1,301.5	1,292.7	3.6	3.4	125.57	0.9	103.3	55.0	48.2	6.75	8.144	
1,400.0	1,386.9	1,401.3	1,390.3	4.1	3.8	122.88	4.1	123.8	60.6	53.0	7.59	7.987	
1,500.0	1,484.7	1,501.1	1,487.9	4.5	4.2	120.65	7.2	144.3	66.4	58.0	8.45	7.859	
1,600.0	1,582.5	1,600.9	1,585.6	4.9	4.7	118.78	10.4	164.8	72.3	63.0	9.32	7.753	
1,700.0	1,680.3	1,700.7	1,683.2	5.4	5.1	117.20	13.5	185.3	78.2	68.0	10.20	7.665	
1,800.0	1,778.1	1,800.5	1,780.8	5.8	5.5	115.83	16.7	205.8	84.2	73.1	11.09	7.592	
1,900.0	1,875.9	1,900.3	1,878.4	6.3	6.0	114.65	19.8	226.3	90.2	78.2	11.98	7.530	
2,000.0	1,973.8	2,000.1	1,976.1	6.7	6.4	113.62	23.0	246.8	96.3	83.4	12.87	7.478	
2,100.0	2,071.6	2,099.9	2,073.7	7.2	6.9	112.71	26.1	267.3	102.3	88.6	13.77	7.433	
2,200.0	2,169.4	2,199.7	2,171.3	7.6	7.3	111.90	29.2	287.8	108.4	93.8	14.67	7.394	
2,300.0	2,267.2	2,299.5	2,268.9	8.1	7.8	111.18	32.4	308.3	114.6	99.0	15.57	7.360	
2,400.0	2,365.0	2,399.3	2,366.5	8.5	8.2	110.53	35.5	328.8	120.7	104.2	16.47	7.330	
2,500.0	2,462.8	2,499.1	2,464.2	9.0	8.7	109.94	38.7	349.3	126.9	109.5	17.37	7.304	
2,600.0	2,560.6	2,598.9	2,561.8	9.4	9.1	109.41	41.8	369.8	133.0	114.8	18.27	7.281	
2,700.0	2,658.5	2,698.7	2,659.4	9.9	9.6	108.93	45.0	390.3	139.2	120.0	19.17	7.260	
2,800.0	2,756.3	2,798.5	2,757.0	10.3	10.0	108.48	48.1	410.8	145.4	125.3	20.08	7.242	
2,900.0	2,854.1	2,898.3	2,854.7	10.8	10.5	108.08	51.3	431.3	151.6	130.6	20.98	7.225	
3,000.0	2,951.9	2,998.1	2,952.3	11.2	10.9	107.70	54.4	451.8	157.8	135.9	21.89	7.210	
3,100.0	3,049.7	3,097.9	3,049.9	11.7	11.4	107.36	57.6	472.3	164.0	141.2	22.79	7.196	
3,200.0	3,147.5	3,197.7	3,147.5	12.1	11.9	107.03	60.7	492.8	170.2	146.5	23.69	7.184	
3,300.0	3,245.3	3,297.5	3,245.1	12.6	12.3	106.74	63.9	513.3	176.4	151.8	24.60	7.172	
3,400.0	3,343.2	3,397.3	3,342.8	13.0	12.8	106.46	67.0	533.8	182.6	157.1	25.50	7.162	
3,500.0	3,441.0	3,497.1	3,440.4	13.5	13.2	106.20	70.2	554.3	188.9	162.5	26.41	7.152	
3,600.0	3,538.8	3,596.9	3,538.0	13.9	13.7	105.95	73.3	574.8	195.1	167.8	27.31	7.143	
3,700.0	3,636.6	3,696.7	3,635.6	14.4	14.1	105.72	76.5	595.3	201.3	173.1	28.22	7.135	
3,800.0	3,734.4	3,796.5	3,733.3	14.8	14.6	105.51	79.6	615.8	207.6	178.4	29.13	7.127	
3,900.0	3,832.2	3,896.5	3,831.1	15.3	15.0	105.48	82.7	635.8	213.8	183.8	29.99	7.130	
4,000.0	3,930.0	3,996.4	3,929.6	15.7	15.3	106.28	85.2	652.6	219.9	189.2	30.71	7.162	
4,059.3	3,988.0	4,055.5	3,988.1	16.0	15.5	107.16	86.5	660.9	223.6	192.5	31.10	7.191	
4,100.0	4,027.9	4,096.0	4,028.3	16.2	15.6	107.90	87.3	665.9	226.1	194.8	31.33	7.216	
4,200.0	4,126.3	4,195.4	4,127.2	16.5	15.8	109.67	88.8	675.9	231.6	199.8	31.77	7.289	
4,300.0	4,225.3	4,294.6	4,226.1	16.8	16.0	111.38	89.8	682.4	236.2	204.1	32.11	7.356	
4,400.0	4,324.7	4,393.6	4,325.1	17.0	16.1	113.07	90.3	685.6	240.0	207.7	32.36	7.418	
4,500.0	4,424.4	4,493.0	4,424.4	17.2	16.2	114.63	90.4	685.9	243.0	210.4	32.54	7.468	
4,600.0	4,524.4	4,592.9	4,524.4	17.3	16.4	115.47	90.4	685.9	244.6	211.8	32.73	7.473	
4,659.4	4,583.8	4,652.3	4,583.8	17.4	16.4	179.49	90.4	685.9	244.8	221.4	23.47	10.432	
4,700.0	4,624.4	4,692.9	4,624.4	17.5	16.5	179.49	90.4	685.9	244.8	221.2	23.61	10.370	
4,800.0	4,724.4	4,792.9	4,724.4	17.6	16.6	179.49	90.4	685.9	244.8	220.9	23.96	10.219	

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 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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
4,900.0	4,824.4	4,892.9	4,824.4	17.7	16.8	179.49	90.4	685.9	244.8	220.5	24.31	10.070	
5,000.0	4,924.4	4,992.9	4,924.4	17.8	16.9	179.49	90.4	685.9	244.8	220.2	24.67	9.924	
5,100.0	5,024.4	5,092.9	5,024.4	18.0	17.0	179.49	90.4	685.9	244.8	219.8	25.03	9.781	
5,200.0	5,124.4	5,192.9	5,124.4	18.1	17.2	179.49	90.4	685.9	244.8	219.5	25.39	9.642	
5,300.0	5,224.4	5,292.9	5,224.4	18.2	17.3	179.49	90.4	685.9	244.8	219.1	25.76	9.505	
5,400.0	5,324.4	5,392.9	5,324.4	18.4	17.4	179.49	90.4	685.9	244.8	218.7	26.13	9.371	
5,500.0	5,424.4	5,492.9	5,424.4	18.5	17.6	179.49	90.4	685.9	244.8	218.3	26.50	9.240	
5,600.0	5,524.4	5,592.9	5,524.4	18.6	17.7	179.49	90.4	685.9	244.8	218.0	26.87	9.112	
5,700.0	5,624.4	5,692.9	5,624.4	18.8	17.9	179.49	90.4	685.9	244.8	217.6	27.25	8.986	
5,800.0	5,724.4	5,792.9	5,724.4	18.9	18.0	179.49	90.4	685.9	244.8	217.2	27.62	8.863	
5,900.0	5,824.4	5,892.9	5,824.4	19.1	18.2	179.49	90.4	685.9	244.8	216.8	28.00	8.743	
6,000.0	5,924.4	5,992.9	5,924.4	19.2	18.3	179.49	90.4	685.9	244.8	216.5	28.39	8.626	
6,100.0	6,024.4	6,092.9	6,024.4	19.4	18.5	179.49	90.4	685.9	244.8	216.1	28.77	8.511	
6,200.0	6,124.4	6,192.9	6,124.4	19.5	18.6	179.49	90.4	685.9	244.8	215.7	29.16	8.398	
6,300.0	6,224.4	6,292.9	6,224.4	19.7	18.8	179.49	90.4	685.9	244.8	215.3	29.54	8.288	
6,400.0	6,324.4	6,392.9	6,324.4	19.8	19.0	179.49	90.4	685.9	244.8	214.9	29.93	8.180	
6,435.4	6,359.8	6,428.3	6,359.8	19.9	19.0	179.49	90.4	685.9	244.8	214.8	30.07	8.143	
6,450.0	6,374.4	6,442.9	6,374.4	19.9	19.0	-90.55	90.4	685.9	244.8	206.7	38.11	6.426	
6,500.0	6,424.3	6,492.8	6,424.3	19.9	19.1	-91.19	90.4	685.9	244.9	206.6	38.28	6.397	
6,550.0	6,473.9	6,542.6	6,474.0	19.9	19.2	-92.60	90.4	685.8	245.1	206.6	38.47	6.371	
6,600.0	6,522.9	6,593.1	6,524.5	19.9	19.2	-94.26	90.4	683.2	245.5	206.9	38.61	6.360	
6,650.0	6,571.2	6,644.1	6,575.2	19.9	19.3	-95.90	90.4	677.0	246.2	207.5	38.66	6.367	
6,700.0	6,618.4	6,695.7	6,625.8	19.8	19.3	-97.50	90.4	667.1	247.0	208.3	38.65	6.391	
6,750.0	6,664.3	6,747.9	6,676.1	19.8	19.2	-99.07	90.4	653.4	248.0	209.4	38.56	6.432	
6,800.0	6,708.8	6,800.6	6,725.8	19.7	19.2	-100.59	90.4	635.9	249.2	210.8	38.40	6.488	
6,850.0	6,751.6	6,853.8	6,774.5	19.6	19.1	-102.05	90.4	614.5	250.4	212.3	38.19	6.557	
6,900.0	6,792.5	6,907.6	6,822.1	19.5	19.0	-103.45	90.4	589.3	251.8	213.9	37.95	6.636	
6,950.0	6,831.2	6,962.0	6,868.0	19.4	18.9	-104.77	90.4	560.3	253.3	215.6	37.69	6.720	
7,000.0	6,867.7	7,016.9	6,912.0	19.3	18.9	-106.01	90.4	527.5	254.8	217.4	37.44	6.806	
7,050.0	6,901.7	7,072.3	6,953.8	19.3	18.8	-107.16	90.4	491.1	256.4	219.1	37.23	6.886	
7,100.0	6,933.0	7,128.1	6,992.9	19.3	18.8	-108.21	90.4	451.3	257.9	220.8	37.08	6.954	
7,150.0	6,961.6	7,184.5	7,029.1	19.3	18.9	-109.17	90.4	408.1	259.3	222.3	37.03	7.002	
7,200.0	6,987.2	7,241.2	7,062.1	19.4	19.0	-110.02	90.4	361.9	260.7	223.6	37.11	7.024	
7,250.0	7,009.8	7,298.4	7,091.4	19.6	19.2	-110.76	90.4	312.9	261.9	224.6	37.34	7.014	
7,300.0	7,029.2	7,355.9	7,116.9	19.9	19.6	-111.40	90.4	261.4	263.0	225.2	37.77	6.964	
7,350.0	7,045.3	7,413.7	7,138.3	20.2	20.0	-111.91	90.4	207.7	263.9	225.6	38.39	6.876	
7,400.0	7,058.1	7,471.7	7,155.3	20.6	20.5	-112.32	90.4	152.2	264.7	225.5	39.21	6.750	
7,450.0	7,067.5	7,530.0	7,167.9	21.2	21.2	-112.60	90.4	95.4	265.2	225.0	40.24	6.592	
7,500.0	7,073.5	7,588.3	7,175.8	21.8	21.9	-112.77	90.4	37.6	265.5	224.1	41.45	6.406	
7,550.0	7,075.9	7,646.7	7,178.9	22.5	22.7	-112.82	90.4	-20.7	265.6	222.8	42.84	6.200	
7,563.0	7,076.0	7,661.5	7,179.0	22.7	22.9	-112.81	90.4	-35.5	265.6	222.4	43.22	6.145	
7,563.9	7,076.0	7,662.4	7,179.0	22.7	23.0	-112.81	90.4	-36.4	265.6	222.4	43.25	6.142	
7,600.0	7,075.8	7,698.4	7,178.9	23.2	23.5	-112.82	90.4	-72.4	265.6	221.4	44.28	6.000	
7,700.0	7,075.3	7,798.4	7,178.5	24.9	25.2	-112.85	90.4	-172.4	265.7	218.3	47.40	5.605	
7,800.0	7,074.9	7,898.4	7,178.1	26.7	27.1	-112.87	90.4	-272.4	265.7	214.9	50.86	5.224	
7,900.0	7,074.4	7,998.4	7,177.8	28.8	29.1	-112.89	90.4	-372.4	265.8	211.2	54.60	4.867	
8,000.0	7,073.9	8,098.4	7,177.4	30.9	31.3	-112.92	90.4	-472.4	265.8	207.3	58.57	4.539	
8,100.0	7,073.4	8,198.4	7,177.0	33.2	33.5	-112.94	90.4	-572.4	265.9	203.2	62.71	4.239	
8,200.0	7,072.9	8,298.4	7,176.7	35.5	35.8	-112.97	90.4	-672.4	265.9	198.9	67.00	3.969	
8,300.0	7,072.4	8,398.4	7,176.3	37.9	38.2	-112.99	90.4	-772.4	266.0	194.5	71.41	3.724	
8,400.0	7,071.9	8,498.4	7,175.9	40.3	40.7	-113.01	90.4	-872.4	266.0	190.1	75.92	3.504	
8,500.0	7,071.5	8,598.4	7,175.6	42.8	43.2	-113.04	90.4	-972.4	266.1	185.5	80.51	3.305	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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	7,071.0	8,698.4	7,175.2	45.4	45.7	-113.06	90.4	-1,072.4	266.1	180.9	85.17	3.124	
8,700.0	7,070.5	8,798.4	7,174.8	47.9	48.3	-113.09	90.4	-1,172.4	266.1	176.3	89.88	2.961	
8,800.0	7,070.0	8,898.4	7,174.5	50.5	50.8	-113.11	90.4	-1,272.4	266.2	171.6	94.65	2.813	
8,900.0	7,069.5	8,998.4	7,174.1	53.1	53.5	-113.13	90.4	-1,372.4	266.2	166.8	99.45	2.677	
9,000.0	7,069.0	9,098.4	7,173.7	55.8	56.1	-113.16	90.4	-1,472.4	266.3	162.0	104.29	2.553	
9,100.0	7,068.5	9,198.4	7,173.4	58.4	58.7	-113.18	90.4	-1,572.4	266.3	157.2	109.16	2.440	
9,200.0	7,068.1	9,298.4	7,173.0	61.1	61.4	-113.21	90.4	-1,672.4	266.4	152.3	114.06	2.336	
9,300.0	7,067.6	9,398.4	7,172.7	63.7	64.1	-113.23	90.4	-1,772.4	266.4	147.5	118.97	2.239	
9,400.0	7,067.1	9,498.4	7,172.3	66.4	66.7	-113.25	90.4	-1,872.4	266.5	142.6	123.91	2.151	
9,500.0	7,066.6	9,598.4	7,171.9	69.1	69.4	-113.28	90.4	-1,972.4	266.5	137.7	128.87	2.068	
9,600.0	7,066.1	9,698.4	7,171.6	71.8	72.1	-113.30	90.4	-2,072.4	266.6	132.7	133.84	1.992	
9,700.0	7,065.6	9,798.4	7,171.2	74.5	74.8	-113.32	90.4	-2,172.4	266.6	127.8	138.82	1.921	
9,800.0	7,065.1	9,898.4	7,170.8	77.2	77.5	-113.35	90.4	-2,272.4	266.7	122.9	143.82	1.854	
9,900.0	7,064.7	9,998.4	7,170.5	80.0	80.3	-113.37	90.4	-2,372.4	266.7	117.9	148.83	1.792	
10,000.0	7,064.2	10,098.4	7,170.1	82.7	83.0	-113.40	90.4	-2,472.4	266.8	112.9	153.84	1.734	
10,100.0	7,063.7	10,198.4	7,169.7	85.4	85.7	-113.42	90.4	-2,572.4	266.8	107.9	158.87	1.679	
10,200.0	7,063.2	10,298.4	7,169.4	88.2	88.5	-113.44	90.4	-2,672.4	266.9	103.0	163.90	1.628	
10,300.0	7,062.7	10,398.4	7,169.0	90.9	91.2	-113.47	90.4	-2,772.4	266.9	98.0	168.94	1.580	
10,400.0	7,062.2	10,498.4	7,168.6	93.6	94.0	-113.49	90.4	-2,872.4	267.0	93.0	173.98	1.534	
10,500.0	7,061.7	10,598.4	7,168.3	96.4	96.7	-113.51	90.4	-2,972.4	267.0	88.0	179.03	1.491	Level 3
10,600.0	7,061.3	10,698.4	7,167.9	99.2	99.5	-113.54	90.4	-3,072.4	267.1	83.0	184.08	1.451	Level 3
10,700.0	7,060.8	10,798.4	7,167.5	101.9	102.2	-113.56	90.4	-3,172.4	267.1	78.0	189.14	1.412	Level 3
10,800.0	7,060.3	10,898.4	7,167.2	104.7	105.0	-113.59	90.4	-3,272.4	267.2	73.0	194.20	1.376	Level 3
10,900.0	7,059.8	10,998.4	7,166.8	107.4	107.7	-113.61	90.4	-3,372.4	267.2	67.9	199.26	1.341	Level 3
11,000.0	7,059.3	11,098.4	7,166.5	110.2	110.5	-113.63	90.4	-3,472.4	267.3	62.9	204.33	1.308	Level 3
11,100.0	7,058.8	11,198.4	7,166.1	113.0	113.3	-113.66	90.4	-3,572.4	267.3	57.9	209.40	1.277	Level 3
11,200.0	7,058.3	11,298.4	7,165.7	115.7	116.0	-113.68	90.4	-3,672.4	267.3	52.9	214.47	1.247	Level 2
11,300.0	7,057.9	11,398.4	7,165.4	118.5	118.8	-113.70	90.4	-3,772.4	267.4	47.9	219.54	1.218	Level 2
11,400.0	7,057.4	11,498.4	7,165.0	121.3	121.6	-113.73	90.4	-3,872.4	267.4	42.8	224.62	1.191	Level 2
11,500.0	7,056.9	11,598.4	7,164.6	124.0	124.4	-113.75	90.4	-3,972.4	267.5	37.8	229.69	1.165	Level 2
11,600.0	7,056.4	11,698.4	7,164.3	126.8	127.1	-113.78	90.4	-4,072.4	267.5	32.8	234.77	1.140	Level 2
11,654.8	7,056.1	11,753.1	7,164.1	128.3	128.6	-113.79	90.3	-4,127.0	267.6	30.0	237.54	1.127	Level 2
11,686.6	7,056.0	11,783.3	7,164.0	129.2	129.5	-113.80	90.3	-4,157.3	267.6	28.5	239.11	1.119	Level 2, SF

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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	1.07	14.9	0.3	15.0				
100.0	100.0	99.0	99.0	0.1	0.1	1.07	14.9	0.3	14.9	14.7	0.19	77.224	
200.0	200.0	199.0	199.0	0.3	0.3	1.07	14.9	0.3	14.9	14.3	0.64	23.280	
300.0	300.0	299.0	299.0	0.5	0.5	1.07	14.9	0.3	14.9	13.8	1.09	13.690	CC, ES
400.0	400.0	398.6	398.6	0.8	0.8	5.55	16.0	1.6	16.1	14.6	1.54	10.502	
500.0	500.0	498.1	497.9	1.0	1.0	-52.07	19.4	5.4	19.1	17.1	1.98	9.635	
600.0	599.8	597.4	596.9	1.2	1.2	-49.26	25.1	11.9	22.8	20.3	2.43	9.360	
700.0	699.5	696.6	695.4	1.5	1.5	-48.71	32.9	21.0	27.1	24.2	2.91	9.297	
800.0	798.7	795.7	793.2	1.7	1.8	-49.52	43.0	32.6	31.9	28.5	3.43	9.310	
900.0	897.5	894.5	890.3	2.0	2.2	-51.11	55.3	46.7	37.4	33.4	4.01	9.328	
1,000.0	995.6	994.3	987.9	2.4	2.6	-54.46	68.9	62.3	42.3	37.6	4.68	9.044	
1,000.1	995.8	994.5	988.0	2.4	2.6	-54.47	68.9	62.4	42.3	37.6	4.68	9.043	
1,100.0	1,093.4	1,094.2	1,085.6	2.8	3.0	-58.98	82.5	78.0	46.4	41.0	5.44	8.532	
1,200.0	1,191.3	1,194.0	1,183.2	3.2	3.4	-62.75	96.1	93.7	50.7	44.5	6.24	8.125	
1,300.0	1,289.1	1,293.9	1,280.9	3.6	3.9	-65.91	109.7	109.4	55.2	48.2	7.08	7.803	
1,400.0	1,386.9	1,393.7	1,378.6	4.1	4.3	-68.59	123.3	125.0	59.9	52.0	7.94	7.547	
1,500.0	1,484.7	1,493.6	1,476.2	4.5	4.7	-70.88	137.0	140.7	64.7	55.9	8.81	7.342	
1,600.0	1,582.5	1,593.4	1,573.9	4.9	5.2	-72.85	150.6	156.4	69.5	59.9	9.69	7.176	
1,700.0	1,680.3	1,693.3	1,671.6	5.4	5.6	-74.57	164.2	172.0	74.5	63.9	10.58	7.039	
1,800.0	1,778.1	1,793.2	1,769.3	5.8	6.1	-76.07	177.8	187.7	79.5	68.0	11.47	6.926	
1,900.0	1,875.9	1,893.0	1,866.9	6.3	6.5	-77.39	191.4	203.4	84.5	72.1	12.37	6.831	
2,000.0	1,973.8	1,992.9	1,964.6	6.7	6.9	-78.56	205.1	219.1	89.6	76.3	13.27	6.751	
2,100.0	2,071.6	2,092.7	2,062.3	7.2	7.4	-79.60	218.7	234.7	94.7	80.5	14.17	6.683	
2,200.0	2,169.4	2,192.6	2,159.9	7.6	7.8	-80.54	232.3	250.4	99.8	84.8	15.07	6.624	
2,300.0	2,267.2	2,292.4	2,257.6	8.1	8.3	-81.39	245.9	266.1	105.0	89.0	15.97	6.573	
2,400.0	2,365.0	2,392.3	2,355.3	8.5	8.7	-82.15	259.6	281.8	110.2	93.3	16.88	6.529	
2,500.0	2,462.8	2,492.1	2,453.0	9.0	9.2	-82.85	273.2	297.4	115.4	97.6	17.78	6.490	
2,600.0	2,560.6	2,592.0	2,550.6	9.4	9.6	-83.49	286.8	313.1	120.6	101.9	18.69	6.455	
2,700.0	2,658.5	2,691.9	2,648.3	9.9	10.1	-84.07	300.4	328.8	125.8	106.3	19.59	6.424	
2,800.0	2,756.3	2,791.7	2,746.0	10.3	10.5	-84.61	314.0	344.5	131.1	110.6	20.49	6.397	
2,900.0	2,854.1	2,891.6	2,843.7	10.8	11.0	-85.11	327.7	360.1	136.3	115.0	21.40	6.372	
3,000.0	2,951.9	2,991.4	2,941.3	11.2	11.4	-85.57	341.3	375.8	141.6	119.3	22.30	6.350	
3,100.0	3,049.7	3,091.3	3,039.0	11.7	11.9	-85.99	354.9	391.5	146.9	123.7	23.21	6.330	
3,200.0	3,147.5	3,191.1	3,136.7	12.1	12.3	-86.39	368.5	407.1	152.2	128.1	24.11	6.311	
3,300.0	3,245.3	3,291.0	3,234.3	12.6	12.8	-86.76	382.1	422.8	157.5	132.4	25.01	6.295	
3,400.0	3,343.2	3,390.8	3,332.0	13.0	13.2	-87.11	395.8	438.5	162.8	136.8	25.92	6.279	
3,500.0	3,441.0	3,490.7	3,429.7	13.5	13.7	-87.43	409.4	454.2	168.0	141.2	26.82	6.265	
3,600.0	3,538.8	3,590.6	3,527.4	13.9	14.1	-87.74	423.0	469.8	173.4	145.6	27.73	6.252	
3,700.0	3,636.6	3,690.4	3,625.0	14.4	14.6	-88.02	436.6	485.5	178.7	150.0	28.63	6.241	
3,800.0	3,734.4	3,790.3	3,722.7	14.8	15.0	-88.29	450.2	501.2	184.0	154.4	29.53	6.230	
3,900.0	3,832.2	3,890.1	3,820.4	15.3	15.5	-88.55	463.9	516.9	189.3	158.9	30.44	6.219	
4,000.0	3,930.0	3,990.0	3,918.0	15.7	15.9	-88.79	477.5	532.5	194.6	163.3	31.34	6.210	
4,059.3	3,988.0	4,049.2	3,976.0	16.0	16.2	-88.93	485.6	541.8	197.8	165.9	31.88	6.204	
4,100.0	4,027.9	4,089.8	4,015.7	16.2	16.4	-88.98	491.1	548.2	199.9	167.7	32.22	6.206	
4,200.0	4,126.3	4,189.6	4,113.4	16.5	16.8	-88.42	504.7	563.9	205.3	172.4	32.95	6.232	
4,300.0	4,225.3	4,289.3	4,210.9	16.8	17.3	-86.95	518.3	579.5	210.9	177.3	33.58	6.281	
4,400.0	4,324.7	4,388.7	4,308.1	17.0	17.7	-84.67	531.9	595.1	217.0	182.9	34.10	6.363	
4,500.0	4,424.4	4,487.7	4,404.9	17.2	18.2	-81.66	545.4	610.7	223.8	189.4	34.46	6.495	
4,600.0	4,524.4	4,586.2	4,501.3	17.3	18.6	-78.06	558.8	626.1	232.1	197.4	34.65	6.698	
4,659.4	4,583.8	4,645.3	4,559.0	17.4	18.9	-11.79	566.8	635.3	237.8	212.6	25.19	9.442	
4,700.0	4,624.4	4,686.8	4,599.8	17.5	19.0	-10.11	572.1	641.4	241.8	216.1	25.68	9.417	
4,800.0	4,724.4	4,790.2	4,701.7	17.6	19.3	-6.66	583.6	654.7	251.1	224.3	26.78	9.374	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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
4,900.0	4,824.4	4,894.8	4,805.3	17.7	19.6	-4.10	592.8	665.3	258.9	231.2	27.72	9.339	
5,000.0	4,924.4	5,000.2	4,910.2	17.8	19.8	-2.32	599.6	673.0	264.9	236.4	28.49	9.299	
5,100.0	5,024.4	5,106.3	5,016.1	18.0	20.0	-1.25	603.8	677.9	268.7	239.7	29.07	9.243	
5,200.0	5,124.4	5,212.7	5,122.5	18.1	20.2	-0.84	605.4	679.8	270.2	240.8	29.49	9.164	
5,300.0	5,224.4	5,313.6	5,223.4	18.2	20.3	-0.83	605.4	679.8	270.3	240.5	29.80	9.068	
5,400.0	5,324.4	5,413.6	5,323.4	18.4	20.4	-0.83	605.4	679.8	270.3	240.1	30.12	8.972	
5,500.0	5,424.4	5,513.6	5,423.4	18.5	20.5	-0.83	605.4	679.8	270.3	239.8	30.45	8.876	
5,600.0	5,524.4	5,613.6	5,523.4	18.6	20.7	-0.83	605.4	679.8	270.3	239.5	30.78	8.781	
5,700.0	5,624.4	5,713.6	5,623.4	18.8	20.8	-0.83	605.4	679.8	270.3	239.2	31.11	8.688	
5,800.0	5,724.4	5,813.6	5,723.4	18.9	20.9	-0.83	605.4	679.8	270.3	238.8	31.44	8.596	
5,900.0	5,824.4	5,913.6	5,823.4	19.1	21.0	-0.83	605.4	679.8	270.3	238.5	31.78	8.504	
6,000.0	5,924.4	6,013.6	5,923.4	19.2	21.2	-0.83	605.4	679.8	270.3	238.1	32.12	8.415	
6,100.0	6,024.4	6,113.6	6,023.4	19.4	21.3	-0.83	605.4	679.8	270.3	237.8	32.46	8.326	
6,200.0	6,124.4	6,213.6	6,123.4	19.5	21.4	-0.83	605.4	679.8	270.3	237.5	32.81	8.238	
6,300.0	6,224.4	6,313.6	6,223.4	19.7	21.6	-0.83	605.4	679.8	270.3	237.1	33.15	8.152	
6,400.0	6,324.4	6,413.6	6,323.4	19.8	21.7	-0.83	605.4	679.8	270.3	236.8	33.50	8.067	
6,435.4	6,359.8	6,449.0	6,358.8	19.9	21.8	-0.83	605.4	679.8	270.3	236.6	33.63	8.037	
6,450.0	6,374.4	6,463.6	6,373.4	19.9	21.8	89.20	605.4	679.8	270.3	231.7	38.55	7.010	
6,500.0	6,424.3	6,513.5	6,423.3	19.9	21.8	89.79	605.4	679.8	270.2	231.7	38.58	7.006	
6,510.4	6,434.6	6,523.9	6,433.6	19.9	21.9	90.00	605.4	679.8	270.2	231.7	38.56	7.009	
6,550.0	6,473.9	6,563.2	6,472.9	19.9	21.9	91.08	605.4	679.7	270.3	231.8	38.44	7.032	
6,600.0	6,522.9	6,613.3	6,523.0	19.9	22.0	92.60	605.4	677.2	270.5	232.3	38.20	7.081	
6,650.0	6,571.2	6,663.9	6,573.2	19.9	22.0	94.12	605.4	671.2	271.0	233.0	37.91	7.148	
6,700.0	6,618.4	6,715.0	6,623.4	19.8	22.0	95.61	605.4	661.5	271.6	234.0	37.57	7.229	
6,750.0	6,664.3	6,766.7	6,673.3	19.8	21.9	97.08	605.4	648.1	272.4	235.2	37.19	7.323	
6,800.0	6,708.8	6,818.9	6,722.6	19.7	21.9	98.52	605.4	631.0	273.3	236.5	36.80	7.427	
6,850.0	6,751.6	6,871.7	6,771.1	19.6	21.8	99.91	605.4	610.0	274.4	238.0	36.40	7.539	
6,900.0	6,792.5	6,925.1	6,818.4	19.5	21.7	101.25	605.4	585.3	275.6	239.6	36.01	7.655	
6,950.0	6,831.2	6,979.0	6,864.1	19.4	21.6	102.52	605.4	556.8	276.9	241.3	35.64	7.769	
7,000.0	6,867.7	7,033.5	6,908.0	19.3	21.4	103.74	605.4	524.6	278.3	243.0	35.33	7.877	
7,050.0	6,901.7	7,088.5	6,949.8	19.3	21.3	104.87	605.4	488.8	279.7	244.6	35.10	7.970	
7,100.0	6,933.0	7,144.0	6,989.0	19.3	21.2	105.93	605.4	449.5	281.1	246.2	34.96	8.042	
7,150.0	6,961.6	7,200.0	7,025.3	19.3	21.1	106.89	605.4	406.9	282.5	247.6	34.95	8.084	
7,200.0	6,987.2	7,256.5	7,058.5	19.4	21.0	107.77	605.4	361.2	283.9	248.8	35.09	8.089	
7,250.0	7,009.8	7,313.4	7,088.2	19.6	20.9	108.55	605.4	312.6	285.1	249.7	35.41	8.052	
7,300.0	7,029.2	7,370.7	7,114.1	19.9	20.9	109.23	605.4	261.6	286.3	250.4	35.92	7.970	
7,350.0	7,045.3	7,428.4	7,135.9	20.2	21.0	109.81	605.4	208.2	287.3	250.7	36.62	7.845	
7,400.0	7,058.1	7,486.3	7,153.5	20.6	21.1	110.28	605.4	153.1	288.1	250.6	37.51	7.680	
7,450.0	7,067.5	7,544.4	7,166.6	21.2	21.5	110.64	605.4	96.4	288.8	250.2	38.60	7.481	
7,500.0	7,073.5	7,602.8	7,175.1	21.8	21.9	110.89	605.4	38.7	289.3	249.4	39.87	7.255	
7,550.0	7,075.9	7,661.2	7,178.8	22.5	22.6	111.03	605.4	-19.6	289.5	248.2	41.30	7.010	
7,563.9	7,076.0	7,677.5	7,179.0	22.7	22.8	111.05	605.4	-35.9	289.6	247.8	41.72	6.940	
7,600.0	7,075.8	7,714.0	7,178.9	23.2	23.3	111.06	605.4	-72.4	289.6	246.8	42.75	6.774	
7,700.0	7,075.3	7,814.0	7,178.5	24.9	24.8	111.08	605.4	-172.4	289.6	243.8	45.83	6.320	
7,800.0	7,074.9	7,914.0	7,178.1	26.7	26.6	111.10	605.4	-272.4	289.7	240.4	49.27	5.879	
7,900.0	7,074.4	8,014.0	7,177.8	28.8	28.6	111.12	605.4	-372.4	289.7	236.7	53.01	5.466	
8,000.0	7,073.9	8,114.0	7,177.4	30.9	30.7	111.15	605.4	-472.4	289.7	232.8	56.98	5.085	
8,100.0	7,073.4	8,214.0	7,177.0	33.2	33.0	111.17	605.4	-572.4	289.8	228.6	61.15	4.739	
8,200.0	7,072.9	8,314.0	7,176.7	35.5	35.3	111.19	605.4	-672.4	289.8	224.4	65.48	4.427	
8,300.0	7,072.4	8,414.0	7,176.3	37.9	37.6	111.21	605.4	-772.4	289.9	220.0	69.93	4.145	
8,400.0	7,071.9	8,514.0	7,175.9	40.3	40.1	111.23	605.4	-872.4	289.9	215.4	74.48	3.893	
8,500.0	7,071.5	8,614.0	7,175.6	42.8	42.6	111.26	605.4	-972.4	290.0	210.8	79.12	3.665	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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	7,071.0	8,714.0	7,175.2	45.4	45.1	111.28	605.4	-1,072.4	290.0	206.2	83.83	3.460	
8,700.0	7,070.5	8,814.0	7,174.9	47.9	47.6	111.30	605.4	-1,172.4	290.1	201.5	88.60	3.274	
8,800.0	7,070.0	8,914.0	7,174.5	50.5	50.2	111.32	605.4	-1,272.4	290.1	196.7	93.42	3.105	
8,900.0	7,069.5	9,014.0	7,174.1	53.1	52.8	111.35	605.4	-1,372.4	290.1	191.9	98.28	2.952	
9,000.0	7,069.0	9,114.0	7,173.8	55.8	55.4	111.37	605.4	-1,472.4	290.2	187.0	103.17	2.813	
9,100.0	7,068.5	9,214.0	7,173.4	58.4	58.0	111.39	605.4	-1,572.4	290.2	182.1	108.10	2.685	
9,200.0	7,068.1	9,314.0	7,173.0	61.1	60.7	111.41	605.4	-1,672.4	290.3	177.2	113.06	2.568	
9,300.0	7,067.6	9,414.0	7,172.7	63.7	63.3	111.43	605.4	-1,772.4	290.3	172.3	118.03	2.460	
9,400.0	7,067.1	9,514.0	7,172.3	66.4	66.0	111.46	605.4	-1,872.4	290.4	167.3	123.03	2.360	
9,500.0	7,066.6	9,614.0	7,171.9	69.1	68.7	111.48	605.4	-1,972.4	290.4	162.4	128.05	2.268	
9,600.0	7,066.1	9,714.0	7,171.6	71.8	71.4	111.50	605.4	-2,072.4	290.5	157.4	133.08	2.183	
9,700.0	7,065.6	9,814.0	7,171.2	74.5	74.1	111.52	605.4	-2,172.4	290.5	152.4	138.12	2.103	
9,800.0	7,065.1	9,914.0	7,170.8	77.2	76.8	111.54	605.4	-2,272.4	290.5	147.4	143.18	2.029	
9,900.0	7,064.7	10,014.0	7,170.5	80.0	79.5	111.57	605.4	-2,372.4	290.6	142.4	148.24	1.960	
10,000.0	7,064.2	10,114.0	7,170.1	82.7	82.2	111.59	605.4	-2,472.4	290.6	137.3	153.32	1.896	
10,100.0	7,063.7	10,214.0	7,169.8	85.4	85.0	111.61	605.4	-2,572.4	290.7	132.3	158.40	1.835	
10,200.0	7,063.2	10,314.0	7,169.4	88.2	87.7	111.63	605.4	-2,672.4	290.7	127.2	163.49	1.778	
10,300.0	7,062.7	10,414.0	7,169.0	90.9	90.4	111.66	605.5	-2,772.4	290.8	122.2	168.59	1.725	
10,400.0	7,062.2	10,514.0	7,168.7	93.6	93.2	111.68	605.5	-2,872.4	290.8	117.1	173.69	1.674	
10,500.0	7,061.7	10,614.0	7,168.3	96.4	95.9	111.70	605.5	-2,972.4	290.9	112.1	178.80	1.627	
10,600.0	7,061.3	10,714.0	7,167.9	99.2	98.7	111.72	605.5	-3,072.4	290.9	107.0	183.92	1.582	
10,700.0	7,060.8	10,814.0	7,167.6	101.9	101.4	111.75	605.5	-3,172.4	291.0	101.9	189.03	1.539	
10,800.0	7,060.3	10,914.0	7,167.2	104.7	104.2	111.77	605.5	-3,272.4	291.0	96.9	194.16	1.499	Level 3
10,900.0	7,059.8	11,014.0	7,166.8	107.4	106.9	111.79	605.5	-3,372.4	291.1	91.8	199.28	1.461	Level 3
11,000.0	7,059.3	11,114.0	7,166.5	110.2	109.7	111.81	605.5	-3,472.4	291.1	86.7	204.41	1.424	Level 3
11,100.0	7,058.8	11,214.0	7,166.1	113.0	112.5	111.84	605.5	-3,572.4	291.1	81.6	209.54	1.389	Level 3
11,200.0	7,058.3	11,314.0	7,165.8	115.7	115.2	111.86	605.5	-3,672.4	291.2	76.5	214.67	1.356	Level 3
11,300.0	7,057.9	11,414.0	7,165.4	118.5	118.0	111.88	605.5	-3,772.4	291.2	71.4	219.80	1.325	Level 3
11,400.0	7,057.4	11,514.0	7,165.0	121.3	120.8	111.90	605.5	-3,872.4	291.3	66.4	224.94	1.295	Level 3
11,500.0	7,056.9	11,614.0	7,164.7	124.0	123.5	111.93	605.5	-3,972.4	291.3	61.3	230.08	1.266	Level 3
11,600.0	7,056.4	11,714.0	7,164.3	126.8	126.3	111.95	605.5	-4,072.4	291.4	56.2	235.22	1.239	Level 2
11,686.6	7,056.0	11,800.7	7,164.0	129.2	128.7	111.96	605.5	-4,159.0	291.5	51.8	239.68	1.216	Level 2, SF

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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	-179.46	-29.9	-0.3	29.9				
100.0	100.0	100.0	100.0	0.1	0.1	-179.46	-29.9	-0.3	29.9	29.7	0.19	153.656	
200.0	200.0	200.0	200.0	0.3	0.3	-179.46	-29.9	-0.3	29.9	29.2	0.64	46.392	
300.0	300.0	300.0	300.0	0.5	0.5	-179.46	-29.9	-0.3	29.9	28.8	1.09	27.320	
400.0	400.0	400.0	400.0	0.8	0.8	-179.46	-29.9	-0.3	29.9	28.3	1.54	19.361	CC, ES
500.0	500.0	500.0	500.0	1.0	1.0	119.55	-29.9	-0.3	30.7	28.7	1.99	15.447	
600.0	599.8	599.8	599.8	1.2	1.2	127.29	-29.9	-0.3	33.6	31.2	2.43	13.798	
700.0	699.5	699.5	699.5	1.5	1.4	137.30	-29.9	-0.3	39.5	36.6	2.89	13.651	
800.0	798.7	799.4	799.3	1.7	1.7	145.05	-30.1	1.4	48.5	45.1	3.34	14.504	
900.0	897.5	899.5	899.3	2.0	1.9	148.97	-30.7	6.6	59.5	55.7	3.79	15.689	
1,000.0	995.6	999.7	999.2	2.4	2.1	150.50	-31.7	15.3	72.1	67.8	4.27	16.873	
1,000.1	995.8	999.9	999.3	2.4	2.1	150.50	-31.7	15.3	72.1	67.9	4.27	16.875	
1,100.0	1,093.4	1,100.2	1,098.9	2.8	2.3	150.15	-33.1	27.4	84.6	79.8	4.81	17.607	
1,200.0	1,191.3	1,201.0	1,198.4	3.2	2.6	147.99	-35.0	43.1	95.5	90.1	5.40	17.679	
1,300.0	1,289.1	1,301.7	1,297.3	3.6	3.0	144.52	-37.2	62.3	105.2	99.1	6.09	17.274	
1,400.0	1,386.9	1,401.1	1,394.5	4.1	3.3	140.88	-39.6	82.8	114.7	107.8	6.85	16.745	
1,500.0	1,484.7	1,500.4	1,491.6	4.5	3.7	137.81	-42.0	103.3	124.5	116.8	7.64	16.290	
1,600.0	1,582.5	1,599.7	1,588.8	4.9	4.1	135.19	-44.4	123.8	134.6	126.2	8.46	15.907	
1,700.0	1,680.3	1,699.0	1,685.9	5.4	4.6	132.94	-46.8	144.3	145.0	135.7	9.30	15.586	
1,800.0	1,778.1	1,798.3	1,783.0	5.8	5.0	130.99	-49.2	164.8	155.6	145.4	10.16	15.317	
1,900.0	1,875.9	1,897.6	1,880.2	6.3	5.4	129.29	-51.6	185.3	166.3	155.3	11.02	15.091	
2,000.0	1,973.8	1,996.9	1,977.3	6.7	5.8	127.80	-54.0	205.8	177.1	165.2	11.89	14.900	
2,100.0	2,071.6	2,096.2	2,074.5	7.2	6.3	126.48	-56.4	226.3	188.1	175.3	12.76	14.737	
2,200.0	2,169.4	2,195.5	2,171.6	7.6	6.7	125.30	-58.8	246.8	199.1	185.5	13.64	14.597	
2,300.0	2,267.2	2,294.8	2,268.7	8.1	7.2	124.25	-61.3	267.3	210.2	195.7	14.52	14.477	
2,400.0	2,365.0	2,394.2	2,365.9	8.5	7.6	123.31	-63.7	287.8	221.4	206.0	15.40	14.373	
2,500.0	2,462.8	2,493.5	2,463.0	9.0	8.0	122.45	-66.1	308.3	232.6	216.3	16.29	14.282	
2,600.0	2,560.6	2,592.8	2,560.2	9.4	8.5	121.68	-68.5	328.8	243.9	226.7	17.17	14.202	
2,700.0	2,658.5	2,692.1	2,657.3	9.9	8.9	120.97	-70.9	349.4	255.2	237.2	18.06	14.131	
2,800.0	2,756.3	2,791.4	2,754.4	10.3	9.4	120.32	-73.3	369.9	266.6	247.6	18.95	14.068	
2,900.0	2,854.1	2,890.7	2,851.6	10.8	9.8	119.73	-75.7	390.4	278.0	258.1	19.84	14.012	
3,000.0	2,951.9	2,990.0	2,948.7	11.2	10.3	119.18	-78.1	410.9	289.4	268.6	20.73	13.962	
3,100.0	3,049.7	3,089.3	3,045.9	11.7	10.7	118.68	-80.5	431.4	300.8	279.2	21.61	13.917	
3,200.0	3,147.5	3,188.6	3,143.0	12.1	11.2	118.21	-82.9	451.9	312.3	289.8	22.50	13.877	
3,300.0	3,245.3	3,288.0	3,240.1	12.6	11.7	117.77	-85.3	472.4	323.7	300.3	23.39	13.840	
3,400.0	3,343.2	3,387.3	3,337.3	13.0	12.1	117.37	-87.7	492.9	335.2	310.9	24.28	13.806	
3,500.0	3,441.0	3,486.6	3,434.4	13.5	12.6	116.99	-90.1	513.4	346.7	321.6	25.17	13.775	
3,600.0	3,538.8	3,585.9	3,531.6	13.9	13.0	116.63	-92.5	533.9	358.3	332.2	26.06	13.747	
3,700.0	3,636.6	3,685.2	3,628.7	14.4	13.5	116.30	-94.9	554.4	369.8	342.8	26.95	13.722	
3,800.0	3,734.4	3,784.5	3,725.8	14.8	13.9	115.99	-97.3	574.9	381.3	353.5	27.84	13.698	
3,900.0	3,832.2	3,883.8	3,823.0	15.3	14.4	115.69	-99.7	595.4	392.9	364.2	28.73	13.676	
4,000.0	3,930.0	3,983.1	3,920.1	15.7	14.8	115.42	-102.1	615.9	404.5	374.8	29.62	13.656	
4,059.3	3,988.0	4,042.6	3,978.3	16.0	15.1	115.29	-103.6	628.0	411.3	381.2	30.12	13.654	
4,100.0	4,027.9	4,083.8	4,018.7	16.2	15.2	115.33	-104.5	635.8	415.8	385.4	30.44	13.661	
4,200.0	4,126.3	4,185.1	4,118.7	16.5	15.6	115.45	-106.4	652.4	425.5	394.4	31.05	13.702	
4,300.0	4,225.3	4,286.6	4,219.4	16.8	15.8	115.58	-108.0	665.5	433.3	401.7	31.58	13.721	
4,400.0	4,324.7	4,388.3	4,320.6	17.0	16.0	115.72	-109.1	675.1	439.1	407.1	32.02	13.713	
4,500.0	4,424.4	4,490.2	4,422.2	17.2	16.2	115.88	-109.8	681.1	443.0	410.7	32.38	13.682	
4,600.0	4,524.4	4,592.0	4,524.0	17.3	16.3	116.06	-110.1	683.6	445.0	412.3	32.66	13.626	
4,659.4	4,583.8	4,651.8	4,583.8	17.4	16.4	-179.99	-110.1	683.6	445.3	421.8	23.51	18.943	
4,700.0	4,624.4	4,692.3	4,624.4	17.5	16.5	-179.99	-110.1	683.6	445.3	421.6	23.64	18.834	
4,800.0	4,724.4	4,792.3	4,724.4	17.6	16.6	-179.99	-110.1	683.6	445.3	421.3	23.99	18.563	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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
4,900.0	4,824.4	4,892.3	4,824.4	17.7	16.7	-179.99	-110.1	683.6	445.3	420.9	24.34	18.296	
5,000.0	4,924.4	4,992.3	4,924.4	17.8	16.9	-179.99	-110.1	683.6	445.3	420.6	24.69	18.034	
5,100.0	5,024.4	5,092.3	5,024.4	18.0	17.0	-179.99	-110.1	683.6	445.3	420.2	25.05	17.778	
5,200.0	5,124.4	5,192.3	5,124.4	18.1	17.1	-179.99	-110.1	683.6	445.3	419.9	25.41	17.527	
5,300.0	5,224.4	5,292.3	5,224.4	18.2	17.3	-179.99	-110.1	683.6	445.3	419.5	25.77	17.281	
5,400.0	5,324.4	5,392.3	5,324.4	18.4	17.4	-179.99	-110.1	683.6	445.3	419.1	26.13	17.040	
5,500.0	5,424.4	5,492.3	5,424.4	18.5	17.6	-179.99	-110.1	683.6	445.3	418.8	26.50	16.804	
5,600.0	5,524.4	5,592.3	5,524.4	18.6	17.7	-179.99	-110.1	683.6	445.3	418.4	26.87	16.573	
5,700.0	5,624.4	5,692.3	5,624.4	18.8	17.8	-179.99	-110.1	683.6	445.3	418.0	27.24	16.347	
5,800.0	5,724.4	5,792.3	5,724.4	18.9	18.0	-179.99	-110.1	683.6	445.3	417.7	27.61	16.125	
5,900.0	5,824.4	5,892.3	5,824.4	19.1	18.1	-179.99	-110.1	683.6	445.3	417.3	27.99	15.908	
6,000.0	5,924.4	5,992.3	5,924.4	19.2	18.3	-179.99	-110.1	683.6	445.3	416.9	28.37	15.696	
6,100.0	6,024.4	6,092.3	6,024.4	19.4	18.4	-179.99	-110.1	683.6	445.3	416.5	28.75	15.488	
6,200.0	6,124.4	6,192.3	6,124.4	19.5	18.6	-179.99	-110.1	683.6	445.3	416.1	29.13	15.285	
6,300.0	6,224.4	6,292.3	6,224.4	19.7	18.8	-179.99	-110.1	683.6	445.3	415.8	29.52	15.086	
6,400.0	6,324.4	6,392.3	6,324.4	19.8	18.9	-179.99	-110.1	683.6	445.3	415.4	29.90	14.891	
6,435.4	6,359.8	6,427.8	6,359.8	19.9	19.0	-179.99	-110.1	683.6	445.3	415.2	30.04	14.823	
6,446.1	6,370.4	6,438.4	6,370.4	19.9	19.0	-90.00	-110.1	683.6	445.3	407.3	37.99	11.721	
6,450.0	6,374.4	6,442.3	6,374.4	19.9	19.0	-90.01	-110.1	683.6	445.3	407.3	38.00	11.717	
6,500.0	6,424.3	6,492.2	6,424.3	19.9	19.1	-90.36	-110.1	683.6	445.3	407.1	38.14	11.675	
6,550.0	6,473.9	6,541.8	6,473.9	19.9	19.1	-91.15	-110.1	683.6	445.4	407.1	38.27	11.639	
6,600.0	6,522.9	6,590.9	6,522.9	19.9	19.2	-92.35	-110.1	683.6	445.7	407.3	38.37	11.615	
6,650.0	6,571.2	6,639.2	6,571.2	19.9	19.3	-93.91	-110.1	683.6	446.4	408.0	38.45	11.610	
6,700.0	6,618.4	6,689.8	6,621.8	19.8	19.4	-95.70	-110.1	681.7	447.7	409.2	38.46	11.639	
6,750.0	6,664.3	6,741.5	6,673.2	19.8	19.4	-97.47	-110.1	676.1	449.4	411.0	38.41	11.702	
6,800.0	6,708.8	6,794.4	6,725.2	19.7	19.4	-99.22	-110.1	666.6	451.6	413.3	38.28	11.797	
6,850.0	6,751.6	6,848.6	6,777.6	19.6	19.3	-100.94	-110.1	652.8	454.2	416.1	38.09	11.923	
6,900.0	6,792.5	6,904.1	6,830.1	19.5	19.3	-102.60	-110.1	634.7	457.1	419.3	37.85	12.077	
6,950.0	6,831.2	6,961.1	6,882.2	19.4	19.2	-104.21	-110.1	611.9	460.4	422.8	37.57	12.252	
7,000.0	6,867.7	7,019.4	6,933.6	19.3	19.1	-105.76	-110.1	584.3	463.8	426.5	37.28	12.441	
7,050.0	6,901.7	7,079.2	6,983.9	19.3	19.1	-107.22	-110.1	551.8	467.4	430.4	37.00	12.632	
7,100.0	6,933.0	7,140.6	7,032.3	19.3	19.0	-108.60	-110.1	514.3	471.1	434.3	36.76	12.814	
7,150.0	6,961.6	7,203.3	7,078.4	19.3	19.0	-109.87	-110.1	471.7	474.7	438.1	36.60	12.970	
7,200.0	6,987.2	7,267.6	7,121.5	19.4	19.0	-111.04	-110.1	424.1	478.2	441.6	36.56	13.080	
7,250.0	7,009.8	7,333.2	7,161.0	19.6	19.2	-112.08	-110.1	371.7	481.5	444.8	36.67	13.129	
7,300.0	7,029.2	7,400.0	7,196.1	19.9	19.4	-112.99	-110.1	314.8	484.5	447.5	36.98	13.101	
7,350.0	7,045.3	7,468.1	7,226.2	20.2	19.8	-113.76	-110.1	253.9	487.1	449.5	37.53	12.978	
7,400.0	7,058.1	7,537.1	7,250.7	20.6	20.3	-114.38	-110.1	189.4	489.2	450.9	38.32	12.767	
7,450.0	7,067.5	7,606.9	7,269.1	21.2	21.0	-114.83	-110.1	122.1	490.8	451.5	39.36	12.471	
7,500.0	7,073.5	7,677.2	7,280.9	21.8	21.9	-115.12	-110.1	52.8	491.9	451.2	40.65	12.100	
7,550.0	7,075.9	7,747.9	7,285.8	22.5	22.9	-115.24	-110.1	-17.7	492.3	450.1	42.15	11.678	
7,563.9	7,076.0	7,765.6	7,286.0	22.7	23.1	-115.25	-110.1	-35.4	492.3	449.7	42.59	11.561	
7,600.0	7,075.8	7,801.7	7,286.1	23.2	23.7	-115.28	-110.1	-71.5	492.4	448.8	43.59	11.298	
7,700.0	7,075.3	7,901.7	7,286.4	24.9	25.3	-115.36	-110.1	-171.5	492.8	446.1	46.62	10.569	
7,800.0	7,074.9	8,001.7	7,286.6	26.7	27.2	-115.44	-110.1	-271.5	493.1	443.1	49.99	9.863	
7,900.0	7,074.4	8,101.7	7,286.9	28.8	29.2	-115.52	-110.1	-371.5	493.4	439.8	53.64	9.199	
8,000.0	7,073.9	8,201.7	7,287.2	30.9	31.4	-115.59	-110.1	-471.5	493.7	436.2	57.49	8.587	
8,100.0	7,073.4	8,301.7	7,287.4	33.2	33.6	-115.67	-110.1	-571.5	494.0	432.5	61.53	8.030	
8,200.0	7,072.9	8,401.7	7,287.7	35.5	35.9	-115.75	-110.1	-671.5	494.4	428.7	65.70	7.525	
8,300.0	7,072.4	8,501.7	7,288.0	37.9	38.3	-115.83	-110.1	-771.5	494.7	424.7	69.99	7.068	
8,400.0	7,071.9	8,601.7	7,288.2	40.3	40.8	-115.91	-110.1	-871.5	495.0	420.7	74.37	6.656	
8,500.0	7,071.5	8,701.7	7,288.5	42.8	43.2	-115.99	-110.1	-971.5	495.4	416.5	78.82	6.284	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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	7,071.0	8,801.7	7,288.8	45.4	45.8	-116.06	-110.1	-1,071.5	495.7	412.3	83.34	5.947	
8,700.0	7,070.5	8,901.7	7,289.0	47.9	48.3	-116.14	-110.1	-1,171.5	496.0	408.1	87.92	5.642	
8,800.0	7,070.0	9,001.7	7,289.3	50.5	50.9	-116.22	-110.1	-1,271.5	496.3	403.8	92.53	5.364	
8,900.0	7,069.5	9,101.6	7,289.6	53.1	53.5	-116.30	-110.1	-1,371.5	496.7	399.5	97.18	5.111	
9,000.0	7,069.0	9,201.6	7,289.8	55.8	56.1	-116.37	-110.1	-1,471.4	497.0	395.1	101.86	4.879	
9,100.0	7,068.5	9,301.6	7,290.1	58.4	58.8	-116.45	-110.1	-1,571.4	497.3	390.8	106.57	4.667	
9,200.0	7,068.1	9,401.6	7,290.4	61.1	61.4	-116.53	-110.1	-1,671.4	497.7	386.4	111.30	4.471	
9,300.0	7,067.6	9,501.6	7,290.6	63.7	64.1	-116.61	-110.1	-1,771.4	498.0	382.0	116.05	4.291	
9,400.0	7,067.1	9,601.6	7,290.9	66.4	66.8	-116.68	-110.1	-1,871.4	498.3	377.5	120.81	4.125	
9,500.0	7,066.6	9,701.6	7,291.2	69.1	69.5	-116.76	-110.1	-1,971.4	498.7	373.1	125.58	3.971	
9,600.0	7,066.1	9,801.6	7,291.4	71.8	72.2	-116.84	-110.1	-2,071.4	499.0	368.7	130.37	3.828	
9,700.0	7,065.6	9,901.6	7,291.7	74.5	74.9	-116.92	-110.1	-2,171.4	499.4	364.2	135.16	3.695	
9,800.0	7,065.1	10,001.6	7,292.0	77.2	77.6	-116.99	-110.1	-2,271.4	499.7	359.7	139.96	3.570	
9,900.0	7,064.7	10,101.6	7,292.2	80.0	80.3	-117.07	-110.1	-2,371.4	500.0	355.3	144.77	3.454	
10,000.0	7,064.2	10,201.6	7,292.5	82.7	83.0	-117.15	-110.1	-2,471.4	500.4	350.8	149.58	3.345	
10,100.0	7,063.7	10,301.6	7,292.8	85.4	85.8	-117.22	-110.1	-2,571.4	500.7	346.3	154.39	3.243	
10,200.0	7,063.2	10,401.6	7,293.0	88.2	88.5	-117.30	-110.1	-2,671.4	501.1	341.9	159.20	3.147	
10,300.0	7,062.7	10,501.6	7,293.3	90.9	91.2	-117.38	-110.1	-2,771.4	501.4	337.4	164.02	3.057	
10,400.0	7,062.2	10,601.6	7,293.6	93.6	94.0	-117.45	-110.1	-2,871.4	501.8	332.9	168.84	2.972	
10,500.0	7,061.7	10,701.6	7,293.8	96.4	96.7	-117.53	-110.0	-2,971.4	502.1	328.4	173.66	2.891	
10,600.0	7,061.3	10,801.6	7,294.1	99.2	99.5	-117.61	-110.0	-3,071.4	502.5	324.0	178.48	2.815	
10,700.0	7,060.8	10,901.6	7,294.4	101.9	102.2	-117.68	-110.0	-3,171.4	502.8	319.5	183.30	2.743	
10,800.0	7,060.3	11,001.6	7,294.6	104.7	105.0	-117.76	-110.0	-3,271.4	503.1	315.0	188.11	2.675	
10,900.0	7,059.8	11,101.6	7,294.9	107.4	107.8	-117.83	-110.0	-3,371.4	503.5	310.6	192.93	2.610	
11,000.0	7,059.3	11,201.6	7,295.2	110.2	110.5	-117.91	-110.0	-3,471.4	503.8	306.1	197.74	2.548	
11,100.0	7,058.8	11,301.6	7,295.4	113.0	113.3	-117.99	-110.0	-3,571.4	504.2	301.6	202.55	2.489	
11,200.0	7,058.3	11,401.6	7,295.7	115.7	116.1	-118.06	-110.0	-3,671.4	504.6	297.2	207.36	2.433	
11,300.0	7,057.9	11,501.6	7,296.0	118.5	118.8	-118.14	-110.0	-3,771.4	504.9	292.7	212.16	2.380	
11,400.0	7,057.4	11,601.6	7,296.2	121.3	121.6	-118.21	-110.0	-3,871.4	505.3	288.3	216.96	2.329	
11,500.0	7,056.9	11,701.6	7,296.5	124.0	124.4	-118.29	-110.0	-3,971.4	505.6	283.9	221.76	2.280	
11,600.0	7,056.4	11,801.6	7,296.8	126.8	127.1	-118.36	-110.0	-4,071.4	506.0	279.4	226.56	2.233	
11,686.6	7,056.0	11,886.1	7,297.0	129.2	129.5	-118.43	-110.0	-4,155.9	506.2	275.6	230.66	2.195 SF	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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	1.0	1.0	0.0	0.0	-179.57	-75.0	-0.6	75.0				
100.0	100.0	101.0	101.0	0.1	0.1	-179.57	-75.0	-0.6	75.0	74.9	0.20	381.597	
200.0	200.0	201.0	201.0	0.3	0.3	-179.57	-75.0	-0.6	75.0	74.4	0.65	116.138	
300.0	300.0	301.0	301.0	0.5	0.5	-179.57	-75.0	-0.6	75.0	74.0	1.10	68.492	
366.3	366.3	367.3	367.3	0.7	0.7	-179.57	-75.0	-0.6	75.0	73.7	1.39	53.841	CC
400.0	400.0	401.0	401.0	0.8	0.8	-179.57	-75.0	-0.6	75.0	73.5	1.55	48.575	ES
500.0	500.0	500.0	500.0	1.0	1.0	116.70	-76.2	0.7	77.0	75.0	1.97	39.137	
600.0	599.8	597.2	597.1	1.2	1.2	117.15	-79.6	4.5	82.8	80.4	2.39	34.661	
700.0	699.5	694.8	694.3	1.5	1.4	117.78	-85.3	10.6	92.4	89.6	2.85	32.443	
800.0	798.7	791.7	790.5	1.7	1.6	118.44	-93.1	19.2	105.9	102.5	3.36	31.549	
900.0	897.5	887.8	885.5	2.0	1.9	119.03	-103.0	30.1	123.1	119.2	3.92	31.402	
1,000.0	995.6	982.8	978.8	2.4	2.3	119.52	-114.9	43.1	144.1	139.6	4.55	31.650	
1,000.1	995.8	983.0	979.0	2.4	2.3	119.52	-114.9	43.1	144.2	139.6	4.55	31.651	
1,100.0	1,093.4	1,079.6	1,073.4	2.8	2.7	120.10	-128.4	57.9	167.3	162.0	5.24	31.912	
1,200.0	1,191.3	1,176.8	1,168.6	3.2	3.1	120.54	-142.0	72.9	190.5	184.5	5.96	31.978	
1,300.0	1,289.1	1,274.1	1,263.7	3.6	3.5	120.88	-155.6	87.8	213.7	207.0	6.69	31.941	
1,400.0	1,386.9	1,371.4	1,358.9	4.1	3.9	121.15	-169.3	102.8	236.9	229.5	7.44	31.852	
1,500.0	1,484.7	1,468.6	1,454.0	4.5	4.4	121.37	-182.9	117.7	260.1	251.9	8.20	31.736	
1,600.0	1,582.5	1,565.9	1,549.1	4.9	4.8	121.56	-196.5	132.6	283.4	274.4	8.96	31.619	
1,700.0	1,680.3	1,663.1	1,644.3	5.4	5.2	121.72	-210.2	147.6	306.6	296.9	9.73	31.501	
1,800.0	1,778.1	1,760.4	1,739.4	5.8	5.7	121.85	-223.8	162.5	329.8	319.3	10.51	31.386	
1,900.0	1,875.9	1,857.7	1,834.5	6.3	6.1	121.97	-237.4	177.5	353.1	341.8	11.29	31.277	
2,000.0	1,973.8	1,954.9	1,929.7	6.7	6.6	122.08	-251.0	192.4	376.3	364.2	12.07	31.174	
2,100.0	2,071.6	2,052.2	2,024.8	7.2	7.0	122.17	-264.7	207.4	399.5	386.7	12.86	31.079	
2,200.0	2,169.4	2,149.4	2,119.9	7.6	7.5	122.25	-278.3	222.3	422.8	409.1	13.64	30.990	
2,300.0	2,267.2	2,246.7	2,215.1	8.1	7.9	122.32	-291.9	237.3	446.0	431.6	14.43	30.907	
2,400.0	2,365.0	2,344.0	2,310.2	8.5	8.4	122.39	-305.6	252.2	469.2	454.0	15.22	30.830	
2,500.0	2,462.8	2,441.2	2,405.3	9.0	8.8	122.45	-319.2	267.2	492.5	476.5	16.01	30.759	
2,600.0	2,560.6	2,538.5	2,500.5	9.4	9.3	122.50	-332.8	282.1	515.7	498.9	16.80	30.692	
2,700.0	2,658.5	2,635.8	2,595.6	9.9	9.7	122.55	-346.4	297.0	538.9	521.3	17.60	30.630	
2,800.0	2,756.3	2,733.0	2,690.7	10.3	10.2	122.60	-360.1	312.0	562.2	543.8	18.39	30.571	
2,900.0	2,854.1	2,830.3	2,785.9	10.8	10.6	122.64	-373.7	326.9	585.4	566.2	19.18	30.517	
3,000.0	2,951.9	2,927.5	2,881.0	11.2	11.1	122.68	-387.3	341.9	608.7	588.7	19.98	30.466	
3,100.0	3,049.7	3,024.8	2,976.2	11.7	11.5	122.72	-401.0	356.8	631.9	611.1	20.77	30.418	
3,200.0	3,147.5	3,122.1	3,071.3	12.1	12.0	122.75	-414.6	371.8	655.1	633.6	21.57	30.373	
3,300.0	3,245.3	3,219.3	3,166.4	12.6	12.4	122.78	-428.2	386.7	678.4	656.0	22.37	30.331	
3,400.0	3,343.2	3,316.6	3,261.6	13.0	12.9	122.81	-441.9	401.7	701.6	678.4	23.16	30.291	
3,500.0	3,441.0	3,413.8	3,356.7	13.5	13.3	122.84	-455.5	416.6	724.9	700.9	23.96	30.253	
3,600.0	3,538.8	3,511.1	3,451.8	13.9	13.8	122.86	-469.1	431.5	748.1	723.3	24.76	30.217	
3,700.0	3,636.6	3,608.4	3,547.0	14.4	14.2	122.88	-482.7	446.5	771.3	745.8	25.55	30.184	
3,800.0	3,734.4	3,705.6	3,642.1	14.8	14.7	122.91	-496.4	461.4	794.6	768.2	26.35	30.151	
3,900.0	3,832.2	3,802.9	3,737.2	15.3	15.1	122.93	-510.0	476.4	817.8	790.7	27.15	30.121	
4,000.0	3,930.0	3,900.2	3,832.4	15.7	15.6	122.95	-523.6	491.3	841.0	813.1	27.95	30.092	
4,059.3	3,988.0	3,957.8	3,888.8	16.0	15.8	122.96	-531.7	500.2	854.8	826.4	28.42	30.075	
4,100.0	4,027.9	3,997.5	3,927.5	16.2	16.0	123.11	-537.3	506.3	864.1	835.4	28.75	30.058	
4,200.0	4,126.3	4,095.1	4,023.0	16.5	16.5	123.32	-550.9	521.3	885.7	856.2	29.47	30.050	
4,300.0	4,225.3	4,193.0	4,118.8	16.8	16.9	123.32	-564.7	536.3	905.4	875.2	30.16	30.022	
4,400.0	4,324.7	4,291.0	4,214.7	17.0	17.4	123.12	-578.4	551.4	923.3	892.5	30.80	29.979	
4,500.0	4,424.4	4,389.1	4,310.7	17.2	17.8	122.72	-592.1	566.5	939.3	908.0	31.39	29.927	
4,600.0	4,524.4	4,487.2	4,406.5	17.3	18.3	122.15	-605.9	581.5	953.7	921.8	31.93	29.871	
4,659.4	4,583.8	4,545.3	4,463.5	17.4	18.6	-174.39	-614.0	590.5	961.5	934.0	27.52	34.937	
4,700.0	4,624.4	4,585.0	4,502.3	17.5	18.8	-174.79	-619.6	596.6	966.6	938.9	27.73	34.856	

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 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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
4,800.0	4,724.4	4,682.8	4,597.9	17.6	19.2	-175.74	-633.3	611.6	979.5	951.2	28.27	34.651	
4,900.0	4,824.4	4,780.6	4,693.6	17.7	19.7	-176.67	-647.0	626.6	992.6	963.8	28.81	34.449	
5,000.0	4,924.4	4,878.5	4,789.3	17.8	20.1	-177.58	-660.7	641.6	1,006.0	976.7	29.37	34.252	
5,100.0	5,024.4	4,990.7	4,899.2	18.0	20.6	-178.57	-676.0	658.4	1,019.4	989.4	29.96	34.023	
5,200.0	5,124.4	5,120.2	5,027.0	18.1	21.0	-179.47	-690.4	674.2	1,030.3	999.9	30.49	33.796	
5,300.0	5,224.4	5,251.5	5,157.2	18.2	21.3	179.88	-701.0	685.8	1,038.4	1,007.4	30.96	33.538	
5,400.0	5,324.4	5,383.9	5,289.3	18.4	21.5	179.49	-707.6	693.0	1,043.4	1,012.0	31.39	33.246	
5,500.0	5,424.4	5,516.9	5,422.2	18.5	21.7	179.34	-710.0	695.7	1,045.3	1,013.5	31.75	32.921	
5,600.0	5,524.4	5,620.0	5,525.4	18.6	21.8	179.34	-710.0	695.7	1,045.3	1,013.3	32.06	32.601	
5,700.0	5,624.4	5,720.0	5,625.4	18.8	21.9	179.34	-710.0	695.7	1,045.3	1,013.0	32.37	32.297	
5,800.0	5,724.4	5,820.0	5,725.4	18.9	22.0	179.34	-710.0	695.7	1,045.3	1,012.6	32.67	31.995	
5,900.0	5,824.4	5,920.0	5,825.4	19.1	22.1	179.34	-710.0	695.7	1,045.3	1,012.3	32.98	31.696	
6,000.0	5,924.4	6,020.0	5,925.4	19.2	22.2	179.34	-710.0	695.7	1,045.3	1,012.0	33.29	31.400	
6,100.0	6,024.4	6,120.0	6,025.4	19.4	22.3	179.34	-710.0	695.7	1,045.3	1,011.7	33.60	31.106	
6,200.0	6,124.4	6,220.0	6,125.4	19.5	22.5	179.34	-710.0	695.7	1,045.3	1,011.4	33.92	30.815	
6,300.0	6,224.4	6,320.0	6,225.4	19.7	22.6	179.34	-710.0	695.7	1,045.3	1,011.1	34.24	30.527	
6,400.0	6,324.4	6,420.0	6,325.4	19.8	22.7	179.34	-710.0	695.7	1,045.3	1,010.8	34.56	30.243	
6,435.4	6,359.8	6,455.5	6,360.8	19.9	22.7	179.34	-710.0	695.7	1,045.3	1,010.6	34.68	30.142	
6,450.0	6,374.4	6,470.3	6,375.6	19.9	22.7	-90.66	-710.0	695.6	1,045.3	1,006.8	38.56	27.107	
6,500.0	6,424.3	6,521.1	6,426.4	19.9	22.8	-90.65	-710.0	692.6	1,045.3	1,006.7	38.65	27.049	
6,550.0	6,473.9	6,572.0	6,476.8	19.9	22.8	-90.64	-710.0	686.1	1,045.3	1,006.6	38.66	27.036	
6,600.0	6,522.9	6,622.8	6,526.6	19.9	22.8	-90.63	-710.0	676.1	1,045.3	1,006.7	38.63	27.062	
6,650.0	6,571.2	6,673.6	6,575.5	19.9	22.7	-90.61	-710.0	662.5	1,045.3	1,006.8	38.54	27.123	
6,700.0	6,618.4	6,724.4	6,623.4	19.8	22.7	-90.59	-710.0	645.5	1,045.3	1,006.9	38.41	27.213	
6,750.0	6,664.3	6,775.1	6,669.9	19.8	22.6	-90.57	-710.0	625.1	1,045.3	1,007.0	38.25	27.325	
6,800.0	6,708.8	6,825.9	6,714.8	19.7	22.5	-90.55	-710.0	601.6	1,045.3	1,007.2	38.08	27.450	
6,850.0	6,751.6	6,876.5	6,757.9	19.6	22.4	-90.52	-710.0	574.9	1,045.3	1,007.4	37.90	27.577	
6,900.0	6,792.5	6,927.2	6,798.9	19.5	22.3	-90.49	-710.0	545.3	1,045.3	1,007.5	37.74	27.694	
6,950.0	6,831.2	6,977.8	6,837.8	19.4	22.2	-90.46	-710.0	512.9	1,045.3	1,007.7	37.62	27.785	
7,000.0	6,867.7	7,028.4	6,874.2	19.3	22.1	-90.42	-710.0	477.8	1,045.3	1,007.7	37.55	27.834	
7,050.0	6,901.7	7,078.9	6,908.1	19.3	22.0	-90.39	-710.0	440.4	1,045.3	1,007.7	37.57	27.825	
7,100.0	6,933.0	7,129.3	6,939.2	19.3	21.9	-90.35	-710.0	400.6	1,045.3	1,007.6	37.68	27.742	
7,150.0	6,961.6	7,179.8	6,967.3	19.3	21.9	-90.31	-710.0	358.8	1,045.3	1,007.3	37.91	27.570	
7,200.0	6,987.2	7,230.1	6,992.5	19.4	21.8	-90.27	-710.0	315.2	1,045.3	1,007.0	38.29	27.302	
7,250.0	7,009.8	7,280.4	7,014.5	19.6	21.8	-90.22	-710.0	270.0	1,045.3	1,006.4	38.81	26.933	
7,300.0	7,029.2	7,330.7	7,033.2	19.9	21.9	-90.18	-710.0	223.4	1,045.3	1,005.8	39.49	26.467	
7,350.0	7,045.3	7,380.9	7,048.6	20.2	22.0	-90.13	-710.0	175.6	1,045.2	1,004.9	40.34	25.913	
7,400.0	7,058.1	7,431.0	7,060.7	20.6	22.1	-90.09	-710.0	126.9	1,045.2	1,003.9	41.34	25.285	
7,450.0	7,067.5	7,481.1	7,069.3	21.2	22.4	-90.04	-710.0	77.6	1,045.2	1,002.8	42.49	24.601	
7,495.2	7,073.0	7,526.3	7,074.0	21.7	22.7	-90.00	-710.0	32.7	1,045.2	1,001.6	43.64	23.949	
7,500.0	7,073.5	7,531.1	7,074.4	21.8	22.7	-90.00	-710.0	27.9	1,045.2	1,001.5	43.77	23.880	
7,550.0	7,075.9	7,581.1	7,076.0	22.5	23.2	-89.95	-710.0	-22.0	1,045.2	1,000.1	45.16	23.144	
7,563.9	7,076.0	7,595.0	7,075.9	22.7	23.3	-89.94	-710.0	-36.0	1,045.2	999.7	45.57	22.936	
7,600.0	7,075.8	7,631.1	7,075.8	23.2	23.8	-89.94	-710.0	-72.0	1,045.2	998.5	46.70	22.383	
7,700.0	7,075.3	7,731.1	7,075.3	24.9	25.3	-89.94	-710.0	-172.0	1,045.2	995.2	50.06	20.880	
7,800.0	7,074.9	7,831.1	7,074.8	26.7	27.1	-89.94	-710.0	-272.0	1,045.2	991.4	53.81	19.426	
7,900.0	7,074.4	7,931.1	7,074.3	28.8	29.1	-89.94	-710.0	-372.0	1,045.2	987.4	57.86	18.066	
8,000.0	7,073.9	8,031.1	7,073.8	30.9	31.2	-89.94	-710.0	-472.0	1,045.2	983.1	62.15	16.818	
8,100.0	7,073.4	8,131.1	7,073.3	33.2	33.5	-89.94	-710.0	-572.0	1,045.2	978.6	66.64	15.685	
8,200.0	7,072.9	8,231.1	7,072.8	35.5	35.8	-89.94	-710.0	-672.0	1,045.2	974.0	71.29	14.661	
8,300.0	7,072.4	8,331.1	7,072.3	37.9	38.2	-89.94	-710.0	-772.0	1,045.2	969.2	76.07	13.740	
8,400.0	7,071.9	8,431.1	7,071.8	40.3	40.7	-89.94	-710.0	-872.0	1,045.2	964.3	80.96	12.910	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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
8,500.0	7,071.5	8,531.1	7,071.4	42.8	43.2	-89.94	-710.0	-972.0	1,045.2	959.3	85.94	12.162	
8,600.0	7,071.0	8,631.1	7,070.9	45.4	45.7	-89.94	-710.0	-1,072.0	1,045.2	954.3	91.00	11.487	
8,700.0	7,070.5	8,731.1	7,070.4	47.9	48.3	-89.94	-710.0	-1,172.0	1,045.2	949.1	96.11	10.875	
8,800.0	7,070.0	8,831.1	7,069.9	50.5	50.9	-89.94	-710.0	-1,272.0	1,045.2	944.0	101.28	10.320	
8,900.0	7,069.5	8,931.1	7,069.4	53.1	53.5	-89.94	-710.0	-1,372.0	1,045.2	938.8	106.49	9.815	
9,000.0	7,069.0	9,031.1	7,068.9	55.8	56.1	-89.94	-710.0	-1,472.0	1,045.2	933.5	111.75	9.354	
9,100.0	7,068.5	9,131.1	7,068.4	58.4	58.7	-89.94	-710.0	-1,572.0	1,045.2	928.2	117.04	8.931	
9,200.0	7,068.1	9,231.1	7,067.9	61.1	61.4	-89.94	-710.0	-1,672.0	1,045.2	922.9	122.35	8.543	
9,300.0	7,067.6	9,331.1	7,067.5	63.7	64.1	-89.94	-710.0	-1,772.0	1,045.2	917.6	127.69	8.186	
9,400.0	7,067.1	9,431.1	7,067.0	66.4	66.8	-89.94	-710.0	-1,872.0	1,045.2	912.2	133.06	7.855	
9,500.0	7,066.6	9,531.1	7,066.5	69.1	69.4	-89.94	-710.0	-1,972.0	1,045.2	906.8	138.44	7.550	
9,600.0	7,066.1	9,631.1	7,066.0	71.8	72.1	-89.94	-710.0	-2,072.0	1,045.2	901.4	143.85	7.266	
9,700.0	7,065.6	9,731.1	7,065.5	74.5	74.9	-89.94	-710.0	-2,172.0	1,045.2	896.0	149.27	7.003	
9,800.0	7,065.1	9,831.1	7,065.0	77.2	77.6	-89.94	-710.0	-2,272.0	1,045.2	890.5	154.70	6.757	
9,900.0	7,064.7	9,931.1	7,064.5	80.0	80.3	-89.94	-710.0	-2,372.0	1,045.2	885.1	160.14	6.527	
10,000.0	7,064.2	10,031.1	7,064.1	82.7	83.0	-89.94	-710.0	-2,472.0	1,045.2	879.6	165.60	6.312	
10,100.0	7,063.7	10,131.1	7,063.6	85.4	85.8	-89.94	-710.0	-2,572.0	1,045.2	874.2	171.07	6.110	
10,200.0	7,063.2	10,231.1	7,063.1	88.2	88.5	-89.94	-710.0	-2,672.0	1,045.2	868.7	176.54	5.921	
10,300.0	7,062.7	10,331.1	7,062.6	90.9	91.2	-89.94	-710.0	-2,772.0	1,045.2	863.2	182.03	5.742	
10,400.0	7,062.2	10,431.1	7,062.1	93.6	94.0	-89.94	-710.0	-2,872.0	1,045.2	857.7	187.52	5.574	
10,500.0	7,061.7	10,531.1	7,061.7	96.4	96.7	-89.94	-710.0	-2,972.0	1,045.2	852.2	193.02	5.415	
10,600.0	7,061.3	10,631.1	7,061.2	99.2	99.5	-89.94	-710.0	-3,072.0	1,045.2	846.7	198.53	5.265	
10,700.0	7,060.8	10,731.1	7,060.7	101.9	102.2	-89.94	-710.0	-3,172.0	1,045.2	841.2	204.04	5.123	
10,800.0	7,060.3	10,831.1	7,060.2	104.7	105.0	-89.94	-710.0	-3,272.0	1,045.2	835.7	209.56	4.988	
10,900.0	7,059.8	10,931.1	7,059.7	107.4	107.8	-89.94	-710.0	-3,372.0	1,045.2	830.2	215.08	4.860	
11,000.0	7,059.3	11,031.1	7,059.3	110.2	110.5	-89.94	-710.0	-3,472.0	1,045.2	824.6	220.61	4.738	
11,100.0	7,058.8	11,131.1	7,058.8	113.0	113.3	-89.94	-710.0	-3,572.0	1,045.2	819.1	226.15	4.622	
11,200.0	7,058.3	11,231.1	7,058.3	115.7	116.0	-89.94	-710.0	-3,672.0	1,045.2	813.6	231.68	4.512	
11,300.0	7,057.9	11,331.1	7,057.8	118.5	118.8	-89.94	-710.0	-3,772.0	1,045.2	808.0	237.22	4.406	
11,400.0	7,057.4	11,431.1	7,057.3	121.3	121.6	-89.94	-710.0	-3,872.0	1,045.2	802.5	242.77	4.306	
11,500.0	7,056.9	11,531.1	7,056.9	124.0	124.4	-89.94	-710.0	-3,972.0	1,045.2	796.9	248.31	4.209	
11,600.0	7,056.4	11,631.1	7,056.4	126.8	127.1	-89.94	-710.0	-4,072.0	1,045.2	791.4	253.86	4.117	
11,660.6	7,056.1	11,691.6	7,056.1	128.5	128.8	-89.94	-710.0	-4,132.6	1,045.2	788.0	257.23	4.063	
11,686.6	7,056.0	11,711.5	7,056.0	129.2	129.4	-89.94	-710.0	-4,152.4	1,045.2	786.7	258.50	4.043	SF

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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-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	1.0	1.0	0.0	0.0	-179.64	-90.0	-0.6	90.0				
100.0	100.0	101.0	101.0	0.1	0.1	-179.64	-90.0	-0.6	90.0	89.8	0.20	457.500	
200.0	200.0	201.0	201.0	0.3	0.3	-179.64	-90.0	-0.6	90.0	89.3	0.65	139.239	
266.3	266.3	267.3	267.3	0.5	0.5	-179.64	-90.0	-0.6	90.0	89.0	0.94	95.276	CC
300.0	300.0	300.0	300.0	0.5	0.5	-179.64	-90.0	-0.6	90.0	88.9	1.09	82.289	ES
400.0	400.0	398.6	398.6	0.8	0.7	179.66	-91.3	0.5	91.3	89.8	1.52	60.100	
500.0	500.0	496.0	495.9	1.0	0.9	114.68	-95.1	3.8	96.0	94.1	1.94	49.455	
600.0	599.8	593.0	592.5	1.2	1.2	114.19	-101.4	9.1	104.8	102.4	2.39	43.917	
700.0	699.5	689.2	688.1	1.5	1.4	114.21	-110.1	16.6	117.7	114.8	2.87	41.026	
800.0	798.7	784.6	782.3	1.7	1.7	114.56	-121.1	25.9	134.5	131.1	3.39	39.624	
900.0	897.5	878.7	874.8	2.0	2.1	115.07	-134.3	37.2	155.3	151.3	3.98	39.058	
1,000.0	995.6	974.8	968.8	2.4	2.5	115.88	-149.5	50.1	179.3	174.7	4.62	38.809	
1,000.1	995.8	975.0	968.9	2.4	2.5	115.88	-149.5	50.1	179.4	174.7	4.62	38.809	
1,100.0	1,093.4	1,071.6	1,063.4	2.8	2.9	117.28	-164.8	63.1	204.2	198.9	5.31	38.489	
1,200.0	1,191.3	1,168.3	1,158.1	3.2	3.3	118.37	-180.1	76.2	229.2	223.2	6.01	38.120	
1,300.0	1,289.1	1,265.0	1,252.7	3.6	3.8	119.25	-195.5	89.2	254.3	247.6	6.74	37.748	
1,400.0	1,386.9	1,361.8	1,347.3	4.1	4.2	119.98	-210.8	102.2	279.4	271.9	7.47	37.395	
1,500.0	1,484.7	1,458.5	1,441.9	4.5	4.6	120.58	-226.1	115.3	304.5	296.3	8.21	37.075	
1,600.0	1,582.5	1,555.3	1,536.6	4.9	5.1	121.09	-241.4	128.3	329.7	320.8	8.96	36.787	
1,700.0	1,680.3	1,652.0	1,631.2	5.4	5.5	121.53	-256.7	141.4	354.9	345.2	9.72	36.527	
1,800.0	1,778.1	1,748.8	1,725.8	5.8	6.0	121.91	-272.1	154.4	380.1	369.6	10.47	36.293	
1,900.0	1,875.9	1,845.5	1,820.4	6.3	6.4	122.24	-287.4	167.4	405.3	394.1	11.23	36.083	
2,000.0	1,973.8	1,942.2	1,915.1	6.7	6.8	122.54	-302.7	180.5	430.6	418.6	12.00	35.893	
2,100.0	2,071.6	2,039.0	2,009.7	7.2	7.3	122.80	-318.0	193.5	455.8	443.0	12.76	35.722	
2,200.0	2,169.4	2,135.7	2,104.3	7.6	7.7	123.03	-333.3	206.5	481.1	467.5	13.53	35.566	
2,300.0	2,267.2	2,232.5	2,199.0	8.1	8.2	123.24	-348.7	219.6	506.3	492.0	14.29	35.424	
2,400.0	2,365.0	2,329.2	2,293.6	8.5	8.6	123.43	-364.0	232.6	531.6	516.5	15.06	35.294	
2,500.0	2,462.8	2,425.9	2,388.2	9.0	9.1	123.61	-379.3	245.7	556.8	541.0	15.83	35.175	
2,600.0	2,560.6	2,522.7	2,482.8	9.4	9.5	123.77	-394.6	258.7	582.1	565.5	16.60	35.066	
2,700.0	2,658.5	2,619.4	2,577.5	9.9	10.0	123.91	-409.9	271.7	607.4	590.0	17.37	34.965	
2,800.0	2,756.3	2,716.2	2,672.1	10.3	10.4	124.04	-425.3	284.8	632.7	614.5	18.14	34.871	
2,900.0	2,854.1	2,812.9	2,766.7	10.8	10.9	124.17	-440.6	297.8	657.9	639.0	18.91	34.785	
3,000.0	2,951.9	2,909.7	2,861.4	11.2	11.3	124.28	-455.9	310.8	683.2	663.5	19.69	34.704	
3,100.0	3,049.7	3,006.4	2,956.0	11.7	11.8	124.39	-471.2	323.9	708.5	688.0	20.46	34.629	
3,200.0	3,147.5	3,103.1	3,050.6	12.1	12.2	124.49	-486.5	336.9	733.8	712.6	21.23	34.559	
3,300.0	3,245.3	3,199.9	3,145.2	12.6	12.7	124.58	-501.9	350.0	759.1	737.1	22.01	34.493	
3,400.0	3,343.2	3,296.6	3,239.9	13.0	13.1	124.67	-517.2	363.0	784.4	761.6	22.78	34.432	
3,500.0	3,441.0	3,393.4	3,334.5	13.5	13.6	124.75	-532.5	376.0	809.7	786.1	23.56	34.374	
3,600.0	3,538.8	3,490.1	3,429.1	13.9	14.0	124.82	-547.8	389.1	835.0	810.6	24.33	34.319	
3,700.0	3,636.6	3,586.9	3,523.7	14.4	14.5	124.89	-563.1	402.1	860.3	835.2	25.10	34.267	
3,800.0	3,734.4	3,683.6	3,618.4	14.8	14.9	124.96	-578.5	415.1	885.6	859.7	25.88	34.219	
3,900.0	3,832.2	3,780.3	3,713.0	15.3	15.4	125.02	-593.8	428.2	910.9	884.2	26.65	34.173	
4,000.0	3,930.0	3,877.1	3,807.6	15.7	15.8	125.08	-609.1	441.2	936.2	908.7	27.43	34.129	
4,059.3	3,988.0	3,934.4	3,863.7	16.0	16.1	125.12	-618.2	448.9	951.2	923.3	27.89	34.104	
4,100.0	4,027.9	3,973.9	3,902.3	16.2	16.3	125.30	-624.4	454.3	961.3	933.1	28.21	34.075	
4,200.0	4,126.3	4,071.0	3,997.4	16.5	16.7	125.59	-639.8	467.4	984.8	955.9	28.93	34.047	
4,300.0	4,225.3	4,168.6	4,092.8	16.8	17.2	125.69	-655.3	480.5	1,006.4	976.8	29.60	34.002	
4,400.0	4,324.7	4,266.4	4,188.4	17.0	17.6	125.60	-670.7	493.7	1,026.0	995.8	30.23	33.945	
4,500.0	4,424.4	4,364.3	4,284.2	17.2	18.1	125.34	-686.3	506.9	1,043.7	1,012.8	30.81	33.879	
4,600.0	4,524.4	4,462.2	4,380.0	17.3	18.5	124.92	-701.8	520.1	1,059.5	1,028.1	31.34	33.810	
4,659.4	4,583.8	4,520.4	4,436.9	17.4	18.8	-171.53	-711.0	527.9	1,068.0	1,039.5	28.52	37.451	
4,700.0	4,624.4	4,560.1	4,475.7	17.5	19.0	-171.87	-717.3	533.3	1,073.6	1,044.9	28.73	37.368	

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 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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-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
4,800.0	4,724.4	4,657.9	4,571.4	17.6	19.4	-172.68	-732.7	546.4	1,087.7	1,058.4	29.27	37.158	
4,900.0	4,824.4	4,755.7	4,667.0	17.7	19.9	-173.47	-748.2	559.6	1,102.0	1,072.1	29.82	36.952	
5,000.0	4,924.4	4,853.5	4,762.7	17.8	20.4	-174.24	-763.7	572.8	1,116.4	1,086.0	30.38	36.750	
5,100.0	5,024.4	4,951.3	4,858.4	18.0	20.8	-174.99	-779.2	586.0	1,131.1	1,100.1	30.94	36.552	
5,200.0	5,124.4	5,049.1	4,954.1	18.1	21.3	-175.72	-794.7	599.2	1,145.9	1,114.4	31.52	36.359	
5,300.0	5,224.4	5,147.0	5,049.8	18.2	21.7	-176.44	-810.2	612.3	1,161.0	1,128.9	32.10	36.170	
5,400.0	5,324.4	5,244.8	5,145.4	18.4	22.2	-177.13	-825.7	625.5	1,176.2	1,143.5	32.68	35.986	
5,500.0	5,424.4	5,342.6	5,241.1	18.5	22.6	-177.81	-841.2	638.7	1,191.6	1,158.3	33.28	35.806	
5,600.0	5,524.4	5,440.4	5,336.8	18.6	23.1	-178.47	-856.7	651.9	1,207.1	1,173.2	33.88	35.631	
5,700.0	5,624.4	5,567.7	5,461.6	18.8	23.6	-179.26	-875.7	668.1	1,222.1	1,187.6	34.51	35.417	
5,800.0	5,724.4	5,714.4	5,606.6	18.9	23.9	-179.95	-892.7	682.5	1,233.6	1,198.5	35.08	35.167	
5,900.0	5,824.4	5,863.1	5,754.5	19.1	24.3	179.61	-904.0	692.2	1,241.3	1,205.7	35.57	34.893	
6,000.0	5,924.4	6,012.9	5,904.1	19.2	24.5	179.39	-909.5	696.9	1,245.0	1,209.0	35.99	34.589	
6,100.0	6,024.4	6,134.1	6,025.4	19.4	24.6	179.37	-910.1	697.3	1,245.3	1,209.0	36.33	34.281	
6,200.0	6,124.4	6,234.1	6,125.4	19.5	24.7	179.37	-910.1	697.3	1,245.3	1,208.7	36.62	34.005	
6,300.0	6,224.4	6,334.1	6,225.4	19.7	24.8	179.37	-910.1	697.3	1,245.3	1,208.4	36.92	33.731	
6,400.0	6,324.4	6,434.1	6,325.4	19.8	24.9	179.37	-910.1	697.3	1,245.3	1,208.1	37.22	33.458	
6,435.4	6,359.8	6,469.6	6,360.8	19.9	24.9	179.37	-910.1	697.3	1,245.3	1,208.0	37.33	33.362	
6,450.0	6,374.4	6,484.1	6,375.4	19.9	25.0	-90.63	-910.1	697.3	1,245.4	1,206.4	38.96	31.964	
6,500.0	6,424.3	6,534.1	6,425.3	19.9	25.0	-90.76	-910.1	697.3	1,245.4	1,206.3	39.06	31.886	
6,550.0	6,473.9	6,584.1	6,475.3	19.9	25.1	-91.03	-910.1	697.2	1,245.5	1,206.4	39.11	31.849	
6,600.0	6,522.9	6,635.4	6,526.6	19.9	25.1	-91.35	-910.1	694.5	1,245.6	1,206.5	39.10	31.861	
6,650.0	6,571.2	6,687.4	6,578.1	19.9	25.1	-91.67	-910.1	688.0	1,245.8	1,206.8	39.03	31.919	
6,700.0	6,618.4	6,739.8	6,629.5	19.8	25.1	-91.98	-910.1	677.7	1,246.0	1,207.1	38.92	32.019	
6,750.0	6,664.3	6,792.9	6,680.6	19.8	25.0	-92.28	-910.1	663.4	1,246.3	1,207.5	38.76	32.154	
6,800.0	6,708.8	6,846.4	6,731.0	19.7	25.0	-92.58	-910.1	645.2	1,246.6	1,208.0	38.57	32.317	
6,850.0	6,751.6	6,900.6	6,780.3	19.6	24.9	-92.86	-910.1	623.1	1,246.8	1,208.5	38.37	32.496	
6,900.0	6,792.5	6,955.2	6,828.4	19.5	24.8	-93.12	-910.1	597.0	1,247.1	1,209.0	38.17	32.678	
6,950.0	6,831.2	7,010.4	6,874.7	19.4	24.7	-93.37	-910.1	567.1	1,247.5	1,209.5	37.98	32.844	
7,000.0	6,867.7	7,066.1	6,918.9	19.3	24.6	-93.61	-910.1	533.3	1,247.8	1,209.9	37.84	32.974	
7,050.0	6,901.7	7,122.2	6,960.8	19.3	24.4	-93.82	-910.1	495.9	1,248.1	1,210.3	37.77	33.046	
7,100.0	6,933.0	7,178.8	6,999.9	19.3	24.3	-94.02	-910.1	455.0	1,248.4	1,210.6	37.79	33.034	
7,150.0	6,961.6	7,235.8	7,035.8	19.3	24.2	-94.19	-910.1	410.8	1,248.6	1,210.7	37.93	32.917	
7,200.0	6,987.2	7,293.2	7,068.4	19.4	24.1	-94.35	-910.1	363.5	1,248.9	1,210.7	38.22	32.676	
7,250.0	7,009.8	7,350.9	7,097.2	19.6	24.0	-94.47	-910.1	313.6	1,249.1	1,210.4	38.67	32.298	
7,300.0	7,029.2	7,408.8	7,122.0	19.9	23.9	-94.58	-910.1	261.3	1,249.3	1,209.9	39.32	31.773	
7,350.0	7,045.3	7,466.9	7,142.5	20.2	23.8	-94.65	-910.1	206.9	1,249.4	1,209.2	40.15	31.116	
7,400.0	7,058.1	7,525.2	7,158.6	20.6	23.8	-94.70	-910.1	150.9	1,249.5	1,208.3	41.17	30.348	
7,450.0	7,067.5	7,583.6	7,170.1	21.2	23.8	-94.72	-910.1	93.7	1,249.5	1,207.1	42.37	29.491	
7,500.0	7,073.5	7,642.0	7,176.9	21.8	23.9	-94.72	-910.1	35.7	1,249.5	1,205.8	43.73	28.576	
7,550.0	7,075.9	7,700.2	7,179.0	22.5	24.1	-94.68	-910.1	-22.4	1,249.5	1,204.2	45.22	27.631	
7,563.1	7,076.0	7,713.2	7,178.9	22.7	24.2	-94.68	-910.1	-35.5	1,249.4	1,203.8	45.61	27.391	
7,563.9	7,076.0	7,714.1	7,178.9	22.7	24.2	-94.68	-910.1	-36.4	1,249.4	1,203.8	45.64	27.376	
7,600.0	7,075.8	7,750.2	7,178.8	23.2	24.4	-94.68	-910.1	-72.4	1,249.4	1,202.7	46.74	26.731	
7,700.0	7,075.3	7,850.2	7,178.4	24.9	25.6	-94.69	-910.1	-172.4	1,249.5	1,199.4	50.06	24.959	
7,800.0	7,074.9	7,950.2	7,178.1	26.7	27.3	-94.69	-910.1	-272.4	1,249.5	1,195.7	53.76	23.239	
7,900.0	7,074.4	8,050.2	7,177.7	28.8	29.3	-94.70	-910.1	-372.4	1,249.5	1,191.7	57.78	21.626	
8,000.0	7,073.9	8,150.2	7,177.4	30.9	31.4	-94.70	-910.1	-472.4	1,249.5	1,187.5	62.03	20.142	
8,100.0	7,073.4	8,250.2	7,177.0	33.2	33.6	-94.71	-910.1	-572.4	1,249.5	1,183.0	66.49	18.792	
8,200.0	7,072.9	8,350.2	7,176.6	35.5	36.0	-94.72	-910.1	-672.4	1,249.5	1,178.4	71.11	17.572	
8,300.0	7,072.4	8,450.2	7,176.3	37.9	38.4	-94.72	-910.1	-772.4	1,249.5	1,173.7	75.86	16.471	
8,400.0	7,071.9	8,550.2	7,175.9	40.3	40.8	-94.73	-910.1	-872.4	1,249.5	1,168.8	80.72	15.480	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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-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
8,500.0	7,071.5	8,650.2	7,175.5	42.8	43.3	-94.73	-910.1	-972.4	1,249.5	1,163.9	85.67	14.585	
8,600.0	7,071.0	8,750.2	7,175.2	45.4	45.8	-94.74	-910.1	-1,072.4	1,249.5	1,158.8	90.70	13.777	
8,700.0	7,070.5	8,850.2	7,174.8	47.9	48.4	-94.74	-910.1	-1,172.4	1,249.6	1,153.8	95.79	13.045	
8,800.0	7,070.0	8,950.2	7,174.4	50.5	51.0	-94.75	-910.1	-1,272.4	1,249.6	1,148.6	100.93	12.380	
8,900.0	7,069.5	9,050.2	7,174.1	53.1	53.6	-94.75	-910.1	-1,372.4	1,249.6	1,143.4	106.12	11.775	
9,000.0	7,069.0	9,150.2	7,173.7	55.8	56.2	-94.76	-910.1	-1,472.4	1,249.6	1,138.2	111.35	11.222	
9,100.0	7,068.5	9,250.2	7,173.3	58.4	58.8	-94.76	-910.1	-1,572.4	1,249.6	1,133.0	116.61	10.716	
9,200.0	7,068.1	9,350.2	7,173.0	61.1	61.5	-94.77	-910.1	-1,672.4	1,249.6	1,127.7	121.91	10.250	
9,300.0	7,067.6	9,450.2	7,172.6	63.7	64.1	-94.78	-910.1	-1,772.4	1,249.6	1,122.4	127.23	9.822	
9,400.0	7,067.1	9,550.2	7,172.3	66.4	66.8	-94.78	-910.1	-1,872.4	1,249.6	1,117.0	132.57	9.426	
9,500.0	7,066.6	9,650.2	7,171.9	69.1	69.5	-94.79	-910.1	-1,972.4	1,249.6	1,111.7	137.93	9.060	
9,600.0	7,066.1	9,750.2	7,171.5	71.8	72.2	-94.79	-910.1	-2,072.4	1,249.6	1,106.3	143.31	8.720	
9,700.0	7,065.6	9,850.2	7,171.2	74.5	74.9	-94.80	-910.1	-2,172.4	1,249.6	1,100.9	148.71	8.403	
9,800.0	7,065.1	9,950.2	7,170.8	77.2	77.6	-94.80	-910.1	-2,272.4	1,249.7	1,095.5	154.12	8.108	
9,900.0	7,064.7	10,050.2	7,170.4	80.0	80.3	-94.81	-910.1	-2,372.4	1,249.7	1,090.1	159.55	7.833	
10,000.0	7,064.2	10,150.2	7,170.1	82.7	83.1	-94.82	-910.1	-2,472.4	1,249.7	1,084.7	164.98	7.575	
10,100.0	7,063.7	10,250.2	7,169.7	85.4	85.8	-94.82	-910.1	-2,572.4	1,249.7	1,079.3	170.43	7.333	
10,200.0	7,063.2	10,350.2	7,169.3	88.2	88.5	-94.83	-910.1	-2,672.4	1,249.7	1,073.8	175.88	7.105	
10,300.0	7,062.7	10,450.2	7,169.0	90.9	91.3	-94.83	-910.1	-2,772.4	1,249.7	1,068.4	181.35	6.891	
10,400.0	7,062.2	10,550.2	7,168.6	93.6	94.0	-94.84	-910.1	-2,872.4	1,249.7	1,062.9	186.82	6.689	
10,500.0	7,061.7	10,650.2	7,168.3	96.4	96.8	-94.84	-910.1	-2,972.4	1,249.7	1,057.4	192.30	6.499	
10,600.0	7,061.3	10,750.2	7,167.9	99.2	99.5	-94.85	-910.1	-3,072.4	1,249.7	1,051.9	197.78	6.319	
10,700.0	7,060.8	10,850.2	7,167.5	101.9	102.3	-94.85	-910.1	-3,172.4	1,249.7	1,046.5	203.28	6.148	
10,800.0	7,060.3	10,950.2	7,167.2	104.7	105.0	-94.86	-910.1	-3,272.4	1,249.7	1,041.0	208.77	5.986	
10,900.0	7,059.8	11,050.2	7,166.8	107.4	107.8	-94.87	-910.1	-3,372.4	1,249.8	1,035.5	214.28	5.832	
11,000.0	7,059.3	11,150.2	7,166.5	110.2	110.5	-94.87	-910.1	-3,472.4	1,249.8	1,030.0	219.78	5.686	
11,100.0	7,058.8	11,250.2	7,166.1	113.0	113.3	-94.88	-910.0	-3,572.4	1,249.8	1,024.5	225.29	5.547	
11,200.0	7,058.3	11,350.2	7,165.7	115.7	116.1	-94.88	-910.0	-3,672.4	1,249.8	1,019.0	230.81	5.415	
11,300.0	7,057.9	11,450.2	7,165.4	118.5	118.8	-94.89	-910.0	-3,772.4	1,249.8	1,013.5	236.33	5.288	
11,400.0	7,057.4	11,550.2	7,165.0	121.3	121.6	-94.89	-910.0	-3,872.4	1,249.8	1,007.9	241.85	5.168	
11,500.0	7,056.9	11,650.2	7,164.6	124.0	124.4	-94.90	-910.0	-3,972.4	1,249.8	1,002.4	247.38	5.052	
11,600.0	7,056.4	11,750.2	7,164.3	126.8	127.1	-94.91	-910.0	-4,072.4	1,249.8	996.9	252.91	4.942	
11,659.3	7,056.1	11,809.5	7,164.1	128.5	128.8	-94.91	-910.0	-4,131.7	1,249.8	993.6	256.19	4.879	
11,686.6	7,056.0	11,828.8	7,164.0	129.2	129.3	-94.91	-910.0	-4,151.0	1,249.8	992.3	257.48	4.854 SF	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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	1.0	1.0	0.0	0.0	-179.73	-59.7	-0.3	59.7				
100.0	100.0	101.0	101.0	0.1	0.1	-179.73	-59.7	-0.3	59.7	59.5	0.20	303.790	
200.0	200.0	201.0	201.0	0.3	0.3	-179.73	-59.7	-0.3	59.7	59.1	0.65	92.458	
300.0	300.0	301.0	301.0	0.5	0.5	-179.73	-59.7	-0.3	59.7	58.7	1.10	54.527	
400.0	400.0	401.0	401.0	0.8	0.8	-179.73	-59.7	-0.3	59.7	58.2	1.55	38.664	CC, ES
500.0	500.0	501.0	501.0	1.0	1.0	117.85	-59.7	-0.3	60.5	58.6	1.99	30.436	
600.0	599.8	600.0	600.0	1.2	1.2	120.57	-60.7	1.2	64.0	61.6	2.42	26.479	
700.0	699.5	698.4	698.3	1.5	1.4	122.79	-63.5	5.5	71.0	68.1	2.85	24.857	
800.0	798.7	796.8	796.2	1.7	1.6	124.37	-68.1	12.6	81.4	78.1	3.34	24.407	
900.0	897.5	894.6	893.3	2.0	1.9	125.31	-74.5	22.5	95.3	91.4	3.87	24.614	
1,000.0	995.6	991.7	989.3	2.4	2.2	125.76	-82.7	35.0	112.5	108.0	4.47	25.147	
1,000.1	995.8	991.8	989.4	2.4	2.2	125.76	-82.7	35.0	112.5	108.1	4.47	25.148	
1,100.0	1,093.4	1,088.2	1,084.1	2.8	2.5	125.56	-92.5	50.2	132.0	126.9	5.14	25.662	
1,200.0	1,191.3	1,185.9	1,179.6	3.2	2.9	124.70	-103.6	67.2	152.3	146.4	5.87	25.964	
1,300.0	1,289.1	1,283.8	1,275.4	3.6	3.3	124.04	-114.7	84.2	172.6	166.0	6.61	26.104	
1,400.0	1,386.9	1,381.7	1,371.2	4.1	3.7	123.51	-125.8	101.3	193.0	185.6	7.38	26.156	
1,500.0	1,484.7	1,479.6	1,466.9	4.5	4.1	123.08	-136.9	118.4	213.3	205.2	8.15	26.158	
1,600.0	1,582.5	1,577.5	1,562.7	4.9	4.6	122.73	-147.9	135.4	233.7	224.7	8.94	26.131	
1,700.0	1,680.3	1,675.4	1,658.4	5.4	5.0	122.44	-159.0	152.5	254.1	244.3	9.74	26.093	
1,800.0	1,778.1	1,773.3	1,754.2	5.8	5.4	122.19	-170.1	169.6	274.4	263.9	10.54	26.047	
1,900.0	1,875.9	1,871.2	1,849.9	6.3	5.9	121.97	-181.2	186.6	294.8	283.5	11.34	25.998	
2,000.0	1,973.8	1,969.1	1,945.7	6.7	6.3	121.78	-192.3	203.7	315.2	303.1	12.15	25.948	
2,100.0	2,071.6	2,066.9	2,041.5	7.2	6.8	121.61	-203.4	220.7	335.6	322.6	12.96	25.899	
2,200.0	2,169.4	2,164.8	2,137.2	7.6	7.2	121.47	-214.5	237.8	356.0	342.2	13.77	25.851	
2,300.0	2,267.2	2,262.7	2,233.0	8.1	7.6	121.34	-225.6	254.9	376.4	361.8	14.59	25.806	
2,400.0	2,365.0	2,360.6	2,328.7	8.5	8.1	121.22	-236.6	271.9	396.8	381.4	15.40	25.762	
2,500.0	2,462.8	2,458.5	2,424.5	9.0	8.5	121.11	-247.7	289.0	417.2	401.0	16.22	25.721	
2,600.0	2,560.6	2,556.4	2,520.2	9.4	9.0	121.02	-258.8	306.1	437.6	420.5	17.04	25.683	
2,700.0	2,658.5	2,654.3	2,616.0	9.9	9.4	120.93	-269.9	323.1	458.0	440.1	17.86	25.646	
2,800.0	2,756.3	2,752.2	2,711.7	10.3	9.9	120.85	-281.0	340.2	478.4	459.7	18.68	25.612	
2,900.0	2,854.1	2,850.1	2,807.5	10.8	10.4	120.78	-292.1	357.2	498.8	479.3	19.50	25.579	
3,000.0	2,951.9	2,948.0	2,903.3	11.2	10.8	120.71	-303.2	374.3	519.2	498.9	20.32	25.548	
3,100.0	3,049.7	3,045.9	2,999.0	11.7	11.3	120.65	-314.3	391.4	539.6	518.4	21.14	25.519	
3,200.0	3,147.5	3,143.8	3,094.8	12.1	11.7	120.59	-325.4	408.4	560.0	538.0	21.97	25.492	
3,300.0	3,245.3	3,241.7	3,190.5	12.6	12.2	120.53	-336.4	425.5	580.4	557.6	22.79	25.466	
3,400.0	3,343.2	3,339.6	3,286.3	13.0	12.6	120.48	-347.5	442.5	600.8	577.2	23.62	25.441	
3,500.0	3,441.0	3,437.5	3,382.0	13.5	13.1	120.44	-358.6	459.6	621.2	596.8	24.44	25.418	
3,600.0	3,538.8	3,535.4	3,477.8	13.9	13.5	120.39	-369.7	476.7	641.6	616.3	25.26	25.396	
3,700.0	3,636.6	3,633.3	3,573.6	14.4	14.0	120.35	-380.8	493.7	662.0	635.9	26.09	25.375	
3,800.0	3,734.4	3,731.2	3,669.3	14.8	14.4	120.31	-391.9	510.8	682.4	655.5	26.92	25.354	
3,900.0	3,832.2	3,829.1	3,765.1	15.3	14.9	120.28	-403.0	527.9	702.8	675.1	27.74	25.335	
4,000.0	3,930.0	3,927.0	3,860.8	15.7	15.3	120.24	-414.1	544.9	723.2	694.7	28.57	25.317	
4,059.3	3,988.0	3,985.0	3,917.6	16.0	15.6	120.22	-420.6	555.0	735.3	706.3	29.06	25.307	
4,100.0	4,027.9	4,024.9	3,956.6	16.2	15.8	120.33	-425.1	562.0	743.5	714.1	29.39	25.299	
4,200.0	4,126.3	4,123.0	4,052.6	16.5	16.2	120.42	-436.3	579.1	762.3	732.2	30.13	25.305	
4,300.0	4,225.3	4,221.4	4,148.8	16.8	16.7	120.27	-447.4	596.2	779.5	748.6	30.82	25.288	
4,400.0	4,324.7	4,319.8	4,245.0	17.0	17.2	119.89	-458.5	613.4	794.9	763.5	31.48	25.255	
4,500.0	4,424.4	4,418.1	4,341.2	17.2	17.6	119.29	-469.7	630.5	808.8	776.8	32.08	25.211	
4,600.0	4,524.4	4,523.7	4,444.6	17.3	18.1	118.44	-481.4	648.6	821.1	788.4	32.62	25.169	
4,659.4	4,583.8	4,592.5	4,512.3	17.4	18.3	-178.27	-488.1	658.9	826.9	800.6	26.30	31.439	
4,700.0	4,624.4	4,639.8	4,559.0	17.5	18.4	-178.72	-492.2	665.2	830.3	803.8	26.48	31.357	
4,800.0	4,724.4	4,757.2	4,675.4	17.6	18.7	-179.61	-500.6	678.0	837.3	810.4	26.91	31.115	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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
4,900.0	4,824.4	4,875.8	4,793.5	17.7	18.9	179.78	-506.3	686.9	842.1	814.8	27.31	30.836	
5,000.0	4,924.4	4,995.0	4,912.6	17.8	19.1	179.46	-509.5	691.7	844.8	817.1	27.68	30.521	
5,100.0	5,024.4	5,107.8	5,025.4	18.0	19.3	179.40	-510.0	692.6	845.3	817.3	28.02	30.170	
5,200.0	5,124.4	5,207.8	5,125.4	18.1	19.4	179.40	-510.0	692.6	845.3	817.0	28.33	29.839	
5,300.0	5,224.4	5,307.8	5,225.4	18.2	19.5	179.40	-510.0	692.6	845.3	816.6	28.64	29.511	
5,400.0	5,324.4	5,407.8	5,325.4	18.4	19.6	179.40	-510.0	692.6	845.3	816.3	28.96	29.186	
5,500.0	5,424.4	5,507.8	5,425.4	18.5	19.7	179.40	-510.0	692.6	845.3	816.0	29.28	28.866	
5,600.0	5,524.4	5,607.8	5,525.4	18.6	19.8	179.40	-510.0	692.6	845.3	815.7	29.61	28.549	
5,700.0	5,624.4	5,707.8	5,625.4	18.8	20.0	179.40	-510.0	692.6	845.3	815.4	29.94	28.236	
5,800.0	5,724.4	5,807.8	5,725.4	18.9	20.1	179.40	-510.0	692.6	845.3	815.0	30.27	27.927	
5,900.0	5,824.4	5,907.8	5,825.4	19.1	20.2	179.40	-510.0	692.6	845.3	814.7	30.60	27.622	
6,000.0	5,924.4	6,007.8	5,925.4	19.2	20.3	179.40	-510.0	692.6	845.3	814.4	30.94	27.321	
6,100.0	6,024.4	6,107.8	6,025.4	19.4	20.5	179.40	-510.0	692.6	845.3	814.0	31.28	27.024	
6,200.0	6,124.4	6,207.8	6,125.4	19.5	20.6	179.40	-510.0	692.6	845.3	813.7	31.62	26.731	
6,300.0	6,224.4	6,307.8	6,225.4	19.7	20.7	179.40	-510.0	692.6	845.3	813.3	31.97	26.443	
6,400.0	6,324.4	6,407.8	6,325.4	19.8	20.9	179.40	-510.0	692.6	845.3	813.0	32.31	26.158	
6,435.4	6,359.8	6,443.2	6,360.8	19.9	20.9	179.40	-510.0	692.6	845.3	812.9	32.44	26.058	
6,450.0	6,374.4	6,457.8	6,375.4	19.9	20.9	-90.61	-510.0	692.6	845.3	807.0	38.28	22.084	
6,500.0	6,424.3	6,507.7	6,425.3	19.9	21.0	-90.80	-510.0	692.6	845.3	806.9	38.39	22.021	
6,550.0	6,473.9	6,557.6	6,475.2	19.9	21.1	-91.20	-510.0	692.5	845.4	807.0	38.46	21.985	
6,600.0	6,522.9	6,608.6	6,526.1	19.9	21.1	-91.68	-510.0	689.8	845.6	807.2	38.47	21.983	
6,650.0	6,571.2	6,660.2	6,577.3	19.9	21.1	-92.15	-510.0	683.4	845.9	807.4	38.42	22.016	
6,700.0	6,618.4	6,712.3	6,628.4	19.8	21.1	-92.61	-510.0	673.2	846.1	807.8	38.32	22.079	
6,750.0	6,664.3	6,765.0	6,679.1	19.8	21.0	-93.06	-510.0	659.2	846.5	808.3	38.19	22.168	
6,800.0	6,708.8	6,818.2	6,729.2	19.7	21.0	-93.50	-510.0	641.2	846.8	808.8	38.02	22.276	
6,850.0	6,751.6	6,871.9	6,778.3	19.6	20.9	-93.92	-510.0	619.4	847.3	809.4	37.83	22.396	
6,900.0	6,792.5	6,926.2	6,826.1	19.5	20.8	-94.32	-510.0	593.7	847.7	810.0	37.65	22.518	
6,950.0	6,831.2	6,981.0	6,872.2	19.4	20.7	-94.70	-510.0	564.1	848.1	810.7	37.48	22.630	
7,000.0	6,867.7	7,036.4	6,916.3	19.3	20.6	-95.06	-510.0	530.7	848.6	811.2	37.36	22.717	
7,050.0	6,901.7	7,092.2	6,958.1	19.3	20.5	-95.39	-510.0	493.7	849.0	811.7	37.30	22.763	
7,100.0	6,933.0	7,148.5	6,997.2	19.3	20.5	-95.70	-510.0	453.3	849.5	812.1	37.34	22.752	
7,150.0	6,961.6	7,205.2	7,033.2	19.3	20.4	-95.97	-510.0	409.5	849.9	812.4	37.50	22.664	
7,200.0	6,987.2	7,262.3	7,065.9	19.4	20.4	-96.22	-510.0	362.7	850.3	812.5	37.81	22.487	
7,250.0	7,009.8	7,319.7	7,094.9	19.6	20.5	-96.43	-510.0	313.1	850.6	812.3	38.29	22.215	
7,300.0	7,029.2	7,377.4	7,120.0	19.9	20.6	-96.60	-510.0	261.2	850.9	811.9	38.95	21.845	
7,350.0	7,045.3	7,435.4	7,140.8	20.2	20.9	-96.73	-510.0	207.1	851.1	811.3	39.80	21.384	
7,400.0	7,058.1	7,493.5	7,157.3	20.6	21.2	-96.83	-510.0	151.3	851.3	810.5	40.84	20.845	
7,450.0	7,067.5	7,551.8	7,169.2	21.2	21.7	-96.89	-510.0	94.3	851.4	809.3	42.06	20.244	
7,500.0	7,073.5	7,610.1	7,176.5	21.8	22.3	-96.91	-510.0	36.5	851.4	808.0	43.44	19.599	
7,550.0	7,075.9	7,668.5	7,179.0	22.5	23.0	-96.89	-510.0	-21.8	851.4	806.4	44.96	18.937	
7,563.1	7,076.0	7,682.2	7,179.0	22.7	23.2	-96.88	-510.0	-35.5	851.4	806.0	45.36	18.771	
7,563.9	7,076.0	7,683.0	7,179.0	22.7	23.2	-96.88	-510.0	-36.4	851.4	806.0	45.38	18.761	
7,600.0	7,075.8	7,719.1	7,178.8	23.2	23.7	-96.88	-510.0	-72.4	851.4	804.9	46.49	18.311	
7,700.0	7,075.3	7,819.1	7,178.5	24.9	25.3	-96.89	-510.0	-172.4	851.4	801.6	49.84	17.082	
7,800.0	7,074.9	7,919.1	7,178.1	26.7	27.2	-96.90	-510.0	-272.4	851.4	797.8	53.56	15.895	
7,900.0	7,074.4	8,019.1	7,177.7	28.8	29.2	-96.90	-510.0	-372.4	851.4	793.8	57.59	14.784	
8,000.0	7,073.9	8,119.1	7,177.4	30.9	31.3	-96.91	-510.0	-472.4	851.4	789.6	61.86	13.765	
8,100.0	7,073.4	8,219.1	7,177.0	33.2	33.6	-96.92	-510.0	-572.4	851.4	785.1	66.32	12.839	
8,200.0	7,072.9	8,319.1	7,176.6	35.5	35.9	-96.93	-510.0	-672.4	851.5	780.5	70.94	12.003	
8,300.0	7,072.4	8,419.1	7,176.3	37.9	38.3	-96.94	-510.0	-772.4	851.5	775.8	75.69	11.250	
8,400.0	7,071.9	8,519.1	7,175.9	40.3	40.8	-96.94	-510.0	-872.4	851.5	770.9	80.55	10.572	
8,500.0	7,071.5	8,619.1	7,175.5	42.8	43.2	-96.95	-510.0	-972.4	851.5	766.0	85.49	9.960	

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 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

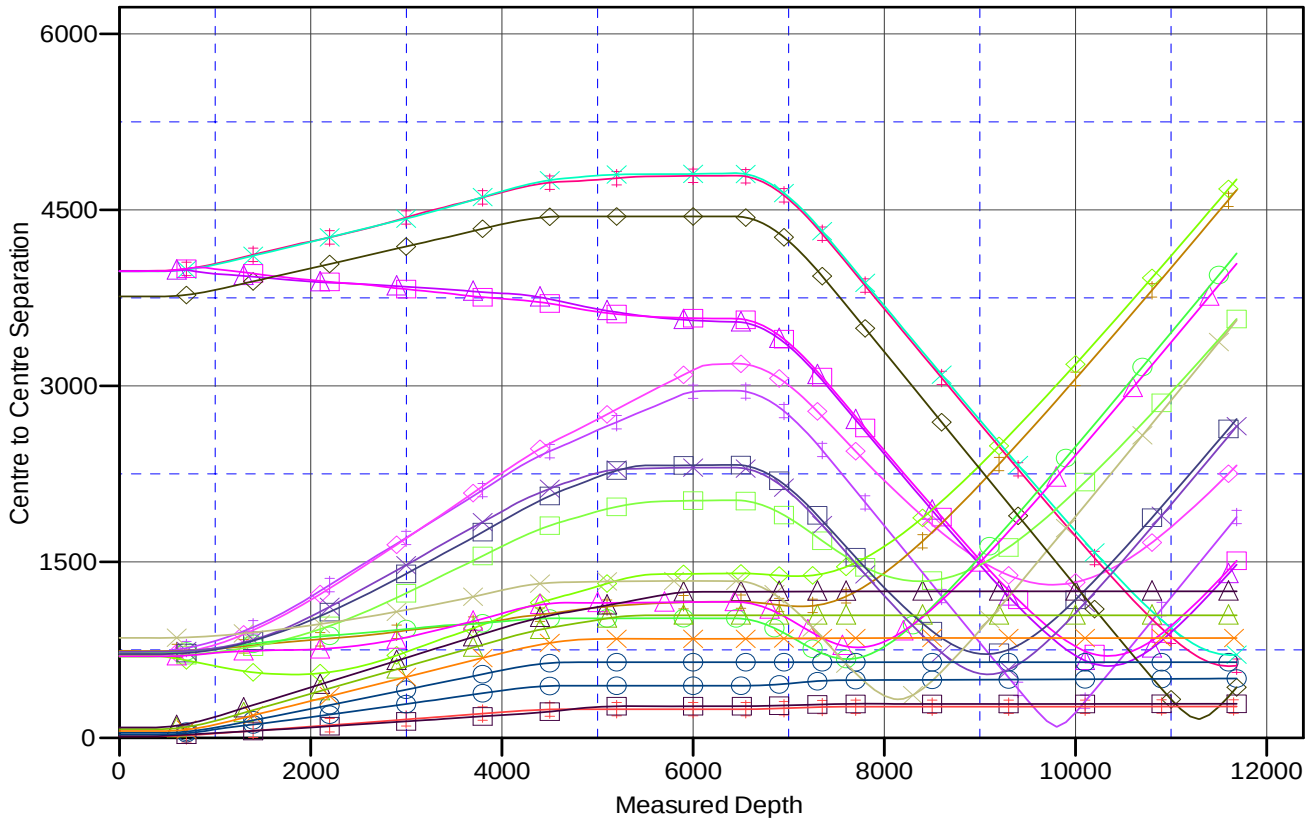
Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,600.0	7,071.0	8,719.1	7,175.2	45.4	45.8	-96.96	-510.0	-1,072.4	851.5	761.0	90.51	9.408	
8,700.0	7,070.5	8,819.1	7,174.8	47.9	48.3	-96.97	-510.0	-1,172.4	851.5	755.9	95.59	8.908	
8,800.0	7,070.0	8,919.1	7,174.4	50.5	50.9	-96.98	-510.0	-1,272.4	851.5	750.8	100.72	8.455	
8,900.0	7,069.5	9,019.1	7,174.1	53.1	53.5	-96.98	-510.0	-1,372.4	851.6	745.7	105.90	8.041	
9,000.0	7,069.0	9,119.1	7,173.7	55.8	56.2	-96.99	-510.0	-1,472.4	851.6	740.5	111.12	7.664	
9,100.0	7,068.5	9,219.1	7,173.3	58.4	58.8	-97.00	-510.0	-1,572.4	851.6	735.2	116.36	7.318	
9,200.0	7,068.1	9,319.1	7,173.0	61.1	61.5	-97.01	-510.0	-1,672.4	851.6	730.0	121.64	7.001	
9,300.0	7,067.6	9,419.1	7,172.6	63.7	64.1	-97.02	-510.0	-1,772.4	851.6	724.7	126.95	6.708	
9,400.0	7,067.1	9,519.1	7,172.2	66.4	66.8	-97.02	-510.0	-1,872.4	851.6	719.4	132.27	6.438	
9,500.0	7,066.6	9,619.1	7,171.9	69.1	69.5	-97.03	-510.0	-1,972.4	851.7	714.0	137.62	6.188	
9,600.0	7,066.1	9,719.1	7,171.5	71.8	72.2	-97.04	-510.0	-2,072.4	851.7	708.7	142.98	5.956	
9,700.0	7,065.6	9,819.1	7,171.1	74.5	74.9	-97.05	-510.0	-2,172.4	851.7	703.3	148.36	5.741	
9,800.0	7,065.1	9,919.1	7,170.8	77.2	77.6	-97.06	-510.0	-2,272.4	851.7	697.9	153.76	5.539	
9,900.0	7,064.7	10,019.1	7,170.4	80.0	80.4	-97.07	-510.0	-2,372.4	851.7	692.5	159.16	5.351	
10,000.0	7,064.2	10,119.1	7,170.1	82.7	83.1	-97.07	-510.0	-2,472.4	851.7	687.1	164.58	5.175	
10,100.0	7,063.7	10,219.1	7,169.7	85.4	85.8	-97.08	-510.0	-2,572.4	851.7	681.7	170.01	5.010	
10,200.0	7,063.2	10,319.1	7,169.3	88.2	88.6	-97.09	-510.0	-2,672.4	851.8	676.3	175.44	4.855	
10,300.0	7,062.7	10,419.1	7,169.0	90.9	91.3	-97.10	-510.0	-2,772.4	851.8	670.9	180.89	4.709	
10,400.0	7,062.2	10,519.1	7,168.6	93.6	94.0	-97.11	-510.0	-2,872.4	851.8	665.4	186.34	4.571	
10,500.0	7,061.7	10,619.1	7,168.3	96.4	96.8	-97.11	-510.0	-2,972.4	851.8	660.0	191.80	4.441	
10,600.0	7,061.3	10,719.1	7,167.9	99.2	99.5	-97.12	-510.0	-3,072.4	851.8	654.6	197.26	4.318	
10,700.0	7,060.8	10,819.1	7,167.5	101.9	102.3	-97.13	-510.0	-3,172.4	851.8	649.1	202.73	4.202	
10,800.0	7,060.3	10,919.1	7,167.2	104.7	105.1	-97.14	-510.0	-3,272.4	851.8	643.6	208.21	4.091	
10,900.0	7,059.8	11,019.1	7,166.8	107.4	107.8	-97.15	-510.0	-3,372.4	851.9	638.2	213.69	3.986	
11,000.0	7,059.3	11,119.1	7,166.4	110.2	110.6	-97.16	-510.0	-3,472.4	851.9	632.7	219.18	3.887	
11,100.0	7,058.8	11,219.1	7,166.1	113.0	113.3	-97.16	-510.0	-3,572.4	851.9	627.2	224.67	3.792	
11,200.0	7,058.3	11,319.1	7,165.7	115.7	116.1	-97.17	-510.0	-3,672.4	851.9	621.7	230.16	3.701	
11,300.0	7,057.9	11,419.1	7,165.4	118.5	118.9	-97.18	-510.0	-3,772.4	851.9	616.3	235.66	3.615	
11,400.0	7,057.4	11,519.1	7,165.0	121.3	121.7	-97.19	-510.0	-3,872.4	851.9	610.8	241.16	3.533	
11,500.0	7,056.9	11,619.1	7,164.6	124.0	124.4	-97.20	-510.0	-3,972.4	852.0	605.3	246.66	3.454	
11,600.0	7,056.4	11,719.1	7,164.3	126.8	127.2	-97.21	-510.0	-4,072.4	852.0	599.8	252.17	3.379	
11,659.6	7,056.1	11,778.7	7,164.1	128.5	128.9	-97.21	-510.0	-4,132.0	852.0	596.5	255.45	3.335	
11,686.6	7,056.0	11,800.2	7,164.0	129.2	129.5	-97.21	-510.0	-4,153.5	851.9	595.2	256.79	3.318	SF

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to KB-EST @ 4951.5usft (Original Well E
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000

Coordinates are relative to: WALTERS 21P-204
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.39°

Ladder Plot



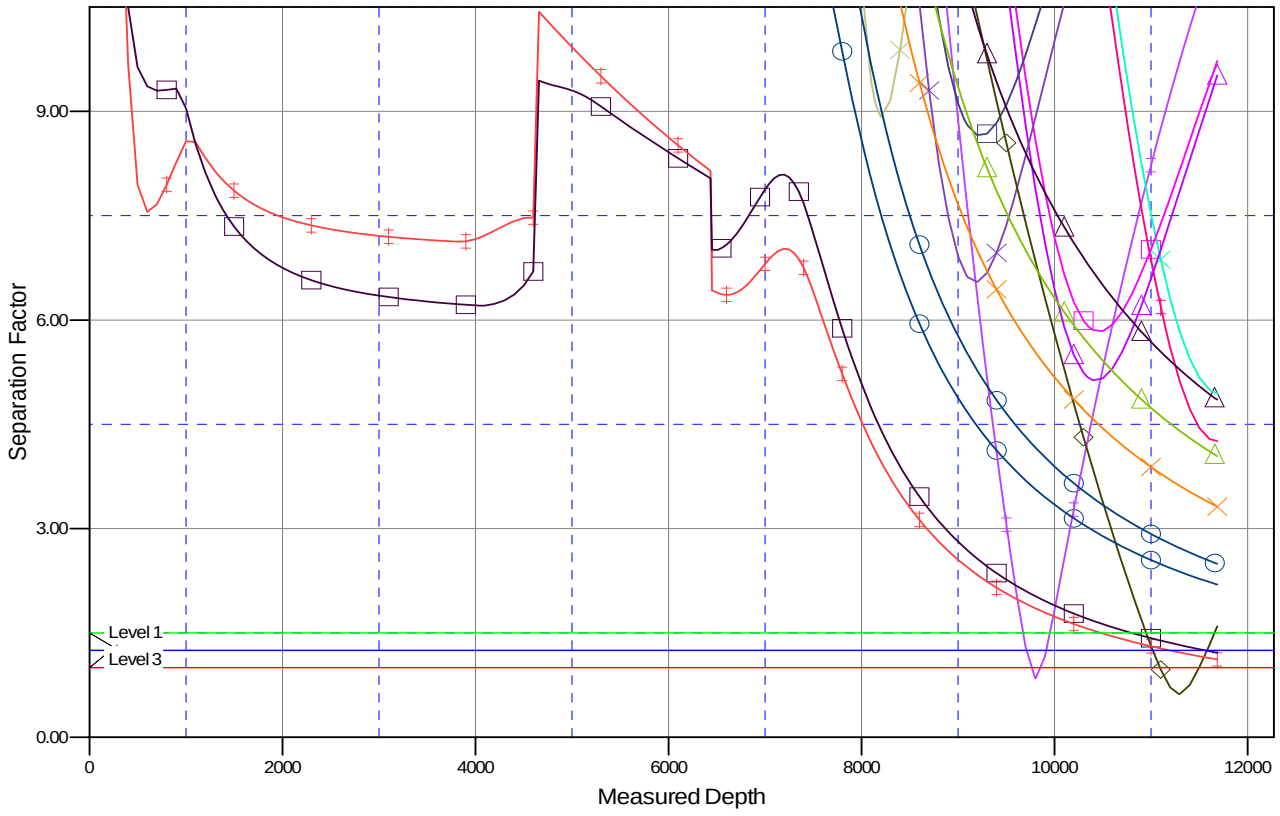
L E G E N D

)XD, Wellbore #1, Wellbore #1 V0
)YD, Wellbore #1, Wellbore #1 V0
3-20D, Wellbore #1, Wellbore #1 V0
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-234, ORIGINAL WELLBORE, PROPOSAL #1 V0
WALTERS 21P-304, ORIGINAL WEI
WALTERS 21P-314, ORIGINAL WEI
WALTERS 21P-434, ORIGINAL WEI
WALTERS 21Q-214, ORIGINAL WE
WALTERS 21Q-304, ORIGINAL WE
WALTERS 21Q-314, ORIGINAL WE

Company:	PDC ENERGY	**Local Co-ordinate Reference:**	Well WALTERS 21P-204
Project:	WELD COUNTY, COLORADO	**TVD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Reference Site:	SE SW SEC. 21 T4N R67W 6th P.M.	**MD Reference:**	KB-EST @ 4951.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	True
Reference Well:	WALTERS 21P-204	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	**Database:**	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to KB-EST @ 4951.5usft (Original Well E Coordinates are relative to: WALTERS 21P-204
Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, Colorado Northern Zone
Central Meridian is -105.500000 Grid Convergence at Surface is: 0.39°

Separation Factor Plot



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-234, ORIGINAL WELLBORE, PROPOSAL #1 V0
WALTERS 21P-304, ORIGINAL WEI
WALTERS 21P-314, ORIGINAL WEI
WALTERS 21P-434, ORIGINAL WEI
WALTERS 21Q-214, ORIGINAL WE
WALTERS 21Q-304, ORIGINAL WE
WALTERS 21Q-314, ORIGINAL WE