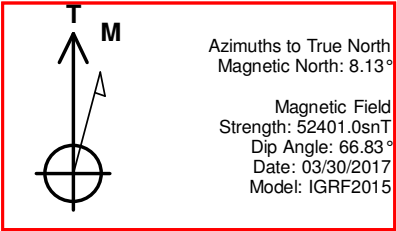


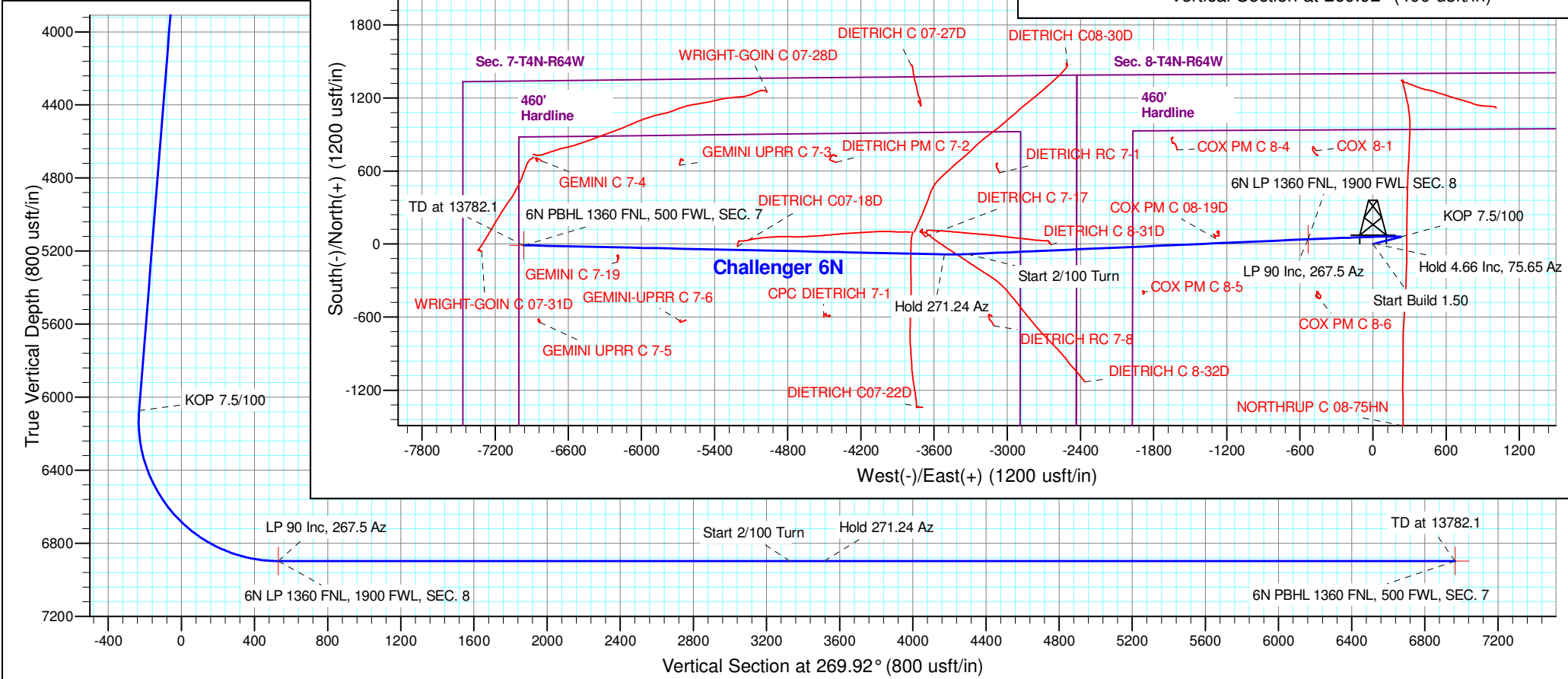
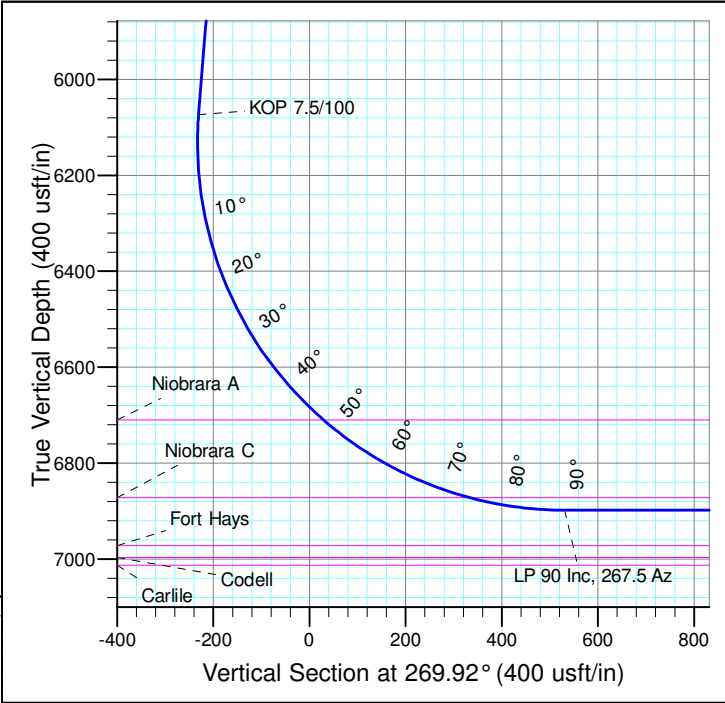


Well Name: Challenger 6N
Surface Location: CHALLENGER 4N64W08 1-9 PAD
North American Datum 1983
US State Plane 1983 , Colorado Northern Zone
Ground Elevation: 4775.0
WELL @ 4798.0usft (Original Well Elev)
Easting Latitude Longitude Slot
0.0 0.0 1364504.61 3257809.12 40° 19' 48.993 N 104° 34' 30.946 W

SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	3000.0	0.00	0.00	3000.0	0.0	0.0	0.00	0.00	0.0	
3	3310.7	4.66	75.65	3310.3	3.1	12.2	1.50	75.65	-12.2	
4	6082.9	4.66	75.65	6073.4	58.9	230.4	0.00	0.00	-230.5	
5	7343.7	90.00	267.50	6898.0	39.5	-531.0	7.50	-168.11	530.9	6N LP 1360 FNL, 1900 FWL, SEC. 8
6	10143.7	90.00	267.50	6898.0	-82.6	-3328.3	0.00	0.00	3328.4	
7	10330.7	90.00	271.24	6898.0	-84.7	-3515.3	2.00	90.00	3515.4	
8	13782.1	90.00	271.24	6898.0	-10.0	-6965.8	0.00	0.00	6965.8	6N PBHL 1360 FNL, 500 FWL, SEC. 7



Project: SEC. 8-T4N-R64W
Site: CHALLENGER 4N64W08 1-9 PAD
Well: Challenger 6N
Wellbore: Wellbore #1
Design: Design #1 30Mar17 kjs



PDC Energy Inc. DJ Basin

SEC. 8-T4N-R64W

CHALLENGER 4N64W08 1-9 PAD

Challenger 6N

Wellbore #1

Design #1 30Mar17 kjs

Anticollision Summary Report

02 June, 2017

Anticollision Summary Report

Company:	PDC Energy Inc. DJ Basin	Local Co-ordinate Reference:	Well Challenger 6N
Project:	SEC. 8-T4N-R64W	TVD Reference:	WELL @ 4798.0usft (Original Well Elev)
Reference Site:	CHALLENGER 4N64W08 1-9 PAD	MD Reference:	WELL @ 4798.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Challenger 6N	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.45 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.1 Single User Db
Reference Design:	Design #1 30Mar17 kjs	Offset TVD Reference:	Offset Datum

Reference	Design #1 30Mar17 kjs		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.0usft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 1,682.5 usft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.45 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	06/02/17		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	13,781.4	Design #1 30Mar17 kjs (Wellbore #1)	MWD	MWD - Standard

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
CHALLENGER 4N64W08 1-9 PAD						
Challenger 1N - Wellbore #1 - Design #1 30Mar17 kjs	200.0	200.0	74.9	74.2	98.251	CC, ES
Challenger 1N - Wellbore #1 - Design #1 30Mar17 kjs	13,782.1	13,803.3	1,249.6	766.9	2.589	SF
Challenger 2N - Wellbore #1 - Design #1 30Mar17 kjs	200.0	200.0	60.0	59.2	78.668	CC, ES
Challenger 2N - Wellbore #1 - Design #1 30Mar17 kjs	13,782.1	13,852.3	1,003.5	519.7	2.074	SF
Challenger 3N - Wellbore #1 - Design #1 30Mar17 kjs	200.0	200.0	45.0	44.2	58.989	CC, ES
Challenger 3N - Wellbore #1 - Design #1 30Mar17 kjs	13,782.1	13,750.1	755.4	273.6	1.568	SF
Challenger 4N - Wellbore #1 - Design #1 30Mar17 kjs	200.0	200.0	30.0	29.2	39.310	CC
Challenger 4N - Wellbore #1 - Design #1 30Mar17 kjs	13,782.1	13,793.1	467.0	-15.3	0.968	Level 1, ES, SF
Challenger 5N - Wellbore #1 - Design #1 30Mar17 kjs	2,000.0	2,000.0	15.0	4.3	1.406	Level 3, CC
Challenger 5N - Wellbore #1 - Design #1 30Mar17 kjs	13,782.1	13,724.7	244.5	-225.5	0.520	Level 1, ES, SF
Challenger 7N - Wellbore #1 - Design #1 30Mar17 kjs	1,800.0	1,800.0	15.0	5.4	1.568	CC
Challenger 7N - Wellbore #1 - Design #1 30Mar17 kjs	13,782.1	13,706.8	283.8	-185.0	0.605	Level 1, ES, SF
Challenger 8N - Wellbore #1 - Design #1 30Mar17 kjs	200.0	200.0	30.0	29.3	39.358	CC
Challenger 8N - Wellbore #1 - Design #1 30Mar17 kjs	13,782.1	13,782.7	488.0	5.3	1.011	Level 2, ES, SF
Challenger 9N - Wellbore #1 - Design #1 30Mar17 kjs	200.0	200.0	45.0	44.2	58.989	CC, ES
Challenger 9N - Wellbore #1 - Design #1 30Mar17 kjs	13,782.1	13,730.2	781.1	300.8	1.626	SF

Company:	PDC Energy Inc. DJ Basin	Local Co-ordinate Reference:	Well Challenger 6N
Project:	SEC. 8-T4N-R64W	TVD Reference:	WELL @ 4798.0usft (Original Well Elev)
Reference Site:	CHALLENGER 4N64W08 1-9 PAD	MD Reference:	WELL @ 4798.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Challenger 6N	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.45 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.1 Single User Db
Reference Design:	Design #1 30Mar17 kjs	Offset TVD Reference:	Offset Datum

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Existing Wells Sec. 7-T4N-R64W						
CPC DIETRICH 7-1 - Wellbore #1 - Wellbore #1	11,310.2	6,907.4	528.1	354.9	3.049	CC, ES
CPC DIETRICH 7-1 - Wellbore #1 - Wellbore #1	11,400.0	6,907.7	535.7	359.4	3.039	SF
DIETRICH C 07-27D - Wellbore #1 - Wellbore #1	10,637.4	6,931.2	1,550.5	1,400.0	10.305	CC
DIETRICH C 07-27D - Wellbore #1 - Wellbore #1	10,700.0	6,931.3	1,551.7	1,399.1	10.169	ES
DIETRICH C 07-27D - Wellbore #1 - Wellbore #1	11,200.0	6,931.7	1,649.4	1,479.7	9.721	SF
DIETRICH C 7-17 - Wellbore #1 - Wellbore #1	10,501.7	6,924.3	156.4	11.7	1.081	Level 2, CC, ES, SF
DIETRICH C 8-31D - Wellbore #1 - Wellbore #1	9,459.4	7,044.4	58.2	-58.3	0.500	Level 1, CC, ES, SF
DIETRICH C 8-32D - Wellbore #1 - Wellbore #1	9,227.5	7,195.0	1,087.6	975.4	9.691	CC
DIETRICH C 8-32D - Wellbore #1 - Wellbore #1	9,300.0	7,194.1	1,090.0	975.4	9.507	ES
DIETRICH C 8-32D - Wellbore #1 - Wellbore #1	9,600.0	7,190.0	1,149.6	1,024.9	9.218	SF
DIETRICH C07-18D - Wellbore #1 - Wellbore #1	12,026.9	7,146.2	51.0	-167.4	0.234	Level 1, CC, ES, SF
DIETRICH C07-22D - Wellbore #1 - Wellbore #1	10,498.6	7,135.9	1,259.7	1,109.2	8.368	CC
DIETRICH C07-22D - Wellbore #1 - Wellbore #1	10,500.0	7,135.8	1,259.7	1,109.1	8.365	ES
DIETRICH C07-22D - Wellbore #1 - Wellbore #1	10,900.0	7,116.4	1,322.0	1,157.7	8.049	SF
DIETRICH C08-30D - Wellbore #1 - Wellbore #1	9,259.9	7,303.9	1,529.5	1,416.0	13.479	CC
DIETRICH C08-30D - Wellbore #1 - Wellbore #1	9,300.0	7,303.8	1,530.0	1,415.2	13.326	ES
DIETRICH C08-30D - Wellbore #1 - Wellbore #1	9,900.0	7,301.9	1,658.0	1,523.0	12.281	SF
DIETRICH PM C 7-2 - Wellbore #1 - Wellbore #1	11,262.1	6,948.2	745.7	573.1	4.321	CC
DIETRICH PM C 7-2 - Wellbore #1 - Wellbore #1	11,300.0	6,945.0	746.7	572.8	4.294	ES
DIETRICH PM C 7-2 - Wellbore #1 - Wellbore #1	11,400.0	6,936.3	758.3	581.0	4.276	SF
DIETRICH RC 7-1 - Wellbore #1 - Wellbore #1	9,853.8	6,927.7	667.2	541.6	5.313	CC, ES
DIETRICH RC 7-1 - Wellbore #1 - Wellbore #1	10,000.0	6,924.2	683.0	552.5	5.233	SF
DIETRICH RC 7-8 - Wellbore #1 - Wellbore #1	9,957.4	6,891.0	583.0	455.5	4.570	CC, ES
DIETRICH RC 7-8 - Wellbore #1 - Wellbore #1	10,000.0	6,889.9	584.6	455.6	4.531	SF
GEMINI C 7-19 - Wellbore #1 - Wellbore #1	13,008.9	6,947.4	92.5	-138.5	0.401	Level 1, CC, ES, SF
GEMINI C 7-4 - Wellbore #1 - Wellbore #1	13,668.5	6,956.2	708.7	455.3	2.797	CC
GEMINI C 7-4 - Wellbore #1 - Wellbore #1	13,700.0	6,954.2	709.4	454.9	2.787	ES, SF
GEMINI UPRR C 7-3 - Wellbore #1 - Wellbore #1	12,516.7	6,977.5	686.4	471.8	3.199	CC, ES
GEMINI UPRR C 7-3 - Wellbore #1 - Wellbore #1	12,600.0	6,975.8	691.4	474.0	3.180	SF
GEMINI UPRR C 7-5 - Wellbore #1 - Wellbore #1	13,635.9	6,850.0	635.5	384.7	2.534	CC, ES
GEMINI UPRR C 7-5 - Wellbore #1 - Wellbore #1	13,700.0	6,850.0	638.8	385.7	2.524	SF
GEMINI-UPRR C 7-6 - Wellbore #1 - Wellbore #1	12,485.2	6,960.6	594.8	382.2	2.797	CC
GEMINI-UPRR C 7-6 - Wellbore #1 - Wellbore #1	12,500.0	6,960.5	595.0	381.8	2.791	ES, SF
NORTHROP C 08-75HN - Wellbore #1 - Wellbore #1	6,700.0	8,028.7	400.7	359.5	9.729	SF
NORTHROP C 08-75HN - Wellbore #1 - Wellbore #1	6,753.7	8,028.6	395.2	355.4	9.942	CC, ES
WRIGHT-GOIN C 07-28D - Wellbore #1 - Wellbore #1	11,829.3	7,303.0	1,312.0	1,108.1	6.435	CC
WRIGHT-GOIN C 07-28D - Wellbore #1 - Wellbore #1	11,900.0	7,298.2	1,313.9	1,107.6	6.368	ES
WRIGHT-GOIN C 07-28D - Wellbore #1 - Wellbore #1	12,100.0	7,284.7	1,339.5	1,126.3	6.283	SF
WRIGHT-GOIN C 07-31D - Wellbore #1 - Wellbore #1	13,782.1	7,035.7	352.2	92.0	1.353	Level 3, CC, ES, SF
Existing Wells Sec. 8-T4N-R64W						
COX 8-1 - Wellbore #1 - Wellbore #1	7,260.9	6,905.7	739.2	697.4	17.672	CC, ES
COX 8-1 - Wellbore #1 - Wellbore #1	7,600.0	6,900.8	815.3	764.7	16.100	SF
COX PM C 08-19D - Wellbore #1 - Wellbore #1	8,110.3	6,883.8	64.8	-0.2	0.997	Level 1, CC, ES, SF
COX PM C 8-4 - Wellbore #1 - Wellbore #1	8,389.3	6,940.2	797.3	721.7	10.547	CC
COX PM C 8-4 - Wellbore #1 - Wellbore #1	8,400.0	6,940.1	797.4	721.4	10.500	ES
COX PM C 8-4 - Wellbore #1 - Wellbore #1	8,700.0	6,935.9	855.7	769.9	9.980	SF
COX PM C 8-5 - Wellbore #1 - Wellbore #1	8,707.8	6,900.4	369.6	284.2	4.327	CC, ES
COX PM C 8-5 - Wellbore #1 - Wellbore #1	8,800.0	6,900.0	380.9	292.5	4.307	SF
COX PM C 8-6 - Wellbore #1 - Wellbore #1	7,298.9	6,887.5	459.7	418.3	11.092	CC
COX PM C 8-6 - Wellbore #1 - Wellbore #1	7,300.0	6,887.5	459.7	418.2	11.086	ES
COX PM C 8-6 - Wellbore #1 - Wellbore #1	7,400.0	6,888.2	470.6	426.7	10.710	SF

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

Company:	PDC Energy Inc. DJ Basin	Local Co-ordinate Reference:	Well Challenger 6N
Project:	SEC. 8-T4N-R64W	TVD Reference:	WELL @ 4798.0usft (Original Well Elev)
Reference Site:	CHALLENGER 4N64W08 1-9 PAD	MD Reference:	WELL @ 4798.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Challenger 6N	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.45 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.1 Single User Db
Reference Design:	Design #1 30Mar17 kjs	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4798.0usft (Original Well Ele

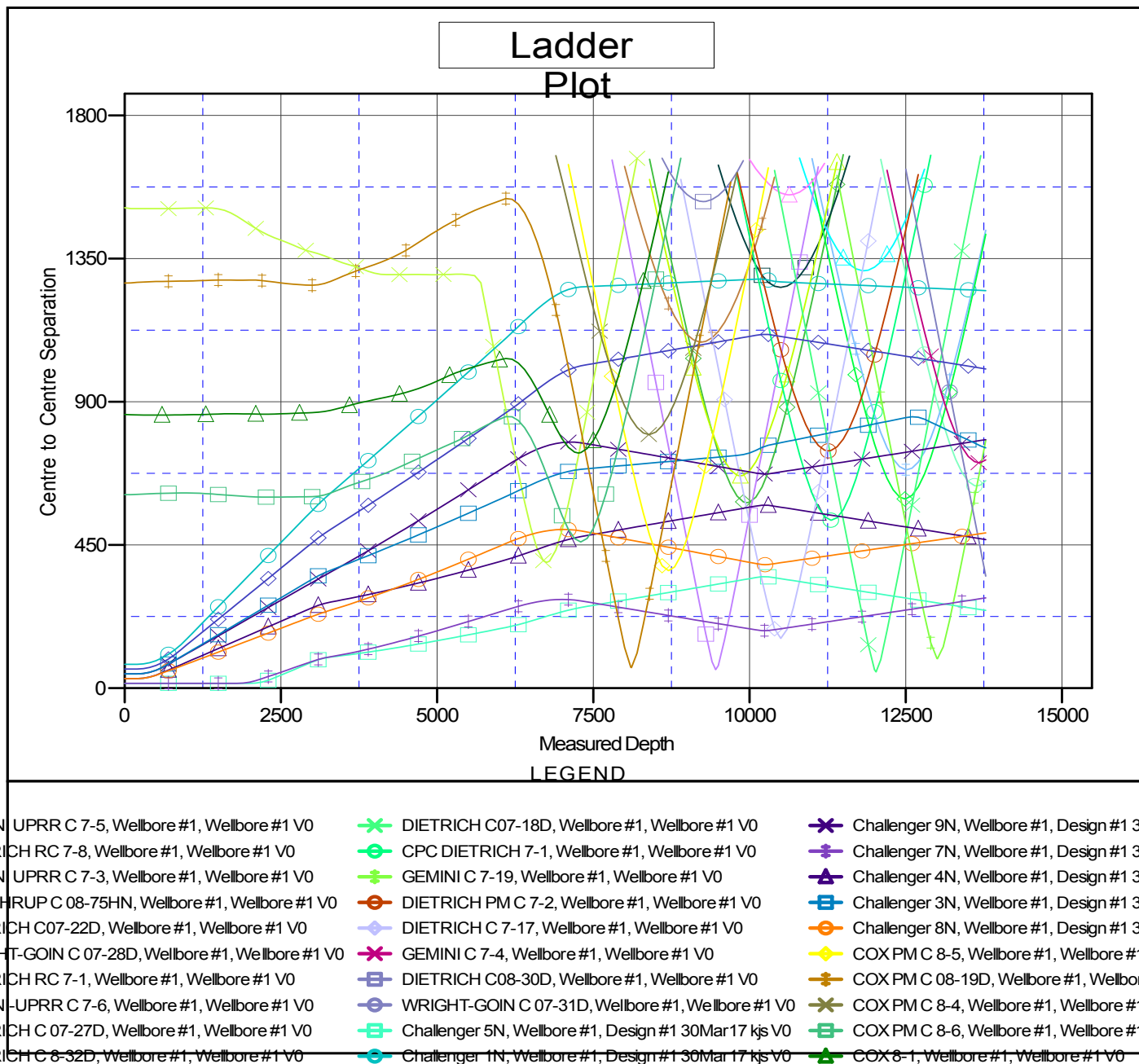
Offset Depths are relative to Offset Datum

Central Meridian is 105° 30' 0.000 W

Coordinates are relative to: Challenger 6N

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.60°



Company:	PDC Energy Inc. DJ Basin	Local Co-ordinate Reference:	Well Challenger 6N
Project:	SEC. 8-T4N-R64W	TVD Reference:	WELL @ 4798.0usft (Original Well Elev)
Reference Site:	CHALLENGER 4N64W08 1-9 PAD	MD Reference:	WELL @ 4798.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Challenger 6N	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.45 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.1 Single User Db
Reference Design:	Design #1 30Mar17 kjs	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4798.0usft (Original Well Ele

Offset Depths are relative to Offset Datum

Central Meridian is 105° 30' 0.000 W

Coordinates are relative to: Challenger 6N

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.60°

