

SYSDRILL
Closest Approach + Clearance Factor Report
Wellbore: Ocho LD 17-377HN (PWB)
Wellpath: Ocho LD 17-377HN (PWP#1)

Ellipse separations are reported ONLY if BOTH wells have uncertainty data
Only Depth and Magnetic Reference Field error terms are correlated across tie points
Scan limit is calculated on CENTRE to CENTRE distance

Summary data uses Closest Approach clearance calculation for all minima
Hole size/Casings ARE included
Hole size/Casings are NOT subtracted from Centre-Centre distance
Confidence limit of 95.00% / 2.80 SD.

Wellbore	
Name	Ocho LD 17-377HN (PWB)
Created	1-Sep-2016
Last Revised	1-Sep-2016
Well	
Name	Ocho LD 17-377HN
Government ID	
Last Revised	1-Sep-2016
Slot	
Name	Slot W07 - Ocho LD 17-377HN
Grid Northing	1237728.894
Grid Easting	3164196.969
Latitude	N39 59 4.0596
Longitude	W104 54 50.5188
North	-89.980
East	0.000
Installation	
Name	Ocho
Easting	3164196.374
Northing	1237818.868
Map Name	<unknown>
North Alignment	True
Field	
Name	Wattenburg
Easting	41136929.757
Northing	12284170.646
Map Name	<unknown>
North Alignment	Grid

Clearance Summary									
Offset WellName	Offset Wellbore	Offset Slot	Offset Structure	Separation [ft]	MD[R]	Diverging From[ft]	Ellipse Separation [ft]	Ellipse MD[R]	Clearance Factor
Ocho LD 17-374HC	Ocho LD 17-374HC (PWB)	Slot W11 - Ocho LD 17-374HC	Ocho		0.940	4242.400	17914.480	-6.490	4242.400
Ocho LD 17-374HN	Ocho LD 17-374HN (PWB)	Slot W10 - Ocho LD 17-374HN	Ocho		4.280	4248.690	17914.480	-3.130	4248.690
Ocho LD 17-377HC	Ocho LD 17-377HC (PWB)	Slot W08 - Ocho LD 17-377HC	Ocho		11.210	4396.330	17914.480	3.420	4396.330
Ocho LD 17-378HN	Ocho LD 17-378HN (PWB)	Slot W06 - Ocho LD 17-378HN	Ocho		13.510	3865.940	17437.660	6.700	3871.390
Ocho LD 17-379HC	Ocho LD 17-379HC (PWB)	Slot W05 - Ocho LD 17-379HC	Ocho		17.170	4823.740	17503.280	7.810	4839.240
Ocho LD 17-375HN	Ocho LD 17-375HN (PWB)	Slot W09 - Ocho LD 17-375HN	Ocho		18.550	4363.520	17914.480	10.940	4363.520
Ocho LD 17-379HN	Ocho LD 17-379HN (PWB)	Slot W04 - Ocho LD 17-379HN	Ocho		19.220	4540.360	17470.470	11.220	4540.360
Ocho LD 17-372HC	Ocho LD 17-372HC (PWB)	Slot W13 - Ocho LD 17-372HC	Ocho		43.790	4035.430	17914.480	36.690	4035.430
Ocho LD 17-372HN	Ocho LD 17-372HN (PWB)	Slot W14 - Ocho LD 17-372HN	Ocho		58.630	4035.430	17914.480	51.530	4035.430
Ocho LD 17-373HN	Ocho LD 17-373HN (PWB)	Slot W12 - Ocho LD 17-373HN	Ocho		74.680	3700.000	17914.480	68.140	3707.350
Ocho LD 17-370HN	Ocho LD 17-370HN (PWB)	Slot W15 - Ocho LD 17-370HN	Ocho		84.620	3986.990	17914.480	77.590	3986.990
Ocho LD 17-363HN	Ocho LD 17-363HN (PWB)	Slot E07 - Ocho LD 17-363HN	Ocho		100.320	3225.000	17914.480	94.550	3225.000
Ocho LD 17-362HC	Ocho LD 17-362HC (PWB)	Slot E06 - Ocho LD 17-362HC	Ocho		101.480	3083.990	17914.480	95.920	3100.390
Ocho LD 17-364HN	Ocho LD 17-364HN (PWB)	Slot E08 - Ocho LD 17-364HN	Ocho		101.480	3571.000	17914.480	95.150	3571.000
Ocho LD 17-364HC	Ocho LD 17-364HC (PWB)	Slot E09 - Ocho LD 17-364HC	Ocho		104.470	3700.000	17914.480	97.930	3707.350
Ocho LD 17-362HN	Ocho LD 17-362HN (PWB)	Slot E05 - Ocho LD 17-362HN	Ocho		104.780	2616.000	17914.480	99.980	2616.000
Ocho LD 17-365HN	Ocho LD 17-365HN (PWB)	Slot E10 - Ocho LD 17-365HN	Ocho		109.720	3700.000	17914.480	103.190	3707.350
Ocho LD 17-361HN	Ocho LD 17-361HN (PWB)	Slot E04 - Ocho LD 17-361HN	Ocho		110.170	2167.000	17914.480	106.100	2167.000
Ocho LD 17-367HN	Ocho LD 17-367HN (PWB)	Slot E11 - Ocho LD 17-367HN	Ocho		116.760	3700.000	17914.480	110.220	3707.350
Ocho LD 17-367HC	Ocho LD 17-367HC (PWB)	Slot E12 - Ocho LD 17-367HC	Ocho		125.070	3700.000	17914.480	118.530	3707.350
Ocho LD 17-368HN	Ocho LD 17-368HN (PWB)	Slot E13 - Ocho LD 17-368HN	Ocho		134.760	3700.000	17914.480	128.220	3707.350
Ocho LD 17-369HN	Ocho LD 17-369HN (PWB)	Slot E14 - Ocho LD 17-369HN	Ocho		145.420	3700.000	17914.480	138.680	3707.350
PDC - MCELWAIN 2	PDC - MCELWAIN 2 (AWB)	ZZ-PDC - MCELWAIN 2	Ocho		152.640	17315.360	17315.360	85.960	17315.360
PDC - MCELWAIN 11-17	PDC - MCELWAIN 11-17 (AWB)	ZZ-PDC - MCELWAIN 11-17	Ocho		156.420	14185.150	14185.150	97.700	14173.230
PDC - MCELWAIN 12-17	PDC - MCELWAIN 12-17 (AWB)	ZZ-PDC - MCELWAIN 12-17	Ocho		156.520	14796.590	14796.590	92.730	14796.240
Ocho LD 17-369HC	Ocho LD 17-369HC (PWB)	Slot E15 - Ocho LD 17-369HC	Ocho		156.560	3700.000	17914.480	150.020	3707.350
STARLIGHT - MARK MCELWAIN 1	STARLIGHT - MARK MCELWAIN 1 (AWB)	ZZ-STARLIGHT - MARK MCELWAIN 1	Ocho		184.720	13763.500	13763.500	129.720	13779.530
BCHP - STONEHOCKER 21-8	BCHP - STONEHOCKER 21-8 (AWB)	ZZ-BCHP - STONEHOCKER 21-8	Ocho		189.480	4636.420	8349.740	180.430	4658.790
KPK - BROWN 13-8	KPK - BROWN 13-8 (AWB)	ZZ-KPK - BROWN 13-8	Ocho		257.010	12447.780	12447.780	211.830	12467.190
KPK - EDSTROM UNIT 1	KPK - EDSTROM UNIT 1 (AWB)	ZZ-KPK - EDSTROM UNIT 1	Ocho		265.150	11101.070	11101.070	233.400	11105.640
ESRCH - MARK MCELWAIN 2	ESRCH - MARK MCELWAIN 2 (AWB)	ZZ-ESRCH - MARK MCELWAIN 2	Ocho		272.150	16410.320	16410.320	193.640	16420.600
BCHP - STONEHOCKER 8-5	BCHP - STONEHOCKER 8-5 (AWB)	ZZ-BCHP - STONEHOCKER 8-5	Ocho		291.780	8934.970	8934.970	276.020	8934.970
BCHP - STONEHOCKER 11-8H	BCHP - STONEHOCKER 11-8H (AWB)	ZZ-BCHP - STONEHOCKER 11-8H	Ocho		311.430	8409.050	8409.050	291.060	8398.950
BCHP - STONEHOCKER 12-8H	BCHP - STONEHOCKER 12-8H (AWB)	ZZ-BCHP - STONEHOCKER 12-8H	Ocho		406.390	9973.750	9973.750	381.130	9990.160
PDC - MCELWAIN 13-17	PDC - MCELWAIN 13-17 (AWB)	ZZ-PDC - MCELWAIN 13-17	Ocho		429.790	15790.400	15790.400	357.590	15800.000
KMG - EDSTROM 24-8 1	KMG - EDSTROM 24-8 1 (AWB)	ZZ-KMG - EDSTROM 24-8 1	Ocho		716.460	12109.330	12109.330	676.030	12106.300
SYG - BROWN 11-8	SYG - BROWN 11-8 (AWB)	ZZ-SYG - BROWN 11-8	Ocho		909.770	11011.320	11011.320	874.590	11007.220
BCHP - STONEHOCKER 22-8H	BCHP - STONEHOCKER 22-8H (AWB)	ZZ-BCHP - STONEHOCKER 22-8H	Ocho		966.520	9925.240	9925.240	943.600	9925.240
MERIT - MCELWAIN 1	MERIT - MCELWAIN 1 (AWB)	ZZ-MERIT - MCELWAIN 1	Ocho		1135.310	13731.220	13731.220	1080.670	13731.220
PDC - STONEHOCKER 32-8	PDC - STONEHOCKER 32-8 (AWB)	ZZ-PDC - STONEHOCKER 32-8	Ocho		1724.240	3700.000	9940.940	1716.130	3707.350
PDC - MCELWAIN 32-17	PDC - MCELWAIN 32-17 (AWB)	ZZ-PDC - MCELWAIN 32-17	Ocho		1761.590	15583.990	15583.990	1691.530	15583.990
PDC - LEISLE 8-5	PDC - LEISLE 8-5 (AWB)	ZZ-PDC - LEISLE 8-5	Ocho		1900.940	3700.000	9027.050	1892.850	3707.350
PDC - MCELWAIN 34-17	PDC - MCELWAIN 34-17 (AWB)	ZZ-PDC - MCELWAIN 34-17	Ocho		2299.840	17914.480	17914.480	2208.210	17914.480
SYG - QUEBEC-N INVESTMENT 1	SYG - QUEBEC-N INVESTMENT 1 (AWB)	ZZ-SYG - QUEBEC-N INVESTMENT 1	Ocho		2306.190	11066.490	11066.490	2274.920	11072.830
KMG - QUEBEC NORTH 34-8	KMG - QUEBEC NORTH 34-8 (AWB)	ZZ-KMG - QUEBEC NORTH 34-8	Ocho		2772.760	12106.300	12106.300	2970.460	12106.300
PDC - MC ELWAIN 4	PDC - MC ELWAIN 4 (AWB)	ZZ-PDC - MC ELWAIN 4	Ocho		3050.950	16650.260	17914.480	2970.050	16666.670
KPK - QUEBEC NORTH 12-8	KPK - QUEBEC NORTH 12-8 (AWB)	ZZ-KPK - QUEBEC NORTH 12-8	Ocho		3406.420	3700.000	10975.130	3398.340	3707.350
KPK - NORTH QUEBEC 16-8	KPK - NORTH QUEBEC 16-8 (AWB)	ZZ-KPK - NORTH QUEBEC 16-8	Ocho		3663.370	12253.940	12253.940	3621.330	12270.340
PDC - MCELWAIN 41-17	PDC - MCELWAIN 41-17 (AWB)	ZZ-PDC - MCELWAIN 41-17	Ocho		3731.660	13900.000	13900.000	3675.680	13910.760
PDC - MCELWAIN 42-17	PDC - MCELWAIN 42-17 (AWB)	ZZ-PDC - MCELWAIN 42-17	Ocho		3805.980	15163.910	15163.910	3739.740	15190.290
PDC - MCELWAIN 44-17A	PDC - MCELWAIN 44-17A (AWB)	ZZ-PDC - MCELWAIN 44-17A	Ocho		3930.640	17914.480	17914.480	3839.200	17914.480