

SYSDRILL
 Closest Approach Summary Report
 Wellbore: Schneider HD 11-299HNX (PWB)
 Wellpath: Schneider HD 11-299HNX (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	Schneider HD 11-299HNX (PWB)
Created	7-Dec-2016
Last Revised	7-Dec-2016

Well

Name	Schneider HD 11-299HNX
Government ID	
Last Revised	7-Dec-2016

Slot

Name	Slot 07 - Schneider HD 11-299HNX
Grid Northing	1361045.171
Grid Easting	3187169.744
Latitude	N40 19 21.0900
Longitude	W104 49 43.3992
North	-89.980
East	0.840

Installation

Name	Schneider - South
Easting	3187168.226
Northing	1361135.142
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[ft]	Diverging From[ft]	Ellipse Separation [ft]	Ellipse MD[ft]	Clearance Factor	Clearance MD[ft]
Schneider HD 11-21	Schneider HD 11-26	Slot 06 - Schneider	Schneider - Soul	13.460	5533.620	16905.690	3.970	5533.620	1.420	5533.620
Schneider HD 11-21	Schneider HD 11-29	Slot 08 - Schneider	Schneider - Soul	15.300	5375.000	5375.000	-32.830	16905.690	0.720	16905.690
Schneider HD 11-21	Schneider HD 11-26	Slot 05 - Schneider	Schneider - Soul	29.510	5305.000	16905.690	20.380	5305.000	1.640	16905.690
Schneider HD 11-3	Schneider HD 11-33	Slot 09 - Schneider	Schneider - Soul	30.240	5375.000	5375.000	20.990	5380.580	2.390	16905.690
Schneider HD 11-3	Schneider HD 11-35	Slot 10 - Schneider	Schneider - Soul	42.000	1184.950	13962.500	34.780	4757.220	4.930	5400.000
Schneider HD 11-2	Schneider HD 11-25	Slot 04 - Schneider	Schneider - Soul	44.450	5112.000	16905.690	35.630	5112.000	3.330	16905.690
Schneider HD 11-3	Schneider HD 11-36	Slot 11 - Schneider	Schneider - Soul	55.820	610.870	13929.750	53.860	639.760	7.040	5413.390
Schneider HD 11-2	Schneider HD 11-25	Slot 03 - Schneider	Schneider - Soul	59.750	4987.000	16905.690	51.130	4987.000	3.550	16905.690
Schneider HD 11-3	Schneider HD 11-36	Slot 12 - Schneider	Schneider - Soul	70.580	3970.830	13549.870	63.620	3970.830	7.750	14271.650
Schneider HD 11-2	Schneider HD 11-22	Slot 02 - Schneider	Schneider - Soul	75.050	5052.490	16905.690	66.310	5068.900	4.230	16905.690
Schneider HD 11-3	Schneider HD 11-39	Slot 13 - Schneider	Schneider - Soul	89.080	4539.430	14211.640	81.200	4539.430	10.130	14320.870
Schneider HD 11-2	Schneider HD 11-22	Slot 01 - Schneider	Schneider - Soul	89.990	4541.000	16905.690	82.090	4541.000	5.200	16905.690
Schneider HD 11-3	Schneider HD 11-33	Slot 14 - Schneider	Schneider - Soul	105.280	5375.000	5375.000	96.040	5380.580	2.180	16905.690
Schneider HD 11-3	Schneider HD 11-35	Slot 15 - Schneider	Schneider - Soul	120.590	5326.000	5326.000	111.430	5326.000	4.970	14238.850
Schneider HD 11-3	Schneider HD 11-39	Slot 16 - Schneider	Schneider - Soul	135.520	4568.000	4568.000	127.590	4568.000	9.700	14304.460
Synergy Brownwood	Synergy Brownwood Z-Synergy Brownwood		Schneider - Soul	362.160	15216.440	15216.440	278.340	15223.100	4.320	15223.100
Noble Ehrlick Feed	Noble Ehrlick Feed L Z-Noble Ehrlick Feed		Schneider - Soul	430.130	10472.300	10472.300	387.820	10472.300	10.160	10482.280
Noble Steele 1-11	Noble Steele 1-11 (A Z-Noble Steele 1-11)		Schneider - Soul	613.520	16769.610	16769.610	516.000	16781.500	6.280	16797.900
Noble Steele 2-11	Noble Steele 2-11 (A Z-Noble Steele 2-11)		Schneider - Soul	744.080	16748.690	16748.690	646.760	16748.690	7.640	16765.090
Synergy Brownwood	Synergy Brownwood Z-Synergy Brownwood		Schneider - Soul	794.610	15251.310	15251.310	710.470	15255.910	9.440	15272.310

Schneider HD 11-11' Schneider HD 11-18' Slot 14 - Schneider f Schneider - Nort	1286.630	11536.200	16905.690	1119.840	16905.690	7.160	16905.690
Noble Lot O 12-5 Noble Lot O 12-5 (A) ZZ - Noble Lot O 12- Schneider - Nort	1414.980	11466.540	11466.540	1364.100	11482.940	27.310	11663.390
Schneider HD 11-11' Schneider HD 11-17' Slot 13 - Schneider f Schneider - Nort	1526.760	7023.450	16890.140	1422.330	16905.690	8.810	16905.690
Schneider HD 11-11' Schneider HD 11-17' Slot 12 - Schneider f Schneider - Nort	1562.030	7053.810	16905.690	1451.740	16905.690	8.880	16905.690
Noble HSR Lot Holc Noble HSR Lot Holdi ZZ - Noble HSR Lot I Schneider - Nort	1722.450	7261.040	7261.040	1707.290	7267.060	91.170	8152.890
Schneider HD 11-11' Schneider HD 11-14' Slot 11 - Schneider f Schneider - Nort	1750.290	6036.750	16905.690	1740.120	6069.550	10.610	16905.690
Schneider HD 11-11' Schneider HD 11-13' Slot 10 - Schneider f Schneider - Nort	1781.630	5905.510	8567.590	1771.710	5905.510	12.300	16905.690
Schneider HD 11-11' Schneider HD 11-13' Slot 09 - Schneider f Schneider - Nort	1804.620	5257.000	8588.010	1795.590	5257.000	12.430	16905.690
Schneider HD 11-11' Schneider HD 11-10' Slot 08 - Schneider f Schneider - Nort	1819.550	4954.070	12240.020	1811.020	4954.070	14.130	16905.690
PDC - Niobrara A W PDC - Niobrara A Wt ZZ - PDC - Niobrara Schneider - Nort	1824.710	6911.740	6911.740	1808.330	6922.570	62.170	8513.780
Schneider HD 11-01' Schneider HD 11-06' Slot 07 - Schneider f Schneider - Nort	1834.850	4506.500	16905.690	1827.030	4511.150	15.830	16905.690
Schneider HD 11-01' Schneider HD 11-06' Slot 06 - Schneider f Schneider - Nort	1850.150	4314.300	16905.690	1842.640	4314.300	15.990	16905.690
PDC Bernhardt 6G- PDC Bernhardt 6G-4 ZZ - PDC Bernhardt Schneider - Nort	1853.640	7015.830	7015.830	1836.060	7021.000	62.820	8579.400
Schneider HD 11-01' Schneider HD 11-05' Slot 05 - Schneider f Schneider - Nort	1864.360	4234.500	16905.690	1856.970	4234.500	17.340	16905.690
Schneider HD 11-01' Schneider HD 11-02' Slot 04 - Schneider f Schneider - Nort	1879.300	3772.970	16905.690	1872.660	3772.970	18.320	16905.690
Schneider HD 11-01' Schneider HD 11-02' Slot 03 - Schneider f Schneider - Nort	1894.600	3286.500	16905.690	1888.750	3286.500	19.430	16905.690
Schneider HD 11-01' Schneider HD 11-01' Slot 02 - Schneider f Schneider - Nort	1909.900	2976.500	16905.690	1904.550	2976.500	20.800	16905.690
PDC Bernhardt 6G- PDC Bernhardt 6G-3 ZZ - PDC Bernhardt Schneider - Nort	1920.920	6840.550	6840.550	1902.610	6856.960	63.480	8251.310
Noble Erlich-PM O Noble Erlich-PM O 1: ZZ - Noble Erlich-PM Schneider - Nort	1939.430	8729.530	8729.530	1912.320	8743.440	64.340	9416.010
Noble HSR Lot Holc Noble HSR Lot Holdi ZZ - Noble HSR Lot I Schneider - Nort	1939.930	8661.420	8661.420	1913.400	8677.820	65.480	9350.390
Noble Erlich-PM O Noble Erlich-PM O 1: ZZ - Noble Erlich-PM Schneider - Nort	2035.270	9931.680	9931.680	1997.760	9957.350	50.910	10465.880
KMG - Erlich Feedlk KMG - Erlich Feedlot ZZ - KMG - Erlich Fe Schneider - Nort	2337.660	8224.700	8224.700	2314.670	8251.310	84.390	9268.370
Noble Bernhardt O Noble Bernhardt O 1 ZZ - Noble Bernhardt Schneider - Nort	2530.070	10614.930	10614.930	2484.080	10629.920	52.740	11171.260
Noble Erlich O 12-2 Noble Erlich O 12-2 (ZZ - Noble Erlich O 1 Schneider - Nort	3329.150	8743.440	8743.440	3301.920	8776.250	96.380	10367.450
Noble Bernhardt-PA Noble Bernhardt-PM ZZ - Noble Bernhardt Schneider - Nort	3358.800	11417.970	11417.970	3308.250	11450.130	60.990	12434.380
Noble Bernhardt-PA Noble Bernhardt-PM ZZ - Noble Bernhardt Schneider - Nort	3390.140	9963.520	9963.520	3352.300	9990.160	77.520	11269.690
PDC - Niobrara A W PDC - Niobrara A Wt ZZ - PDC - Niobrara Schneider - Nort	6309.840	6791.340	6791.340	6297.350	6791.340	199.040	12237.530

All data is in Feet unless otherwise stated

Coordinates are from Slot MD's are from Rig and TVD's are from Rig (Planned Datum #1 4755.1ft above Mean Sea Level)

Vertical Section is from 0.00N 0.00E on azimuth 271.280 degrees

Prepared by Great Western Operating Company

Date Printed: