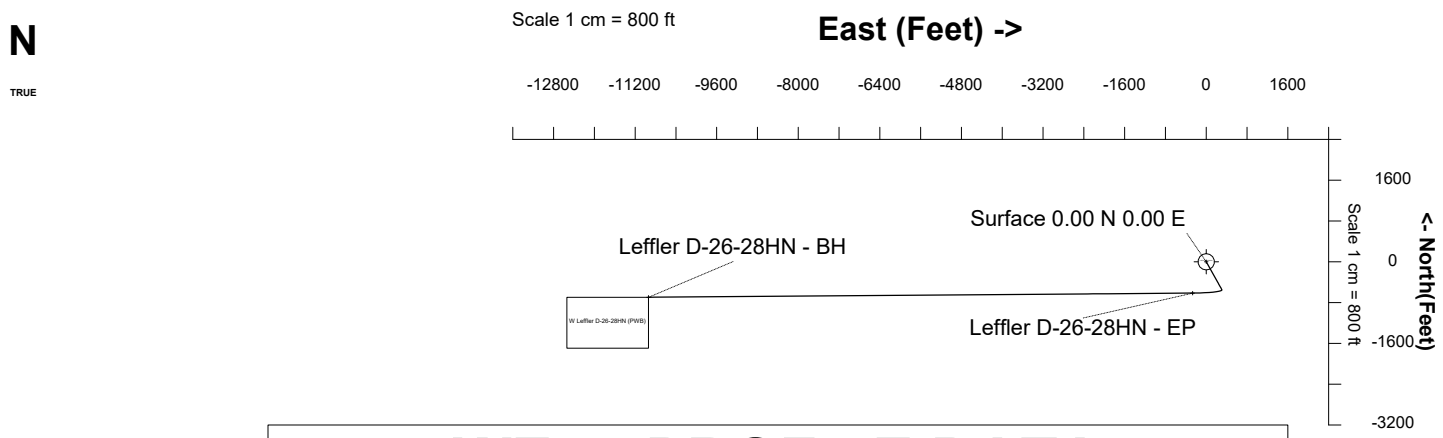
BAYSWATER E & P, LLC

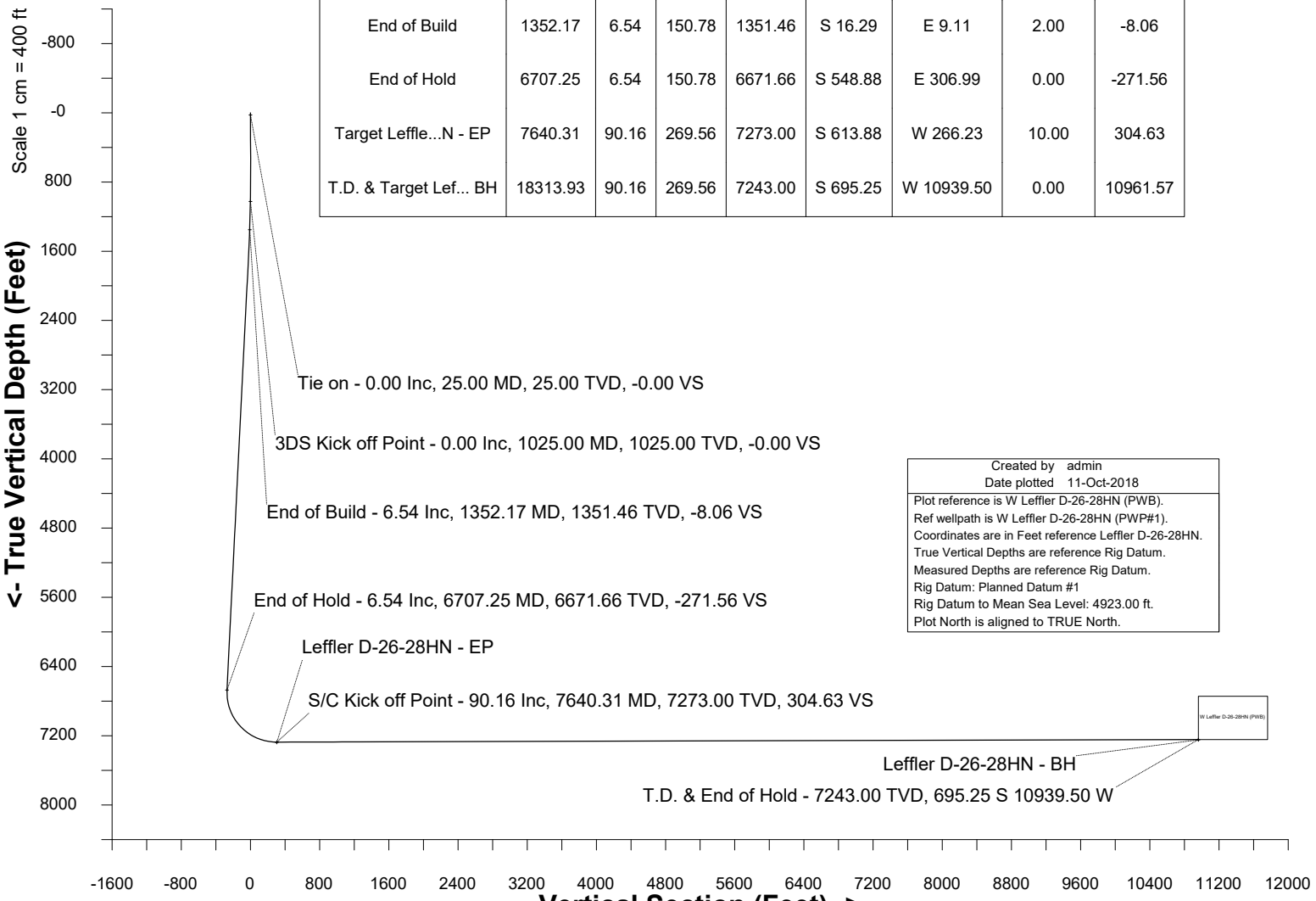
Location	**Weld County, CO**	**Slot**	**Leffler D-26-28HN**
Field	**WATTENBERG**	**Well**	**W Leffler D-26-28HN**
Installation	**Leffler Pad**	**Wellbore**	**W Leffler D-26-28HN (PWB)**



WELL PROFILE DATA

Point	MD	Inc	Azi	TVD	North	East	deg/100ft	V. Sect
Tie on	25.00	0.00	0.00	25.00	S 0.00	W 0.00		-0.00
KOP	1025.00	0.00	150.78	1025.00	S 0.00	W 0.00	0.00	-0.00
End of Build	1352.17	6.54	150.78	1351.46	S 16.29	E 9.11	2.00	-8.06
End of Hold	6707.25	6.54	150.78	6671.66	S 548.88	E 306.99	0.00	-271.56
Target Leffle...N - EP	7640.31	90.16	269.56	7273.00	S 613.88	W 266.23	10.00	304.63
T.D. & Target Lef... BH	18313.93	90.16	269.56	7243.00	S 695.25	W 10939.50	0.00	10961.57

Jul-30-2018
EMM-2015 [2000.0-2020.0] Dip: 66.99 deg Field: 52394.0 nT
Lat: N40 33 10.0548 Long: W104 45 12.7260 Elev: 0.00 ft
Magnetic North is 8.06 deg East of TRUE North
To correct azimuth from Magnetic to TRUE add 8.06 deg



Created by	admin
Date plotted	11-Oct-2018

Plot reference is W Leffler D-26-28HN (PWB).
Ref wellpath is W Leffler D-26-28HN (PWP#1).
Coordinates are in Feet reference Leffler D-26-28HN.
True Vertical Depths are reference Rig Datum.
Measured Depths are reference Rig Datum.
Rig Datum: Planned Datum #1
Rig Datum to Mean Sea Level: 4923.00 ft.
Plot North is aligned to TRUE North.

SYSDRILL
Well Design Combined Report
Wellbore: W Leffler D-26-28HN (PWB)

Wellhead Details

Name	Latitude	Longitude	Northing	Easting	North	East	Slot Elevation Above Ground
Leffler D-26-28HN	40.55279600	-104.75331900	1445098.0658	3207487.2232	1.09N	60.02E	0.00

Declination

Date	Source	Time
Jul-30-2018	EMM-2015 [2000.0-2020.0]	11:39

Installation Details

Name	Installation Position (Latitude)	Installation Position (Longitude)	Northing	Easting	Coord System Name	North Alignment
Leffler Pad	40.55279300	-104.75353500	1445096.4676	3207427.2119	CO83-NF on NORTH AMERICAN DATUM 1983 datum	True

Summary Wellpath

MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Northing	Easting
25.00	0.00	0.000	25.00	0.00N	0.00E		0.00	1445098.07	3207487.22
1025.00	0.00	150.780	1025.00	0.00N	0.00E	==>	0.00	1445098.07	3207487.22
1352.17	6.54	150.780	1351.46	16.29S	9.11E	2.00	-8.06	1445081.86	3207496.47
6707.25	6.54	150.780	6671.66	548.88S	306.99E	==>	-271.56	1444551.80	3207798.82
7640.31	90.16	269.560	7273.00	613.88S	266.23W	10.00	304.63	1444481.98	3207226.18
18313.93	90.16	269.560	7243.00	695.25S	10939.50W	==>	10961.57	1444310.75	3196554.31

Interpolated Wellpath

MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	All Station Comments
0.00	0.00	0.000	0.00	0.00N	0.00E		0.00	Rig Datum
25.00	0.00	0.000	25.00	0.00N	0.00E	==>	0.00	Slot Datum
100.00	0.00	0.000	100.00	0.00N	0.00E	==>	0.00	
200.00	0.00	0.000	200.00	0.00N	0.00E	==>	0.00	
300.00	0.00	0.000	300.00	0.00N	0.00E	==>	0.00	
400.00	0.00	0.000	400.00	0.00N	0.00E	==>	0.00	
500.00	0.00	0.000	500.00	0.00N	0.00E	==>	0.00	
600.00	0.00	0.000	600.00	0.00N	0.00E	==>	0.00	
700.00	0.00	0.000	700.00	0.00N	0.00E	==>	0.00	
800.00	0.00	0.000	800.00	0.00N	0.00E	==>	0.00	
900.00	0.00	0.000	900.00	0.00N	0.00E	==>	0.00	
1000.00	0.00	0.000	1000.00	0.00N	0.00E	==>	0.00	
1100.00	1.50	150.780	1099.99	0.86S	0.48E	2.00	-0.42	
1200.00	3.50	150.780	1199.89	4.66S	2.61E	2.00	-2.31	
1300.00	5.50	150.780	1299.58	11.51S	6.44E	2.00	-5.69	
1400.00	6.54	150.780	1398.98	21.04S	11.77E	==>	-10.41	
1500.00	6.54	150.780	1498.33	30.99S	17.33E	==>	-15.33	
1600.00	6.54	150.780	1597.67	40.94S	22.90E	==>	-20.25	
1700.00	6.54	150.780	1697.02	50.88S	28.46E	==>	-25.17	
1800.00	6.54	150.780	1796.37	60.83S	34.02E	==>	-30.09	
1900.00	6.54	150.780	1895.72	70.77S	39.58E	==>	-35.01	
2000.00	6.54	150.780	1995.07	80.72S	45.15E	==>	-39.94	
2100.00	6.54	150.780	2094.42	90.66S	50.71E	==>	-44.86	
2200.00	6.54	150.780	2193.77	100.61S	56.27E	==>	-49.78	
2300.00	6.54	150.780	2293.12	110.55S	61.83E	==>	-54.70	
2400.00	6.54	150.780	2392.46	120.50S	67.40E	==>	-59.62	
2500.00	6.54	150.780	2491.81	130.45S	72.96E	==>	-64.54	
2600.00	6.54	150.780	2591.16	140.39S	78.52E	==>	-69.46	
2700.00	6.54	150.780	2690.51	150.34S	84.08E	==>	-74.38	
2800.00	6.54	150.780	2789.86	160.28S	89.65E	==>	-79.30	
2900.00	6.54	150.780	2889.21	170.23S	95.21E	==>	-84.22	
3000.00	6.54	150.780	2988.56	180.17S	100.77E	==>	-89.14	
3100.00	6.54	150.780	3087.90	190.12S	106.33E	==>	-94.06	

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 4923.0ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 266.360 degrees
Bottom hole distance is 10961.57 Feet on azimuth 266.36 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by Microsoft
Date Printed: 11-Oct-2018

Interpolated Wellpath

MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	All Station Comments
3200.00	6.54	150.780	3187.25	200.07S	111.90E	==>	-98.98	
3300.00	6.54	150.780	3286.60	210.01S	117.46E	==>	-103.90	
3400.00	6.54	150.780	3385.95	219.96S	123.02E	==>	-108.82	
3500.00	6.54	150.780	3485.30	229.90S	128.58E	==>	-113.74	
3600.00	6.54	150.780	3584.65	239.85S	134.15E	==>	-118.66	
3700.00	6.54	150.780	3684.00	249.79S	139.71E	==>	-123.59	
3800.00	6.54	150.780	3783.34	259.74S	145.27E	==>	-128.51	
3900.00	6.54	150.780	3882.69	269.68S	150.84E	==>	-133.43	
4000.00	6.54	150.780	3982.04	279.63S	156.40E	==>	-138.35	
4100.00	6.54	150.780	4081.39	289.58S	161.96E	==>	-143.27	
4200.00	6.54	150.780	4180.74	299.52S	167.52E	==>	-148.19	
4300.00	6.54	150.780	4280.09	309.47S	173.09E	==>	-153.11	
4400.00	6.54	150.780	4379.44	319.41S	178.65E	==>	-158.03	
4500.00	6.54	150.780	4478.78	329.36S	184.21E	==>	-162.95	
4600.00	6.54	150.780	4578.13	339.30S	189.77E	==>	-167.87	
4700.00	6.54	150.780	4677.48	349.25S	195.34E	==>	-172.79	
4800.00	6.54	150.780	4776.83	359.20S	200.90E	==>	-177.71	
4900.00	6.54	150.780	4876.18	369.14S	206.46E	==>	-182.63	
5000.00	6.54	150.780	4975.53	379.09S	212.02E	==>	-187.55	
5100.00	6.54	150.780	5074.88	389.03S	217.59E	==>	-192.47	
5200.00	6.54	150.780	5174.22	398.98S	223.15E	==>	-197.39	
5300.00	6.54	150.780	5273.57	408.92S	228.71E	==>	-202.32	
5400.00	6.54	150.780	5372.92	418.87S	234.27E	==>	-207.24	
5500.00	6.54	150.780	5472.27	428.81S	239.84E	==>	-212.16	
5600.00	6.54	150.780	5571.62	438.76S	245.40E	==>	-217.08	
5700.00	6.54	150.780	5670.97	448.71S	250.96E	==>	-222.00	
5800.00	6.54	150.780	5770.32	458.65S	256.52E	==>	-226.92	
5900.00	6.54	150.780	5869.66	468.60S	262.09E	==>	-231.84	
6000.00	6.54	150.780	5969.01	478.54S	267.65E	==>	-236.76	
6100.00	6.54	150.780	6068.36	488.49S	273.21E	==>	-241.68	
6200.00	6.54	150.780	6167.71	498.43S	278.78E	==>	-246.60	
6300.00	6.54	150.780	6267.06	508.38S	284.34E	==>	-251.52	
6400.00	6.54	150.780	6366.41	518.33S	289.90E	==>	-256.44	
6500.00	6.54	150.780	6465.76	528.27S	295.46E	==>	-261.36	
6600.00	6.54	150.780	6565.10	538.22S	301.03E	==>	-266.28	
6700.00	6.54	150.780	6664.45	548.16S	306.59E	==>	-271.20	
6800.00	8.39	226.580	6763.81	558.17S	304.65E	10.00	-268.63	
6900.00	17.10	250.470	6861.31	568.12S	285.45E	10.00	-248.84	
7000.00	26.71	258.020	6954.00	577.73S	249.52E	10.00	-212.37	
7100.00	36.52	261.740	7039.06	586.69S	197.95E	10.00	-160.34	
7200.00	46.41	264.050	7113.91	594.73S	132.32E	10.00	-94.33	
7300.00	56.32	265.710	7176.27	601.62S	54.61E	10.00	-16.34	
7400.00	66.26	267.010	7224.25	607.13S	32.81W	10.00	71.25	
7500.00	76.20	268.130	7256.38	611.11S	127.29W	10.00	165.79	
7600.00	86.15	269.160	7271.70	613.43S	225.95W	10.00	264.41	
7700.00	90.16	269.560	7272.83	614.34S	325.92W	==>	364.23	
7800.00	90.16	269.560	7272.55	615.10S	425.92W	==>	464.07	
7900.00	90.16	269.560	7272.27	615.86S	525.91W	==>	563.92	
8000.00	90.16	269.560	7271.99	616.62S	625.91W	==>	663.76	
8100.00	90.16	269.560	7271.71	617.38S	725.91W	==>	763.60	
8200.00	90.16	269.560	7271.43	618.15S	825.90W	==>	863.45	
8300.00	90.16	269.560	7271.15	618.91S	925.90W	==>	963.29	
8400.00	90.16	269.560	7270.86	619.67S	1025.90W	==>	1063.13	
8500.00	90.16	269.560	7270.58	620.43S	1125.89W	==>	1162.98	
8600.00	90.16	269.560	7270.30	621.20S	1225.89W	==>	1262.82	
8700.00	90.16	269.560	7270.02	621.96S	1325.89W	==>	1362.67	
8800.00	90.16	269.560	7269.74	622.72S	1425.88W	==>	1462.51	
8900.00	90.16	269.560	7269.46	623.48S	1525.88W	==>	1562.35	
9000.00	90.16	269.560	7269.18	624.25S	1625.88W	==>	1662.20	

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 4923.0ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 266.360 degrees
Bottom hole distance is 10961.57 Feet on azimuth 266.36 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by Microsoft
Date Printed: 11-Oct-2018

Interpolated Wellpath

MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	All Station Comments
9100.00	90.16	269.560	7268.90	625.01S	1725.87W	==>	1762.04	
9200.00	90.16	269.560	7268.62	625.77S	1825.87W	==>	1861.88	
9300.00	90.16	269.560	7268.34	626.53S	1925.87W	==>	1961.73	
9400.00	90.16	269.560	7268.05	627.30S	2025.86W	==>	2061.57	
9500.00	90.16	269.560	7267.77	628.06S	2125.86W	==>	2161.41	
9600.00	90.16	269.560	7267.49	628.82S	2225.86W	==>	2261.26	
9700.00	90.16	269.560	7267.21	629.58S	2325.85W	==>	2361.10	
9800.00	90.16	269.560	7266.93	630.34S	2425.85W	==>	2460.95	
9900.00	90.16	269.560	7266.65	631.11S	2525.85W	==>	2560.79	
10000.00	90.16	269.560	7266.37	631.87S	2625.84W	==>	2660.63	
10100.00	90.16	269.560	7266.09	632.63S	2725.84W	==>	2760.48	
10200.00	90.16	269.560	7265.81	633.39S	2825.84W	==>	2860.32	
10300.00	90.16	269.560	7265.52	634.16S	2925.83W	==>	2960.16	
10400.00	90.16	269.560	7265.24	634.92S	3025.83W	==>	3060.01	
10500.00	90.16	269.560	7264.96	635.68S	3125.83W	==>	3159.85	
10600.00	90.16	269.560	7264.68	636.44S	3225.82W	==>	3259.70	
10700.00	90.16	269.560	7264.40	637.21S	3325.82W	==>	3359.54	
10800.00	90.16	269.560	7264.12	637.97S	3425.82W	==>	3459.38	
10900.00	90.16	269.560	7263.84	638.73S	3525.81W	==>	3559.23	
11000.00	90.16	269.560	7263.56	639.49S	3625.81W	==>	3659.07	
11100.00	90.16	269.560	7263.28	640.25S	3725.81W	==>	3758.91	
11200.00	90.16	269.560	7262.99	641.02S	3825.80W	==>	3858.76	
11300.00	90.16	269.560	7262.71	641.78S	3925.80W	==>	3958.60	
11400.00	90.16	269.560	7262.43	642.54S	4025.80W	==>	4058.45	
11500.00	90.16	269.560	7262.15	643.30S	4125.79W	==>	4158.29	
11600.00	90.16	269.560	7261.87	644.07S	4225.79W	==>	4258.13	
11700.00	90.16	269.560	7261.59	644.83S	4325.79W	==>	4357.98	
11800.00	90.16	269.560	7261.31	645.59S	4425.78W	==>	4457.82	
11900.00	90.16	269.560	7261.03	646.35S	4525.78W	==>	4557.66	
12000.00	90.16	269.560	7260.75	647.12S	4625.78W	==>	4657.51	
12100.00	90.16	269.560	7260.47	647.88S	4725.77W	==>	4757.35	
12200.00	90.16	269.560	7260.18	648.64S	4825.77W	==>	4857.19	
12300.00	90.16	269.560	7259.90	649.40S	4925.77W	==>	4957.04	
12400.00	90.16	269.560	7259.62	650.16S	5025.76W	==>	5056.88	
12500.00	90.16	269.560	7259.34	650.93S	5125.76W	==>	5156.73	
12600.00	90.16	269.560	7259.06	651.69S	5225.76W	==>	5256.57	
12700.00	90.16	269.560	7258.78	652.45S	5325.75W	==>	5356.41	
12800.00	90.16	269.560	7258.50	653.21S	5425.75W	==>	5456.26	
12900.00	90.16	269.560	7258.22	653.98S	5525.75W	==>	5556.10	
13000.00	90.16	269.560	7257.94	654.74S	5625.74W	==>	5655.94	
13100.00	90.16	269.560	7257.65	655.50S	5725.74W	==>	5755.79	
13200.00	90.16	269.560	7257.37	656.26S	5825.74W	==>	5855.63	
13300.00	90.16	269.560	7257.09	657.03S	5925.73W	==>	5955.48	
13400.00	90.16	269.560	7256.81	657.79S	6025.73W	==>	6055.32	
13500.00	90.16	269.560	7256.53	658.55S	6125.73W	==>	6155.16	
13600.00	90.16	269.560	7256.25	659.31S	6225.72W	==>	6255.01	
13700.00	90.16	269.560	7255.97	660.07S	6325.72W	==>	6354.85	
13800.00	90.16	269.560	7255.69	660.84S	6425.72W	==>	6454.69	
13900.00	90.16	269.560	7255.41	661.60S	6525.71W	==>	6554.54	
14000.00	90.16	269.560	7255.13	662.36S	6625.71W	==>	6654.38	
14100.00	90.16	269.560	7254.84	663.12S	6725.71W	==>	6754.23	
14200.00	90.16	269.560	7254.56	663.89S	6825.70W	==>	6854.07	
14300.00	90.16	269.560	7254.28	664.65S	6925.70W	==>	6953.91	
14400.00	90.16	269.560	7254.00	665.41S	7025.70W	==>	7053.76	
14500.00	90.16	269.560	7253.72	666.17S	7125.69W	==>	7153.60	
14600.00	90.16	269.560	7253.44	666.94S	7225.69W	==>	7253.44	
14700.00	90.16	269.560	7253.16	667.70S	7325.69W	==>	7353.29	
14800.00	90.16	269.560	7252.88	668.46S	7425.69W	==>	7453.13	
14900.00	90.16	269.560	7252.60	669.22S	7525.68W	==>	7552.98	

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 4923.0ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 266.360 degrees
Bottom hole distance is 10961.57 Feet on azimuth 266.36 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by Microsoft
Date Printed: 11-Oct-2018

Interpolated Wellpath

MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	All Station Comments
15000.00	90.16	269.560	7252.31	669.99S	7625.68W	==>	7652.82	
15100.00	90.16	269.560	7252.03	670.75S	7725.68W	==>	7752.66	
15200.00	90.16	269.560	7251.75	671.51S	7825.67W	==>	7852.51	
15300.00	90.16	269.560	7251.47	672.27S	7925.67W	==>	7952.35	
15400.00	90.16	269.560	7251.19	673.03S	8025.67W	==>	8052.19	
15500.00	90.16	269.560	7250.91	673.80S	8125.66W	==>	8152.04	
15600.00	90.16	269.560	7250.63	674.56S	8225.66W	==>	8251.88	
15700.00	90.16	269.560	7250.35	675.32S	8325.66W	==>	8351.72	
15800.00	90.16	269.560	7250.07	676.08S	8425.65W	==>	8451.57	
15900.00	90.16	269.560	7249.78	676.85S	8525.65W	==>	8551.41	
16000.00	90.16	269.560	7249.50	677.61S	8625.65W	==>	8651.26	
16100.00	90.16	269.560	7249.22	678.37S	8725.64W	==>	8751.10	
16200.00	90.16	269.560	7248.94	679.13S	8825.64W	==>	8850.94	
16300.00	90.16	269.560	7248.66	679.90S	8925.64W	==>	8950.79	
16400.00	90.16	269.560	7248.38	680.66S	9025.63W	==>	9050.63	
16500.00	90.16	269.560	7248.10	681.42S	9125.63W	==>	9150.47	
16600.00	90.16	269.560	7247.82	682.18S	9225.63W	==>	9250.32	
16700.00	90.16	269.560	7247.54	682.94S	9325.62W	==>	9350.16	
16800.00	90.16	269.560	7247.26	683.71S	9425.62W	==>	9450.01	
16900.00	90.16	269.560	7246.97	684.47S	9525.62W	==>	9549.85	
17000.00	90.16	269.560	7246.69	685.23S	9625.61W	==>	9649.69	
17100.00	90.16	269.560	7246.41	685.99S	9725.61W	==>	9749.54	
17200.00	90.16	269.560	7246.13	686.76S	9825.61W	==>	9849.38	
17300.00	90.16	269.560	7245.85	687.52S	9925.60W	==>	9949.22	
17400.00	90.16	269.560	7245.57	688.28S	10025.60W	==>	10049.07	
17500.00	90.16	269.560	7245.29	689.04S	10125.60W	==>	10148.91	
17600.00	90.16	269.560	7245.01	689.81S	10225.59W	==>	10248.76	
17700.00	90.16	269.560	7244.73	690.57S	10325.59W	==>	10348.60	
17800.00	90.16	269.560	7244.44	691.33S	10425.59W	==>	10448.44	
17900.00	90.16	269.560	7244.16	692.09S	10525.58W	==>	10548.29	
18000.00	90.16	269.560	7243.88	692.85S	10625.58W	==>	10648.13	
18100.00	90.16	269.560	7243.60	693.62S	10725.58W	==>	10747.97	
18200.00	90.16	269.560	7243.32	694.38S	10825.57W	==>	10847.82	
18300.00	90.16	269.560	7243.04	695.14S	10925.57W	==>	10947.66	
18313.93	90.16	269.560	7243.00	695.25S	10939.50W	==>	10961.57	

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 4923.0ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 266.360 degrees
Bottom hole distance is 10961.57 Feet on azimuth 266.36 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by Microsoft
Date Printed: 11-Oct-2018

Targets

Name	North[ft]	East[ft]	TVD[ft]	Latitude	Longitude	Northing	Easting
Leffler D-26-28HN - BH	695.25S	10939.50W	7243.00	40.55088100	-104.79268400	1444310.75	3196554.31
Leffler D-26-28HN - EP	613.88S	266.23W	7273.00	40.55111100	-104.75427700	1444481.98	3207226.18

Survey Tool Program

Reference	Survey Name	MD[ft]	TVD[ft]	Survey Tool	Error Model
676459	Planned	1500.00	1498.33	WdW Rate Gyro	Standard
676458	Planned	18313.93	7243.00	ISCWSA MWD	Rev 4 + SAG + FLT

Notes

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 4923.0ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 266.360 degrees
Bottom hole distance is 10961.57 Feet on azimuth 266.36 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by Microsoft
Date Printed: 11-Oct-2018

SYSDRILL
Closest Approach + Clearance Factor Summary Report
Wellbore: W Leffler D-26-28HN (PWB)

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	Created	Last Revised
W Leffler D-26-28HN (PWB)	Jul-30-2018	Oct-11-2018

Well

Name	Government ID	Last Revised
W Leffler D-26-28HN		Jul-30-2018

Slot

Name	Latitude	Longitude	Grid Northing	Grid Easting	North	East
Leffler D-26-28HN	40.55279600	-104.75331900	1445098.0658	3207487.2232	1.09N	60.02E

Installation

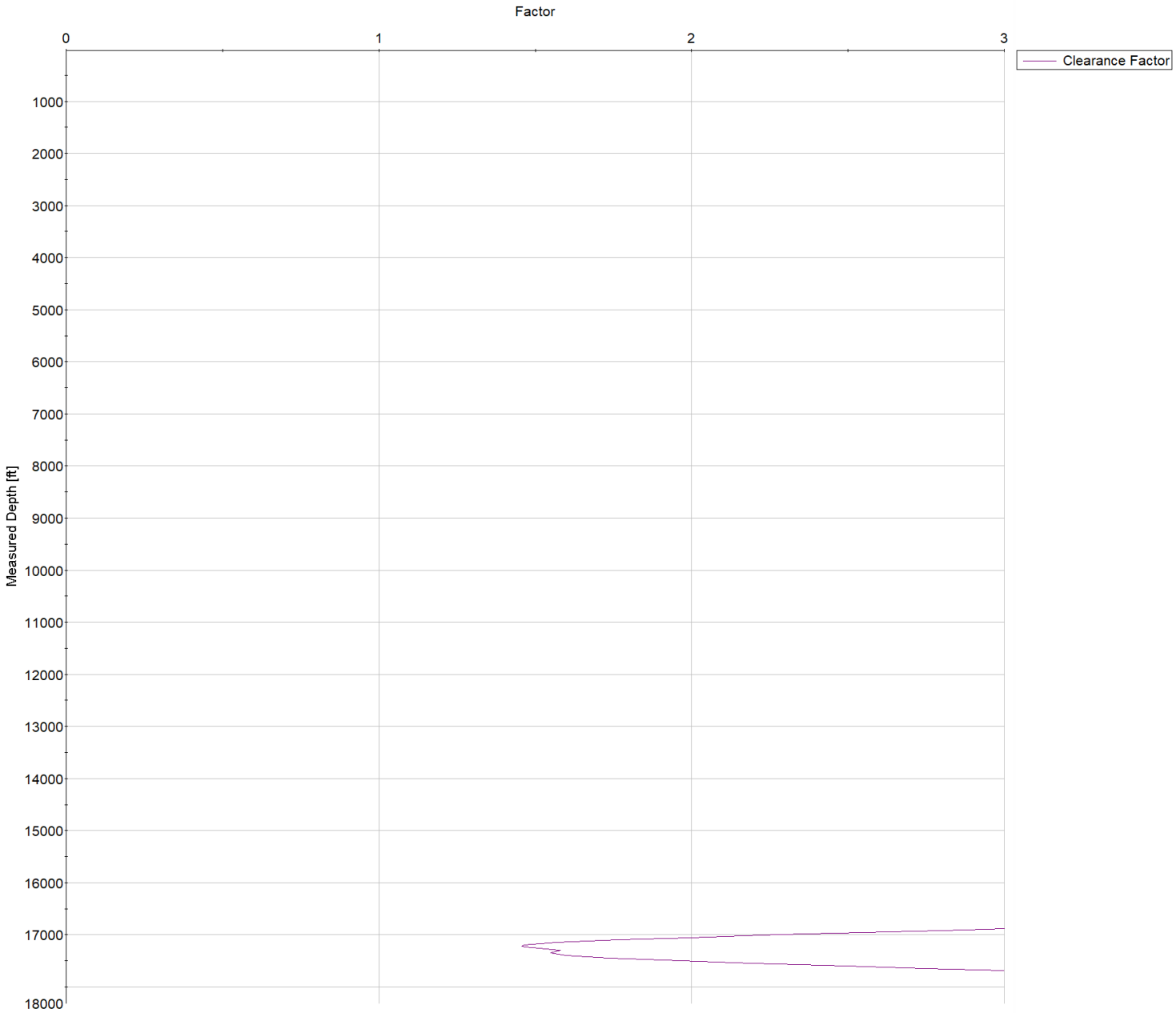
Name	Installation Position (Latitude)	Installation Position (Longitude)	Easting	Northing	Coord System Name	North Alignment
Leffler Pad	40.55279300	-104.75353500	3207427.2119	1445096.4676	CO83-NF on NORTH AMERICAN DATUM 1983 datum	True

Clearance Summary

Offset WellName	Separation [ft]	MD[ft]	Diverging From[ft]	Ellipse Separation [ft]	Ellipse MD[ft]	Clearance Factor	Clearance MD[ft]
W Thornton 21K-443	154.74	17291.85	17291.85	52.61	17233.01	1.46	17216.60
W Leffler 1-27	157.77	9588.89	9588.89	57.11	9588.89	1.57	9588.65
W Leffler 41-27	263.23	8200.84	8200.84	210.23	8200.84	4.96	8210.70
W Leffler 31-27	269.89	9869.59	9869.59	159.35	9869.59	2.44	9869.59
W Leffler 27C	507.87	8926.20	8926.20	430.49	8948.88	6.43	9014.50
W Leffler 32-27	1383.08	9867.52	9867.52	1271.43	9916.73	11.71	10228.41
W Leffler 42-27	1438.71	8216.14	8216.14	1384.44	8259.91	21.67	8932.48

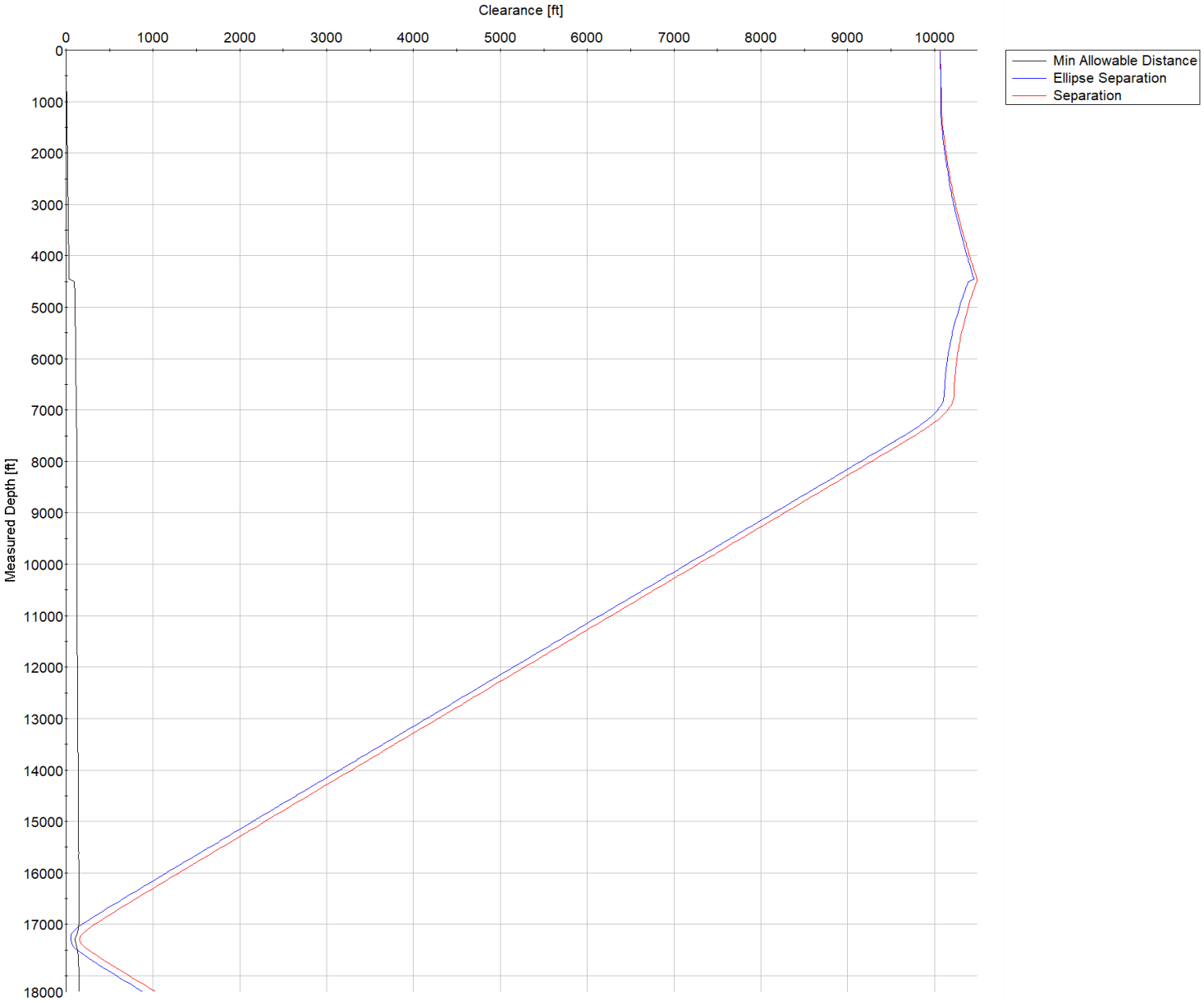
All data is in Feet unless otherwise stated
Coordinates are from Slot MD's are from Rig and TVD's are from Rig (Planned Datum #1 4923.0ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 266.360 degrees
Prepared by Microsoft
Date Printed: 11-Oct-2018

SYSDRILL
Closest Approach + Clearance Factor Summary Report
Wellbore: W Leffler D-26-28HN (PWB)



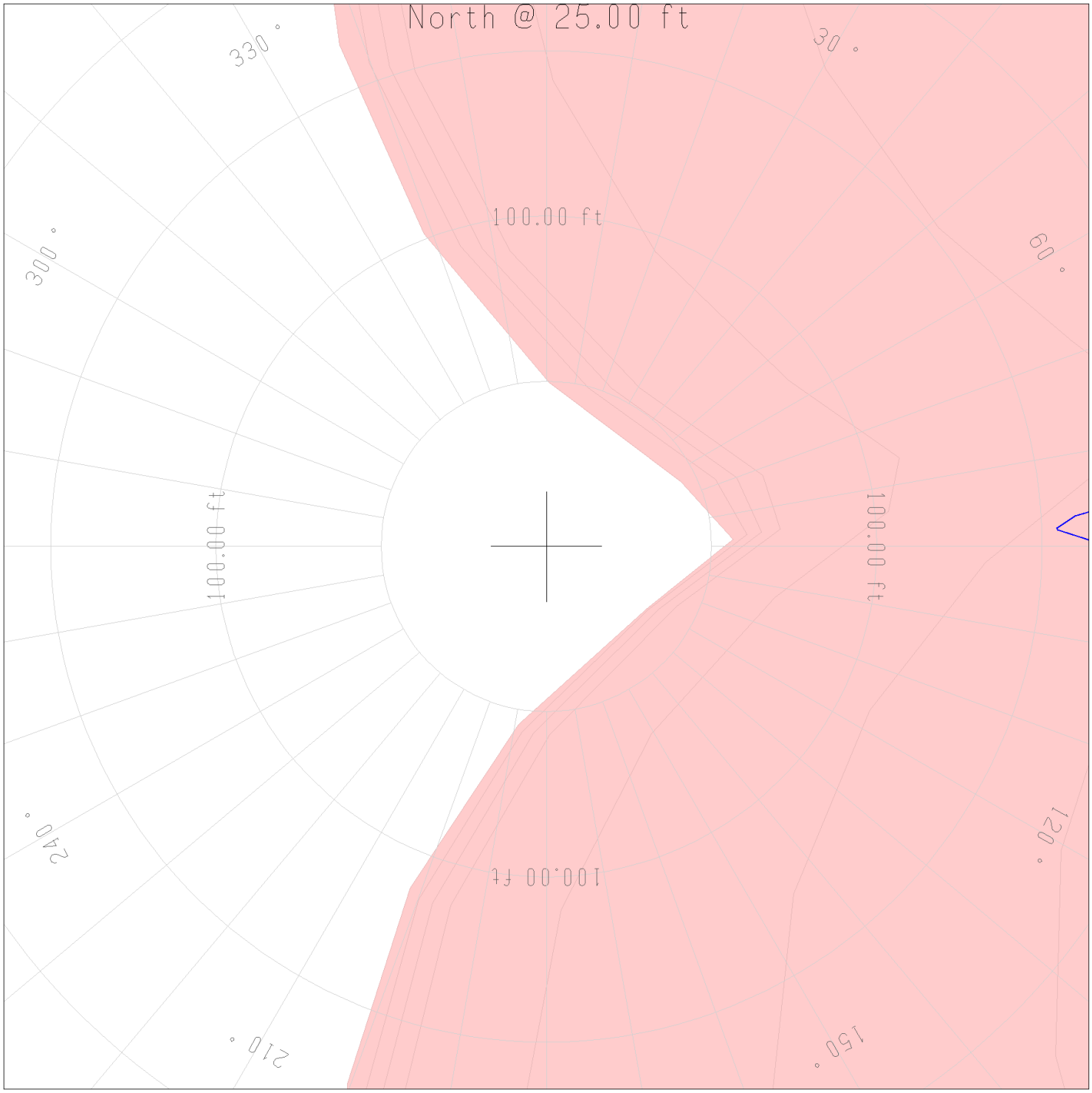
All data is in Feet unless otherwise stated
Coordinates are from Slot MD's are from Rig and TVD's are from Rig (Planned Datum #1 4923.0ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 266.360 degrees
Prepared by Microsoft
Date Printed: 11-Oct-2018

SYSDRILL
Closest Approach + Clearance Factor Summary Report
Wellbore: W Leffler D-26-28HN (PWB)



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 4923.0ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 266.360 degrees
Prepared by Microsoft
Date Printed: 11-Oct-2018

SYSDRILL
Closest Approach + Clearance Factor Summary Report
Wellbore: W Leffler D-26-28HN (PWB)



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 4923.0ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 266.360 degrees
Prepared by Microsoft
Date Printed: 11-Oct-2018