

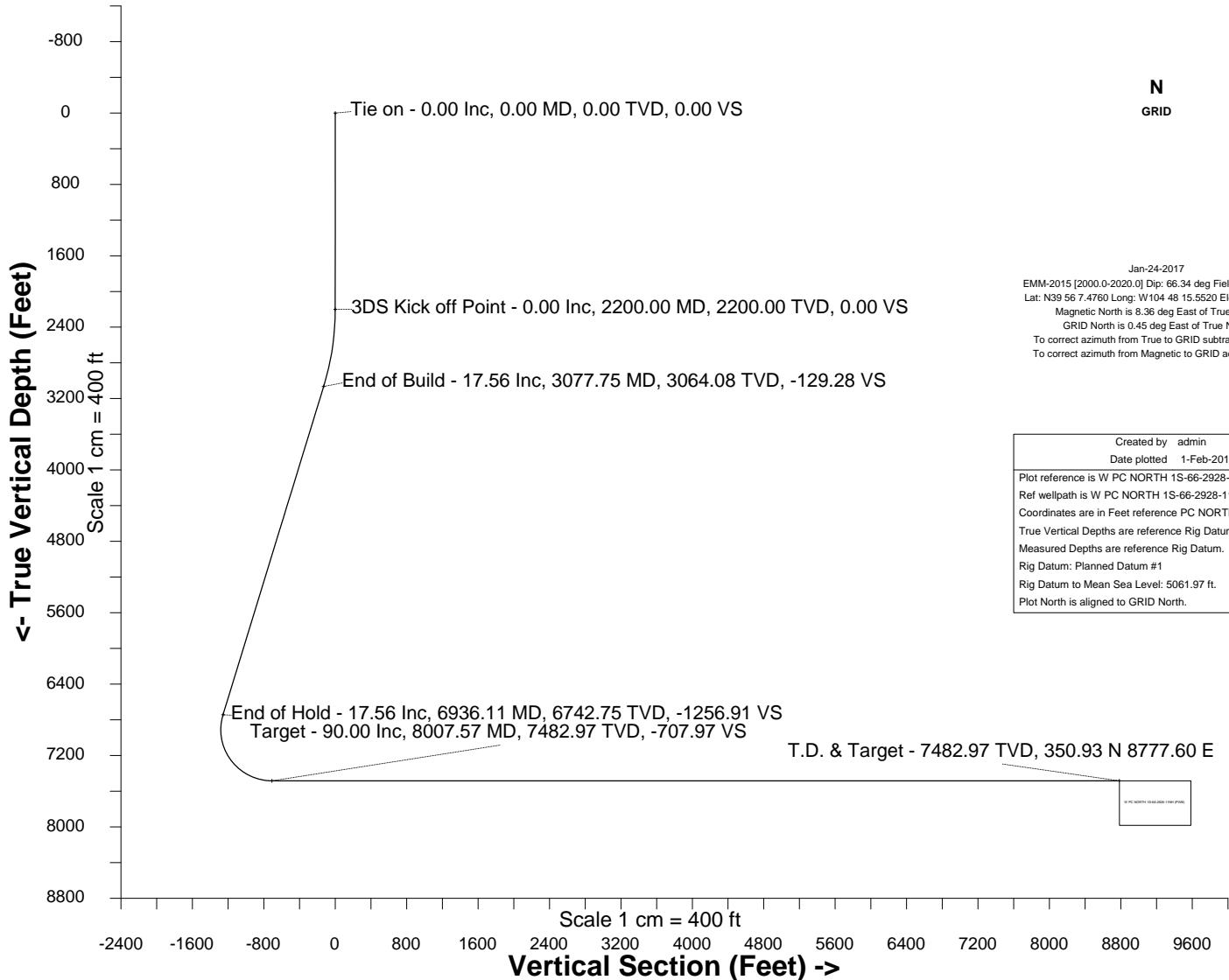
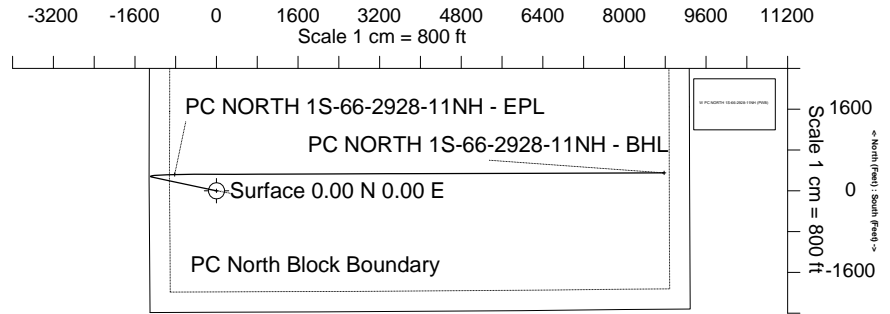
HRM Resources

Location	DJ Basin	Slot	PC NORTH 1S-66-2928-11NH
Field	WATTENBERG	Well	W PC NORTH 1S-66-2928-11NH
Installation	PC 1S-66-2928 PAD	Wellbore	W PC NORTH 1S-66-2928-11NH (PWB)

WELL PROFILE DATA

Point	MD	Inc	Azi	TVD	North	East	deg/100ft	V. Sect
Tie on	0.00	0.00	0.00	0.00	S 0.00	W 0.00		0.00
KOP	2200.00	0.00	282.02	2200.00	S 0.00	W 0.00	0.00	0.00
End of Build	3077.75	17.56	282.02	3064.08	N 27.79	W 130.49	2.00	-129.28
End of Hold	6936.11	17.56	282.02	6742.75	N 270.24	W 1268.72	0.00	-1256.91
Target PC NOR... - EPL	8007.57	90.00	89.82	7482.97	N 321.43	W 721.39	10.00	-707.97
T.D. & Target PC ...BHL	17506.60	90.00	89.82	7482.97	N 350.93	E 8777.60	0.00	8784.61

East (Feet) ->



N
GRID

Jan-24-2017
 EMM-2015 [2000.0-2020.0] Dip: 66.34 deg Field: 52071.6 nT
 Lat: N39 56 7.4760 Long: W104 48 15.5520 Elev: 9723.01 ft
 Magnetic North is 8.36 deg East of True North
 GRID North is 0.45 deg East of True North
 To correct azimuth from True to GRID subtract 0.45 deg
 To correct azimuth from Magnetic to GRID add 7.91 deg

Created by	admin
Date plotted	1-Feb-2017
Plot reference is W PC NORTH 1S-66-2928-11NH (PWB). Ref wellpath is W PC NORTH 1S-66-2928-11NH (PWP#1). Coordinates are in Feet reference PC NORTH 1S-66-2928-11NH. True Vertical Depths are reference Rig Datum. Measured Depths are reference Rig Datum. Rig Datum: Planned Datum #1 Rig Datum to Mean Sea Level: 5061.97 ft. Plot North is aligned to GRID North.	

Azimuth 87.71 with reference 0.00 N, 0.00 E from PC NORTH 1S-66-2928-11NH



SYSDRILL
Well Design Combined Report
Wellbore: W PC NORTH 1S-66-2928-11NH (PWB)



Wellhead Details

Name	Latitude	Longitude	Northing	Easting	North	East	Slot Elevation Above Ground
PC NORTH 1S-66-2928-11NH	N39 56 7.4760	W104 48 15.1560	1220083.9241	3195110.6811	0.24N	30.85E	0.00

Declination

Date	Source	Time
Jan-24-2017	EMM-2015 [2000.0-2020.0]	09:32

Installation Details

Name	Installation Position (Latitude)	Installation Position (Longitude)	Northing	Easting	Coord System Name	North Alignment
PC 1S-66-2928 PAD	N39 56 7.4760	W104 48 15.5520	1220083.6821	3195079.8360	CO83-NF on NORTH AMERICAN DATUM 1983 datum	Grid

Summary Wellpath

MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Northing	Easting
0.00	0.00	0.000	0.00	0.00N	0.00E		0.00	1220083.92	3195110.68
2200.00	0.00	282.020	2200.00	0.00N	0.00E	==>	0.00	1220083.92	3195110.68
3077.75	17.56	282.020	3064.08	27.79N	130.49W	2.00	-129.28	1220111.72	3194980.19
6936.11	17.56	282.020	6742.75	270.24N	1268.72W	==>	-1256.91	1220354.15	3193842.00
8007.57	90.00	89.820	7482.97	321.43N	721.39W	10.00	-707.97	1220405.35	3194389.32
17506.60	90.00	89.820	7482.97	350.93N	8777.60E	==>	8784.61	1220434.85	3203888.02

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	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	0.00	0.000	1100.00	0.00N	0.00E	==>	0.00	
1200.00	0.00	0.000	1200.00	0.00N	0.00E	==>	0.00	
1300.00	0.00	0.000	1300.00	0.00N	0.00E	==>	0.00	
1400.00	0.00	0.000	1400.00	0.00N	0.00E	==>	0.00	
1500.00	0.00	0.000	1500.00	0.00N	0.00E	==>	0.00	
1600.00	0.00	0.000	1600.00	0.00N	0.00E	==>	0.00	
1700.00	0.00	0.000	1700.00	0.00N	0.00E	==>	0.00	
1800.00	0.00	0.000	1800.00	0.00N	0.00E	==>	0.00	
1900.00	0.00	0.000	1900.00	0.00N	0.00E	==>	0.00	
2000.00	0.00	0.000	2000.00	0.00N	0.00E	==>	0.00	
2100.00	0.00	0.000	2100.00	0.00N	0.00E	==>	0.00	
2200.00	0.00	282.020	2200.00	0.00N	0.00E	==>	0.00	
2300.00	2.00	282.020	2299.98	0.36N	1.71W	2.00	-1.69	
2400.00	4.00	282.020	2399.84	1.45N	6.83W	2.00	-6.76	
2500.00	6.00	282.020	2499.45	3.27N	15.35W	2.00	-15.21	
2600.00	8.00	282.020	2598.70	5.81N	27.27W	2.00	-27.01	
2700.00	10.00	282.020	2697.47	9.07N	42.57W	2.00	-42.17	
2800.00	12.00	282.020	2795.62	13.04N	61.23W	2.00	-60.66	
2900.00	14.00	282.020	2893.06	17.73N	83.23W	2.00	-82.45	
3000.00	16.00	282.020	2989.64	23.12N	108.54W	2.00	-107.53	
3100.00	17.56	282.020	3085.29	29.19N	137.06W	==>	-135.78	

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 5062.0ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 87.710 degrees
Bottom hole distance is 8784.61 Feet on azimuth 87.71 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by IPT
Date Printed: 1-Feb-2017



SYSDRILL
Well Design Combined Report
Wellbore: W PC NORTH 1S-66-2928-11NH (PWB)



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	17.56	282.020	3180.64	35.48N	166.56W	==>	-165.01	
3300.00	17.56	282.020	3275.98	41.76N	196.06W	==>	-194.23	
3400.00	17.56	282.020	3371.32	48.04N	225.56W	==>	-223.46	
3500.00	17.56	282.020	3466.67	54.33N	255.06W	==>	-252.68	
3600.00	17.56	282.020	3562.01	60.61N	284.56W	==>	-281.91	
3700.00	17.56	282.020	3657.35	66.89N	314.06W	==>	-311.14	
3800.00	17.56	282.020	3752.69	73.18N	343.56W	==>	-340.36	
3900.00	17.56	282.020	3848.04	79.46N	373.06W	==>	-369.59	
4000.00	17.56	282.020	3943.38	85.75N	402.56W	==>	-398.81	
4100.00	17.56	282.020	4038.72	92.03N	432.06W	==>	-428.04	
4200.00	17.56	282.020	4134.07	98.31N	461.56W	==>	-457.26	
4300.00	17.56	282.020	4229.41	104.60N	491.06W	==>	-486.49	
4400.00	17.56	282.020	4324.75	110.88N	520.56W	==>	-515.72	
4500.00	17.56	282.020	4420.09	117.16N	550.06W	==>	-544.94	
4600.00	17.56	282.020	4515.44	123.45N	579.56W	==>	-574.17	
4700.00	17.56	282.020	4610.78	129.73N	609.06W	==>	-603.39	
4800.00	17.56	282.020	4706.12	136.01N	638.56W	==>	-632.62	
4900.00	17.56	282.020	4801.46	142.30N	668.06W	==>	-661.84	
5000.00	17.56	282.020	4896.81	148.58N	697.56W	==>	-691.07	
5100.00	17.56	282.020	4992.15	154.86N	727.06W	==>	-720.30	
5200.00	17.56	282.020	5087.49	161.15N	756.56W	==>	-749.52	
5300.00	17.56	282.020	5182.84	167.43N	786.06W	==>	-778.75	
5400.00	17.56	282.020	5278.18	173.72N	815.56W	==>	-807.97	
5500.00	17.56	282.020	5373.52	180.00N	845.06W	==>	-837.20	
5600.00	17.56	282.020	5468.86	186.28N	874.56W	==>	-866.42	
5700.00	17.56	282.020	5564.21	192.57N	904.07W	==>	-895.65	
5800.00	17.56	282.020	5659.55	198.85N	933.57W	==>	-924.88	
5900.00	17.56	282.020	5754.89	205.13N	963.07W	==>	-954.10	
6000.00	17.56	282.020	5850.24	211.42N	992.57W	==>	-983.33	
6100.00	17.56	282.020	5945.58	217.70N	1022.07W	==>	-1012.55	
6200.00	17.56	282.020	6040.92	223.98N	1051.57W	==>	-1041.78	
6300.00	17.56	282.020	6136.26	230.27N	1081.07W	==>	-1071.01	
6400.00	17.56	282.020	6231.61	236.55N	1110.57W	==>	-1100.23	
6500.00	17.56	282.020	6326.95	242.83N	1140.07W	==>	-1129.46	
6600.00	17.56	282.020	6422.29	249.12N	1169.57W	==>	-1158.68	
6700.00	17.56	282.020	6517.63	255.40N	1199.07W	==>	-1187.91	
6800.00	17.56	282.020	6612.98	261.69N	1228.57W	==>	-1217.13	
6900.00	17.56	282.020	6708.32	267.97N	1258.07W	==>	-1246.36	
7000.00	11.41	289.170	6804.58	274.32N	1284.13W	10.00	-1272.15	
7100.00	3.90	348.620	6903.73	280.92N	1294.17W	10.00	-1281.91	
7200.00	10.00	67.530	7003.11	287.59N	1286.80W	10.00	-1274.29	
7300.00	19.61	79.000	7099.70	294.13N	1262.25W	10.00	-1249.49	
7400.00	29.47	83.030	7190.56	300.33N	1221.26W	10.00	-1208.29	
7500.00	39.40	85.150	7272.94	306.01N	1165.08W	10.00	-1151.92	
7600.00	49.35	86.530	7344.33	311.00N	1095.41W	10.00	-1082.11	
7700.00	59.32	87.550	7402.56	315.15N	1014.38W	10.00	-1000.98	
7800.00	69.29	88.370	7445.86	318.32N	924.44W	10.00	-910.98	
7900.00	79.27	89.100	7472.92	320.43N	828.32W	10.00	-814.86	
8000.00	89.24	89.770	7482.92	321.41N	728.96W	10.00	-715.54	
8100.00	90.00	89.820	7482.97	321.72N	628.96W	==>	-615.60	
8200.00	90.00	89.820	7482.97	322.03N	528.96W	==>	-515.67	
8300.00	90.00	89.820	7482.97	322.34N	428.96W	==>	-415.74	
8400.00	90.00	89.820	7482.97	322.65N	328.96W	==>	-315.81	
8500.00	90.00	89.820	7482.97	322.96N	228.96W	==>	-215.88	
8600.00	90.00	89.820	7482.97	323.27N	128.96W	==>	-115.94	
8700.00	90.00	89.820	7482.97	323.58N	28.96W	==>	-16.01	
8800.00	90.00	89.820	7482.97	323.89N	71.04E	==>	83.92	
8900.00	90.00	89.820	7482.97	324.20N	171.04E	==>	183.85	
9000.00	90.00	89.820	7482.97	324.51N	271.04E	==>	283.79	

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 5062.0ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 87.710 degrees
Bottom hole distance is 8784.61 Feet on azimuth 87.71 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by IPT
Date Printed: 1-Feb-2017



SYSDRILL
Well Design Combined Report
Wellbore: W PC NORTH 1S-66-2928-11NH (PWB)



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	90.00	89.820	7482.97	324.83N	371.04E	==>	383.72	
9200.00	90.00	89.820	7482.97	325.14N	471.04E	==>	483.65	
9300.00	90.00	89.820	7482.97	325.45N	571.04E	==>	583.58	
9400.00	90.00	89.820	7482.97	325.76N	671.04E	==>	683.51	
9500.00	90.00	89.820	7482.97	326.07N	771.04E	==>	783.45	
9600.00	90.00	89.820	7482.97	326.38N	871.03E	==>	883.38	
9700.00	90.00	89.820	7482.97	326.69N	971.03E	==>	983.31	
9800.00	90.00	89.820	7482.97	327.00N	1071.03E	==>	1083.24	
9900.00	90.00	89.820	7482.97	327.31N	1171.03E	==>	1183.17	
10000.00	90.00	89.820	7482.97	327.62N	1271.03E	==>	1283.11	
10100.00	90.00	89.820	7482.97	327.93N	1371.03E	==>	1383.04	
10200.00	90.00	89.820	7482.97	328.24N	1471.03E	==>	1482.97	
10300.00	90.00	89.820	7482.97	328.55N	1571.03E	==>	1582.90	
10400.00	90.00	89.820	7482.97	328.86N	1671.03E	==>	1682.83	
10500.00	90.00	89.820	7482.97	329.17N	1771.03E	==>	1782.77	
10600.00	90.00	89.820	7482.97	329.48N	1871.03E	==>	1882.70	
10700.00	90.00	89.820	7482.97	329.79N	1971.03E	==>	1982.63	
10800.00	90.00	89.820	7482.97	330.10N	2071.03E	==>	2082.56	
10900.00	90.00	89.820	7482.97	330.42N	2171.03E	==>	2182.49	
11000.00	90.00	89.820	7482.97	330.73N	2271.03E	==>	2282.43	
11100.00	90.00	89.820	7482.97	331.04N	2371.03E	==>	2382.36	
11200.00	90.00	89.820	7482.97	331.35N	2471.03E	==>	2482.29	
11300.00	90.00	89.820	7482.97	331.66N	2571.03E	==>	2582.22	
11400.00	90.00	89.820	7482.97	331.97N	2671.03E	==>	2682.16	
11500.00	90.00	89.820	7482.97	332.28N	2771.03E	==>	2782.09	
11600.00	90.00	89.820	7482.97	332.59N	2871.03E	==>	2882.02	
11700.00	90.00	89.820	7482.97	332.90N	2971.02E	==>	2981.95	
11800.00	90.00	89.820	7482.97	333.21N	3071.02E	==>	3081.88	
11900.00	90.00	89.820	7482.97	333.52N	3171.02E	==>	3181.82	
12000.00	90.00	89.820	7482.97	333.83N	3271.02E	==>	3281.75	
12100.00	90.00	89.820	7482.97	334.14N	3371.02E	==>	3381.68	
12200.00	90.00	89.820	7482.97	334.45N	3471.02E	==>	3481.61	
12300.00	90.00	89.820	7482.97	334.76N	3571.02E	==>	3581.54	
12400.00	90.00	89.820	7482.97	335.07N	3671.02E	==>	3681.48	
12500.00	90.00	89.820	7482.97	335.38N	3771.02E	==>	3781.41	
12600.00	90.00	89.820	7482.97	335.69N	3871.02E	==>	3881.34	
12700.00	90.00	89.820	7482.97	336.01N	3971.02E	==>	3981.27	
12800.00	90.00	89.820	7482.97	336.32N	4071.02E	==>	4081.20	
12900.00	90.00	89.820	7482.97	336.63N	4171.02E	==>	4181.14	
13000.00	90.00	89.820	7482.97	336.94N	4271.02E	==>	4281.07	
13100.00	90.00	89.820	7482.97	337.25N	4371.02E	==>	4381.00	
13200.00	90.00	89.820	7482.97	337.56N	4471.02E	==>	4480.93	
13300.00	90.00	89.820	7482.97	337.87N	4571.02E	==>	4580.87	
13400.00	90.00	89.820	7482.97	338.18N	4671.02E	==>	4680.80	
13500.00	90.00	89.820	7482.97	338.49N	4771.02E	==>	4780.73	
13600.00	90.00	89.820	7482.97	338.80N	4871.02E	==>	4880.66	
13700.00	90.00	89.820	7482.97	339.11N	4971.01E	==>	4980.59	
13800.00	90.00	89.820	7482.97	339.42N	5071.01E	==>	5080.53	
13900.00	90.00	89.820	7482.97	339.73N	5171.01E	==>	5180.46	
14000.00	90.00	89.820	7482.97	340.04N	5271.01E	==>	5280.39	
14100.00	90.00	89.820	7482.97	340.35N	5371.01E	==>	5380.32	
14200.00	90.00	89.820	7482.97	340.66N	5471.01E	==>	5480.25	
14300.00	90.00	89.820	7482.97	340.97N	5571.01E	==>	5580.19	
14400.00	90.00	89.820	7482.97	341.28N	5671.01E	==>	5680.12	
14500.00	90.00	89.820	7482.97	341.59N	5771.01E	==>	5780.05	
14600.00	90.00	89.820	7482.97	341.91N	5871.01E	==>	5879.98	
14700.00	90.00	89.820	7482.97	342.22N	5971.01E	==>	5979.91	
14800.00	90.00	89.820	7482.97	342.53N	6071.01E	==>	6079.85	
14900.00	90.00	89.820	7482.97	342.84N	6171.01E	==>	6179.78	

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Vertical Section is from 0.00N 0.00E on azimuth 87.710 degrees
Bottom hole distance is 8784.61 Feet on azimuth 87.71 degrees from Wellhead
Calculation method uses Minimum Curvature method
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SYS DRILL
Well Design Combined Report
Wellbore: W PC NORTH 1S-66-2928-11NH (PWB)



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	90.00	89.820	7482.97	343.15N	6271.01E	==>	6279.71	
15100.00	90.00	89.820	7482.97	343.46N	6371.01E	==>	6379.64	
15200.00	90.00	89.820	7482.97	343.77N	6471.01E	==>	6479.58	
15300.00	90.00	89.820	7482.97	344.08N	6571.01E	==>	6579.51	
15400.00	90.00	89.820	7482.97	344.39N	6671.01E	==>	6679.44	
15500.00	90.00	89.820	7482.97	344.70N	6771.01E	==>	6779.37	
15600.00	90.00	89.820	7482.97	345.01N	6871.01E	==>	6879.30	
15700.00	90.00	89.820	7482.97	345.32N	6971.01E	==>	6979.24	
15800.00	90.00	89.820	7482.97	345.63N	7071.00E	==>	7079.17	
15900.00	90.00	89.820	7482.97	345.94N	7171.00E	==>	7179.10	
16000.00	90.00	89.820	7482.97	346.25N	7271.00E	==>	7279.03	
16100.00	90.00	89.820	7482.97	346.56N	7371.00E	==>	7378.96	
16200.00	90.00	89.820	7482.97	346.87N	7471.00E	==>	7478.90	
16300.00	90.00	89.820	7482.97	347.18N	7571.00E	==>	7578.83	
16400.00	90.00	89.820	7482.97	347.50N	7671.00E	==>	7678.76	
16500.00	90.00	89.820	7482.97	347.81N	7771.00E	==>	7778.69	
16600.00	90.00	89.820	7482.97	348.12N	7871.00E	==>	7878.62	
16700.00	90.00	89.820	7482.97	348.43N	7971.00E	==>	7978.56	
16800.00	90.00	89.820	7482.97	348.74N	8071.00E	==>	8078.49	
16900.00	90.00	89.820	7482.97	349.05N	8171.00E	==>	8178.42	
17000.00	90.00	89.820	7482.97	349.36N	8271.00E	==>	8278.35	
17100.00	90.00	89.820	7482.97	349.67N	8371.00E	==>	8378.29	
17200.00	90.00	89.820	7482.97	349.98N	8471.00E	==>	8478.22	
17300.00	90.00	89.820	7482.97	350.29N	8571.00E	==>	8578.15	
17400.00	90.00	89.820	7482.97	350.60N	8671.00E	==>	8678.08	
17500.00	90.00	89.820	7482.97	350.91N	8771.00E	==>	8778.01	
17506.60	90.00	89.820	7482.97	350.93N	8777.60E	==>	8784.61	

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 5062.0ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 87.710 degrees
Bottom hole distance is 8784.61 Feet on azimuth 87.71 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by IPT
Date Printed: 1-Feb-2017



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SYSDRILL
Closest Approach + Clearance Factor Summary Report
Wellbore: W PC NORTH 1S-66-2928-11NH (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 PC NORTH 1S-66-2928-11NH (PWB)	Jan-24-2017	Jan-24-2017

Well		
Name	Government ID	Last Revised
W PC NORTH 1S-66-2928-11NH		Jan-24-2017

Slot						
Name	Latitude	Longitude	Grid Northing	Grid Easting	North	East
PC NORTH 1S-66-2928-11NH	N39 56 7.4760	W104 48 15.1560	1220083.9241	3195110.6811	0.24N	30.85E

Installation						
Name	Installation Position (Latitude)	Installation Position (Longitude)	Easting	Northing	Coord System Name	North Alignment
PC 1S-66-2928 PAD	N39 56 7.4760	W104 48 15.5520	3195079.8360	1220083.6821	CO83-NF on NORTH AMERICAN DATUM 1983 datum	Grid

Clearance Summary							
Offset WellName	Separation [ft]	MD[ft]	Diverging From[ft]	Ellipse Separation [ft]	Ellipse MD[ft]	Clearance Factor	Clearance MD[ft]
W PC SOUTH 1S-66-2928-12NH	14.57	2165.35	17506.60	-385.91	17506.60	0.48	17506.60
W PC SOUTH 1S-66-2928-13CDH	29.14	2100.00	17506.60	-72.86	17506.60	0.89	17506.60
W PC NORTH 1S-66-2928-2NH	34.12	1150.03	17506.60	32.22	1200.00	2.80	17506.60
W PC NORTH 1S-66-2928-3NH	41.78	1410.76	1405.52	39.51	1427.17	2.40	17506.60
W PC SOUTH 1S-66-2928-14NH	43.71	2050.52	17506.60	-3.00	17506.60	1.00	17506.60
W PC NORTH 1S-66-2928-4CDH	50.37	1574.80	17506.60	47.91	1574.80	2.21	17506.60
W PC NORTH 1S-66-2928-10CDH	53.89	5462.60	7221.94	-167.50	17506.60	0.66	17506.60
W PC SOUTH 1S-66-2928-15NH	61.93	2000.00	17506.60	56.57	2066.93	1.50	17506.60
W PC NORTH 1S-66-2928-5NH	62.26	1713.95	1713.95	59.14	1738.85	1.93	17506.60
W PC NORTH 1S-66-2928-6NH	75.32	1788.06	17506.60	71.67	1820.87	1.41	17506.60
W PC SOUTH 1S-66-2928-16CDH	76.50	1949.61	17506.60	71.63	2001.31	1.90	17506.60

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SYSDRILL
Closest Approach + Clearance Factor Summary Report
Wellbore: W PC NORTH 1S-66-2928-11NH (PWB)



Clearance Summary							
Offset WellName	Separation [ft]	MD[ft]	Diverging From[ft]	Ellipse Separation [ft]	Ellipse MD[ft]	Clearance Factor	Clearance MD[ft]
W PC NORTH 1S-66-2928-7CD H	88.03	1870.08	17506.60	84.14	1886.48	1.22	17506.60
W PC SOUTH 1S-66-2928-17N H	91.07	1900.00	17506.60	86.63	1935.70	2.01	17506.60
W PC NORTH 1S-66-2928-8NH	101.68	1938.66	1938.66	-31.47	17506.60	0.96	17506.60
W PC SOUTH 1S-66-2928-18N H	105.64	1849.36	17506.60	101.67	1886.48	2.50	17506.60
W PC NORTH 1S-66-2928-9NH	119.89	1926.75	4200.00	-381.28	17506.60	0.49	17506.60
W PC SOUTH 1S-66-2928-19C DH	120.22	1800.00	17506.60	116.61	1837.27	2.95	17506.60
W PC SOUTH 1S-66-2928-20N H	134.78	1749.22	17506.60	131.57	1771.65	3.04	17506.60
W POLLARD #1	2027.86	13389.26	13389.26	1768.22	13451.44	7.68	13697.51

