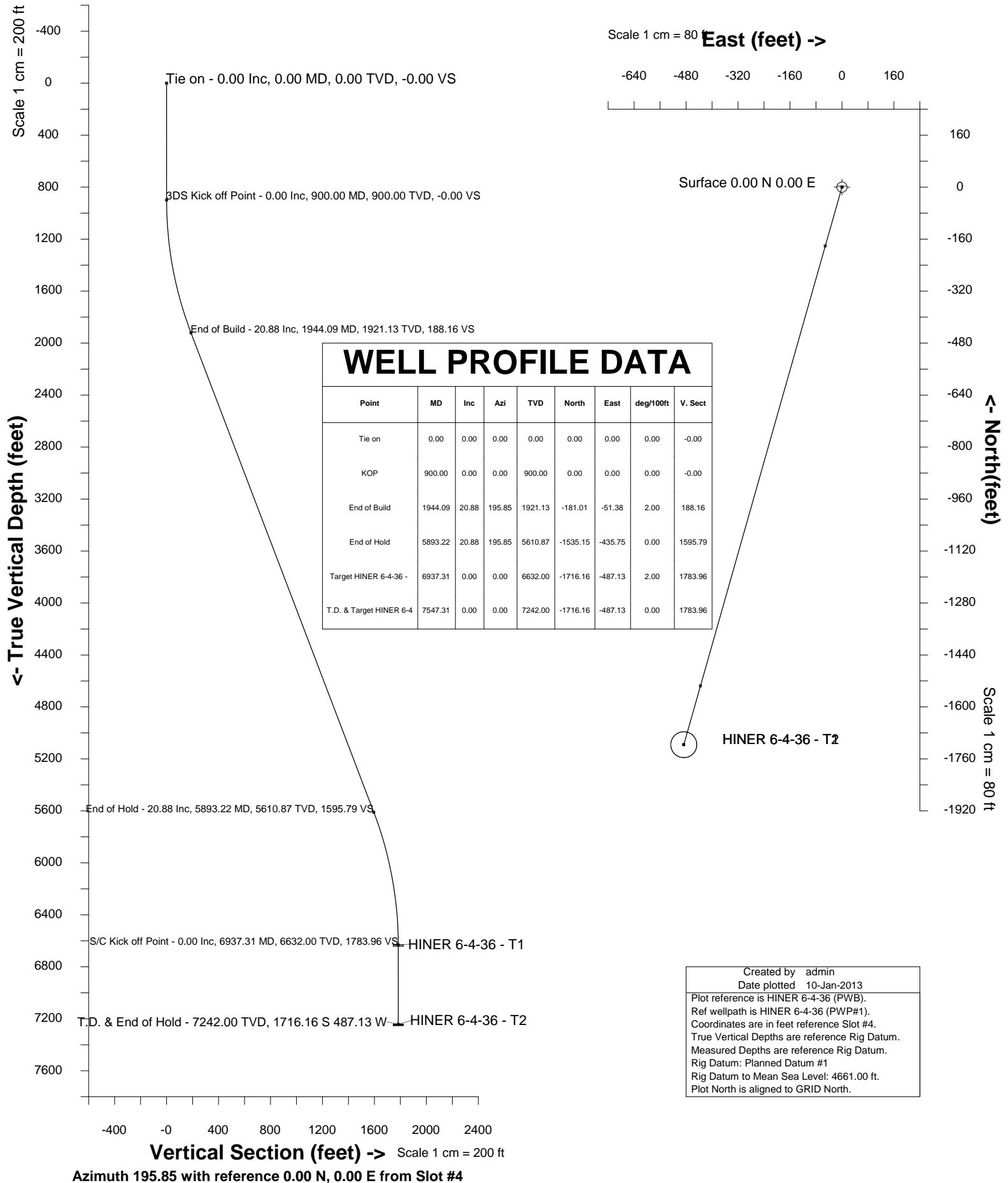


HRM Resources

Location	Weld County, CO, USA	Slot	Slot #4
Field	WATTENBERG	Well	HINER 6-4-36
Installation	Hiner Pad	Wellbore	HINER 6-4-36 (PWB)





SYSDRILL
Wellpath Report
Wellbore: HINER 6-4-36 (PWB)
Wellpath: HINER 6-4-36 (PWP#1)

Wellbore

Name	Created	Last Revised
HINER 6-4-36 (PWB)	19-Dec-2012	8-Jan-2013

Well

Name	Government ID	Last Revised
HINER 6-4-36		19-Dec-2012

Slot

Name	Grid Northing	Grid Easting	Latitude	Longitude	North	East
Slot #4	1407600.8796	3217352.9503	N40 26 58.6993	W104 43 8.4202	1.00S	60.00W

Installation

Name	Easting	Northing	Coord System Name	North Alignment
Hiner Pad	3217412.9479	1407601.8796	CO83-NF on NORTH AMERICAN DATUM 1983 datum	Grid

Field

Name	Easting	Northing	Coord System Name	North Alignment
WATTENBERG	3217412.9943	1407601.8800	CO83-NF on NORTH AMERICAN DATUM 1983 datum	Grid

Wellpath Report

MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]
0.00	0.00	0.000	0.00	0.00N	0.00E		0.00
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	2.00	195.850	999.98	1.68S	0.48W	2.00	1.75
1100.00	4.00	195.850	1099.84	6.71S	1.91W	2.00	6.98
1200.00	6.00	195.850	1199.45	15.10S	4.29W	2.00	15.69
1300.00	8.00	195.850	1298.70	26.82S	7.61W	2.00	27.88
1400.00	10.00	195.850	1397.47	41.87S	11.88W	2.00	43.52
1500.00	12.00	195.850	1495.62	60.22S	17.09W	2.00	62.60
1600.00	14.00	195.850	1593.06	81.86S	23.24W	2.00	85.10
1700.00	16.00	195.850	1689.64	106.76S	30.30W	2.00	110.98
1800.00	18.00	195.850	1785.27	134.88S	38.29W	2.00	140.21
1900.00	20.00	195.850	1879.82	166.20S	47.18W	2.00	172.77
1944.09	20.88	195.850	1921.13	181.01S	51.38W	2.00	188.16
2000.00	20.88	195.850	1973.37	200.19S	56.82W	==>	208.09
2100.00	20.88	195.850	2066.80	234.48S	66.56W	==>	243.74
2200.00	20.88	195.850	2160.23	268.76S	76.29W	==>	279.38
2300.00	20.88	195.850	2253.66	303.05S	86.02W	==>	315.03
2400.00	20.88	195.850	2347.09	337.34S	95.76W	==>	350.67
2500.00	20.88	195.850	2440.53	371.63S	105.49W	==>	386.31
2600.00	20.88	195.850	2533.96	405.92S	115.22W	==>	421.96
2700.00	20.88	195.850	2627.39	440.21S	124.95W	==>	457.60
2800.00	20.88	195.850	2720.82	474.50S	134.69W	==>	493.25
2900.00	20.88	195.850	2814.25	508.79S	144.42W	==>	528.89
3000.00	20.88	195.850	2907.68	543.08S	154.15W	==>	564.53
3100.00	20.88	195.850	3001.12	577.37S	163.89W	==>	600.18
3200.00	20.88	195.850	3094.55	611.66S	173.62W	==>	635.82
3300.00	20.88	195.850	3187.98	645.95S	183.35W	==>	671.47
3400.00	20.88	195.850	3281.41	680.24S	193.09W	==>	707.11
3500.00	20.88	195.850	3374.84	714.53S	202.82W	==>	742.75
3600.00	20.88	195.850	3468.28	748.82S	212.55W	==>	778.40
3700.00	20.88	195.850	3561.71	783.11S	222.29W	==>	814.04
3800.00	20.88	195.850	3655.14	817.39S	232.02W	==>	849.69
3900.00	20.88	195.850	3748.57	851.68S	241.75W	==>	885.33
4000.00	20.88	195.850	3842.00	885.97S	251.48W	==>	920.97
4100.00	20.88	195.850	3935.43	920.26S	261.22W	==>	956.62
4200.00	20.88	195.850	4028.87	954.55S	270.95W	==>	992.26
4300.00	20.88	195.850	4122.30	988.84S	280.68W	==>	1027.91
4400.00	20.88	195.850	4215.73	1023.13S	290.42W	==>	1063.55
4500.00	20.88	195.850	4309.16	1057.42S	300.15W	==>	1099.19
4600.00	20.88	195.850	4402.59	1091.71S	309.88W	==>	1134.84

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 4661.0ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 195.850 degrees
Bottom hole distance is 1783.96 Feet on azimuth 195.85 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by Peterson Energy
Date Printed: 8-Jan-2013



SYSDRILL
Wellpath Report
Wellbore: HINER 6-4-36 (PWB)
Wellpath: HINER 6-4-36 (PWP#1)

Wellpath Report

MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]
4700.00	20.88	195.850	4496.03	1126.00S	319.62W	==>	1170.48
4800.00	20.88	195.850	4589.46	1160.29S	329.35W	==>	1206.13
4900.00	20.88	195.850	4682.89	1194.58S	339.08W	==>	1241.77
5000.00	20.88	195.850	4776.32	1228.87S	348.81W	==>	1277.41
5100.00	20.88	195.850	4869.75	1263.16S	358.55W	==>	1313.06
5200.00	20.88	195.850	4963.19	1297.45S	368.28W	==>	1348.70
5300.00	20.88	195.850	5056.62	1331.74S	378.01W	==>	1384.35
5400.00	20.88	195.850	5150.05	1366.02S	387.75W	==>	1419.99
5500.00	20.88	195.850	5243.48	1400.31S	397.48W	==>	1455.63
5600.00	20.88	195.850	5336.91	1434.60S	407.21W	==>	1491.28
5700.00	20.88	195.850	5430.34	1468.89S	416.95W	==>	1526.92
5800.00	20.88	195.850	5523.78	1503.18S	426.68W	==>	1562.57
5893.22	20.88	195.850	5610.87	1535.15S	435.75W	==>	1595.79
5993.22	18.88	195.850	5704.91	1567.86S	445.04W	2.00	1629.80
6093.22	16.88	195.850	5800.07	1597.40S	453.42W	2.00	1660.50
6193.22	14.88	195.850	5896.25	1623.72S	460.89W	2.00	1687.87
6293.22	12.88	195.850	5993.33	1646.80S	467.45W	2.00	1711.86
6393.22	10.88	195.850	6091.18	1666.61S	473.07W	2.00	1732.45
6493.22	8.88	195.850	6189.69	1683.12S	477.75W	2.00	1749.61
6593.22	6.88	195.850	6288.74	1696.31S	481.50W	2.00	1763.32
6693.22	4.88	195.850	6388.21	1706.16S	484.30W	2.00	1773.57
6793.22	2.88	195.850	6487.97	1712.68S	486.14W	2.00	1780.34
6893.22	0.88	195.850	6587.92	1715.83S	487.04W	2.00	1783.62
6937.31	0.00	0.000	6632.00	1716.16S	487.13W	2.00	1783.96
7000.00	0.00	0.000	6694.69	1716.16S	487.13W	==>	1783.96
7100.00	0.00	0.000	6794.69	1716.16S	487.13W	==>	1783.96
7200.00	0.00	0.000	6894.69	1716.16S	487.13W	==>	1783.96
7300.00	0.00	0.000	6994.69	1716.16S	487.13W	==>	1783.96
7400.00	0.00	0.000	7094.69	1716.16S	487.13W	==>	1783.96
7500.00	0.00	0.000	7194.69	1716.16S	487.13W	==>	1783.96
7547.31	0.00	0.000	7242.00	1716.16S	487.13W	==>	1783.96

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Vertical Section is from 0.00N 0.00E on azimuth 195.850 degrees
Bottom hole distance is 1783.96 Feet on azimuth 195.85 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by Peterson Energy
Date Printed: 8-Jan-2013



SYSDRILL
Wellpath Report
Wellbore: HINER 6-4-36 (PWB)
Wellpath: HINER 6-4-36 (PWP#1)

Targets

Name	North[ft]	East[ft]	TVD[ft]	Latitude	Longitude	Easting	Northing	Last Revised
HINER 6-4-36 - T1	1716.16S	487.13W	6632.00	N40 26 41.7840	W104 43 14.9160	3216865.84	1405884.79	10-Dec-2012
HINER 6-4-36 - T2	1716.16S	487.13W	7242.00	N40 26 41.7840	W104 43 14.9160	3216865.84	1405884.79	10-Dec-2012

Survey Tool Program

Reference	Survey Name	MD[ft]	TVD[ft]	Survey Tool	Error Model
19269	Planned	7547.31	7242.00	WdW Rate Gyro	Standard

All data is in Feet unless otherwise stated
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Calculation method uses Minimum Curvature method
Prepared by Peterson Energy
Date Printed: 8-Jan-2013



SYSDRILL
Closest Approach + Clearance Factor Summary Report
Wellbore: HINER 6-4-36 (PWB)
Wellpath: HINER 6-4-36 (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
Cutoff 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
HINER 6-4-36 (PWB)	19-Dec-2012	8-Jan-2013

Well

Name	Government ID	Last Revised
HINER 6-4-36		19-Dec-2012

Slot

Name	Grid Northing	Grid Easting	Latitude	Longitude	North	East
Slot #4	1407600.8796	3217352.9503	N40 26 58.6993	W104 43 8.4202	1.00S	60.00W

Installation

Name	Easting	Northing	Coord System Name	North Alignment
Hiner Pad	3217412.9479	1407601.8796	CO83-NF on NORTH AMERICAN DATUM 1983 datum	Grid

Field

Name	Easting	Northing	Coord System Name	North Alignment
WATTENBERG	3217412.9943	1407601.8800	CO83-NF on NORTH AMERICAN DATUM 1983 datum	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]
HINER #32-36	HINER #32-36 (PWB)	Slot #5	Hiner Pad	20.00	900.00	7547.31	18.55	900.00	12.82	1033.46
HINER 41-36	HINER 41-36 (PWB)	Slot #3	Hiner Pad	20.00	902.23	7547.31	18.54	918.64	12.66	1033.46
HINER #6-2-36	HINER #6-2-36 (PWB)	Slot #6	Hiner Pad	39.39	1033.78	7547.31	37.73	1066.27	21.54	1230.31
HINER #42-36	HINER #42-36 (PWB)	Slot #2	Hiner Pad	40.00	902.23	7547.31	38.55	918.64	23.42	1246.72
HINER #4-2-36	HINER #4-2-36 (PWB)	Slot #7	Hiner Pad	59.87	984.25	7547.31	58.28	984.25	34.57	1181.10
HINER #8-2-36	HINER #8-2-36 (PWB)	Slot #1	Hiner Pad	60.05	900.00	7547.31	58.60	900.00	38.01	1066.27
HINER 31-36	HINER 31-36 (PWB)	Slot #8	Hiner Pad	80.00	836.61	7547.31	78.64	853.02	50.23	1131.89