



HIGH PLAINS DISPOSAL

Location Windsor Slot HPD PLATTVILLE #2
Field Wattenburg Well HPD PLATTVILLE #2
Installation HPD PLATTEVILLE #2 Wellbore HPD PLATTVILLE #2 (PWB)



East (feet) ->

-1000 -800 -600 -400 -200 0 200 400 600

Scale 1 cm = 100 ft

Scale 1 cm = 400 ft

Tie on - 0.00 Inc, 16.00 MD, 16.00 TVD, 0.00 VS

3DS Kick off Point - 0.00 Inc, 800.00 MD, 800.00 TVD, 0.00 VS

9 5/8in Surface Casing

End of Build - 20.20 Inc, 1809.99 MD, 1789.19 TVD, 176.20 VS

WELL PROFILE DATA

Point	MD	Inc	Azi	TVD	North	East	deg/100ft	V. Sect
Tie on	16.00	0.00	0.00	16.00	0.00	0.00	0.00	0.00
KOP	800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00
End of Build	1809.99	20.20	172.04	1789.19	-174.50	24.40	2.00	176.20
End of Hold	8013.12	20.20	172.04	7610.81	-2295.77	321.05	0.00	2318.11
Target HPD PLATTVILLE	9023.11	0.00	359.49	8600.00	-2470.27	345.45	2.00	2494.31
T.D. & Target HPD PLATT	11023.11	0.00	359.49	10600.00	-2470.27	345.45	0.00	2494.31

NIOBRARA

CODELL

J SS

LYONS

INGLESIDE

L SATANKA

WOLFCAMP

AMAZON

COUNCIL GROVE

ADMIRE

VIRGIL

MISSOURI

FOUNTAIN

End of Hold - 20.20 Inc, 8013.12 MD, 7610.81 TVD, 2318.11 VS

HPD PLATTVILLE #2 - T2

S/C Kick off Point - 0.00 Inc, 9023.11 MD, 8600.00 TVD, 2494.31 VS

7.0in Intermediate Casing

HPD PLATTVILLE #2 - T3

T.D. & End of Hold - 10600.00 TVD, 2470.27 S 345.45 E

4 1/2in Slotted Liner

Scale 1 cm = 400 ft

Vertical Section (feet) ->

Azimuth 172.04 with reference 0.00 N, 0.00 E from HPD PLATTVILLE #2

Surface 0.00 N 0.00 E

<- North(feet)

Scale 1 cm = 100 ft

Created by admin

Date plotted 21-May-2014

Plot reference is HPD PLATTVILLE #2 (PWB).

Ref wellpath is HPD PLATTVILLE #2 (PWP#1).

Coordinates are in feet reference HPD PLATTVILLE #2.

True Vertical Depths are reference Rig Datum.

Measured Depths are reference Rig Datum.

Rig Datum: Planned Datum #1

Rig Datum to Mean Sea Level: 5042.00 ft.

Plot North is aligned to GRID North.



INTEGRATED PETROLEUM TECHNOLOGIES, INC
SYSDRILL
Well Design Combined Report
Wellbore: HPD PLATTVILLE #2 (PWB)



Wellhead Details							
Name	Northing	Easting	Latitude	Longitude	North	East	Elevation Above Inst.
HPD PLATTVILLE #2	1869295.6132	3218477.2770	40.21743000	-104.71778000	0.00N	0.00E	-0.00

Declination			
Date	Source	Time	
11-May-2014	IGRF Model [1900.0-2015.0]	23:43	

Site Details				
Name	Northing	Easting	Coord System Name	North Alignment
HPD PLATTEVILLE #2	1869295.6132	3218477.2770	CO83-CF 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
16.00	0.00	0.000	16.00	0.00N	0.00E		0.00	1869295.61	3218477.28
800.00	0.00	0.000	800.00	0.00N	0.00E	==>	0.00	1869295.61	3218477.28
1809.99	20.20	172.040	1789.19	174.50S	24.40E	2.00	176.20	1869121.09	3218501.68
8013.12	20.20	172.040	7610.81	2295.77S	321.05E	==>	2318.11	1866999.56	3218798.37
9023.11	0.00	359.490	8600.00	2470.27S	345.45E	2.00	2494.31	1866825.04	3218822.77
11023.11	0.00	359.490	10600.00	2470.27S	345.45E	==>	2494.31	1866825.04	3218822.77

Interpolated 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	1869295.61	3218477.28
16.00	0.00	0.000	16.00	0.00N	0.00E	==>	0.00	1869295.61	3218477.28
100.00	0.00	0.000	100.00	0.00N	0.00E	==>	0.00	1869295.61	3218477.28
200.00	0.00	0.000	200.00	0.00N	0.00E	==>	0.00	1869295.61	3218477.28
300.00	0.00	0.000	300.00	0.00N	0.00E	==>	0.00	1869295.61	3218477.28
400.00	0.00	0.000	400.00	0.00N	0.00E	==>	0.00	1869295.61	3218477.28
500.00	0.00	0.000	500.00	0.00N	0.00E	==>	0.00	1869295.61	3218477.28
600.00	0.00	0.000	600.00	0.00N	0.00E	==>	0.00	1869295.61	3218477.28
700.00	0.00	0.000	700.00	0.00N	0.00E	==>	0.00	1869295.61	3218477.28
784.00	0.00	0.000	784.00	0.00N	0.00E	==>	0.00	1869295.61	3218477.28
800.00	0.00	0.000	800.00	0.00N	0.00E	==>	0.00	1869295.61	3218477.28
884.00	1.68	172.040	883.99	1.22S	0.17E	2.00	1.23	1869294.39	3218477.45
984.00	3.68	172.040	983.87	5.85S	0.82E	2.00	5.91	1869289.76	3218478.10
1084.00	5.68	172.040	1083.54	13.93S	1.95E	2.00	14.07	1869281.68	3218479.23
1184.00	7.68	172.040	1182.85	25.45S	3.56E	2.00	25.70	1869270.16	3218480.84
1284.00	9.68	172.040	1281.70	40.40S	5.65E	2.00	40.79	1869255.21	3218482.93
1384.00	11.68	172.040	1379.96	58.75S	8.22E	2.00	59.32	1869236.86	3218485.49
1484.00	13.68	172.040	1477.52	80.49S	11.26E	2.00	81.27	1869215.12	3218488.53
1584.00	15.68	172.040	1574.25	105.58S	14.77E	2.00	106.61	1869190.02	3218492.04
1684.00	17.68	172.040	1670.04	134.01S	18.74E	2.00	135.31	1869161.59	3218496.02
1784.00	19.68	172.040	1764.77	165.72S	23.18E	2.00	167.34	1869129.87	3218500.46
1800.00	20.00	172.040	1779.82	171.10S	23.93E	2.00	172.77	1869124.49	3218501.21
1809.99	20.20	172.040	1789.19	174.50S	24.40E	2.00	176.20	1869121.09	3218501.68
1900.00	20.20	172.040	1873.67	205.28S	28.71E	==>	207.28	1869090.30	3218505.99
2000.00	20.20	172.040	1967.52	239.48S	33.49E	==>	241.81	1869056.10	3218510.77
2100.00	20.20	172.040	2061.37	273.68S	38.27E	==>	276.34	1869021.90	3218515.55
2200.00	20.20	172.040	2155.22	307.87S	43.05E	==>	310.87	1868987.70	3218520.34
2300.00	20.20	172.040	2249.07	342.07S	47.84E	==>	345.40	1868953.50	3218525.12
2400.00	20.20	172.040	2342.92	376.27S	52.62E	==>	379.93	1868919.30	3218529.90
2500.00	20.20	172.040	2436.77	410.46S	57.40E	==>	414.46	1868885.10	3218534.68
2600.00	20.20	172.040	2530.62	444.66S	62.18E	==>	448.99	1868850.90	3218539.47
2700.00	20.20	172.040	2624.47	478.86S	66.97E	==>	483.52	1868816.70	3218544.25
2800.00	20.20	172.040	2718.32	513.05S	71.75E	==>	518.05	1868782.50	3218549.03
2900.00	20.20	172.040	2812.17	547.25S	76.53E	==>	552.58	1868748.30	3218553.82
3000.00	20.20	172.040	2906.01	581.45S	81.31E	==>	587.10	1868714.09	3218558.60

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 5042.0ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 172.040 degrees
Bottom hole distance is 2494.31 Feet on azimuth 172.04 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by Integrated Petroleum Technologies, Inc.
Date Printed: 21-May-2014



INTEGRATED PETROLEUM TECHNOLOGIES, INC
SYSDRILL
Well Design Combined Report
Wellbore: HPD PLATTVILLE #2 (PWB)



Interpolated Wellpath									
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Northing	Easting
3100.00	20.20	172.040	2999.86	615.64S	86.09E	==>	621.63	1868679.89	3218563.38
3200.00	20.20	172.040	3093.71	649.84S	90.88E	==>	656.16	1868645.69	3218568.16
3300.00	20.20	172.040	3187.56	684.04S	95.66E	==>	690.69	1868611.49	3218572.95
3400.00	20.20	172.040	3281.41	718.23S	100.44E	==>	725.22	1868577.29	3218577.73
3500.00	20.20	172.040	3375.26	752.43S	105.22E	==>	759.75	1868543.09	3218582.51
3600.00	20.20	172.040	3469.11	786.63S	110.00E	==>	794.28	1868508.89	3218587.30
3700.00	20.20	172.040	3562.96	820.82S	114.79E	==>	828.81	1868474.69	3218592.08
3800.00	20.20	172.040	3656.81	855.02S	119.57E	==>	863.34	1868440.49	3218596.86
3900.00	20.20	172.040	3750.66	889.22S	124.35E	==>	897.87	1868406.29	3218601.64
4000.00	20.20	172.040	3844.51	923.41S	129.13E	==>	932.40	1868372.09	3218606.43
4100.00	20.20	172.040	3938.36	957.61S	133.92E	==>	966.93	1868337.88	3218611.21
4200.00	20.20	172.040	4032.21	991.81S	138.70E	==>	1001.46	1868303.68	3218615.99
4300.00	20.20	172.040	4126.06	1026.00S	143.48E	==>	1035.99	1868269.48	3218620.78
4400.00	20.20	172.040	4219.91	1060.20S	148.26E	==>	1070.52	1868235.28	3218625.56
4500.00	20.20	172.040	4313.76	1094.40S	153.04E	==>	1105.05	1868201.08	3218630.34
4600.00	20.20	172.040	4407.61	1128.59S	157.83E	==>	1139.57	1868166.88	3218635.12
4700.00	20.20	172.040	4501.46	1162.79S	162.61E	==>	1174.10	1868132.68	3218639.91
4800.00	20.20	172.040	4595.31	1196.99S	167.39E	==>	1208.63	1868098.48	3218644.69
4900.00	20.20	172.040	4689.15	1231.18S	172.17E	==>	1243.16	1868064.28	3218649.47
5000.00	20.20	172.040	4783.00	1265.38S	176.96E	==>	1277.69	1868030.08	3218654.25
5100.00	20.20	172.040	4876.85	1299.58S	181.74E	==>	1312.22	1867995.88	3218659.04
5200.00	20.20	172.040	4970.70	1333.77S	186.52E	==>	1346.75	1867961.68	3218663.82
5300.00	20.20	172.040	5064.55	1367.97S	191.30E	==>	1381.28	1867927.47	3218668.60
5400.00	20.20	172.040	5158.40	1402.17S	196.08E	==>	1415.81	1867893.27	3218673.39
5500.00	20.20	172.040	5252.25	1436.36S	200.87E	==>	1450.34	1867859.07	3218678.17
5600.00	20.20	172.040	5346.10	1470.56S	205.65E	==>	1484.87	1867824.87	3218682.95
5700.00	20.20	172.040	5439.95	1504.76S	210.43E	==>	1519.40	1867790.67	3218687.73
5800.00	20.20	172.040	5533.80	1538.95S	215.21E	==>	1553.93	1867756.47	3218692.52
5900.00	20.20	172.040	5627.65	1573.15S	220.00E	==>	1588.46	1867722.27	3218697.30
6000.00	20.20	172.040	5721.50	1607.35S	224.78E	==>	1622.99	1867688.07	3218702.08
6100.00	20.20	172.040	5815.35	1641.54S	229.56E	==>	1657.52	1867653.87	3218706.87
6200.00	20.20	172.040	5909.20	1675.74S	234.34E	==>	1692.05	1867619.67	3218711.65
6300.00	20.20	172.040	6003.05	1709.94S	239.12E	==>	1726.57	1867585.47	3218716.43
6400.00	20.20	172.040	6096.90	1744.13S	243.91E	==>	1761.10	1867551.26	3218721.21
6500.00	20.20	172.040	6190.75	1778.33S	248.69E	==>	1795.63	1867517.06	3218726.00
6600.00	20.20	172.040	6284.60	1812.53S	253.47E	==>	1830.16	1867482.86	3218730.78
6700.00	20.20	172.040	6378.44	1846.72S	258.25E	==>	1864.69	1867448.66	3218735.56
6800.00	20.20	172.040	6472.29	1880.92S	263.03E	==>	1899.22	1867414.46	3218740.34
6900.00	20.20	172.040	6566.14	1915.12S	267.82E	==>	1933.75	1867380.26	3218745.13
7000.00	20.20	172.040	6659.99	1949.31S	272.60E	==>	1968.28	1867346.06	3218749.91
7100.00	20.20	172.040	6753.84	1983.51S	277.38E	==>	2002.81	1867311.86	3218754.69
7200.00	20.20	172.040	6847.69	2017.71S	282.16E	==>	2037.34	1867277.66	3218759.48
7300.00	20.20	172.040	6941.54	2051.90S	286.95E	==>	2071.87	1867243.46	3218764.26
7400.00	20.20	172.040	7035.39	2086.10S	291.73E	==>	2106.40	1867209.26	3218769.04
7500.00	20.20	172.040	7129.24	2120.30S	296.51E	==>	2140.93	1867175.05	3218773.82
7600.00	20.20	172.040	7223.09	2154.49S	301.29E	==>	2175.46	1867140.85	3218778.61
7700.00	20.20	172.040	7316.94	2188.69S	306.07E	==>	2209.99	1867106.65	3218783.39
7800.00	20.20	172.040	7410.79	2222.89S	310.86E	==>	2244.52	1867072.45	3218788.17
7900.00	20.20	172.040	7504.64	2257.08S	315.64E	==>	2279.05	1867038.25	3218792.96
7997.12	20.20	172.040	7595.79	2290.30S	320.28E	==>	2312.58	1867005.03	3218797.60
8000.00	20.20	172.040	7598.49	2291.28S	320.42E	==>	2313.57	1867004.05	3218797.74
8013.12	20.20	172.040	7610.81	2295.77S	321.05E	==>	2318.11	1866999.56	3218798.37
8097.12	18.52	172.040	7690.05	2323.34S	324.91E	2.00	2345.95	1866971.98	3218802.22
8197.12	16.52	172.040	7785.41	2353.16S	329.07E	2.00	2376.05	1866942.17	3218806.39
8297.12	14.52	172.040	7881.76	2379.65S	332.78E	2.00	2402.81	1866915.66	3218810.10
8397.12	12.52	172.040	7978.98	2402.80S	336.02E	2.00	2426.19	1866892.51	3218813.34
8497.12	10.52	172.040	8076.96	2422.58S	338.78E	2.00	2446.16	1866872.73	3218816.10
8597.12	8.52	172.040	8175.58	2438.96S	341.07E	2.00	2462.69	1866856.35	3218818.39

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Coordinates are from Slot MD's are from Rig and TVD's are from Rig (Planned Datum #1 5042.0ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 172.040 degrees
Bottom hole distance is 2494.31 Feet on azimuth 172.04 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by Integrated Petroleum Technologies, Inc.
Date Printed: 21-May-2014



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SYSDRILL
Well Design Combined Report
Wellbore: HPD PLATTVILLE #2 (PWB)



Interpolated Wellpath									
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Northing	Easting
8697.12	6.52	172.040	8274.72	2451.92S	342.89E	2.00	2475.78	1866843.39	3218820.21
8797.12	4.52	172.040	8374.25	2461.45S	344.22E	2.00	2485.40	1866833.86	3218821.54
8897.12	2.52	172.040	8474.05	2467.53S	345.07E	2.00	2491.54	1866827.78	3218822.39
8997.12	0.52	172.040	8574.01	2470.15S	345.44E	2.00	2494.19	1866825.15	3218822.76
9023.11	0.00	359.490	8600.00	2470.27S	345.45E	2.00	2494.31	1866825.04	3218822.77
9100.00	0.00	359.490	8676.89	2470.27S	345.45E	==>	2494.31	1866825.04	3218822.77
9200.00	0.00	359.490	8776.89	2470.27S	345.45E	==>	2494.31	1866825.04	3218822.77
9300.00	0.00	359.490	8876.89	2470.27S	345.45E	==>	2494.31	1866825.04	3218822.77
9400.00	0.00	359.490	8976.89	2470.27S	345.45E	==>	2494.31	1866825.04	3218822.77
9500.00	0.00	359.490	9076.89	2470.27S	345.45E	==>	2494.31	1866825.04	3218822.77
9600.00	0.00	359.490	9176.89	2470.27S	345.45E	==>	2494.31	1866825.04	3218822.77
9700.00	0.00	359.490	9276.89	2470.27S	345.45E	==>	2494.31	1866825.04	3218822.77
9800.00	0.00	359.490	9376.89	2470.27S	345.45E	==>	2494.31	1866825.04	3218822.77
9900.00	0.00	359.490	9476.89	2470.27S	345.45E	==>	2494.31	1866825.04	3218822.77
10000.00	0.00	359.490	9576.89	2470.27S	345.45E	==>	2494.31	1866825.04	3218822.77
10100.00	0.00	359.490	9676.89	2470.27S	345.45E	==>	2494.31	1866825.04	3218822.77
10200.00	0.00	359.490	9776.89	2470.27S	345.45E	==>	2494.31	1866825.04	3218822.77
10300.00	0.00	359.490	9876.89	2470.27S	345.45E	==>	2494.31	1866825.04	3218822.77
10400.00	0.00	359.490	9976.89	2470.27S	345.45E	==>	2494.31	1866825.04	3218822.77
10500.00	0.00	359.490	10076.89	2470.27S	345.45E	==>	2494.31	1866825.04	3218822.77
10600.00	0.00	359.490	10176.89	2470.27S	345.45E	==>	2494.31	1866825.04	3218822.77
10700.00	0.00	359.490	10276.89	2470.27S	345.45E	==>	2494.31	1866825.04	3218822.77
10800.00	0.00	359.490	10376.89	2470.27S	345.45E	==>	2494.31	1866825.04	3218822.77
10900.00	0.00	359.490	10476.89	2470.27S	345.45E	==>	2494.31	1866825.04	3218822.77
11000.00	0.00	359.490	10576.89	2470.27S	345.45E	==>	2494.31	1866825.04	3218822.77
11023.11	0.00	359.490	10600.00	2470.27S	345.45E	==>	2494.31	1866825.04	3218822.77

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Vertical Section is from 0.00N 0.00E on azimuth 172.040 degrees
Bottom hole distance is 2494.31 Feet on azimuth 172.04 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by Integrated Petroleum Technologies, Inc.
Date Printed: 21-May-2014



INTEGRATED PETROLEUM TECHNOLOGIES, INC
SYSDRILL
Well Design Combined Report
Wellbore: HPD PLATTVILLE #2 (PWB)



Hole Sections

Diameter [in]	Start MD[ft]	Start TVD[ft]	Start North[ft]	Start East[ft]	End MD[ft]	End TVD[ft]	End North[ft]	End East[ft]
12 1/4	16.00	16.00	0.00N	0.00E	800.00	800.00	0.00N	0.00E
8 3/4	800.00	800.00	0.00N	0.00E	9536.00	9112.89	2470.27S	345.45E
6 1/8	9536.00	9112.89	2470.27S	345.45E	11023.11	10600.00	2470.27S	345.45E

Casings

Name	Top MD[ft]	Top TVD[ft]	Top North[ft]	Top East[ft]	Shoe MD[ft]	Shoe TVD[ft]	Shoe North[ft]	Shoe East[ft]
9 5/8in Surface Casing	16.00	16.00	0.00N	0.00E	800.00	800.00	0.00N	0.00E
7.0in Intermediate Casing	16.00	16.00	0.00N	0.00E	9536.00	9112.89	2470.27S	345.45E
4 1/2in Slotted Liner	9336.00	8912.89	2470.27S	345.45E	11023.11	10600.00	2470.27S	345.45E

Targets

Name	North[ft]	East[ft]	TVD[ft]	Latitude	Longitude	Northing	Easting	Last Revised
HPD PLATTVILLE #2 - T2	2470.28S	395.55E	8600.00	40.21064000	-104.71644000	1866825.03	3218872.87	11-May-2014
HPD PLATTVILLE #2 - T3	2470.28S	395.55E	10600.00	40.21064000	-104.71644000	1866825.03	3218872.87	11-May-2014

Formations

Formation Name	MD[ft]	TVD[ft]	Dip Angle[deg]	Dip Azimuth[deg]	Incidence Angle[deg]	Remarks
NIOBRARA	7530.64	7158.00	0.00	0.00	69.80	
CODELL	7831.13	7440.00	0.00	0.00	69.80	
J SS	8299.44	7884.00	0.00	0.00	75.53	
LYONS	9546.11	9123.00	0.00	0.00	90.00	
INGLESIDE	9679.11	9256.00	0.00	0.00	90.00	
L SATANKA	9834.11	9411.00	0.00	0.00	90.00	
WOLFCAMP	9939.11	9516.00	0.00	0.00	90.00	
AMAZON	9987.11	9564.00	0.00	0.00	90.00	
COUNCIL GROVE	10045.11	9622.00	0.00	0.00	90.00	
ADMIRE	10231.11	9808.00	0.00	0.00	90.00	
VIRGIL	10285.11	9862.00	0.00	0.00	90.00	
MISSOURI	10445.11	10022.00	0.00	0.00	90.00	
FOUNTAIN	10519.11	10096.00	0.00	0.00	90.00	

Survey Tool Program

Reference	Survey Name	MD[ft]	TVD[ft]	Survey Tool	Error Model
192361	Planned	11023.11	10600.00	WdW Rate Gyro	Standard

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 5042.0ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 172.040 degrees
Bottom hole distance is 2494.31 Feet on azimuth 172.04 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by Integrated Petroleum Technologies, Inc.
Date Printed: 21-May-2014



SYSDRILL
Closest Approach + Clearance Factor Summary Report
Wellbore: HPD PLATTVILLE #2 (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
HPD PLATTVILLE #2 (PWB)	11-May-2014	21-May-2014

Well		
Name	Government ID	Last Revised
HPD PLATTVILLE #2		11-May-2014

Slot						
Name	Grid Northing	Grid Easting	Latitude	Longitude	North	East
HPD PLATTVILLE #2	1869295.6132	3218477.2770	40.21743000	-104.71778000	0.00N	0.00E

Installation					
Name	Easting	Northing	Coord System Name	North Alignment	
HPD PLATTEVILLE #2	3218477.2770	1869295.6132	CO83-CF on NORTH AMERICAN DATUM 1983 datum	Grid	

Field					
Name	Easting	Northing	Coord System Name	North Alignment	
Wattenburg	41136929.7567	12284170.6461	CO83-NF on NORTH AMERICAN DATUM 1983 datum	Grid	

Clearance Summary								
Offset Wellbore	Offset Structure	Separation [ft]	MD[ft]	Diverging From[ft]	Ellipse Separation [ft]	Ellipse MD[ft]	Clearance Factor	Clearance MD[ft]
HSR-ESCOBOZ A 1-24 (AWB)	PLATTEVILLE OFFSETS	122.63	1955.43	1955.43	107.10	1955.43	7.83	2000.91
CRUICKSHANK 1C-24HZ (AWB)	PLATTEVILLE OFFSETS	145.45	7841.56	7841.56	65.77	7841.56	1.83	7841.56
HSR-WALSH 8-24 (AWB)	PLATTEVILLE OFFSETS	267.57	6029.00	6029.00	230.20	6036.34	7.14	6085.55
CRUICKSHANK 27N-24HZ (AWB)	PLATTEVILLE OFFSETS	482.85	7586.84	7586.84	404.37	7586.84	6.15	7586.84
WARDELL H 19-31D (AWB)	PLATTEVILLE OFFSETS	562.21	5117.71	5117.71	522.08	5134.11	13.73	5281.75
HPD PLATTEVILLE 1 (AWB)	PLATTEVILLE OFFSETS	601.60	1705.63	11023.11	587.43	1738.44	34.36	2739.10
WARDELL H 19-30D (AWB)	PLATTEVILLE OFFSETS	803.72	3744.14	3744.14	760.55	3756.16	18.20	3920.20
WFL H 19-05Ji (AWB)	PLATTEVILLE OFFSETS	858.45	7416.00	7416.00	814.46	7447.10	19.07	7890.02
JOHNSON 24-24 (AWB)	PLATTEVILLE OFFSETS	1015.79	7840.80	7840.80	967.03	7873.61	20.49	8480.57
BOHLENDER, JACOB T. 'B' 1 (AWB)	PLATTEVILLE OFFSETS	1038.76	4895.59	4895.59	1007.09	4937.26	30.48	5905.11
WARDELL H 19-04 (AWB)	PLATTEVILLE OFFSETS	1073.59	2845.72	2845.72	1053.21	2903.14	43.40	4527.15

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Coordinates are from Slot MD's are from Rig and TVD's are from Rig (Planned Datum #1 5042.0ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 172.040 degrees
Prepared by Integrated Petroleum Technologies, Inc.
Date Printed: 21-May-2014



SYSDRILL
Closest Approach + Clearance Factor Summary Report
Wellbore: HPD PLATTVILLE #2 (PWB)



Offset Wellbore	Offset Structure	Separation [ft]	MD[ft]	Diverging From[ft]	Ellipse Separation [ft]	Ellipse MD[ft]	Clearance Factor	Clearance MD[ft]
HSR-LONNY JOSEPH 9-24 (AWB)	PLATTEVILLE OFFSETS	1168.40	8728.75	8728.75	1124.43	8728.75	26.57	8743.03
WARDELL H 19-33D (AWB)	PLATTEVILLE OFFSETS	1347.42	8365.74	8365.74	1305.30	8365.74	31.95	8316.52
HSR-YUNKER 2-24A (AWB)	PLATTEVILLE OFFSETS	1447.29	1973.86	1973.86	1431.36	2050.12	58.85	5166.92
WARDELL H 19-29D (AWB)	PLATTEVILLE OFFSETS	1447.32	3447.47	3447.47	1411.63	3477.29	38.01	3985.82
JOHNSON 21-24 (AWB)	PLATTEVILLE OFFSETS	1460.43	1869.67	1869.67	1451.90	1916.00	54.47	7316.00
CAMP H 30-29D (AWB)	PLATTEVILLE OFFSETS	1499.28	8852.44	8852.44	1454.73	8852.44	33.64	8890.67
JOHNSON 7-24 (AWB)	PLATTEVILLE OFFSETS	1847.44	6269.73	6269.73	1809.45	6348.02	43.04	8037.65
HSR-SCHNEIDER 16-24 (AWB)	PLATTEVILLE OFFSETS	1985.79	8693.82	8693.82	1948.63	8693.82	53.42	8726.63
HSR-TUCK 10-24 (AWB)	PLATTEVILLE OFFSETS	1993.39	8554.18	8554.18	1945.03	8554.18	41.18	8613.12
WARDELL H 19-13 (AWB)	PLATTEVILLE OFFSETS	2164.65	8422.91	8422.91	2129.35	8422.91	61.31	8431.35
HSR-ROSS 15-24A (AWB)	PLATTEVILLE OFFSETS	2617.73	8693.82	8693.82	2573.52	8693.82	59.18	8743.03