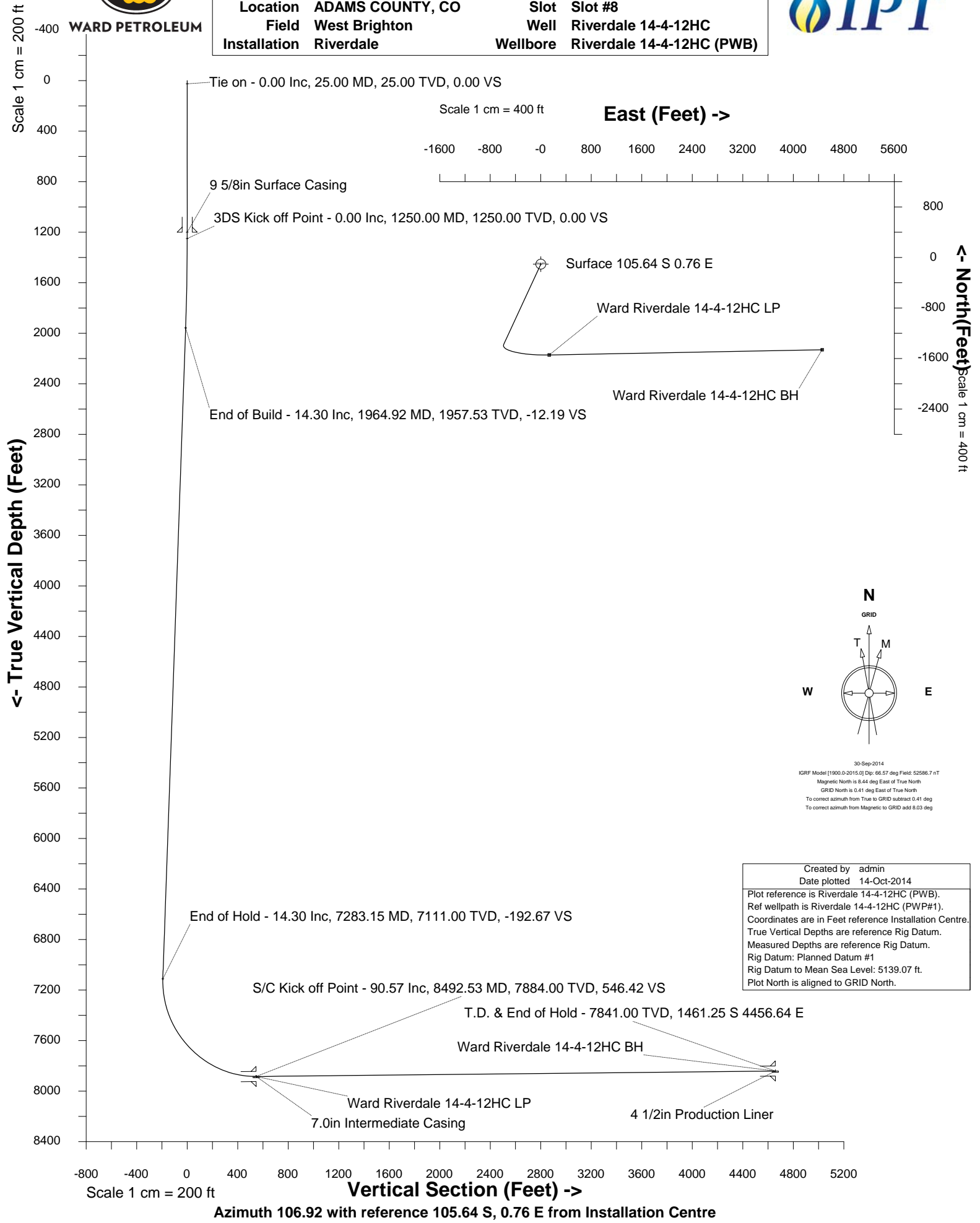




WARD PETROLEUM



Location	ADAMS COUNTY, CO	Slot	Slot #8
Field	West Brighton	Well	Riverdale 14-4-12HC
Installation	Riverdale	Wellbore	Riverdale 14-4-12HC (PWB)





WARD PETROLEUM

INTEGRATED PETROLEUM TECHNOLOGIES, INC
SYSDRILL
Well Design Combined Report
Wellbore: Riverdale 14-4-12HC (PWB)



Wellhead Details

Name	Northing	Easting	Latitude	Longitude	North	East	Elevation Above Inst.
Slot #8	1229949.2884	3178208.7733	39.96284000	-104.86423000	105.64S	0.76E	2.91

Declination

Date	Source	Time
30-Sep-2014	IGRF Model [1900.0-2015.0]	10:30

Site Details

Name	Northing	Easting	Coord System Name	North Alignment
Riverdale	1230054.9248	3178208.0159	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
25.00	0.00	0.000	25.00	0.00N	0.00E		0.00	1229949.29	3178208.77
12815.76	90.57	88.910	7841.00	1355.61S	4455.88E	==>	4657.53	1228593.72	3182664.51

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	1229949.29	3178208.77
25.00	0.00	0.000	25.00	0.00N	0.00E	==>	0.00	1229949.29	3178208.77
100.00	0.00	0.000	100.00	0.00N	0.00E	==>	0.00	1229949.29	3178208.77
200.00	0.00	0.000	200.00	0.00N	0.00E	==>	0.00	1229949.29	3178208.77
300.00	0.00	0.000	300.00	0.00N	0.00E	==>	0.00	1229949.29	3178208.77
400.00	0.00	0.000	400.00	0.00N	0.00E	==>	0.00	1229949.29	3178208.77
500.00	0.00	0.000	500.00	0.00N	0.00E	==>	0.00	1229949.29	3178208.77
600.00	0.00	0.000	600.00	0.00N	0.00E	==>	0.00	1229949.29	3178208.77
700.00	0.00	0.000	700.00	0.00N	0.00E	==>	0.00	1229949.29	3178208.77
800.00	0.00	0.000	800.00	0.00N	0.00E	==>	0.00	1229949.29	3178208.77
900.00	0.00	0.000	900.00	0.00N	0.00E	==>	0.00	1229949.29	3178208.77
1000.00	0.00	0.000	1000.00	0.00N	0.00E	==>	0.00	1229949.29	3178208.77
1100.00	0.00	0.000	1100.00	0.00N	0.00E	==>	0.00	1229949.29	3178208.77
1200.00	0.00	0.000	1200.00	0.00N	0.00E	==>	0.00	1229949.29	3178208.77
1225.00	0.00	0.000	1225.00	0.00N	0.00E	==>	0.00	1229949.29	3178208.77
1325.00	1.50	204.820	1324.99	0.89S	0.41W	2.00	-0.13	1229948.40	3178208.36
1425.00	3.50	204.820	1424.89	4.85S	2.24W	2.00	-0.73	1229944.44	3178206.53
1525.00	5.50	204.820	1524.58	11.97S	5.54W	2.00	-1.81	1229937.32	3178203.24
1625.00	7.50	204.820	1623.93	22.25S	10.29W	2.00	-3.37	1229927.04	3178198.49
1725.00	9.50	204.820	1722.83	35.66S	16.49W	2.00	-5.40	1229913.63	3178192.28
1825.00	11.50	204.820	1821.15	52.20S	24.14W	2.00	-7.90	1229897.09	3178184.63
1925.00	13.50	204.820	1918.77	71.84S	33.23W	2.00	-10.88	1229877.45	3178175.55
2000.00	14.30	204.820	1991.52	88.41S	40.89W	==>	-13.38	1229860.88	3178167.89
2100.00	14.30	204.820	2088.42	110.83S	51.25W	==>	-16.78	1229838.47	3178157.52
2200.00	14.30	204.820	2185.32	133.24S	61.62W	==>	-20.17	1229816.05	3178147.15
2300.00	14.30	204.820	2282.22	155.66S	71.99W	==>	-23.56	1229793.63	3178136.79
2400.00	14.30	204.820	2379.12	178.08S	82.35W	==>	-26.96	1229771.22	3178126.42
2500.00	14.30	204.820	2476.03	200.49S	92.72W	==>	-30.35	1229748.80	3178116.06
2600.00	14.30	204.820	2572.93	222.91S	103.09W	==>	-33.75	1229726.39	3178105.69
2700.00	14.30	204.820	2669.83	245.32S	113.45W	==>	-37.14	1229703.97	3178095.32
2800.00	14.30	204.820	2766.73	267.74S	123.82W	==>	-40.53	1229681.56	3178084.96
2900.00	14.30	204.820	2863.64	290.16S	134.19W	==>	-43.93	1229659.14	3178074.59
3000.00	14.30	204.820	2960.54	312.57S	144.55W	==>	-47.32	1229636.73	3178064.22
3100.00	14.30	204.820	3057.44	334.99S	154.92W	==>	-50.71	1229614.31	3178053.86
3200.00	14.30	204.820	3154.34	357.41S	165.29W	==>	-54.11	1229591.89	3178043.49
3300.00	14.30	204.820	3251.24	379.82S	175.65W	==>	-57.50	1229569.48	3178033.12
3400.00	14.30	204.820	3348.15	402.24S	186.02W	==>	-60.89	1229547.06	3178022.76
3500.00	14.30	204.820	3445.05	424.65S	196.39W	==>	-64.29	1229524.65	3178012.39
3600.00	14.30	204.820	3541.95	447.07S	206.76W	==>	-67.68	1229502.23	3178002.02
3700.00	14.30	204.820	3638.85	469.49S	217.12W	==>	-71.07	1229479.82	3177991.66

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Coordinates are from Slot MD's are from Rig and TVD's are from Rig (Planned Datum #1 5139.1ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 106.920 degrees
Bottom hole distance is 4657.53 Feet on azimuth 106.92 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by Integrated Petroleum Technologies, Inc.
Date Printed: 14-Oct-2014



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SYSDRILL
Well Design Combined Report
Wellbore: Riverdale 14-4-12HC (PWB)



WARD PETROLEUM

Interpolated Wellpath									
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Northing	Easting
3800.00	14.30	204.820	3735.76	491.90S	227.49W	==>	-74.47	1229457.40	3177981.29
3900.00	14.30	204.820	3832.66	514.32S	237.86W	==>	-77.86	1229434.99	3177970.93
4000.00	14.30	204.820	3929.56	536.73S	248.22W	==>	-81.25	1229412.57	3177960.56
4100.00	14.30	204.820	4026.46	559.15S	258.59W	==>	-84.65	1229390.16	3177950.19
4200.00	14.30	204.820	4123.37	581.57S	268.96W	==>	-88.04	1229367.74	3177939.83
4300.00	14.30	204.820	4220.27	603.98S	279.32W	==>	-91.43	1229345.32	3177929.46
4400.00	14.30	204.820	4317.17	626.40S	289.69W	==>	-94.83	1229322.91	3177919.09
4500.00	14.30	204.820	4414.07	648.82S	300.06W	==>	-98.22	1229300.49	3177908.73
4600.00	14.30	204.820	4510.97	671.23S	310.42W	==>	-101.62	1229278.08	3177898.36
4700.00	14.30	204.820	4607.88	693.65S	320.79W	==>	-105.01	1229255.66	3177887.99
4800.00	14.30	204.820	4704.78	716.06S	331.16W	==>	-108.40	1229233.25	3177877.63
4900.00	14.30	204.820	4801.68	738.48S	341.52W	==>	-111.80	1229210.83	3177867.26
5000.00	14.30	204.820	4898.58	760.90S	351.89W	==>	-115.19	1229188.42	3177856.90
5100.00	14.30	204.820	4995.49	783.31S	362.26W	==>	-118.58	1229166.00	3177846.53
5200.00	14.30	204.820	5092.39	805.73S	372.62W	==>	-121.98	1229143.59	3177836.16
5300.00	14.30	204.820	5189.29	828.15S	382.99W	==>	-125.37	1229121.17	3177825.80
5400.00	14.30	204.820	5286.19	850.56S	393.36W	==>	-128.76	1229098.75	3177815.43
5500.00	14.30	204.820	5383.09	872.98S	403.72W	==>	-132.16	1229076.34	3177805.06
5600.00	14.30	204.820	5480.00	895.39S	414.09W	==>	-135.55	1229053.92	3177794.70
5700.00	14.30	204.820	5576.90	917.81S	424.46W	==>	-138.94	1229031.51	3177784.33
5800.00	14.30	204.820	5673.80	940.23S	434.82W	==>	-142.34	1229009.09	3177773.96
5900.00	14.30	204.820	5770.70	962.64S	445.19W	==>	-145.73	1228986.68	3177763.60
6000.00	14.30	204.820	5867.61	985.06S	455.56W	==>	-149.12	1228964.26	3177753.23
6100.00	14.30	204.820	5964.51	1007.48S	465.92W	==>	-152.52	1228941.85	3177742.86
6200.00	14.30	204.820	6061.41	1029.89S	476.29W	==>	-155.91	1228919.43	3177732.50
6300.00	14.30	204.820	6158.31	1052.31S	486.66W	==>	-159.30	1228897.02	3177722.13
6400.00	14.30	204.820	6255.21	1074.72S	497.02W	==>	-162.70	1228874.60	3177711.77
6500.00	14.30	204.820	6352.12	1097.14S	507.39W	==>	-166.09	1228852.18	3177701.40
6600.00	14.30	204.820	6449.02	1119.56S	517.76W	==>	-169.49	1228829.77	3177691.03
6700.00	14.30	204.820	6545.92	1141.97S	528.12W	==>	-172.88	1228807.35	3177680.67
6800.00	14.30	204.820	6642.82	1164.39S	538.49W	==>	-176.27	1228784.94	3177670.30
6900.00	14.30	204.820	6739.73	1186.80S	548.86W	==>	-179.67	1228762.52	3177659.93
7000.00	14.30	204.820	6836.63	1209.22S	559.22W	==>	-183.06	1228740.11	3177649.57
7100.00	14.30	204.820	6933.53	1231.64S	569.59W	==>	-186.45	1228717.69	3177639.20
7200.00	14.30	204.820	7030.43	1254.05S	579.96W	==>	-189.85	1228695.28	3177628.83
7300.00	13.78	199.690	7127.35	1276.47S	590.13W	8.00	-193.05	1228672.86	3177618.66
7400.00	13.31	165.080	7224.73	1298.84S	591.18W	8.00	-187.55	1228650.49	3177617.61
7500.00	17.03	137.570	7321.35	1320.80S	578.32W	8.00	-168.85	1228628.53	3177630.48
7600.00	22.99	121.780	7415.34	1341.93S	551.79W	8.00	-137.32	1228607.40	3177657.00
7700.00	29.89	112.580	7504.87	1361.81S	512.12W	8.00	-93.58	1228587.52	3177696.67
7800.00	37.19	106.640	7588.18	1380.06S	460.07W	8.00	-38.47	1228569.27	3177748.72
7900.00	44.71	102.450	7663.67	1396.33S	396.66W	8.00	26.92	1228553.01	3177812.12
8000.00	52.34	99.240	7729.86	1410.29S	323.13W	8.00	101.34	1228539.05	3177885.66
8100.00	60.04	96.640	7785.47	1421.67S	240.89W	8.00	183.33	1228527.66	3177967.89
8200.00	67.79	94.420	7829.40	1430.26S	151.56W	8.00	271.29	1228519.08	3178057.21
8300.00	75.57	92.430	7860.82	1435.88S	56.88W	8.00	363.51	1228513.46	3178151.90
8400.00	83.36	90.570	7879.10	1438.43S	41.32E	8.00	458.20	1228510.91	3178250.09
8500.00	90.57	88.910	7883.92	1437.86S	141.12E	==>	553.52	1228511.48	3178349.89
8600.00	90.57	88.910	7882.93	1435.95S	241.10E	==>	648.61	1228513.38	3178449.87
8700.00	90.57	88.910	7881.93	1434.05S	341.08E	==>	743.70	1228515.29	3178549.84
8800.00	90.57	88.910	7880.94	1432.14S	441.05E	==>	838.80	1228517.19	3178649.81
8900.00	90.57	88.910	7879.94	1430.24S	541.03E	==>	933.89	1228519.10	3178749.79
9000.00	90.57	88.910	7878.95	1428.33S	641.01E	==>	1028.98	1228521.00	3178849.76
9100.00	90.57	88.910	7877.95	1426.43S	740.99E	==>	1124.08	1228522.91	3178949.73
9200.00	90.57	88.910	7876.96	1424.52S	840.96E	==>	1219.17	1228524.82	3179049.71
9300.00	90.57	88.910	7875.97	1422.61S	940.94E	==>	1314.27	1228526.72	3179149.68
9400.00	90.57	88.910	7874.97	1420.71S	1040.92E	==>	1409.36	1228528.63	3179249.66
9500.00	90.57	88.910	7873.98	1418.80S	1140.89E	==>	1504.45	1228530.53	3179349.63
9600.00	90.57	88.910	7872.98	1416.90S	1240.87E	==>	1599.55	1228532.44	3179449.60
9700.00	90.57	88.910	7871.99	1414.99S	1340.85E	==>	1694.64	1228534.34	3179549.58

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Vertical Section is from 0.00N 0.00E on azimuth 106.920 degrees
Bottom hole distance is 4657.53 Feet on azimuth 106.92 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by Integrated Petroleum Technologies, Inc.
Date Printed: 14-Oct-2014



WARD PETROLEUM

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SYSDRILL
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Wellbore: Riverdale 14-4-12HC (PWB)



Interpolated Wellpath									
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Northing	Easting
9800.00	90.57	88.910	7870.99	1413.09S	1440.82E	==>	1789.73	1228536.25	3179649.55
9900.00	90.57	88.910	7870.00	1411.18S	1540.80E	==>	1884.83	1228538.15	3179749.52
10000.00	90.57	88.910	7869.00	1409.27S	1640.78E	==>	1979.92	1228540.06	3179849.50
10100.00	90.57	88.910	7868.01	1407.37S	1740.75E	==>	2075.02	1228541.97	3179949.47
10200.00	90.57	88.910	7867.01	1405.46S	1840.73E	==>	2170.11	1228543.87	3180049.44
10300.00	90.57	88.910	7866.02	1403.56S	1940.71E	==>	2265.20	1228545.78	3180149.42
10400.00	90.57	88.910	7865.02	1401.65S	2040.68E	==>	2360.30	1228547.68	3180249.39
10500.00	90.57	88.910	7864.03	1399.75S	2140.66E	==>	2455.39	1228549.59	3180349.37
10600.00	90.57	88.910	7863.04	1397.84S	2240.64E	==>	2550.48	1228551.49	3180449.34
10700.00	90.57	88.910	7862.04	1395.93S	2340.62E	==>	2645.58	1228553.40	3180549.31
10800.00	90.57	88.910	7861.05	1394.03S	2440.59E	==>	2740.67	1228555.31	3180649.29
10900.00	90.57	88.910	7860.05	1392.12S	2540.57E	==>	2835.77	1228557.21	3180749.26
11000.00	90.57	88.910	7859.06	1390.22S	2640.55E	==>	2930.86	1228559.12	3180849.23
11100.00	90.57	88.910	7858.06	1388.31S	2740.52E	==>	3025.95	1228561.02	3180949.21
11200.00	90.57	88.910	7857.07	1386.41S	2840.50E	==>	3121.05	1228562.93	3181049.18
11300.00	90.57	88.910	7856.07	1384.50S	2940.48E	==>	3216.14	1228564.83	3181149.15
11400.00	90.57	88.910	7855.08	1382.59S	3040.45E	==>	3311.23	1228566.74	3181249.13
11500.00	90.57	88.910	7854.08	1380.69S	3140.43E	==>	3406.33	1228568.64	3181349.10
11600.00	90.57	88.910	7853.09	1378.78S	3240.41E	==>	3501.42	1228570.55	3181449.08
11700.00	90.57	88.910	7852.09	1376.88S	3340.38E	==>	3596.52	1228572.46	3181549.05
11800.00	90.57	88.910	7851.10	1374.97S	3440.36E	==>	3691.61	1228574.36	3181649.02
11900.00	90.57	88.910	7850.11	1373.07S	3540.34E	==>	3786.70	1228576.27	3181749.00
12000.00	90.57	88.910	7849.11	1371.16S	3640.31E	==>	3881.80	1228578.17	3181848.97
12100.00	90.57	88.910	7848.12	1369.25S	3740.29E	==>	3976.89	1228580.08	3181948.94
12200.00	90.57	88.910	7847.12	1367.35S	3840.27E	==>	4071.98	1228581.98	3182048.92
12300.00	90.57	88.910	7846.13	1365.44S	3940.25E	==>	4167.08	1228583.89	3182148.89
12400.00	90.57	88.910	7845.13	1363.54S	4040.22E	==>	4262.17	1228585.80	3182248.86
12500.00	90.57	88.910	7844.14	1361.63S	4140.20E	==>	4357.26	1228587.70	3182348.84
12600.00	90.57	88.910	7843.14	1359.73S	4240.18E	==>	4452.36	1228589.61	3182448.81
12700.00	90.57	88.910	7842.15	1357.82S	4340.15E	==>	4547.45	1228591.51	3182548.79
12800.00	90.57	88.910	7841.15	1355.91S	4440.13E	==>	4642.55	1228593.42	3182648.76
12815.76	90.57	88.910	7841.00	1355.61S	4455.88E	==>	4657.53	1228593.72	3182664.51

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SYSDRILL
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Wellbore: Riverdale 14-4-12HC (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]
13 1/2	25.00	25.00	0.00N	0.00E	1200.00	1200.00	0.00N	0.00E
8 3/4	1200.00	1200.00	0.00N	0.00E	8492.00	7884.00	1438.01S	133.13E
6 1/8	8492.00	7884.00	1438.01S	133.13E	12815.76	7841.00	1355.61S	4455.88E

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	25.00	25.00	0.00N	0.00E	1200.00	1200.00	0.00N	0.00E
7.0in Intermediate Casing	25.00	25.00	0.00N	0.00E	8492.00	7884.00	1438.01S	133.13E
4 1/2in Production Liner	8292.00	7858.78	1435.54S	64.61W	12815.76	7841.00	1355.61S	4455.88E

Targets								
Name	North[ft]	East[ft]	TVD[ft]	Latitude	Longitude	Northing	Easting	Last Revised
Ward Riverdale 14-4-12HC BH	1355.61S	4455.88E	7841.00	39.95903000	-104.84837000	1228593.72	3182664.51	30-Sep-2014
Ward Riverdale 14-4-12HC LP	1438.00S	133.66E	7884.00	39.95889000	-104.86379000	1228511.33	3178342.43	30-Sep-2014

Survey Tool Program					
Reference	Survey Name	MD[ft]	TVD[ft]	Survey Tool	Error Model
304925	Planned	12815.76	7841.00	WdW Rate Gyro	Standard

Notes

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Coordinates are from Slot MD's are from Rig and TVD's are from Rig (Planned Datum #1 5139.1ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 106.920 degrees
Bottom hole distance is 4657.53 Feet on azimuth 106.92 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by Integrated Petroleum Technologies, Inc.
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Wellbore: Riverdale 14-4-12HC (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
Proximities beyond 2500.00ft with expansion rate of 0.00ft/1000ft are not reported
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
Riverdale 14-4-12HC (PWB)	30-Sep-2014	2-Oct-2014

Well		
Name	Government ID	Last Revised
Riverdale 14-4-12HC		1-Oct-2014

Slot						
Name	Grid Northing	Grid Easting	Latitude	Longitude	North	East
Slot #8	1229949.2884	3178208.7733	39.96284000	-104.86423000	105.64S	0.76E

Installation				
Name	Easting	Northing	Coord System Name	North Alignment
Riverdale	3178208.0159	1230054.9248	CO83-NF on NORTH AMERICAN DATUM 1983 datum	Grid

Field				
Name	Easting	Northing	Coord System Name	North Alignment
West Brighton	3178196.4983	1231661.3262	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]
Riverdale 15-2-12HN (PWB)	Riverdale	5.88	1563.42	7841.75	2.75	1566.99	1.88	1566.99
Riverdale 22-2-1HC (PWB)	Riverdale	11.13	1189.70	8135.15	8.29	1189.70	3.92	1189.70
Riverdale 23-4-1HN (PWB)	Riverdale	14.57	1189.70	1189.70	11.73	1189.70	5.13	1189.70
Riverdale 14-4-11HN (PWB)	Riverdale	14.57	1250.00	12815.76	11.73	1189.70	5.13	1189.70
Riverdale 15-2-11HC (PWB)	Riverdale	23.42	1250.00	7950.02	20.58	1189.70	8.09	1583.40
W United Bank of Denver 1 (AWB)	Offsets	27.75	2059.75	2059.75	14.97	2059.75	2.17	2059.75
Riverdale 14-4-10HC (PWB)	Riverdale	32.79	1250.00	12815.76	29.95	1189.70	10.86	12815.76
Riverdale 15-2-10HN (PWB)	Riverdale	40.94	1250.00	7637.60	38.11	1189.70	14.42	1189.70
Riverdale 14-4-9HN (PWB)	Riverdale	47.36	1250.00	8513.00	44.52	1189.70	16.68	1189.70
Riverdale 15-2-9HC (PWB)	Riverdale	55.29	1250.00	7743.94	52.45	1189.70	19.48	1189.70
Riverdale	Riverdale	61.93	1250.00	1250.00	59.09	1189.70	21.70	12815.76

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Offset Wellbore	Offset Structure	Separation [ft]	MD[ft]	Diverging From[ft]	Ellipse Separation [ft]	Ellipse MD[ft]	Clearance Factor	Clearance MD[ft]
14-4-8HC (PWB)								
Riverdale 15-2-8HN (PWB)	Riverdale	69.72	1250.00	1250.00	66.88	1189.70	24.56	1189.70
Riverdale 14-4-7HN (PWB)	Riverdale	76.50	1250.00	1250.00	73.66	1189.70	26.95	1189.70
Riverdale 15-2-7HC (PWB)	Riverdale	84.21	1250.00	1250.00	81.37	1189.70	29.67	1189.70
Riverdale 14-4-6HC (PWB)	Riverdale	91.07	1227.43	1227.43	88.23	1189.70	32.08	1189.70
Riverdale 15-2-6HN (PWB)	Riverdale	98.72	1227.44	1227.44	95.88	1189.70	34.78	1189.70
Riverdale 14-4-5HN (PWB)	Riverdale	105.64	1189.70	1189.70	102.80	1189.70	37.23	1189.70
Riverdale 15-2-5HC (PWB)	Riverdale	113.24	1202.54	1202.54	110.40	1189.70	39.90	1189.70
W Adams County 1 (AWB)	Offsets	502.02	5418.98	5418.98	476.49	5418.98	19.66	5418.98
W Ehler, John 20 (AWB)	Offsets	742.95	5517.50	5517.50	719.24	5517.50	31.33	5504.00
W Ehler, John 15 (AWB)	Offsets	938.29	2895.73	2895.73	921.74	2961.35	44.36	5225.13
Sharp #23-3-1HC (PWB)	Sharp Pad	1004.40	12815.76	12815.76	953.49	12815.76	19.73	12815.76
Sharp #24-3-12HN (PWB)	Sharp Pad	1279.98	12815.76	12815.76	1226.69	12815.76	24.02	12815.76
W United Bank of Denver 3 (AWB)	Offsets	1359.51	1255.31	1255.31	1350.23	1189.70	88.37	5323.56
W RC Nauman 2 (AWB)	Offsets	1480.21	1250.00	1250.00	1470.82	1189.70	109.53	5425.00
SHARP #24-3-11HC (PWB)	Sharp Pad	1612.07	12815.76	12815.76	1558.06	12815.76	29.85	12815.76
Sharp #24-3-11HC (PWB)	Sharp Pad	1612.07	12815.76	12815.76	1558.28	12815.76	29.97	12815.76
W Wiggett 1 (AWB)	Offsets	1687.83	7652.95	7652.95	1655.52	7652.95	51.01	8079.46
W Alice Wiggett 2 (AWB)	Offsets	1748.89	5728.21	5728.21	1727.06	5728.21	80.08	5700.85
W Ehler, John 18 (AWB)	Offsets	1773.27	1255.31	1255.31	1763.75	1189.70	100.08	5323.56
W Renslow 1 (AWB)	Offsets	1800.22	5662.52	5662.52	1775.29	5668.04	72.07	5750.07
W Nauman 1-14 (AWB)	Offsets	1923.17	1250.00	1250.00	1911.64	1271.72	113.31	4044.03
W Ehler, John 21 (AWB)	Offsets	1934.28	5626.72	5626.72	1909.02	5626.72	76.37	5733.66
Sharp #24-3-10HN (PWB)	Sharp Pad	2002.98	12815.76	12815.76	1948.92	12815.76	37.05	12815.76

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Offset Wellbore	Offset Structure	Separation [ft]	MD[ft]	Diverging From[ft]	Ellipse Separation [ft]	Ellipse MD[ft]	Clearance Factor	Clearance MD[ft]
W United Bank of Denver 2 (AWB)	Offsets	2009.85	3092.59	3092.59	1992.79	3240.22	81.12	5487.60
W Ehler, John 22 (AWB)	Offsets	2131.10	5192.32	5192.32	2105.28	5307.15	81.04	5536.81
W RC Nauman 4 (AWB)	Offsets	2150.68	1250.00	1250.00	2141.23	1189.70	154.90	3225.00
KROUGH-SCOTT #1 (AWB)	Offsets	2332.82	12815.76	12815.76	2268.72	12815.76	36.39	12815.76
Sharp #24-3-9HC (PWB)	Sharp Pad	2395.71	12815.76	12815.76	2341.12	12815.76	43.89	12815.76
SHARP #24-3-9HC (PWB)	Sharp Pad	2395.71	12815.76	12815.76	2340.97	12815.76	43.76	12815.76
W Alice Wiggett 3 (AWB)	Offsets	2514.88	5915.07	5915.07	2491.74	5915.07	108.61	5996.13