

MINERAL RESOURCES, INC.

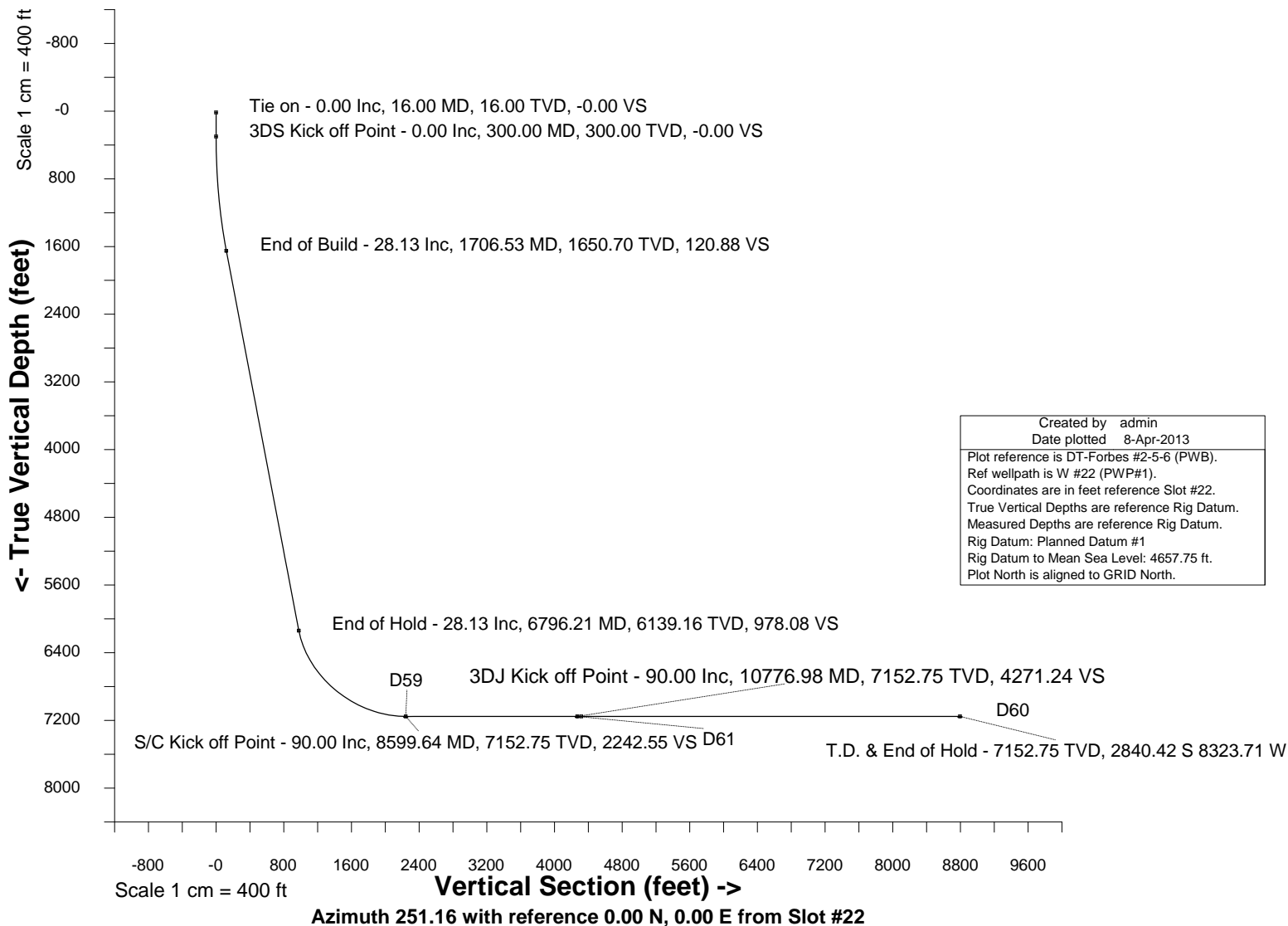
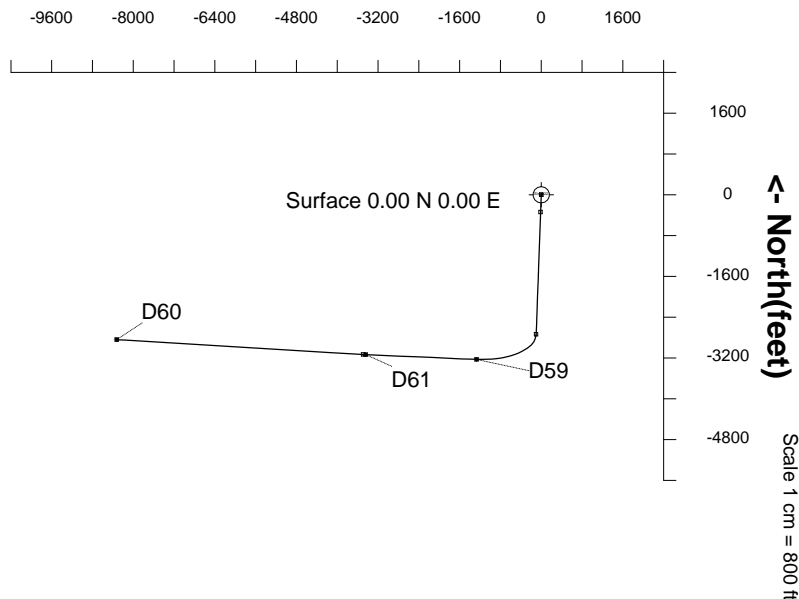
Location	Weld County, CO, USA(Imported)	Slot	Slot #22
Field	Wattenberg	Well	DT-Forbes #2-5-6
Installation	Downtown	Wellbore	DT-Forbes #2-5-6 (PWB)

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	300.00	0.00	0.00	300.00	0.00	0.00	0.00	-0.00
End of Build	1706.53	28.13	182.09	1650.70	-338.18	-12.32	2.00	120.88
End of Hold	6796.21	28.13	182.09	6139.16	-2736.28	-99.72	0.00	978.08
Target D59	8599.64	90.00	272.45	7152.75	-3228.66	-1267.76	5.00	2242.55
Target D61	10776.98	90.00	272.45	7152.75	-3135.52	-3443.11	0.00	4271.24
End of Turn	10827.66	90.00	273.47	7152.75	-3132.90	-3493.72	2.00	4318.30
T.D. & Target D60	15666.50	90.00	273.47	7152.75	-2840.42	-8323.71	0.00	8795.00

Scale 1 cm = 800 ft

East (feet) ->





INTEGRATED PETROLEUM TECHNOLOGIES, INC
SYSDRILL
Well Design Combined Report
Wellbore: DT-Forbes #2-5-6 (PWB)

Wellhead Details							
Name	Northing	Easting	Latitude	Longitude	North	East	Elevation Above Inst.
Slot #22	1402355.2796	3227071.5411	N40 26 6.0000	W104 41 3.3360	338.80S	3.12E	-1.30

Declination			
Date	Source	Time	
30-Jan-2013	IGRF Model [1900.0-2015.0]	10:11	

Site Details				
Name	Northing	Easting	Coord System Name	North Alignment
Downtown	1402694.0641	3227068.4245	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
16.00	0.00	0.000	16.00	0.00N	0.00E		0.00	1402355.28	3227071.54
300.00	0.00	0.000	300.00	0.00N	0.00E	==>	0.00	1402355.28	3227071.54
1706.53	28.13	182.090	1650.70	338.18S	12.32W	2.00	120.88	1402017.12	3227059.22
6796.21	28.13	182.090	6139.16	2736.28S	99.72W	==>	978.08	1399619.11	3226971.83
8599.64	90.00	272.450	7152.75	3228.66S	1267.76W	5.00	2242.55	1399126.75	3225803.83
10776.98	90.00	272.450	7152.75	3135.52S	3443.11W	==>	4271.24	1399219.89	3223628.57
10827.66	90.00	273.470	7152.75	3132.90S	3493.72W	2.00	4318.30	1399222.50	3223577.96
15666.50	90.00	273.470	7152.75	2840.42S	8323.71W	==>	8795.00	1399514.97	3218748.17

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	1402355.28	3227071.54
16.00	0.00	0.000	16.00	0.00N	0.00E	==>	0.00	1402355.28	3227071.54
100.00	0.00	0.000	100.00	0.00N	0.00E	==>	0.00	1402355.28	3227071.54
200.00	0.00	0.000	200.00	0.00N	0.00E	==>	0.00	1402355.28	3227071.54
284.00	0.00	0.000	284.00	0.00N	0.00E	==>	0.00	1402355.28	3227071.54
300.00	0.00	0.000	300.00	0.00N	0.00E	==>	0.00	1402355.28	3227071.54
384.00	1.68	182.090	383.99	1.23S	0.04W	2.00	0.44	1402354.05	3227071.50
484.00	3.68	182.090	483.87	5.90S	0.22W	2.00	2.11	1402349.38	3227071.33
584.00	5.68	182.090	583.54	14.06S	0.51W	2.00	5.02	1402341.22	3227071.03
684.00	7.68	182.090	682.85	25.68S	0.94W	2.00	9.18	1402329.60	3227070.61
784.00	9.68	182.090	781.70	40.76S	1.49W	2.00	14.57	1402314.52	3227070.06
884.00	11.68	182.090	879.96	59.28S	2.16W	2.00	21.19	1402296.00	3227069.38
984.00	13.68	182.090	977.52	81.22S	2.96W	2.00	29.03	1402274.07	3227068.58
1084.00	15.68	182.090	1074.25	106.54S	3.88W	2.00	38.08	1402248.74	3227067.66
1184.00	17.68	182.090	1170.04	135.22S	4.93W	2.00	48.33	1402220.06	3227066.61
1284.00	19.68	182.090	1264.77	167.23S	6.09W	2.00	59.78	1402188.06	3227065.45
1384.00	21.68	182.090	1358.32	202.52S	7.38W	2.00	72.39	1402152.77	3227064.16
1484.00	23.68	182.090	1450.58	241.05S	8.78W	2.00	86.16	1402114.24	3227062.76
1584.00	25.68	182.090	1541.44	282.77S	10.31W	2.00	101.08	1402072.52	3227061.24
1684.00	27.68	182.090	1630.79	327.64S	11.94W	2.00	117.12	1402027.65	3227059.60
1700.00	28.00	182.090	1644.94	335.11S	12.21W	2.00	119.78	1402020.19	3227059.33
1706.53	28.13	182.090	1650.70	338.18S	12.32W	2.00	120.88	1402017.12	3227059.22
1800.00	28.13	182.090	1733.13	382.22S	13.93W	==>	136.62	1401973.08	3227057.61
1900.00	28.13	182.090	1821.32	429.34S	15.65W	==>	153.47	1401925.96	3227055.90
2000.00	28.13	182.090	1909.50	476.45S	17.36W	==>	170.31	1401878.85	3227054.18
2100.00	28.13	182.090	1997.69	523.57S	19.08W	==>	187.15	1401831.73	3227052.46
2200.00	28.13	182.090	2085.88	570.69S	20.80W	==>	203.99	1401784.62	3227050.74
2300.00	28.13	182.090	2174.07	617.80S	22.52W	==>	220.83	1401737.50	3227049.03
2400.00	28.13	182.090	2262.25	664.92S	24.23W	==>	237.68	1401690.39	3227047.31
2500.00	28.13	182.090	2350.44	712.04S	25.95W	==>	254.52	1401643.27	3227045.59
2600.00	28.13	182.090	2438.63	759.15S	27.67W	==>	271.36	1401596.16	3227043.88
2700.00	28.13	182.090	2526.82	806.27S	29.38W	==>	288.20	1401549.04	3227042.16
2800.00	28.13	182.090	2615.00	853.39S	31.10W	==>	305.04	1401501.93	3227040.44
2900.00	28.13	182.090	2703.19	900.51S	32.82W	==>	321.89	1401454.81	3227038.72
3000.00	28.13	182.090	2791.38	947.62S	34.53W	==>	338.73	1401407.70	3227037.01

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 4657.8ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 251.160 degrees
Bottom hole distance is 8795.00 Feet on azimuth 251.16 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by Peterson Energy
Date Printed: 22-May-2013



INTEGRATED PETROLEUM TECHNOLOGIES, INC
SYSDRILL
Well Design Combined Report
Wellbore: DT-Forbes #2-5-6 (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	28.13	182.090	2879.57	994.74S	36.25W	==>	355.57	1401360.58	3227035.29
3200.00	28.13	182.090	2967.75	1041.86S	37.97W	==>	372.41	1401313.47	3227033.57
3300.00	28.13	182.090	3055.94	1088.97S	39.69W	==>	389.25	1401266.35	3227031.86
3400.00	28.13	182.090	3144.13	1136.09S	41.40W	==>	406.09	1401219.23	3227030.14
3500.00	28.13	182.090	3232.32	1183.21S	43.12W	==>	422.94	1401172.12	3227028.42
3600.00	28.13	182.090	3320.50	1230.32S	44.84W	==>	439.78	1401125.00	3227026.71
3700.00	28.13	182.090	3408.69	1277.44S	46.55W	==>	456.62	1401077.89	3227024.99
3800.00	28.13	182.090	3496.88	1324.56S	48.27W	==>	473.46	1401030.77	3227023.27
3900.00	28.13	182.090	3585.07	1371.68S	49.99W	==>	490.30	1400983.66	3227021.55
4000.00	28.13	182.090	3673.25	1418.79S	51.71W	==>	507.15	1400936.54	3227019.84
4100.00	28.13	182.090	3761.44	1465.91S	53.42W	==>	523.99	1400889.43	3227018.12
4200.00	28.13	182.090	3849.63	1513.03S	55.14W	==>	540.83	1400842.31	3227016.40
4300.00	28.13	182.090	3937.82	1560.14S	56.86W	==>	557.67	1400795.20	3227014.69
4400.00	28.13	182.090	4026.00	1607.26S	58.57W	==>	574.51	1400748.08	3227012.97
4500.00	28.13	182.090	4114.19	1654.38S	60.29W	==>	591.36	1400700.97	3227011.25
4600.00	28.13	182.090	4202.38	1701.49S	62.01W	==>	608.20	1400653.85	3227009.53
4700.00	28.13	182.090	4290.57	1748.61S	63.73W	==>	625.04	1400606.74	3227007.82
4800.00	28.13	182.090	4378.75	1795.73S	65.44W	==>	641.88	1400559.62	3227006.10
4900.00	28.13	182.090	4466.94	1842.84S	67.16W	==>	658.72	1400512.51	3227004.38
5000.00	28.13	182.090	4555.13	1889.96S	68.88W	==>	675.57	1400465.39	3227002.67
5100.00	28.13	182.090	4643.32	1937.08S	70.59W	==>	692.41	1400418.28	3227000.95
5200.00	28.13	182.090	4731.50	1984.20S	72.31W	==>	709.25	1400371.16	3226999.23
5300.00	28.13	182.090	4819.69	2031.31S	74.03W	==>	726.09	1400324.05	3226997.52
5400.00	28.13	182.090	4907.88	2078.43S	75.75W	==>	742.93	1400276.93	3226995.80
5500.00	28.13	182.090	4996.07	2125.55S	77.46W	==>	759.78	1400229.82	3226994.08
5600.00	28.13	182.090	5084.25	2172.66S	79.18W	==>	776.62	1400182.70	3226992.36
5700.00	28.13	182.090	5172.44	2219.78S	80.90W	==>	793.46	1400135.59	3226990.65
5800.00	28.13	182.090	5260.63	2266.90S	82.61W	==>	810.30	1400088.47	3226988.93
5900.00	28.13	182.090	5348.82	2314.01S	84.33W	==>	827.14	1400041.36	3226987.21
6000.00	28.13	182.090	5437.00	2361.13S	86.05W	==>	843.99	1399994.24	3226985.50
6100.00	28.13	182.090	5525.19	2408.25S	87.77W	==>	860.83	1399947.13	3226983.78
6200.00	28.13	182.090	5613.38	2455.37S	89.48W	==>	877.67	1399900.01	3226982.06
6300.00	28.13	182.090	5701.57	2502.48S	91.20W	==>	894.51	1399852.90	3226980.35
6400.00	28.13	182.090	5789.75	2549.60S	92.92W	==>	911.35	1399805.78	3226978.63
6500.00	28.13	182.090	5877.94	2596.72S	94.63W	==>	928.19	1399758.67	3226976.91
6600.00	28.13	182.090	5966.13	2643.83S	96.35W	==>	945.04	1399711.55	3226975.19
6700.00	28.13	182.090	6054.32	2690.95S	98.07W	==>	961.88	1399664.44	3226973.48
6796.21	28.13	182.090	6139.16	2736.28S	99.72W	==>	978.08	1399619.11	3226971.83
6800.00	28.13	182.490	6142.50	2738.07S	99.79W	5.00	978.73	1399617.32	3226971.75
6900.00	28.54	193.000	6230.58	2784.92S	106.19W	5.00	999.92	1399570.47	3226965.35
7000.00	29.72	202.990	6317.98	2831.05S	121.26W	5.00	1029.07	1399524.34	3226950.29
7100.00	31.60	212.090	6404.05	2876.09S	144.88W	5.00	1065.97	1399479.30	3226926.67
7200.00	34.04	220.150	6488.12	2919.71S	176.86W	5.00	1110.33	1399435.69	3226894.69
7300.00	36.95	227.160	6569.56	2961.57S	216.97W	5.00	1161.81	1399393.83	3226854.58
7400.00	40.22	233.240	6647.74	3001.36S	264.91W	5.00	1220.03	1399354.04	3226806.64
7500.00	43.76	238.520	6722.08	3038.77S	320.30W	5.00	1284.53	1399316.63	3226751.26
7600.00	47.52	243.140	6792.01	3073.51S	382.72W	5.00	1354.83	1399281.89	3226688.83
7700.00	51.44	247.220	6856.99	3105.33S	451.71W	5.00	1430.39	1399250.07	3226619.85
7800.00	55.48	250.880	6916.53	3133.98S	526.73W	5.00	1510.65	1399221.43	3226544.84
7900.00	59.63	254.190	6970.17	3159.24S	607.21W	5.00	1594.97	1399196.17	3226464.36
8000.00	63.85	257.230	7017.52	3180.92S	692.54W	5.00	1682.74	1399174.49	3226379.02
8100.00	68.13	260.060	7058.20	3198.86S	782.08W	5.00	1773.27	1399156.55	3226289.49
8200.00	72.46	262.720	7091.91	3212.91S	875.14W	5.00	1865.88	1399142.50	3226196.44
8300.00	76.82	265.260	7118.40	3222.98S	971.01W	5.00	1959.86	1399132.43	3226100.57
8400.00	81.21	267.710	7137.45	3228.98S	1068.96W	5.00	2054.50	1399126.43	3226002.63
8500.00	85.61	270.100	7148.93	3230.87S	1168.25W	5.00	2149.08	1399124.53	3225903.34
8599.64	90.00	272.450	7152.75	3228.66S	1267.76W	5.00	2242.55	1399126.75	3225803.83
8600.00	90.00	272.450	7152.75	3228.64S	1268.12W	==>	2242.88	1399126.77	3225803.47
8700.00	90.00	272.450	7152.75	3224.36S	1368.03W	==>	2336.05	1399131.04	3225703.57
8800.00	90.00	272.450	7152.75	3220.09S	1467.93W	==>	2429.23	1399135.32	3225603.67
8900.00	90.00	272.450	7152.75	3215.81S	1567.84W	==>	2522.40	1399139.60	3225503.76

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 4657.8ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 251.160 degrees
Bottom hole distance is 8795.00 Feet on azimuth 251.16 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by Peterson Energy
Date Printed: 22-May-2013



INTEGRATED PETROLEUM TECHNOLOGIES, INC
SYSDRILL
Well Design Combined Report
Wellbore: DT-Forbes #2-5-6 (PWB)

Interpolated Wellpath									
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Northing	Easting
9000.00	90.00	272.450	7152.75	3211.53S	1667.75W	==>	2615.57	1399143.88	3225403.86
9100.00	90.00	272.450	7152.75	3207.25S	1767.66W	==>	2708.75	1399148.15	3225303.95
9200.00	90.00	272.450	7152.75	3202.98S	1867.57W	==>	2801.92	1399152.43	3225204.05
9300.00	90.00	272.450	7152.75	3198.70S	1967.48W	==>	2895.09	1399156.71	3225104.14
9400.00	90.00	272.450	7152.75	3194.42S	2067.39W	==>	2988.27	1399160.99	3225004.24
9500.00	90.00	272.450	7152.75	3190.14S	2167.29W	==>	3081.44	1399165.26	3224904.33
9600.00	90.00	272.450	7152.75	3185.86S	2267.20W	==>	3174.61	1399169.54	3224804.43
9700.00	90.00	272.450	7152.75	3181.59S	2367.11W	==>	3267.79	1399173.82	3224704.52
9800.00	90.00	272.450	7152.75	3177.31S	2467.02W	==>	3360.96	1399178.10	3224604.62
9900.00	90.00	272.450	7152.75	3173.03S	2566.93W	==>	3454.13	1399182.37	3224504.72
10000.00	90.00	272.450	7152.75	3168.75S	2666.84W	==>	3547.31	1399186.65	3224404.81
10100.00	90.00	272.450	7152.75	3164.48S	2766.74W	==>	3640.48	1399190.93	3224304.91
10200.00	90.00	272.450	7152.75	3160.20S	2866.65W	==>	3733.65	1399195.21	3224205.00
10300.00	90.00	272.450	7152.75	3155.92S	2966.56W	==>	3826.82	1399199.48	3224105.10
10400.00	90.00	272.450	7152.75	3151.64S	3066.47W	==>	3920.00	1399203.76	3224005.19
10500.00	90.00	272.450	7152.75	3147.37S	3166.38W	==>	4013.17	1399208.04	3223905.29
10600.00	90.00	272.450	7152.75	3143.09S	3266.29W	==>	4106.34	1399212.32	3223805.38
10700.00	90.00	272.450	7152.75	3138.81S	3366.20W	==>	4199.52	1399216.60	3223705.48
10776.98	90.00	272.450	7152.75	3135.52S	3443.11W	==>	4271.24	1399219.89	3223628.57
10800.00	90.00	272.910	7152.75	3134.44S	3466.10W	2.00	4292.66	1399220.96	3223605.58
10827.66	90.00	273.470	7152.75	3132.90S	3493.72W	2.00	4318.30	1399222.50	3223577.96
10900.00	90.00	273.470	7152.75	3128.53S	3565.92W	==>	4385.22	1399226.88	3223505.76
11000.00	90.00	273.470	7152.75	3122.48S	3665.74W	==>	4477.74	1399232.92	3223405.95
11100.00	90.00	273.470	7152.75	3116.44S	3765.56W	==>	4570.26	1399238.96	3223306.13
11200.00	90.00	273.470	7152.75	3110.40S	3865.38W	==>	4662.77	1399245.01	3223206.32
11300.00	90.00	273.470	7152.75	3104.35S	3965.19W	==>	4755.29	1399251.05	3223106.51
11400.00	90.00	273.470	7152.75	3098.31S	4065.01W	==>	4847.80	1399257.10	3223006.69
11500.00	90.00	273.470	7152.75	3092.26S	4164.83W	==>	4940.32	1399263.14	3222906.88
11600.00	90.00	273.470	7152.75	3086.22S	4264.64W	==>	5032.84	1399269.18	3222807.07
11700.00	90.00	273.470	7152.75	3080.17S	4364.46W	==>	5125.35	1399275.23	3222707.25
11800.00	90.00	273.470	7152.75	3074.13S	4464.28W	==>	5217.87	1399281.27	3222607.44
11900.00	90.00	273.470	7152.75	3068.08S	4564.10W	==>	5310.38	1399287.32	3222507.63
12000.00	90.00	273.470	7152.75	3062.04S	4663.91W	==>	5402.90	1399293.36	3222407.81
12100.00	90.00	273.470	7152.75	3056.00S	4763.73W	==>	5495.42	1399299.41	3222308.00
12200.00	90.00	273.470	7152.75	3049.95S	4863.55W	==>	5587.93	1399305.45	3222208.19
12300.00	90.00	273.470	7152.75	3043.91S	4963.36W	==>	5680.45	1399311.49	3222108.37
12400.00	90.00	273.470	7152.75	3037.86S	5063.18W	==>	5772.97	1399317.54	3222008.56
12500.00	90.00	273.470	7152.75	3031.82S	5163.00W	==>	5865.48	1399323.58	3221908.75
12600.00	90.00	273.470	7152.75	3025.77S	5262.82W	==>	5958.00	1399329.63	3221808.94
12700.00	90.00	273.470	7152.75	3019.73S	5362.63W	==>	6050.51	1399335.67	3221709.12
12800.00	90.00	273.470	7152.75	3013.69S	5462.45W	==>	6143.03	1399341.72	3221609.31
12900.00	90.00	273.470	7152.75	3007.64S	5562.27W	==>	6235.55	1399347.76	3221509.50
13000.00	90.00	273.470	7152.75	3001.60S	5662.09W	==>	6328.06	1399353.80	3221409.68
13100.00	90.00	273.470	7152.75	2995.55S	5761.90W	==>	6420.58	1399359.85	3221309.87
13200.00	90.00	273.470	7152.75	2989.51S	5861.72W	==>	6513.10	1399365.89	3221210.06
13300.00	90.00	273.470	7152.75	2983.46S	5961.54W	==>	6605.61	1399371.94	3221110.24
13400.00	90.00	273.470	7152.75	2977.42S	6061.35W	==>	6698.13	1399377.98	3221010.43
13500.00	90.00	273.470	7152.75	2971.37S	6161.17W	==>	6790.64	1399384.02	3220910.62
13600.00	90.00	273.470	7152.75	2965.33S	6260.99W	==>	6883.16	1399390.07	3220810.80
13700.00	90.00	273.470	7152.75	2959.29S	6360.81W	==>	6975.68	1399396.11	3220710.99
13800.00	90.00	273.470	7152.75	2953.24S	6460.62W	==>	7068.19	1399402.16	3220611.18
13900.00	90.00	273.470	7152.75	2947.20S	6560.44W	==>	7160.71	1399408.20	3220511.36
14000.00	90.00	273.470	7152.75	2941.15S	6660.26W	==>	7253.22	1399414.25	3220411.55
14100.00	90.00	273.470	7152.75	2935.11S	6760.07W	==>	7345.74	1399420.29	3220311.74
14200.00	90.00	273.470	7152.75	2929.06S	6859.89W	==>	7438.26	1399426.33	3220211.92
14300.00	90.00	273.470	7152.75	2923.02S	6959.71W	==>	7530.77	1399432.38	3220112.11
14400.00	90.00	273.470	7152.75	2916.97S	7059.53W	==>	7623.29	1399438.42	3220012.30
14500.00	90.00	273.470	7152.75	2910.93S	7159.34W	==>	7715.81	1399444.47	3219912.49
14600.00	90.00	273.470	7152.75	2904.89S	7259.16W	==>	7808.32	1399450.51	3219812.67
14700.00	90.00	273.470	7152.75	2898.84S	7358.98W	==>	7900.84	1399456.55	3219712.86
14800.00	90.00	273.470	7152.75	2892.80S	7458.79W	==>	7993.35	1399462.60	3219613.05

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Vertical Section is from 0.00N 0.00E on azimuth 251.160 degrees
Bottom hole distance is 8795.00 Feet on azimuth 251.16 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by Peterson Energy
Date Printed: 22-May-2013



INTEGRATED PETROLEUM TECHNOLOGIES, INC
SYSDRILL
Well Design Combined Report
Wellbore: DT-Forbes #2-5-6 (PWB)

Interpolated Wellpath									
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Northing	Easting
14900.00	90.00	273.470	7152.75	2886.75S	7558.61W	==>	8085.87	1399468.64	3219513.23
15000.00	90.00	273.470	7152.75	2880.71S	7658.43W	==>	8178.39	1399474.69	3219413.42
15100.00	90.00	273.470	7152.75	2874.66S	7758.25W	==>	8270.90	1399480.73	3219313.61
15200.00	90.00	273.470	7152.75	2868.62S	7858.06W	==>	8363.42	1399486.78	3219213.79
15300.00	90.00	273.470	7152.75	2862.57S	7957.88W	==>	8455.93	1399492.82	3219113.98
15400.00	90.00	273.470	7152.75	2856.53S	8057.70W	==>	8548.45	1399498.86	3219014.17
15500.00	90.00	273.470	7152.75	2850.49S	8157.51W	==>	8640.97	1399504.91	3218914.35
15600.00	90.00	273.470	7152.75	2844.44S	8257.33W	==>	8733.48	1399510.95	3218814.54
15666.50	90.00	273.470	7152.75	2840.42S	8323.71W	==>	8795.00	1399514.97	3218748.17

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SYSDRILL
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Wellbore: DT-Forbes #2-5-6 (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	560.00	559.64	11.78S	0.43W
8 3/4	560.00	559.64	11.78S	0.43W	8600.00	7152.75	3228.64S	1268.12W
6 1/8	8600.00	7152.75	3228.64S	1268.12W	15666.50	7152.75	2840.42S	8323.71W

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	0.00				560.00	559.64	11.78S	0.43W
7.0in Intermediate Casing	0.00				8600.00	7152.75	3228.64S	1268.12W
4 1/2in Production Liner	6800.00	6142.50	2738.07S	99.79W	15666.50	7152.75	2840.42S	8323.71W

Targets								
Name	North[ft]	East[ft]	TVD[ft]	Latitude	Longitude	Northing	Easting	Last Revised
D59	3228.66S	1267.76W	7152.75	N40 25 34.2120	W104 41 20.1120	1399126.75	3225803.83	15-Mar-2013
D60	2840.42S	8323.71W	7152.75	N40 25 38.6760	W104 42 51.3000	1399514.97	3218748.17	15-Mar-2013
D61	3135.52S	3443.11W	7152.75	N40 25 35.3280	W104 41 48.2280	1399219.89	3223628.57	15-Mar-2013

Survey Tool Program						
Reference	Survey Name	MD[ft]	TVD[ft]	Survey Tool	Error Model	
42560	Planned	15666.50	7152.75	WdW Rate Gyro	Standard	

Notes

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SYSDRILL
Closest Approach + Clearance Factor Summary Report
Wellbore: DT-Forbes #2-5-6 (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
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
DT-Forbes #2-5-6 (PWB)	5-Apr-2013	12-Apr-2013

Well		
Name	Government ID	Last Revised
DT-Forbes #2-5-6		5-Apr-2013

Slot						
Name	Grid Northing	Grid Easting	Latitude	Longitude	North	East
Slot #22	1402355.2796	3227071.5411	N40 26 6.0000	W104 41 3.3360	338.80S	3.12E

Installation					
Name	Easting	Northing	Coord System Name	North Alignment	
Downtown	3227068.4245	1402694.0641	CO83-NF on NORTH AMERICAN DATUM 1983 datum	Grid	

Field					
Name	Easting	Northing	Coord System Name	North Alignment	
Wattenberg	3211772.6087	1400656.3763	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]
DT-Forbes #3-5-6	DT-Forbes #3-5-6 (PWB)	Slot #23	Downtown	14.84	245.66	15632.80	13.55	245.66	2.61	15666.50
DT-Forbes #1-5-6	DT-Forbes #1-5-6 (PWB)	Slot #21	Downtown	18.22	300.00	15666.50	16.84	300.00	2.72	15666.50
DT-Forbes #4-5-6	DT-Forbes #4-5-6 (PWB)	Slot #24	Downtown	29.67	196.45	15617.53	28.47	196.45	4.43	15666.50
DT-Martinez #3-5-6	DT-Martinez #3-5-6 (PWB)	Slot #20	Downtown	32.79	300.00	15666.50	31.42	300.00	4.51	15666.50
DT-Martinez #2-5-6	DT-Martinez #2-5-6 (PWB)	Slot #19	Downtown	47.36	300.00	15666.50	45.99	300.00	6.85	15666.50
DT-Forbes #5-5-6	DT-Forbes #5-5-6 (PWB)	Slot #25	Downtown	47.69	147.23	15594.30	46.56	147.23	6.77	15666.50
DT-Heath #1-5-8	DT-Heath #1-5-8 (PWB)	Slot #1	Downtown	59.53	8098.91	8098.91	17.26	8070.46	1.35	8054.06
DT-Luther #1-5-6	DT-Luther #1-5-6 (PWB)	Slot #26	Downtown	62.18	98.02	15571.33	61.13	98.02	8.87	15666.50
Erbes #5-2H5	Erbes #5-2H5 (AWB)	Erbes #5-2H5	Downtown Pad offsets	64.42	613.65	613.65	56.68	639.36	7.86	754.19
DT-StarPak #1-5-17	DT-StarPak #1-5-17 (PWB)	Slot #18	Downtown	65.58	300.00	7571.66	64.21	300.00	6.35	7676.76
DT-StarPak #2-5-17	DT-StarPak #2-5-17 (PWB)	Slot #17	Downtown	80.15	300.00	7496.31	78.78	300.00	12.74	7693.17
DT-StarPak #3-5-17	DT-StarPak #3-5-17 (PWB)	Slot #16	Downtown	98.36	300.00	7289.30	96.99	300.00	15.73	7479.91

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SYSDRILL
Closest Approach + Clearance Factor Summary Report
Wellbore: DT-Forbes #2-5-6 (PWB)

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]
DT-StarPak #4-5-17	DT-StarPak #4-5-17 (PWB)	Slot #15	Downtown	112.94	300.00	7269.35	111.57	300.00	22.16	7516.00
DT-StarPak #5-5-17	DT-StarPak #5-5-17 (PWB)	Slot #14	Downtown	127.54	300.00	7135.42	126.17	300.00	26.17	7381.49
DT-Pioneer #1-5-17	DT-Pioneer #1-5-17 (PWB)	Slot #13	Downtown	145.75	300.00	7135.42	144.38	300.00	32.46	7430.70
DT-Pioneer #2-5-17	DT-Pioneer #2-5-17 (PWB)	Slot #12	Downtown	160.32	300.00	7037.00	158.95	300.00	37.12	7332.27
DT-Martinez #1-5-6	DT-Martinez #1-5-6 (PWB)	Slot #11	Downtown	178.54	300.00	13634.30	177.16	300.00	8.95	15666.50
DT-Habitat #5-5-6	DT-Habitat #5-5-6 (PWB)	Slot #10	Downtown	193.11	300.00	13598.68	191.74	300.00	11.38	15666.50
DT-Habitat #4-5-6	DT-Habitat #4-5-6 (PWB)	Slot #9	Downtown	207.68	300.00	13648.43	206.31	300.00	13.60	15666.50
DT-Habitat #3-5-6	DT-Habitat #3-5-6 (PWB)	Slot #8	Downtown	225.89	300.00	13680.70	224.52	300.00	16.11	15666.50
DT-Heath #2-5-8	DT-Heath #2-5-8 (PWB)	Slot #2	Downtown	229.80	7876.94	7876.94	189.53	7906.42	4.87	7988.44
DT-Habitat #2-5-6	DT-Habitat #2-5-6 (PWB)	Slot #7	Downtown	240.45	300.00	13697.92	239.08	300.00	18.45	15666.50
DT-Habitat #1-5-6	DT-Habitat #1-5-6 (PWB)	Slot #6	Downtown	258.66	300.00	13734.00	257.29	300.00	21.06	15666.50
DT-Lopez #2-5-6	DT-Lopez #2-5-6 (PWB)	Slot #5	Downtown	273.24	300.00	13795.53	271.86	300.00	23.52	15666.50
DT-Lextron #1-32-32	DT-Lextron #1-32-32 (PWB)	Slot #4	Downtown	287.81	300.00	300.00	286.44	300.00	162.18	1279.12
DT-Lopez #1-5-6	DT-Lopez #1-5-6 (PWB)	Slot #3	Downtown	306.02	300.00	13818.58	304.65	300.00	26.10	15666.50
W Mcelroy #41-5	W Mcelroy #41-5 (AWB)	Mcelroy #41-5	Downtown Pad offsets	875.59	1445.20	1445.20	862.61	1475.97	51.76	2607.86
Arnold #1	Arnold #1 (AWB)	Arnold #1	Downtown Pad offsets	1211.40	4417.16	4417.16	1179.15	4445.13	35.03	5232.54