

MINERAL RESOURCES, INC.

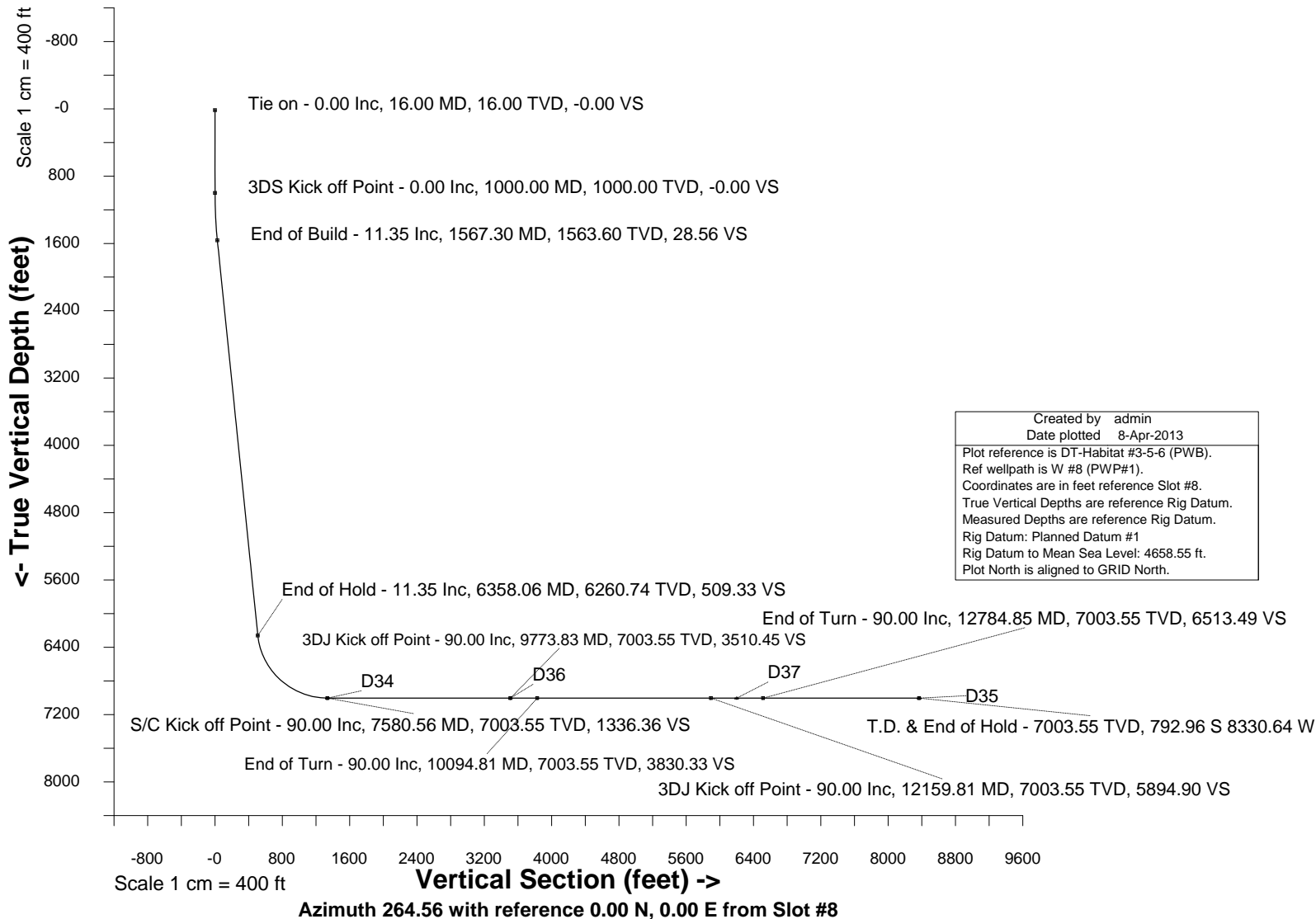
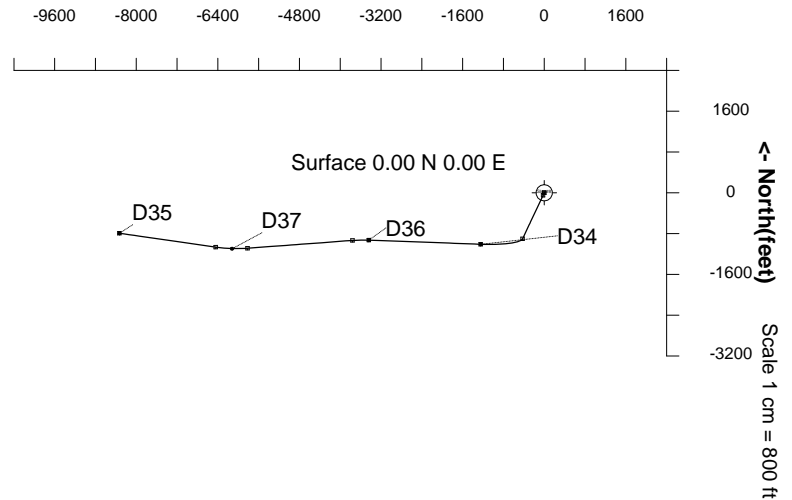
Location	Weld County, CO, USA(Imported)	Slot	Slot #8
Field	Wattenberg	Well	DT-Habitat #3-5-6
Installation	Downtown	Wellbore	DT-Habitat #3-5-6 (PWB)

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	1000.00	0.00	0.00	1000.00	0.00	0.00	0.00	-0.00
End of Build	1567.30	11.35	205.23	1563.60	-50.64	-23.87	2.00	28.56
End of Hold	6358.06	11.35	205.23	6260.74	-903.21	-425.66	0.00	509.33
Target D34	7580.56	90.00	272.14	7003.55	-1009.70	-1246.29	7.00	1336.36
Target D36	9773.83	90.00	272.14	7003.55	-927.64	-3438.02	0.00	3510.45
End of Turn	10094.81	90.00	265.72	7003.55	-933.60	-3758.77	2.00	3830.33
Target D37	12159.81	90.00	265.72	7003.55	-1087.55	-5818.03	0.00	5894.90
End of Turn	12784.85	90.00	278.23	7003.55	-1066.05	-6441.46	2.00	6513.49
T.D. & Target D35	14693.66	90.00	278.23	7003.55	-792.96	-8330.64	0.00	8368.29

Scale 1 cm = 800 ft

East (feet) ->



Created by	admin
Date plotted	8-Apr-2013

Plot reference is DT-Habitat #3-5-6 (PWB).
 Ref wellpath is W #8 (PWP#1).
 Coordinates are in feet reference Slot #8.
 True Vertical Depths are reference Rig Datum.
 Measured Depths are reference Rig Datum.
 Rig Datum: Planned Datum #1
 Rig Datum to Mean Sea Level: 4658.55 ft.
 Plot North is aligned to GRID North.



INTEGRATED PETROLEUM TECHNOLOGIES, INC
SYSDRILL
Well Design Combined Report
Wellbore: DT-Habitat #3-5-6 (PWB)

Wellhead Details							
Name	Northing	Easting	Latitude	Longitude	North	East	Elevation Above Inst.
Slot #8	1402581.1103	3227066.6798	N40 26 8.2320	W104 41 3.3720	112.96S	1.74W	-0.50

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	1402581.11	3227066.68
1000.00	0.00	0.000	1000.00	0.00N	0.00E	==>	0.00	1402581.11	3227066.68
1567.30	11.35	205.230	1563.60	50.64S	23.87W	2.00	28.56	1402530.47	3227042.81
6358.06	11.35	205.230	6260.74	903.21S	425.66W	==>	509.33	1401677.93	3226641.04
7580.56	90.00	272.140	7003.55	1009.70S	1246.29W	7.00	1336.36	1401571.45	3225820.44
9773.83	90.00	272.140	7003.55	927.64S	3438.02W	==>	3510.45	1401653.51	3223628.80
10094.81	90.00	265.720	7003.55	933.60S	3758.77W	2.00	3830.33	1401647.54	3223308.06
12159.81	90.00	265.720	7003.55	1087.55S	5818.03W	==>	5894.90	1401493.60	3221248.89
12784.85	90.00	278.230	7003.55	1066.05S	6441.46W	2.00	6513.49	1401515.10	3220625.48
14693.66	90.00	278.230	7003.55	792.96S	8330.64W	==>	8368.29	1401788.18	3218736.38

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	1402581.11	3227066.68
16.00	0.00	0.000	16.00	0.00N	0.00E	==>	0.00	1402581.11	3227066.68
100.00	0.00	0.000	100.00	0.00N	0.00E	==>	0.00	1402581.11	3227066.68
200.00	0.00	0.000	200.00	0.00N	0.00E	==>	0.00	1402581.11	3227066.68
300.00	0.00	0.000	300.00	0.00N	0.00E	==>	0.00	1402581.11	3227066.68
400.00	0.00	0.000	400.00	0.00N	0.00E	==>	0.00	1402581.11	3227066.68
500.00	0.00	0.000	500.00	0.00N	0.00E	==>	0.00	1402581.11	3227066.68
600.00	0.00	0.000	600.00	0.00N	0.00E	==>	0.00	1402581.11	3227066.68
700.00	0.00	0.000	700.00	0.00N	0.00E	==>	0.00	1402581.11	3227066.68
800.00	0.00	0.000	800.00	0.00N	0.00E	==>	0.00	1402581.11	3227066.68
900.00	0.00	0.000	900.00	0.00N	0.00E	==>	0.00	1402581.11	3227066.68
984.00	0.00	0.000	984.00	0.00N	0.00E	==>	0.00	1402581.11	3227066.68
1000.00	0.00	0.000	1000.00	0.00N	0.00E	==>	0.00	1402581.11	3227066.68
1084.00	1.68	205.230	1083.99	1.11S	0.52W	2.00	0.63	1402580.00	3227066.15
1184.00	3.68	205.230	1183.87	5.34S	2.52W	2.00	3.01	1402575.77	3227064.16
1284.00	5.68	205.230	1283.54	12.72S	6.00W	2.00	7.17	1402568.39	3227060.68
1384.00	7.68	205.230	1382.85	23.25S	10.95W	2.00	13.11	1402557.87	3227055.73
1484.00	9.68	205.230	1481.70	36.90S	17.39W	2.00	20.81	1402544.22	3227049.29
1567.30	11.35	205.230	1563.60	50.64S	23.87W	2.00	28.56	1402530.47	3227042.81
1600.00	11.35	205.230	1595.66	56.46S	26.61W	==>	31.84	1402524.65	3227040.07
1700.00	11.35	205.230	1693.71	74.26S	35.00W	==>	41.88	1402506.85	3227031.68
1800.00	11.35	205.230	1791.75	92.06S	43.38W	==>	51.91	1402489.06	3227023.30
1900.00	11.35	205.230	1889.80	109.85S	51.77W	==>	61.95	1402471.26	3227014.91
2000.00	11.35	205.230	1987.84	127.65S	60.16W	==>	71.98	1402453.47	3227006.53
2100.00	11.35	205.230	2085.89	145.44S	68.54W	==>	82.02	1402435.67	3226998.14
2200.00	11.35	205.230	2183.93	163.24S	76.93W	==>	92.05	1402417.88	3226989.75
2300.00	11.35	205.230	2281.98	181.04S	85.32W	==>	102.09	1402400.08	3226981.37
2400.00	11.35	205.230	2380.03	198.83S	93.70W	==>	112.12	1402382.29	3226972.98
2500.00	11.35	205.230	2478.07	216.63S	102.09W	==>	122.16	1402364.49	3226964.59
2600.00	11.35	205.230	2576.12	234.42S	110.48W	==>	132.19	1402346.69	3226956.21
2700.00	11.35	205.230	2674.16	252.22S	118.86W	==>	142.23	1402328.90	3226947.82
2800.00	11.35	205.230	2772.21	270.02S	127.25W	==>	152.26	1402311.10	3226939.43
2900.00	11.35	205.230	2870.25	287.81S	135.64W	==>	162.30	1402293.31	3226931.05
3000.00	11.35	205.230	2968.30	305.61S	144.02W	==>	172.34	1402275.51	3226922.66

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 4658.6ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 264.560 degrees
Bottom hole distance is 8368.29 Feet on azimuth 264.56 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-Habitat #3-5-6 (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	11.35	205.230	3066.35	323.41S	152.41W	==>	182.37	1402257.72	3226914.27
3200.00	11.35	205.230	3164.39	341.20S	160.80W	==>	192.41	1402239.92	3226905.89
3300.00	11.35	205.230	3262.44	359.00S	169.18W	==>	202.44	1402222.13	3226897.50
3400.00	11.35	205.230	3360.48	376.79S	177.57W	==>	212.48	1402204.33	3226889.12
3500.00	11.35	205.230	3458.53	394.59S	185.96W	==>	222.51	1402186.54	3226880.73
3600.00	11.35	205.230	3556.57	412.39S	194.34W	==>	232.55	1402168.74	3226872.34
3700.00	11.35	205.230	3654.62	430.18S	202.73W	==>	242.58	1402150.95	3226863.96
3800.00	11.35	205.230	3752.67	447.98S	211.12W	==>	252.62	1402133.15	3226855.57
3900.00	11.35	205.230	3850.71	465.77S	219.51W	==>	262.65	1402115.35	3226847.18
4000.00	11.35	205.230	3948.76	483.57S	227.89W	==>	272.69	1402097.56	3226838.80
4100.00	11.35	205.230	4046.80	501.37S	236.28W	==>	282.72	1402079.76	3226830.41
4200.00	11.35	205.230	4144.85	519.16S	244.67W	==>	292.76	1402061.97	3226822.02
4300.00	11.35	205.230	4242.89	536.96S	253.05W	==>	302.79	1402044.17	3226813.64
4400.00	11.35	205.230	4340.94	554.76S	261.44W	==>	312.83	1402026.38	3226805.25
4500.00	11.35	205.230	4438.99	572.55S	269.83W	==>	322.87	1402008.58	3226796.86
4600.00	11.35	205.230	4537.03	590.35S	278.21W	==>	332.90	1401990.79	3226788.48
4700.00	11.35	205.230	4635.08	608.14S	286.60W	==>	342.94	1401972.99	3226780.09
4800.00	11.35	205.230	4733.12	625.94S	294.99W	==>	352.97	1401955.20	3226771.71
4900.00	11.35	205.230	4831.17	643.74S	303.37W	==>	363.01	1401937.40	3226763.32
5000.00	11.35	205.230	4929.21	661.53S	311.76W	==>	373.04	1401919.60	3226754.93
5100.00	11.35	205.230	5027.26	679.33S	320.15W	==>	383.08	1401901.81	3226746.55
5200.00	11.35	205.230	5125.31	697.12S	328.53W	==>	393.11	1401884.01	3226738.16
5300.00	11.35	205.230	5223.35	714.92S	336.92W	==>	403.15	1401866.22	3226729.77
5400.00	11.35	205.230	5321.40	732.72S	345.31W	==>	413.18	1401848.42	3226721.39
5500.00	11.35	205.230	5419.44	750.51S	353.69W	==>	423.22	1401830.63	3226713.00
5600.00	11.35	205.230	5517.49	768.31S	362.08W	==>	433.25	1401812.83	3226704.61
5700.00	11.35	205.230	5615.53	786.11S	370.47W	==>	443.29	1401795.04	3226696.23
5800.00	11.35	205.230	5713.58	803.90S	378.85W	==>	453.32	1401777.24	3226687.84
5900.00	11.35	205.230	5811.63	821.70S	387.24W	==>	463.36	1401759.45	3226679.45
6000.00	11.35	205.230	5909.67	839.49S	395.63W	==>	473.40	1401741.65	3226671.07
6100.00	11.35	205.230	6007.72	857.29S	404.01W	==>	483.43	1401723.85	3226662.68
6200.00	11.35	205.230	6105.76	875.09S	412.40W	==>	493.47	1401706.06	3226654.30
6300.00	11.35	205.230	6203.81	892.88S	420.79W	==>	503.50	1401688.26	3226645.91
6358.06	11.35	205.230	6260.74	903.21S	425.66W	==>	509.33	1401677.93	3226641.04
6400.00	12.76	217.580	6301.75	910.62S	430.24W	7.00	514.59	1401670.53	3226636.45
6500.00	17.70	236.810	6398.27	927.72S	449.73W	7.00	535.61	1401653.43	3226616.97
6600.00	23.68	247.250	6491.81	943.83S	481.00W	7.00	568.27	1401637.32	3226585.70
6700.00	30.08	253.560	6580.98	958.70S	523.60W	7.00	612.09	1401622.45	3226543.10
6800.00	36.68	257.800	6664.45	972.12S	576.89W	7.00	666.41	1401609.03	3226489.81
6900.00	43.39	260.890	6740.98	983.89S	640.08W	7.00	730.43	1401597.26	3226426.62
7000.00	50.17	263.290	6809.42	993.83S	712.23W	7.00	803.19	1401587.32	3226354.48
7100.00	56.99	265.260	6868.76	1001.80S	792.25W	7.00	883.61	1401579.35	3226274.46
7200.00	63.84	266.940	6918.10	1007.67S	878.95W	7.00	970.48	1401573.48	3226187.76
7300.00	70.70	268.440	6956.72	1011.35S	971.05W	7.00	1062.52	1401569.80	3226095.66
7400.00	77.57	269.810	6984.04	1012.80S	1067.17W	7.00	1158.34	1401568.35	3225999.55
7500.00	84.45	271.120	6999.65	1011.99S	1165.88W	7.00	1256.53	1401569.16	3225900.84
7580.56	90.00	272.140	7003.55	1009.70S	1246.29W	7.00	1336.36	1401571.45	3225820.44
7600.00	90.00	272.140	7003.55	1008.97S	1265.71W	==>	1355.62	1401572.18	3225801.02
7700.00	90.00	272.140	7003.55	1005.23S	1365.64W	==>	1454.75	1401575.92	3225701.10
7800.00	90.00	272.140	7003.55	1001.49S	1465.57W	==>	1553.87	1401579.66	3225601.17
7900.00	90.00	272.140	7003.55	997.75S	1565.50W	==>	1653.00	1401583.41	3225501.24
8000.00	90.00	272.140	7003.55	994.00S	1665.43W	==>	1752.12	1401587.15	3225401.32
8100.00	90.00	272.140	7003.55	990.26S	1765.36W	==>	1851.25	1401590.89	3225301.39
8200.00	90.00	272.140	7003.55	986.52S	1865.29W	==>	1950.38	1401594.63	3225201.47
8300.00	90.00	272.140	7003.55	982.78S	1965.22W	==>	2049.50	1401598.37	3225101.54
8400.00	90.00	272.140	7003.55	979.04S	2065.15W	==>	2148.63	1401602.11	3225001.61
8500.00	90.00	272.140	7003.55	975.30S	2165.08W	==>	2247.75	1401605.85	3224901.69
8600.00	90.00	272.140	7003.55	971.56S	2265.01W	==>	2346.88	1401609.59	3224801.76
8700.00	90.00	272.140	7003.55	967.81S	2364.94W	==>	2446.01	1401613.33	3224701.84
8800.00	90.00	272.140	7003.55	964.07S	2464.87W	==>	2545.13	1401617.08	3224601.91
8900.00	90.00	272.140	7003.55	960.33S	2564.80W	==>	2644.26	1401620.82	3224501.98

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Coordinates are from Slot MD's are from Rig and TVD's are from Rig (Planned Datum #1 4658.6ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 264.560 degrees
Bottom hole distance is 8368.29 Feet on azimuth 264.56 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-Habitat #3-5-6 (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	272.140	7003.55	956.59S	2664.73W	==>	2743.38	1401624.56	3224402.06
9100.00	90.00	272.140	7003.55	952.85S	2764.66W	==>	2842.51	1401628.30	3224302.13
9200.00	90.00	272.140	7003.55	949.11S	2864.59W	==>	2941.63	1401632.04	3224202.21
9300.00	90.00	272.140	7003.55	945.37S	2964.52W	==>	3040.76	1401635.78	3224102.28
9400.00	90.00	272.140	7003.55	941.62S	3064.45W	==>	3139.89	1401639.52	3224002.35
9500.00	90.00	272.140	7003.55	937.88S	3164.38W	==>	3239.01	1401643.26	3223902.43
9600.00	90.00	272.140	7003.55	934.14S	3264.31W	==>	3338.14	1401647.01	3223802.50
9700.00	90.00	272.140	7003.55	930.40S	3364.24W	==>	3437.26	1401650.75	3223702.58
9773.83	90.00	272.140	7003.55	927.64S	3438.02W	==>	3510.45	1401653.51	3223628.80
9800.00	90.00	271.620	7003.55	926.78S	3464.17W	2.00	3536.40	1401654.37	3223602.65
9900.00	90.00	269.620	7003.55	925.70S	3564.16W	2.00	3635.84	1401655.45	3223502.66
10000.00	90.00	267.620	7003.55	928.10S	3664.13W	2.00	3735.59	1401653.05	3223402.70
10094.81	90.00	265.720	7003.55	933.60S	3758.77W	2.00	3830.33	1401647.54	3223308.06
10100.00	90.00	265.720	7003.55	933.99S	3763.95W	==>	3835.52	1401647.16	3223302.88
10200.00	90.00	265.720	7003.55	941.45S	3863.67W	==>	3935.50	1401639.70	3223203.16
10300.00	90.00	265.720	7003.55	948.90S	3963.39W	==>	4035.47	1401632.25	3223103.45
10400.00	90.00	265.720	7003.55	956.36S	4063.11W	==>	4135.45	1401624.79	3223003.73
10500.00	90.00	265.720	7003.55	963.81S	4162.84W	==>	4235.43	1401617.34	3222904.01
10600.00	90.00	265.720	7003.55	971.27S	4262.56W	==>	4335.41	1401609.88	3222804.29
10700.00	90.00	265.720	7003.55	978.72S	4362.28W	==>	4435.39	1401602.43	3222704.57
10800.00	90.00	265.720	7003.55	986.18S	4462.00W	==>	4535.37	1401594.97	3222604.86
10900.00	90.00	265.720	7003.55	993.63S	4561.72W	==>	4635.35	1401587.52	3222505.14
11000.00	90.00	265.720	7003.55	1001.09S	4661.44W	==>	4735.33	1401580.06	3222405.42
11100.00	90.00	265.720	7003.55	1008.54S	4761.17W	==>	4835.31	1401572.61	3222305.70
11200.00	90.00	265.720	7003.55	1016.00S	4860.89W	==>	4935.29	1401565.16	3222205.99
11300.00	90.00	265.720	7003.55	1023.45S	4960.61W	==>	5035.27	1401557.70	3222106.27
11400.00	90.00	265.720	7003.55	1030.91S	5060.33W	==>	5135.25	1401550.25	3222006.55
11500.00	90.00	265.720	7003.55	1038.36S	5160.05W	==>	5235.23	1401542.79	3221906.83
11600.00	90.00	265.720	7003.55	1045.82S	5259.78W	==>	5335.21	1401535.34	3221807.11
11700.00	90.00	265.720	7003.55	1053.27S	5359.50W	==>	5435.19	1401527.88	3221707.40
11800.00	90.00	265.720	7003.55	1060.73S	5459.22W	==>	5535.17	1401520.43	3221607.68
11900.00	90.00	265.720	7003.55	1068.18S	5558.94W	==>	5635.15	1401512.97	3221507.96
12000.00	90.00	265.720	7003.55	1075.64S	5658.66W	==>	5735.12	1401505.52	3221408.24
12100.00	90.00	265.720	7003.55	1083.09S	5758.38W	==>	5835.10	1401498.06	3221308.53
12159.81	90.00	265.720	7003.55	1087.55S	5818.03W	==>	5894.90	1401493.60	3221248.89
12200.00	90.00	266.530	7003.55	1090.26S	5858.13W	2.00	5935.08	1401490.89	3221208.79
12300.00	90.00	268.530	7003.55	1094.58S	5958.03W	2.00	6034.94	1401486.58	3221108.89
12400.00	90.00	270.530	7003.55	1095.40S	6058.02W	2.00	6134.56	1401485.76	3221008.90
12500.00	90.00	272.530	7003.55	1092.73S	6157.98W	2.00	6233.81	1401488.42	3220908.95
12600.00	90.00	274.530	7003.55	1086.58S	6257.78W	2.00	6332.59	1401494.58	3220809.15
12700.00	90.00	276.530	7003.55	1076.94S	6357.31W	2.00	6430.76	1401504.21	3220709.62
12784.85	90.00	278.230	7003.55	1066.05S	6441.46W	2.00	6513.49	1401515.10	3220625.48
12800.00	90.00	278.230	7003.55	1063.88S	6456.45W	==>	6528.21	1401517.27	3220610.49
12900.00	90.00	278.230	7003.55	1049.58S	6555.42W	==>	6625.38	1401531.58	3220511.52
13000.00	90.00	278.230	7003.55	1035.27S	6654.39W	==>	6722.55	1401545.88	3220412.55
13100.00	90.00	278.230	7003.55	1020.96S	6753.37W	==>	6819.72	1401560.19	3220313.58
13200.00	90.00	278.230	7003.55	1006.65S	6852.34W	==>	6916.89	1401574.50	3220214.62
13300.00	90.00	278.230	7003.55	992.35S	6951.31W	==>	7014.06	1401588.80	3220115.65
13400.00	90.00	278.230	7003.55	978.04S	7050.28W	==>	7111.23	1401603.11	3220016.68
13500.00	90.00	278.230	7003.55	963.73S	7149.25W	==>	7208.40	1401617.41	3219917.71
13600.00	90.00	278.230	7003.55	949.43S	7248.22W	==>	7305.57	1401631.72	3219818.75
13700.00	90.00	278.230	7003.55	935.12S	7347.19W	==>	7402.74	1401646.03	3219719.78
13800.00	90.00	278.230	7003.55	920.81S	7446.16W	==>	7499.91	1401660.33	3219620.81
13900.00	90.00	278.230	7003.55	906.51S	7545.14W	==>	7597.08	1401674.64	3219521.85
14000.00	90.00	278.230	7003.55	892.20S	7644.11W	==>	7694.25	1401688.95	3219422.88
14100.00	90.00	278.230	7003.55	877.89S	7743.08W	==>	7791.42	1401703.25	3219323.91
14200.00	90.00	278.230	7003.55	863.59S	7842.05W	==>	7888.59	1401717.56	3219224.94
14300.00	90.00	278.230	7003.55	849.28S	7941.02W	==>	7985.77	1401731.87	3219125.98
14400.00	90.00	278.230	7003.55	834.97S	8039.99W	==>	8082.94	1401746.17	3219027.01
14500.00	90.00	278.230	7003.55	820.67S	8138.96W	==>	8180.11	1401760.48	3218928.04
14600.00	90.00	278.230	7003.55	806.36S	8237.94W	==>	8277.28	1401774.78	3218829.07

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Vertical Section is from 0.00N 0.00E on azimuth 264.560 degrees
Bottom hole distance is 8368.29 Feet on azimuth 264.56 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-Habitat #3-5-6 (PWB)

Interpolated Wellpath									
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft] ==>	Vertical Section[ft]	Northing	Easting
14693.66	90.00	278.230	7003.55	792.96S	8330.64W		8368.29	1401788.18	3218736.38

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INTEGRATED PETROLEUM TECHNOLOGIES, INC
SYSDRILL
Well Design Combined Report
Wellbore: DT-Habitat #3-5-6 (PWB)

Hole Sections								
Diameter	Start	Start	Start	Start	End	End	End	End
[in]	MD[ft]	TVD[ft]	North[ft]	East[ft]	MD[ft]	TVD[ft]	North[ft]	East[ft]
12 1/4	16.00	16.00	0.00N	0.00E	560.00	560.00	0.00N	0.00E
8 3/4	560.00	560.00	0.00N	0.00E	7581.00	7003.55	1009.68S	1246.72W
6 1/8	7581.00	7003.55	1009.68S	1246.72W	14693.66	7003.55	792.96S	8330.64W

Casings								
Name	Top	Top	Top	Top	Shoe	Shoe	Shoe	Shoe
	MD[ft]	TVD[ft]	North[ft]	East[ft]	MD[ft]	TVD[ft]	North[ft]	East[ft]
9 5/8in Surface Casing	0.00				560.00	560.00	0.00N	0.00E
7.0in Intermediate Casing	0.00				7581.00	7003.55	1009.68S	1246.72W
4 1/2in Production Liner	6358.00	6260.68	903.20S	425.65W	14693.66	7003.55	792.96S	8330.64W

Targets								
Name	North[ft]	East[ft]	TVD[ft]	Latitude	Longitude	Northing	Easting	Last Revised
D34	1009.70S	1246.29W	7003.55	N40 25 58.3680	W104 41 19.6080	1401571.45	3225820.44	15-Mar-2013
D35	792.96S	8330.64W	7003.55	N40 26 1.1400	W104 42 51.1920	1401788.18	3218736.38	15-Mar-2013
D36	927.64S	3438.02W	7003.55	N40 25 59.3760	W104 41 47.9400	1401653.51	3223628.80	15-Mar-2013
D37	1097.55S	6123.03W	7003.55	N40 25 57.9360	W104 42 22.6800	1401483.61	3220943.90	15-Mar-2013

Survey Tool Program						
Reference	Survey Name	MD[ft]	TVD[ft]	Survey Tool	Error Model	
33623	Planned	14693.66	7003.55	WdW Rate Gyro	Standard	

Notes

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SYSDRILL
Closest Approach + Clearance Factor Summary Report
Wellbore: DT-Habitat #3-5-6 (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-Habitat #3-5-6 (PWB)	12-Mar-2013	12-Apr-2013

Well		
Name	Government ID	Last Revised
DT-Habitat #3-5-6		4-Apr-2013

Slot						
Name	Grid Northing	Grid Easting	Latitude	Longitude	North	East
Slot #8	1402581.1103	3227066.6798	N40 26 8.2320	W104 41 3.3720	112.96S	1.74W

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-Habitat #2-5-6	DT-Habitat #2-5-6 (PWB)	Slot #7	Downtown	14.84	1000.25	12824.74	12.59	1000.25	2.64	14693.66
DT-Habitat #4-5-6	DT-Habitat #4-5-6 (PWB)	Slot #9	Downtown	18.22	934.64	12716.00	16.06	951.04	2.63	14693.66
DT-Habitat #5-5-6	DT-Habitat #5-5-6 (PWB)	Slot #10	Downtown	32.79	885.42	12647.23	30.72	901.83	4.33	14693.66
DT-Habitat #1-5-6	DT-Habitat #1-5-6 (PWB)	Slot #6	Downtown	32.91	1000.25	12916.00	30.66	1000.25	4.41	14693.66
DT-Lopez #2-5-6	DT-Lopez #2-5-6 (PWB)	Slot #5	Downtown	46.01	1016.66	12967.97	43.74	1016.66	6.77	14693.66
DT-Martinez #1-5-6	DT-Martinez #1-5-6 (PWB)	Slot #11	Downtown	47.36	836.21	12581.62	45.37	852.61	6.66	14693.66
Erbes #5-2H5	Erbes #5-2H5 (AWB)	Erbes #5-2H5	Downtown Pad offsets	48.18	2519.54	2519.54	31.34	2525.84	2.86	2542.25
DT-Lextron #1-32-32	DT-Lextron #1-32-32 (PWB)	Slot #4	Downtown	62.00	704.98	704.98	60.19	770.59	28.68	1033.06
DT-Pioneer #2-5-17	DT-Pioneer #2-5-17 (PWB)	Slot #12	Downtown	65.58	787.00	787.00	63.66	803.40	31.59	1000.25
DT-Pioneer #1-5-17	DT-Pioneer #1-5-17 (PWB)	Slot #13	Downtown	80.15	737.78	737.78	78.32	754.19	39.61	983.85
DT-Lopez #1-5-6	DT-Lopez #1-5-6 (PWB)	Slot #3	Downtown	80.20	688.57	12948.57	78.41	557.34	8.86	14693.66
DT-Heath #2-5-8	DT-Heath #2-5-8 (PWB)	Slot #2	Downtown	94.76	639.36	7016.00	92.98	557.34	22.07	7135.42

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Prepared by Peterson Energy
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SYSDRILL
Closest Approach + Clearance Factor Summary Report
Wellbore: DT-Habitat #3-5-6 (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 #5-5-17	DT-StarPak #5-5-17 (PWB)	Slot #14	Downtown	98.36	688.57	688.57	96.58	557.34	49.96	967.44
DT-StarPak #4-5-17	DT-StarPak #4-5-17 (PWB)	Slot #15	Downtown	112.97	639.36	639.36	111.19	557.34	59.18	951.04
DT-Heath #1-5-8	DT-Heath #1-5-8 (PWB)	Slot #1	Downtown	112.97	590.15	7152.27	106.29	7168.23	6.55	7201.04
DT-StarPak #3-5-17	DT-StarPak #3-5-17 (PWB)	Slot #16	Downtown	127.54	590.15	590.15	125.75	557.34	68.67	934.64
DT-StarPak #2-5-17	DT-StarPak #2-5-17 (PWB)	Slot #17	Downtown	145.75	540.93	540.93	143.99	540.93	59.21	7086.21
DT-StarPak #1-5-17	DT-StarPak #1-5-17 (PWB)	Slot #18	Downtown	160.32	491.72	491.72	158.64	491.72	55.63	7250.25
DT-Martinez #2-5-6	DT-Martinez #2-5-6 (PWB)	Slot #19	Downtown	178.54	442.51	12516.00	176.94	442.51	8.67	14693.66
DT-Martinez #3-5-6	DT-Martinez #3-5-6 (PWB)	Slot #20	Downtown	193.11	393.30	12532.40	191.59	393.30	10.89	14693.66
DT-Forbes #1-5-6	DT-Forbes #1-5-6 (PWB)	Slot #21	Downtown	207.68	344.08	12532.40	206.24	344.08	13.00	14693.66
DT-Forbes #2-5-6	DT-Forbes #2-5-6 (PWB)	Slot #22	Downtown	225.89	294.87	12548.81	224.53	294.87	15.29	14693.66
DT-Forbes #3-5-6	DT-Forbes #3-5-6 (PWB)	Slot #23	Downtown	240.45	245.66	12548.81	239.16	245.66	17.45	14693.66
DT-Forbes #4-5-6	DT-Forbes #4-5-6 (PWB)	Slot #24	Downtown	255.04	196.45	12565.21	253.83	196.45	19.73	14693.66
DT-Forbes #5-5-6	DT-Forbes #5-5-6 (PWB)	Slot #25	Downtown	273.25	147.23	12581.62	272.12	147.23	21.89	14693.66
DT-Luther #1-5-6	DT-Luther #1-5-6 (PWB)	Slot #26	Downtown	287.82	98.02	12581.62	286.77	98.02	24.16	14693.66
W Mcelroy #41-5	W Mcelroy #41-5 (AWB)	Mcelroy #41-5	Downtown Pad offsets	994.56	1623.61	1623.61	981.64	1738.44	45.50	5970.72
Arnold #1	Arnold #1 (AWB)	Arnold #1	Downtown Pad offsets	1862.03	6380.83	6380.83	1830.19	6380.83	57.70	6594.08