

MINERAL RESOURCES, INC.

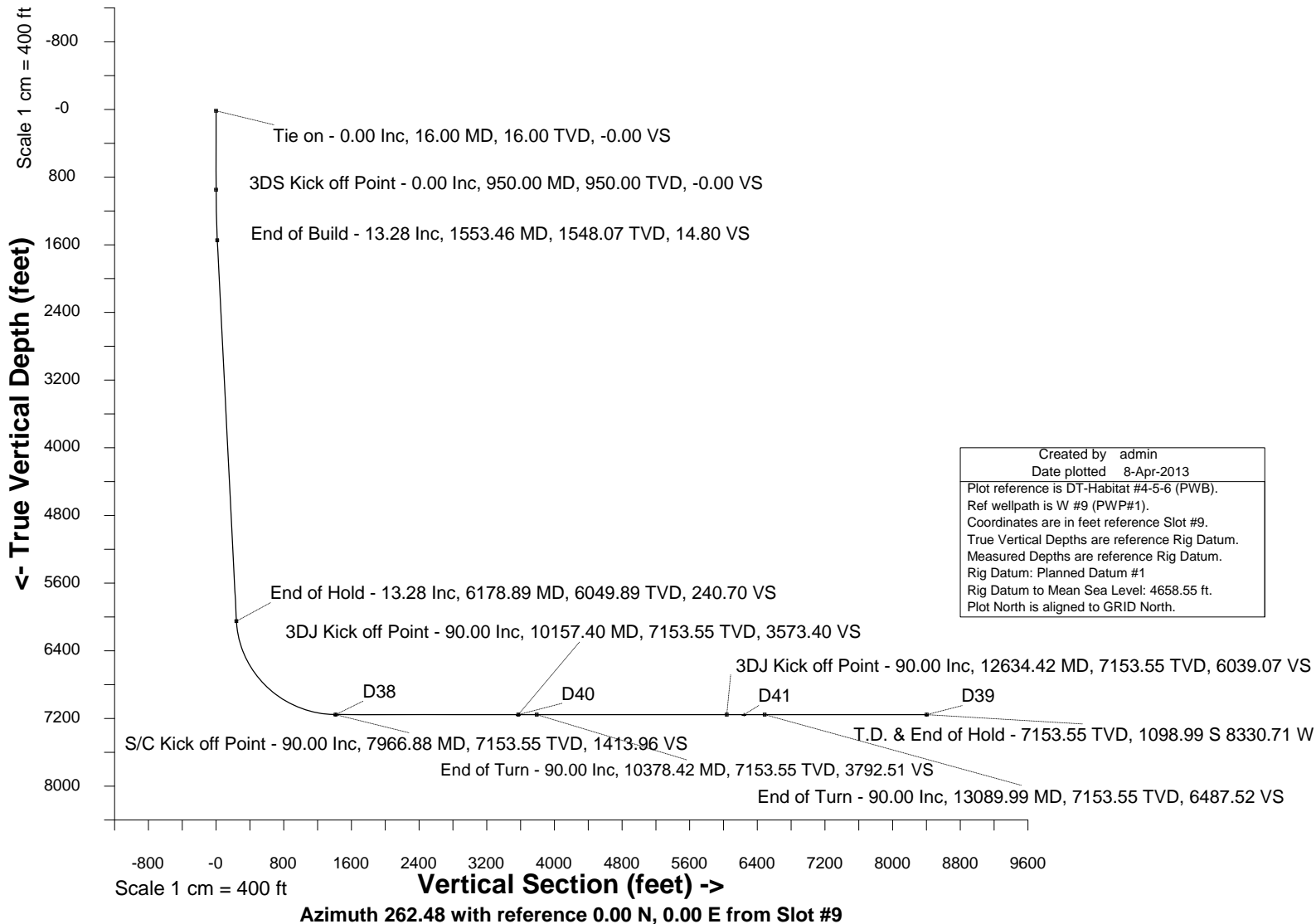
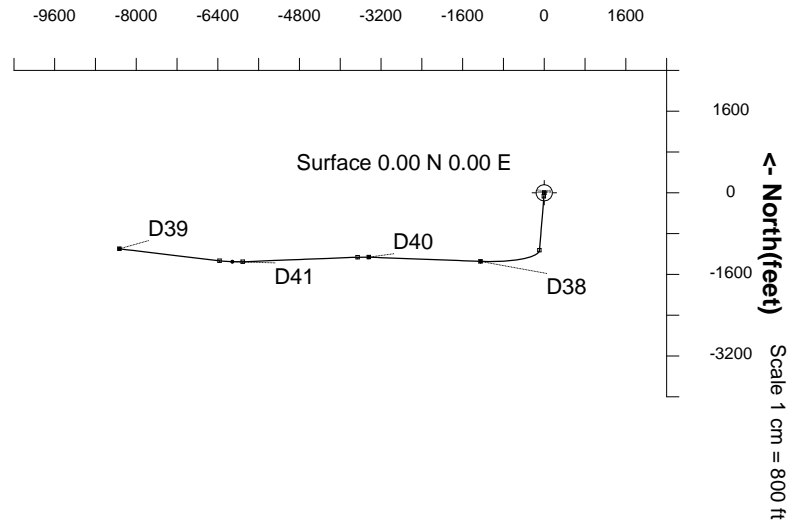
Location	Weld County, CO, USA(Imported)	Slot	Slot #9
Field	Wattenberg	Well	DT-Habitat #4-5-6
Installation	Downtown	Wellbore	DT-Habitat #4-5-6 (PWB)

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	950.00	0.00	0.00	950.00	0.00	0.00	0.00	-0.00
End of Build	1553.46	13.28	184.76	1548.07	-69.36	-5.78	2.20	14.80
End of Hold	6178.89	13.28	184.76	6049.89	-1127.89	-93.99	0.00	240.70
Target D38	7966.88	90.00	272.15	7153.55	-1344.90	-1248.79	5.00	1413.96
Target D40	10157.40	90.00	272.15	7153.55	-1262.82	-3437.77	0.00	3573.40
End of Turn	10378.42	90.00	267.73	7153.55	-1263.06	-3658.74	2.00	3792.51
Target D41	12634.42	90.00	267.73	7153.55	-1352.53	-5912.96	0.00	6039.07
End of Turn	13089.99	90.00	276.84	7153.55	-1334.41	-6367.69	2.00	6487.52
T.D. & Target D39	15067.08	90.00	276.84	7153.55	-1098.99	-8330.71	0.00	8402.89

Scale 1 cm = 800 ft

East (feet) ->



Created by admin
Date plotted 8-Apr-2013
Plot reference is DT-Habitat #4-5-6 (PWB).
Ref wellpath is W #9 (PWP#1).
Coordinates are in feet reference Slot #9.
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 #4-5-6 (PWB)

Wellhead Details							
Name	Northing	Easting	Latitude	Longitude	North	East	Elevation Above Inst.
Slot #9	1402562.8961	3227066.8474	N40 26 8.0520	W104 41 3.3720	131.17S	1.58W	-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	1402562.90	3227066.85
950.00	0.00	0.000	950.00	0.00N	0.00E	==>	0.00	1402562.90	3227066.85
1553.46	13.28	184.760	1548.07	69.36S	5.78W	2.20	14.80	1402493.54	3227061.07
6178.89	13.28	184.760	6049.89	1127.89S	93.99W	==>	240.70	1401435.05	3226972.86
7966.88	90.00	272.150	7153.55	1344.90S	1248.79W	5.00	1413.96	1401218.05	3225818.11
10157.40	90.00	272.150	7153.55	1262.82S	3437.77W	==>	3573.40	1401300.13	3223629.21
10378.42	90.00	267.730	7153.55	1263.06S	3658.74W	2.00	3792.51	1401299.89	3223408.25
12634.42	90.00	267.730	7153.55	1352.53S	5912.96W	==>	6039.07	1401210.42	3221154.12
13089.99	90.00	276.840	7153.55	1334.41S	6367.69W	2.00	6487.52	1401228.54	3220699.41
15067.08	90.00	276.840	7153.55	1098.99S	8330.71W	==>	8402.89	1401463.95	3218736.47

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	1402562.90	3227066.85
16.00	0.00	0.000	16.00	0.00N	0.00E	==>	0.00	1402562.90	3227066.85
100.00	0.00	0.000	100.00	0.00N	0.00E	==>	0.00	1402562.90	3227066.85
200.00	0.00	0.000	200.00	0.00N	0.00E	==>	0.00	1402562.90	3227066.85
300.00	0.00	0.000	300.00	0.00N	0.00E	==>	0.00	1402562.90	3227066.85
400.00	0.00	0.000	400.00	0.00N	0.00E	==>	0.00	1402562.90	3227066.85
500.00	0.00	0.000	500.00	0.00N	0.00E	==>	0.00	1402562.90	3227066.85
600.00	0.00	0.000	600.00	0.00N	0.00E	==>	0.00	1402562.90	3227066.85
700.00	0.00	0.000	700.00	0.00N	0.00E	==>	0.00	1402562.90	3227066.85
800.00	0.00	0.000	800.00	0.00N	0.00E	==>	0.00	1402562.90	3227066.85
900.00	0.00	0.000	900.00	0.00N	0.00E	==>	0.00	1402562.90	3227066.85
934.00	0.00	0.000	934.00	0.00N	0.00E	==>	0.00	1402562.90	3227066.85
950.00	0.00	0.000	950.00	0.00N	0.00E	==>	0.00	1402562.90	3227066.85
1034.00	1.85	184.760	1033.99	1.35S	0.11W	2.20	0.29	1402561.55	3227066.73
1134.00	4.05	184.760	1133.85	6.47S	0.54W	2.20	1.38	1402556.42	3227066.31
1234.00	6.25	184.760	1233.44	15.42S	1.28W	2.20	3.29	1402547.48	3227065.56
1334.00	8.45	184.760	1332.61	28.16S	2.35W	2.20	6.01	1402534.74	3227064.50
1434.00	10.65	184.760	1431.22	44.69S	3.72W	2.20	9.54	1402518.21	3227063.12
1534.00	12.85	184.760	1529.12	64.98S	5.42W	2.20	13.87	1402497.92	3227061.43
1553.46	13.28	184.760	1548.07	69.36S	5.78W	2.20	14.80	1402493.54	3227061.07
1600.00	13.28	184.760	1593.37	80.01S	6.67W	==>	17.08	1402482.89	3227060.18
1700.00	13.28	184.760	1690.70	102.90S	8.58W	==>	21.96	1402460.00	3227058.27
1800.00	13.28	184.760	1788.03	125.78S	10.48W	==>	26.84	1402437.12	3227056.37
1900.00	13.28	184.760	1885.35	148.67S	12.39W	==>	31.73	1402414.23	3227054.46
2000.00	13.28	184.760	1982.68	171.55S	14.30W	==>	36.61	1402391.35	3227052.55
2100.00	13.28	184.760	2080.01	194.44S	16.20W	==>	41.49	1402368.47	3227050.64
2200.00	13.28	184.760	2177.34	217.32S	18.11W	==>	46.38	1402345.58	3227048.74
2300.00	13.28	184.760	2274.66	240.21S	20.02W	==>	51.26	1402322.70	3227046.83
2400.00	13.28	184.760	2371.99	263.09S	21.93W	==>	56.15	1402299.81	3227044.92
2500.00	13.28	184.760	2469.32	285.98S	23.83W	==>	61.03	1402276.93	3227043.02
2600.00	13.28	184.760	2566.65	308.86S	25.74W	==>	65.91	1402254.05	3227041.11
2700.00	13.28	184.760	2663.97	331.75S	27.65W	==>	70.80	1402231.16	3227039.20
2800.00	13.28	184.760	2761.30	354.63S	29.55W	==>	75.68	1402208.28	3227037.29
2900.00	13.28	184.760	2858.63	377.52S	31.46W	==>	80.57	1402185.39	3227035.39

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 262.480 degrees
Bottom hole distance is 8402.89 Feet on azimuth 262.48 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 #4-5-6 (PWB)

Interpolated Wellpath									
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Northing	Easting
3000.00	13.28	184.760	2955.96	400.40S	33.37W	==>	85.45	1402162.51	3227033.48
3100.00	13.28	184.760	3053.28	423.29S	35.28W	==>	90.33	1402139.63	3227031.57
3200.00	13.28	184.760	3150.61	446.17S	37.18W	==>	95.22	1402116.74	3227029.67
3300.00	13.28	184.760	3247.94	469.06S	39.09W	==>	100.10	1402093.86	3227027.76
3400.00	13.28	184.760	3345.27	491.94S	41.00W	==>	104.98	1402070.97	3227025.85
3500.00	13.28	184.760	3442.59	514.83S	42.90W	==>	109.87	1402048.09	3227023.95
3600.00	13.28	184.760	3539.92	537.71S	44.81W	==>	114.75	1402025.21	3227022.04
3700.00	13.28	184.760	3637.25	560.60S	46.72W	==>	119.64	1402002.32	3227020.13
3800.00	13.28	184.760	3734.58	583.48S	48.63W	==>	124.52	1401979.44	3227018.22
3900.00	13.28	184.760	3831.90	606.37S	50.53W	==>	129.40	1401956.55	3227016.32
4000.00	13.28	184.760	3929.23	629.25S	52.44W	==>	134.29	1401933.67	3227014.41
4100.00	13.28	184.760	4026.56	652.14S	54.35W	==>	139.17	1401910.79	3227012.50
4200.00	13.28	184.760	4123.89	675.02S	56.25W	==>	144.05	1401887.90	3227010.60
4300.00	13.28	184.760	4221.21	697.91S	58.16W	==>	148.94	1401865.02	3227008.69
4400.00	13.28	184.760	4318.54	720.79S	60.07W	==>	153.82	1401842.13	3227006.78
4500.00	13.28	184.760	4415.87	743.67S	61.98W	==>	158.71	1401819.25	3227004.87
4600.00	13.28	184.760	4513.20	766.56S	63.88W	==>	163.59	1401796.37	3227002.97
4700.00	13.28	184.760	4610.52	789.44S	65.79W	==>	168.47	1401773.48	3227001.06
4800.00	13.28	184.760	4707.85	812.33S	67.70W	==>	173.36	1401750.60	3226999.15
4900.00	13.28	184.760	4805.18	835.21S	69.60W	==>	178.24	1401727.71	3226997.25
5000.00	13.28	184.760	4902.51	858.10S	71.51W	==>	183.13	1401704.83	3226995.34
5100.00	13.28	184.760	4999.83	880.98S	73.42W	==>	188.01	1401681.95	3226993.43
5200.00	13.28	184.760	5097.16	903.87S	75.33W	==>	192.89	1401659.06	3226991.53
5300.00	13.28	184.760	5194.49	926.75S	77.23W	==>	197.78	1401636.18	3226989.62
5400.00	13.28	184.760	5291.82	949.64S	79.14W	==>	202.66	1401613.29	3226987.71
5500.00	13.28	184.760	5389.14	972.52S	81.05W	==>	207.54	1401590.41	3226985.80
5600.00	13.28	184.760	5486.47	995.41S	82.95W	==>	212.43	1401567.53	3226983.90
5700.00	13.28	184.760	5583.80	1018.29S	84.86W	==>	217.31	1401544.64	3226981.99
5800.00	13.28	184.760	5681.13	1041.18S	86.77W	==>	222.20	1401521.76	3226980.08
5900.00	13.28	184.760	5778.45	1064.06S	88.68W	==>	227.08	1401498.87	3226978.18
6000.00	13.28	184.760	5875.78	1086.95S	90.58W	==>	231.96	1401475.99	3226976.27
6100.00	13.28	184.760	5973.11	1109.83S	92.49W	==>	236.85	1401453.11	3226974.36
6178.89	13.28	184.760	6049.89	1127.89S	93.99W	==>	240.70	1401435.05	3226972.86
6200.00	13.36	189.330	6070.43	1132.71S	94.59W	5.00	241.92	1401430.23	3226972.26
6300.00	14.81	209.110	6167.48	1155.30S	102.69W	5.00	252.90	1401407.65	3226964.16
6400.00	17.59	224.110	6263.54	1177.33S	119.43W	5.00	272.39	1401385.62	3226947.42
6500.00	21.17	234.670	6357.89	1198.63S	144.70W	5.00	300.22	1401364.31	3226922.16
6600.00	25.23	242.130	6449.80	1219.05S	178.29W	5.00	336.20	1401343.89	3226888.56
6700.00	29.56	247.590	6538.58	1238.43S	219.96W	5.00	380.04	1401324.51	3226846.90
6800.00	34.05	251.740	6623.56	1256.62S	269.38W	5.00	431.41	1401306.33	3226797.48
6900.00	38.66	255.010	6704.08	1273.48S	326.17W	5.00	489.93	1401289.46	3226740.69
7000.00	43.35	257.690	6779.53	1288.89S	389.92W	5.00	555.14	1401274.06	3226676.94
7100.00	48.08	259.930	6849.34	1302.72S	460.13W	5.00	626.55	1401260.23	3226606.74
7200.00	52.86	261.860	6912.97	1314.88S	536.26W	5.00	703.62	1401248.07	3226530.61
7300.00	57.66	263.560	6969.95	1325.26S	617.74W	5.00	785.77	1401237.69	3226449.13
7400.00	62.48	265.090	7019.84	1333.79S	703.95W	5.00	872.35	1401229.16	3226362.92
7500.00	67.31	266.490	7062.25	1340.41S	794.24W	5.00	962.72	1401222.54	3226272.64
7600.00	72.16	267.800	7096.87	1345.07S	887.90W	5.00	1056.19	1401217.88	3226178.98
7700.00	77.02	269.030	7123.44	1347.72S	984.24W	5.00	1152.05	1401215.23	3226082.65
7800.00	81.88	270.220	7141.74	1348.35S	1082.51W	5.00	1249.56	1401214.60	3225984.38
7900.00	86.75	271.380	7151.65	1346.96S	1181.98W	5.00	1347.99	1401215.99	3225884.91
7966.88	90.00	272.150	7153.55	1344.90S	1248.79W	5.00	1413.96	1401218.05	3225818.11
8000.00	90.00	272.150	7153.55	1343.66S	1281.89W	==>	1446.61	1401219.29	3225785.01
8100.00	90.00	272.150	7153.55	1339.91S	1381.82W	==>	1545.19	1401223.04	3225685.08
8200.00	90.00	272.150	7153.55	1336.17S	1481.75W	==>	1643.78	1401226.78	3225585.16
8300.00	90.00	272.150	7153.55	1332.42S	1581.68W	==>	1742.36	1401230.53	3225485.23
8400.00	90.00	272.150	7153.55	1328.67S	1681.61W	==>	1840.94	1401234.28	3225385.31
8500.00	90.00	272.150	7153.55	1324.92S	1781.54W	==>	1939.52	1401238.02	3225285.38
8600.00	90.00	272.150	7153.55	1321.18S	1881.47W	==>	2038.10	1401241.77	3225185.45
8700.00	90.00	272.150	7153.55	1317.43S	1981.40W	==>	2136.68	1401245.52	3225085.53
8800.00	90.00	272.150	7153.55	1313.68S	2081.33W	==>	2235.26	1401249.27	3224985.60

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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 262.480 degrees
Bottom hole distance is 8402.89 Feet on azimuth 262.48 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 #4-5-6 (PWB)

Interpolated Wellpath									
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Northing	Easting
8900.00	90.00	272.150	7153.55	1309.94S	2181.26W	==>	2333.84	1401253.01	3224885.68
9000.00	90.00	272.150	7153.55	1306.19S	2281.19W	==>	2432.43	1401256.76	3224785.75
9100.00	90.00	272.150	7153.55	1302.44S	2381.12W	==>	2531.01	1401260.51	3224685.83
9200.00	90.00	272.150	7153.55	1298.69S	2481.05W	==>	2629.59	1401264.25	3224585.90
9300.00	90.00	272.150	7153.55	1294.95S	2580.98W	==>	2728.17	1401268.00	3224485.97
9400.00	90.00	272.150	7153.55	1291.20S	2680.91W	==>	2826.75	1401271.75	3224386.05
9500.00	90.00	272.150	7153.55	1287.45S	2780.84W	==>	2925.33	1401275.49	3224286.12
9600.00	90.00	272.150	7153.55	1283.71S	2880.77W	==>	3023.91	1401279.24	3224186.20
9700.00	90.00	272.150	7153.55	1279.96S	2980.70W	==>	3122.50	1401282.99	3224086.27
9800.00	90.00	272.150	7153.55	1276.21S	3080.63W	==>	3221.08	1401286.74	3223986.35
9900.00	90.00	272.150	7153.55	1272.46S	3180.55W	==>	3319.66	1401290.48	3223886.42
10000.00	90.00	272.150	7153.55	1268.72S	3280.48W	==>	3418.24	1401294.23	3223786.49
10100.00	90.00	272.150	7153.55	1264.97S	3380.41W	==>	3516.82	1401297.98	3223686.57
10157.40	90.00	272.150	7153.55	1262.82S	3437.77W	==>	3573.40	1401300.13	3223629.21
10200.00	90.00	271.300	7153.55	1261.54S	3480.35W	2.00	3615.45	1401301.41	3223586.63
10300.00	90.00	269.300	7153.55	1261.02S	3580.35W	2.00	3714.52	1401301.92	3223486.64
10378.42	90.00	267.730	7153.55	1263.06S	3658.74W	2.00	3792.51	1401299.89	3223408.25
10400.00	90.00	267.730	7153.55	1263.92S	3680.30W	==>	3813.99	1401299.03	3223386.69
10500.00	90.00	267.730	7153.55	1267.88S	3780.22W	==>	3913.58	1401295.06	3223286.77
10600.00	90.00	267.730	7153.55	1271.85S	3880.14W	==>	4013.16	1401291.10	3223186.86
10700.00	90.00	267.730	7153.55	1275.81S	3980.07W	==>	4112.74	1401287.13	3223086.94
10800.00	90.00	267.730	7153.55	1279.78S	4079.99W	==>	4212.32	1401283.17	3222987.02
10900.00	90.00	267.730	7153.55	1283.75S	4179.91W	==>	4311.90	1401279.20	3222887.11
11000.00	90.00	267.730	7153.55	1287.71S	4279.83W	==>	4411.49	1401275.24	3222787.19
11100.00	90.00	267.730	7153.55	1291.68S	4379.75W	==>	4511.07	1401271.27	3222687.27
11200.00	90.00	267.730	7153.55	1295.64S	4479.67W	==>	4610.65	1401267.30	3222587.35
11300.00	90.00	267.730	7153.55	1299.61S	4579.59W	==>	4710.23	1401263.34	3222487.44
11400.00	90.00	267.730	7153.55	1303.58S	4679.52W	==>	4809.81	1401259.37	3222387.52
11500.00	90.00	267.730	7153.55	1307.54S	4779.44W	==>	4909.39	1401255.41	3222287.60
11600.00	90.00	267.730	7153.55	1311.51S	4879.36W	==>	5008.98	1401251.44	3222187.68
11700.00	90.00	267.730	7153.55	1315.47S	4979.28W	==>	5108.56	1401247.47	3222087.77
11800.00	90.00	267.730	7153.55	1319.44S	5079.20W	==>	5208.14	1401243.51	3221987.85
11900.00	90.00	267.730	7153.55	1323.41S	5179.12W	==>	5307.72	1401239.54	3221887.93
12000.00	90.00	267.730	7153.55	1327.37S	5279.04W	==>	5407.30	1401235.58	3221788.01
12100.00	90.00	267.730	7153.55	1331.34S	5378.96W	==>	5506.88	1401231.61	3221688.10
12200.00	90.00	267.730	7153.55	1335.30S	5478.89W	==>	5606.47	1401227.64	3221588.18
12300.00	90.00	267.730	7153.55	1339.27S	5578.81W	==>	5706.05	1401223.68	3221488.26
12400.00	90.00	267.730	7153.55	1343.24S	5678.73W	==>	5805.63	1401219.71	3221388.35
12500.00	90.00	267.730	7153.55	1347.20S	5778.65W	==>	5905.21	1401215.75	3221288.43
12600.00	90.00	267.730	7153.55	1351.17S	5878.57W	==>	6004.79	1401211.78	3221188.51
12634.42	90.00	267.730	7153.55	1352.53S	5912.96W	==>	6039.07	1401210.42	3221154.12
12700.00	90.00	269.040	7153.55	1354.38S	5978.52W	2.00	6104.30	1401208.57	3221088.57
12800.00	90.00	271.040	7153.55	1354.32S	6078.51W	2.00	6203.43	1401208.63	3220988.58
12900.00	90.00	273.040	7153.55	1350.76S	6178.44W	2.00	6302.04	1401212.19	3220888.65
13000.00	90.00	275.040	7153.55	1343.72S	6278.19W	2.00	6400.00	1401219.23	3220788.91
13089.99	90.00	276.840	7153.55	1334.41S	6367.69W	2.00	6487.52	1401228.54	3220699.41
13100.00	90.00	276.840	7153.55	1333.22S	6377.63W	==>	6497.22	1401229.73	3220689.47
13200.00	90.00	276.840	7153.55	1321.31S	6476.92W	==>	6594.10	1401241.64	3220590.19
13300.00	90.00	276.840	7153.55	1309.40S	6576.21W	==>	6690.98	1401253.55	3220490.90
13400.00	90.00	276.840	7153.55	1297.49S	6675.50W	==>	6787.85	1401265.45	3220391.62
13500.00	90.00	276.840	7153.55	1285.59S	6774.79W	==>	6884.73	1401277.36	3220292.33
13600.00	90.00	276.840	7153.55	1273.68S	6874.07W	==>	6981.61	1401289.27	3220193.05
13700.00	90.00	276.840	7153.55	1261.77S	6973.36W	==>	7078.49	1401301.17	3220093.76
13800.00	90.00	276.840	7153.55	1249.87S	7072.65W	==>	7175.37	1401313.08	3219994.48
13900.00	90.00	276.840	7153.55	1237.96S	7171.94W	==>	7272.25	1401324.99	3219895.19
14000.00	90.00	276.840	7153.55	1226.05S	7271.23W	==>	7369.12	1401336.89	3219795.91
14100.00	90.00	276.840	7153.55	1214.14S	7370.52W	==>	7466.00	1401348.80	3219696.62
14200.00	90.00	276.840	7153.55	1202.24S	7469.81W	==>	7562.88	1401360.71	3219597.34
14300.00	90.00	276.840	7153.55	1190.33S	7569.10W	==>	7659.76	1401372.61	3219498.05
14400.00	90.00	276.840	7153.55	1178.42S	7668.38W	==>	7756.64	1401384.52	3219398.77
14500.00	90.00	276.840	7153.55	1166.52S	7767.67W	==>	7853.52	1401396.43	3219299.49

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Vertical Section is from 0.00N 0.00E on azimuth 262.480 degrees
Bottom hole distance is 8402.89 Feet on azimuth 262.48 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 #4-5-6 (PWB)

Interpolated Wellpath									
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Northing	Easting
14600.00	90.00	276.840	7153.55	1154.61S	7866.96W	==>	7950.40	1401408.33	3219200.20
14700.00	90.00	276.840	7153.55	1142.70S	7966.25W	==>	8047.27	1401420.24	3219100.92
14800.00	90.00	276.840	7153.55	1130.80S	8065.54W	==>	8144.15	1401432.15	3219001.63
14900.00	90.00	276.840	7153.55	1118.89S	8164.83W	==>	8241.03	1401444.05	3218902.35
15000.00	90.00	276.840	7153.55	1106.98S	8264.12W	==>	8337.91	1401455.96	3218803.06
15067.08	90.00	276.840	7153.55	1098.99S	8330.71W	==>	8402.89	1401463.95	3218736.47

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INTEGRATED PETROLEUM TECHNOLOGIES, INC
SYSDRILL
Well Design Combined Report
Wellbore: DT-Habitat #4-5-6 (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	7967.00	7153.55	1344.90S	1248.91W
6 1/8	7967.00	7153.55	1344.90S	1248.91W	15067.08	7153.55	1098.99S	8330.71W

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				7967.00	7153.55	1344.90S	1248.91W
4 1/2in Production Liner	6179.00	6050.00	1127.91S	94.00W	15067.08	7153.55	1098.99S	8330.71W

Targets								
Name	North[ft]	East[ft]	TVD[ft]	Latitude	Longitude	Northing	Easting	Last Revised
D38	1344.90S	1248.79W	7153.55	N40 25 54.8760	W104 41 19.6800	1401218.05	3225818.11	15-Mar-2013
D39	1098.99S	8330.71W	7153.55	N40 25 57.9360	W104 42 51.2280	1401463.95	3218736.47	15-Mar-2013
D40	1262.82S	3437.77W	7153.55	N40 25 55.8840	W104 41 47.9760	1401300.13	3223629.21	15-Mar-2013
D41	1352.53S	6117.96W	7153.55	N40 25 55.2360	W104 42 22.6440	1401210.42	3220949.13	15-Mar-2013

Survey Tool Program						
Reference	Survey Name	MD[ft]	TVD[ft]	Survey Tool	Error Model	
33609	Planned	15067.08	7153.55	WdW Rate Gyro	Standard	

Notes

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SYSDRILL
Closest Approach + Clearance Factor Summary Report
Wellbore: DT-Habitat #4-5-6 (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 #4-5-6 (PWB)	12-Mar-2013	12-Apr-2013

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

Slot						
Name	Grid Northing	Grid Easting	Latitude	Longitude	North	East
Slot #9	1402562.8961	3227066.8474	N40 26 8.0520	W104 41 3.3720	131.17S	1.58W

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 #5-5-6	DT-Habitat #5-5-6 (PWB)	Slot #10	Downtown	14.57	885.42	13024.53	12.50	901.83	2.58	15067.08
DT-Habitat #3-5-6	DT-Habitat #3-5-6 (PWB)	Slot #8	Downtown	18.22	951.04	13128.68	16.05	951.04	2.68	15067.08
DT-Martinez #1-5-6	DT-Martinez #1-5-6 (PWB)	Slot #11	Downtown	29.15	836.21	12958.91	27.16	852.61	4.32	15067.08
DT-Habitat #2-5-6	DT-Habitat #2-5-6 (PWB)	Slot #7	Downtown	32.91	951.04	13164.27	30.74	951.04	4.42	15067.08
Erbes #5-2H5	Erbes #5-2H5 (AWB)	Erbes #5-2H5	Downtown Pad offsets	41.63	2237.44	2237.44	25.85	2237.44	2.63	2246.97
DT-Pioneer #2-5-17	DT-Pioneer #2-5-17 (PWB)	Slot #12	Downtown	47.36	787.00	787.00	45.45	803.40	22.97	1180.70
DT-Heath #1-5-8	DT-Heath #1-5-8 (PWB)	Slot #1	Downtown	48.29	7462.75	7462.75	28.18	7447.10	2.23	7430.70
DT-Habitat #1-5-6	DT-Habitat #1-5-6 (PWB)	Slot #6	Downtown	51.08	951.04	13216.56	48.92	951.04	6.84	15067.08
DT-Pioneer #1-5-17	DT-Pioneer #1-5-17 (PWB)	Slot #13	Downtown	61.93	737.78	737.78	60.10	754.19	31.21	918.23
DT-Lopez #2-5-6	DT-Lopez #2-5-6 (PWB)	Slot #5	Downtown	64.51	967.44	13294.17	62.32	967.44	8.91	15067.08
DT-StarPak #5-5-17	DT-StarPak #5-5-17 (PWB)	Slot #14	Downtown	80.15	688.57	688.57	78.36	557.34	41.49	934.64
DT-Lextron #1-32-32	DT-Lextron #1-32-32	Slot #4	Downtown	80.20	704.98	704.98	78.40	770.59	36.86	1033.06

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SYSDRILL
Closest Approach + Clearance Factor Summary Report
Wellbore: DT-Habitat #4-5-6 (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]
	(PWB)									
DT-StarPak #4-5-17	DT-StarPak #4-5-17 (PWB)	Slot #15	Downtown	94.76	639.36	639.36	92.98	557.34	50.52	885.42
DT-Lopez #1-5-6	DT-Lopez #1-5-6 (PWB)	Slot #3	Downtown	98.40	688.57	13270.59	96.62	557.34	11.28	15067.08
DT-StarPak #3-5-17	DT-StarPak #3-5-17 (PWB)	Slot #16	Downtown	109.33	590.15	590.15	107.54	557.34	50.26	6856.55
DT-Heath #2-5-8	DT-Heath #2-5-8 (PWB)	Slot #2	Downtown	112.97	639.36	7266.66	111.18	557.34	10.61	7365.08
DT-StarPak #2-5-17	DT-StarPak #2-5-17 (PWB)	Slot #17	Downtown	127.54	540.93	540.93	125.78	540.93	42.66	7086.21
DT-StarPak #1-5-17	DT-StarPak #1-5-17 (PWB)	Slot #18	Downtown	142.11	491.72	491.72	140.43	491.72	42.57	7447.10
DT-Martinez #2-5-6	DT-Martinez #2-5-6 (PWB)	Slot #19	Downtown	160.32	442.51	12893.30	158.72	442.51	6.62	15067.08
DT-Martinez #3-5-6	DT-Martinez #3-5-6 (PWB)	Slot #20	Downtown	174.89	393.30	12893.30	173.37	393.30	8.61	15067.08
DT-Forbes #1-5-6	DT-Forbes #1-5-6 (PWB)	Slot #21	Downtown	189.46	344.08	12909.70	188.02	344.08	10.89	15067.08
DT-Forbes #2-5-6	DT-Forbes #2-5-6 (PWB)	Slot #22	Downtown	207.68	294.87	12926.10	206.31	294.87	13.03	15067.08
DT-Forbes #3-5-6	DT-Forbes #3-5-6 (PWB)	Slot #23	Downtown	222.23	245.66	12926.10	220.95	245.66	15.31	15067.08
DT-Forbes #4-5-6	DT-Forbes #4-5-6 (PWB)	Slot #24	Downtown	236.82	196.45	12942.51	235.61	196.45	17.47	15067.08
DT-Forbes #5-5-6	DT-Forbes #5-5-6 (PWB)	Slot #25	Downtown	255.04	147.23	12958.91	253.91	147.23	19.73	15067.08
DT-Luther #1-5-6	DT-Luther #1-5-6 (PWB)	Slot #26	Downtown	269.61	98.02	12958.91	268.56	98.02	21.91	15067.08
W Mcelroy #41-5	W Mcelroy #41-5 (AWB)	Mcelroy #41-5	Downtown Pad offsets	907.10	2954.11	2954.11	887.86	3034.37	37.69	5281.75
Arnold #1	Arnold #1 (AWB)	Arnold #1	Downtown Pad offsets	1446.38	6298.81	6298.81	1414.26	6315.21	44.14	6561.28