

# MINERAL RESOURCES, INC.

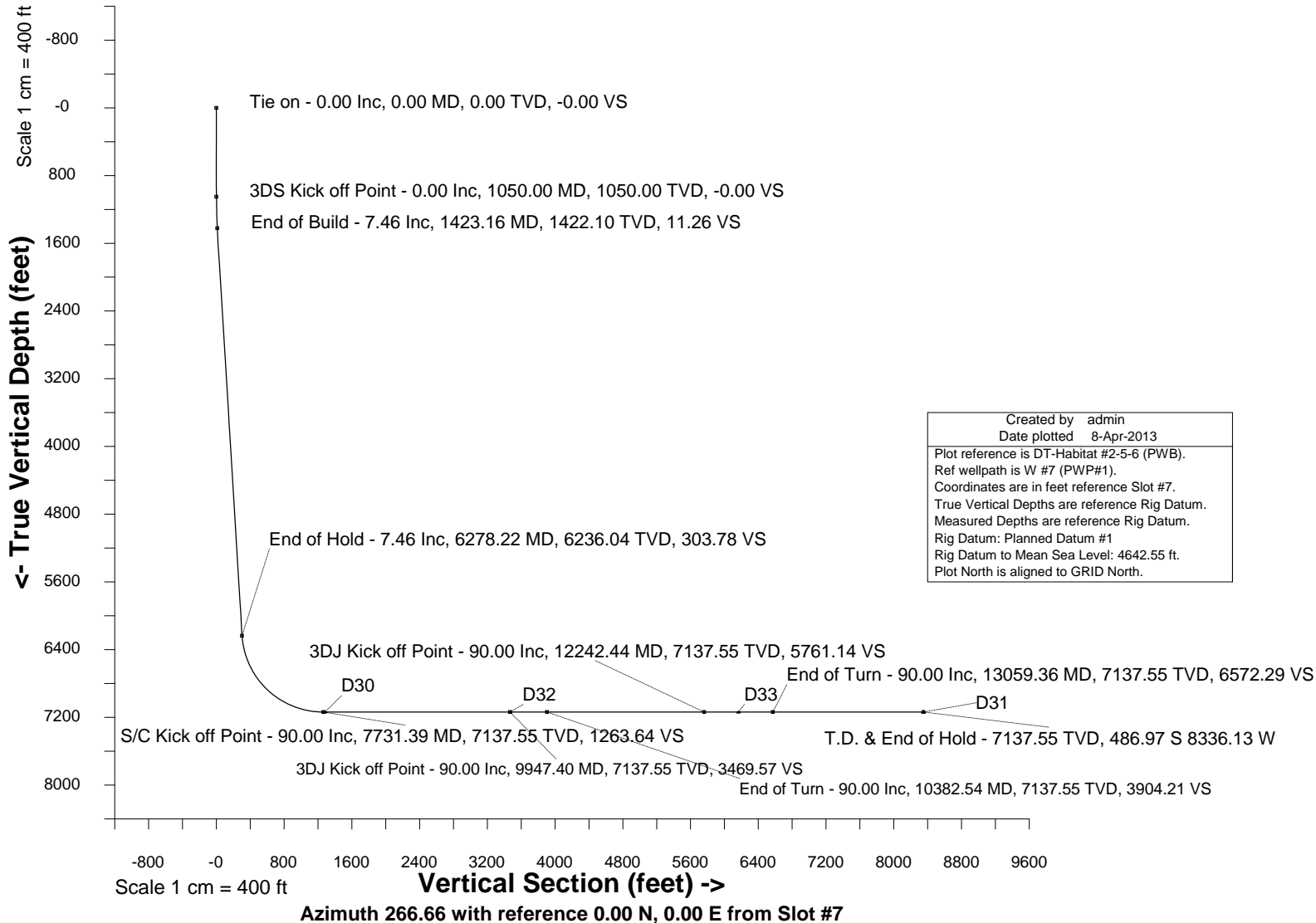
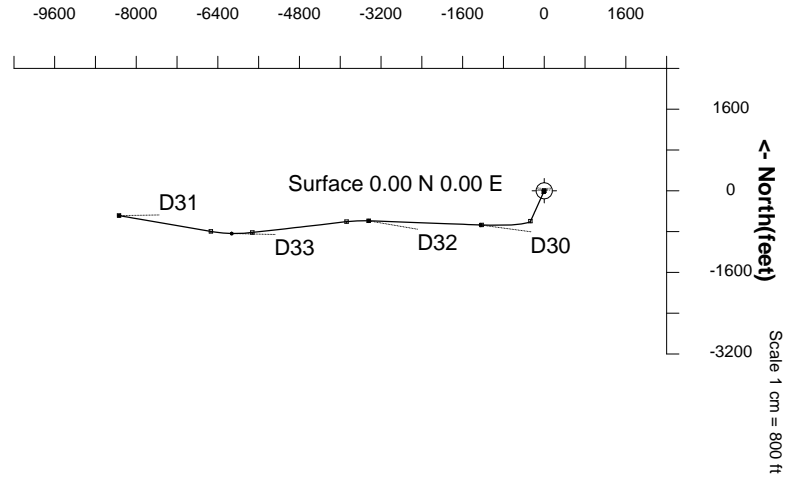
<b>Location</b>	Weld County, CO, USA(Imported)	<b>Slot</b>	Slot #7
<b>Field</b>	Wattenberg	<b>Well</b>	DT-Habitat #2-5-6
<b>Installation</b>	Downtown	<b>Wellbore</b>	DT-Habitat #2-5-6 (PWB)

## WELL PROFILE DATA

Point	MD	Inc	Azi	TVD	North	East	deg/100ft	V. Sect
Tie on	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.00
KOP	1050.00	0.00	0.00	1050.00	0.00	0.00	0.00	-0.00
End of Build	1423.16	7.46	204.29	1422.10	-22.12	-9.98	2.00	11.26
End of Hold	6278.22	7.46	204.29	6236.04	-596.89	-269.43	0.00	303.78
Target D30	7731.39	90.00	272.12	7137.55	-670.87	-1226.60	6.00	1263.64
Target D32	9947.40	90.00	272.12	7137.55	-588.84	-3441.09	0.00	3469.57
End of Turn	10382.54	90.00	263.42	7137.55	-605.75	-3875.48	2.00	3904.21
Target D33	12242.44	90.00	263.42	7137.55	-818.92	-5723.12	0.00	5761.14
End of Turn	13059.36	90.00	279.76	7137.55	-796.36	-6536.97	2.00	6572.29
T.D. & Target D31	14884.93	90.00	279.76	7137.55	-486.97	-8336.13	0.00	8350.34

Scale 1 cm = 800 ft

East (feet) ->





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

Wellhead Details							
Name	Northing	Easting	Latitude	Longitude	North	East	Elevation Above Inst.
Slot #7	1402595.7073	3227069.3293	N40 26 8.3760	W104 41 3.3360	98.36S	0.90E	-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
0.00	0.00	0.000	0.00	0.00N	0.00E		0.00	1402595.71	3227069.33
1050.00	0.00	0.000	1050.00	0.00N	0.00E	==>	0.00	1402595.71	3227069.33
1423.16	7.46	204.290	1422.10	22.12S	9.98W	2.00	11.26	1402573.59	3227059.35
6278.22	7.46	204.290	6236.04	596.89S	269.43W	==>	303.78	1401998.84	3226799.91
7731.39	90.00	272.120	7137.55	670.87S	1226.60W	6.00	1263.64	1401924.86	3225842.78
9947.40	90.00	272.120	7137.55	588.84S	3441.09W	==>	3469.57	1402006.89	3223628.38
10382.54	90.00	263.420	7137.55	605.75S	3875.48W	2.00	3904.21	1401989.98	3223194.01
12242.44	90.00	263.420	7137.55	818.92S	5723.12W	==>	5761.14	1401776.82	3221346.44
13059.36	90.00	279.760	7137.55	796.36S	6536.97W	2.00	6572.29	1401799.38	3220532.62
14884.93	90.00	279.760	7137.55	486.97S	8336.13W	==>	8350.34	1402108.76	3218733.54

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	1402595.71	3227069.33
100.00	0.00	0.000	100.00	0.00N	0.00E	==>	0.00	1402595.71	3227069.33
200.00	0.00	0.000	200.00	0.00N	0.00E	==>	0.00	1402595.71	3227069.33
300.00	0.00	0.000	300.00	0.00N	0.00E	==>	0.00	1402595.71	3227069.33
400.00	0.00	0.000	400.00	0.00N	0.00E	==>	0.00	1402595.71	3227069.33
500.00	0.00	0.000	500.00	0.00N	0.00E	==>	0.00	1402595.71	3227069.33
600.00	0.00	0.000	600.00	0.00N	0.00E	==>	0.00	1402595.71	3227069.33
700.00	0.00	0.000	700.00	0.00N	0.00E	==>	0.00	1402595.71	3227069.33
800.00	0.00	0.000	800.00	0.00N	0.00E	==>	0.00	1402595.71	3227069.33
900.00	0.00	0.000	900.00	0.00N	0.00E	==>	0.00	1402595.71	3227069.33
1000.00	0.00	0.000	1000.00	0.00N	0.00E	==>	0.00	1402595.71	3227069.33
1050.00	0.00	0.000	1050.00	0.00N	0.00E	==>	0.00	1402595.71	3227069.33
1150.00	2.00	204.290	1149.98	1.59S	0.72W	2.00	0.81	1402594.12	3227068.61
1250.00	4.00	204.290	1249.84	6.36S	2.87W	2.00	3.24	1402589.35	3227066.46
1350.00	6.00	204.290	1349.45	14.30S	6.46W	2.00	7.28	1402581.40	3227062.87
1423.16	7.46	204.290	1422.10	22.12S	9.98W	2.00	11.26	1402573.59	3227059.35
1500.00	7.46	204.290	1498.29	31.22S	14.09W	==>	15.89	1402564.49	3227055.24
1600.00	7.46	204.290	1597.45	43.06S	19.43W	==>	21.91	1402552.65	3227049.90
1700.00	7.46	204.290	1696.60	54.89S	24.78W	==>	27.94	1402540.82	3227044.55
1800.00	7.46	204.290	1795.75	66.73S	30.12W	==>	33.96	1402528.98	3227039.21
1900.00	7.46	204.290	1894.91	78.57S	35.47W	==>	39.99	1402517.14	3227033.87
2000.00	7.46	204.290	1994.06	90.41S	40.81W	==>	46.01	1402505.30	3227028.52
2100.00	7.46	204.290	2093.21	102.25S	46.15W	==>	52.04	1402493.46	3227023.18
2200.00	7.46	204.290	2192.36	114.09S	51.50W	==>	58.06	1402481.62	3227017.83
2300.00	7.46	204.290	2291.52	125.93S	56.84W	==>	64.09	1402469.79	3227012.49
2400.00	7.46	204.290	2390.67	137.76S	62.18W	==>	70.11	1402457.95	3227007.15
2500.00	7.46	204.290	2489.82	149.60S	67.53W	==>	76.14	1402446.11	3227001.80
2600.00	7.46	204.290	2588.98	161.44S	72.87W	==>	82.16	1402434.27	3226996.46
2700.00	7.46	204.290	2688.13	173.28S	78.22W	==>	88.19	1402422.43	3226991.12
2800.00	7.46	204.290	2787.28	185.12S	83.56W	==>	94.21	1402410.60	3226985.77
2900.00	7.46	204.290	2886.43	196.96S	88.90W	==>	100.24	1402398.76	3226980.47
3000.00	7.46	204.290	2985.59	208.80S	94.25W	==>	106.26	1402386.92	3226975.09
3100.00	7.46	204.290	3084.74	220.63S	99.59W	==>	112.29	1402375.08	3226969.74
3200.00	7.46	204.290	3183.89	232.47S	104.93W	==>	118.31	1402363.24	3226964.40

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 4642.6ft above Mean Sea Level )  
Vertical Section is from 0.00N 0.00E on azimuth 266.660 degrees  
Bottom hole distance is 8350.34 Feet on azimuth 266.66 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 #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
3300.00	7.46	204.290	3283.05	244.31S	110.28W	==>	124.34	1402351.41	3226959.06
3400.00	7.46	204.290	3382.20	256.15S	115.62W	==>	130.36	1402339.57	3226953.71
3500.00	7.46	204.290	3481.35	267.99S	120.97W	==>	136.39	1402327.73	3226948.37
3600.00	7.46	204.290	3580.50	279.83S	126.31W	==>	142.41	1402315.89	3226943.03
3700.00	7.46	204.290	3679.66	291.67S	131.65W	==>	148.44	1402304.05	3226937.68
3800.00	7.46	204.290	3778.81	303.51S	137.00W	==>	154.46	1402292.21	3226932.34
3900.00	7.46	204.290	3877.96	315.34S	142.34W	==>	160.49	1402280.38	3226926.99
4000.00	7.46	204.290	3977.12	327.18S	147.68W	==>	166.51	1402268.54	3226921.65
4100.00	7.46	204.290	4076.27	339.02S	153.03W	==>	172.54	1402256.70	3226916.31
4200.00	7.46	204.290	4175.42	350.86S	158.37W	==>	178.56	1402244.86	3226910.96
4300.00	7.46	204.290	4274.58	362.70S	163.72W	==>	184.59	1402233.02	3226905.62
4400.00	7.46	204.290	4373.73	374.54S	169.06W	==>	190.61	1402221.19	3226900.28
4500.00	7.46	204.290	4472.88	386.38S	174.40W	==>	196.64	1402209.35	3226894.93
4600.00	7.46	204.290	4572.03	398.21S	179.75W	==>	202.66	1402197.51	3226889.59
4700.00	7.46	204.290	4671.19	410.05S	185.09W	==>	208.69	1402185.67	3226884.25
4800.00	7.46	204.290	4770.34	421.89S	190.43W	==>	214.71	1402173.83	3226878.90
4900.00	7.46	204.290	4869.49	433.73S	195.78W	==>	220.74	1402161.99	3226873.56
5000.00	7.46	204.290	4968.65	445.57S	201.12W	==>	226.76	1402150.16	3226868.22
5100.00	7.46	204.290	5067.80	457.41S	206.46W	==>	232.79	1402138.32	3226862.87
5200.00	7.46	204.290	5166.95	469.25S	211.81W	==>	238.81	1402126.48	3226857.53
5300.00	7.46	204.290	5266.10	481.08S	217.15W	==>	244.84	1402114.64	3226852.19
5400.00	7.46	204.290	5365.26	492.92S	222.50W	==>	250.86	1402102.80	3226846.84
5500.00	7.46	204.290	5464.41	504.76S	227.84W	==>	256.89	1402090.97	3226841.50
5600.00	7.46	204.290	5563.56	516.60S	233.18W	==>	262.91	1402079.13	3226836.16
5700.00	7.46	204.290	5662.72	528.44S	238.53W	==>	268.94	1402067.29	3226830.81
5800.00	7.46	204.290	5761.87	540.28S	243.87W	==>	274.96	1402055.45	3226825.47
5900.00	7.46	204.290	5861.02	552.12S	249.21W	==>	280.99	1402043.61	3226820.12
6000.00	7.46	204.290	5960.17	563.95S	254.56W	==>	287.01	1402031.78	3226814.78
6100.00	7.46	204.290	6059.33	575.79S	259.90W	==>	293.04	1402019.94	3226809.44
6200.00	7.46	204.290	6158.48	587.63S	265.25W	==>	299.06	1402008.10	3226804.09
6278.22	7.46	204.290	6236.04	596.89S	269.43W	==>	303.78	1401998.84	3226799.91
6300.00	8.04	212.980	6257.62	599.46S	270.84W	6.00	305.34	1401996.27	3226798.50
6400.00	12.23	238.100	6356.08	610.94S	283.65W	6.00	318.80	1401984.79	3226785.69
6500.00	17.50	249.500	6452.72	621.81S	306.75W	6.00	342.50	1401973.92	3226762.59
6600.00	23.12	255.620	6546.47	631.97S	339.89W	6.00	376.16	1401963.77	3226729.46
6700.00	28.89	259.420	6636.32	641.29S	382.69W	6.00	419.44	1401954.44	3226686.66
6800.00	34.73	262.040	6721.27	649.67S	434.69W	6.00	471.84	1401946.06	3226634.66
6900.00	40.61	263.990	6800.39	657.03S	495.32W	6.00	532.79	1401938.70	3226574.03
7000.00	46.52	265.510	6872.83	663.29S	563.91W	6.00	601.64	1401932.45	3226505.44
7100.00	52.44	266.770	6937.77	668.36S	639.72W	6.00	677.61	1401927.37	3226429.63
7200.00	58.38	267.840	6994.52	672.21S	721.92W	6.00	759.89	1401923.53	3226347.44
7300.00	64.32	268.780	7042.45	674.78S	809.59W	6.00	847.56	1401920.96	3226259.77
7400.00	70.27	269.630	7081.04	676.04S	901.79W	6.00	939.68	1401919.69	3226167.58
7500.00	76.22	270.420	7109.85	676.00S	997.50W	6.00	1035.22	1401919.74	3226071.87
7600.00	82.17	271.170	7128.59	674.64S	1095.67W	6.00	1133.15	1401921.10	3225973.70
7700.00	88.13	271.890	7137.04	671.97S	1195.23W	6.00	1232.39	1401923.76	3225874.14
7731.39	90.00	272.120	7137.55	670.87S	1226.60W	6.00	1263.64	1401924.86	3225842.78
7800.00	90.00	272.120	7137.55	668.33S	1295.16W	==>	1331.93	1401927.40	3225774.22
7900.00	90.00	272.120	7137.55	664.63S	1395.09W	==>	1431.48	1401931.10	3225674.29
8000.00	90.00	272.120	7137.55	660.93S	1495.02W	==>	1531.02	1401934.80	3225574.36
8100.00	90.00	272.120	7137.55	657.23S	1594.96W	==>	1630.57	1401938.51	3225474.44
8200.00	90.00	272.120	7137.55	653.53S	1694.89W	==>	1730.11	1401942.21	3225374.51
8300.00	90.00	272.120	7137.55	649.82S	1794.82W	==>	1829.66	1401945.91	3225274.58
8400.00	90.00	272.120	7137.55	646.12S	1894.75W	==>	1929.21	1401949.61	3225174.65
8500.00	90.00	272.120	7137.55	642.42S	1994.68W	==>	2028.75	1401953.31	3225074.73
8600.00	90.00	272.120	7137.55	638.72S	2094.61W	==>	2128.30	1401957.01	3224974.80
8700.00	90.00	272.120	7137.55	635.02S	2194.54W	==>	2227.84	1401960.72	3224874.87
8800.00	90.00	272.120	7137.55	631.32S	2294.48W	==>	2327.39	1401964.42	3224774.95
8900.00	90.00	272.120	7137.55	627.61S	2394.41W	==>	2426.93	1401968.12	3224675.02
9000.00	90.00	272.120	7137.55	623.91S	2494.34W	==>	2526.48	1401971.82	3224575.09
9100.00	90.00	272.120	7137.55	620.21S	2594.27W	==>	2626.02	1401975.52	3224475.16

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Vertical Section is from 0.00N 0.00E on azimuth 266.660 degrees  
Bottom hole distance is 8350.34 Feet on azimuth 266.66 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 #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
9200.00	90.00	272.120	7137.55	616.51S	2694.20W	==>	2725.57	1401979.22	3224375.24
9300.00	90.00	272.120	7137.55	612.81S	2794.13W	==>	2825.12	1401982.93	3224275.31
9400.00	90.00	272.120	7137.55	609.10S	2894.06W	==>	2924.66	1401986.63	3224175.38
9500.00	90.00	272.120	7137.55	605.40S	2994.00W	==>	3024.21	1401990.33	3224075.45
9600.00	90.00	272.120	7137.55	601.70S	3093.93W	==>	3123.75	1401994.03	3223975.53
9700.00	90.00	272.120	7137.55	598.00S	3193.86W	==>	3223.30	1401997.73	3223875.60
9800.00	90.00	272.120	7137.55	594.30S	3293.79W	==>	3322.84	1402001.43	3223775.67
9900.00	90.00	272.120	7137.55	590.59S	3393.72W	==>	3422.39	1402005.14	3223675.74
9947.40	90.00	272.120	7137.55	588.84S	3441.09W	==>	3469.57	1402006.89	3223628.38
10000.00	90.00	271.070	7137.55	587.38S	3493.67W	2.00	3521.98	1402008.36	3223575.80
10100.00	90.00	269.070	7137.55	587.25S	3593.66W	2.00	3621.79	1402008.48	3223475.81
10200.00	90.00	267.070	7137.55	590.62S	3693.60W	2.00	3721.76	1402005.11	3223375.88
10300.00	90.00	265.070	7137.55	597.48S	3793.36W	2.00	3821.75	1401998.25	3223276.12
10382.54	90.00	263.420	7137.55	605.75S	3875.48W	2.00	3904.21	1401989.98	3223194.01
10400.00	90.00	263.420	7137.55	607.76S	3892.83W	==>	3921.64	1401987.98	3223176.66
10500.00	90.00	263.420	7137.55	619.22S	3992.17W	==>	4021.48	1401976.51	3223077.32
10600.00	90.00	263.420	7137.55	630.68S	4091.51W	==>	4121.33	1401965.05	3222977.98
10700.00	90.00	263.420	7137.55	642.14S	4190.85W	==>	4221.17	1401953.59	3222878.65
10800.00	90.00	263.420	7137.55	653.60S	4290.19W	==>	4321.01	1401942.13	3222779.31
10900.00	90.00	263.420	7137.55	665.06S	4389.53W	==>	4420.85	1401930.67	3222679.97
11000.00	90.00	263.420	7137.55	676.52S	4488.87W	==>	4520.69	1401919.21	3222580.64
11100.00	90.00	263.420	7137.55	687.98S	4588.21W	==>	4620.53	1401907.75	3222481.30
11200.00	90.00	263.420	7137.55	699.45S	4687.56W	==>	4720.37	1401896.29	3222381.96
11300.00	90.00	263.420	7137.55	710.91S	4786.90W	==>	4820.21	1401884.83	3222282.62
11400.00	90.00	263.420	7137.55	722.37S	4886.24W	==>	4920.05	1401873.37	3222183.29
11500.00	90.00	263.420	7137.55	733.83S	4985.58W	==>	5019.89	1401861.91	3222083.95
11600.00	90.00	263.420	7137.55	745.29S	5084.92W	==>	5119.73	1401850.45	3221984.61
11700.00	90.00	263.420	7137.55	756.75S	5184.26W	==>	5219.57	1401838.99	3221885.28
11800.00	90.00	263.420	7137.55	768.21S	5283.60W	==>	5319.41	1401827.52	3221785.94
11900.00	90.00	263.420	7137.55	779.67S	5382.94W	==>	5419.25	1401816.06	3221686.60
12000.00	90.00	263.420	7137.55	791.14S	5482.28W	==>	5519.09	1401804.60	3221587.26
12100.00	90.00	263.420	7137.55	802.60S	5581.62W	==>	5618.93	1401793.14	3221487.93
12200.00	90.00	263.420	7137.55	814.06S	5680.97W	==>	5718.77	1401781.68	3221388.59
12242.44	90.00	263.420	7137.55	818.92S	5723.12W	==>	5761.14	1401776.82	3221346.44
12300.00	90.00	264.570	7137.55	824.94S	5780.37W	2.00	5818.64	1401770.80	3221289.19
12400.00	90.00	266.570	7137.55	832.67S	5880.07W	2.00	5918.62	1401763.07	3221189.50
12500.00	90.00	268.570	7137.55	836.91S	5979.97W	2.00	6018.60	1401758.83	3221089.60
12600.00	90.00	270.570	7137.55	837.66S	6079.96W	2.00	6118.46	1401758.08	3220989.61
12700.00	90.00	272.570	7137.55	834.92S	6179.92W	2.00	6218.09	1401760.82	3220889.66
12800.00	90.00	274.570	7137.55	828.69S	6279.72W	2.00	6317.36	1401767.05	3220789.86
12900.00	90.00	276.570	7137.55	818.99S	6379.24W	2.00	6416.15	1401776.75	3220690.34
13000.00	90.00	278.570	7137.55	805.81S	6478.37W	2.00	6514.33	1401789.93	3220591.22
13059.36	90.00	279.760	7137.55	796.36S	6536.97W	2.00	6572.29	1401799.38	3220532.62
13100.00	90.00	279.760	7137.55	789.47S	6577.02W	==>	6611.87	1401806.27	3220492.57
13200.00	90.00	279.760	7137.55	772.52S	6675.57W	==>	6709.26	1401823.21	3220394.02
13300.00	90.00	279.760	7137.55	755.58S	6774.13W	==>	6806.66	1401840.16	3220295.47
13400.00	90.00	279.760	7137.55	738.63S	6872.68W	==>	6904.06	1401857.11	3220196.92
13500.00	90.00	279.760	7137.55	721.68S	6971.23W	==>	7001.46	1401874.05	3220098.37
13600.00	90.00	279.760	7137.55	704.73S	7069.79W	==>	7098.85	1401891.00	3219999.82
13700.00	90.00	279.760	7137.55	687.79S	7168.34W	==>	7196.25	1401907.95	3219901.27
13800.00	90.00	279.760	7137.55	670.84S	7266.89W	==>	7293.65	1401924.89	3219802.73
13900.00	90.00	279.760	7137.55	653.89S	7365.45W	==>	7391.05	1401941.84	3219704.18
14000.00	90.00	279.760	7137.55	636.94S	7464.00W	==>	7488.44	1401958.79	3219605.63
14100.00	90.00	279.760	7137.55	620.00S	7562.55W	==>	7585.84	1401975.73	3219507.08
14200.00	90.00	279.760	7137.55	603.05S	7661.11W	==>	7683.24	1401992.68	3219408.53
14300.00	90.00	279.760	7137.55	586.10S	7759.66W	==>	7780.64	1402009.63	3219309.98
14400.00	90.00	279.760	7137.55	569.15S	7858.22W	==>	7878.03	1402026.58	3219211.43
14500.00	90.00	279.760	7137.55	552.21S	7956.77W	==>	7975.43	1402043.52	3219112.88
14600.00	90.00	279.760	7137.55	535.26S	8055.32W	==>	8072.83	1402060.47	3219014.33
14700.00	90.00	279.760	7137.55	518.31S	8153.88W	==>	8170.22	1402077.42	3218915.78
14800.00	90.00	279.760	7137.55	501.36S	8252.43W	==>	8267.62	1402094.36	3218817.23

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Vertical Section is from 0.00N 0.00E on azimuth 266.660 degrees  
Bottom hole distance is 8350.34 Feet on azimuth 266.66 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 #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
14884.93	90.00	279.760	7137.55	486.97S	8336.13W		8350.34	1402108.76	3218733.54

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SYSDRILL  
Well Design Combined Report  
Wellbore: DT-Habitat #2-5-6 (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	0.00	0.00	0.00N	0.00E	560.00	560.00	0.00N	0.00E
8 3/4	560.00	560.00	0.00N	0.00E	7731.00	7137.55	670.89S	1226.21W
6 1/8	7731.00	7137.55	670.89S	1226.21W	14884.93	7137.55	486.97S	8336.13W

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	0.00	0.00N	0.00E	560.00	560.00	0.00N	0.00E
7.0in Intermediate Casing	0.00	0.00	0.00N	0.00E	7731.00	7137.55	670.89S	1226.21W
4 1/2in Production Liner	6278.00	6235.82	596.87S	269.41W	14884.93	7137.55	486.97S	8336.13W

Targets								
Name	North[ft]	East[ft]	TVD[ft]	Latitude	Longitude	Northing	Easting	Last Revised
D30	670.87S	1246.60W	7137.55	N40 26 1.8600	W104 41 19.5360	1401924.86	3225822.78	15-Mar-2013
D31	486.97S	8336.13W	7137.55	N40 26 4.3080	W104 42 51.1920	1402108.76	3218733.54	15-Mar-2013
D32	588.84S	3441.09W	7137.55	N40 26 2.8680	W104 41 47.9040	1402006.89	3223628.38	15-Mar-2013
D33	838.92S	6128.12W	7137.55	N40 26 0.6360	W104 42 22.6800	1401756.82	3220941.45	15-Mar-2013

Survey Tool Program						
Reference	Survey Name	MD[ft]	TVD[ft]	Survey Tool	Error Model	
33530	Planned	14884.93	7137.55	WdW Rate Gyro	Standard	

Notes

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

Well		
Name	Government ID	Last Revised
DT-Habitat #2-5-6		4-Apr-2013

Slot						
Name	Grid Northing	Grid Easting	Latitude	Longitude	North	East
Slot #7	1402595.7073	3227069.3293	N40 26 8.3760	W104 41 3.3360	98.36S	0.90E

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 #3-5-6	DT-Habitat #3-5-6 (PWB)	Slot #8	Downtown	14.84	984.25	12975.72	12.60	984.25	2.58	14878.61
DT-Habitat #1-5-6	DT-Habitat #1-5-6 (PWB)	Slot #6	Downtown	18.22	1050.00	13123.36	15.87	1050.00	2.67	14884.93
DT-Lopez #2-5-6	DT-Lopez #2-5-6 (PWB)	Slot #5	Downtown	31.50	1066.27	13221.78	29.13	1066.27	4.38	14884.93
DT-Habitat #4-5-6	DT-Habitat #4-5-6 (PWB)	Slot #9	Downtown	32.91	918.64	12910.10	30.75	935.04	4.32	14862.20
DT-Heath #1-5-8	DT-Heath #1-5-8 (PWB)	Slot #1	Downtown	33.66	7244.53	7244.53	18.89	7234.25	2.16	7234.25
DT-Lextron #1-32-32	DT-Lextron #1-32-32 (PWB)	Slot #4	Downtown	47.36	672.57	672.57	45.57	721.78	22.87	967.85
DT-Habitat #5-5-6	DT-Habitat #5-5-6 (PWB)	Slot #10	Downtown	47.44	869.42	12844.49	45.37	885.83	6.61	14884.93
Erbes #5-2H5	Erbes #5-2H5 (AWB)	Erbes #5-2H5	Downtown Pad offsets	47.78	3226.31	3226.31	28.60	3231.63	2.49	3248.03
DT-Martinez #1-5-6	DT-Martinez #1-5-6 (PWB)	Slot #11	Downtown	62.00	820.21	12778.87	60.01	836.61	8.64	14884.93
DT-Lopez #1-5-6	DT-Lopez #1-5-6 (PWB)	Slot #3	Downtown	65.58	672.57	13146.16	63.79	541.34	6.76	14884.93
DT-Heath #2-5-8	DT-Heath #2-5-8 (PWB)	Slot #2	Downtown	80.15	623.36	7081.31	78.36	541.34	16.92	7152.23
DT-Pioneer #2-5-17	DT-Pioneer #2-5-17 (PWB)	Slot #12	Downtown	80.20	771.00	771.00	78.29	787.40	37.94	1017.06

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SYSDRILL  
Closest Approach + Clearance Factor Summary Report  
Wellbore: DT-Habitat #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-Pioneer #1-5-17	DT-Pioneer #1-5-17 (PWB)	Slot #13	Downtown	94.76	721.78	721.78	92.93	738.19	46.05	1000.66
DT-StarPak #5-5-17	DT-StarPak #5-5-17 (PWB)	Slot #14	Downtown	112.97	672.57	672.57	111.19	541.34	56.53	984.25
DT-StarPak #4-5-17	DT-StarPak #4-5-17 (PWB)	Slot #15	Downtown	127.51	623.36	623.36	125.72	541.34	65.80	967.85
DT-StarPak #3-5-17	DT-StarPak #3-5-17 (PWB)	Slot #16	Downtown	142.08	574.15	574.15	140.30	541.34	75.35	935.04
DT-StarPak #2-5-17	DT-StarPak #2-5-17 (PWB)	Slot #17	Downtown	160.30	524.93	524.93	158.54	524.93	80.33	7660.76
DT-StarPak #1-5-17	DT-StarPak #1-5-17 (PWB)	Slot #18	Downtown	174.87	475.72	475.72	173.19	475.72	74.40	7874.02
DT-Martinez #2-5-6	DT-Martinez #2-5-6 (PWB)	Slot #19	Downtown	193.09	426.51	12729.66	191.49	426.51	10.89	14884.93
DT-Martinez #3-5-6	DT-Martinez #3-5-6 (PWB)	Slot #20	Downtown	207.66	377.30	12729.66	206.14	377.30	12.93	14884.93
DT-Forbes #1-5-6	DT-Forbes #1-5-6 (PWB)	Slot #21	Downtown	222.23	328.08	12729.66	220.79	328.08	15.19	14884.93
DT-Forbes #2-5-6	DT-Forbes #2-5-6 (PWB)	Slot #22	Downtown	240.45	278.87	12746.06	239.08	278.87	17.35	14884.93
DT-Forbes #3-5-6	DT-Forbes #3-5-6 (PWB)	Slot #23	Downtown	255.04	229.66	12746.06	253.75	229.66	19.62	14884.93
DT-Forbes #4-5-6	DT-Forbes #4-5-6 (PWB)	Slot #24	Downtown	269.65	180.45	12762.47	268.44	180.45	21.80	14884.93
DT-Forbes #5-5-6	DT-Forbes #5-5-6 (PWB)	Slot #25	Downtown	287.86	131.23	12778.87	286.73	131.23	24.05	14884.93
DT-Luther #1-5-6	DT-Luther #1-5-6 (PWB)	Slot #26	Downtown	302.43	82.02	12795.28	301.38	82.02	26.23	14884.93
W Mcelroy #41-5	W Mcelroy #41-5 (AWB)	Mcelroy #41-5	Downtown Pad offsets	996.94	1984.91	1984.91	982.23	2230.97	39.75	6315.62
Arnold #1	Arnold #1 (AWB)	Arnold #1	Downtown Pad offsets	1928.71	6332.02	6332.02	1899.44	6332.02	64.61	6660.10