

MINERAL RESOURCES, INC.

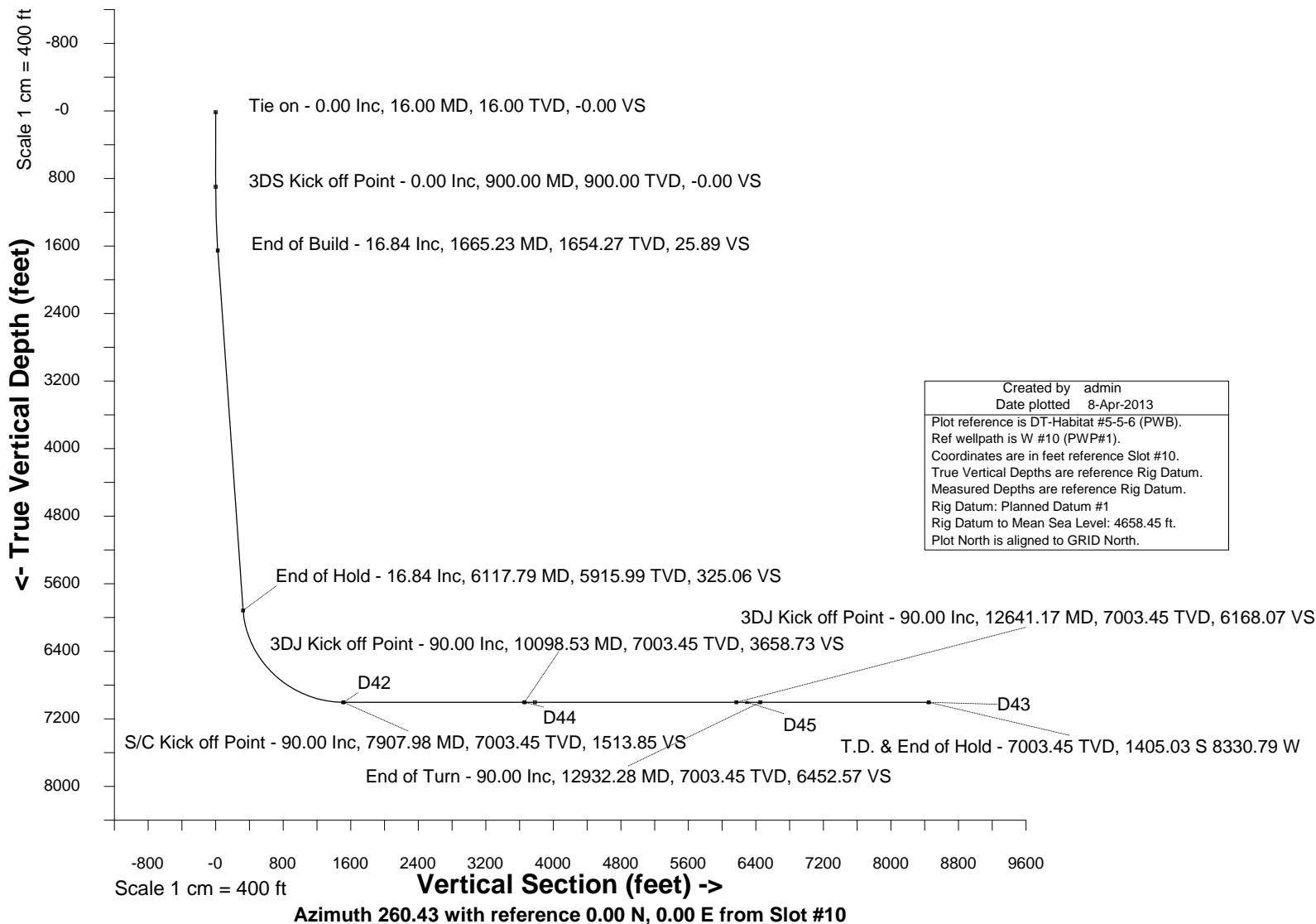
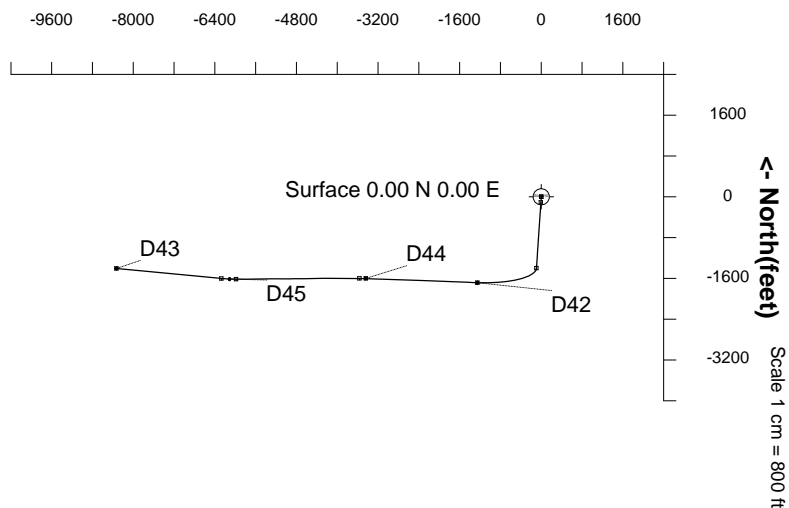
Location	Weld County, CO, USA(Imported)	Slot	Slot #10
Field	Wattenberg	Well	DT-Habitat #5-5-6
Installation	Downtown	Wellbore	DT-Habitat #5-5-6 (PWB)

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	900.00	0.00	0.00	900.00	0.00	0.00	0.00	-0.00
End of Build	1665.23	16.84	183.84	1654.27	-111.37	-7.48	2.20	25.89
End of Hold	6117.79	16.84	183.84	5915.99	-1398.01	-93.86	0.00	325.06
Target D42	7907.98	90.00	272.15	7003.45	-1683.75	-1251.26	5.00	1513.85
Target D44	10098.53	90.00	272.15	7003.45	-1601.67	-3440.27	0.00	3658.73
End of Turn	10223.79	90.00	269.64	7003.45	-1599.71	-3565.51	2.00	3781.90
Target D45	12641.17	90.00	269.64	7003.45	-1614.80	-5982.84	0.00	6168.07
End of Turn	12932.28	90.00	275.46	7003.45	-1601.84	-6273.54	2.00	6452.57
T.D. & Target D43	14998.93	90.00	275.46	7003.45	-1405.03	-8330.79	0.00	8448.44

Scale 1 cm = 800 ft

East (feet) ->



Created by admin
Date plotted 8-Apr-2013
Plot reference is DT-Habitat #5-5-6 (PWB).
Ref wellpath is W #10 (PWP#1).
Coordinates are in feet reference Slot #10.
True Vertical Depths are reference Rig Datum.
Measured Depths are reference Rig Datum.
Rig Datum: Planned Datum #1
Rig Datum to Mean Sea Level: 4658.45 ft.
Plot North is aligned to GRID North.



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

Wellhead Details							
Name	Northing	Easting	Latitude	Longitude	North	East	Elevation Above Inst.
Slot #10	1402548.3247	3227066.9814	N40 26 7.9080	W104 41 3.3720	145.75S	1.44W	-0.60

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	1402548.32	3227066.98
900.00	0.00	0.000	900.00	0.00N	0.00E	==>	0.00	1402548.32	3227066.98
1665.23	16.84	183.840	1654.27	111.37S	7.48W	2.20	25.89	1402436.96	3227059.50
6117.79	16.84	183.840	5915.99	1398.01S	93.86W	==>	325.06	1401150.37	3226973.12
7907.98	90.00	272.150	7003.45	1683.75S	1251.26W	5.00	1513.85	1400864.64	3225815.77
10098.53	90.00	272.150	7003.45	1601.67S	3440.27W	==>	3658.73	1400946.72	3223626.85
10223.79	90.00	269.640	7003.45	1599.71S	3565.51W	2.00	3781.90	1400948.68	3223501.62
12641.17	90.00	269.640	7003.45	1614.80S	5982.84W	==>	6168.07	1400933.58	3221084.38
12932.28	90.00	275.460	7003.45	1601.84S	6273.54W	2.00	6452.57	1400946.55	3220793.69
14998.93	90.00	275.460	7003.45	1405.03S	8330.79W	==>	8448.44	1401143.35	3218736.52

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	1402548.32	3227066.98
16.00	0.00	0.000	16.00	0.00N	0.00E	==>	0.00	1402548.32	3227066.98
100.00	0.00	0.000	100.00	0.00N	0.00E	==>	0.00	1402548.32	3227066.98
200.00	0.00	0.000	200.00	0.00N	0.00E	==>	0.00	1402548.32	3227066.98
300.00	0.00	0.000	300.00	0.00N	0.00E	==>	0.00	1402548.32	3227066.98
400.00	0.00	0.000	400.00	0.00N	0.00E	==>	0.00	1402548.32	3227066.98
500.00	0.00	0.000	500.00	0.00N	0.00E	==>	0.00	1402548.32	3227066.98
600.00	0.00	0.000	600.00	0.00N	0.00E	==>	0.00	1402548.32	3227066.98
700.00	0.00	0.000	700.00	0.00N	0.00E	==>	0.00	1402548.32	3227066.98
800.00	0.00	0.000	800.00	0.00N	0.00E	==>	0.00	1402548.32	3227066.98
884.00	0.00	0.000	884.00	0.00N	0.00E	==>	0.00	1402548.32	3227066.98
900.00	0.00	0.000	900.00	0.00N	0.00E	==>	0.00	1402548.32	3227066.98
984.00	1.85	183.840	983.99	1.35S	0.09W	2.20	0.31	1402546.97	3227066.89
1084.00	4.05	183.840	1083.85	6.48S	0.44W	2.20	1.51	1402541.84	3227066.55
1184.00	6.25	183.840	1183.44	15.43S	1.04W	2.20	3.59	1402532.89	3227065.95
1284.00	8.45	183.840	1282.61	28.19S	1.89W	2.20	6.56	1402520.13	3227065.09
1384.00	10.65	183.840	1381.22	44.74S	3.00W	2.20	10.40	1402503.58	3227063.98
1484.00	12.85	183.840	1479.12	65.06S	4.37W	2.20	15.13	1402483.27	3227062.61
1584.00	15.05	183.840	1576.16	89.11S	5.98W	2.20	20.72	1402459.22	3227061.00
1665.23	16.84	183.840	1654.27	111.37S	7.48W	2.20	25.89	1402436.96	3227059.50
1700.00	16.84	183.840	1687.55	121.41S	8.15W	==>	28.23	1402426.92	3227058.83
1800.00	16.84	183.840	1783.26	150.31S	10.09W	==>	34.95	1402398.02	3227056.89
1900.00	16.84	183.840	1878.97	179.21S	12.03W	==>	41.67	1402369.13	3227054.95
2000.00	16.84	183.840	1974.69	208.10S	13.97W	==>	48.39	1402340.23	3227053.01
2100.00	16.84	183.840	2070.40	237.00S	15.91W	==>	55.11	1402311.33	3227051.07
2200.00	16.84	183.840	2166.12	265.90S	17.85W	==>	61.82	1402282.44	3227049.13
2300.00	16.84	183.840	2261.83	294.79S	19.79W	==>	68.54	1402253.54	3227047.19
2400.00	16.84	183.840	2357.55	323.69S	21.73W	==>	75.26	1402224.65	3227045.25
2500.00	16.84	183.840	2453.26	352.59S	23.67W	==>	81.98	1402195.75	3227043.31
2600.00	16.84	183.840	2548.97	381.48S	25.61W	==>	88.70	1402166.86	3227041.37
2700.00	16.84	183.840	2644.69	410.38S	27.55W	==>	95.42	1402137.96	3227039.43
2800.00	16.84	183.840	2740.40	439.28S	29.49W	==>	102.14	1402109.06	3227037.49
2900.00	16.84	183.840	2836.12	468.18S	31.43W	==>	108.86	1402080.17	3227035.55
3000.00	16.84	183.840	2931.83	497.07S	33.37W	==>	115.58	1402051.27	3227033.61

All data is in Feet unless otherwise stated
Coordinates are from Slot MD's are from Rig (Planned Datum #1 4658.5ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 260.430 degrees
Bottom hole distance is 8448.44 Feet on azimuth 260.43 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 #5-5-6 (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	16.84	183.840	3027.55	525.97S	35.31W	==>	122.29	1402022.38	3227031.67
3200.00	16.84	183.840	3123.26	554.87S	37.25W	==>	129.01	1401993.48	3227029.73
3300.00	16.84	183.840	3218.97	583.76S	39.19W	==>	135.73	1401964.59	3227027.79
3400.00	16.84	183.840	3314.69	612.66S	41.13W	==>	142.45	1401935.69	3227025.85
3500.00	16.84	183.840	3410.40	641.56S	43.08W	==>	149.17	1401906.79	3227023.91
3600.00	16.84	183.840	3506.12	670.45S	45.02W	==>	155.89	1401877.90	3227021.97
3700.00	16.84	183.840	3601.83	699.35S	46.96W	==>	162.61	1401849.00	3227020.03
3800.00	16.84	183.840	3697.54	728.25S	48.90W	==>	169.33	1401820.11	3227018.09
3900.00	16.84	183.840	3793.26	757.14S	50.84W	==>	176.05	1401791.21	3227016.15
4000.00	16.84	183.840	3888.97	786.04S	52.78W	==>	182.76	1401762.32	3227014.21
4100.00	16.84	183.840	3984.69	814.94S	54.72W	==>	189.48	1401733.42	3227012.27
4200.00	16.84	183.840	4080.40	843.83S	56.66W	==>	196.20	1401704.52	3227010.33
4300.00	16.84	183.840	4176.12	872.73S	58.60W	==>	202.92	1401675.63	3227008.39
4400.00	16.84	183.840	4271.83	901.63S	60.54W	==>	209.64	1401646.73	3227006.45
4500.00	16.84	183.840	4367.54	930.52S	62.48W	==>	216.36	1401617.84	3227004.51
4600.00	16.84	183.840	4463.26	959.42S	64.42W	==>	223.08	1401588.94	3227002.57
4700.00	16.84	183.840	4558.97	988.32S	66.36W	==>	229.80	1401560.05	3227000.63
4800.00	16.84	183.840	4654.69	1017.22S	68.30W	==>	236.52	1401531.15	3226998.69
4900.00	16.84	183.840	4750.40	1046.11S	70.24W	==>	243.23	1401502.25	3226996.75
5000.00	16.84	183.840	4846.11	1075.01S	72.18W	==>	249.95	1401473.36	3226994.81
5100.00	16.84	183.840	4941.83	1103.91S	74.12W	==>	256.67	1401444.46	3226992.87
5200.00	16.84	183.840	5037.54	1132.80S	76.06W	==>	263.39	1401415.57	3226990.93
5300.00	16.84	183.840	5133.26	1161.70S	78.00W	==>	270.11	1401386.67	3226988.99
5400.00	16.84	183.840	5228.97	1190.60S	79.94W	==>	276.83	1401357.78	3226987.05
5500.00	16.84	183.840	5324.69	1219.49S	81.88W	==>	283.55	1401328.88	3226985.11
5600.00	16.84	183.840	5420.40	1248.39S	83.82W	==>	290.27	1401299.98	3226983.17
5700.00	16.84	183.840	5516.11	1277.29S	85.76W	==>	296.99	1401271.09	3226981.23
5800.00	16.84	183.840	5611.83	1306.18S	87.70W	==>	303.70	1401242.19	3226979.29
5900.00	16.84	183.840	5707.54	1335.08S	89.64W	==>	310.42	1401213.30	3226977.35
6000.00	16.84	183.840	5803.26	1363.98S	91.58W	==>	317.14	1401184.40	3226975.41
6100.00	16.84	183.840	5898.97	1392.87S	93.52W	==>	323.86	1401155.51	3226973.47
6117.79	16.84	183.840	5915.99	1398.01S	93.86W	==>	325.06	1401150.37	3226973.12
6200.00	17.43	197.680	5994.59	1421.63S	98.40W	5.00	333.46	1401126.75	3226968.58
6300.00	19.31	212.450	6089.55	1449.87S	111.83W	5.00	351.40	1401098.51	3226955.16
6400.00	22.14	224.130	6183.11	1477.36S	133.83W	5.00	377.66	1401071.02	3226933.15
6500.00	25.62	233.040	6274.56	1503.90S	164.25W	5.00	412.07	1401044.48	3226902.74
6600.00	29.51	239.840	6363.22	1529.29S	202.84W	5.00	454.34	1401019.10	3226864.15
6700.00	33.67	245.140	6448.40	1553.33S	249.31W	5.00	504.17	1400995.06	3226817.68
6800.00	38.01	249.380	6529.46	1575.84S	303.32W	5.00	561.17	1400972.55	3226763.68
6900.00	42.48	252.860	6605.78	1596.64S	364.44W	5.00	624.90	1400951.75	3226702.55
7000.00	47.04	255.790	6676.77	1615.59S	432.22W	5.00	694.89	1400932.80	3226634.78
7100.00	51.66	258.310	6741.91	1632.53S	506.14W	5.00	770.60	1400915.86	3226560.86
7200.00	56.33	260.520	6800.69	1647.34S	585.64W	5.00	851.45	1400901.05	3226481.37
7300.00	61.03	262.510	6852.66	1659.90S	670.10W	5.00	936.83	1400888.49	3226396.90
7400.00	65.76	264.320	6897.43	1670.13S	758.90W	5.00	1026.08	1400878.27	3226308.11
7500.00	70.51	266.000	6934.67	1677.93S	851.35W	5.00	1118.54	1400870.46	3226215.67
7600.00	75.28	267.590	6964.07	1683.25S	946.74W	5.00	1213.49	1400865.14	3226120.28
7700.00	80.05	269.110	6985.43	1686.06S	1044.36W	5.00	1310.22	1400862.34	3226022.66
7800.00	84.83	270.580	6998.58	1686.32S	1143.46W	5.00	1407.98	1400862.07	3225923.57
7900.00	89.62	272.030	7003.42	1684.04S	1243.29W	5.00	1506.04	1400864.35	3225823.74
7907.98	90.00	272.150	7003.45	1683.75S	1251.26W	5.00	1513.85	1400864.64	3225815.77
8000.00	90.00	272.150	7003.45	1680.30S	1343.22W	==>	1603.96	1400868.09	3225723.82
8100.00	90.00	272.150	7003.45	1676.56S	1443.15W	==>	1701.87	1400871.84	3225623.89
8200.00	90.00	272.150	7003.45	1672.81S	1543.08W	==>	1799.79	1400875.58	3225523.97
8300.00	90.00	272.150	7003.45	1669.06S	1643.01W	==>	1897.70	1400879.33	3225424.04
8400.00	90.00	272.150	7003.45	1665.31S	1742.94W	==>	1995.62	1400883.08	3225324.11
8500.00	90.00	272.150	7003.45	1661.57S	1842.87W	==>	2093.53	1400886.82	3225224.19
8600.00	90.00	272.150	7003.45	1657.82S	1942.80W	==>	2191.45	1400890.57	3225124.26
8700.00	90.00	272.150	7003.45	1654.07S	2042.73W	==>	2289.36	1400894.32	3225024.34
8800.00	90.00	272.150	7003.45	1650.33S	2142.66W	==>	2387.28	1400898.07	3224924.41
8900.00	90.00	272.150	7003.45	1646.58S	2242.58W	==>	2485.19	1400901.81	3224824.49

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Coordinates are from Slot MD's are from Rig and TVD's are from Rig (Planned Datum #1 4658.5ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 260.430 degrees
Bottom hole distance is 8448.44 Feet on azimuth 260.43 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 #5-5-6 (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	272.150	7003.45	1642.83S	2342.51W	==>	2583.11	1400905.56	3224724.56
9100.00	90.00	272.150	7003.45	1639.08S	2442.44W	==>	2681.02	1400909.31	3224624.63
9200.00	90.00	272.150	7003.45	1635.34S	2542.37W	==>	2778.94	1400913.05	3224524.71
9300.00	90.00	272.150	7003.45	1631.59S	2642.30W	==>	2876.85	1400916.80	3224424.78
9400.00	90.00	272.150	7003.45	1627.84S	2742.23W	==>	2974.77	1400920.55	3224324.86
9500.00	90.00	272.150	7003.45	1624.10S	2842.16W	==>	3072.68	1400924.29	3224224.93
9600.00	90.00	272.150	7003.45	1620.35S	2942.09W	==>	3170.60	1400928.04	3224125.01
9700.00	90.00	272.150	7003.45	1616.60S	3042.02W	==>	3268.51	1400931.79	3224025.08
9800.00	90.00	272.150	7003.45	1612.85S	3141.95W	==>	3366.43	1400935.54	3223925.15
9900.00	90.00	272.150	7003.45	1609.11S	3241.88W	==>	3464.34	1400939.28	3223825.23
10000.00	90.00	272.150	7003.45	1605.36S	3341.81W	==>	3562.26	1400943.03	3223725.30
10098.53	90.00	272.150	7003.45	1601.67S	3440.27W	==>	3658.73	1400946.72	3223626.85
10100.00	90.00	272.120	7003.45	1601.61S	3441.74W	2.00	3660.17	1400946.78	3223625.38
10200.00	90.00	270.120	7003.45	1599.66S	3541.72W	2.00	3758.43	1400948.73	3223525.40
10223.79	90.00	269.640	7003.45	1599.71S	3565.51W	2.00	3781.90	1400948.68	3223501.62
10300.00	90.00	269.640	7003.45	1600.19S	3641.72W	==>	3857.12	1400948.20	3223425.41
10400.00	90.00	269.640	7003.45	1600.81S	3741.71W	==>	3955.83	1400947.58	3223325.42
10500.00	90.00	269.640	7003.45	1601.44S	3841.71W	==>	4054.54	1400946.95	3223225.42
10600.00	90.00	269.640	7003.45	1602.06S	3941.71W	==>	4153.25	1400946.33	3223125.43
10700.00	90.00	269.640	7003.45	1602.68S	4041.71W	==>	4251.96	1400945.70	3223025.43
10800.00	90.00	269.640	7003.45	1603.31S	4141.71W	==>	4350.67	1400945.08	3222925.44
10900.00	90.00	269.640	7003.45	1603.93S	4241.70W	==>	4449.38	1400944.46	3222825.45
11000.00	90.00	269.640	7003.45	1604.56S	4341.70W	==>	4548.09	1400943.83	3222725.45
11100.00	90.00	269.640	7003.45	1605.18S	4441.70W	==>	4646.80	1400943.21	3222625.46
11200.00	90.00	269.640	7003.45	1605.81S	4541.70W	==>	4745.51	1400942.58	3222525.46
11300.00	90.00	269.640	7003.45	1606.43S	4641.70W	==>	4844.22	1400941.96	3222425.47
11400.00	90.00	269.640	7003.45	1607.05S	4741.70W	==>	4942.93	1400941.33	3222325.48
11500.00	90.00	269.640	7003.45	1607.68S	4841.69W	==>	5041.64	1400940.71	3222225.48
11600.00	90.00	269.640	7003.45	1608.30S	4941.69W	==>	5140.35	1400940.09	3222125.49
11700.00	90.00	269.640	7003.45	1608.93S	5041.69W	==>	5239.05	1400939.46	3222025.49
11800.00	90.00	269.640	7003.45	1609.55S	5141.69W	==>	5337.76	1400938.84	3221925.50
11900.00	90.00	269.640	7003.45	1610.18S	5241.69W	==>	5436.47	1400938.21	3221825.51
12000.00	90.00	269.640	7003.45	1610.80S	5341.68W	==>	5535.18	1400937.59	3221725.51
12100.00	90.00	269.640	7003.45	1611.43S	5441.68W	==>	5633.89	1400936.96	3221625.52
12200.00	90.00	269.640	7003.45	1612.05S	5541.68W	==>	5732.60	1400936.34	3221525.52
12300.00	90.00	269.640	7003.45	1612.67S	5641.68W	==>	5831.31	1400935.71	3221425.53
12400.00	90.00	269.640	7003.45	1613.30S	5741.68W	==>	5930.02	1400935.09	3221325.54
12500.00	90.00	269.640	7003.45	1613.92S	5841.67W	==>	6028.73	1400934.47	3221225.54
12600.00	90.00	269.640	7003.45	1614.55S	5941.67W	==>	6127.44	1400933.84	3221125.55
12641.17	90.00	269.640	7003.45	1614.80S	5982.84W	==>	6168.07	1400933.58	3221084.38
12700.00	90.00	270.820	7003.45	1614.57S	6041.67W	2.00	6226.05	1400933.82	3221025.55
12800.00	90.00	272.820	7003.45	1611.39S	6141.61W	2.00	6324.07	1400937.00	3220925.61
12900.00	90.00	274.820	7003.45	1604.73S	6241.39W	2.00	6421.35	1400943.66	3220825.84
12932.28	90.00	275.460	7003.45	1601.84S	6273.54W	2.00	6452.57	1400946.55	3220793.69
13000.00	90.00	275.460	7003.45	1595.39S	6340.95W	==>	6517.97	1400953.00	3220726.29
13100.00	90.00	275.460	7003.45	1585.87S	6440.49W	==>	6614.55	1400962.52	3220626.74
13200.00	90.00	275.460	7003.45	1576.35S	6540.04W	==>	6711.12	1400972.04	3220527.20
13300.00	90.00	275.460	7003.45	1566.82S	6639.59W	==>	6807.70	1400981.57	3220427.66
13400.00	90.00	275.460	7003.45	1557.30S	6739.13W	==>	6904.27	1400991.09	3220328.12
13500.00	90.00	275.460	7003.45	1547.78S	6838.68W	==>	7000.85	1401000.61	3220228.58
13600.00	90.00	275.460	7003.45	1538.25S	6938.22W	==>	7097.42	1401010.13	3220129.04
13700.00	90.00	275.460	7003.45	1528.73S	7037.77W	==>	7194.00	1401019.66	3220029.50
13800.00	90.00	275.460	7003.45	1519.21S	7137.31W	==>	7290.57	1401029.18	3219929.95
13900.00	90.00	275.460	7003.45	1509.68S	7236.86W	==>	7387.15	1401038.70	3219830.41
14000.00	90.00	275.460	7003.45	1500.16S	7336.40W	==>	7483.72	1401048.22	3219730.87
14100.00	90.00	275.460	7003.45	1490.64S	7435.95W	==>	7580.30	1401057.75	3219631.33
14200.00	90.00	275.460	7003.45	1481.11S	7535.50W	==>	7676.88	1401067.27	3219531.79
14300.00	90.00	275.460	7003.45	1471.59S	7635.04W	==>	7773.45	1401076.79	3219432.25
14400.00	90.00	275.460	7003.45	1462.07S	7734.59W	==>	7870.03	1401086.32	3219332.70
14500.00	90.00	275.460	7003.45	1452.54S	7834.13W	==>	7966.60	1401095.84	3219233.16
14600.00	90.00	275.460	7003.45	1443.02S	7933.68W	==>	8063.18	1401105.36	3219133.62

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Vertical Section is from 0.00N 0.00E on azimuth 260.430 degrees
Bottom hole distance is 8448.44 Feet on azimuth 260.43 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 #5-5-6 (PWB)

Interpolated Wellpath									
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Northing	Easting
14700.00	90.00	275.460	7003.45	1433.50S	8033.22W	==>	8159.75	1401114.88	3219034.08
14800.00	90.00	275.460	7003.45	1423.98S	8132.77W	==>	8256.33	1401124.41	3218934.54
14900.00	90.00	275.460	7003.45	1414.45S	8232.31W	==>	8352.90	1401133.93	3218835.00
14998.93	90.00	275.460	7003.45	1405.03S	8330.79W	==>	8448.44	1401143.35	3218736.52

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INTEGRATED PETROLEUM TECHNOLOGIES, INC
SYSDRILL
Well Design Combined Report
Wellbore: DT-Habitat #5-5-6 (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	7908.00	7003.45	1683.75S	1251.28W
6 1/8	7908.00	7003.45	1683.75S	1251.28W	14998.93	7003.45	1405.03S	8330.79W

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				7908.00	7003.45	1683.75S	1251.28W
4 1/2in Production Liner	6118.00	5916.20	1398.08S	93.87W	14998.93	7003.45	1405.03S	8330.79W

Targets								
Name	North[ft]	East[ft]	TVD[ft]	Latitude	Longitude	Northing	Easting	Last Revised
D42	1683.75S	1251.26W	7003.45	N40 25 51.3840	W104 41 19.7520	1400864.64	3225815.77	15-Mar-2013
D43	1405.03S	8330.79W	7003.45	N40 25 54.7680	W104 42 51.2640	1401143.35	3218736.52	15-Mar-2013
D44	1601.67S	3440.27W	7003.45	N40 25 52.3920	W104 41 48.0480	1400946.72	3223626.85	15-Mar-2013
D45	1614.80S	6112.84W	7003.45	N40 25 52.5000	W104 42 22.6080	1400933.58	3220954.39	15-Mar-2013

Survey Tool Program						
Reference	Survey Name	MD[ft]	TVD[ft]	Survey Tool	Error Model	
33663	Planned	14998.93	7003.45	WdW Rate Gyro	Standard	

Notes

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

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

Slot						
Name	Grid Northing	Grid Easting	Latitude	Longitude	North	East
Slot #10	1402548.3247	3227066.9814	N40 26 7.9080	W104 41 3.3720	145.75S	1.44W

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-Martinez #1-5-6	DT-Martinez #1-5-6 (PWB)	Slot #11	Downtown	14.57	836.21	12729.25	12.58	852.61	2.63	14998.93
DT-Habitat #4-5-6	DT-Habitat #4-5-6 (PWB)	Slot #9	Downtown	14.57	901.83	12979.01	12.49	901.83	2.63	14998.93
DT-Pioneer #2-5-17	DT-Pioneer #2-5-17 (PWB)	Slot #12	Downtown	32.79	787.00	787.00	30.88	803.40	15.84	1131.49
DT-Habitat #3-5-6	DT-Habitat #3-5-6 (PWB)	Slot #8	Downtown	32.79	901.83	13018.42	30.71	901.83	4.43	14998.93
Erbes #5-2H5	Erbes #5-2H5 (AWB)	Erbes #5-2H5	Downtown Pad offsets	46.39	2009.91	2009.91	31.49	2016.00	3.11	2017.31
DT-Pioneer #1-5-17	DT-Pioneer #1-5-17 (PWB)	Slot #13	Downtown	47.36	737.78	737.78	45.53	754.19	24.05	1147.89
DT-Habitat #2-5-6	DT-Habitat #2-5-6 (PWB)	Slot #7	Downtown	47.44	901.83	13047.57	45.36	901.83	6.80	14998.93
DT-StarPak #5-5-17	DT-StarPak #5-5-17 (PWB)	Slot #14	Downtown	65.58	688.57	688.57	63.79	557.34	34.44	869.02
DT-Habitat #1-5-6	DT-Habitat #1-5-6 (PWB)	Slot #6	Downtown	65.64	901.83	13093.27	63.55	901.83	8.95	14998.93
DT-Lopez #2-5-6	DT-Lopez #2-5-6 (PWB)	Slot #5	Downtown	79.38	918.23	13164.20	77.27	918.23	11.31	14998.93
DT-StarPak #4-5-17	DT-StarPak #4-5-17 (PWB)	Slot #15	Downtown	80.20	639.36	639.36	78.41	557.34	33.96	6151.17
DT-Heath	DT-Heath	Slot #1	Downtown	88.06	7462.58	7462.58	66.90	7479.91	3.55	7512.72

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SYSDRILL
Closest Approach + Clearance Factor Summary Report
Wellbore: DT-Habitat #5-5-6 (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]
#1-5-8	#1-5-8 (PWB)									
DT-StarPak #3-5-17	DT-StarPak #3-5-17 (PWB)	Slot #16	Downtown	94.76	590.15	590.15	92.98	557.34	29.48	6249.60
DT-Lextron #1-32-32	DT-Lextron #1-32-32 (PWB)	Slot #4	Downtown	94.77	704.98	704.98	92.96	754.19	43.92	1033.06
DT-StarPak #2-5-17	DT-StarPak #2-5-17 (PWB)	Slot #17	Downtown	112.97	540.93	540.93	111.21	540.93	22.90	6626.89
DT-Lopez #1-5-6	DT-Lopez #1-5-6 (PWB)	Slot #3	Downtown	112.97	688.57	13164.32	111.18	557.34	13.52	14998.93
DT-StarPak #1-5-17	DT-StarPak #1-5-17 (PWB)	Slot #18	Downtown	127.54	491.72	491.72	125.86	491.72	22.74	7004.19
DT-Heath #2-5-8	DT-Heath #2-5-8 (PWB)	Slot #2	Downtown	127.54	639.36	7267.01	125.75	557.34	14.07	7416.00
DT-Martinez #2-5-6	DT-Martinez #2-5-6 (PWB)	Slot #19	Downtown	145.75	442.51	12811.28	144.15	442.51	4.34	14998.93
DT-Martinez #3-5-6	DT-Martinez #3-5-6 (PWB)	Slot #20	Downtown	160.32	393.30	12811.28	158.80	393.30	6.62	14998.93
DT-Forbes #1-5-6	DT-Forbes #1-5-6 (PWB)	Slot #21	Downtown	174.89	344.08	12816.00	173.45	344.08	8.67	14998.93
DT-Forbes #2-5-6	DT-Forbes #2-5-6 (PWB)	Slot #22	Downtown	193.11	294.87	12827.68	191.74	294.87	10.99	14998.93
DT-Forbes #3-5-6	DT-Forbes #3-5-6 (PWB)	Slot #23	Downtown	207.66	245.66	12844.08	206.37	245.66	13.12	14998.93
DT-Forbes #4-5-6	DT-Forbes #4-5-6 (PWB)	Slot #24	Downtown	222.25	196.45	12860.49	221.04	196.45	15.41	14998.93
DT-Forbes #5-5-6	DT-Forbes #5-5-6 (PWB)	Slot #25	Downtown	240.46	147.23	12860.49	239.34	147.23	17.56	14998.93
DT-Luther #1-5-6	DT-Luther #1-5-6 (PWB)	Slot #26	Downtown	255.04	98.02	12876.89	253.98	98.02	19.83	14998.93
W Mcelroy #41-5	W Mcelroy #41-5 (AWB)	Mcelroy #41-5	Downtown Pad offsets	899.57	2630.84	2630.84	881.35	2689.88	40.21	4379.52
Arnold #1	Arnold #1 (AWB)	Arnold #1	Downtown Pad offsets	1326.62	6200.38	6200.38	1292.24	6216.79	38.03	6416.00