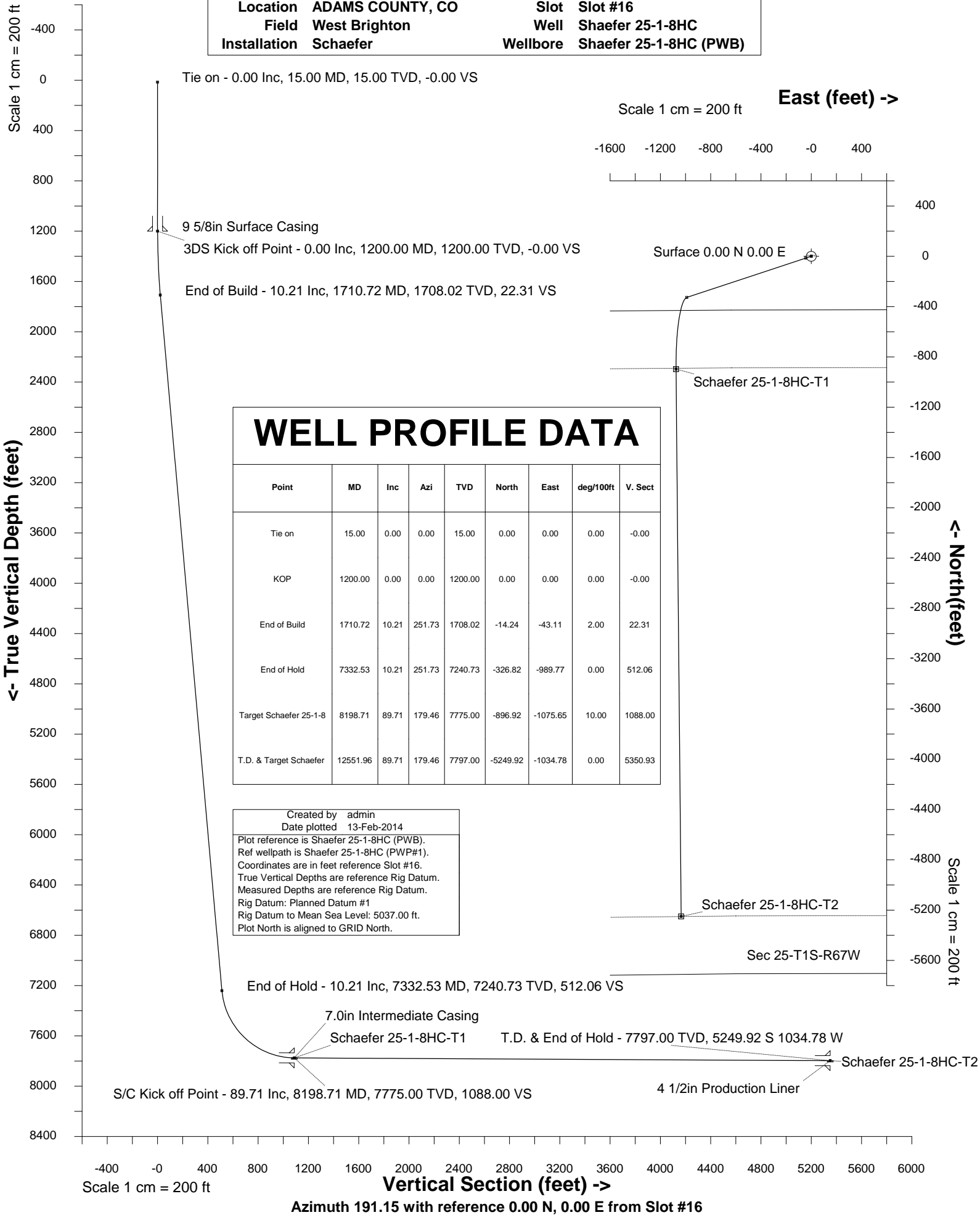


WARD PETROLEUM

Location	ADAMS COUNTY, CO	Slot	Slot #16
Field	West Brighton	Well	Shaefer 25-1-8HC
Installation	Schaefer	Wellbore	Shaefer 25-1-8HC (PWB)





INTEGRATED PETROLEUM TECHNOLOGIES, INC
SYSDRILL
Well Design Combined Report
Wellbore: Shaefer 25-1-8HC (PWB)

Wellhead Details							
Name	Northing	Easting	Latitude	Longitude	North	East	Elevation Above Inst.
Slot #16	1223332.4575	3186451.9776	39.94451000	-104.83500000	13.86N	95.44W	-0.00

Declination			
Date	Source	Time	
10-Feb-2014	IGRF Model [1900.0-2015.0]		13:06

Site Details				
Name	Northing	Easting	Coord System Name	North Alignment
Schaefer	1223318.6021	3186547.4140	CO83-NF on NAD83 datum	Grid

Summary Wellpath									
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Northing	Easting
15.00	0.00	0.000	15.00	0.00N	0.00E		0.00	1223332.46	3186451.98
1200.00	0.00	0.000	1200.00	0.00N	0.00E	==>	0.00	1223332.46	3186451.98
1710.72	10.21	251.730	1708.02	14.24S	43.11W	2.00	22.31	1223318.22	3186408.86
7332.53	10.21	251.730	7240.73	326.82S	989.77W	==>	512.06	1223005.65	3185462.24
8198.71	89.71	179.460	7775.00	896.92S	1075.65W	10.00	1088.00	1222435.57	3185376.36
12551.96	89.71	179.460	7797.00	5249.92S	1034.78W	==>	5350.93	1218082.70	3185417.23

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	1223332.46	3186451.98
15.00	0.00	0.000	15.00	0.00N	0.00E	==>	0.00	1223332.46	3186451.98
100.00	0.00	0.000	100.00	0.00N	0.00E	==>	0.00	1223332.46	3186451.98
200.00	0.00	0.000	200.00	0.00N	0.00E	==>	0.00	1223332.46	3186451.98
300.00	0.00	0.000	300.00	0.00N	0.00E	==>	0.00	1223332.46	3186451.98
400.00	0.00	0.000	400.00	0.00N	0.00E	==>	0.00	1223332.46	3186451.98
500.00	0.00	0.000	500.00	0.00N	0.00E	==>	0.00	1223332.46	3186451.98
600.00	0.00	0.000	600.00	0.00N	0.00E	==>	0.00	1223332.46	3186451.98
700.00	0.00	0.000	700.00	0.00N	0.00E	==>	0.00	1223332.46	3186451.98
800.00	0.00	0.000	800.00	0.00N	0.00E	==>	0.00	1223332.46	3186451.98
900.00	0.00	0.000	900.00	0.00N	0.00E	==>	0.00	1223332.46	3186451.98
1000.00	0.00	0.000	1000.00	0.00N	0.00E	==>	0.00	1223332.46	3186451.98
1100.00	0.00	0.000	1100.00	0.00N	0.00E	==>	0.00	1223332.46	3186451.98
1185.00	0.00	0.000	1185.00	0.00N	0.00E	==>	0.00	1223332.46	3186451.98
1200.00	0.00	0.000	1200.00	0.00N	0.00E	==>	0.00	1223332.46	3186451.98
1285.00	1.70	251.730	1284.99	0.40S	1.20W	2.00	0.62	1223332.06	3186450.78
1385.00	3.70	251.730	1384.87	1.87S	5.67W	2.00	2.93	1223330.59	3186446.31
1485.00	5.70	251.730	1484.53	4.44S	13.45W	2.00	6.96	1223328.02	3186438.53
1585.00	7.70	251.730	1583.84	8.10S	24.53W	2.00	12.69	1223324.36	3186427.45
1685.00	9.70	251.730	1682.69	12.84S	38.89W	2.00	20.12	1223319.62	3186413.09
1700.00	10.00	251.730	1697.47	13.65S	41.33W	2.00	21.38	1223318.81	3186410.65
1710.72	10.21	251.730	1708.02	14.24S	43.11W	2.00	22.31	1223318.22	3186408.86
1800.00	10.21	251.730	1795.88	19.20S	58.15W	==>	30.08	1223313.26	3186393.83
1900.00	10.21	251.730	1894.30	24.76S	74.99W	==>	38.79	1223307.70	3186376.99
2000.00	10.21	251.730	1992.71	30.32S	91.83W	==>	47.51	1223302.14	3186360.15
2100.00	10.21	251.730	2091.13	35.88S	108.67W	==>	56.22	1223296.58	3186343.32
2200.00	10.21	251.730	2189.54	41.44S	125.50W	==>	64.93	1223291.02	3186326.48
2300.00	10.21	251.730	2287.96	47.00S	142.34W	==>	73.64	1223285.46	3186309.64
2400.00	10.21	251.730	2386.37	52.56S	159.18W	==>	82.35	1223279.90	3186292.80
2500.00	10.21	251.730	2484.79	58.12S	176.02W	==>	91.06	1223274.34	3186275.96
2600.00	10.21	251.730	2583.20	63.68S	192.86W	==>	99.78	1223268.78	3186259.12
2700.00	10.21	251.730	2681.62	69.24S	209.70W	==>	108.49	1223263.22	3186242.28
2800.00	10.21	251.730	2780.04	74.80S	226.54W	==>	117.20	1223257.66	3186225.45
2900.00	10.21	251.730	2878.45	80.36S	243.38W	==>	125.91	1223252.10	3186208.61
3000.00	10.21	251.730	2976.87	85.92S	260.22W	==>	134.62	1223246.54	3186191.77
3100.00	10.21	251.730	3075.28	91.48S	277.06W	==>	143.33	1223240.98	3186174.93
3200.00	10.21	251.730	3173.70	97.04S	293.89W	==>	152.05	1223235.42	3186158.09
3300.00	10.21	251.730	3272.11	102.60S	310.73W	==>	160.76	1223229.86	3186141.25
3400.00	10.21	251.730	3370.53	108.16S	327.57W	==>	169.47	1223224.30	3186124.42

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Vertical Section is from 0.00N 0.00E on azimuth 191.150 degrees
Bottom hole distance is 5350.93 Feet on azimuth 191.15 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by Integrated Petroleum Technologies, Inc.
Date Printed: 13-Feb-2014



INTEGRATED PETROLEUM TECHNOLOGIES, INC
SYSDRILL
Well Design Combined Report
Wellbore: Shaefer 25-1-8HC (PWB)

Interpolated Wellpath									
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Northing	Easting
3500.00	10.21	251.730	3468.94	113.72S	344.41W	==>	178.18	1223218.74	3186107.58
3600.00	10.21	251.730	3567.36	119.28S	361.25W	==>	186.89	1223213.18	3186090.74
3700.00	10.21	251.730	3665.77	124.84S	378.09W	==>	195.60	1223207.62	3186073.90
3800.00	10.21	251.730	3764.19	130.40S	394.93W	==>	204.32	1223202.06	3186057.06
3900.00	10.21	251.730	3862.60	135.96S	411.77W	==>	213.03	1223196.50	3186040.22
4000.00	10.21	251.730	3961.02	141.53S	428.61W	==>	221.74	1223190.94	3186023.38
4100.00	10.21	251.730	4059.43	147.09S	445.45W	==>	230.45	1223185.38	3186006.55
4200.00	10.21	251.730	4157.85	152.65S	462.28W	==>	239.16	1223179.82	3185989.71
4300.00	10.21	251.730	4256.26	158.21S	479.12W	==>	247.87	1223174.26	3185972.87
4400.00	10.21	251.730	4354.68	163.77S	495.96W	==>	256.59	1223168.70	3185956.03
4500.00	10.21	251.730	4453.09	169.33S	512.80W	==>	265.30	1223163.14	3185939.19
4600.00	10.21	251.730	4551.51	174.89S	529.64W	==>	274.01	1223157.58	3185922.35
4700.00	10.21	251.730	4649.92	180.45S	546.48W	==>	282.72	1223152.02	3185905.51
4800.00	10.21	251.730	4748.34	186.01S	563.32W	==>	291.43	1223146.46	3185888.68
4900.00	10.21	251.730	4846.75	191.57S	580.16W	==>	300.14	1223140.90	3185871.84
5000.00	10.21	251.730	4945.17	197.13S	597.00W	==>	308.86	1223135.34	3185855.00
5100.00	10.21	251.730	5043.58	202.69S	613.84W	==>	317.57	1223129.78	3185838.16
5200.00	10.21	251.730	5142.00	208.25S	630.67W	==>	326.28	1223124.22	3185821.32
5300.00	10.21	251.730	5240.41	213.81S	647.51W	==>	334.99	1223118.66	3185804.48
5400.00	10.21	251.730	5338.83	219.37S	664.35W	==>	343.70	1223113.10	3185787.65
5500.00	10.21	251.730	5437.24	224.93S	681.19W	==>	352.41	1223107.54	3185770.81
5600.00	10.21	251.730	5535.66	230.49S	698.03W	==>	361.13	1223101.98	3185753.97
5700.00	10.21	251.730	5634.07	236.05S	714.87W	==>	369.84	1223096.42	3185737.13
5800.00	10.21	251.730	5732.49	241.61S	731.71W	==>	378.55	1223090.86	3185720.29
5900.00	10.21	251.730	5830.90	247.17S	748.55W	==>	387.26	1223085.30	3185703.45
6000.00	10.21	251.730	5929.32	252.73S	765.39W	==>	395.97	1223079.74	3185686.61
6100.00	10.21	251.730	6027.73	258.29S	782.23W	==>	404.68	1223074.18	3185669.78
6200.00	10.21	251.730	6126.15	263.85S	799.06W	==>	413.39	1223068.62	3185652.94
6300.00	10.21	251.730	6224.56	269.41S	815.90W	==>	422.11	1223063.06	3185636.10
6400.00	10.21	251.730	6322.98	274.97S	832.74W	==>	430.82	1223057.50	3185619.26
6500.00	10.21	251.730	6421.39	280.53S	849.58W	==>	439.53	1223051.94	3185602.42
6600.00	10.21	251.730	6519.81	286.09S	866.42W	==>	448.24	1223046.38	3185585.58
6700.00	10.21	251.730	6618.22	291.65S	883.26W	==>	456.95	1223040.82	3185568.75
6800.00	10.21	251.730	6716.64	297.21S	900.10W	==>	465.66	1223035.26	3185551.91
6900.00	10.21	251.730	6815.05	302.77S	916.94W	==>	474.38	1223029.70	3185535.07
7000.00	10.21	251.730	6913.47	308.33S	933.78W	==>	483.09	1223024.14	3185518.23
7100.00	10.21	251.730	7011.88	313.89S	950.62W	==>	491.80	1223018.58	3185501.39
7200.00	10.21	251.730	7110.30	319.45S	967.45W	==>	500.51	1223013.02	3185484.55
7300.00	10.21	251.730	7208.71	325.01S	984.29W	==>	509.22	1223007.46	3185467.71
7332.53	10.21	251.730	7240.73	326.82S	989.77W	==>	512.06	1223005.65	3185462.24
7400.00	13.81	223.720	7306.77	334.52S	1001.03W	10.00	521.79	1222997.94	3185450.98
7500.00	22.01	204.540	7401.92	360.26S	1017.10W	10.00	550.15	1222972.21	3185434.91
7600.00	31.25	195.850	7491.25	402.36S	1032.01W	10.00	594.34	1222930.11	3185420.00
7700.00	40.82	190.880	7572.04	459.55S	1045.29W	10.00	653.02	1222872.92	3185406.72
7800.00	50.53	187.540	7641.85	530.09S	1056.55W	10.00	724.40	1222802.39	3185395.46
7900.00	60.31	185.030	7698.54	611.83S	1065.45W	10.00	806.32	1222720.65	3185386.56
8000.00	70.14	182.970	7740.39	702.29S	1071.70W	10.00	896.29	1222630.19	3185380.31
8100.00	79.98	181.150	7766.14	798.73S	1075.14W	10.00	991.56	1222533.75	3185376.88
8198.71	89.71	179.460	7775.00	896.92S	1075.65W	10.00	1088.00	1222435.57	3185376.36
8200.00	89.71	179.460	7775.01	898.21S	1075.64W	==>	1089.26	1222434.28	3185376.37
8300.00	89.71	179.460	7775.51	998.20S	1074.70W	==>	1187.19	1222334.29	3185377.31
8400.00	89.71	179.460	7776.02	1098.19S	1073.76W	==>	1285.11	1222234.30	3185378.25
8500.00	89.71	179.460	7776.52	1198.19S	1072.82W	==>	1383.04	1222134.31	3185379.19
8600.00	89.71	179.460	7777.03	1298.18S	1071.88W	==>	1480.96	1222034.31	3185380.13
8700.00	89.71	179.460	7777.53	1398.18S	1070.94W	==>	1578.89	1221934.32	3185381.07
8800.00	89.71	179.460	7778.04	1498.17S	1070.00W	==>	1676.81	1221834.33	3185382.01
8900.00	89.71	179.460	7778.54	1598.17S	1069.07W	==>	1774.74	1221734.34	3185382.95
9000.00	89.71	179.460	7779.05	1698.16S	1068.13W	==>	1872.66	1221634.35	3185383.88
9100.00	89.71	179.460	7779.55	1798.15S	1067.19W	==>	1970.59	1221534.36	3185384.82
9200.00	89.71	179.460	7780.06	1898.15S	1066.25W	==>	2068.51	1221434.37	3185385.76
9300.00	89.71	179.460	7780.57	1998.14S	1065.31W	==>	2166.44	1221334.38	3185386.70

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Vertical Section is from 0.00N 0.00E on azimuth 191.150 degrees
Bottom hole distance is 5350.93 Feet on azimuth 191.15 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by Integrated Petroleum Technologies, Inc.
Date Printed: 13-Feb-2014



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SYSDRILL
Well Design Combined Report
Wellbore: Shaefer 25-1-8HC (PWB)

Interpolated Wellpath									
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Northing	Easting
9400.00	89.71	179.460	7781.07	2098.14S	1064.37W	==>	2264.36	1221234.38	3185387.64
9500.00	89.71	179.460	7781.58	2198.13S	1063.43W	==>	2362.29	1221134.39	3185388.58
9600.00	89.71	179.460	7782.08	2298.13S	1062.49W	==>	2460.21	1221034.40	3185389.52
9700.00	89.71	179.460	7782.59	2398.12S	1061.55W	==>	2558.14	1220934.41	3185390.46
9800.00	89.71	179.460	7783.09	2498.11S	1060.62W	==>	2656.06	1220834.42	3185391.39
9900.00	89.71	179.460	7783.60	2598.11S	1059.68W	==>	2753.99	1220734.43	3185392.33
10000.00	89.71	179.460	7784.10	2698.10S	1058.74W	==>	2851.91	1220634.44	3185393.27
10100.00	89.71	179.460	7784.61	2798.10S	1057.80W	==>	2949.84	1220534.45	3185394.21
10200.00	89.71	179.460	7785.11	2898.09S	1056.86W	==>	3047.76	1220434.46	3185395.15
10300.00	89.71	179.460	7785.62	2998.09S	1055.92W	==>	3145.69	1220334.46	3185396.09
10400.00	89.71	179.460	7786.12	3098.08S	1054.98W	==>	3243.62	1220234.47	3185397.03
10500.00	89.71	179.460	7786.63	3198.08S	1054.04W	==>	3341.54	1220134.48	3185397.97
10600.00	89.71	179.460	7787.14	3298.07S	1053.11W	==>	3439.47	1220034.49	3185398.91
10700.00	89.71	179.460	7787.64	3398.06S	1052.17W	==>	3537.39	1219934.50	3185399.84
10800.00	89.71	179.460	7788.15	3498.06S	1051.23W	==>	3635.32	1219834.51	3185400.78
10900.00	89.71	179.460	7788.65	3598.05S	1050.29W	==>	3733.24	1219734.52	3185401.72
11000.00	89.71	179.460	7789.16	3698.05S	1049.35W	==>	3831.17	1219634.53	3185402.66
11100.00	89.71	179.460	7789.66	3798.04S	1048.41W	==>	3929.09	1219534.53	3185403.60
11200.00	89.71	179.460	7790.17	3898.04S	1047.47W	==>	4027.02	1219434.54	3185404.54
11300.00	89.71	179.460	7790.67	3998.03S	1046.53W	==>	4124.94	1219334.55	3185405.48
11400.00	89.71	179.460	7791.18	4098.02S	1045.59W	==>	4222.87	1219234.56	3185406.42
11500.00	89.71	179.460	7791.68	4198.02S	1044.66W	==>	4320.79	1219134.57	3185407.35
11600.00	89.71	179.460	7792.19	4298.01S	1043.72W	==>	4418.72	1219034.58	3185408.29
11700.00	89.71	179.460	7792.69	4398.01S	1042.78W	==>	4516.64	1218934.59	3185409.23
11800.00	89.71	179.460	7793.20	4498.00S	1041.84W	==>	4614.57	1218834.60	3185410.17
11900.00	89.71	179.460	7793.71	4598.00S	1040.90W	==>	4712.49	1218734.60	3185411.11
12000.00	89.71	179.460	7794.21	4697.99S	1039.96W	==>	4810.42	1218634.61	3185412.05
12100.00	89.71	179.460	7794.72	4797.98S	1039.02W	==>	4908.34	1218534.62	3185412.99
12200.00	89.71	179.460	7795.22	4897.98S	1038.08W	==>	5006.27	1218434.63	3185413.93
12300.00	89.71	179.460	7795.73	4997.97S	1037.15W	==>	5104.19	1218334.64	3185414.86
12400.00	89.71	179.460	7796.23	5097.97S	1036.21W	==>	5202.12	1218234.65	3185415.80
12500.00	89.71	179.460	7796.74	5197.96S	1035.27W	==>	5300.04	1218134.66	3185416.74
12551.96	89.71	179.460	7797.00	5249.92S	1034.78W	==>	5350.93	1218082.70	3185417.23

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Vertical Section is from 0.00N 0.00E on azimuth 191.150 degrees
Bottom hole distance is 5350.93 Feet on azimuth 191.15 degrees from Wellhead
Calculation method uses Minimum Curvature method
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SYSDRILL
Well Design Combined Report
Wellbore: Shaefer 25-1-8HC (PWB)

Hole Sections								
Diameter [in]	Start MD[ft]	Start TVD[ft]	Start North[ft]	Start East[ft]	End MD[ft]	End TVD[ft]	End North[ft]	End East[ft]
13 1/2	15.00	15.00	0.00N	0.00E	1200.00	1200.00	0.00N	0.00E
8 3/4	1200.00	1200.00	0.00N	0.00E	8198.00	7775.00	896.21S	1075.66W
6 1/8	8198.00	7775.00	896.21S	1075.66W	12551.00	7797.00	5248.96S	1034.79W

Casings								
Name	Top MD[ft]	Top TVD[ft]	Top North[ft]	Top East[ft]	Shoe MD[ft]	Shoe TVD[ft]	Shoe North[ft]	Shoe East[ft]
9 5/8in Surface Casing	15.00	15.00	0.00N	0.00E	1200.00	1200.00	0.00N	0.00E
7.0in Intermediate Casing	15.00	15.00	0.00N	0.00E	8198.00	7775.00	896.21S	1075.66W
4 1/2in Production Liner	7998.00	7739.71	700.42S	1071.61W	12551.00	7797.00	5248.96S	1034.79W

Targets								
Name	North[ft]	East[ft]	TVD[ft]	Latitude	Longitude	Northing	Easting	Last Revised
Schaefer 25-1-8HC-T1	896.92S	1075.65W	7775.00	39.94207000	-104.83886000	1222435.57	3185376.36	11-Feb-2014
Schaefer 25-1-8HC-T2	5249.92S	1034.78W	7797.00	39.93012000	-104.83883000	1218082.70	3185417.23	11-Feb-2014

Survey Tool Program					
Reference	Survey Name	MD[ft]	TVD[ft]	Survey Tool	Error Model
153621	Planned	12551.96	7797.00	WdW Rate Gyro	Standard

Notes



SYSDRILL
Closest Approach + Clearance Factor Summary Report
Wellbore: Schaefer 25-1-8HC (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
Proximities beyond 2500.00ft with expansion rate of 0.00ft/1000ft are not reported
Scan limit 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
Schaefer 25-1-8HC (PWB)	12-Feb-2014	13-Feb-2014

Well		
Name	Government ID	Last Revised
Schaefer 25-1-8HC		12-Feb-2014

Slot						
Name	Grid Northing	Grid Easting	Latitude	Longitude	North	East
Slot #16	1223332.4575	3186451.9776	39.94451000	-104.83500000	13.86N	95.44W

Installation				
Name	Easting	Northing	Coord System Name	North Alignment
Schaefer	3186547.4140	1223318.6021	CO83-NF on NORTH AMERICAN DATUM 1983 datum	Grid

Field				
Name	Easting	Northing	Coord System Name	North Alignment
West Brighton	3178196.4983	1231661.3262	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]
Schaefer 25-1-7HN	Schaefer 25-1-7HN (PWB)	Slot #15	Schaefer	14.02	1200.00	12548.10	11.15	1200.00	4.88	1200.00
Schaefer 24-3-8HN	Schaefer 24-3-8HN (PWB)	Slot #8	Schaefer	15.13	1450.89	7524.19	12.16	1450.89	2.44	7528.12
Schaefer 24-3-7HC	Schaefer 24-3-7HC (PWB)	Slot #7	Schaefer	15.61	1212.51	7605.72	12.74	1200.00	5.44	1200.00
Schaefer 24-3-6HN	Schaefer 24-3-6HN (PWB)	Slot #6	Schaefer	26.75	1200.00	1200.00	23.88	1200.00	9.31	1200.00
Schaefer 25-1-6HC	Schaefer 25-1-6HC (PWB)	Slot #14	Schaefer	28.04	1200.00	12551.96	25.17	1200.00	9.23	12547.81
Schaefer 24-3-5HC	Schaefer 24-3-5HC (PWB)	Slot #5	Schaefer	39.26	1200.00	1200.00	36.38	1200.00	13.67	1200.00
Schaefer 25-1-5HN	Schaefer 25-1-5HN (PWB)	Slot #13	Schaefer	44.86	1200.00	12551.96	41.99	1200.00	14.23	12547.81
Schaefer 24-3-4HN	Schaefer 24-3-4HN (PWB)	Slot #4	Schaefer	52.53	1200.00	1200.00	49.66	1200.00	18.29	1200.00
Schaefer 25-1-4HC	Schaefer 25-1-4HC (PWB)	Slot #12	Schaefer	58.88	1200.00	11891.67	56.01	1200.00	18.94	12547.81
Schaefer	Schaefer	Slot #3	Schaefer	68.85	1200.00	1200.00	65.98	1200.00	23.97	1200.00

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Vertical Section is from 0.00N 0.00E on azimuth 191.150 degrees
Prepared by Integrated Petroleum Technologies, Inc.
Date Printed: 13-Feb-2014



SYSDRILL
Closest Approach + Clearance Factor Summary Report
Wellbore: Shaefer 25-1-8HC (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]
24-3-3HC	24-3-3HC (PWB)									
Schaefer 25-1-3HN	Schaefer 25-1-3HN (PWB)	Slot #11	Schaefer	72.90	1200.00	12551.96	70.03	1200.00	23.34	12547.81
Schaefer 24-3-2HN	Schaefer 24-3-2HN (PWB)	Slot #2	Schaefer	82.61	1200.00	1200.00	79.74	1200.00	28.76	1200.00
Schaefer 25-1-2HC	Schaefer 25-1-2HC (PWB)	Slot #10	Schaefer	89.72	1200.00	1200.00	86.85	1200.00	31.24	1200.00
Schaefer 24-3-1HC	Schaefer 24-3-1HC (PWB)	Slot #1	Schaefer	96.44	1200.00	1200.00	93.57	1200.00	33.59	1200.00
Schaefer 25-1-1HN	Schaefer 25-1-1HN (PWB)	Slot #9	Schaefer	103.74	1200.00	1200.00	100.87	1200.00	36.12	1200.00
Sharp #25-1-9HN	Sharp #25-1-9HN (PWB)	Slot #4	Sharp Pad	484.42	12550.06	12550.06	398.90	12550.06	5.66	12550.06
Sharp #24-3-9HC	Sharp #24-3-9HC (PWB)	Slot #10	Sharp Pad	524.64	7741.38	7741.38	507.84	7741.38	28.65	7971.04
SHARP #24-3-9HC	SHARP #24-3-9HC (PWB)	Slot #7	Sharp Pad	526.29	7741.38	7741.38	509.40	7741.38	28.53	7971.04
Sharp #25-1-10H C	Sharp #25-1-10HC (PWB)	Slot #3	Sharp Pad	877.92	12551.96	12551.96	784.41	12547.81	9.39	12547.81
Sharp #24-3-10H N	Sharp #24-3-10HN (PWB)	Slot #9	Sharp Pad	954.68	7652.05	7652.05	939.08	7659.36	54.91	8167.89
Sharp #25-1-11H N	Sharp #25-1-11HN (PWB)	Slot #2	Sharp Pad	1331.47	12551.96	12551.96	1238.82	12547.81	14.37	12547.81
Sharp #24-3-11H C	Sharp #24-3-11HC (PWB)	Slot #8	Sharp Pad	1373.56	7806.99	7806.99	1357.62	7815.00	70.65	8692.82
SHARP #24-3-11H C	SHARP #24-3-11HC (PWB)	Slot #5	Sharp Pad	1374.41	7806.99	7806.99	1358.44	7815.00	70.53	8643.61
Sharp #25-1-12H C	Sharp #25-1-12HC (PWB)	Slot #1	Sharp Pad	1758.44	12551.96	12551.96	1664.99	12547.81	18.82	12547.81
W Huebner 25-44	W Huebner 25-44 (AWB)	Huebner 25-44	Offsets	1798.64	12039.28	12039.28	1730.11	12039.28	26.17	12154.11
Sharp #24-3-12H N	Sharp #24-3-12HN (PWB)	Slot #7	Sharp Pad	1802.06	7744.75	7744.75	1786.81	7757.78	87.41	9037.31
Sharp #26-1-1HN	Sharp #23-3-1HC (PWB)	Slot #5	Sharp Pad	2206.35	12551.96	12551.96	2113.28	12547.81	23.70	12547.81
Sharp #23-3-1HC	Sharp #23-3-1HC (PWB)	Slot #6	Sharp Pad	2210.33	7875.14	7875.14	2194.17	7889.02	95.29	9020.91
W LEWIS	W LEWIS #1	LEWIS #1	Offsets	2528.58	12551.96	12551.96	2458.98	12551.96	36.16	12547.81

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Wellbore: Shaefer 25-1-8HC (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	(AWB)									