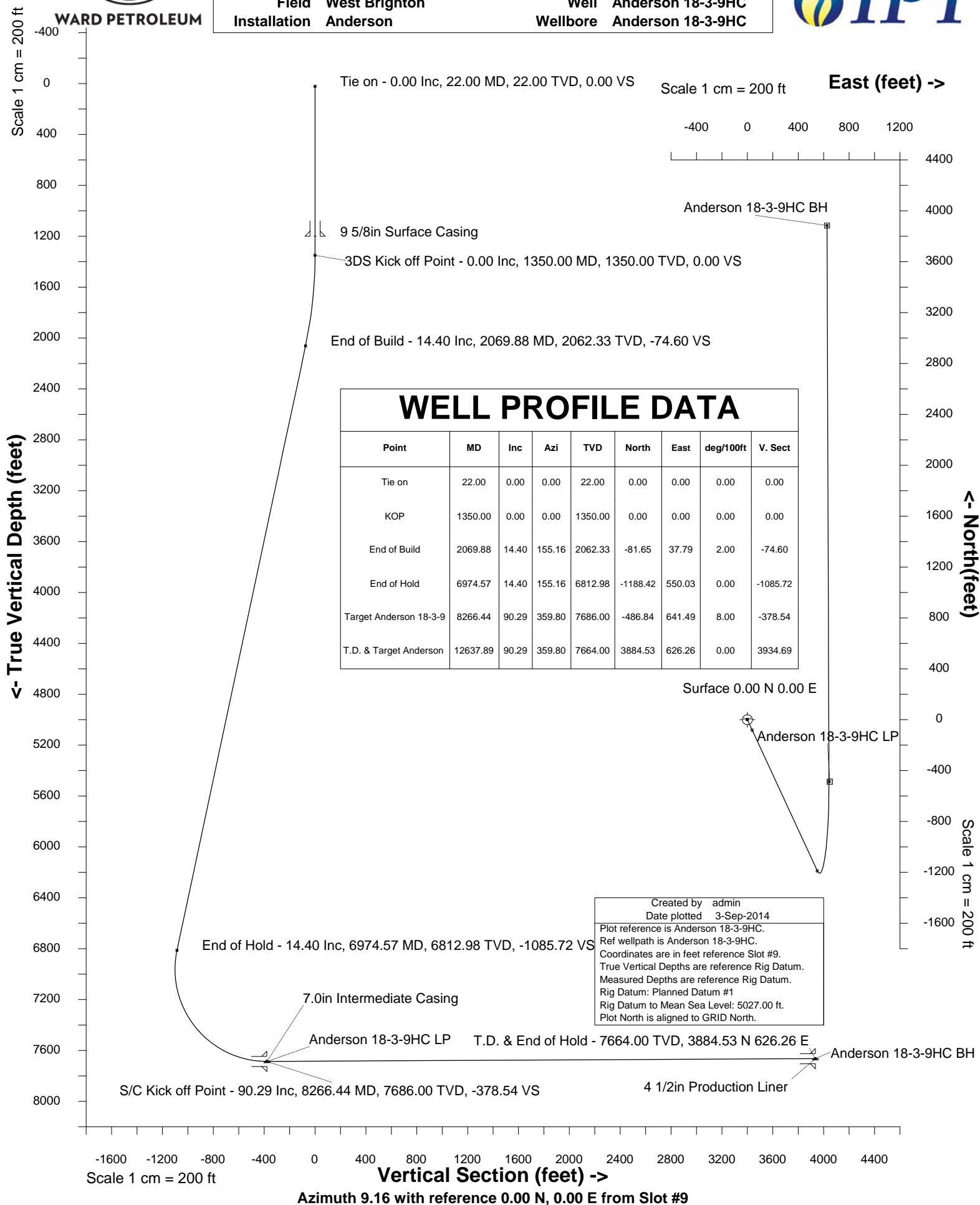




WARD PETROLEUM

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Location	ADAMS COUNTY, CO	Slot	Slot #9
Field	West Brighton	Well	Anderson 18-3-9HC
Installation	Anderson	Wellbore	Anderson 18-3-9HC





WARD PETROLEUM

INTEGRATED PETROLEUM TECHNOLOGIES, INC

SYSDRILL

Well Design Combined Report

Wellbore: Anderson 18-3-9HC



Wellhead Details

Name	Northing	Easting	Latitude	Longitude	North	East	Elevation Above Inst.
Slot #9	1229147.9241	3189542.3883	39.96041000	-104.82382000	11.23S	39.16W	-0.00

Declination

Date	Source	Time
28-Aug-2014	IGRF Model [1900.0-2015.0]	10:16

Site Details

Name	Northing	Easting	Coord System Name	North Alignment
Anderson	1229159.1513	3189581.5481	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
22.00	0.00	0.000	22.00	0.00N	0.00E		0.00	1229147.92	3189542.39
1350.00	0.00	0.000	1350.00	0.00N	0.00E	==>	0.00	1229147.92	3189542.39
2069.88	14.40	155.160	2062.33	81.65S	37.79E	2.00	-74.60	1229066.27	3189580.18
6974.57	14.40	155.160	6812.98	1188.42S	550.03E	==>	-1085.72	1227959.55	3190092.40
8266.44	90.29	359.800	7686.00	486.84S	641.49E	8.00	-378.54	1228661.10	3190183.86
12637.89	90.29	359.800	7664.00	3884.53N	626.26E	==>	3934.69	1233032.33	3190168.62

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	1229147.92	3189542.39
22.00	0.00	0.000	22.00	0.00N	0.00E	==>	0.00	1229147.92	3189542.39
100.00	0.00	0.000	100.00	0.00N	0.00E	==>	0.00	1229147.92	3189542.39
200.00	0.00	0.000	200.00	0.00N	0.00E	==>	0.00	1229147.92	3189542.39
300.00	0.00	0.000	300.00	0.00N	0.00E	==>	0.00	1229147.92	3189542.39
400.00	0.00	0.000	400.00	0.00N	0.00E	==>	0.00	1229147.92	3189542.39
500.00	0.00	0.000	500.00	0.00N	0.00E	==>	0.00	1229147.92	3189542.39
600.00	0.00	0.000	600.00	0.00N	0.00E	==>	0.00	1229147.92	3189542.39
700.00	0.00	0.000	700.00	0.00N	0.00E	==>	0.00	1229147.92	3189542.39
800.00	0.00	0.000	800.00	0.00N	0.00E	==>	0.00	1229147.92	3189542.39
900.00	0.00	0.000	900.00	0.00N	0.00E	==>	0.00	1229147.92	3189542.39
1000.00	0.00	0.000	1000.00	0.00N	0.00E	==>	0.00	1229147.92	3189542.39
1100.00	0.00	0.000	1100.00	0.00N	0.00E	==>	0.00	1229147.92	3189542.39
1200.00	0.00	0.000	1200.00	0.00N	0.00E	==>	0.00	1229147.92	3189542.39
1300.00	0.00	0.000	1300.00	0.00N	0.00E	==>	0.00	1229147.92	3189542.39
1328.00	0.00	0.000	1328.00	0.00N	0.00E	==>	0.00	1229147.92	3189542.39
1350.00	0.00	0.000	1350.00	0.00N	0.00E	==>	0.00	1229147.92	3189542.39
1428.00	1.56	155.160	1427.99	0.96S	0.45E	2.00	-0.88	1229146.96	3189542.83
1528.00	3.56	155.160	1527.89	5.02S	2.32E	2.00	-4.58	1229142.91	3189544.71
1628.00	5.56	155.160	1627.56	12.23S	5.66E	2.00	-11.17	1229135.69	3189548.05
1728.00	7.56	155.160	1726.90	22.60S	10.46E	2.00	-20.65	1229125.33	3189552.85
1828.00	9.56	155.160	1825.79	36.11S	16.71E	2.00	-32.99	1229111.82	3189559.10
1928.00	11.56	155.160	1924.09	52.74S	24.41E	2.00	-48.18	1229095.19	3189566.80
2028.00	13.56	155.160	2021.69	72.47S	33.54E	2.00	-66.21	1229075.46	3189575.93
2069.88	14.40	155.160	2062.33	81.65S	37.79E	2.00	-74.60	1229066.27	3189580.18
2100.00	14.40	155.160	2091.50	88.45S	40.94E	==>	-80.81	1229059.48	3189583.32
2200.00	14.40	155.160	2188.36	111.01S	51.38E	==>	-101.42	1229036.91	3189593.77
2300.00	14.40	155.160	2285.22	133.58S	61.82E	==>	-122.04	1229014.35	3189604.21
2400.00	14.40	155.160	2382.08	156.14S	72.27E	==>	-142.65	1228991.78	3189614.65
2500.00	14.40	155.160	2478.94	178.71S	82.71E	==>	-163.27	1228969.22	3189625.10
2600.00	14.40	155.160	2575.80	201.28S	93.15E	==>	-183.88	1228946.66	3189635.54
2700.00	14.40	155.160	2672.66	223.84S	103.60E	==>	-204.50	1228924.09	3189645.98
2800.00	14.40	155.160	2769.52	246.41S	114.04E	==>	-225.11	1228901.53	3189656.43
2900.00	14.40	155.160	2866.38	268.97S	124.49E	==>	-245.73	1228878.96	3189666.87
3000.00	14.40	155.160	2963.24	291.54S	134.93E	==>	-266.35	1228856.40	3189677.31
3100.00	14.40	155.160	3060.10	314.10S	145.37E	==>	-286.96	1228833.83	3189687.76

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 5027.0ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 9.160 degrees
Bottom hole distance is 3934.69 Feet on azimuth 9.16 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by Integrated Petroleum Technologies, Inc.
Date Printed: 3-Sep-2014



WARD PETROLEUM

INTEGRATED PETROLEUM TECHNOLOGIES, INC SYSDRILL

Well Design Combined Report
Wellbore: Anderson 18-3-9HC



Interpolated Wellpath									
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Northing	Easting
3200.00	14.40	155.160	3156.95	336.67S	155.82E	==>	-307.58	1228811.27	3189698.20
3300.00	14.40	155.160	3253.81	359.23S	166.26E	==>	-328.19	1228788.70	3189708.64
3400.00	14.40	155.160	3350.67	381.80S	176.71E	==>	-348.81	1228766.14	3189719.09
3500.00	14.40	155.160	3447.53	404.36S	187.15E	==>	-369.42	1228743.57	3189729.53
3600.00	14.40	155.160	3544.39	426.93S	197.59E	==>	-390.04	1228721.01	3189739.97
3700.00	14.40	155.160	3641.25	449.50S	208.04E	==>	-410.65	1228698.44	3189750.42
3800.00	14.40	155.160	3738.11	472.06S	218.48E	==>	-431.27	1228675.88	3189760.86
3900.00	14.40	155.160	3834.97	494.63S	228.92E	==>	-451.88	1228653.31	3189771.30
4000.00	14.40	155.160	3931.83	517.19S	239.37E	==>	-472.50	1228630.75	3189781.75
4100.00	14.40	155.160	4028.69	539.76S	249.81E	==>	-493.12	1228608.18	3189792.19
4200.00	14.40	155.160	4125.55	562.32S	260.26E	==>	-513.73	1228585.62	3189802.64
4300.00	14.40	155.160	4222.41	584.89S	270.70E	==>	-534.35	1228563.06	3189813.08
4400.00	14.40	155.160	4319.27	607.45S	281.14E	==>	-554.96	1228540.49	3189823.52
4500.00	14.40	155.160	4416.13	630.02S	291.59E	==>	-575.58	1228517.93	3189833.97
4600.00	14.40	155.160	4512.98	652.58S	302.03E	==>	-596.19	1228495.36	3189844.41
4700.00	14.40	155.160	4609.84	675.15S	312.47E	==>	-616.81	1228472.80	3189854.85
4800.00	14.40	155.160	4706.70	697.72S	322.92E	==>	-637.42	1228450.23	3189865.30
4900.00	14.40	155.160	4803.56	720.28S	333.36E	==>	-658.04	1228427.67	3189875.74
5000.00	14.40	155.160	4900.42	742.85S	343.81E	==>	-678.66	1228405.10	3189886.18
5100.00	14.40	155.160	4997.28	765.41S	354.25E	==>	-699.27	1228382.54	3189896.63
5200.00	14.40	155.160	5094.14	787.98S	364.69E	==>	-719.89	1228359.97	3189907.07
5300.00	14.40	155.160	5191.00	810.54S	375.14E	==>	-740.50	1228337.41	3189917.51
5400.00	14.40	155.160	5287.86	833.11S	385.58E	==>	-761.12	1228314.84	3189927.96
5500.00	14.40	155.160	5384.72	855.67S	396.02E	==>	-781.73	1228292.28	3189938.40
5600.00	14.40	155.160	5481.58	878.24S	406.47E	==>	-802.35	1228269.71	3189948.84
5700.00	14.40	155.160	5578.44	900.80S	416.91E	==>	-822.96	1228247.15	3189959.29
5800.00	14.40	155.160	5675.30	923.37S	427.36E	==>	-843.58	1228224.58	3189969.73
5900.00	14.40	155.160	5772.16	945.94S	437.80E	==>	-864.20	1228202.02	3189980.17
6000.00	14.40	155.160	5869.02	968.50S	448.24E	==>	-884.81	1228179.46	3189990.62
6100.00	14.40	155.160	5965.87	991.07S	458.69E	==>	-905.43	1228156.89	3190001.06
6200.00	14.40	155.160	6062.73	1013.63S	469.13E	==>	-926.04	1228134.33	3190011.50
6300.00	14.40	155.160	6159.59	1036.20S	479.57E	==>	-946.66	1228111.76	3190021.95
6400.00	14.40	155.160	6256.45	1058.76S	490.02E	==>	-967.27	1228089.20	3190032.39
6500.00	14.40	155.160	6353.31	1081.33S	500.46E	==>	-987.89	1228066.63	3190042.83
6600.00	14.40	155.160	6450.17	1103.89S	510.91E	==>	-1008.50	1228044.07	3190053.28
6700.00	14.40	155.160	6547.03	1126.46S	521.35E	==>	-1029.12	1228021.50	3190063.72
6800.00	14.40	155.160	6643.89	1149.02S	531.79E	==>	-1049.73	1227998.94	3190074.16
6900.00	14.40	155.160	6740.75	1171.59S	542.24E	==>	-1070.35	1227976.37	3190084.61
6974.57	14.40	155.160	6812.98	1188.42S	550.03E	==>	-1085.72	1227959.55	3190092.40
7000.00	12.59	151.160	6837.70	1193.71S	552.69E	8.00	-1090.53	1227954.25	3190095.06
7100.00	6.82	116.210	6936.31	1205.90S	563.29E	8.00	-1100.88	1227942.06	3190105.66
7200.00	7.88	50.580	7035.65	1204.17S	573.93E	8.00	-1097.47	1227943.79	3190116.30
7300.00	14.32	24.640	7133.78	1188.55S	584.40E	8.00	-1080.39	1227959.41	3190126.77
7400.00	21.81	15.360	7228.80	1159.35S	594.49E	8.00	-1049.95	1227988.61	3190136.86
7500.00	29.56	10.720	7318.86	1117.13S	604.01E	8.00	-1006.76	1228030.83	3190146.38
7600.00	37.41	7.880	7402.21	1062.72S	612.78E	8.00	-951.64	1228085.23	3190155.15
7700.00	45.30	5.920	7477.22	997.18S	620.63E	8.00	-885.69	1228150.78	3190163.00
7800.00	53.22	4.420	7542.43	921.78S	627.39E	8.00	-810.17	1228226.17	3190169.76
7900.00	61.16	3.210	7596.57	837.99S	632.95E	8.00	-726.56	1228309.96	3190175.31
8000.00	69.10	2.180	7638.60	747.44S	637.18E	8.00	-636.49	1228400.51	3190179.55
8100.00	77.05	1.240	7667.69	651.89S	640.02E	8.00	-541.71	1228496.06	3190182.38
8200.00	85.00	0.370	7683.27	553.20S	641.40E	8.00	-444.06	1228594.74	3190183.76
8266.44	90.29	359.800	7686.00	486.84S	641.49E	8.00	-378.54	1228661.10	3190183.86
8300.00	90.29	359.800	7685.83	453.28S	641.38E	==>	-345.42	1228694.66	3190183.74
8400.00	90.29	359.800	7685.33	353.28S	641.03E	==>	-246.75	1228794.65	3190183.39
8500.00	90.29	359.800	7684.82	253.28S	640.68E	==>	-148.08	1228894.65	3190183.05
8600.00	90.29	359.800	7684.32	153.29S	640.33E	==>	-49.42	1228994.64	3190182.70
8700.00	90.29	359.800	7683.82	53.29S	639.98E	==>	49.25	1229094.64	3190182.35
8800.00	90.29	359.800	7683.31	46.71N	639.63E	==>	147.92	1229194.63	3190182.00
8900.00	90.29	359.800	7682.81	146.71N	639.28E	==>	246.59	1229294.63	3190181.65

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Vertical Section is from 0.00N 0.00E on azimuth 9.160 degrees
Bottom hole distance is 3934.69 Feet on azimuth 9.16 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by Integrated Petroleum Technologies, Inc.
Date Printed: 3-Sep-2014



INTEGRATED PETROLEUM TECHNOLOGIES, INC
SYSDRILL

Well Design Combined Report
Wellbore: Anderson 18-3-9HC



WARD PETROLEUM

Interpolated Wellpath									
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Northing	Easting
9000.00	90.29	359.800	7682.31	246.71N	638.94E	==>	345.26	1229394.62	3190181.30
9100.00	90.29	359.800	7681.80	346.70N	638.59E	==>	443.92	1229494.62	3190180.95
9200.00	90.29	359.800	7681.30	446.70N	638.24E	==>	542.59	1229594.61	3190180.61
9300.00	90.29	359.800	7680.80	546.70N	637.89E	==>	641.26	1229694.61	3190180.26
9400.00	90.29	359.800	7680.30	646.70N	637.54E	==>	739.93	1229794.60	3190179.91
9500.00	90.29	359.800	7679.79	746.70N	637.19E	==>	838.60	1229894.60	3190179.56
9600.00	90.29	359.800	7679.29	846.69N	636.84E	==>	937.26	1229994.59	3190179.21
9700.00	90.29	359.800	7678.79	946.69N	636.50E	==>	1035.93	1230094.59	3190178.86
9800.00	90.29	359.800	7678.28	1046.69N	636.15E	==>	1134.60	1230194.58	3190178.51
9900.00	90.29	359.800	7677.78	1146.69N	635.80E	==>	1233.27	1230294.58	3190178.17
10000.00	90.29	359.800	7677.28	1246.69N	635.45E	==>	1331.94	1230394.57	3190177.82
10100.00	90.29	359.800	7676.77	1346.69N	635.10E	==>	1430.60	1230494.57	3190177.47
10200.00	90.29	359.800	7676.27	1446.68N	634.75E	==>	1529.27	1230594.56	3190177.12
10300.00	90.29	359.800	7675.77	1546.68N	634.40E	==>	1627.94	1230694.56	3190176.77
10400.00	90.29	359.800	7675.26	1646.68N	634.06E	==>	1726.61	1230794.55	3190176.42
10500.00	90.29	359.800	7674.76	1746.68N	633.71E	==>	1825.27	1230894.55	3190176.08
10600.00	90.29	359.800	7674.26	1846.68N	633.36E	==>	1923.94	1230994.54	3190175.73
10700.00	90.29	359.800	7673.75	1946.67N	633.01E	==>	2022.61	1231094.54	3190175.38
10800.00	90.29	359.800	7673.25	2046.67N	632.66E	==>	2121.28	1231194.53	3190175.03
10900.00	90.29	359.800	7672.75	2146.67N	632.31E	==>	2219.95	1231294.53	3190174.68
11000.00	90.29	359.800	7672.24	2246.67N	631.96E	==>	2318.61	1231394.52	3190174.33
11100.00	90.29	359.800	7671.74	2346.67N	631.62E	==>	2417.28	1231494.51	3190173.98
11200.00	90.29	359.800	7671.24	2446.66N	631.27E	==>	2515.95	1231594.51	3190173.64
11300.00	90.29	359.800	7670.73	2546.66N	630.92E	==>	2614.62	1231694.50	3190173.29
11400.00	90.29	359.800	7670.23	2646.66N	630.57E	==>	2713.29	1231794.50	3190172.94
11500.00	90.29	359.800	7669.73	2746.66N	630.22E	==>	2811.95	1231894.49	3190172.59
11600.00	90.29	359.800	7669.22	2846.66N	629.87E	==>	2910.62	1231994.49	3190172.24
11700.00	90.29	359.800	7668.72	2946.66N	629.53E	==>	3009.29	1232094.48	3190171.89
11800.00	90.29	359.800	7668.22	3046.65N	629.18E	==>	3107.96	1232194.48	3190171.54
11900.00	90.29	359.800	7667.71	3146.65N	628.83E	==>	3206.63	1232294.47	3190171.20
12000.00	90.29	359.800	7667.21	3246.65N	628.48E	==>	3305.29	1232394.47	3190170.85
12100.00	90.29	359.800	7666.71	3346.65N	628.13E	==>	3403.96	1232494.46	3190170.50
12200.00	90.29	359.800	7666.20	3446.65N	627.78E	==>	3502.63	1232594.46	3190170.15
12300.00	90.29	359.800	7665.70	3546.64N	627.43E	==>	3601.30	1232694.45	3190169.80
12400.00	90.29	359.800	7665.20	3646.64N	627.09E	==>	3699.96	1232794.45	3190169.45
12500.00	90.29	359.800	7664.69	3746.64N	626.74E	==>	3798.63	1232894.44	3190169.10
12600.00	90.29	359.800	7664.19	3846.64N	626.39E	==>	3897.30	1232994.44	3190168.76
12637.89	90.29	359.800	7664.00	3884.53N	626.26E	==>	3934.69	1233032.33	3190168.62

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WARD PETROLEUM

INTEGRATED PETROLEUM TECHNOLOGIES, INC

SYSDRILL

Well Design Combined Report

Wellbore: Anderson 18-3-9HC



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	22.00	22.00	0.00N	0.00E	1200.00	1200.00	0.00N	0.00E
8 3/4	1200.00	1200.00	0.00N	0.00E	8266.00	7686.00	487.28S	641.49E
6 1/8	8266.00	7686.00	487.28S	641.49E	12637.89	7664.00	3884.53N	626.26E

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	22.00	22.00	0.00N	0.00E	1200.00	1200.00	0.00N	0.00E
7.0in Intermediate Casing	22.00	22.00	0.00N	0.00E	8266.00	7686.00	487.28S	641.49E
4 1/2in Production Liner	8066.00	7659.29	684.82S	639.21E	12637.89	7664.00	3884.53N	626.26E

Targets

Name	North[ft]	East[ft]	TVD[ft]	Latitude	Longitude	Northing	Easting	Last Revised
Anderson 18-3-9HC BH	3884.53N	626.26E	7664.00	39.97106000	-104.82148000	1233032.33	3190168.62	28-Aug-2014
Anderson 18-3-9HC LP	486.84S	648.49E	7686.00	39.95906000	-104.82152000	1228661.10	3190190.86	28-Aug-2014

Survey Tool Program

Reference	Survey Name	MD[ft]	TVD[ft]	Survey Tool	Error Model
299605	Planned	12637.89	7664.00	WdW Rate Gyro	Standard

Notes

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 5027.0ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 9.160 degrees
Bottom hole distance is 3934.69 Feet on azimuth 9.16 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by Integrated Petroleum Technologies, Inc.
Date Printed: 3-Sep-2014



SYSDRILL
Closest Approach + Clearance Factor Summary Report
Wellbore: Anderson 18-3-9HC



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 2000.00ft 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
Anderson 18-3-9HC	28-Aug-2014	3-Sep-2014

Well		
Name	Government ID	Last Revised
Anderson 18-3-9HC		29-Aug-2014

Slot						
Name	Grid Northing	Grid Easting	Latitude	Longitude	North	East
Slot #9	1229147.9241	3189542.3883	39.96041000	-104.82382000	11.23S	39.16W

Installation				
Name	Easting	Northing	Coord System Name	North Alignment
Anderson	3189581.5481	1229159.1513	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 Wellbore	Offset Structure	Separation [ft]	MD[ft]	Diverging From[ft]	Ellipse Separation [ft]	Ellipse MD[ft]	Clearance Factor	Clearance MD[ft]
Anderson 19-1-10HC	Anderson	12.24	1367.14	7736.87	9.30	1498.38	3.93	1662.42
Anderson 19-1-9HN	Anderson	13.79	1350.74	7599.08	10.95	1186.70	1.51	7599.08
Anderson 18-3-10HN	Anderson	13.93	1367.14	1367.14	11.08	1383.55	4.83	1432.76
Anderson 18-3-8HN	Anderson	16.82	1285.12	12637.89	13.98	1186.70	5.92	1186.70
Anderson 19-1-11HN	Anderson	24.86	1367.14	7523.24	22.04	1367.14	8.68	1416.36
Anderson 19-1-8HC	Anderson	24.95	1350.74	7805.34	22.11	1186.70	8.72	1416.36
Anderson 18-3-11HC	Anderson	28.03	1252.31	1252.31	25.19	1186.70	9.87	1186.70
Anderson 18-3-7HC	Anderson	30.84	1250.00	12637.89	28.00	1186.70	10.86	1186.70
Anderson 19-1-12HC	Anderson	38.05	1250.00	7677.87	35.21	1186.70	13.39	1186.70
Anderson 19-1-7HN	Anderson	40.74	1285.12	7687.47	37.90	1186.70	14.34	1186.70
Anderson 18-3-12HN	Anderson	44.85	1200.00	12637.89	41.99	1200.00	15.68	1200.00
Schaefer 24-3-1HC (PWB)	Schaefer	1779.70	7535.12	7535.12	1730.40	7522.00	35.93	7436.70

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Coordinates are from Slot MD's are from Rig and TVD's are from Rig (Planned Datum #1 5027.0ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 9.160 degrees
Prepared by Integrated Petroleum Technologies, Inc.
Date Printed: 3-Sep-2014



WARD PETROLEUM

SYS DRILL
Closest Approach + Clearance Factor Summary Report
Wellbore: Anderson 18-3-9HC



Offset Wellbore	Offset Structure	Separation [ft]	MD[ft]	Diverging From[ft]	Ellipse Separation [ft]	Ellipse MD[ft]	Clearance Factor	Clearance MD[ft]
W Wagner #1 (AWB)	Offsets	1874.15	5262.79	5262.79	1848.83	5271.34	73.24	5501.00
W WAGNER #1 (AWB)	Offsets	1874.15	5262.79	5262.79	1848.55	5271.34	72.69	5435.39