

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-22\2014-12-22_001.xad

Created: 12/22/2014 10:18:30 AM
Modified: 12/22/2014 10:50:17 AM

Electrophoresis File Run Summary

Instrument Information:

Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

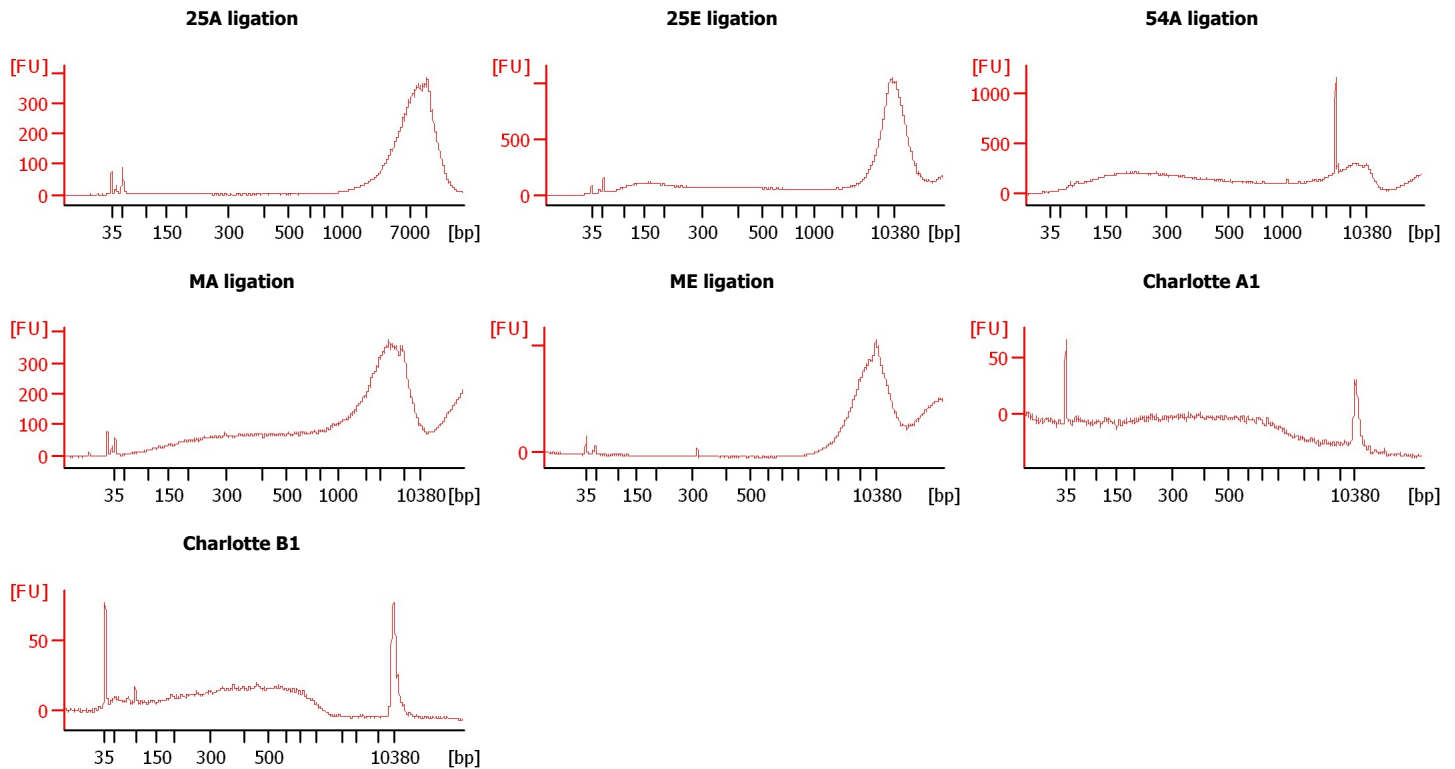
Assay Information:

Assay Origin Path: C:\Program Files\Agilent\2100 bioanalyzer\2100
expert\assays\dsDNA\High Sensitivity DNA.xsy

Assay Class: High Sensitivity DNA Assay
Version: 1.03
Assay Comments: Copyright © 2003-2010 Agilent Technologies

Chip Information:

Chip Lot #:
Reagent Kit Lot #:
Chip Comments:



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Electrophoresis File Run Summary (Chip Summary)

| Sample Name | Sample Comment | Rest. Digest | Status | Observation | Result Label | Result Color |
|--------------|----------------|--------------------------|--------|-------------|--------------|--------------|
| 25A ligation | | <input type="checkbox"/> | ✓ | | | |
| 25E ligation | | <input type="checkbox"/> | ✓ | | | |
| 54A ligation | | <input type="checkbox"/> | ✓ | | | |
| MA ligation | | <input type="checkbox"/> | ✓ | | | |
| ME ligation | | <input type="checkbox"/> | ✓ | | | |
| Charlotte A1 | | <input type="checkbox"/> | ✓ | | | |
| Charlotte B1 | | <input type="checkbox"/> | ✓ | | | |
| sample 8 | | <input type="checkbox"/> | | | | |
| sample 9 | | <input type="checkbox"/> | | | | |
| sample 10 | | <input type="checkbox"/> | | | | |
| sample 11 | | <input type="checkbox"/> | | | | |
| Ladder | | <input type="checkbox"/> | ✓ | | | |

Chip Lot # **Reagent Kit Lot #**

Chip Comments :

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Electrophoresis Assay Details

General Analysis Settings

Number of Available Sample and Ladder Wells (Max.) : 12
Minimum Visible Range [s] : 32
Maximum Visible Range [s] : 138
Start Analysis Time Range [s] : 33
End Analysis Time Range [s] : 137.5
Ladder Concentration [pg/μl] : 1950
Uses Standard Area for Ladder Fragments
Lower Marker Concentration [pg/μl] : 125
Upper Marker Concentration [pg/μl] : 75
Used Upper Marker for Quantitation
Standard Curve Fit is Point to Point
Show Data Aligned to Lower and Upper Marker

Integrator Settings

Integration Start Time [s] : 33.05
Integration End Time [s] : 137
Slope Threshold : 0.8
Height Threshold [FU] : 5
Area Threshold : 0.05
Width Threshold [s] : 0.6
Baseline Plateau [s] : 0.5

Filter Settings

Filter Width [s] : 0.5
Polynomial Order : 4

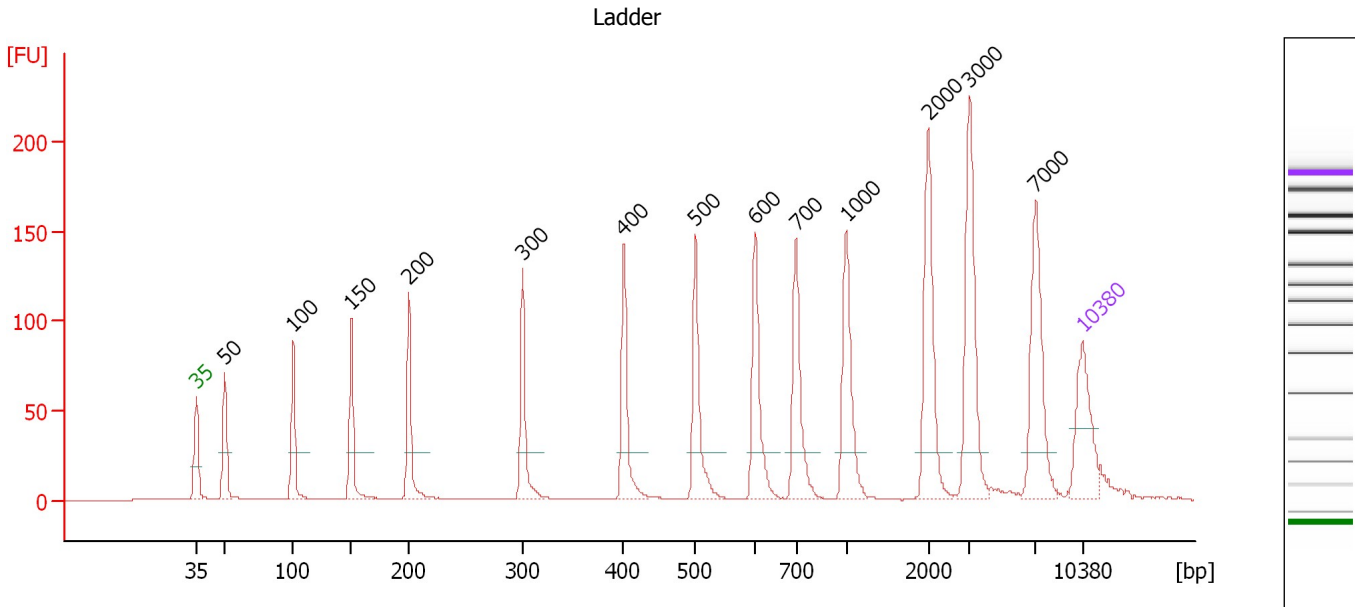
Ladder

| Ladder Peak | Size | Area |
|-------------|-------|------|
| 1 | 35 | 160 |
| 2 | 50 | 210 |
| 3 | 100 | 208 |
| 4 | 150 | 221 |
| 5 | 200 | 242 |
| 6 | 300 | 270 |
| 7 | 400 | 305 |
| 8 | 500 | 306 |
| 9 | 600 | 336 |
| 10 | 700 | 321 |
| 11 | 1000 | 366 |
| 12 | 2000 | 413 |
| 13 | 3000 | 411 |
| 14 | 7000 | 400 |
| 15 | 10380 | 214 |

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Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

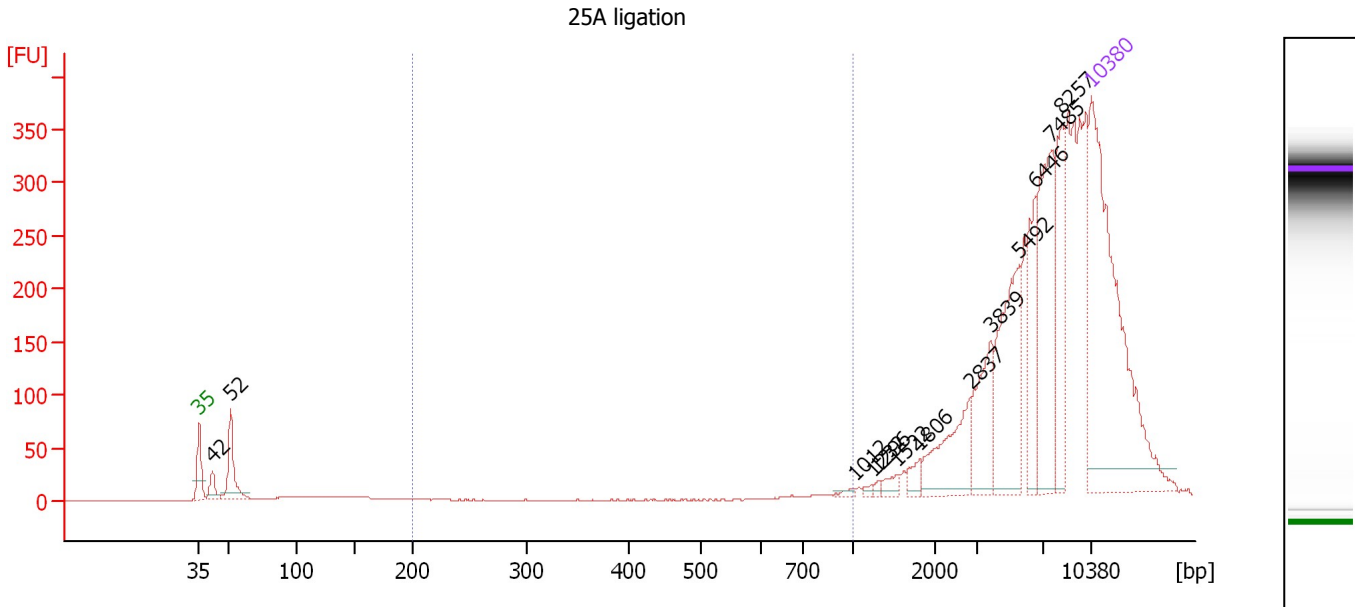
Peak table for Ladder

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|------|-----------|---------------|-------------------|--------------|----------------------------|
| 1 | 35 | 125.00 | 5,411.3 | Lower Marker | 43.00 |
| 2 | 50 | 150.00 | 4,545.5 | Ladder Peak | 45.23 |
| 3 | 100 | 150.00 | 2,272.7 | Ladder Peak | 50.63 |
| 4 | 150 | 150.00 | 1,515.2 | Ladder Peak | 55.22 |
| 5 | 200 | 150.00 | 1,136.4 | Ladder Peak | 59.77 |
| 6 | 300 | 150.00 | 757.6 | Ladder Peak | 68.75 |
| 7 | 400 | 150.00 | 568.2 | Ladder Peak | 76.76 |
| 8 | 500 | 150.00 | 454.5 | Ladder Peak | 82.45 |
| 9 | 600 | 150.00 | 378.8 | Ladder Peak | 87.17 |
| 10 | 700 | 150.00 | 324.7 | Ladder Peak | 90.37 |
| 11 | 1,000 | 150.00 | 227.3 | Ladder Peak | 94.33 |
| 12 | 2,000 | 150.00 | 113.6 | Ladder Peak | 100.82 |
| 13 | 3,000 | 150.00 | 75.8 | Ladder Peak | 104.07 |
| 14 | 7,000 | 150.00 | 32.5 | Ladder Peak | 109.33 |
| 15 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

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Electropherogram Summary Continued ...



Overall Results for sample 1 : 25A ligation

Number of peaks found: 13 Corr. Area 1: 3.1
 Noise: 0.4

Peak table for sample 1 : 25A ligation

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|------|-----------|---------------|-------------------|--------------|----------------------------|
| 1 | 35 | 125.00 | 5,411.3 | Lower Marker | 43.00 |
| 2 | 42 | 6.09 | 221.0 | | 44.00 |
| 3 | 52 | 18.56 | 538.9 | | 45.47 |
| 4 | 1,012 | 1.11 | 1.7 | | 94.41 |
| 5 | 1,232 | 0.97 | 1.2 | | 95.83 |
| 6 | 1,296 | 0.77 | 0.9 | | 96.25 |
| 7 | 1,522 | 2.48 | 2.5 | | 97.72 |
| 8 | 1,806 | 3.21 | 2.7 | | 99.56 |
| 9 | 2,837 | 19.18 | 10.2 | | 103.54 |
| 10 | 3,839 | 18.49 | 7.3 | | 105.17 |
| 11 | 5,492 | 33.09 | 9.1 | | 107.35 |
| 12 | 6,446 | 18.10 | 4.3 | | 108.60 |
| 13 | 7,485 | 36.15 | 7.3 | | 109.86 |
| 14 | 8,257 | 23.47 | 4.3 | | 110.70 |
| 15 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

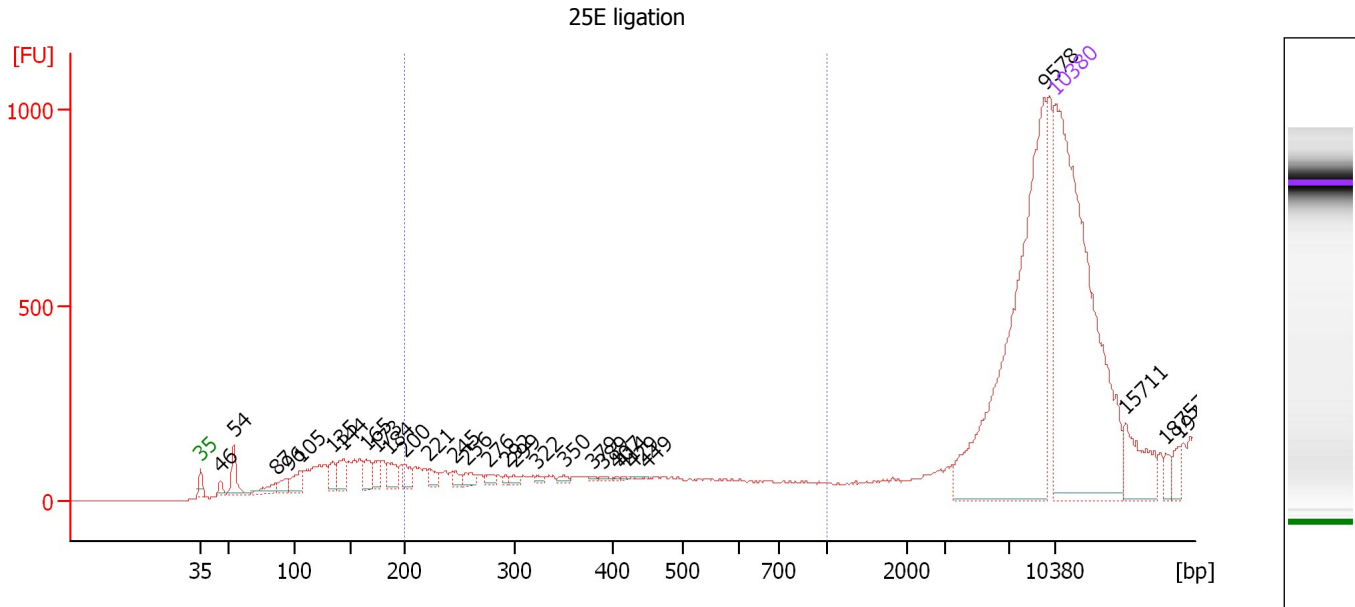
Region table for sample 1 : 25A ligation

| From [bp] | Average Size [bp] | To [bp] | Corr. Area | % of Total | Size distribution in CV [%] | Conc. [pg/μl] | Molarity [pmol/l] | Color |
|-----------|-------------------|---------|------------|------------|-----------------------------|---------------|-------------------|-------|
| 200 | 966 | 1,000 | 3.1 | 0 | 2.2 | 0.30 | 0.5 | Blue |

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Electropherogram Summary Continued ...



Overall Results for sample 2 : 25E ligation

Number of peaks found: 29 Corr. Area 1: 389.6
 Noise: 0.8

Peak table for sample 2 : 25E ligation

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|------|-----------|---------------|-------------------|--------------|----------------------------|
| 1 | 35 | 125.00 | 5,411.3 | Lower Marker | 43.00 |
| 2 | 46 | 1.87 | 61.9 | | 44.61 |
| 3 | 54 | 7.71 | 215.2 | | 45.70 |
| 4 | 87 | 3.65 | 63.7 | | 49.22 |
| 5 | 96 | 3.51 | 55.6 | | 50.17 |
| 6 | 105 | 5.39 | 77.4 | | 51.13 |
| 7 | 135 | 4.86 | 54.6 | | 53.83 |
| 8 | 144 | 5.93 | 62.3 | | 54.70 |
| 9 | 165 | 5.08 | 46.7 | | 56.57 |
| 10 | 173 | 3.53 | 30.8 | | 57.35 |
| 11 | 184 | 4.74 | 39.0 | | 58.35 |
| 12 | 200 | 3.44 | 26.1 | | 59.74 |
| 13 | 221 | 2.45 | 16.8 | | 61.70 |
| 14 | 245 | 1.83 | 11.3 | | 63.83 |
| 15 | 256 | 2.30 | 13.6 | | 64.78 |
| 16 | 276 | 1.49 | 8.2 | | 66.61 |
| 17 | 292 | 0.81 | 4.2 | | 68.00 |
| 18 | 299 | 1.08 | 5.5 | | 68.65 |
| 19 | 322 | 0.67 | 3.2 | | 70.48 |
| 20 | 350 | 0.77 | 3.3 | | 72.78 |
| 21 | 379 | 0.36 | 1.4 | | 75.09 |
| 22 | 389 | 0.44 | 1.7 | | 75.91 |
| 23 | 407 | 0.20 | 0.8 | | 77.13 |
| 24 | 414 | 0.18 | 0.7 | | 77.57 |
| 25 | 429 | 0.13 | 0.5 | | 78.43 |

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Electropherogram Summary Continued ...

... Peak table for sample 2 : 25E ligation

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|------|-----------|---------------|-------------------|--------------|----------------------------|
| 26 | 449 | 0.10 | 0.3 | | 79.52 |
| 27 | 9,578 | 72.84 | 11.5 | | 112.13 |
| 28 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |
| 29 | 15,711 | 0.00 | 0.0 | | 118.78 |
| 30 | 18,757 | 0.00 | 0.0 | | 122.09 |
| 31 | 19,799 | 0.00 | 0.0 | | 123.22 |

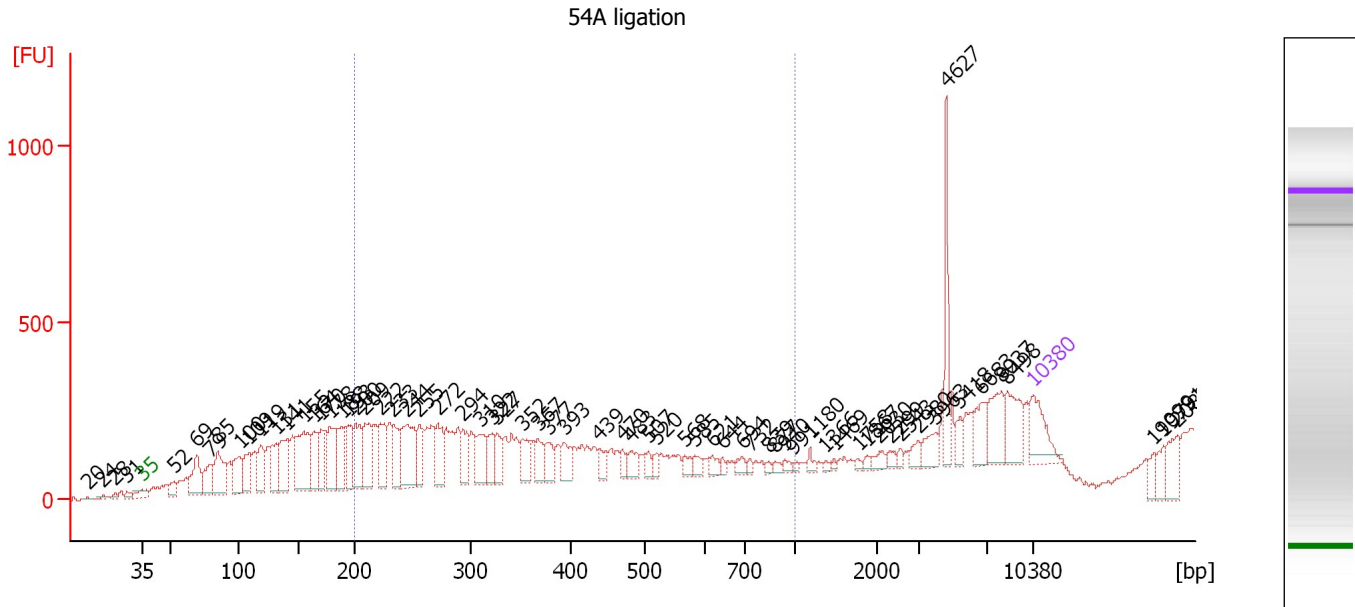
Region table for sample 2 : 25E ligation

| From [bp] | Average Size [bp] | To [bp] | Corr. Area | % of Total | Size distribution in CV [%] | Conc. [pg/μl] | Molarity [pmol/l] | Color |
|-----------|-------------------|---------|------------|------------|-----------------------------|---------------|-------------------|---|
| 200 | 242 | 1,000 | 389.6 | 9 | 13.8 | 15.38 | 97.2 |  |

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Electropherogram Summary Continued ...



Overall Results for sample 3 : 54A ligation

Number of peaks found: 67 Corr. Area 1: 4,393.1
 Noise: 8.3

Peak table for sample 3 : 54A ligation

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|------|-----------|---------------|-------------------|--------------|----------------------------|
| 1 | 20 | 0.00 | 0.0 | | 38.75 |
| 2 | 24 | 0.00 | 0.0 | | 39.96 |
| 3 | 28 | 0.00 | 0.0 | | 40.87 |
| 4 | 31 | 0.00 | 0.0 | | 41.83 |
| 5 | 35 | 125.00 | 5,411.3 | Lower Marker | 43.00 |
| 6 | 52 | 40.73 | 1,176.1 | | 45.50 |
| 7 | 69 | 131.25 | 2,878.9 | | 47.29 |
| 8 | 79 | 102.33 | 1,969.4 | | 48.33 |
| 9 | 85 | 152.75 | 2,738.1 | | 48.96 |
| 10 | 100 | 122.00 | 1,840.7 | | 50.67 |
| 11 | 109 | 86.11 | 1,201.6 | | 51.42 |
| 12 | 119 | 97.87 | 1,250.7 | | 52.33 |
| 13 | 131 | 128.96 | 1,488.6 | | 53.50 |
| 14 | 141 | 142.17 | 1,525.2 | | 54.42 |
| 15 | 155 | 227.40 | 2,217.9 | | 55.71 |
| 16 | 164 | 100.56 | 928.8 | | 56.50 |
| 17 | 170 | 116.48 | 1,038.2 | | 57.04 |
| 18 | 178 | 140.81 | 1,197.0 | | 57.79 |
| 19 | 188 | 106.23 | 854.7 | | 58.71 |
| 20 | 193 | 106.11 | 831.5 | | 59.17 |
| 21 | 200 | 132.51 | 1,002.8 | | 59.79 |
| 22 | 209 | 137.67 | 1,000.1 | | 60.54 |
| 23 | 222 | 118.27 | 807.1 | | 61.75 |
| 24 | 233 | 90.15 | 587.0 | | 62.71 |
| 25 | 244 | 185.99 | 1,153.5 | | 63.75 |

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Electropherogram Summary Continued ...

... Peak table for sample 3 : 54A ligation

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|------|-----------|---------------|-------------------|--------------|----------------------------|
| 26 | 255 | 82.77 | 491.8 | | 64.71 |
| 27 | 272 | 89.36 | 497.5 | | 66.25 |
| 28 | 294 | 76.99 | 397.4 | | 68.17 |
| 29 | 310 | 85.33 | 417.2 | | 69.54 |
| 30 | 322 | 70.27 | 330.8 | | 70.50 |
| 31 | 327 | 55.95 | 259.2 | | 70.92 |
| 32 | 352 | 62.75 | 270.4 | | 72.88 |
| 33 | 367 | 57.56 | 237.6 | | 74.13 |
| 34 | 377 | 49.47 | 198.8 | | 74.92 |
| 35 | 393 | 55.10 | 212.6 | | 76.17 |
| 36 | 439 | 33.23 | 114.8 | | 78.96 |
| 37 | 470 | 23.34 | 75.2 | | 80.75 |
| 38 | 483 | 39.55 | 124.2 | | 81.46 |
| 39 | 507 | 19.70 | 58.8 | | 82.79 |
| 40 | 520 | 18.61 | 54.3 | | 83.38 |
| 41 | 568 | 21.10 | 56.3 | | 85.67 |
| 42 | 585 | 20.58 | 53.3 | | 86.46 |
| 43 | 621 | 18.74 | 45.7 | | 87.83 |
| 44 | 644 | 11.52 | 27.1 | | 88.58 |
| 45 | 694 | 18.54 | 40.5 | | 90.17 |
| 46 | 732 | 9.55 | 19.8 | | 90.79 |
| 47 | 839 | 7.23 | 13.1 | | 92.21 |
| 48 | 877 | 10.19 | 17.6 | | 92.71 |
| 49 | 940 | 10.18 | 16.4 | | 93.54 |
| 50 | 991 | 6.10 | 9.3 | | 94.21 |
| 51 | 1,180 | 12.04 | 15.5 | | 95.50 |
| 52 | 1,366 | 6.00 | 6.7 | | 96.71 |
| 53 | 1,469 | 5.38 | 5.5 | | 97.38 |
| 54 | 1,758 | 6.03 | 5.2 | | 99.25 |
| 55 | 1,867 | 8.10 | 6.6 | | 99.96 |
| 56 | 2,030 | 15.60 | 11.6 | | 100.92 |
| 57 | 2,299 | 12.44 | 8.2 | | 101.79 |
| 58 | 2,543 | 8.34 | 5.0 | | 102.58 |
| 59 | 2,980 | 20.09 | 10.2 | | 104.00 |
| 60 | 3,963 | 37.30 | 14.3 | | 105.33 |
| 61 | 4,627 | 86.75 | 28.4 | | 106.21 |
| 62 | 5,418 | 22.14 | 6.2 | | 107.25 |
| 63 | 6,683 | 55.21 | 12.5 | | 108.92 |
| 64 | 8,037 | 77.83 | 14.7 | | 110.46 |
| 65 | 8,498 | 80.67 | 14.4 | | 110.96 |
| 66 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |
| 67 | 19,099 | 0.00 | 0.0 | | 122.46 |
| 68 | 19,791 | 0.00 | 0.0 | | 123.21 |
| 69 | 20,828 | 0.00 | 0.0 | | 124.33 |

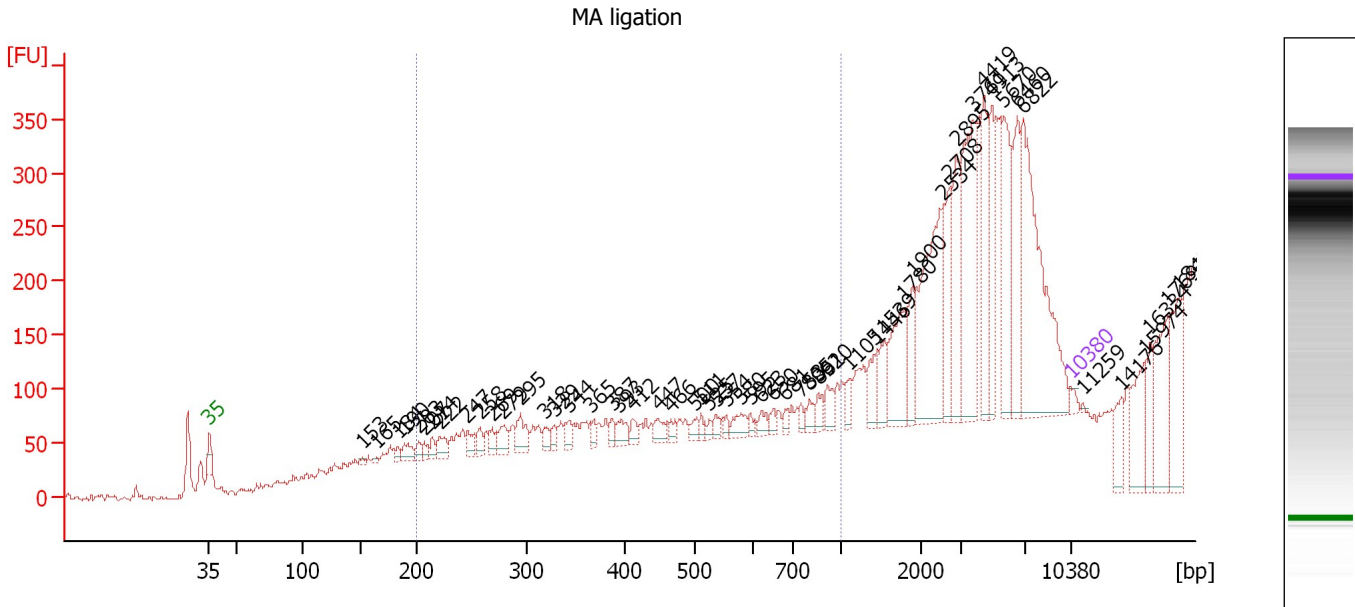
Region table for sample 3 : 54A ligation

| From [bp] | Average Size [bp] | To [bp] | Corr. Area | % of Total | Size distribution in CV [%] | Conc. [pg/μl] | Molarity [pmol/l] | Color |
|-----------|-------------------|---------|------------|------------|-----------------------------|---------------|-------------------|-------------------------------------|
| 200 | 316 | 1,000 | 4,393.1 | 46 | 29.3 | 1,921.83 | 10,186.6 | ■ |

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Electropherogram Summary Continued ...



Overall Results for sample 4 : MA ligation

Number of peaks found: 56 Corr. Area 1: 0.0
 Noise: 2.5

Peak table for sample 4 : MA ligation

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|------|-----------|---------------|-------------------|--------------|----------------------------|
| 1 | 35 | 125.00 | 5,411.3 | Lower Marker | 43.00 |
| 2 | 153 | 55.16 | 546.7 | | 55.48 |
| 3 | 165 | 57.52 | 528.9 | | 56.57 |
| 4 | 184 | 128.10 | 1,055.9 | | 58.30 |
| 5 | 190 | 272.13 | 2,170.0 | | 58.86 |
| 6 | 203 | 145.85 | 1,089.1 | | 60.03 |
| 7 | 207 | 143.12 | 1,046.3 | | 60.42 |
| 8 | 214 | 169.19 | 1,195.1 | | 61.07 |
| 9 | 222 | 309.70 | 2,116.2 | | 61.72 |
| 10 | 247 | 233.56 | 1,433.6 | | 63.98 |
| 11 | 258 | 229.80 | 1,347.3 | | 65.02 |
| 12 | 269 | 190.84 | 1,074.7 | | 65.97 |
| 13 | 279 | 346.38 | 1,879.7 | | 66.88 |
| 14 | 295 | 433.74 | 2,230.4 | | 68.27 |
| 15 | 318 | 195.38 | 929.9 | | 70.22 |
| 16 | 329 | 160.10 | 738.1 | | 71.04 |
| 17 | 344 | 220.45 | 971.5 | | 72.26 |
| 18 | 365 | 157.91 | 654.7 | | 73.99 |
| 19 | 387 | 150.62 | 589.5 | | 75.72 |
| 20 | 393 | 265.64 | 1,024.0 | | 76.20 |
| 21 | 412 | 160.70 | 590.5 | | 77.46 |
| 22 | 447 | 220.98 | 748.4 | | 79.45 |
| 23 | 466 | 136.63 | 444.6 | | 80.49 |
| 24 | 500 | 138.55 | 419.9 | | 82.44 |
| 25 | 511 | 116.43 | 345.3 | | 82.96 |

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Electropherogram Summary Continued ...


... Peak table for sample 4 :

MA ligation

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|------|-----------|---------------|-------------------|--------------|----------------------------|
| 26 | 525 | 90.27 | 260.6 | | 83.61 |
| 27 | 537 | 113.93 | 321.7 | | 84.18 |
| 28 | 554 | 96.30 | 263.3 | | 85.00 |
| 29 | 580 | 252.33 | 659.4 | | 86.21 |
| 30 | 595 | 96.50 | 245.6 | | 86.95 |
| 31 | 623 | 157.85 | 383.9 | | 87.90 |
| 32 | 650 | 111.94 | 260.9 | | 88.77 |
| 33 | 681 | 105.99 | 235.7 | | 89.77 |
| 34 | 753 | 113.01 | 227.4 | | 91.07 |
| 35 | 805 | 170.55 | 320.8 | | 91.76 |
| 36 | 861 | 177.29 | 311.9 | | 92.50 |
| 37 | 920 | 245.55 | 404.3 | | 93.28 |
| 38 | 1,105 | 189.41 | 259.7 | | 95.01 |
| 39 | 1,446 | 357.81 | 375.0 | | 97.22 |
| 40 | 1,539 | 416.98 | 410.5 | | 97.83 |
| 41 | 1,780 | 962.23 | 819.2 | | 99.39 |
| 42 | 1,900 | 589.23 | 469.9 | | 100.17 |
| 43 | 2,534 | 2,182.63 | 1,304.9 | | 102.55 |
| 44 | 2,708 | 718.30 | 401.9 | | 103.12 |
| 45 | 2,895 | 1,098.53 | 575.0 | | 103.72 |
| 46 | 3,761 | 2,057.27 | 828.7 | | 105.07 |
| 47 | 4,419 | 1,118.63 | 383.5 | | 105.93 |
| 48 | 4,913 | 946.79 | 292.0 | | 106.59 |
| 49 | 5,670 | 1,309.92 | 350.0 | | 107.58 |
| 50 | 6,460 | 1,087.74 | 255.1 | | 108.62 |
| 51 | 6,822 | 3,238.39 | 719.2 | | 109.10 |
| 52 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |
| 53 | 11,259 | 0.00 | 0.0 | | 113.95 |
| 54 | 14,176 | 0.00 | 0.0 | | 117.12 |
| 55 | 15,974 | 0.00 | 0.0 | | 119.07 |
| 56 | 16,334 | 0.00 | 0.0 | | 119.46 |
| 57 | 17,692 | 0.00 | 0.0 | | 120.93 |
| 58 | 18,451 | 0.00 | 0.0 | | 121.76 |

Region table for sample 4 :

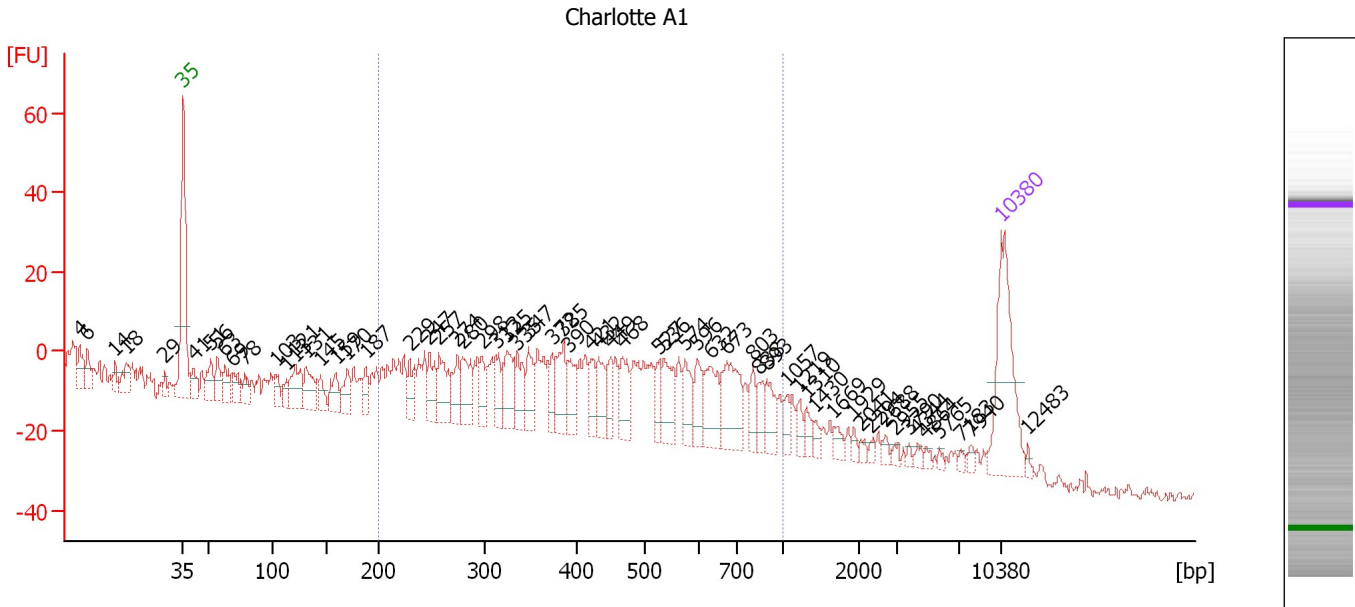
MA ligation

| From [bp] | Average Size [bp] | To [bp] | Corr. Area | % of Total | Size distribution in CV [%] | Conc. [pg/μl] | Molarity [pmol/l] | Color |
|-----------|-------------------|---------|------------|------------|-----------------------------|---------------|-------------------|---|
| 200 | 0 | 1,000 | 0.0 | 0 | 0.0 | 0.00 | 0.0 |  |

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Electropherogram Summary Continued ...



Overall Results for sample 6 : Charlotte A1

Number of peaks found: 62 Corr. Area 1: 569.6
 Noise: 2.2

Peak table for sample 6 : Charlotte A1

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|------|-----------|---------------|-------------------|--------------|----------------------------|
| 1 | 4 | 0.00 | 0.0 | | 34.15 |
| 2 | 6 | 0.00 | 0.0 | | 34.79 |
| 3 | 14 | 0.00 | 0.0 | | 37.11 |
| 4 | 18 | 0.00 | 0.0 | | 38.12 |
| 5 | 29 | 0.00 | 0.0 | | 41.40 |
| 6 | 35 | 125.00 | 5,411.3 | Lower Marker | 43.00 |
| 7 | 41 | 22.27 | 820.4 | | 43.91 |
| 8 | 51 | 26.53 | 790.1 | | 45.33 |
| 9 | 56 | 20.51 | 551.4 | | 45.92 |
| 10 | 63 | 23.52 | 568.4 | | 46.60 |
| 11 | 69 | 21.53 | 472.3 | | 47.29 |
| 12 | 78 | 16.70 | 324.7 | | 48.25 |
| 13 | 103 | 13.89 | 204.5 | | 50.89 |
| 14 | 113 | 13.28 | 178.3 | | 51.81 |
| 15 | 121 | 37.56 | 469.2 | | 52.58 |
| 16 | 131 | 32.69 | 377.4 | | 53.50 |
| 17 | 145 | 17.18 | 179.4 | | 54.77 |
| 18 | 159 | 24.67 | 234.9 | | 56.05 |
| 19 | 170 | 21.79 | 194.0 | | 57.05 |
| 20 | 187 | 17.21 | 139.3 | | 58.61 |
| 21 | 229 | 22.29 | 147.4 | | 62.39 |
| 22 | 247 | 26.19 | 160.4 | | 64.04 |
| 23 | 257 | 42.66 | 251.9 | | 64.86 |
| 24 | 274 | 25.45 | 140.5 | | 66.46 |
| 25 | 280 | 33.69 | 182.6 | | 66.91 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-22\2014-12-22_001.xad


Created: 12/22/2014 10:18:30 AM
 Modified: 12/22/2014 10:50:17 AM

Electropherogram Summary Continued ...

... Peak table for sample 6 : Charlotte A1

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|------|-----------|---------------|-------------------|--------------|----------------------------|
| 26 | 298 | 23.78 | 121.0 | | 68.55 |
| 27 | 313 | 22.16 | 107.3 | | 69.79 |
| 28 | 325 | 37.71 | 175.8 | | 70.74 |
| 29 | 335 | 27.88 | 126.0 | | 71.57 |
| 30 | 347 | 27.88 | 121.7 | | 72.52 |
| 31 | 372 | 19.62 | 79.9 | | 74.53 |
| 32 | 385 | 35.10 | 138.2 | | 75.54 |
| 33 | 390 | 23.98 | 93.2 | | 75.95 |
| 34 | 421 | 18.38 | 66.2 | | 77.95 |
| 35 | 432 | 26.15 | 91.7 | | 78.59 |
| 36 | 449 | 18.31 | 61.8 | | 79.55 |
| 37 | 468 | 27.81 | 90.1 | | 80.60 |
| 38 | 527 | 17.40 | 50.0 | | 83.70 |
| 39 | 536 | 34.10 | 96.3 | | 84.16 |
| 40 | 574 | 24.98 | 65.9 | | 85.94 |
| 41 | 596 | 22.88 | 58.1 | | 86.99 |
| 42 | 632 | 36.35 | 87.2 | | 88.18 |
| 43 | 673 | 52.18 | 117.5 | | 89.50 |
| 44 | 803 | 14.80 | 27.9 | | 91.74 |
| 45 | 838 | 13.79 | 24.9 | | 92.19 |
| 46 | 893 | 20.23 | 34.3 | | 92.92 |
| 47 | 1,057 | 9.46 | 13.6 | | 94.70 |
| 48 | 1,219 | 9.04 | 11.2 | | 95.75 |
| 49 | 1,310 | 8.62 | 10.0 | | 96.34 |
| 50 | 1,430 | 5.30 | 5.6 | | 97.12 |
| 51 | 1,669 | 6.92 | 6.3 | | 98.67 |
| 52 | 1,929 | 3.52 | 2.8 | | 100.36 |
| 53 | 2,041 | 3.43 | 2.5 | | 100.95 |
| 54 | 2,294 | 2.93 | 1.9 | | 101.77 |
| 55 | 2,688 | 3.70 | 2.1 | | 103.05 |
| 56 | 2,955 | 3.32 | 1.7 | | 103.92 |
| 57 | 3,790 | 2.28 | 0.9 | | 105.11 |
| 58 | 4,344 | 3.42 | 1.2 | | 105.84 |
| 59 | 4,864 | 2.68 | 0.8 | | 106.52 |
| 60 | 5,765 | 2.27 | 0.6 | | 107.71 |
| 61 | 7,183 | 2.48 | 0.5 | | 109.53 |
| 62 | 7,940 | 3.69 | 0.7 | | 110.35 |
| 63 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |
| 64 | 12,483 | 0.00 | 0.0 | | 115.28 |

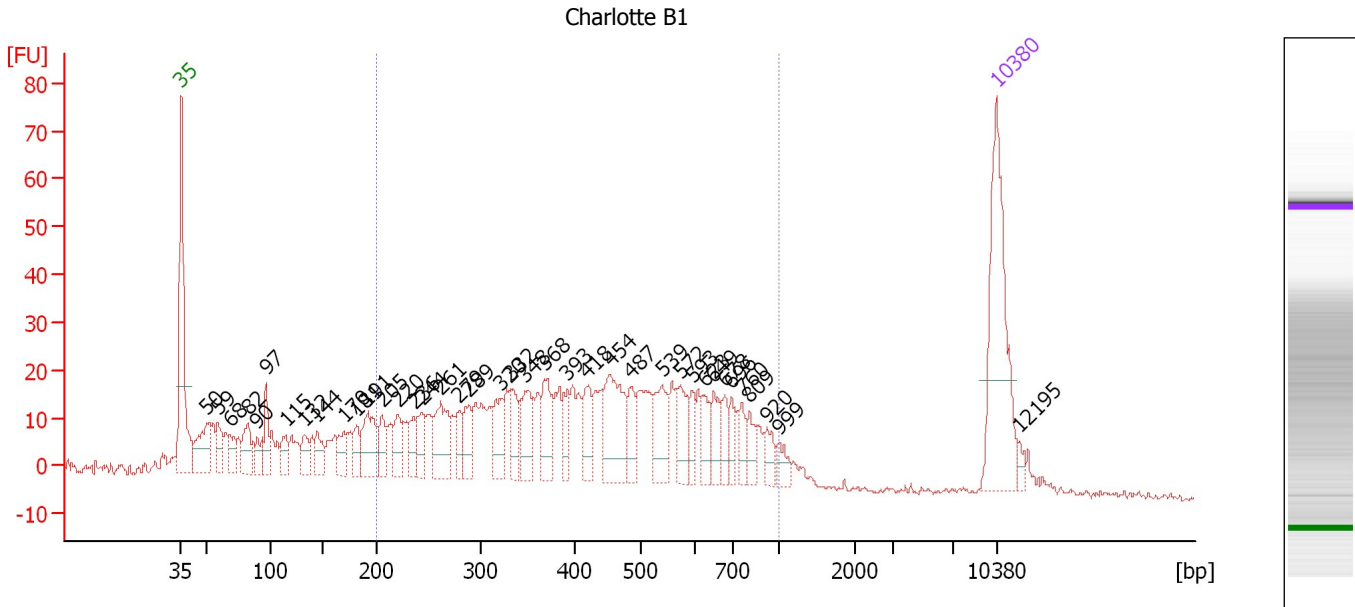
Region table for sample 6 : Charlotte A1

| From [bp] | Average Size [bp] | To [bp] | Corr. Area | % of Total | Size distribution in CV [%] | Conc. [pg/μl] | Molarity [pmol/l] | Color |
|-----------|-------------------|---------|------------|------------|-----------------------------|---------------|-------------------|---|
| 200 | 488 | 1,000 | 569.6 | 84 | 38.1 | 716.35 | 2,756.6 |  |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-22\2014-12-22_001.xad

Created: 12/22/2014 10:18:30 AM
 Modified: 12/22/2014 10:50:17 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : Charlotte B1

Number of peaks found: 39 Corr. Area 1: 782.8
 Noise: 0.7

Peak table for sample 7 : Charlotte B1

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|------|-----------|---------------|-------------------|--------------|----------------------------|
| 1 | 35 | 125.00 | 5,411.3 | Lower Marker | 43.00 |
| 2 | 50 | 39.29 | 1,196.3 | | 45.20 |
| 3 | 59 | 18.14 | 469.1 | | 46.16 |
| 4 | 68 | 16.67 | 371.8 | | 47.17 |
| 5 | 82 | 26.48 | 487.2 | | 48.72 |
| 6 | 90 | 14.67 | 247.0 | | 49.55 |
| 7 | 97 | 20.44 | 320.1 | | 50.28 |
| 8 | 115 | 15.99 | 211.3 | | 51.97 |
| 9 | 132 | 15.88 | 182.9 | | 53.53 |
| 10 | 144 | 16.81 | 176.8 | | 54.67 |
| 11 | 170 | 16.96 | 151.5 | | 57.01 |
| 12 | 181 | 13.20 | 110.4 | | 58.06 |
| 13 | 191 | 37.16 | 294.4 | | 58.98 |
| 14 | 205 | 17.67 | 130.6 | | 60.21 |
| 15 | 220 | 17.99 | 123.8 | | 61.59 |
| 16 | 236 | 14.14 | 91.0 | | 62.96 |
| 17 | 244 | 17.20 | 106.9 | | 63.69 |
| 18 | 261 | 38.74 | 224.9 | | 65.25 |
| 19 | 279 | 14.28 | 77.4 | | 66.90 |
| 20 | 289 | 20.65 | 108.4 | | 67.72 |
| 21 | 320 | 24.68 | 116.7 | | 70.38 |
| 22 | 332 | 21.42 | 97.7 | | 71.34 |
| 23 | 348 | 27.60 | 120.3 | | 72.57 |
| 24 | 368 | 27.79 | 114.5 | | 74.18 |
| 25 | 393 | 14.51 | 56.0 | | 76.19 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-22\2014-12-22_001.xad


Created: 12/22/2014 10:18:30 AM
 Modified: 12/22/2014 10:50:17 AM

Electropherogram Summary Continued ...

... Peak table for sample 7 : Charlotte B1

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|------|-----------|---------------|-------------------|--------------|----------------------------|
| 26 | 418 | 22.38 | 81.1 | | 77.79 |
| 27 | 454 | 53.28 | 178.0 | | 79.81 |
| 28 | 487 | 18.05 | 56.2 | | 81.69 |
| 29 | 539 | 28.96 | 81.4 | | 84.29 |
| 30 | 572 | 22.12 | 58.6 | | 85.85 |
| 31 | 593 | 11.78 | 30.1 | | 86.86 |
| 32 | 623 | 14.52 | 35.3 | | 87.91 |
| 33 | 649 | 15.33 | 35.8 | | 88.74 |
| 34 | 678 | 11.74 | 26.3 | | 89.65 |
| 35 | 696 | 10.41 | 22.6 | | 90.25 |
| 36 | 760 | 10.82 | 21.6 | | 91.16 |
| 37 | 809 | 10.28 | 19.3 | | 91.80 |
| 38 | 920 | 9.85 | 16.2 | | 93.27 |
| 39 | 999 | 8.07 | 12.2 | | 94.32 |
| 40 | ▶ 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |
| 41 | 12,195 | 0.00 | 0.0 | | 114.97 |

Region table for sample 7 : Charlotte B1

| From [bp] | Average Size [bp] | To [bp] | Corr. Area | % of Total | Size distribution in CV [%] | Conc. [pg/μl] | Molarity [pmol/l] | Color |
|-----------|-------------------|---------|------------|------------|-----------------------------|---------------|-------------------|---|
| 200 | 456 | 1,000 | 782.8 | 71 | 38.4 | 776.56 | 3,182.1 |  |

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-22\2014-12-22_001.xad

Created: 12/22/2014 10:18:30 AM
Modified: 12/22/2014 10:50:17 AM

Gel Image

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-22\2014-12-22_001.xad

Created: 12/22/2014 10:18:30 AM
Modified: 12/22/2014 10:50:17 AM

Invalid Samples

Sample 8 has not been run, no results available.

Sample 9 has not been run, no results available.

Sample 10 has not been run, no results available.

Sample 11 has not been run, no results available.

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-22\2014-12-22_001.xad

Created: 12/22/2014 10:18:30 AM
 Modified: 12/22/2014 10:50:17 AM

Run Logbook

| Description | Number | Source | Category | Sub Category | Time | Time Zone | User | Host |
|---|--------|------------|----------|--------------|------------------------|-------------------------------------|----------|----------|
| Run ended on port 1 (Number of wells acquired: 8) | | Instrument | Run | | 12/22/2014 10:48:23 AM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2014-12-22\2014-12-22_001.xad) | | Instrument | Run | | 12/22/2014 10:18:35 AM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Product Number : G2938B | | Instrument | Run | | 12/22/2014 10:18:35 AM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Name : | | Instrument | Run | | 12/22/2014 10:18:35 AM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Vendor : Agilent Technologies | | Instrument | Run | | 12/22/2014 10:18:35 AM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Serial# : DE13701086 | | Instrument | Run | | 12/22/2014 10:18:35 AM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Firmware : C.01.069 | | Instrument | Run | | 12/22/2014 10:18:35 AM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Cartridge : Electrode | | Instrument | Run | | 12/22/2014 10:18:35 AM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |