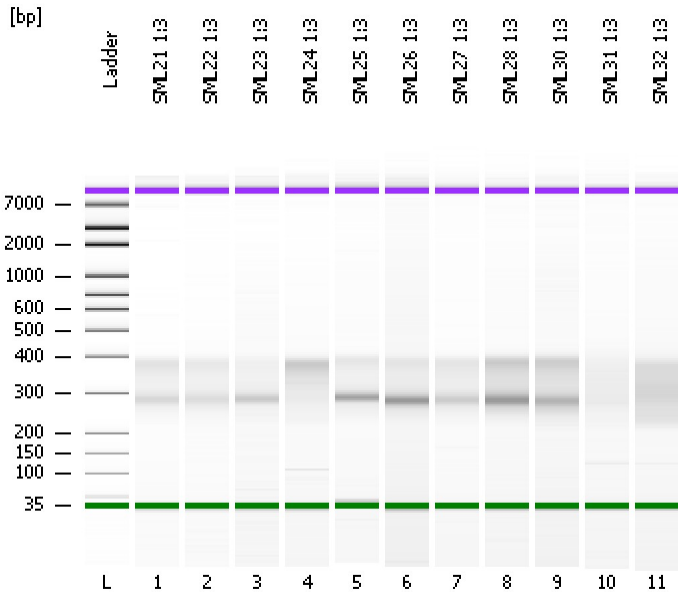


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-08-07\2015-08-07_003.xad

Created: 8/7/2015 3:57:30 PM
Modified: 8/7/2015 4:40:30 PM

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

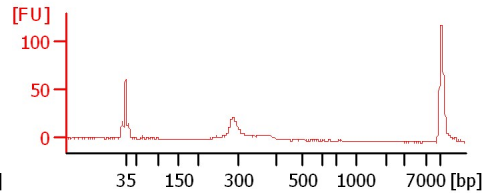
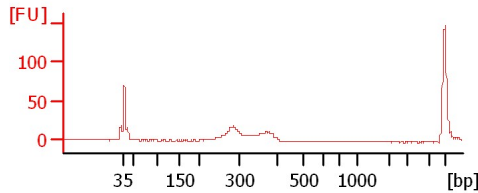
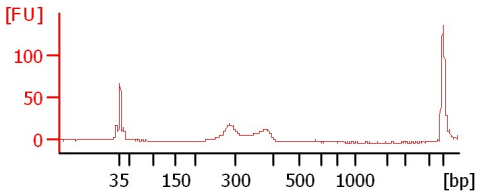
Chip Information:

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

SML21 1:3

SML22 1:3

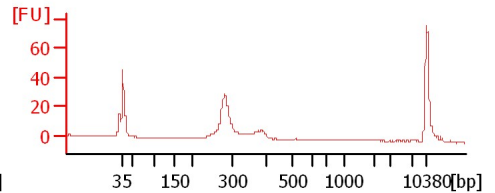
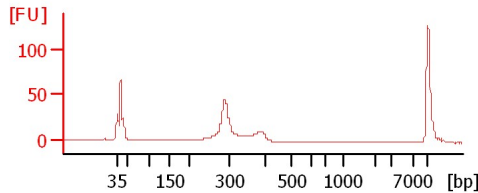
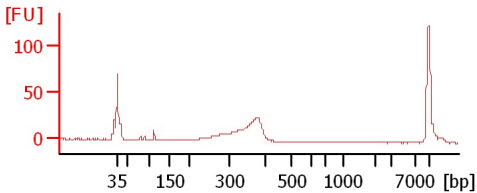
SML23 1:3



SML24 1:3

SML25 1:3

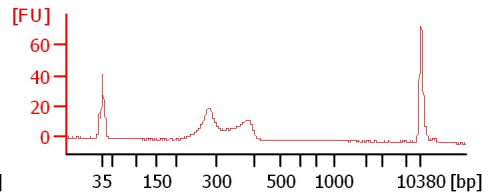
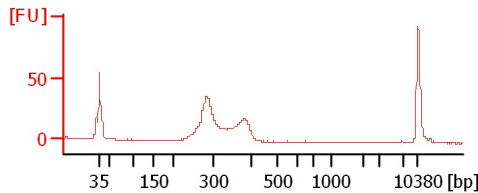
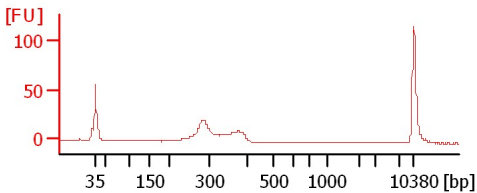
SML26 1:3



SML27 1:3

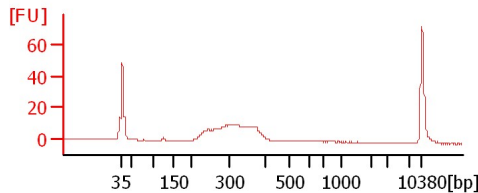
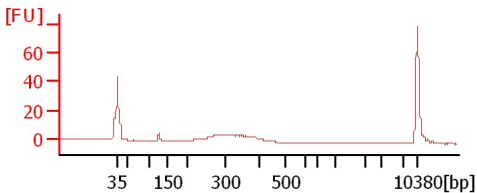
SML28 1:3

SML30 1:3



SML31 1:3

SML32 1:3



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-08-07\2015-08-07_003.xad

Created: 8/7/2015 3:57:30 PM
Modified: 8/7/2015 4:40:30 PM

Electrophoresis File Run Summary (Chip Summary)

| Sample Name | Sample Comment | Rest. Digest | Status | Observation | Result Label | Result Color |
|-------------|----------------|--------------------------|--------|-------------|--------------|--------------|
| SML21 1:3 | | <input type="checkbox"/> | ✓ | | | |
| SML22 1:3 | | <input type="checkbox"/> | ✓ | | | |
| SML23 1:3 | | <input type="checkbox"/> | ✓ | | | |
| SML24 1:3 | | <input type="checkbox"/> | ✓ | | | |
| SML25 1:3 | | <input type="checkbox"/> | ✓ | | | |
| SML26 1:3 | | <input type="checkbox"/> | ✓ | | | |
| SML27 1:3 | | <input type="checkbox"/> | ✓ | | | |
| SML28 1:3 | | <input type="checkbox"/> | ✓ | | | |
| SML30 1:3 | | <input type="checkbox"/> | ✓ | | | |
| SML31 1:3 | | <input type="checkbox"/> | ✓ | | | |
| SML32 1:3 | | <input type="checkbox"/> | ✓ | | | |
| Ladder | | <input type="checkbox"/> | ✓ | | | |

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-08-07\2015-08-07_003.xad

Created: 8/7/2015 3:57:30 PM
Modified: 8/7/2015 4:40:30 PM

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 : 0.1
Width Threshold [s] : 0.6
Baseline Plateau [s] : 0.5

Filter Settings

Filter Width [s] : 0.5
Polynomial Order : 4

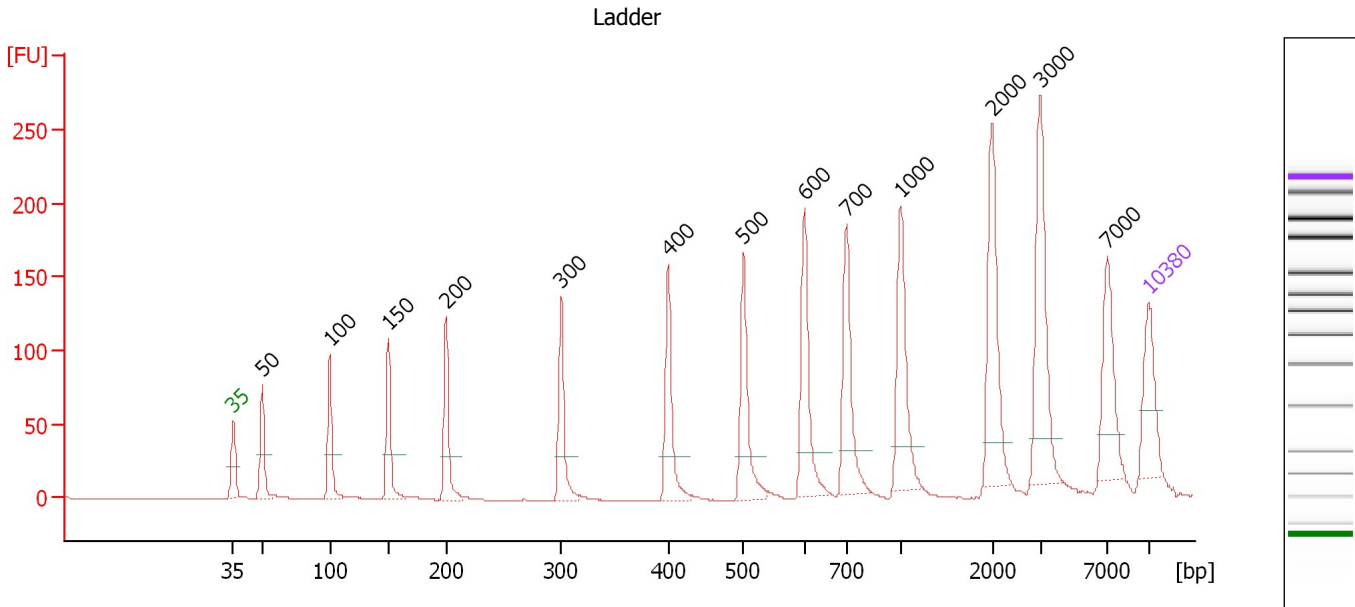
Ladder

| 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 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-08-07\2015-08-07_003.xad

Created: 8/7/2015 3:57:30 PM
 Modified: 8/7/2015 4:40:30 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

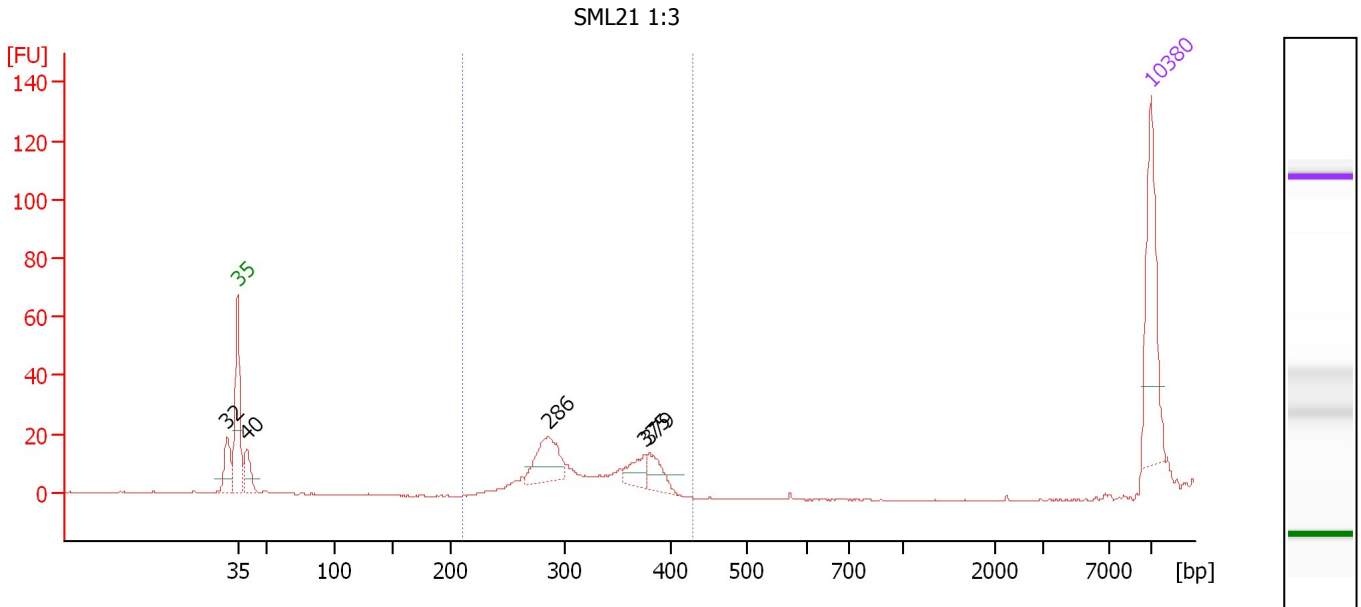
Peak table for Ladder

| 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 | 45.20 |
| 3 | 100 | 150.00 | 2,272.7 | Ladder Peak | 50.38 |
| 4 | 150 | 150.00 | 1,515.2 | Ladder Peak | 54.87 |
| 5 | 200 | 150.00 | 1,136.4 | Ladder Peak | 59.28 |
| 6 | 300 | 150.00 | 757.6 | Ladder Peak | 68.09 |
| 7 | 400 | 150.00 | 568.2 | Ladder Peak | 76.25 |
| 8 | 500 | 150.00 | 454.5 | Ladder Peak | 82.04 |
| 9 | 600 | 150.00 | 378.8 | Ladder Peak | 86.69 |
| 10 | 700 | 150.00 | 324.7 | Ladder Peak | 89.91 |
| 11 | 1,000 | 150.00 | 227.3 | Ladder Peak | 94.03 |
| 12 | 2,000 | 150.00 | 113.6 | Ladder Peak | 101.05 |
| 13 | 3,000 | 150.00 | 75.8 | Ladder Peak | 104.72 |
| 14 | 7,000 | 150.00 | 32.5 | Ladder Peak | 109.86 |
| 15 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-08-07\2015-08-07_003.xad

Created: 8/7/2015 3:57:30 PM
 Modified: 8/7/2015 4:40:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : SML21 1:3

Number of peaks found: 5 Corr. Area 1: 146.9
 Noise: 0.2

Peak table for sample 1 : SML21 1:3

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|------|-----------|---------------|-------------------|--------------|----------------------------|
| 1 | 32 | 0.00 | 0.0 | | 42.18 |
| 2 | 35 | 125.00 | 5,411.3 | Lower Marker | 43.00 |
| 3 | 40 | 34.24 | 1,305.7 | | 43.69 |
| 4 | 286 | 60.90 | 323.0 | | 66.82 |
| 5 | 375 | 22.32 | 90.1 | | 74.22 |
| 6 | 379 | 25.60 | 102.3 | | 74.55 |
| 7 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

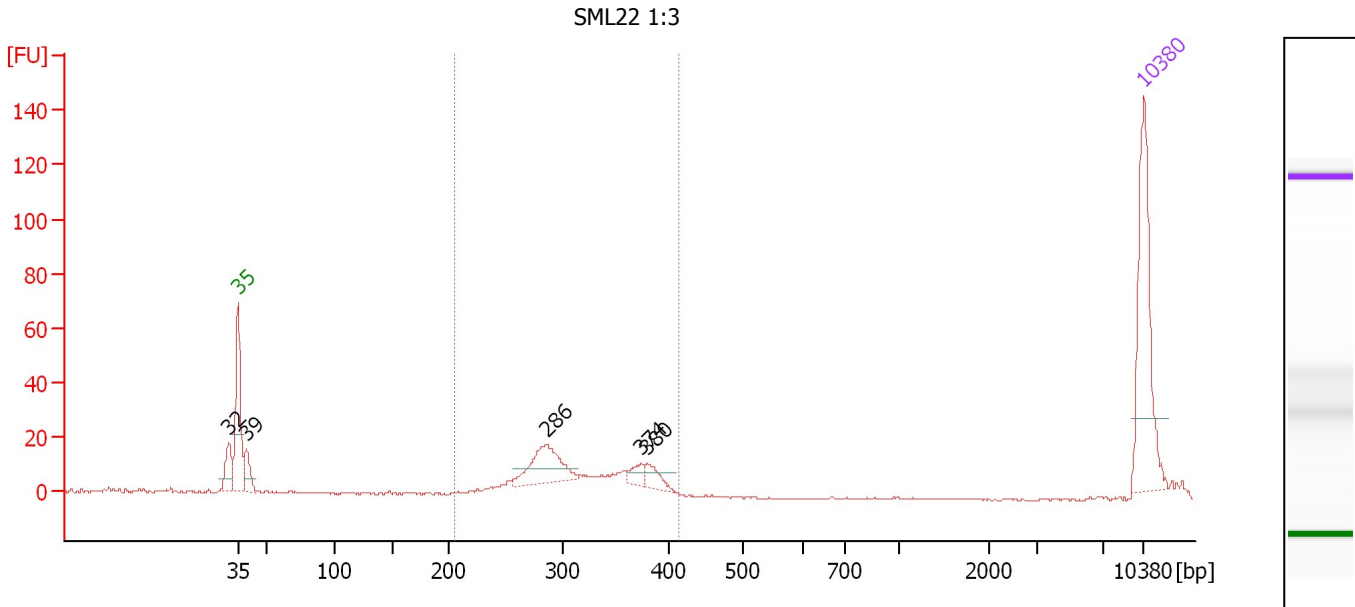
Region table for sample 1 : SML21 1:3

| From [bp] | Average Size [bp] | To [bp] | Corr. Area | Molarity [pmol/l] | Co % of lor Total | Size distribution in CV [%] | Conc. [pg/μl] |
|-----------|-------------------|---------|------------|-------------------|-------------------|-----------------------------|---------------|
| 211 | 322 | 427 | 146.9 | 819.4 | 74 | 13.2 | 170.19 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-08-07\2015-08-07_003.xad

Created: 8/7/2015 3:57:30 PM
 Modified: 8/7/2015 4:40:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : SML22 1:3

Number of peaks found: 5 Corr. Area 1: 169.5
 Noise: 0.3

Peak table for sample 2 : SML22 1:3

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|------|-----------|---------------|-------------------|--------------|----------------------------|
| 1 | 32 | 0.00 | 0.0 | | 42.26 |
| 2 | 35 | 125.00 | 5,411.3 | Lower Marker | 43.00 |
| 3 | 39 | 23.24 | 891.8 | | 43.66 |
| 4 | 286 | 52.48 | 278.5 | | 66.81 |
| 5 | 374 | 9.94 | 40.2 | | 74.15 |
| 6 | 380 | 12.98 | 51.7 | | 74.64 |
| 7 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

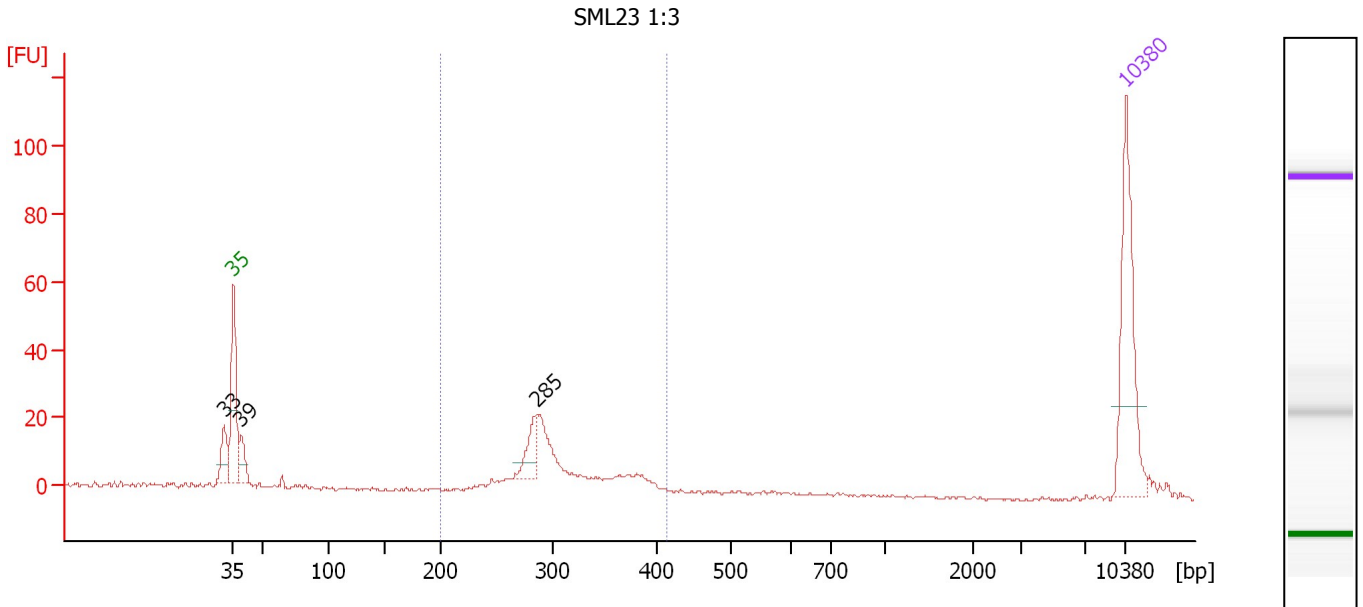
Region table for sample 2 : SML22 1:3

| From [bp] | Average Size [bp] | To [bp] | Corr. Area | Molarity [pmol/l] | Co % of lor Total | Size distribution in CV [%] | Conc. [pg/μl] |
|-----------|-------------------|---------|------------|-------------------|-------------------|-----------------------------|---------------|
| 205 | 317 | 414 | 169.5 | 712.3 | 71 | 13.9 | 145.21 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-08-07\2015-08-07_003.xad

Created: 8/7/2015 3:57:30 PM
 Modified: 8/7/2015 4:40:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : SML23 1:3

Number of peaks found: 3 Corr. Area 1: 124.6
 Noise: 0.4

Peak table for sample 3 : SML23 1:3

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|------|-----------|---------------|-------------------|--------------|----------------------------|
| 1 | 33 | 0.00 | 0.0 | | 42.29 |
| 2 | 35 | 125.00 | 5,411.3 | Lower Marker | 43.00 |
| 3 | 39 | 23.38 | 902.1 | | 43.63 |
| 4 | 285 | 28.84 | 153.4 | | 66.75 |
| 5 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

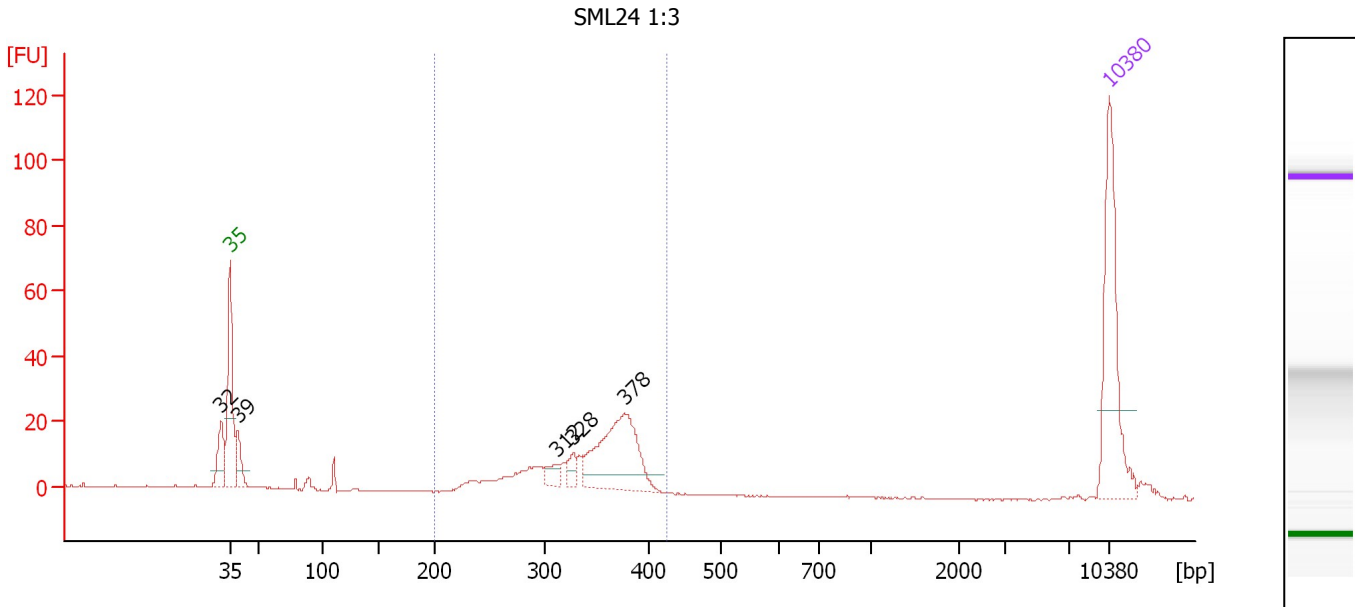
Region table for sample 3 : SML23 1:3

| From [bp] | Average Size [bp] | To [bp] | Corr. Area | Molarity [pmol/l] | Co % of Ior Total | Size distribution in CV [%] | Conc. [pg/μl] |
|-----------|-------------------|---------|------------|-------------------|-------------------|-----------------------------|---------------|
| 200 | 307 | 412 | 124.6 | 671.3 | 70 | 12.3 | 133.70 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-08-07\2015-08-07_003.xad

Created: 8/7/2015 3:57:30 PM
 Modified: 8/7/2015 4:40:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : SML24 1:3

Number of peaks found: 5 Corr. Area 1: 215.1
 Noise: 0.1

Peak table for sample 4 : SML24 1:3

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|------|-----------|---------------|-------------------|--------------|----------------------------|
| 1 | 32 | 0.00 | 0.0 | | 42.28 |
| 2 | 35 | 125.00 | 5,411.3 | Lower Marker | 43.00 |
| 3 | 39 | 27.45 | 1,065.1 | | 43.59 |
| 4 | 312 | 10.96 | 53.2 | | 69.06 |
| 5 | 328 | 10.08 | 46.6 | | 70.34 |
| 6 | 378 | 103.01 | 413.4 | | 74.41 |
| 7 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

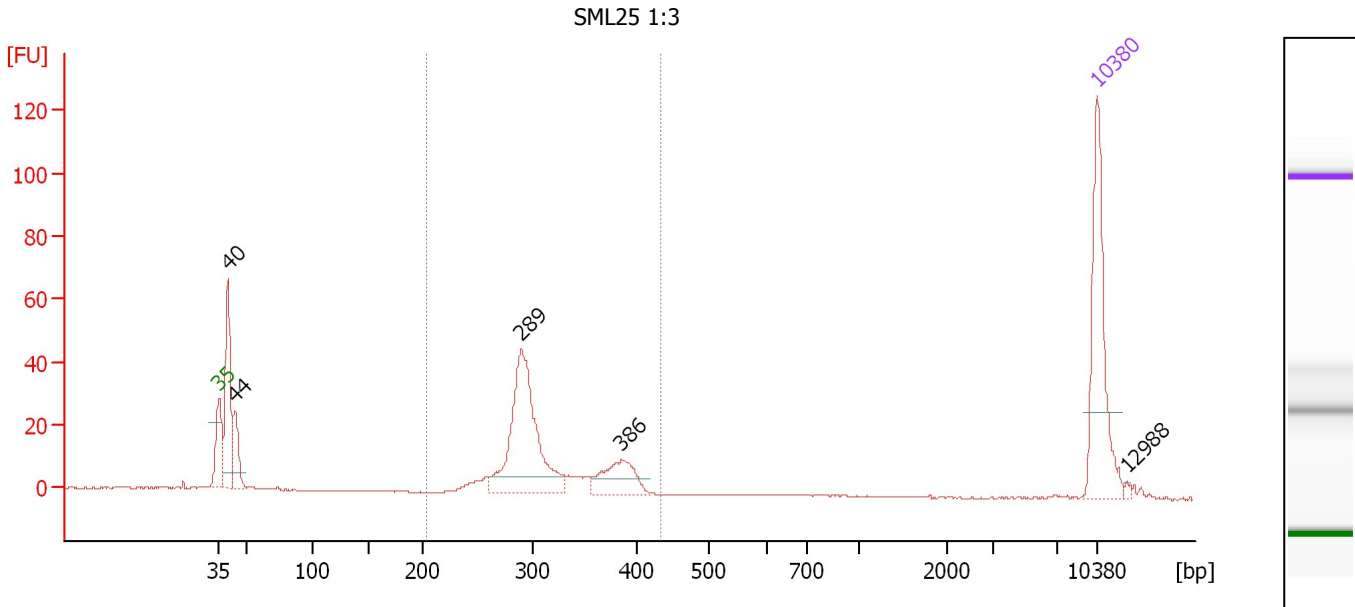
Region table for sample 4 : SML24 1:3

| From [bp] | Average Size [bp] | To [bp] | Corr. Area | Molarity [pmol/l] | Co % of lor Total | Size distribution in CV [%] | Conc. [pg/μl] |
|-----------|-------------------|---------|------------|-------------------|-------------------|-----------------------------|---------------|
| 200 | 339 | 425 | 215.1 | 907.4 | 75 | 13.0 | 197.99 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-08-07\2015-08-07_003.xad

Created: 8/7/2015 3:57:30 PM
 Modified: 8/7/2015 4:40:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : SML25 1:3

Number of peaks found: 5 Corr. Area 1: 238.9
 Noise: 0.1

Peak table for sample 5 : SML25 1:3

| 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 | 40 | 98.69 | 3,745.5 | | 43.72 |
| 3 | 44 | 37.16 | 1,288.9 | | 44.28 |
| 4 | 289 | 162.38 | 851.5 | | 67.11 |
| 5 | 386 | 38.99 | 153.0 | | 75.11 |
| 6 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |
| 7 | 12,988 | 0.00 | 0.0 | | 115.42 |

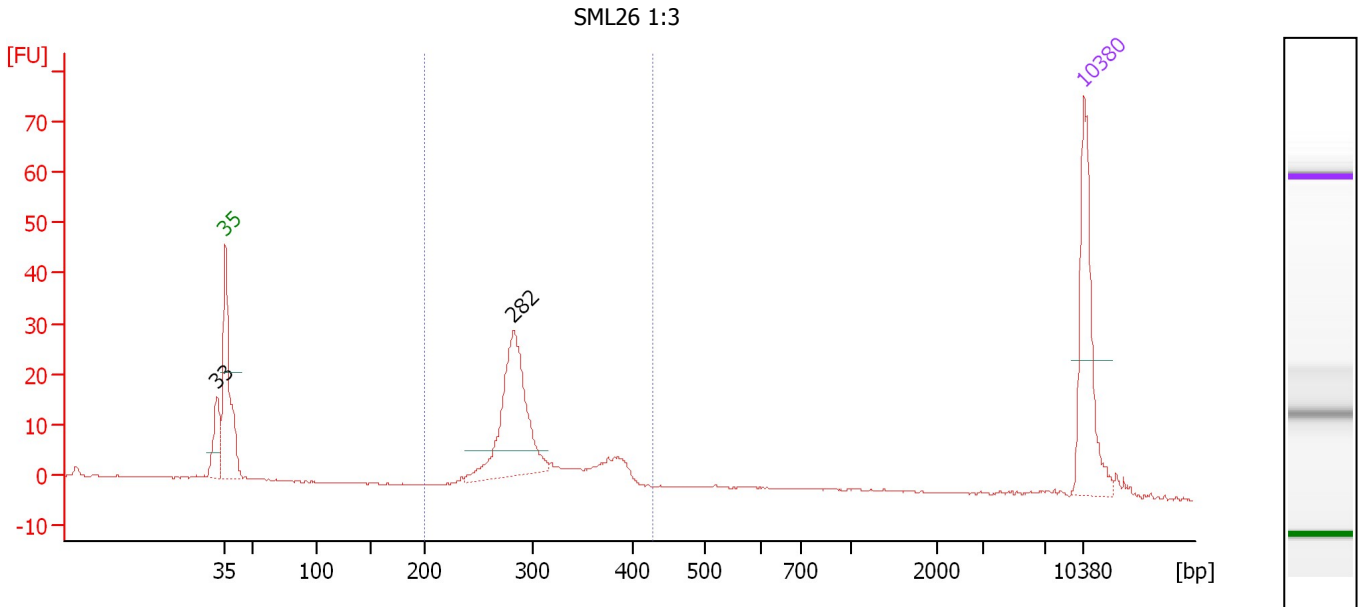
Region table for sample 5 : SML25 1:3

| From [bp] | Average Size [bp] | To [bp] | Corr. Area | Molarity [pmol/l] | Co % of lor Total | Size distribution in CV [%] | Conc. [pg/μl] |
|-----------|-------------------|---------|------------|-------------------|-------------------|-----------------------------|---------------|
| 202 | 312 | 435 | 238.9 | 1,108.3 | 65 | 13.3 | 224.15 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-08-07\2015-08-07_003.xad

Created: 8/7/2015 3:57:30 PM
 Modified: 8/7/2015 4:40:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : SML26 1:3

Number of peaks found: 2 Corr. Area 1: 149.6
 Noise: 0.1

Peak table for sample 6 : SML26 1:3

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|------|-----------|---------------|-------------------|--------------|----------------------------|
| 1 | 33 | 0.00 | 0.0 | | 42.30 |
| 2 | 35 | 125.00 | 5,411.3 | Lower Marker | 43.00 |
| 3 | 282 | 162.03 | 871.4 | | 66.48 |
| 4 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

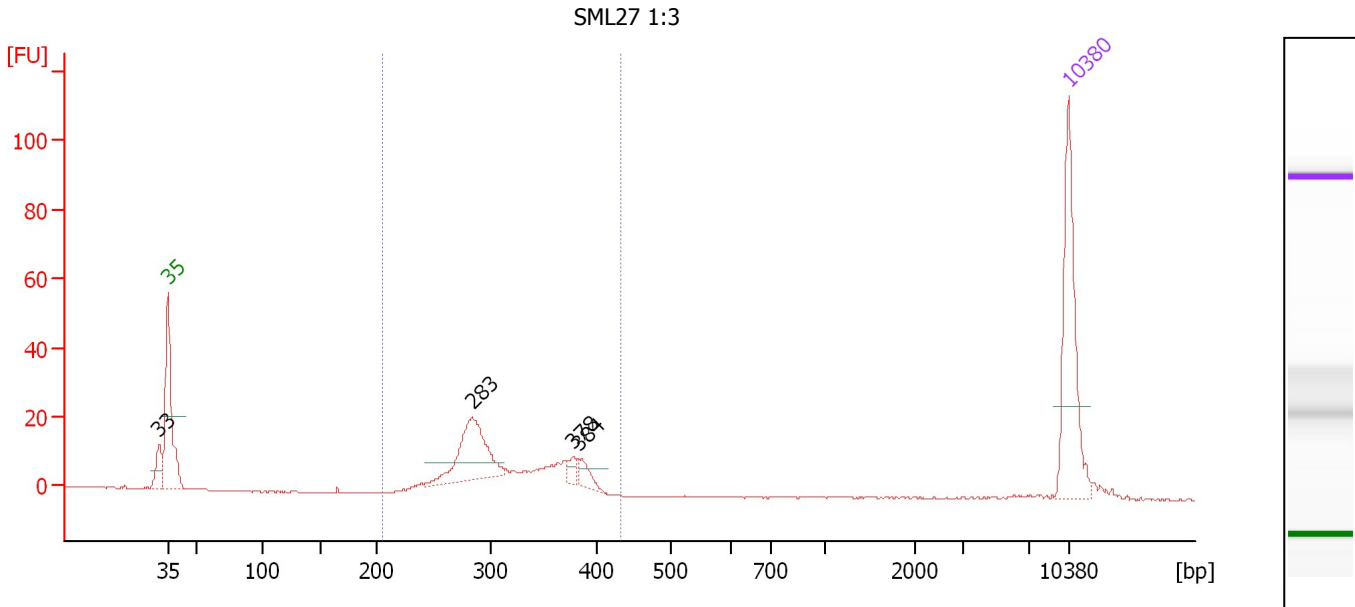
Region table for sample 6 : SML26 1:3

| From [bp] | Average Size [bp] | To [bp] | Corr. Area | Molarity [pmol/l] | Co % of Ior Total | Size distribution in CV [%] | Conc. [pg/μl] |
|-----------|-------------------|---------|------------|-------------------|-------------------|-----------------------------|---------------|
| 200 | 302 | 428 | 149.6 | 1,169.3 | 82 | 12.8 | 229.12 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-08-07\2015-08-07_003.xad

Created: 8/7/2015 3:57:30 PM
 Modified: 8/7/2015 4:40:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : SML27 1:3

Number of peaks found: 4 Corr. Area 1: 174.9
 Noise: 0.1

Peak table for sample 7 : SML27 1:3

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|------|-----------|---------------|-------------------|--------------|----------------------------|
| 1 | 33 | 0.00 | 0.0 | | 42.30 |
| 2 | 35 | 125.00 | 5,411.3 | Lower Marker | 43.00 |
| 3 | 283 | 82.24 | 439.9 | | 66.61 |
| 4 | 378 | 8.18 | 32.7 | | 74.48 |
| 5 | 384 | 11.81 | 46.6 | | 74.97 |
| 6 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

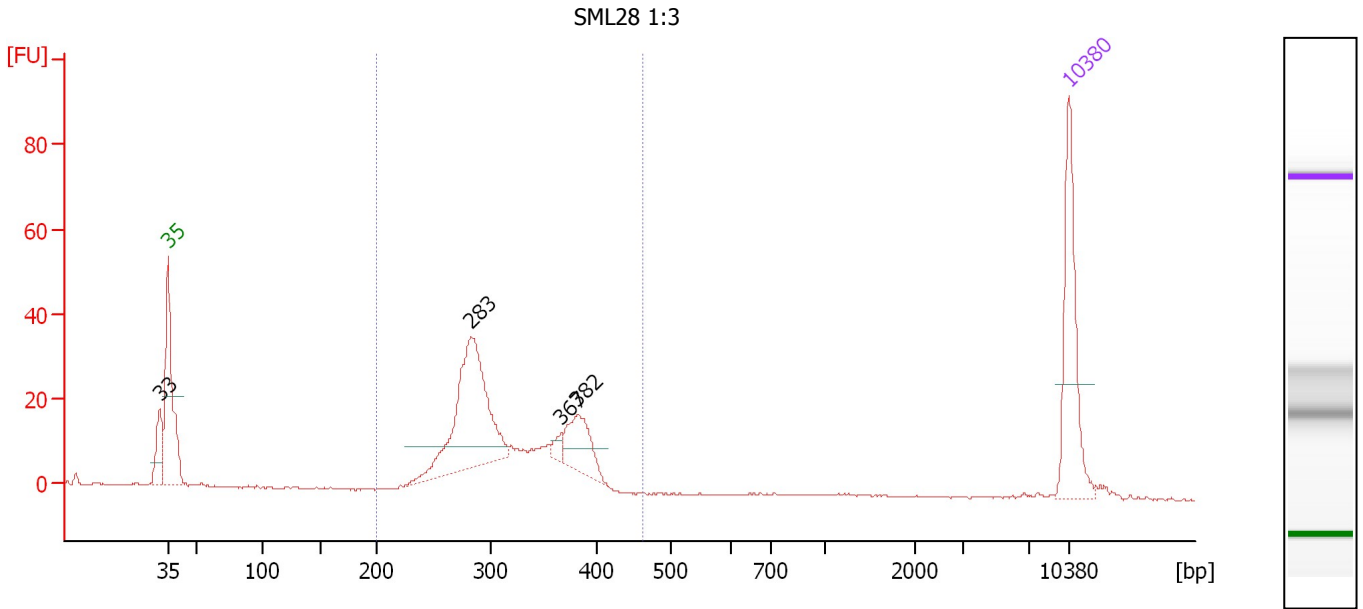
Region table for sample 7 : SML27 1:3

| From [bp] | Average Size [bp] | To [bp] | Corr. Area | Molarity [pmol/l] | Co % of lor Total | Size distribution in CV [%] | Conc. [pg/μl] |
|-----------|-------------------|---------|------------|-------------------|-------------------|-----------------------------|---------------|
| 205 | 316 | 434 | 174.9 | 974.0 | 88 | 13.9 | 198.28 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-08-07\2015-08-07_003.xad

Created: 8/7/2015 3:57:30 PM
 Modified: 8/7/2015 4:40:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : SML28 1:3

Number of peaks found: 4 Corr. Area 1: 312.4
 Noise: 0.2

Peak table for sample 8 : SML28 1:3

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|------|-----------|---------------|-------------------|--------------|----------------------------|
| 1 | 33 | 0.00 | 0.0 | | 42.34 |
| 2 | 35 | 125.00 | 5,411.3 | Lower Marker | 43.00 |
| 3 | 283 | 192.46 | 1,031.3 | | 66.57 |
| 4 | 367 | 8.68 | 35.9 | | 73.54 |
| 5 | 382 | 48.31 | 191.6 | | 74.78 |
| 6 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

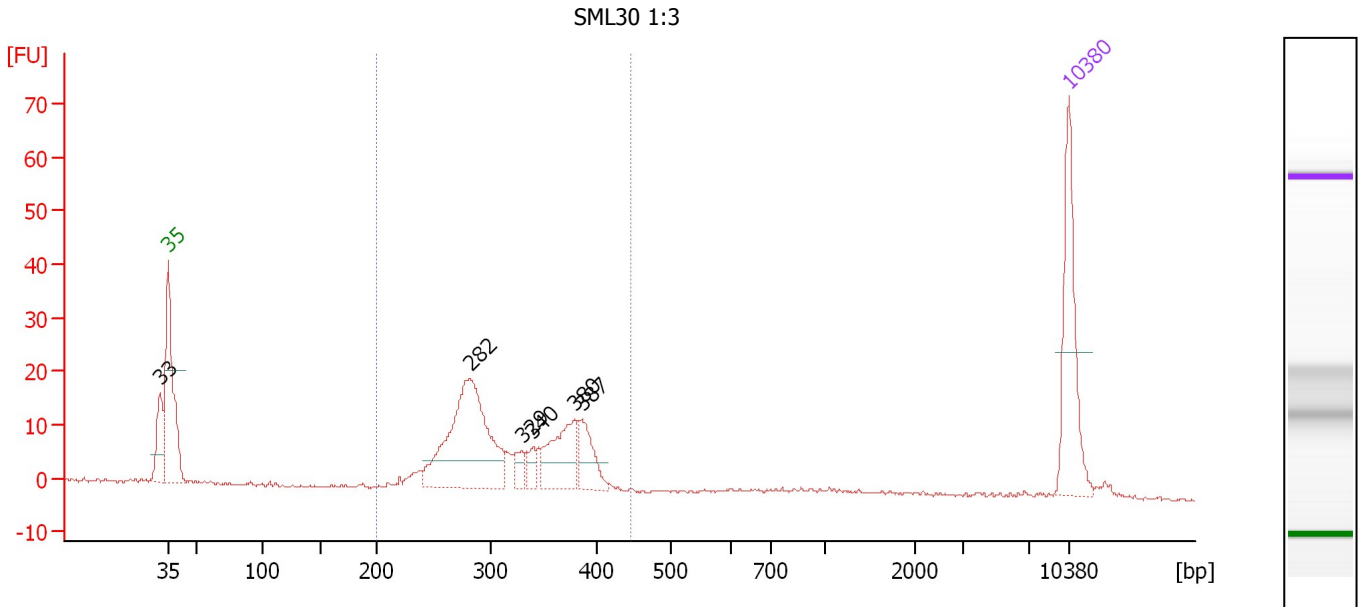
Region table for sample 8 : SML28 1:3

| From [bp] | Average Size [bp] | To [bp] | Corr. Area | Molarity [pmol/l] | Co % of Ior Total | Size distribution in CV [%] | Conc. [pg/μl] |
|-----------|-------------------|---------|------------|-------------------|-------------------|-----------------------------|---------------|
| 200 | 316 | 463 | 312.4 | 2,131.4 | 89 | 14.6 | 432.86 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-08-07\2015-08-07_003.xad

Created: 8/7/2015 3:57:30 PM
 Modified: 8/7/2015 4:40:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : SML30 1:3

Number of peaks found: 6 Corr. Area 1: 206.8
 Noise: 0.3

Peak table for sample 9 : SML30 1:3

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|------|-----------|---------------|-------------------|--------------|----------------------------|
| 1 | 33 | 0.00 | 0.0 | | 42.38 |
| 2 | 35 | 125.00 | 5,411.3 | Lower Marker | 43.00 |
| 3 | 282 | 203.92 | 1,096.6 | | 66.48 |
| 4 | 329 | 14.18 | 65.2 | | 70.49 |
| 5 | 340 | 14.21 | 63.3 | | 71.37 |
| 6 | 380 | 64.06 | 255.7 | | 74.59 |
| 7 | 387 | 38.18 | 149.6 | | 75.16 |
| 8 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

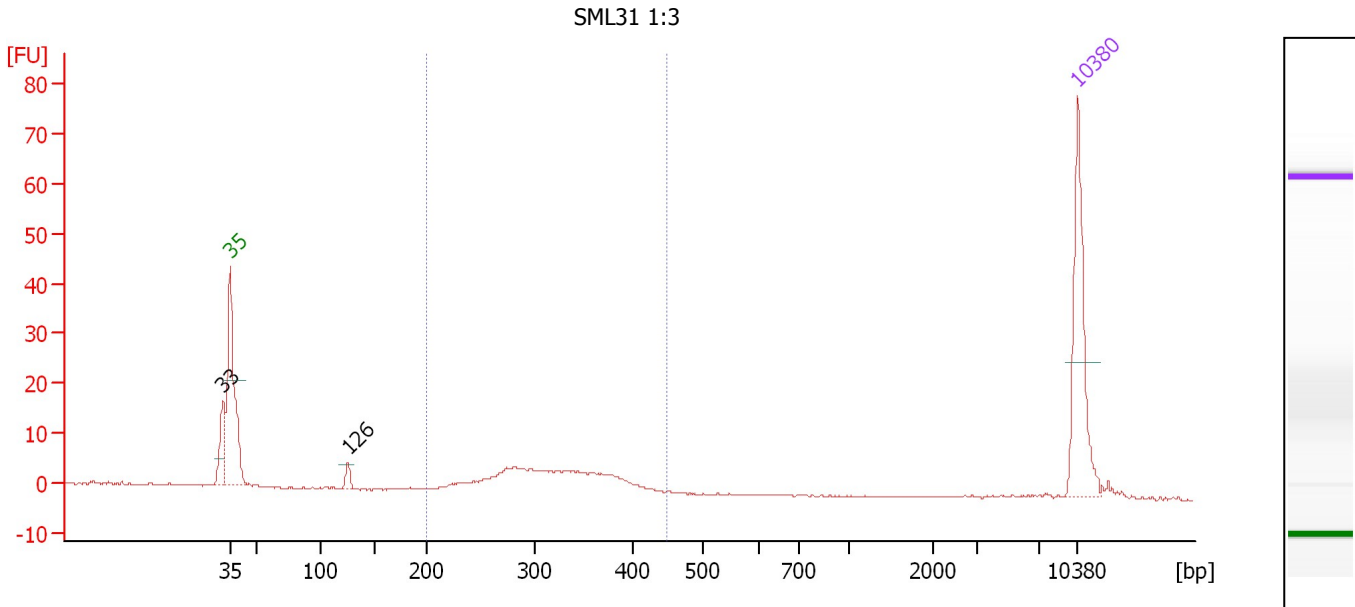
Region table for sample 9 : SML30 1:3

| From [bp] | Average Size [bp] | To [bp] | Corr. Area | Molarity [pmol/l] | Co % of Ior Total | Size distribution in CV [%] | Conc. [pg/μl] |
|-----------|-------------------|---------|------------|-------------------|-------------------|-----------------------------|---------------|
| 200 | 318 | 446 | 206.8 | 1,812.3 | 84 | 15.4 | 368.35 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-08-07\2015-08-07_003.xad

Created: 8/7/2015 3:57:30 PM
 Modified: 8/7/2015 4:40:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : SML31 1:3

Number of peaks found: 2 Corr. Area 1: 72.0
 Noise: 0.1

Peak table for sample 10 : SML31 1:3

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|------|-----------|---------------|-------------------|--------------|----------------------------|
| 1 | 33 | 0.00 | 0.0 | | 42.43 |
| 2 | 35 | 125.00 | 5,411.3 | Lower Marker | 43.00 |
| 3 | 126 | 9.97 | 119.7 | | 52.73 |
| 4 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

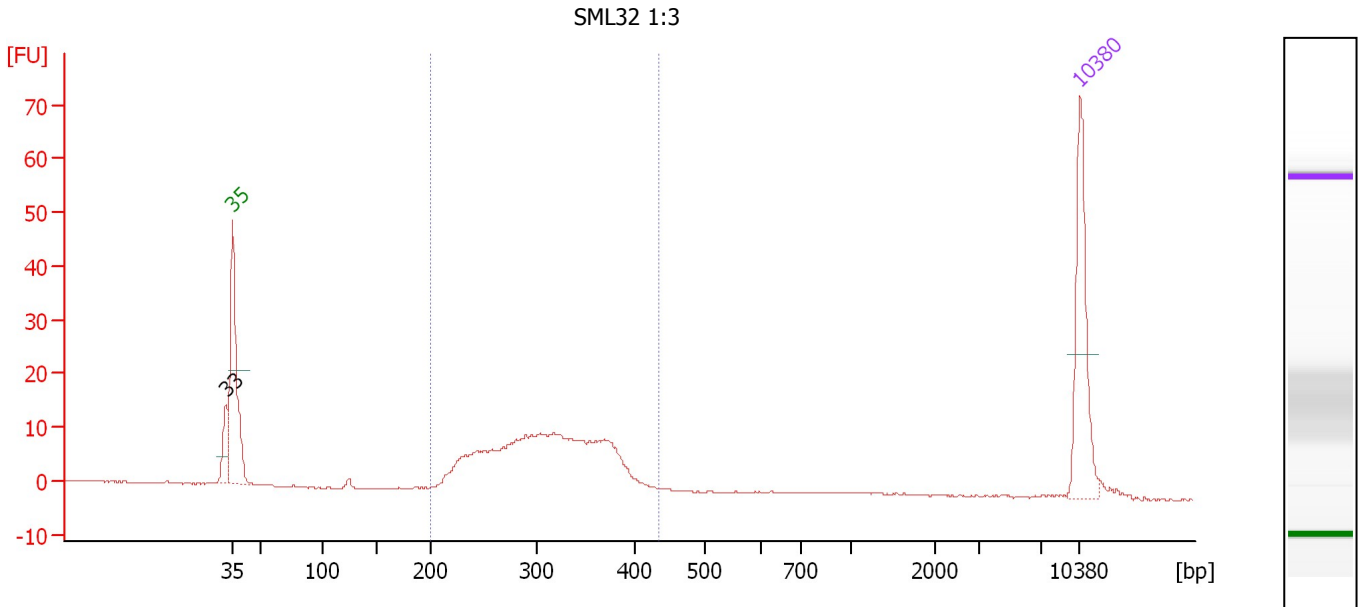
Region table for sample 10 : SML31 1:3

| From [bp] | Average Size [bp] | To [bp] | Corr. Area | Molarity [pmol/l] | Co % of lor Total | Size distribution in CV [%] | Conc. [pg/μl] |
|-----------|-------------------|---------|------------|-------------------|-------------------|-----------------------------|---------------|
| 200 | 318 | 447 | 72.0 | 620.1 | 70 | 15.2 | 126.27 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-08-07\2015-08-07_003.xad

Created: 8/7/2015 3:57:30 PM
 Modified: 8/7/2015 4:40:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : SML32 1:3

Number of peaks found: 1 Corr. Area 1: 185.5
 Noise: 0.1

Peak table for sample 11 : SML32 1:3

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|------|-----------|---------------|-------------------|--------------|----------------------------|
| 1 | 33 | 0.00 | 0.0 | | 42.43 |
| 2 | 35 | 125.00 | 5,411.3 | Lower Marker | 43.00 |
| 3 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

Region table for sample 11 : SML32 1:3

| From [bp] | Average Size [bp] | To [bp] | Corr. Area | Molarity [pmol/l] | Co % of Ior Total | Size distribution in CV [%] | Conc. [pg/μl] |
|-----------|-------------------|---------|------------|-------------------|-------------------|-----------------------------|---------------|
| 200 | 311 | 435 | 185.5 | 1,700.7 | 86 | 15.9 | 337.52 |

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Gel Image

