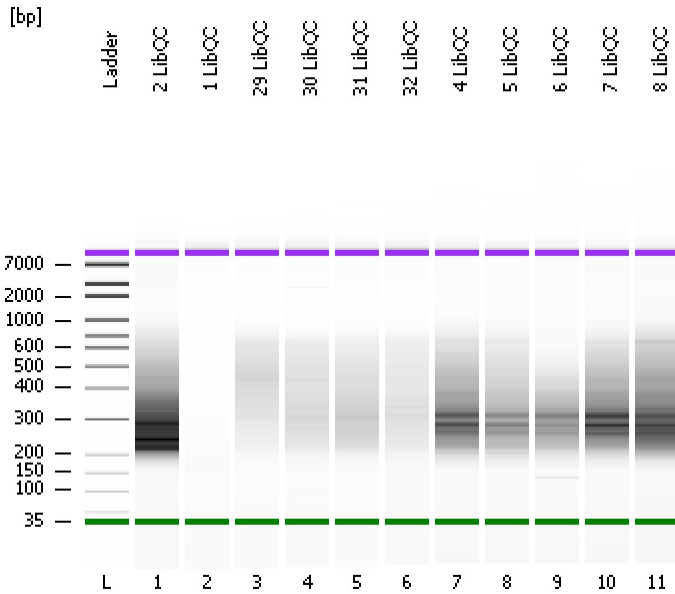


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-08\2019-10-08_003.xad

Created: 10/8/2019 2:37:10 PM
Modified: 10/8/2019 3:18:30 PM

Electrophoresis File Run Summary



Instrument Information:

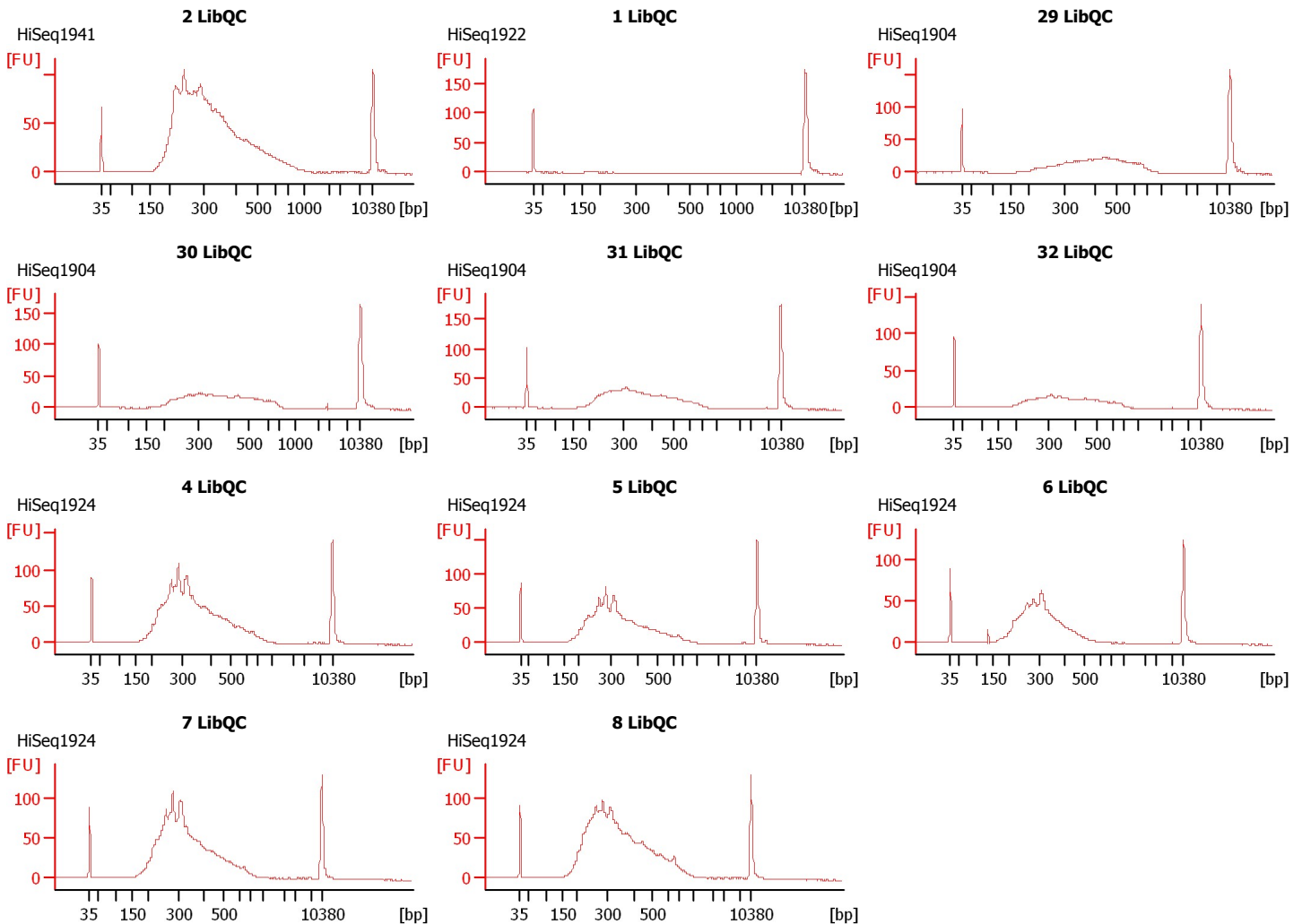
Instrument Name: DE34903152 Firmware: C.01.069
Serial#: DE34903152 Type: G2938C

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:



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-08\2019-10-08_003.xad

Created: 10/8/2019 2:37:10 PM
 Modified: 10/8/2019 3:18:30 PM

Electrophoresis File Run Summary (Chip Summary)

| Sample Name | Sample Comment | Rest. Digest | Status | Observation | Result Label | Result Color |
|-------------|----------------|--------------------------|--------|-------------|--------------|--------------|
| 2 LibQC | HiSeq1941 | <input type="checkbox"/> | ✓ | | | |
| 1 LibQC | HiSeq1922 | <input type="checkbox"/> | ✓ | | | |
| 29 LibQC | HiSeq1904 | <input type="checkbox"/> | ✓ | | | |
| 30 LibQC | HiSeq1904 | <input type="checkbox"/> | ✓ | | | |
| 31 LibQC | HiSeq1904 | <input type="checkbox"/> | ✓ | | | |
| 32 LibQC | HiSeq1904 | <input type="checkbox"/> | ✓ | | | |
| 4 LibQC | HiSeq1924 | <input type="checkbox"/> | ✓ | | | |
| 5 LibQC | HiSeq1924 | <input type="checkbox"/> | ✓ | | | |
| 6 LibQC | HiSeq1924 | <input type="checkbox"/> | ✓ | | | |
| 7 LibQC | HiSeq1924 | <input type="checkbox"/> | ✓ | | | |
| 8 LibQC | HiSeq1924 | <input type="checkbox"/> | ✓ | | | |
| Ladder | | <input type="checkbox"/> | ✓ | | | |

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-08\2019-10-08_003.xad

Created: 10/8/2019 2:37:10 PM
Modified: 10/8/2019 3:18:30 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

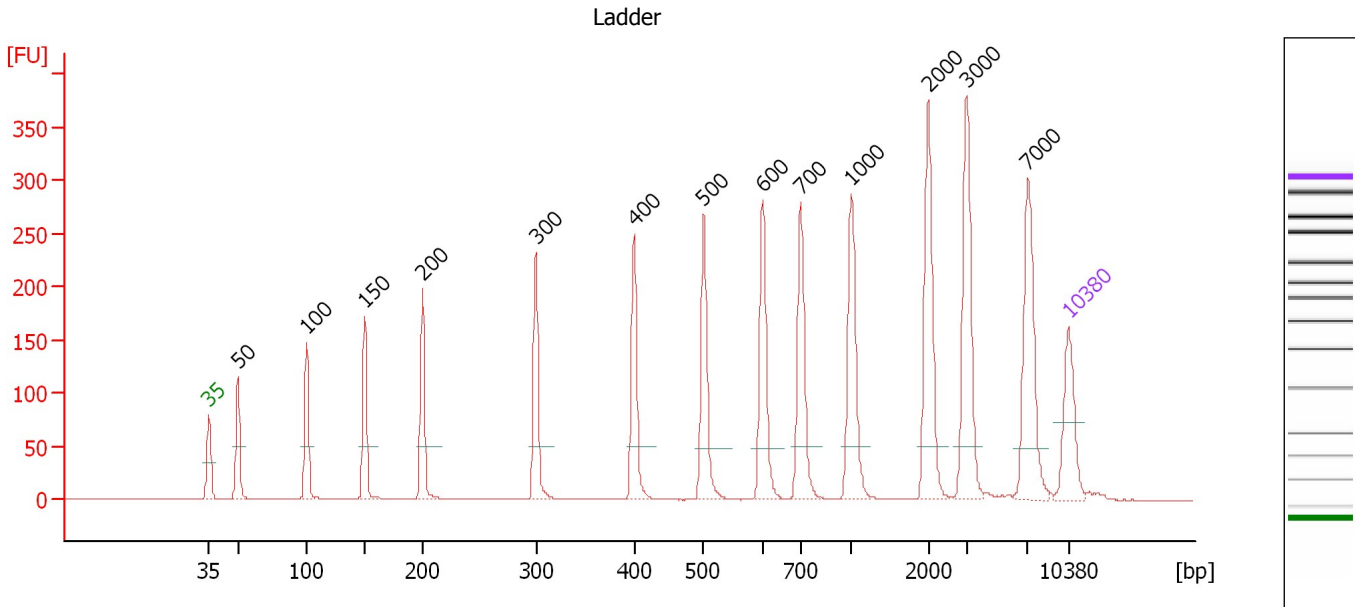
Ladder

| 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:\... bioanalyzer\2100 expert\data\2019-10-08\2019-10-08_003.xad

Created: 10/8/2019 2:37:10 PM
 Modified: 10/8/2019 3:18:30 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.3

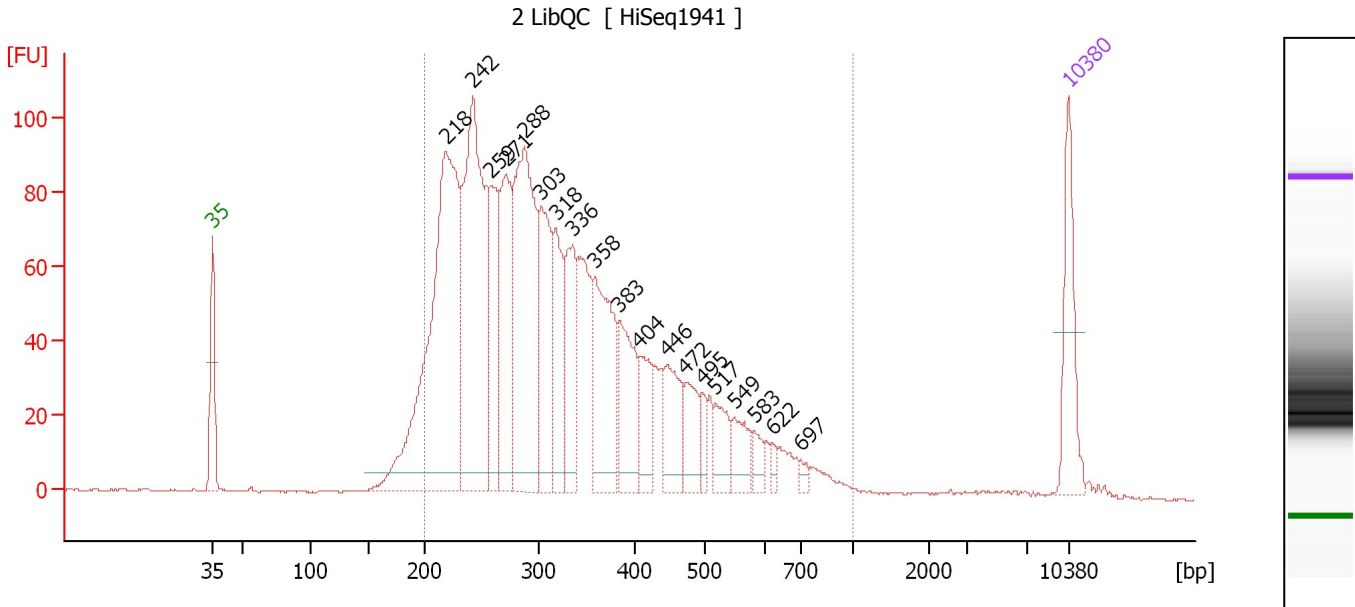
Peak table for Ladder

| 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 | 45.39 |
| 3 | 100 | 150.00 | 2,272.7 | Ladder Peak | 50.95 |
| 4 | 150 | 150.00 | 1,515.2 | Ladder Peak | 55.68 |
| 5 | 200 | 150.00 | 1,136.4 | Ladder Peak | 60.41 |
| 6 | 300 | 150.00 | 757.6 | Ladder Peak | 69.62 |
| 7 | 400 | 150.00 | 568.2 | Ladder Peak | 77.61 |
| 8 | 500 | 150.00 | 454.5 | Ladder Peak | 83.30 |
| 9 | 600 | 150.00 | 378.8 | Ladder Peak | 88.12 |
| 10 | 700 | 150.00 | 324.7 | Ladder Peak | 91.20 |
| 11 | 1,000 | 150.00 | 227.3 | Ladder Peak | 95.33 |
| 12 | 2,000 | 150.00 | 113.6 | Ladder Peak | 101.58 |
| 13 | 3,000 | 150.00 | 75.8 | Ladder Peak | 104.71 |
| 14 | 7,000 | 150.00 | 32.5 | Ladder Peak | 109.70 |
| 15 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-08\2019-10-08_003.xad

Created: 10/8/2019 2:37:10 PM
 Modified: 10/8/2019 3:18:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : 2 LibQC

Number of peaks found: 19 Corr. Area 1: 2,327.1
 Noise: 0.3

Peak table for sample 1 : 2 LibQC

| 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 | 218 | 631.47 | 4,381.7 | | 62.10 |
| 3 | 242 | 460.42 | 2,882.2 | | 64.28 |
| 4 | 259 | 146.87 | 860.5 | | 65.81 |
| 5 | 271 | 182.78 | 1,020.3 | | 66.99 |
| 6 | 288 | 358.74 | 1,887.4 | | 68.51 |
| 7 | 303 | 174.87 | 874.2 | | 69.87 |
| 8 | 318 | 109.46 | 520.9 | | 71.09 |
| 9 | 336 | 121.43 | 547.8 | | 72.48 |
| 10 | 358 | 173.51 | 733.9 | | 74.27 |
| 11 | 383 | 110.83 | 438.1 | | 76.28 |
| 12 | 404 | 67.43 | 252.8 | | 77.85 |
| 13 | 446 | 77.28 | 262.8 | | 80.20 |
| 14 | 472 | 55.93 | 179.7 | | 81.69 |
| 15 | 495 | 21.35 | 65.3 | | 83.04 |
| 16 | 517 | 41.91 | 122.8 | | 84.13 |
| 17 | 549 | 42.04 | 116.0 | | 85.65 |
| 18 | 583 | 20.10 | 52.2 | | 87.31 |
| 19 | 622 | 9.05 | 22.1 | | 88.79 |
| 20 | 697 | 8.17 | 17.8 | | 91.11 |
| 21 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

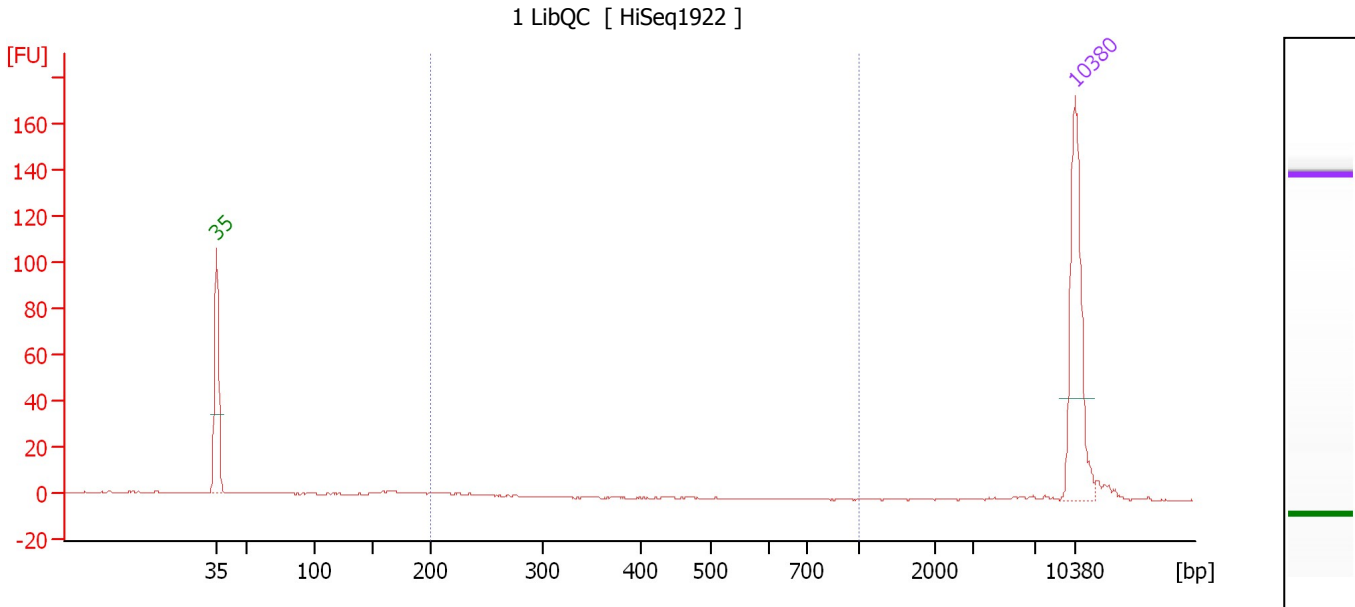
Region table for sample 1 : 2 LibQC

| From [bp] | To [bp] | Average Size [bp] | Conc. [pg/μl] | Corr. Area | Molarity [pmol/l] | Co % of lor Total | Size distribution in CV [%] |
|-----------|---------|-------------------|---------------|------------|-------------------|-------------------|-----------------------------|
| 200 | 1,000 | 339 | 3,000.29 | 2,327.1 | 15,246.5 | 94 | 35.4 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-08\2019-10-08_003.xad

Created: 10/8/2019 2:37:10 PM
 Modified: 10/8/2019 3:18:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : 1 LibQC

Number of peaks found: 0 Corr. Area 1: 3.9
 Noise: 0.2

Peak table for sample 2 : 1 LibQC

| 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 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

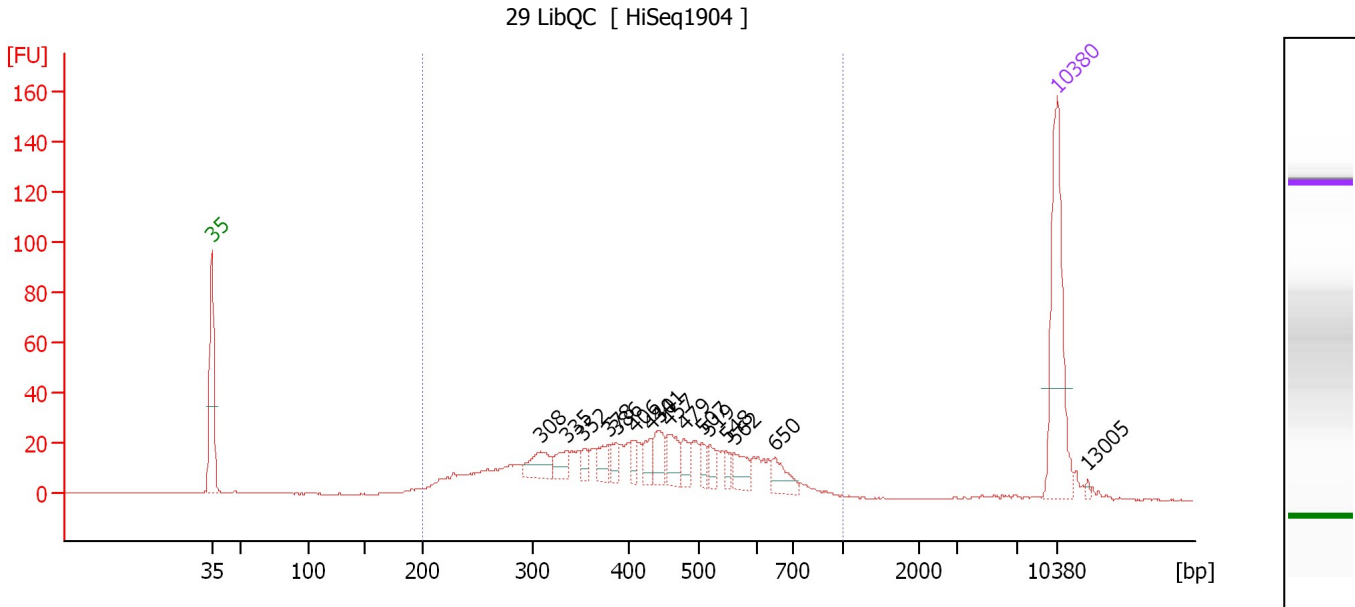
Region table for sample 2 : 1 LibQC

| From [bp] | To [bp] | Average Size [bp] | Conc. [pg/μl] | Corr. Area | Molarity [pmol/l] | Co % of lor Total | Size distribution in CV [%] |
|-----------|---------|-------------------|---------------|------------|-------------------|-------------------|-----------------------------|
| 200 | 1,000 | 220 | 3.08 | 3.9 | 21.3 | 10 | 6.6 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-08\2019-10-08_003.xad

Created: 10/8/2019 2:37:10 PM
 Modified: 10/8/2019 3:18:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 29 LibQC

Number of peaks found: 16 Corr. Area 1: 674.4
 Noise: 0.2

Peak table for sample 3 : 29 LibQC

| 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 | 308 | 22.59 | 111.3 | | 70.22 |
| 3 | 335 | 14.30 | 64.8 | | 72.39 |
| 4 | 352 | 7.74 | 33.3 | | 73.80 |
| 5 | 378 | 14.58 | 58.5 | | 75.83 |
| 6 | 386 | 10.70 | 42.0 | | 76.50 |
| 7 | 406 | 9.34 | 34.9 | | 77.96 |
| 8 | 430 | 11.36 | 40.0 | | 79.33 |
| 9 | 441 | 18.95 | 65.1 | | 79.94 |
| 10 | 457 | 20.08 | 66.6 | | 80.83 |
| 11 | 479 | 12.94 | 40.9 | | 82.11 |
| 12 | 507 | 8.88 | 26.5 | | 83.61 |
| 13 | 519 | 10.31 | 30.1 | | 84.23 |
| 14 | 548 | 7.10 | 19.6 | | 85.60 |
| 15 | 562 | 15.47 | 41.8 | | 86.26 |
| 16 | 650 | 14.87 | 34.6 | | 89.67 |
| 17 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |
| 18 | 13,005 | 0.00 | 0.0 | | 115.56 |

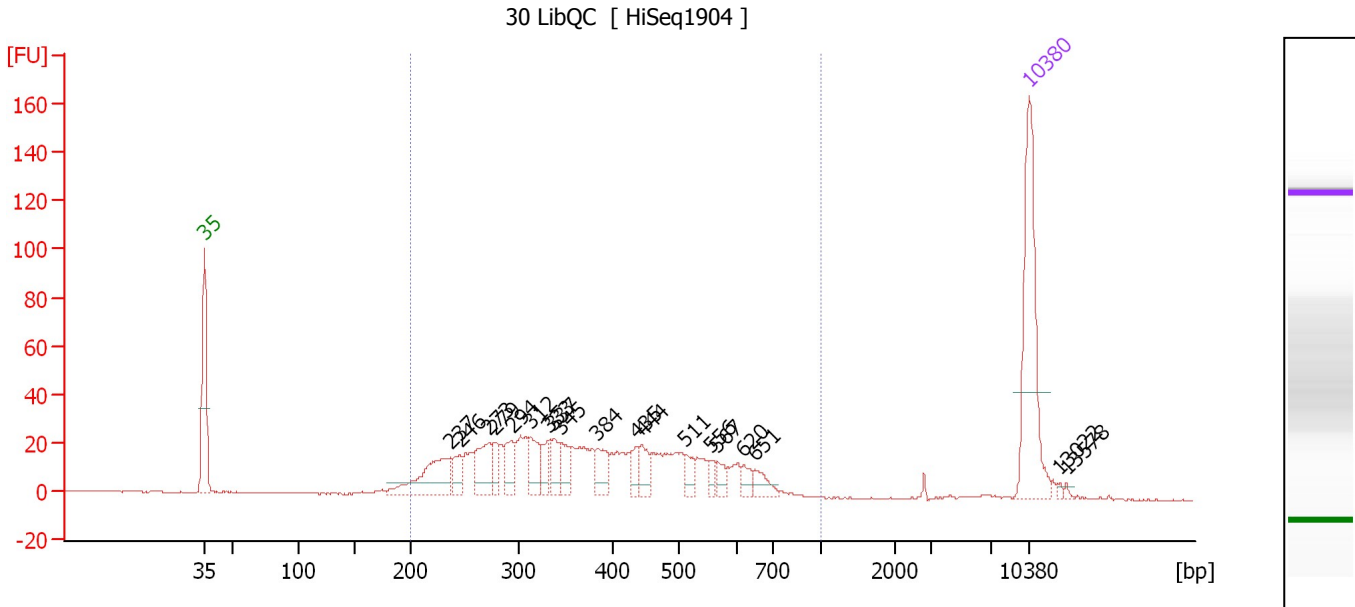
Region table for sample 3 : 29 LibQC

| From [bp] | To [bp] | Average Size [bp] | Conc. [pg/μl] | Corr. Area | Molarity [pmol/l] | Co % of lor Total | Size distribution in CV [%] |
|-----------|---------|-------------------|---------------|------------|-------------------|-------------------|-----------------------------|
| 200 | 1,000 | 431 | 473.26 | 674.4 | 1,911.6 | 93 | 30.6 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-08\2019-10-08_003.xad

Created: 10/8/2019 2:37:10 PM
 Modified: 10/8/2019 3:18:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : 30 LibQC

Number of peaks found: 19 Corr. Area 1: 729.5
 Noise: 0.2

Peak table for sample 4 : 30 LibQC

| 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 | 237 | 55.10 | 351.6 | | 63.86 |
| 3 | 246 | 14.47 | 89.0 | | 64.67 |
| 4 | 273 | 33.83 | 187.5 | | 67.16 |
| 5 | 279 | 13.78 | 74.9 | | 67.66 |
| 6 | 294 | 20.84 | 107.4 | | 69.06 |
| 7 | 312 | 23.67 | 114.9 | | 70.60 |
| 8 | 333 | 15.01 | 68.4 | | 72.23 |
| 9 | 337 | 17.70 | 79.5 | | 72.59 |
| 10 | 345 | 16.84 | 74.1 | | 73.18 |
| 11 | 384 | 19.54 | 77.2 | | 76.30 |
| 12 | 435 | 10.01 | 34.9 | | 79.61 |
| 13 | 444 | 16.10 | 54.9 | | 80.10 |
| 14 | 511 | 10.40 | 30.8 | | 83.81 |
| 15 | 556 | 6.49 | 17.7 | | 85.99 |
| 16 | 567 | 7.76 | 20.7 | | 86.53 |
| 17 | 620 | 7.70 | 18.8 | | 88.75 |
| 18 | 651 | 10.01 | 23.3 | | 89.70 |
| 19 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |
| 20 | 13,022 | 0.00 | 0.0 | | 115.58 |
| 21 | 13,578 | 0.00 | 0.0 | | 116.12 |

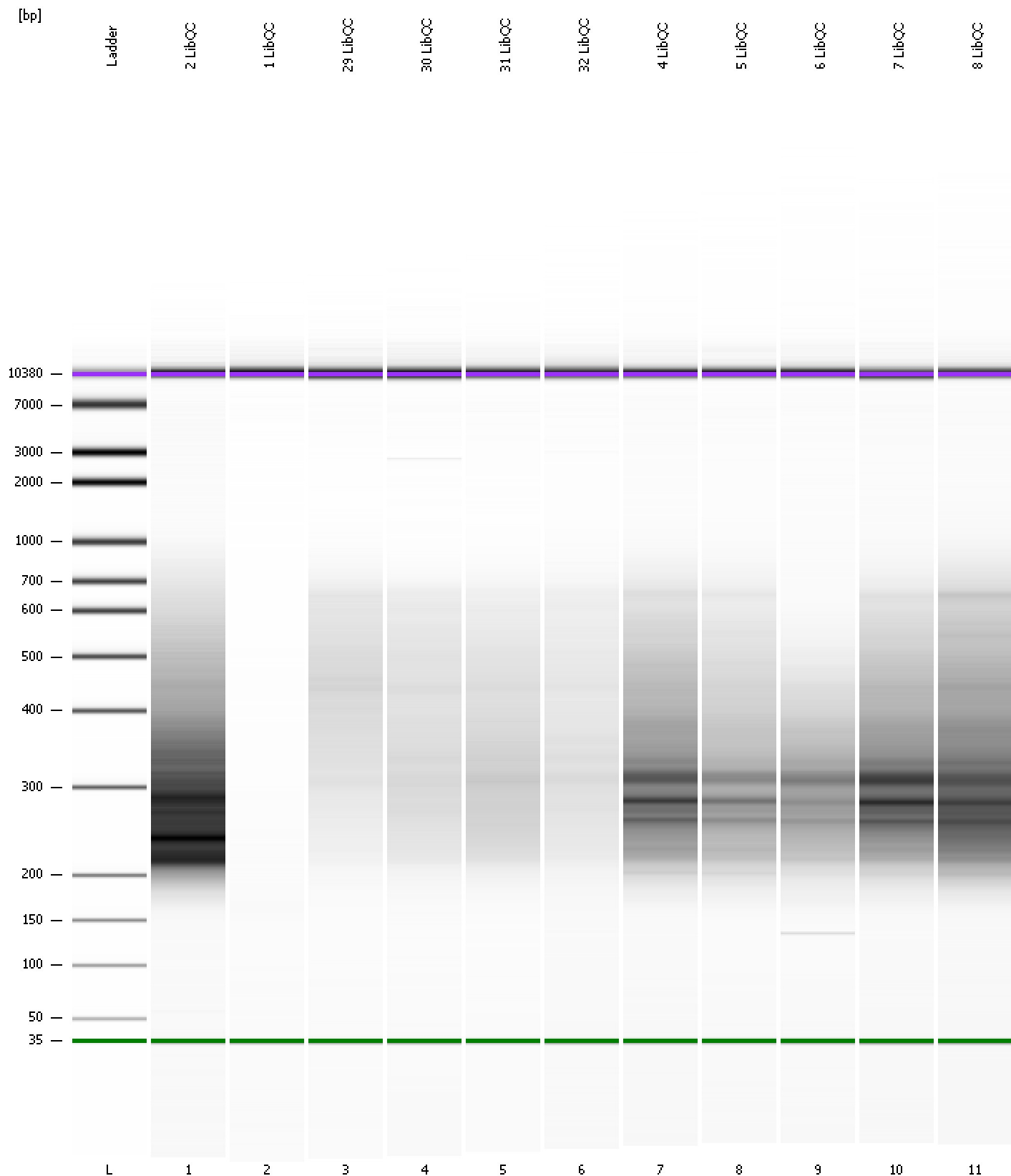
Region table for sample 4 : 30 LibQC

| From [bp] | To [bp] | Average Size [bp] | Conc. [pg/μl] | Corr. Area | Molarity [pmol/l] | Co % of lor Total | Size distribution in CV [%] |
|-----------|---------|-------------------|---------------|------------|-------------------|-------------------|-----------------------------|
| 200 | 1,000 | 392 | 484.87 | 729.5 | 2,158.5 | 94 | 32.1 |

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-08\2019-10-08_003.xad

Created: 10/8/2019 2:37:10 PM
Modified: 10/8/2019 3:18:30 PM

Gel Image

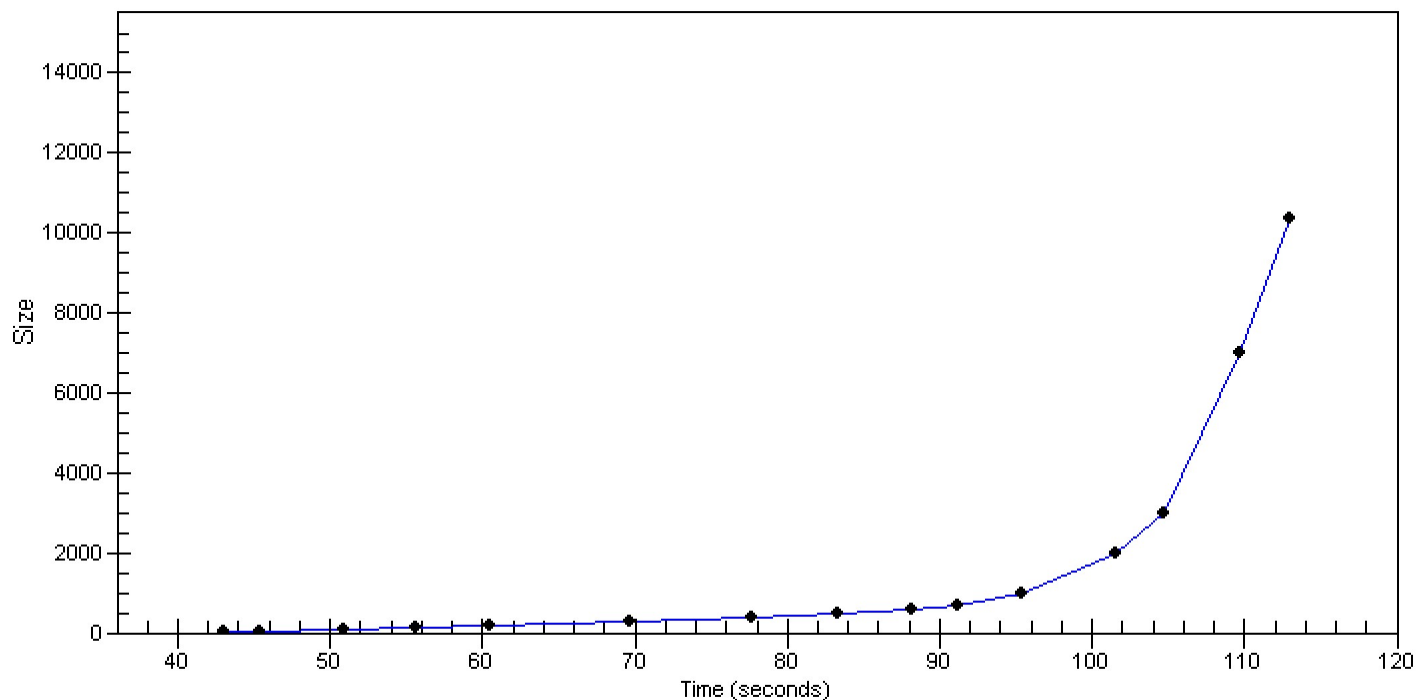


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-08\2019-10-08_003.xad

Created: 10/8/2019 2:37:10 PM
Modified: 10/8/2019 3:18:30 PM

Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-08\2019-10-08_003.xad

Created: 10/8/2019 2:37:10 PM
 Modified: 10/8/2019 3:18:30 PM

Run Logbook

| Description | Number | Source | Category | Sub Category | Time | Time Zone | User | Host |
|--|--------|------------|----------|--------------|----------------------|-------------------------------------|----------|----------|
| Run ended on port 1 (Number of wells acquired: 12) | | Instrument | Run | | 10/8/2019 3:18:28 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2019-10-08\2019-10-08_003.xad) | | Instrument | Run | | 10/8/2019 2:37:15 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Product Number : G2938C | | Instrument | Run | | 10/8/2019 2:37:15 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Name : | | Instrument | Run | | 10/8/2019 2:37:15 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Vendor : Agilent Technologies | | Instrument | Run | | 10/8/2019 2:37:15 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Serial# : DE34903152 | | Instrument | Run | | 10/8/2019 2:37:15 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Firmware : C.01.069 | | Instrument | Run | | 10/8/2019 2:37:15 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Cartridge : Electrode | | Instrument | Run | | 10/8/2019 2:37:15 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |