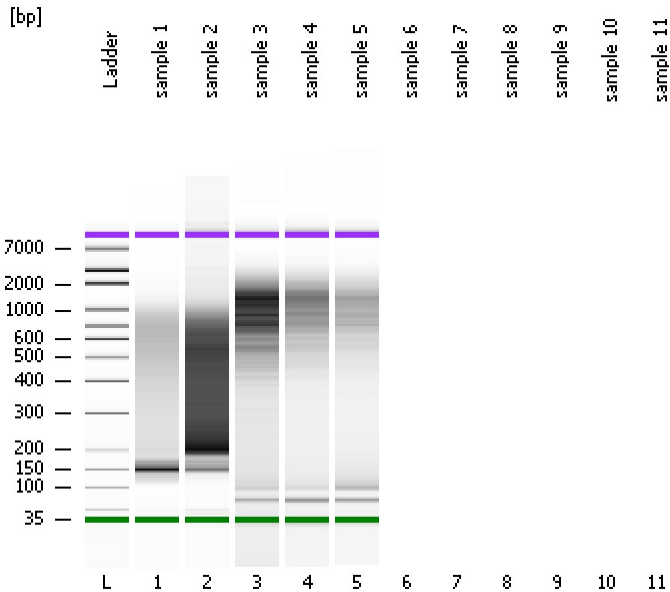


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2017-06-05\2017-06-05_001.xad

Created: 6/5/2017 4:40:08 PM
Modified: 6/5/2017 5:04:18 PM

Electrophoresis File Run Summary



Instrument Information:

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

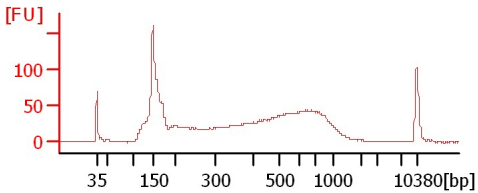
Assay Information:

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

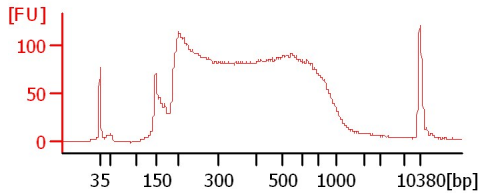
Chip Information:

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

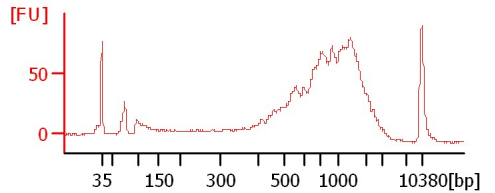
sample 1



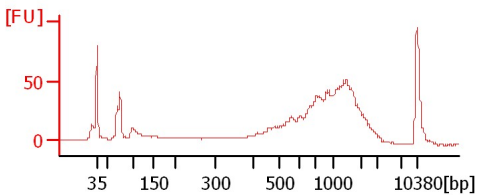
sample 2



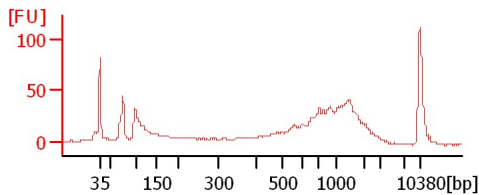
sample 3



sample 4



sample 5



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-06-05\2017-06-05_001.xad

Created: 6/5/2017 4:40:08 PM
 Modified: 6/5/2017 5:04:18 PM

Electrophoresis File Run Summary (Chip Summary)

| Sample Name | Sample Comment | Rest. Digest | Status | Observation | Result Label | Result Color |
|-------------|----------------|--------------------------|--------|-------------|--------------|--------------|
| sample 1 | | <input type="checkbox"/> | ✓ | | | |
| sample 2 | | <input type="checkbox"/> | ✓ | | | |
| sample 3 | | <input type="checkbox"/> | ✓ | | | |
| sample 4 | | <input type="checkbox"/> | ✓ | | | |
| sample 5 | | <input type="checkbox"/> | ✓ | | | |
| sample 6 | | <input type="checkbox"/> | | | | |
| sample 7 | | <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 #

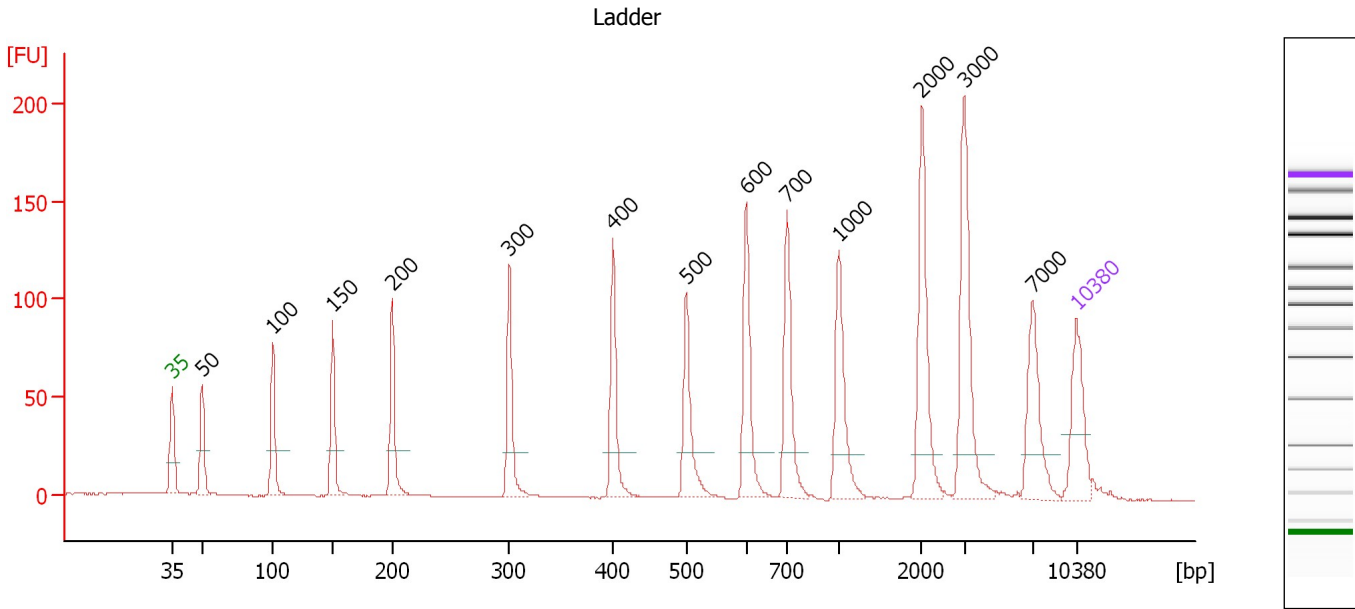
Reagent Kit Lot #

Chip Comments :

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-06-05\2017-06-05_001.xad

Created: 6/5/2017 4:40:08 PM
 Modified: 6/5/2017 5:04:18 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

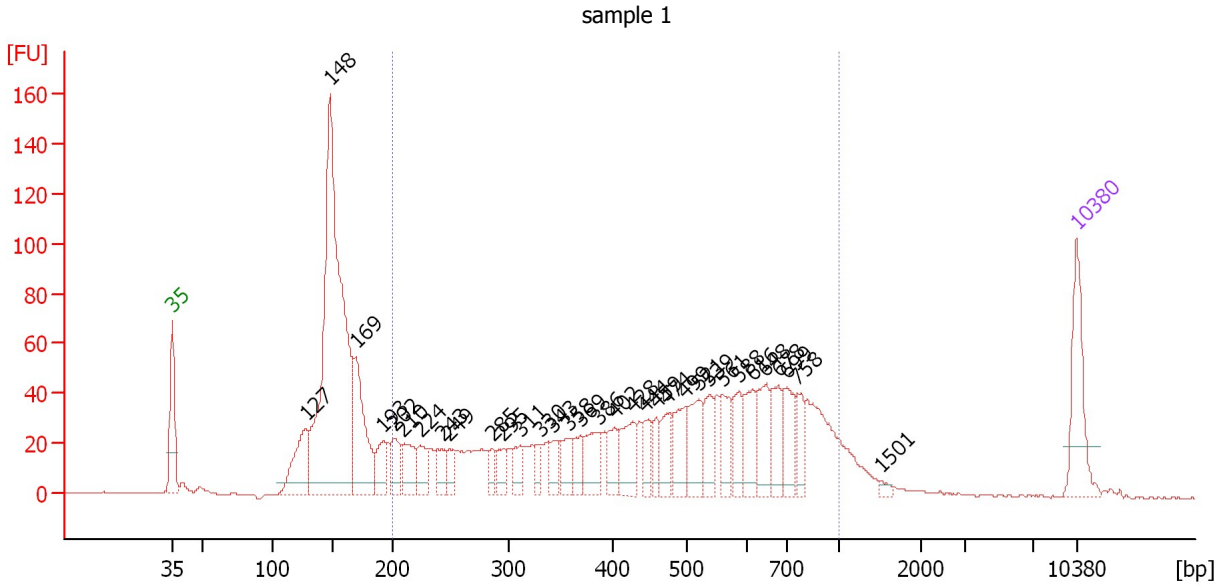
Peak table for Ladder

| 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 | 45.36 |
| 3 | 100 | 150.00 | 2,272.7 | Ladder Peak | 50.81 |
| 4 | 150 | 150.00 | 1,515.2 | Ladder Peak | 55.44 |
| 5 | 200 | 150.00 | 1,136.4 | Ladder Peak | 60.02 |
| 6 | 300 | 150.00 | 757.6 | Ladder Peak | 69.10 |
| 7 | 400 | 150.00 | 568.2 | Ladder Peak | 77.13 |
| 8 | 500 | 150.00 | 454.5 | Ladder Peak | 82.80 |
| 9 | 600 | 150.00 | 378.8 | Ladder Peak | 87.43 |
| 10 | 700 | 150.00 | 324.7 | Ladder Peak | 90.61 |
| 11 | 1,000 | 150.00 | 227.3 | Ladder Peak | 94.58 |
| 12 | 2,000 | 150.00 | 113.6 | Ladder Peak | 101.04 |
| 13 | 3,000 | 150.00 | 75.8 | Ladder Peak | 104.32 |
| 14 | 7,000 | 150.00 | 32.5 | Ladder Peak | 109.60 |
| 15 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-06-05\2017-06-05_001.xad

Created: 6/5/2017 4:40:08 PM
 Modified: 6/5/2017 5:04:18 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : sample 1

Number of peaks found: 33 Corr. Area 1: 1,270.0
 Noise: 0.2

Peak table for sample 1 : sample 1

| 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 | 127 | 108.68 | 1,293.0 | | 53.34 |
| 3 | 148 | 786.56 | 8,053.3 | | 55.25 |
| 4 | 169 | 158.74 | 1,420.8 | | 57.20 |
| 5 | 193 | 48.60 | 382.5 | | 59.33 |
| 6 | 202 | 48.30 | 362.7 | | 60.18 |
| 7 | 210 | 52.57 | 380.1 | | 60.89 |
| 8 | 224 | 42.72 | 288.7 | | 62.22 |
| 9 | 243 | 31.22 | 194.8 | | 63.91 |
| 10 | 249 | 25.37 | 154.5 | | 64.44 |
| 11 | 285 | 21.46 | 113.9 | | 67.77 |
| 12 | 295 | 27.68 | 142.3 | | 68.61 |
| 13 | 311 | 29.79 | 145.3 | | 69.94 |
| 14 | 330 | 21.54 | 98.9 | | 71.50 |
| 15 | 343 | 29.38 | 129.9 | | 72.52 |
| 16 | 358 | 37.72 | 159.6 | | 73.76 |
| 17 | 369 | 31.19 | 128.2 | | 74.60 |
| 18 | 386 | 54.75 | 215.1 | | 75.98 |
| 19 | 402 | 36.56 | 137.9 | | 77.22 |
| 20 | 428 | 55.18 | 195.6 | | 78.69 |
| 21 | 444 | 32.24 | 110.0 | | 79.62 |
| 22 | 459 | 26.23 | 86.6 | | 80.46 |
| 23 | 474 | 44.22 | 141.4 | | 81.31 |
| 24 | 499 | 55.03 | 167.2 | | 82.73 |
| 25 | 521 | 62.49 | 181.6 | | 83.79 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-06-05\2017-06-05_001.xad

Created: 6/5/2017 4:40:08 PM
 Modified: 6/5/2017 5:04:18 PM

Electropherogram Summary Continued ...

... Peak table for sample 1 : sample 1

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|------|-----------|---------------|-------------------|--------------|----------------------------|
| 26 | 539 | 45.01 | 126.6 | | 84.59 |
| 27 | 561 | 46.49 | 125.6 | | 85.61 |
| 28 | 588 | 41.25 | 106.4 | | 86.86 |
| 29 | 616 | 50.68 | 124.8 | | 87.92 |
| 30 | 648 | 59.90 | 140.2 | | 88.94 |
| 31 | 678 | 50.48 | 112.8 | | 89.92 |
| 32 | 699 | 51.86 | 112.4 | | 90.58 |
| 33 | 758 | 34.64 | 69.2 | | 91.38 |
| 34 | 1,501 | 5.07 | 5.1 | | 97.82 |
| 35 | ▶ 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |

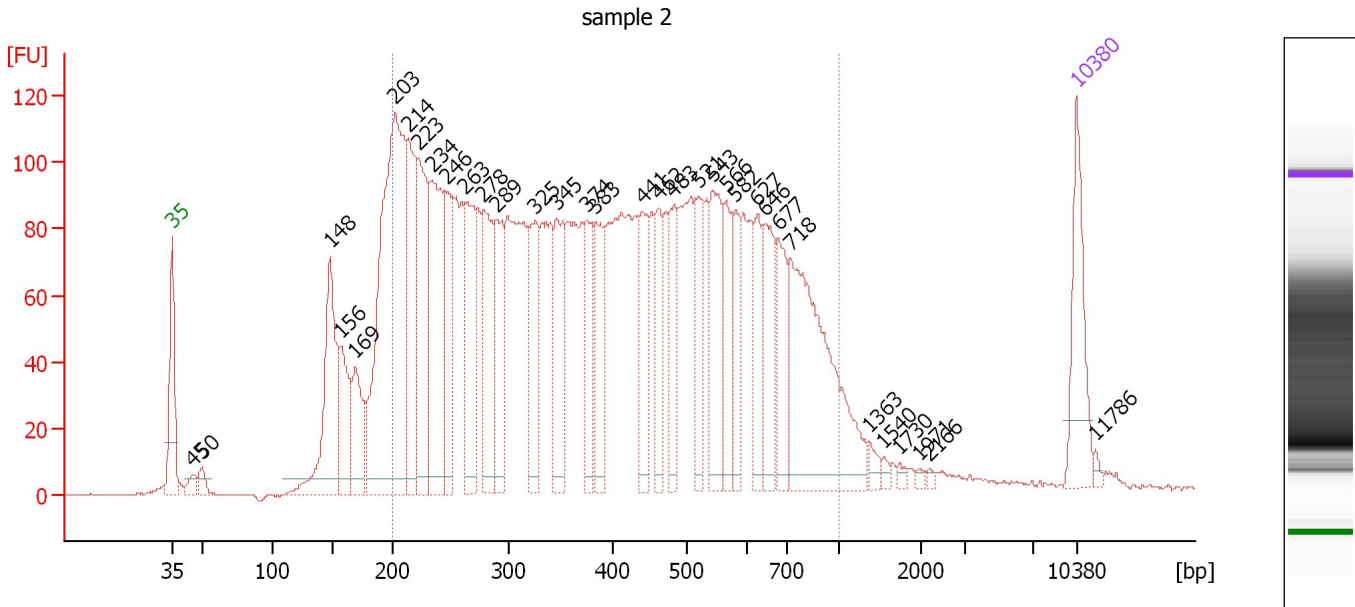
Region table for sample 1 : sample 1

| From [bp] | To [bp] | Average Size [bp] | Corr. Area | Molarity [pmol/l] | Co Conc. lor [pg/μl] | % of Total | Size distribution in CV [%] |
|-----------|---------|-------------------|------------|-------------------|----------------------|------------|-----------------------------|
| 200 | 1,000 | 499 | 1,270.0 | 5,827.6 | ■ 1,510.73 | 62 | 38.4 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-06-05\2017-06-05_001.xad

Created: 6/5/2017 4:40:08 PM
 Modified: 6/5/2017 5:04:18 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : sample 2

Number of peaks found: 34 Corr. Area 1: 3,856.0
 Noise: 0.3

Peak table for sample 2 : sample 2

| 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 | 45 | 14.93 | 497.6 | | 44.64 |
| 3 | 50 | 16.41 | 499.1 | | 45.33 |
| 4 | 148 | 201.36 | 2,063.7 | | 55.24 |
| 5 | 156 | 96.60 | 936.5 | | 56.01 |
| 6 | 169 | 84.63 | 757.6 | | 57.20 |
| 7 | 203 | 551.91 | 4,126.5 | | 60.26 |
| 8 | 214 | 149.30 | 1,058.5 | | 61.26 |
| 9 | 223 | 182.30 | 1,239.9 | | 62.09 |
| 10 | 234 | 218.60 | 1,413.4 | | 63.14 |
| 11 | 246 | 111.14 | 684.8 | | 64.19 |
| 12 | 263 | 139.40 | 804.6 | | 65.69 |
| 13 | 278 | 142.29 | 775.2 | | 67.11 |
| 14 | 289 | 110.02 | 576.5 | | 68.11 |
| 15 | 325 | 111.42 | 519.9 | | 71.08 |
| 16 | 345 | 112.16 | 492.3 | | 72.73 |
| 17 | 374 | 84.16 | 340.8 | | 75.05 |
| 18 | 383 | 91.93 | 363.4 | | 75.79 |
| 19 | 441 | 88.82 | 305.3 | | 79.44 |
| 20 | 462 | 73.51 | 240.8 | | 80.67 |
| 21 | 483 | 77.99 | 244.8 | | 81.81 |
| 22 | 521 | 72.25 | 210.1 | | 83.78 |
| 23 | 543 | 117.29 | 327.4 | | 84.78 |
| 24 | 566 | 69.99 | 187.2 | | 85.88 |
| 25 | 582 | 54.20 | 141.0 | | 86.61 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-06-05\2017-06-05_001.xad

Created: 6/5/2017 4:40:08 PM
 Modified: 6/5/2017 5:04:18 PM

Electropherogram Summary Continued ...

... Peak table for sample 2 : sample 2

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|------|-----------|---------------|-------------------|--------------|----------------------------|
| 26 | 627 | 55.71 | 134.6 | | 88.30 |
| 27 | 646 | 80.95 | 189.9 | | 88.89 |
| 28 | 677 | 71.52 | 159.9 | | 89.89 |
| 29 | 718 | 279.01 | 588.6 | | 90.85 |
| 30 | 1,363 | 9.95 | 11.1 | | 96.93 |
| 31 | 1,540 | 4.63 | 4.6 | | 98.07 |
| 32 | 1,730 | 4.70 | 4.1 | | 99.30 |
| 33 | 1,971 | 3.39 | 2.6 | | 100.85 |
| 34 | 2,166 | 2.69 | 1.9 | | 101.58 |
| 35 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |
| 36 | 11,786 | 0.00 | 0.0 | | 114.42 |

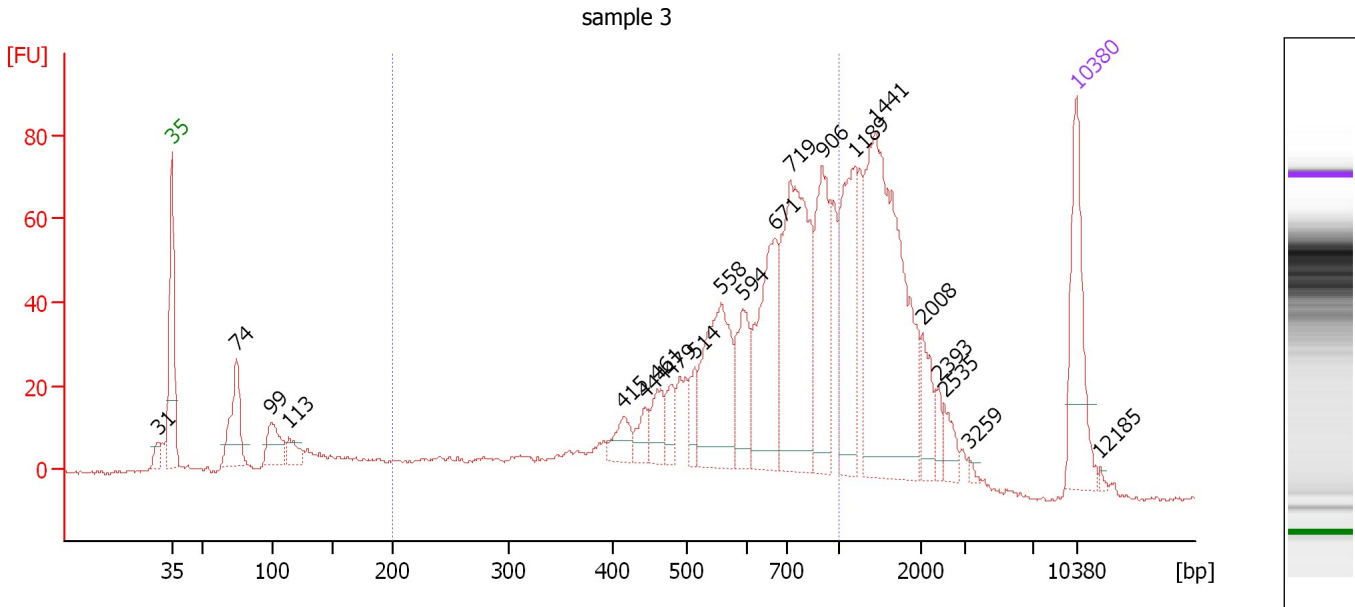
Region table for sample 2 : sample 2

| From [bp] | To [bp] | Average Size [bp] | Corr. Area | Molarity [pmol/l] | Co Conc. lor [pg/μl] | % of Total | Size distribution in CV [%] |
|-----------|---------|-------------------|------------|-------------------|----------------------|------------|-----------------------------|
| 200 | 1,000 | 428 | 3,856.0 | 18,396.1 | 4,126.00 | 85 | 41.4 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-06-05\2017-06-05_001.xad

Created: 6/5/2017 4:40:08 PM
 Modified: 6/5/2017 5:04:18 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : sample 3

Number of peaks found: 21 Corr. Area 1: 956.9
 Noise: 0.3

Peak table for sample 3 : sample 3

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|------|-----------|---------------|-------------------|--------------|----------------------------|
| 1 | 31 | 0.00 | 0.0 | | 41.88 |
| 2 | 35 | 125.00 | 5,411.3 | Lower Marker | 43.00 |
| 3 | 74 | 77.14 | 1,577.2 | | 47.99 |
| 4 | 99 | 42.37 | 649.3 | | 50.69 |
| 5 | 113 | 21.71 | 290.4 | | 52.04 |
| 6 | 415 | 24.24 | 88.6 | | 77.95 |
| 7 | 444 | 19.32 | 65.9 | | 79.63 |
| 8 | 461 | 28.10 | 92.4 | | 80.56 |
| 9 | 479 | 21.35 | 67.5 | | 81.64 |
| 10 | 514 | 21.86 | 64.4 | | 83.45 |
| 11 | 558 | 121.70 | 330.2 | | 85.50 |
| 12 | 594 | 59.27 | 151.3 | | 87.13 |
| 13 | 671 | 119.71 | 270.2 | | 89.70 |
| 14 | 719 | 211.39 | 445.5 | | 90.86 |
| 15 | 906 | 97.97 | 163.9 | | 93.33 |
| 16 | 1,189 | 99.22 | 126.5 | | 95.80 |
| 17 | 1,441 | 262.18 | 275.6 | | 97.43 |
| 18 | 2,008 | 28.65 | 21.6 | | 101.07 |
| 19 | 2,393 | 10.57 | 6.7 | | 102.33 |
| 20 | 2,535 | 13.72 | 8.2 | | 102.79 |
| 21 | 3,259 | 2.60 | 1.2 | | 104.66 |
| 22 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |
| 23 | 12,185 | 0.00 | 0.0 | | 114.82 |

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2017-06-05\2017-06-05_001.xad

Created: 6/5/2017 4:40:08 PM
Modified: 6/5/2017 5:04:18 PM

Electropherogram Summary Continued ...

... Region table for sample 3 :

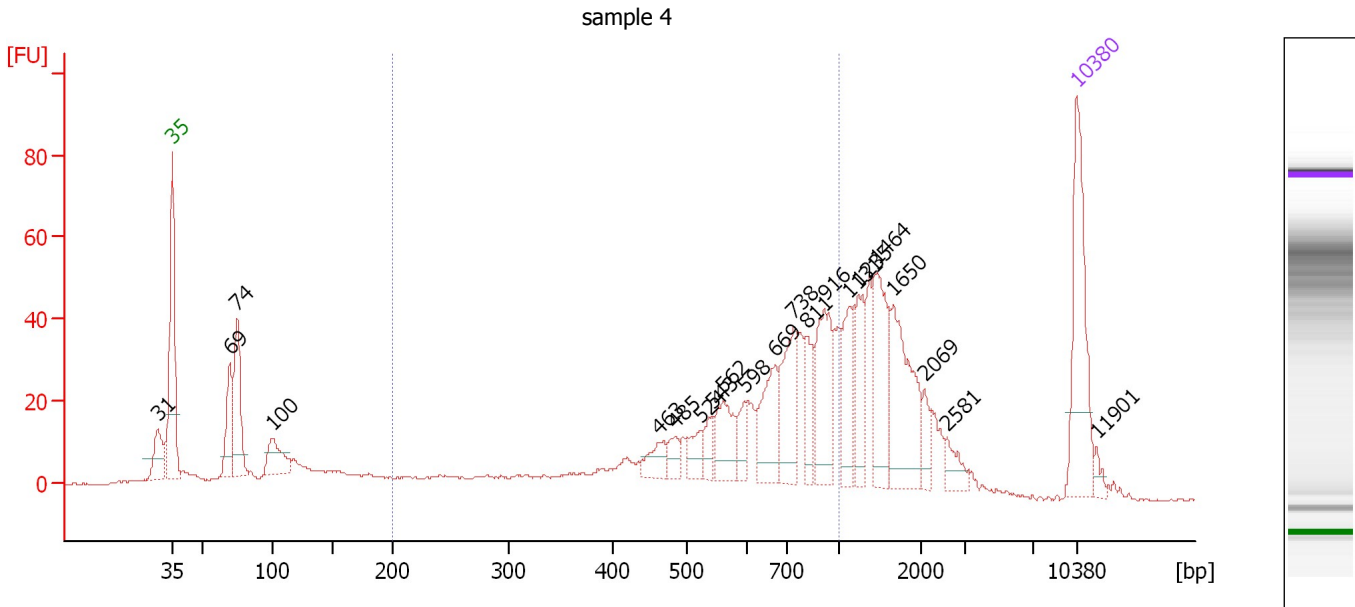
sample 3

| From [bp] | To [bp] | Average Size [bp] | Corr. Area | Molarity [pmol/l] | Co Conc. lor [pg/μl] | % of Total | Size distribution in CV [%] |
|-----------|---------|-------------------|------------|-------------------|----------------------|------------|-----------------------------|
| 200 | 1,000 | 631 | 956.9 | 3,142.6 | 1,084.67 | 57 | 30.7 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-06-05\2017-06-05_001.xad

Created: 6/5/2017 4:40:08 PM
 Modified: 6/5/2017 5:04:18 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : sample 4

Number of peaks found: 21 Corr. Area 1: 497.2
 Noise: 0.3

Peak table for sample 4 : sample 4

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|------|-----------|---------------|-------------------|--------------|----------------------------|
| 1 | 31 | 0.00 | 0.0 | | 41.90 |
| 2 | 35 | 125.00 | 5,411.3 | Lower Marker | 43.00 |
| 3 | 69 | 50.01 | 1,094.7 | | 47.45 |
| 4 | 74 | 78.68 | 1,600.7 | | 48.03 |
| 5 | 100 | 37.38 | 566.7 | | 50.80 |
| 6 | 463 | 18.42 | 60.3 | | 80.68 |
| 7 | 485 | 13.33 | 41.7 | | 81.93 |
| 8 | 524 | 16.52 | 47.8 | | 83.89 |
| 9 | 543 | 14.75 | 41.2 | | 84.80 |
| 10 | 562 | 37.29 | 100.6 | | 85.66 |
| 11 | 598 | 17.47 | 44.3 | | 87.34 |
| 12 | 669 | 49.00 | 110.9 | | 89.63 |
| 13 | 738 | 56.08 | 115.1 | | 91.12 |
| 14 | 811 | 26.47 | 49.5 | | 92.08 |
| 15 | 916 | 62.15 | 102.9 | | 93.47 |
| 16 | 1,131 | 37.09 | 49.7 | | 95.43 |
| 17 | 1,235 | 35.63 | 43.7 | | 96.10 |
| 18 | 1,464 | 58.13 | 60.1 | | 97.58 |
| 19 | 1,650 | 73.91 | 67.9 | | 98.78 |
| 20 | 2,069 | 12.97 | 9.5 | | 101.27 |
| 21 | 2,581 | 13.10 | 7.7 | | 102.95 |
| 22 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |
| 23 | 11,901 | 0.00 | 0.0 | | 114.53 |

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2017-06-05\2017-06-05_001.xad

Created: 6/5/2017 4:40:08 PM
Modified: 6/5/2017 5:04:18 PM

Electropherogram Summary Continued ...

... Region table for sample 4 :

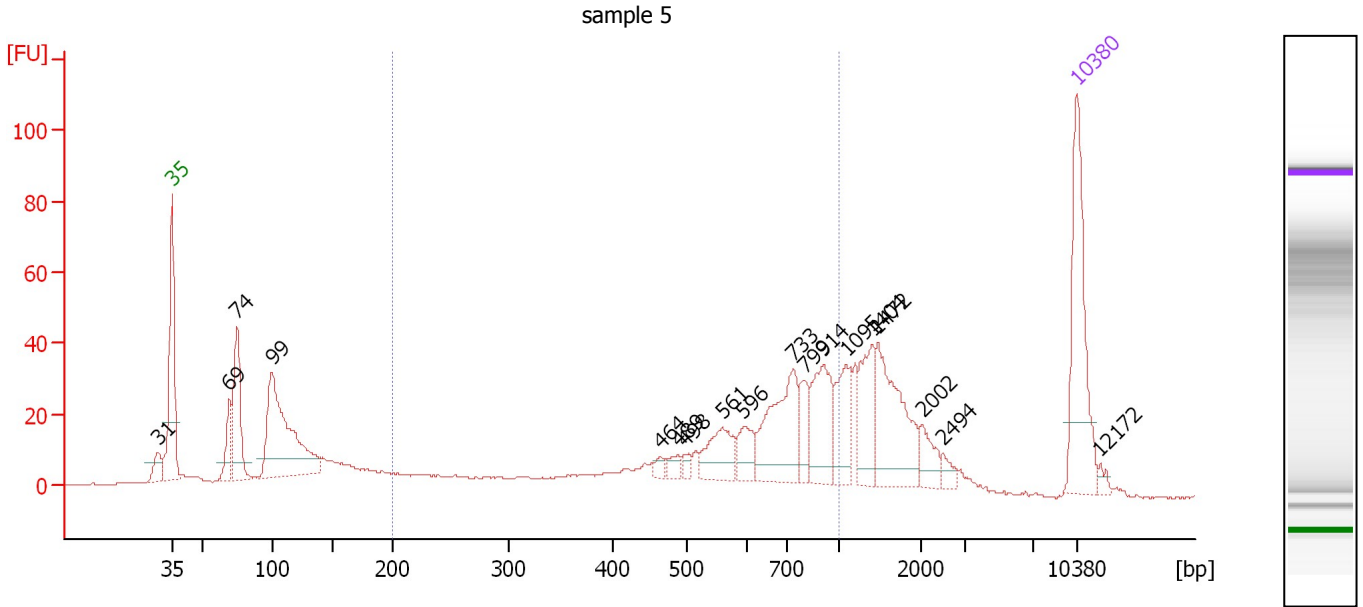
sample 4

| From [bp] | To [bp] | Average Size [bp] | Corr. Area | Molarity [pmol/l] | Co Conc. lor [pg/μl] | % of Total | Size distribution in CV [%] |
|-----------|---------|-------------------|------------|-------------------|----------------------|------------|-----------------------------|
| 200 | 1,000 | 641 | 497.2 | 1,540.8 | 538.11 | 46 | 30.7 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-06-05\2017-06-05_001.xad

Created: 6/5/2017 4:40:08 PM
 Modified: 6/5/2017 5:04:18 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : sample 5

Number of peaks found: 18 Corr. Area 1: 427.8
 Noise: 0.2

Peak table for sample 5 : sample 5

| Peak | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations | Aligned Migration Time [s] |
|------|-----------|---------------|-------------------|--------------|----------------------------|
| 1 | 31 | 0.00 | 0.0 | | 41.88 |
| 2 | 35 | 125.00 | 5,411.3 | Lower Marker | 43.00 |
| 3 | 69 | 30.57 | 670.4 | | 47.44 |
| 4 | 74 | 76.96 | 1,566.1 | | 48.02 |
| 5 | 99 | 161.10 | 2,464.5 | | 50.71 |
| 6 | 464 | 5.89 | 19.2 | | 80.76 |
| 7 | 489 | 8.17 | 25.3 | | 82.17 |
| 8 | 498 | 5.71 | 17.4 | | 82.71 |
| 9 | 561 | 33.59 | 90.7 | | 85.63 |
| 10 | 596 | 20.12 | 51.1 | | 87.24 |
| 11 | 733 | 76.35 | 157.8 | | 91.05 |
| 12 | 799 | 20.99 | 39.8 | | 91.93 |
| 13 | 914 | 50.59 | 83.9 | | 93.44 |
| 14 | 1,095 | 34.18 | 47.3 | | 95.20 |
| 15 | 1,404 | 39.22 | 42.3 | | 97.20 |
| 16 | 1,472 | 69.86 | 71.9 | | 97.63 |
| 17 | 2,002 | 16.91 | 12.8 | | 101.05 |
| 18 | 2,494 | 6.46 | 3.9 | | 102.66 |
| 19 | 10,380 | 75.00 | 10.9 | Upper Marker | 113.00 |
| 20 | 12,172 | 0.00 | 0.0 | | 114.80 |

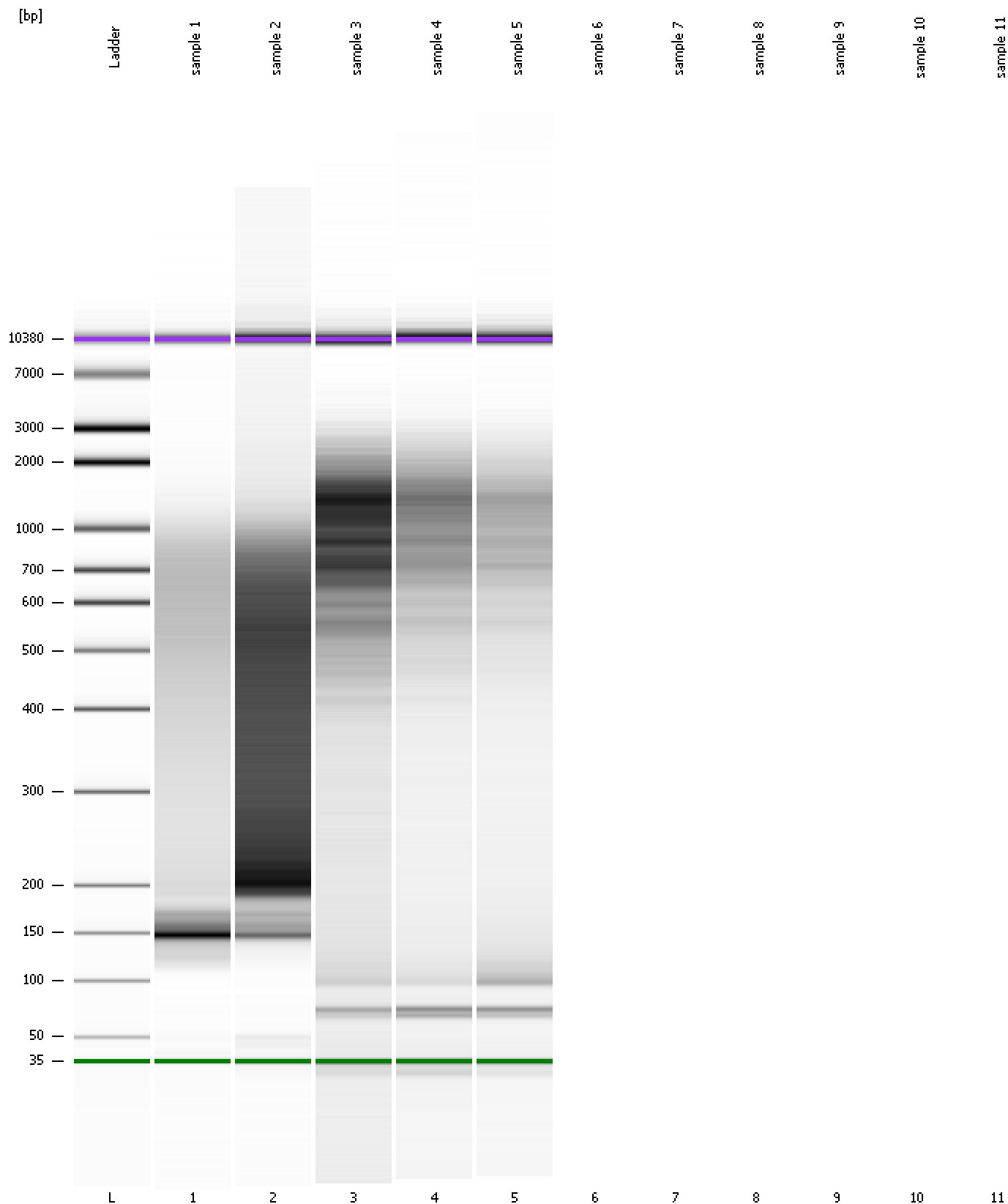
Region table for sample 5 : sample 5

| From [bp] | To [bp] | Average Size [bp] | Corr. Area | Molarity [pmol/l] | Co Conc. [pg/μl] | % of Total | Size distribution in CV [%] |
|-----------|---------|-------------------|------------|-------------------|------------------|------------|-----------------------------|
| 200 | 1,000 | 623 | 427.8 | 1,217.3 | 395.12 | 42 | 33.2 |

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2017-06-05\2017-06-05_001.xad

Created: 6/5/2017 4:40:08 PM
Modified: 6/5/2017 5:04:18 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2017-06-05\2017-06-05_001.xad

Created: 6/5/2017 4:40:08 PM
Modified: 6/5/2017 5:04:18 PM

Invalid Samples

Sample 6 has not been run, no results available.

Sample 7 has not been run, no results available.

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.