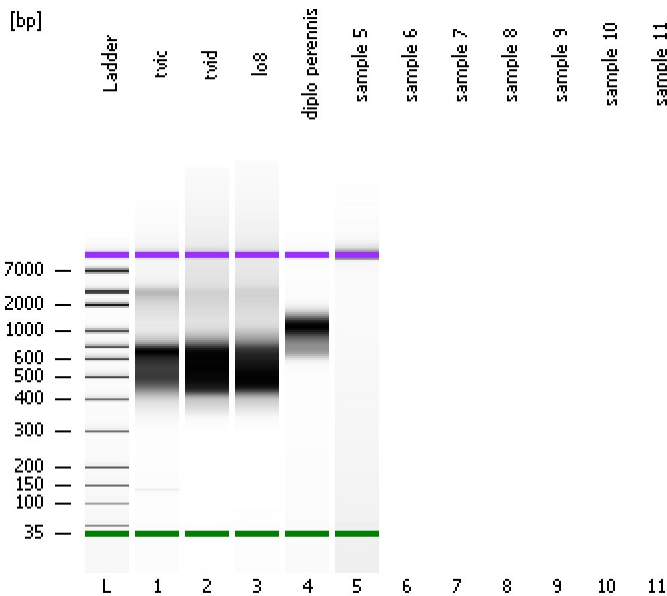


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-24\2015-04-24\_003.xad

Created: 4/24/2015 11:13:40 AM  
Modified: 4/24/2015 11:45:14 AM

### Electrophoresis File Run Summary



#### Instrument Information:

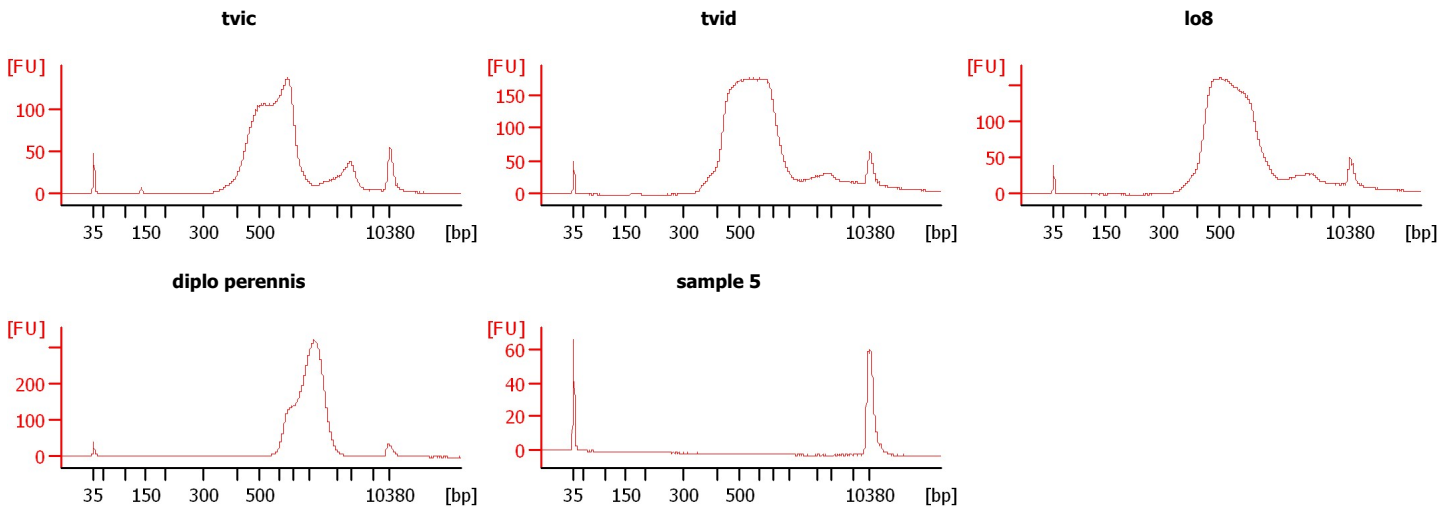
Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

#### 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:



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-24\2015-04-24\_003.xad

Created: 4/24/2015 11:13:40 AM  
 Modified: 4/24/2015 11:45:14 AM

**Electrophoresis File Run Summary (Chip Summary)**

| Sample Name    | Sample Comment | Rest. Digest             | Status | Observation | Result Label | Result Color |
|----------------|----------------|--------------------------|--------|-------------|--------------|--------------|
| tvic           |                | <input type="checkbox"/> | ✓      |             |              |              |
| tvid           |                | <input type="checkbox"/> | ✓      |             |              |              |
| lo8            |                | <input type="checkbox"/> | ✓      |             |              |              |
| diplo perennis |                | <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:\...ents and Settings\Bioanalyzer\2015-04-24\2015-04-24\_003.xad

Created: 4/24/2015 11:13:40 AM  
Modified: 4/24/2015 11:45:14 AM

**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

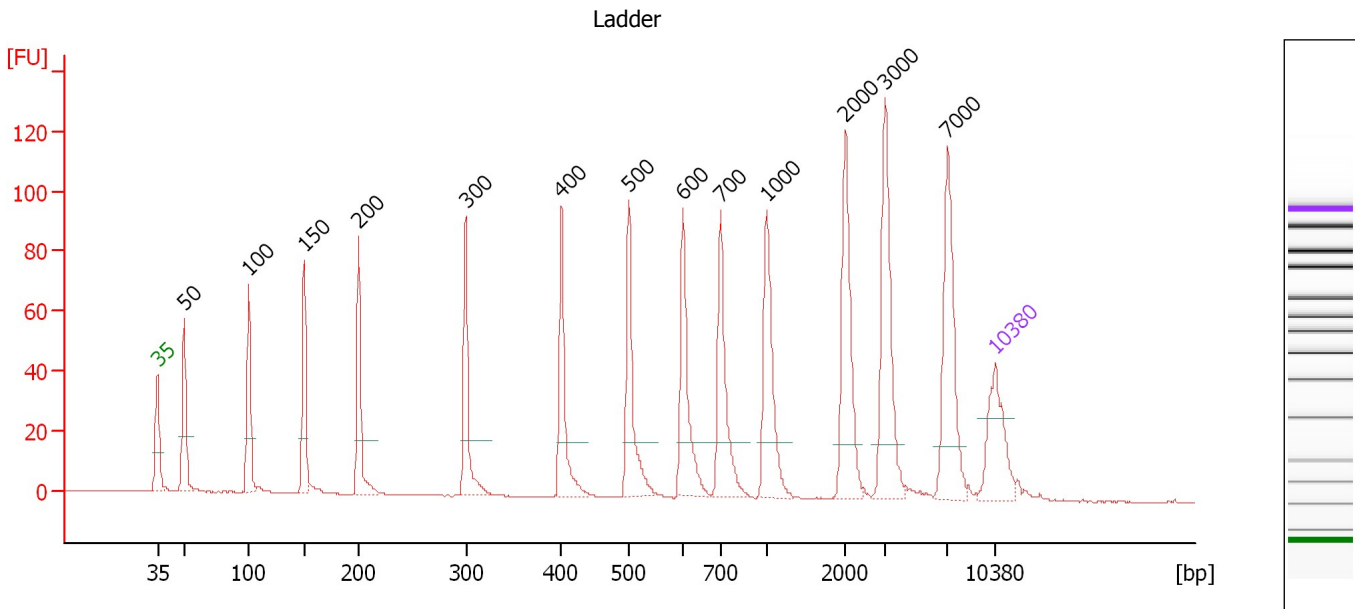
**Ladder**

| 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\2015-04-24\2015-04-24\_003.xad

Created: 4/24/2015 11:13:40 AM  
 Modified: 4/24/2015 11:45:14 AM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

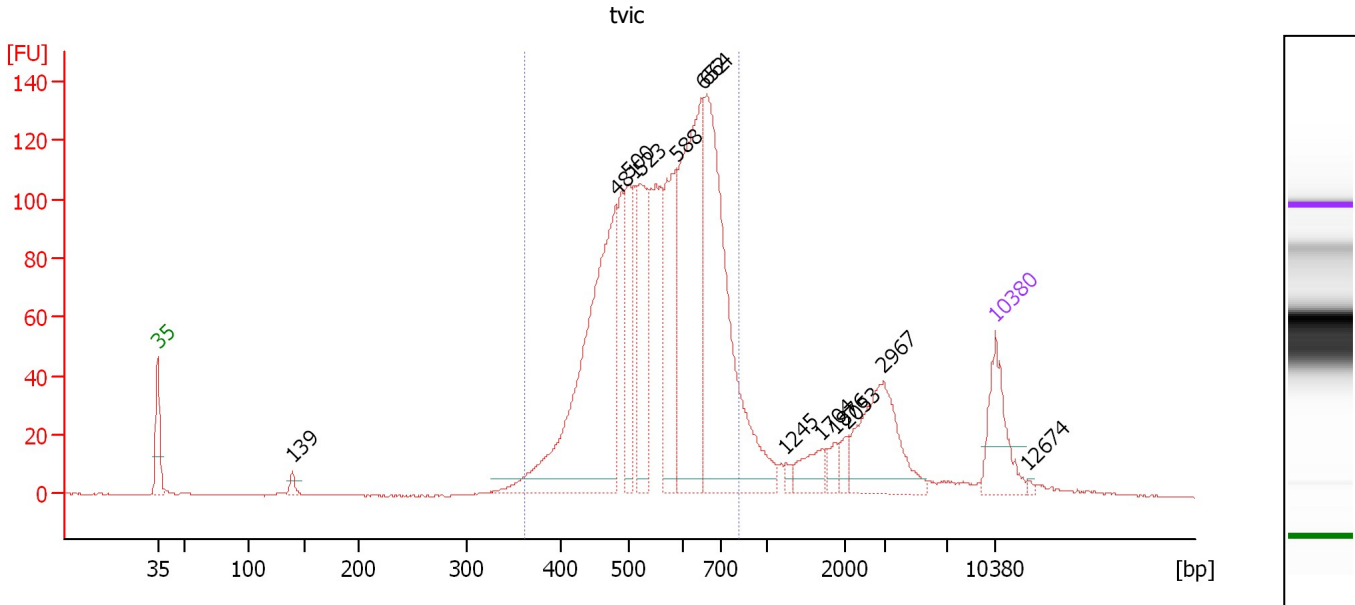
**Peak table for Ladder**

| 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  | 50.62                      |
| 4    | 150       | 150.00        | 1,515.2           | Ladder Peak  | 55.22                      |
| 5    | 200       | 150.00        | 1,136.4           | Ladder Peak  | 59.83                      |
| 6    | 300       | 150.00        | 757.6             | Ladder Peak  | 68.75                      |
| 7    | 400       | 150.00        | 568.2             | Ladder Peak  | 76.75                      |
| 8    | 500       | 150.00        | 454.5             | Ladder Peak  | 82.37                      |
| 9    | 600       | 150.00        | 378.8             | Ladder Peak  | 86.92                      |
| 10   | 700       | 150.00        | 324.7             | Ladder Peak  | 90.04                      |
| 11   | 1,000     | 150.00        | 227.3             | Ladder Peak  | 93.90                      |
| 12   | 2,000     | 150.00        | 113.6             | Ladder Peak  | 100.45                     |
| 13   | 3,000     | 150.00        | 75.8              | Ladder Peak  | 103.80                     |
| 14   | 7,000     | 150.00        | 32.5              | Ladder Peak  | 109.05                     |
| 15   | 10,380    | 75.00         | 10.9              | Upper Marker | 113.00                     |

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-24\2015-04-24\_003.xad

Created: 4/24/2015 11:13:40 AM  
 Modified: 4/24/2015 11:45:14 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : tvic**

Number of peaks found: 13                      Corr. Area 1: 1,702.1  
 Noise: 0.2

**Peak table for sample 1 : tvic**

| 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    | 139       | 15.03         | 163.4             |              | 54.24                      |
| 3    | 481       | 545.96        | 1,720.2           |              | 81.29                      |
| 4    | 500       | 124.11        | 376.0             |              | 82.38                      |
| 5    | 523       | 168.25        | 487.6             |              | 83.41                      |
| 6    | 588       | 179.56        | 462.8             |              | 86.37                      |
| 7    | 652       | 385.28        | 895.6             |              | 88.54                      |
| 8    | 664       | 494.23        | 1,127.9           |              | 88.91                      |
| 9    | 1,245     | 7.67          | 9.3               |              | 95.50                      |
| 10   | 1,704     | 36.29         | 32.3              |              | 98.51                      |
| 11   | 1,876     | 16.83         | 13.6              |              | 99.64                      |
| 12   | 2,053     | 17.88         | 13.2              |              | 100.63                     |
| 13   | 2,967     | 141.15        | 72.1              |              | 103.69                     |
| 14   | 10,380    | 75.00         | 10.9              | Upper Marker | 113.00                     |
| 15   | 12,674    | 0.00          | 0.0               |              | 115.68                     |

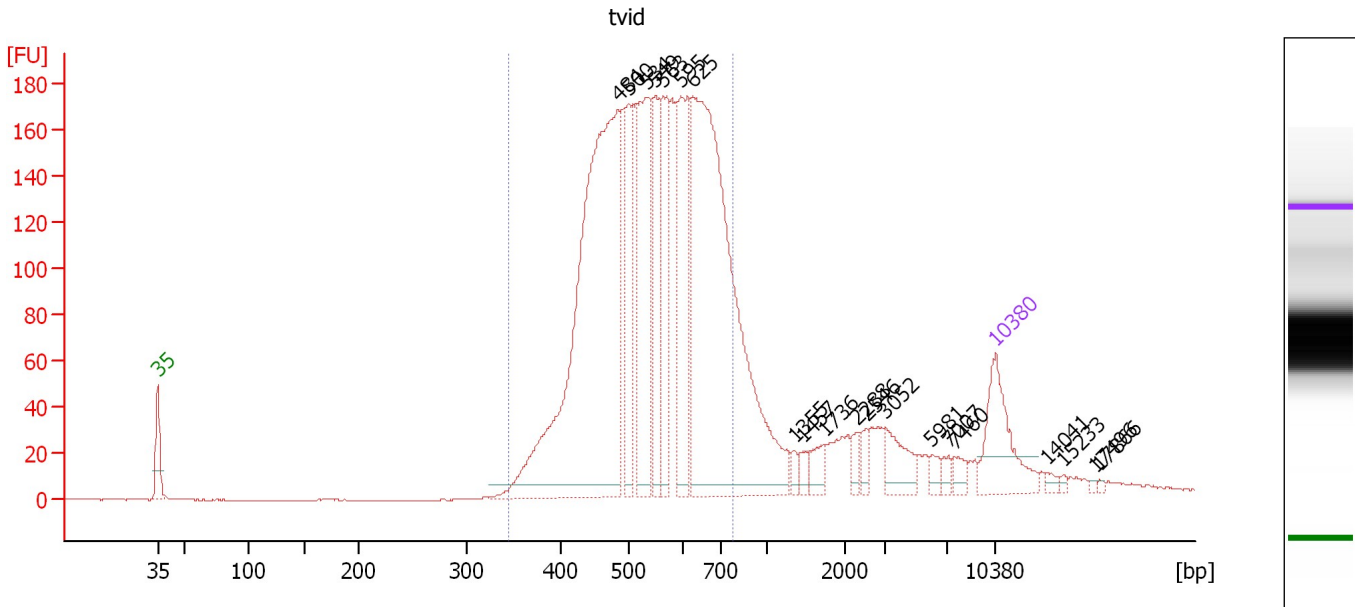
**Region table for sample 1 : tvic**

| From [bp] | Average Size [bp] | To [bp] | Corr. Area | Molarity [pmol/l] | % of Total | Size distribution in CV [%] | Conc. [pg/μl] | Color |
|-----------|-------------------|---------|------------|-------------------|------------|-----------------------------|---------------|-------|
| 361       | 563               | 815     | 1,702.1    | 6,139.2           | 82         | 16.8                        | 2,194.88      | Blue  |

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-24\2015-04-24\_003.xad

Created: 4/24/2015 11:13:40 AM  
 Modified: 4/24/2015 11:45:14 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : tvid**

Number of peaks found: 20                      Corr. Area 1: 2,733.5  
 Noise: 0.2

**Peak table for sample 2 : tvid**

| 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    | 484       | 763.60        | 2,391.1           |              | 81.46                      |
| 3    | 500       | 122.67        | 371.6             |              | 82.38                      |
| 4    | 534       | 210.93        | 598.6             |              | 83.91                      |
| 5    | 549       | 108.09        | 298.5             |              | 84.59                      |
| 6    | 563       | 138.01        | 371.1             |              | 85.26                      |
| 7    | 595       | 185.70        | 472.8             |              | 86.70                      |
| 8    | 625       | 688.44        | 1,668.2           |              | 87.71                      |
| 9    | 1,355     | 9.37          | 10.5              |              | 96.22                      |
| 10   | 1,457     | 11.77         | 12.2              |              | 96.89                      |
| 11   | 1,736     | 18.25         | 15.9              |              | 98.72                      |
| 12   | 2,288     | 12.46         | 8.3               |              | 101.41                     |
| 13   | 2,546     | 12.12         | 7.2               |              | 102.28                     |
| 14   | 3,052     | 36.24         | 18.0              |              | 103.87                     |
| 15   | 5,981     | 9.83          | 2.5               |              | 107.71                     |
| 16   | 7,007     | 8.54          | 1.8               |              | 109.06                     |
| 17   | 7,460     | 12.14         | 2.5               |              | 109.59                     |
| 18   | 10,380    | 75.00         | 10.9              | Upper Marker | 113.00                     |
| 19   | 14,041    | 0.00          | 0.0               |              | 117.28                     |
| 20   | 15,233    | 0.00          | 0.0               |              | 118.67                     |
| 21   | 17,496    | 0.00          | 0.0               |              | 121.32                     |
| 22   | 17,866    | 0.00          | 0.0               |              | 121.75                     |

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-24\2015-04-24\_003.xad

Created: 4/24/2015 11:13:40 AM  
Modified: 4/24/2015 11:45:14 AM

**Electropherogram Summary Continued ...**

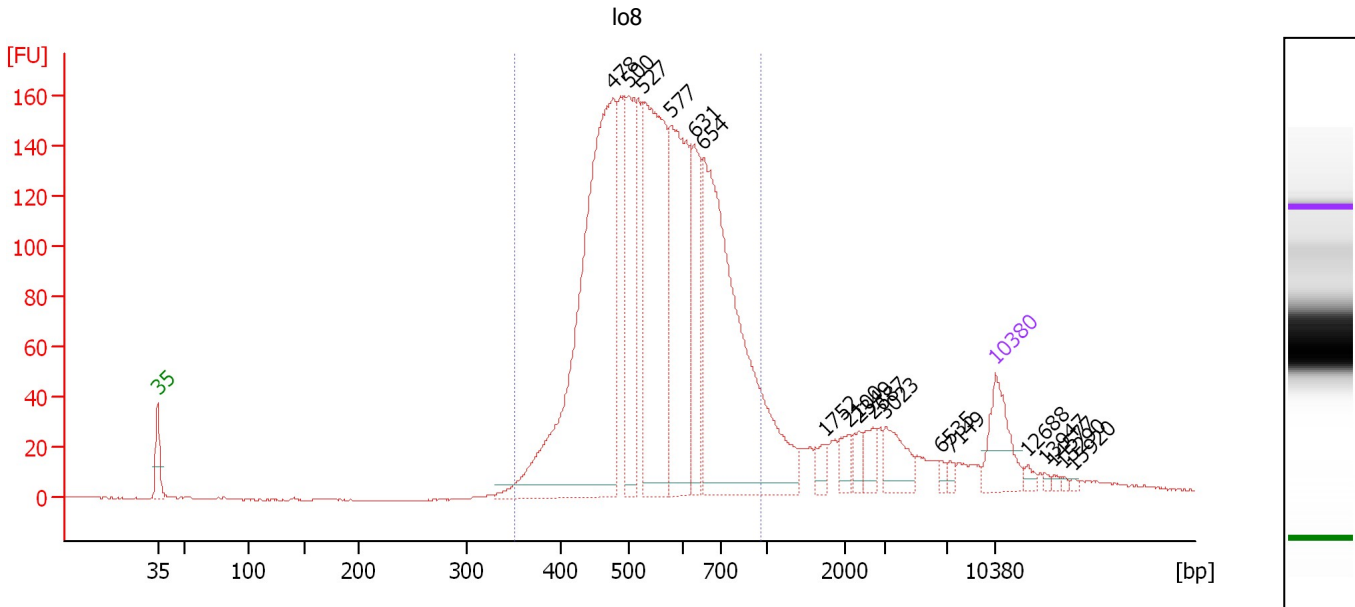
... Region table for sample 2 : tvid

| From [bp] | Average Size [bp] | To [bp] | Corr. Area | Molarity [pmol/l] | % of Total | Size distribution in CV [%] | Conc. [pg/μl] | Color |
|-----------|-------------------|---------|------------|-------------------|------------|-----------------------------|---------------|-------|
| 344       | 546               | 778     | 2,733.5    | 6,580.6           | 81         | 17.0                        | 2,278.85      | ■     |

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-24\2015-04-24\_003.xad

Created: 4/24/2015 11:13:40 AM  
 Modified: 4/24/2015 11:45:14 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : lo8**

Number of peaks found: 18                      Corr. Area 1: 2,513.4  
 Noise: 0.2

**Peak table for sample 3 : lo8**

| 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    | 478       | 951.39        | 3,017.6           |              | 81.11                      |
| 3    | 500       | 241.39        | 732.2             |              | 82.34                      |
| 4    | 527       | 526.86        | 1,513.6           |              | 83.62                      |
| 5    | 577       | 389.02        | 1,021.7           |              | 85.87                      |
| 6    | 631       | 170.90        | 410.5             |              | 87.88                      |
| 7    | 654       | 721.51        | 1,670.4           |              | 88.62                      |
| 8    | 1,752     | 21.44         | 18.5              |              | 98.82                      |
| 9    | 2,100     | 24.03         | 17.3              |              | 100.79                     |
| 10   | 2,349     | 20.85         | 13.4              |              | 101.62                     |
| 11   | 2,687     | 26.42         | 14.9              |              | 102.75                     |
| 12   | 3,023     | 52.70         | 26.4              |              | 103.83                     |
| 13   | 6,535     | 8.08          | 1.9               |              | 108.44                     |
| 14   | 7,149     | 8.68          | 1.8               |              | 109.22                     |
| 15   | 10,380    | 75.00         | 10.9              | Upper Marker | 113.00                     |
| 16   | 12,688    | 0.00          | 0.0               |              | 115.70                     |
| 17   | 13,947    | 0.00          | 0.0               |              | 117.17                     |
| 18   | 14,577    | 0.00          | 0.0               |              | 117.91                     |
| 19   | 15,290    | 0.00          | 0.0               |              | 118.74                     |
| 20   | 15,920    | 0.00          | 0.0               |              | 119.48                     |

**Region table for sample 3 : lo8**

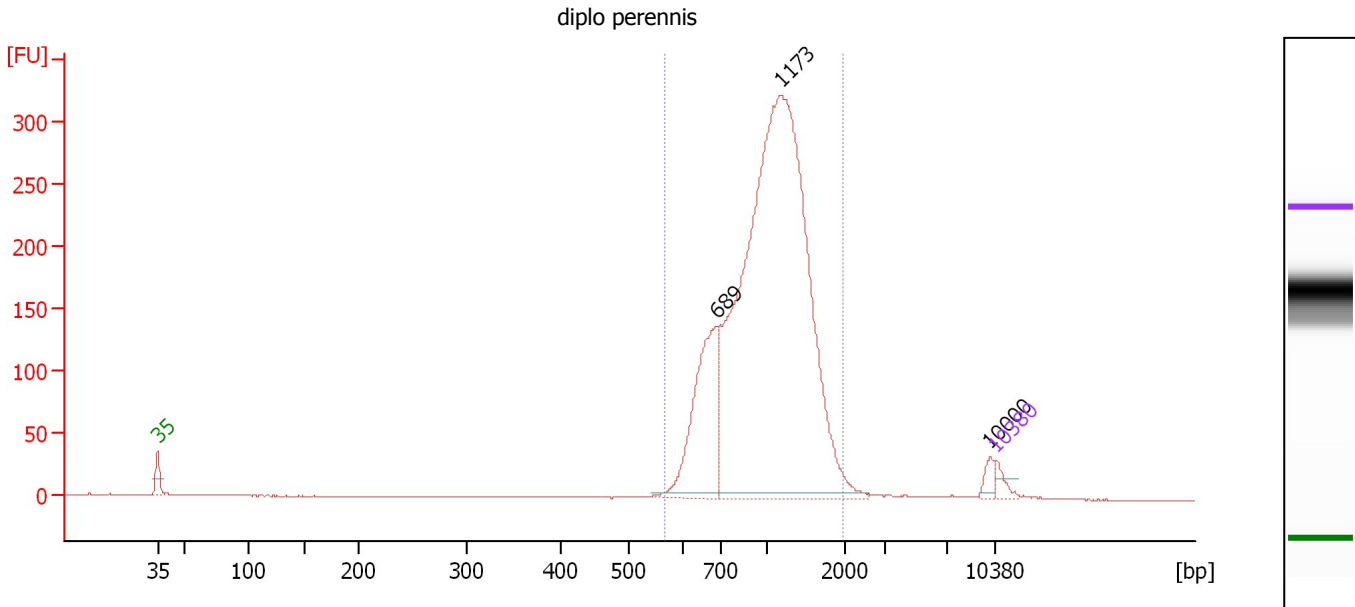
| From [bp] | Average Size [bp] | To [bp] | Corr. Area | Molarity [pmol/l] | % of Total | Size distribution in CV [%] | Conc. [pg/μl] | Color |
|-----------|-------------------|---------|------------|-------------------|------------|-----------------------------|---------------|-------|
| 352       | 565               | 967     | 2,513.4    | 8,979.4           | 85         | 21.2                        | 3,177.82      | Blue  |



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-24\2015-04-24\_003.xad

Created: 4/24/2015 11:13:40 AM  
 Modified: 4/24/2015 11:45:14 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : diplo perennis**

Number of peaks found: 3                      Corr. Area 1: 2,560.9  
 Noise: 0.3

**Peak table for sample 4 : diplo perennis**

| 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    | 689       | 1,291.25      | 2,839.1           |              | 89.70                      |
| 3    | 1,173     | 6,622.02      | 8,552.7           |              | 95.03                      |
| 4    | 10,000    | 70.43         | 10.7              |              | 112.56                     |
| 5    | 10,380    | 75.00         | 10.9              | Upper Marker | 113.00                     |

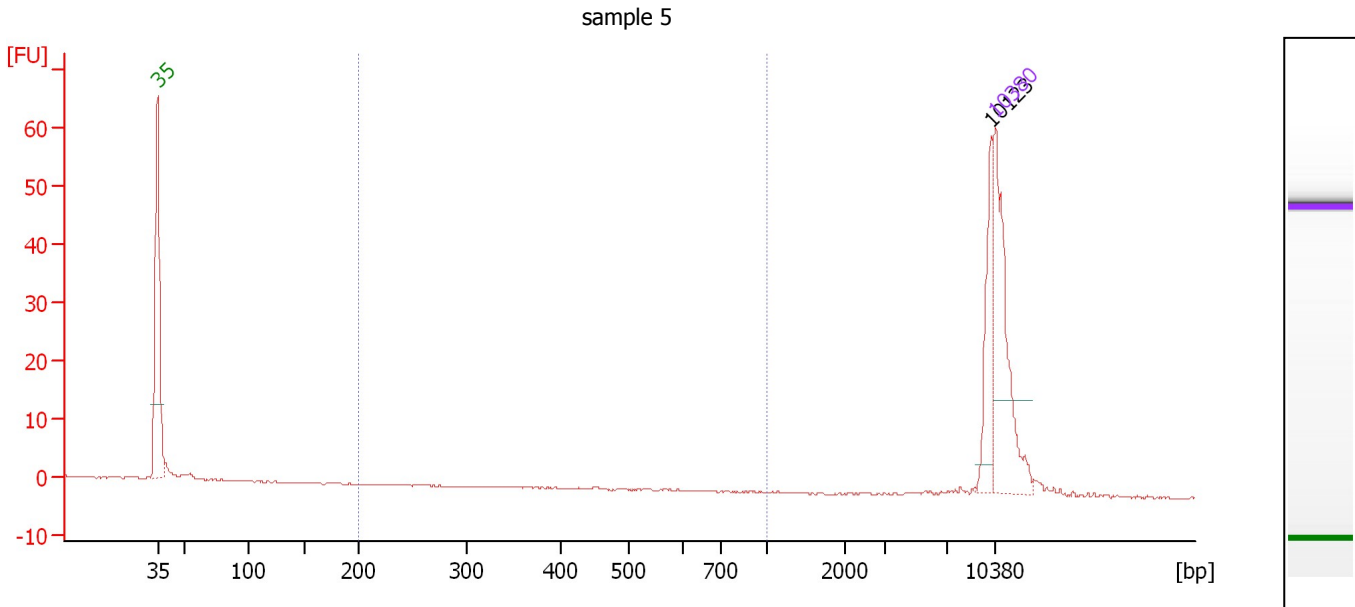
**Region table for sample 4 : diplo perennis**

| From [bp] | Average Size [bp] | To [bp] | Corr. Area | Molarity [pmol/l] | % of Total | Size distribution in CV [%] | Conc. [pg/μl] | Color |
|-----------|-------------------|---------|------------|-------------------|------------|-----------------------------|---------------|-------|
| 568       | 1,086             | 1,974   | 2,560.9    | 12,331.9          | 96         | 29.5                        | 8,005.93      | Blue  |

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-24\2015-04-24\_003.xad

Created: 4/24/2015 11:13:40 AM  
 Modified: 4/24/2015 11:45:14 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : sample 5**

Number of peaks found: 1                      Corr. Area 1: 0.0  
 Noise: 0.1

**Peak table for sample 5 : sample 5**

| 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    | 10,123    | 38.25         | 5.7               |              | 112.70                     |
| 3    | 10,380    | 75.00         | 10.9              | Upper Marker | 113.00                     |

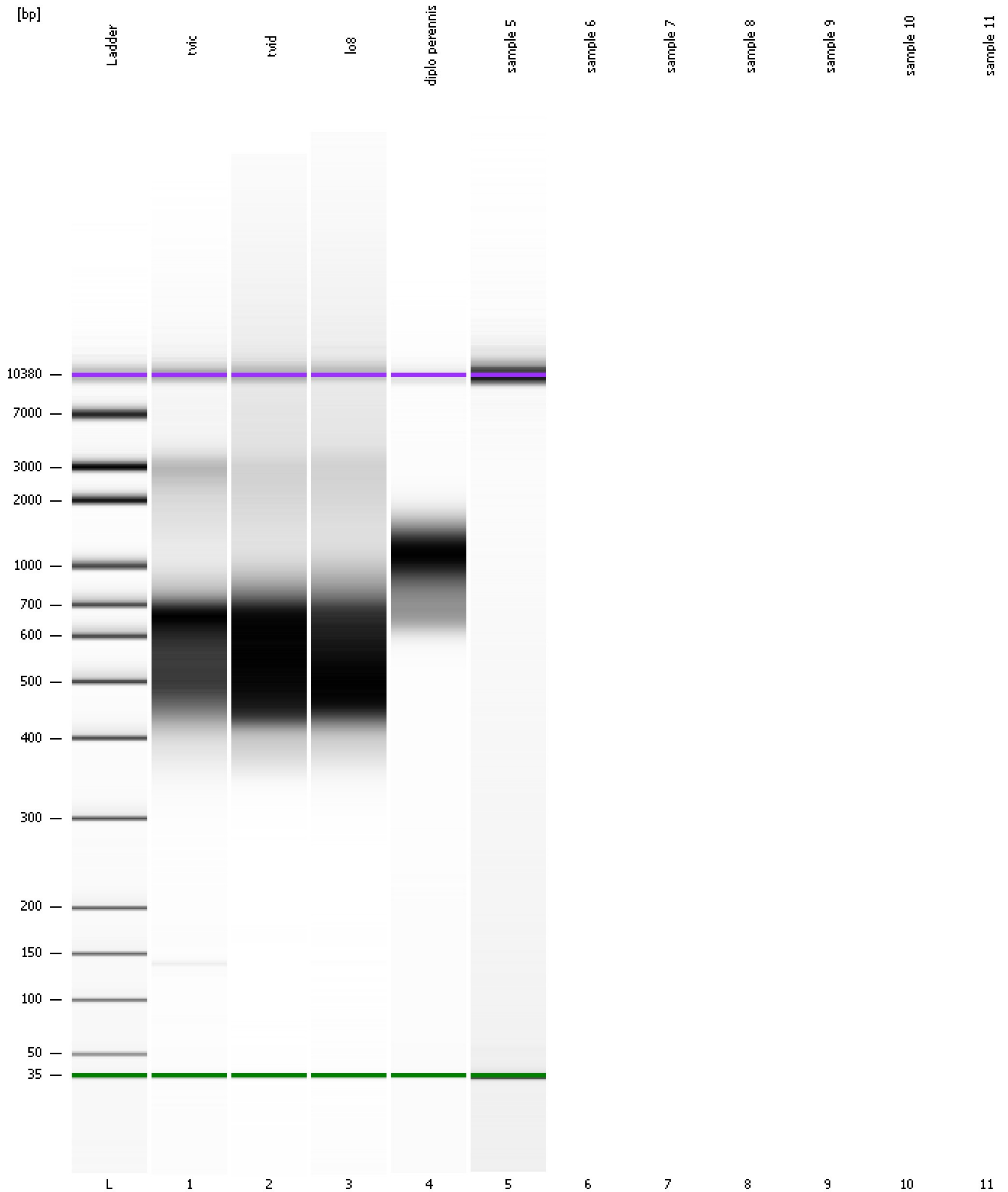
**Region table for sample 5 : sample 5**

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

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-24\2015-04-24\_003.xad

Created: 4/24/2015 11:13:40 AM  
Modified: 4/24/2015 11:45:14 AM

**Gel Image**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-24\2015-04-24\_003.xad

Created: 4/24/2015 11:13:40 AM  
Modified: 4/24/2015 11:45:14 AM

**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.

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-24\2015-04-24\_003.xad

Created: 4/24/2015 11:13:40 AM  
 Modified: 4/24/2015 11:45:14 AM

**Run Logbook**

| Description   | Number | Source     | Category | Sub Category | Time                  | Time Zone                           | User     | Host     |
|---|--------|------------|----------|--------------|-----------------------|-------------------------------------|----------|----------|
| Run ended on port 1 (Number of wells acquired: 6)   |        | Instrument | Run      |              | 4/24/2015 11:37:51 AM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-04-24\2015-04-24_003.xad) |        | Instrument | Run      |              | 4/24/2015 11:13:45 AM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Product Number : G2938B   |        | Instrument | Run      |              | 4/24/2015 11:13:45 AM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Name :  |        | Instrument | Run      |              | 4/24/2015 11:13:45 AM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Vendor : Agilent Technologies   |        | Instrument | Run      |              | 4/24/2015 11:13:45 AM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Serial# : DE13701086  |        | Instrument | Run      |              | 4/24/2015 11:13:45 AM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Firmware : C.01.069   |        | Instrument | Run      |              | 4/24/2015 11:13:45 AM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Cartridge : Electrode   |        | Instrument | Run      |              | 4/24/2015 11:13:45 AM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |