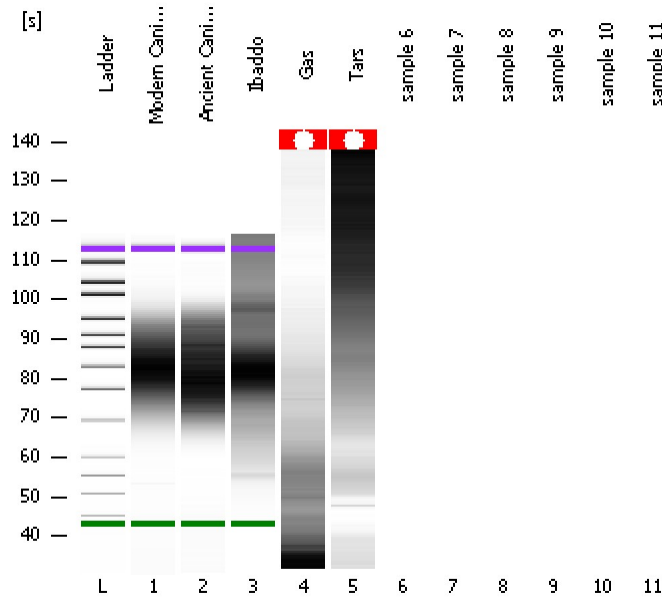


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-04\2014-04-04_001.xad

Created: 4/4/2014 7:51:33 AM
Modified: 4/4/2014 8:18:14 AM

Electrophoresis File Run Summary



Instrument Information:

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

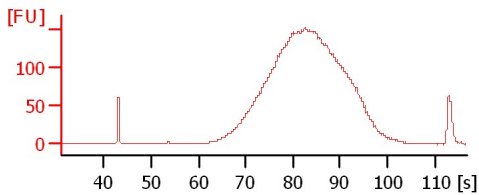
Assay Information:

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

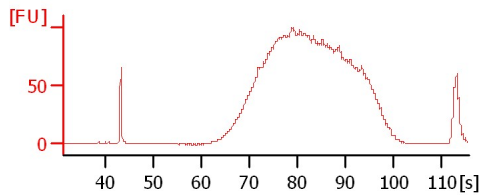
Chip Information:

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

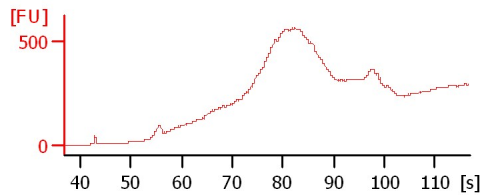
Modern Canine-1



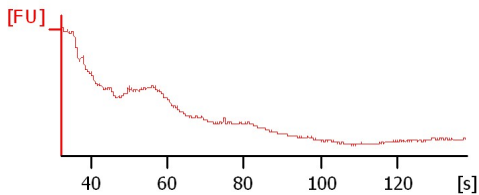
Ancient Canine-1 1:2



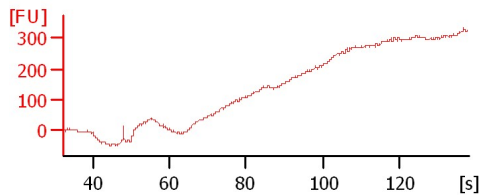
Ibaddo



Gas



Tars



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-04\2014-04-04_001.xad

Created: 4/4/2014 7:51:33 AM
 Modified: 4/4/2014 8:18:14 AM

Electrophoresis File Run Summary (Chip Summary)

| Sample Name | Sample Comment | Rest. Digest | Status | Observation | Result Label | Result Color |
|----------------------|----------------|--------------------------|--------|-------------|--------------|--------------|
| Modern Canine-1 | | <input type="checkbox"/> | ✓ | | | |
| Ancient Canine-1 1:2 | | <input type="checkbox"/> | ✓ | | | |
| Ibaddo | | <input type="checkbox"/> | ✓ | | | |
| Gas | | <input type="checkbox"/> | ✓ | | | |
| Tars | | <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\2014-04-04\2014-04-04_001.xad

Created: 4/4/2014 7:51:33 AM
Modified: 4/4/2014 8:18:14 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

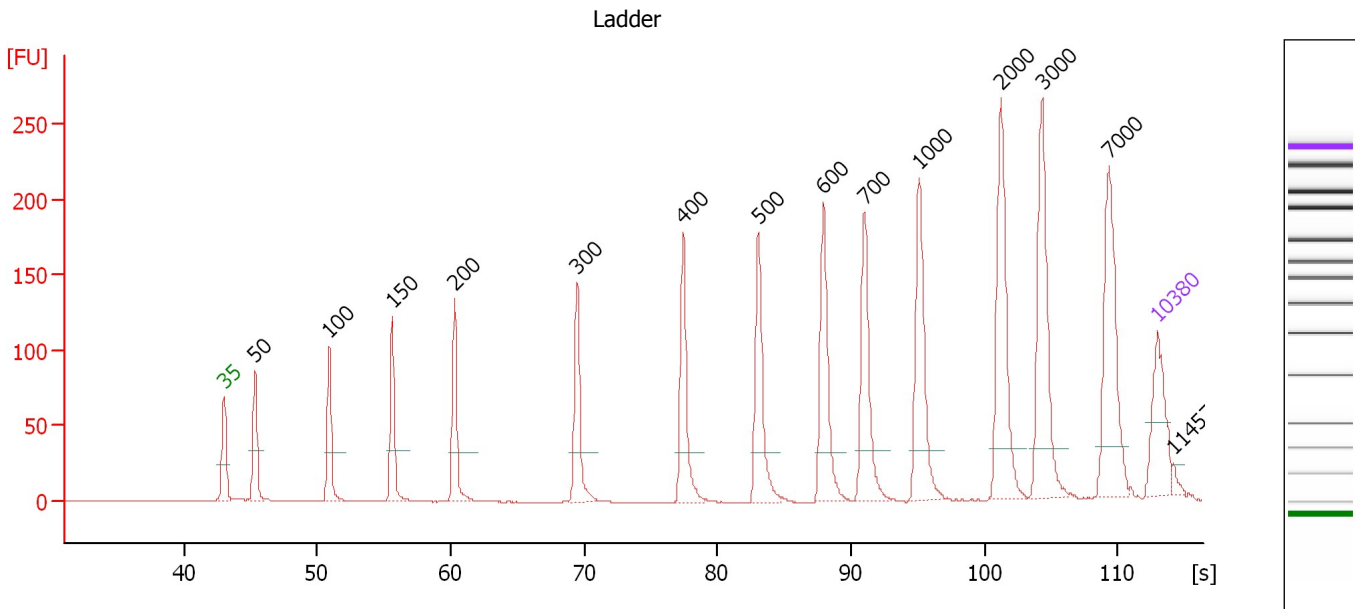
Ladder

| 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\2014-04-04\2014-04-04_001.xad

Created: 4/4/2014 7:51:33 AM
 Modified: 4/4/2014 8:18:14 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

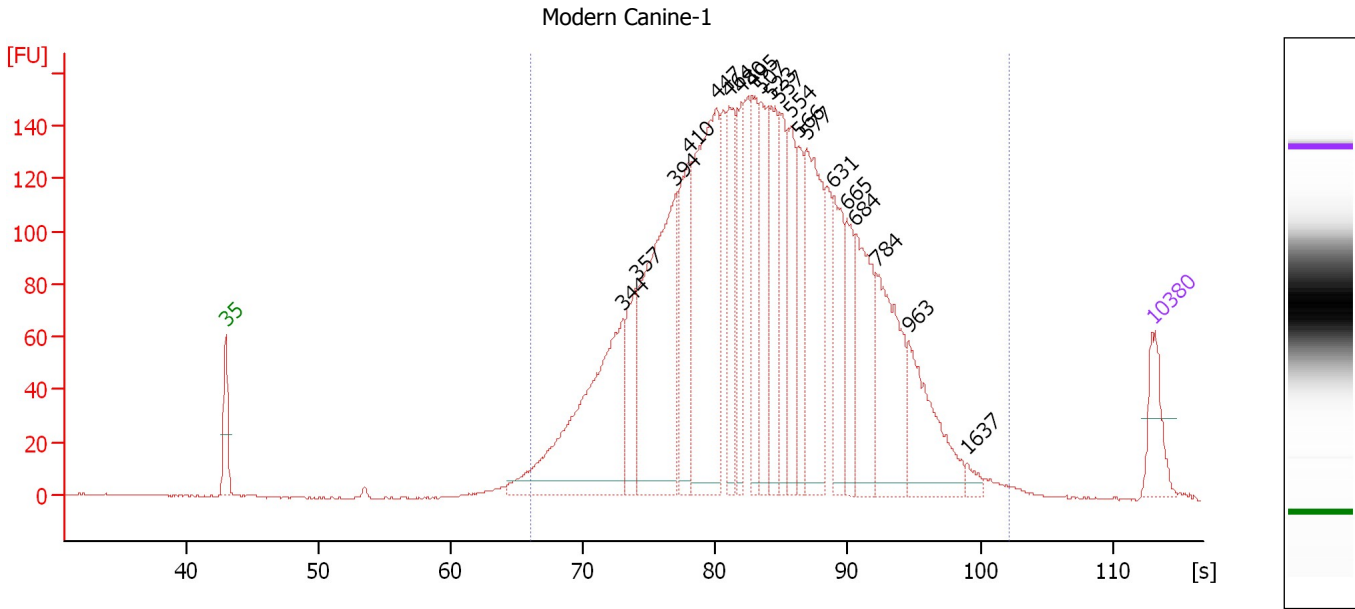
Peak table for Ladder

| Peak | Aligned Migration Time [s] | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations |
|------|----------------------------|-----------|---------------|-------------------|--------------|
| 1 | 43.00 | 35 | 125.00 | 5,411.3 | Lower Marker |
| 2 | 45.33 | 50 | 150.00 | 4,545.5 | Ladder Peak |
| 3 | 50.89 | 100 | 150.00 | 2,272.7 | Ladder Peak |
| 4 | 55.64 | 150 | 150.00 | 1,515.2 | Ladder Peak |
| 5 | 60.31 | 200 | 150.00 | 1,136.4 | Ladder Peak |
| 6 | 69.49 | 300 | 150.00 | 757.6 | Ladder Peak |
| 7 | 77.46 | 400 | 150.00 | 568.2 | Ladder Peak |
| 8 | 83.05 | 500 | 150.00 | 454.5 | Ladder Peak |
| 9 | 87.96 | 600 | 150.00 | 378.8 | Ladder Peak |
| 10 | 91.02 | 700 | 150.00 | 324.7 | Ladder Peak |
| 11 | 95.09 | 1,000 | 150.00 | 227.3 | Ladder Peak |
| 12 | 101.25 | 2,000 | 150.00 | 113.6 | Ladder Peak |
| 13 | 104.35 | 3,000 | 150.00 | 75.8 | Ladder Peak |
| 14 | 109.34 | 7,000 | 150.00 | 32.5 | Ladder Peak |
| 15 | 113.00 | 10,380 | 75.00 | 10.9 | Upper Marker |
| 16 | 114.17 | 11,457 | 0.00 | 0.0 | |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-04\2014-04-04_001.xad

Created: 4/4/2014 7:51:33 AM
 Modified: 4/4/2014 8:18:14 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : Modern Canine-1

Number of peaks found: 20 Corr. Area 1: 3,699.9
 Noise: 0.3


Peak table for sample 1 : Modern Canine-1

| Peak | Aligned Migration Time [s] | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations |
|------|----------------------------|-----------|---------------|-------------------|--------------|
| 1 | 43.00 | 35 | 125.00 | 5,411.3 | Lower Marker |
| 2 | 73.01 | 344 | 648.82 | 2,855.8 | |
| 3 | 74.03 | 357 | 166.34 | 706.1 | |
| 4 | 76.99 | 394 | 641.90 | 2,467.9 | |
| 5 | 78.00 | 410 | 247.74 | 916.1 | |
| 6 | 80.07 | 447 | 625.24 | 2,120.8 | |
| 7 | 81.04 | 464 | 211.48 | 690.5 | |
| 8 | 81.93 | 480 | 173.08 | 546.3 | |
| 9 | 82.79 | 495 | 174.72 | 534.5 | |
| 10 | 83.39 | 507 | 205.70 | 614.8 | |
| 11 | 84.16 | 523 | 233.41 | 676.6 | |
| 12 | 84.85 | 537 | 177.74 | 501.8 | |
| 13 | 85.71 | 554 | 166.61 | 455.6 | |
| 14 | 86.27 | 566 | 127.24 | 340.9 | |
| 15 | 86.84 | 577 | 338.13 | 887.6 | |
| 16 | 88.91 | 631 | 170.57 | 409.6 | |
| 17 | 89.96 | 665 | 123.93 | 282.2 | |
| 18 | 90.53 | 684 | 262.87 | 582.3 | |
| 19 | 92.15 | 784 | 283.39 | 548.0 | |
| 20 | 94.59 | 963 | 211.87 | 333.3 | |
| 21 | 99.01 | 1,637 | 16.13 | 14.9 | |
| 22 | 113.00 | 10,380 | 75.00 | 10.9 | Upper Marker |

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-04\2014-04-04_001.xad

Created: 4/4/2014 7:51:33 AM
Modified: 4/4/2014 8:18:14 AM

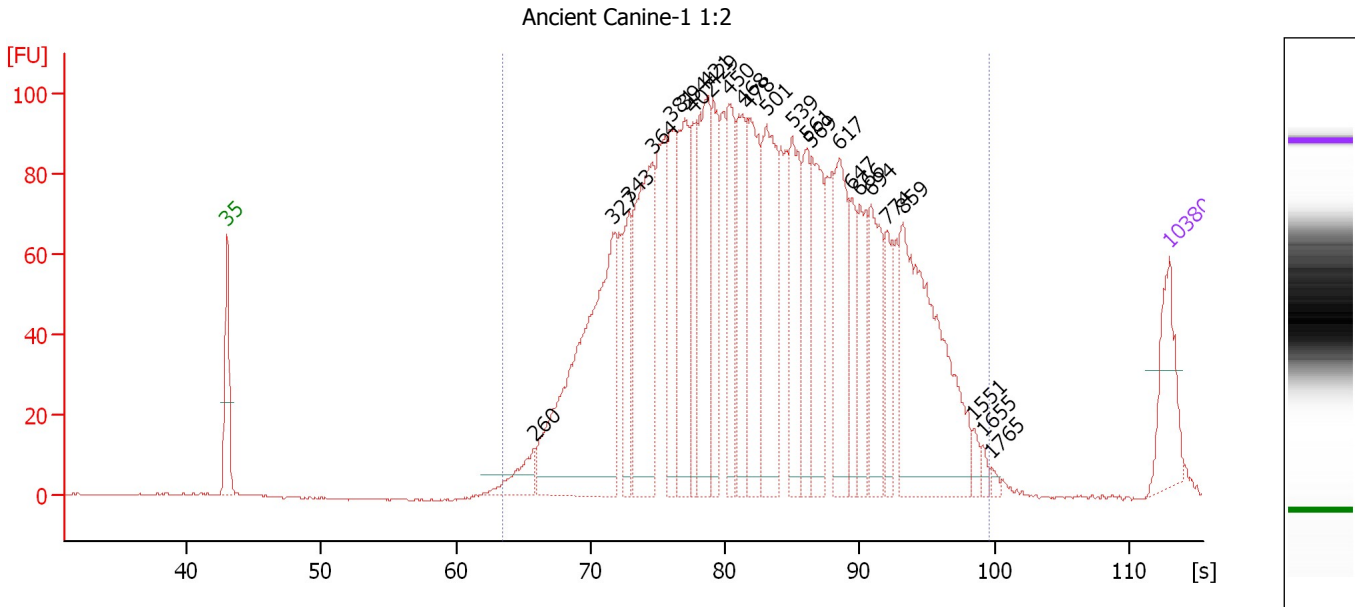
Electropherogram Summary Continued ...**... Region table for sample 1 : Modern Canine-1**

| From [bp] | To [bp] | Average Size [bp] | Molarity [pmol/l] | Conc. [pg/μl] | Co Corr. lor Area | % of Total | Size distribution in CV [%] |
|-----------|---------|-------------------|-------------------|---------------|---|------------|-----------------------------|
| 263 | 2,283 | 554 | 18,508.4 | 5,789.44 |  3,699.9 | 99 | 41.9 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-04\2014-04-04_001.xad

Created: 4/4/2014 7:51:33 AM
 Modified: 4/4/2014 8:18:14 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : Ancient Canine-1 1:2

Number of peaks found: 25 Corr. Area 1: 2,871.6
 Noise: 0.2

Peak table for sample 2 : Ancient Canine-1 1:2

| Peak | Aligned Migration Time [s] | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations |
|------|----------------------------|-----------|---------------|-------------------|--------------|
| 1 | 43.00 | 35 | 125.00 | 5,411.3 | Lower Marker |
| 2 | 65.77 | 260 | 56.74 | 331.2 | |
| 3 | 71.64 | 327 | 541.11 | 2,507.2 | |
| 4 | 72.87 | 343 | 117.73 | 520.8 | |
| 5 | 74.55 | 364 | 305.17 | 1,271.9 | |
| 6 | 75.91 | 381 | 135.50 | 539.5 | |
| 7 | 76.98 | 394 | 180.92 | 695.6 | |
| 8 | 77.58 | 402 | 101.40 | 382.0 | |
| 9 | 78.66 | 421 | 199.81 | 718.3 | |
| 10 | 79.10 | 429 | 126.58 | 446.7 | |
| 11 | 80.25 | 450 | 139.78 | 470.7 | |
| 12 | 81.25 | 468 | 150.25 | 486.6 | |
| 13 | 81.81 | 478 | 180.57 | 572.6 | |
| 14 | 83.09 | 501 | 228.58 | 691.7 | |
| 15 | 84.96 | 539 | 144.86 | 407.3 | |
| 16 | 86.04 | 561 | 96.08 | 259.6 | |
| 17 | 86.44 | 569 | 148.77 | 396.2 | |
| 18 | 88.47 | 617 | 149.70 | 367.9 | |
| 19 | 89.39 | 647 | 77.90 | 182.6 | |
| 20 | 89.99 | 666 | 90.44 | 205.7 | |
| 21 | 90.82 | 694 | 133.42 | 291.5 | |
| 22 | 92.02 | 774 | 70.56 | 138.2 | |
| 23 | 93.18 | 859 | 366.43 | 646.3 | |
| 24 | 98.48 | 1,551 | 12.24 | 12.0 | |
| 25 | 99.12 | 1,655 | 8.88 | 8.1 | |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-04\2014-04-04_001.xad

Created: 4/4/2014 7:51:33 AM
 Modified: 4/4/2014 8:18:14 AM

Electropherogram Summary Continued ...

... Peak table for sample 2 : Ancient Canine-1 1:2

| Peak | Aligned Migration Time [s] | Size [bp] | Conc. [pg/ μ l] | Molarity [pmol/l] | Observations |
|------|----------------------------|-----------|---------------------|-------------------|--------------|
| 26 | 99.80 | 1,765 | 5.49 | 4.7 | |
| 27 | 113.00 | 10,380 | 75.00 | 10.9 | Upper Marker |

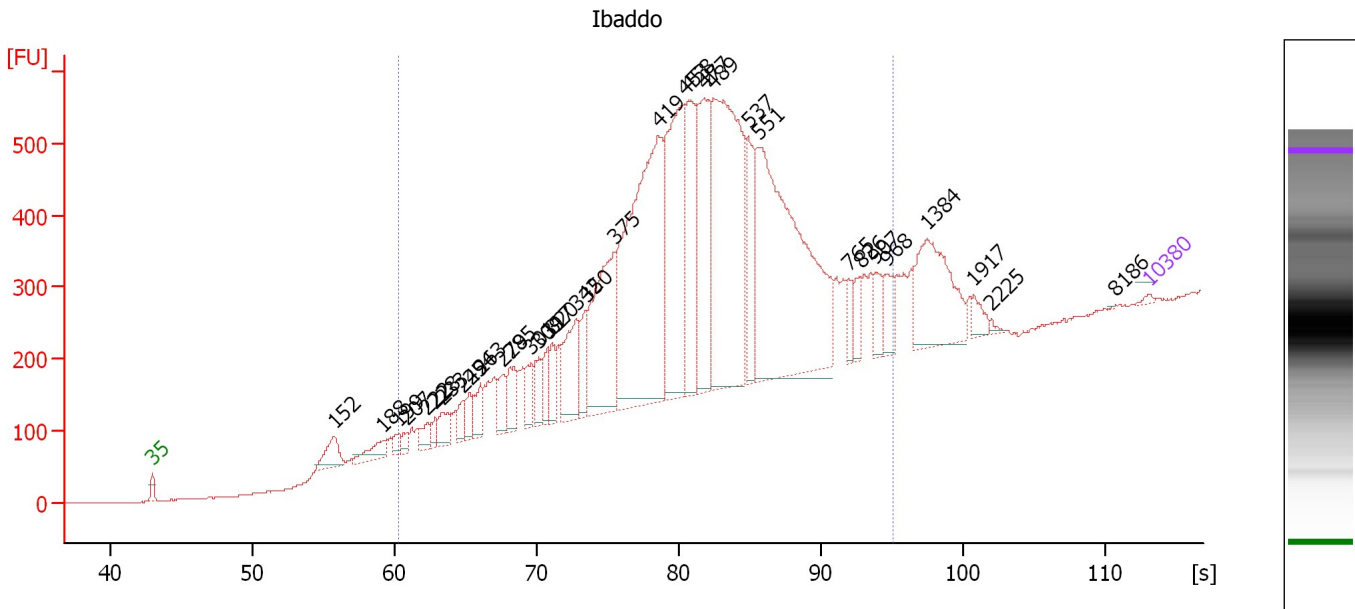
Region table for sample 2 : Ancient Canine-1 1:2

| From [bp] | To [bp] | Average Size [bp] | Molarity [pmol/l] | Conc. [pg/ μ l] | Co Corr. for Area | % of Total | Size distribution in CV [%] |
|-----------|---------|-------------------|-------------------|---------------------|-------------------|------------|-----------------------------|
| 235 | 1,740 | 545 | 14,538.4 | 4,322.23 | 2,871.6 | 100 | 43.9 |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-04\2014-04-04_001.xad

Created: 4/4/2014 7:51:33 AM
 Modified: 4/4/2014 8:18:14 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : Ibaddo

Number of peaks found: 34 Corr. Area 1: 8,964.6
 Noise: 0.5

Peak table for sample 3 : Ibaddo

| Peak | Aligned Migration Time [s] | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations |
|------|----------------------------|-----------|---------------|-------------------|--------------|
| 1 | 43.00 | 35 | 125.00 | 5,411.3 | Lower Marker |
| 2 | 55.79 | 152 | 1,804.75 | 18,032.8 | |
| 3 | 59.23 | 188 | 1,213.60 | 9,759.5 | |
| 4 | 60.25 | 199 | 475.62 | 3,615.4 | |
| 5 | 60.92 | 207 | 437.77 | 3,208.8 | |
| 6 | 62.32 | 222 | 727.22 | 4,965.0 | |
| 7 | 62.89 | 228 | 509.79 | 3,386.4 | |
| 8 | 63.38 | 233 | 1,129.35 | 7,330.3 | |
| 9 | 64.85 | 249 | 818.70 | 4,972.3 | |
| 10 | 65.30 | 254 | 953.15 | 5,676.7 | |
| 11 | 66.06 | 263 | 1,204.74 | 6,950.4 | |
| 12 | 67.57 | 279 | 1,302.70 | 7,072.6 | |
| 13 | 68.13 | 285 | 1,548.92 | 8,227.6 | |
| 14 | 69.60 | 301 | 1,123.28 | 5,645.4 | |
| 15 | 70.17 | 309 | 1,160.77 | 5,699.6 | |
| 16 | 70.81 | 317 | 1,071.33 | 5,126.7 | |
| 17 | 71.08 | 320 | 1,310.61 | 6,206.8 | |
| 18 | 72.81 | 342 | 3,330.01 | 14,765.0 | |
| 19 | 73.45 | 350 | 1,504.28 | 6,516.4 | |
| 20 | 75.45 | 375 | 7,294.04 | 29,481.9 | |
| 21 | 78.55 | 419 | 18,044.93 | 65,176.0 | |
| 22 | 80.43 | 453 | 10,007.95 | 33,457.8 | |
| 23 | 80.70 | 458 | 5,454.75 | 18,047.9 | |
| 24 | 81.75 | 477 | 6,373.95 | 20,254.0 | |
| 25 | 82.43 | 489 | 15,511.66 | 48,066.4 | |

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-04\2014-04-04_001.xad

Created: 4/4/2014 7:51:33 AM
 Modified: 4/4/2014 8:18:14 AM

Electropherogram Summary Continued ...

... Peak table for sample 3 : Ibaddo

| Peak | Aligned Migration Time [s] | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations |
|------|----------------------------|-----------|---------------|-------------------|--------------|
| 26 | 84.85 | 537 | 3,288.07 | 9,284.3 | |
| 27 | 85.57 | 551 | 17,739.41 | 48,762.6 | |
| 28 | 91.91 | 765 | 816.50 | 1,616.7 | |
| 29 | 92.74 | 826 | 790.34 | 1,448.9 | |
| 30 | 93.83 | 907 | 919.12 | 1,535.0 | |
| 31 | 94.66 | 968 | 1,145.86 | 1,792.6 | |
| 32 | 97.45 | 1,384 | 4,508.18 | 4,935.1 | |
| 33 | 100.74 | 1,917 | 499.77 | 395.0 | |
| 34 | 101.94 | 2,225 | 99.18 | 67.5 | |
| 35 | 110.62 | 8,186 | 24.39 | 4.5 | |
| 36 | 113.00 | 10,380 | 75.00 | 10.9 | Upper Marker |

Region table for sample 3 : Ibaddo

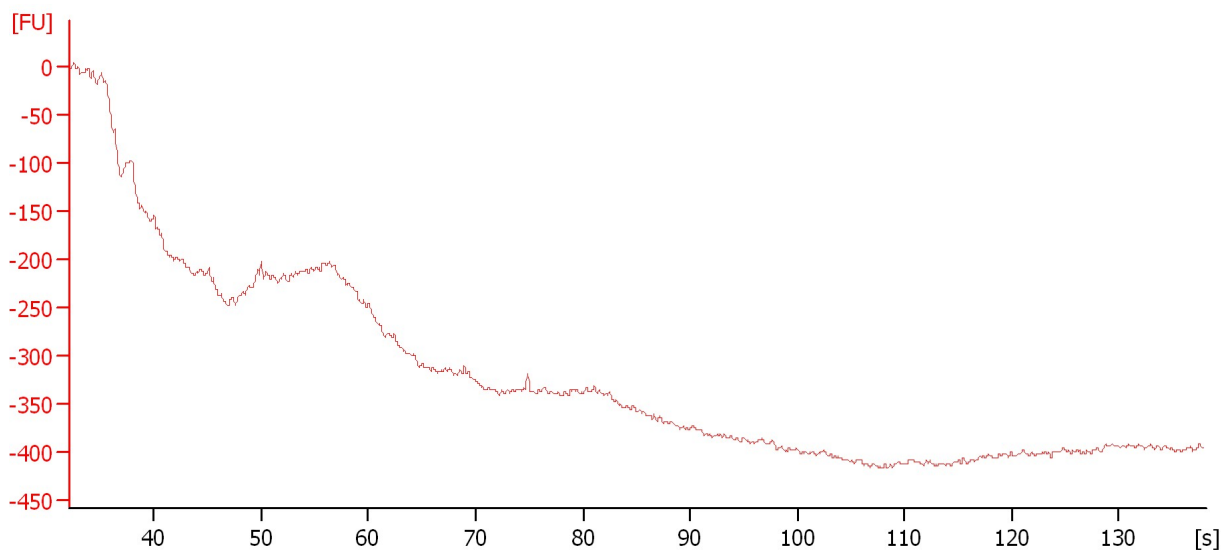
| From [bp] | To [bp] | Average Size [bp] | Molarity [pmol/l] | Conc. [pg/μl] | Co Corr. for Area | % of Total | Size distribution in CV [%] |
|-----------|---------|-------------------|-------------------|---------------|-------------------|------------|-----------------------------|
| 200 | 1,000 | 488 | 362,099.9 | 103,829.92 | 8,964.6 | 92 | 28.8 |

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-04\2014-04-04_001.xad

Created: 4/4/2014 7:51:33 AM
Modified: 4/4/2014 8:18:14 AM

Electropherogram Summary Continued ...

Gas



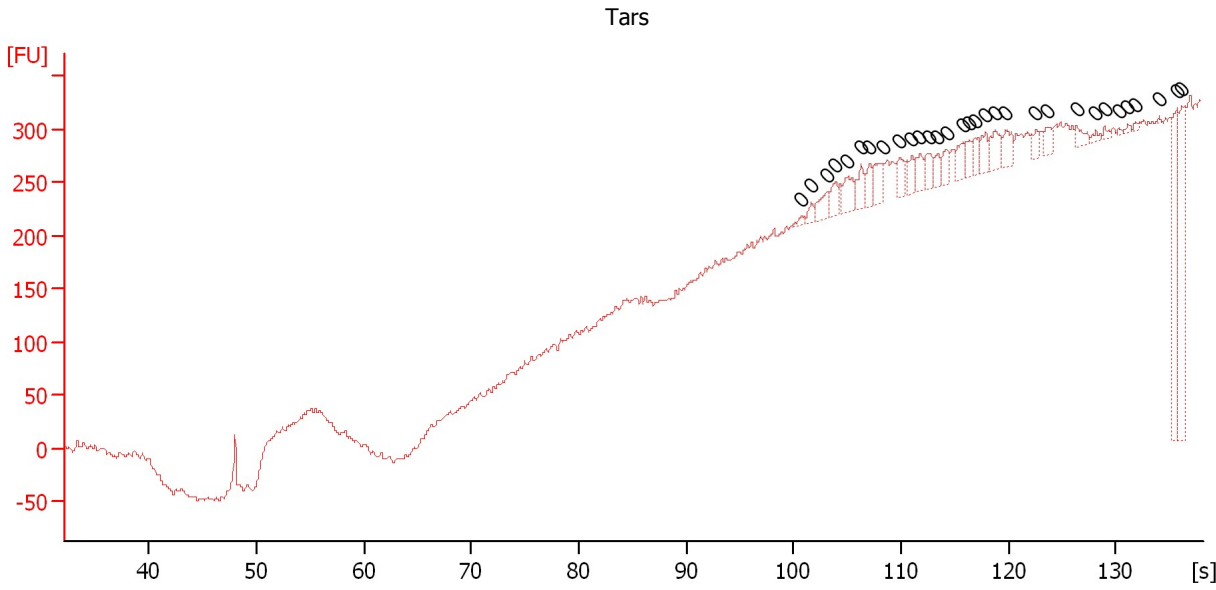
Overall Results for sample 4 : Gas

Noise: 3.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-04\2014-04-04_001.xad

Created: 4/4/2014 7:51:33 AM
 Modified: 4/4/2014 8:18:14 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : Tars

Number of peaks found: 0 Noise: 3.1

Peak table for sample 5 : Tars

| Peak | Aligned Migration Time [s] | Size [bp] | Conc. [pg/μl] | Molarity [pmol/l] | Observations |
|------|----------------------------|-----------|---------------|-------------------|--------------|
| 1 | 100.75 | 0 | 0.00 | 0.0 | |
| 2 | 101.65 | 0 | 0.00 | 0.0 | |
| 3 | 103.10 | 0 | 0.00 | 0.0 | |
| 4 | 103.90 | 0 | 0.00 | 0.0 | |
| 5 | 104.90 | 0 | 0.00 | 0.0 | |
| 6 | 106.30 | 0 | 0.00 | 0.0 | |
| 7 | 107.10 | 0 | 0.00 | 0.0 | |
| 8 | 108.25 | 0 | 0.00 | 0.0 | |
| 9 | 109.90 | 0 | 0.00 | 0.0 | |
| 10 | 111.00 | 0 | 0.00 | 0.0 | |
| 11 | 111.75 | 0 | 0.00 | 0.0 | |
| 12 | 112.65 | 0 | 0.00 | 0.0 | |
| 13 | 113.40 | 0 | 0.00 | 0.0 | |
| 14 | 114.20 | 0 | 0.00 | 0.0 | |
| 15 | 115.80 | 0 | 0.00 | 0.0 | |
| 16 | 116.30 | 0 | 0.00 | 0.0 | |
| 17 | 116.95 | 0 | 0.00 | 0.0 | |
| 18 | 117.85 | 0 | 0.00 | 0.0 | |
| 19 | 118.75 | 0 | 0.00 | 0.0 | |
| 20 | 119.75 | 0 | 0.00 | 0.0 | |
| 21 | 122.55 | 0 | 0.00 | 0.0 | |
| 22 | 123.55 | 0 | 0.00 | 0.0 | |
| 23 | 126.35 | 0 | 0.00 | 0.0 | |
| 24 | 128.15 | 0 | 0.00 | 0.0 | |
| 25 | 129.00 | 0 | 0.00 | 0.0 | |
| 26 | 130.30 | 0 | 0.00 | 0.0 | |
| 27 | 131.10 | 0 | 0.00 | 0.0 | |

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-04\2014-04-04_001.xad

Created: 4/4/2014 7:51:33 AM
Modified: 4/4/2014 8:18:14 AM

Electropherogram Summary Continued ...

... Peak table for sample 5 :

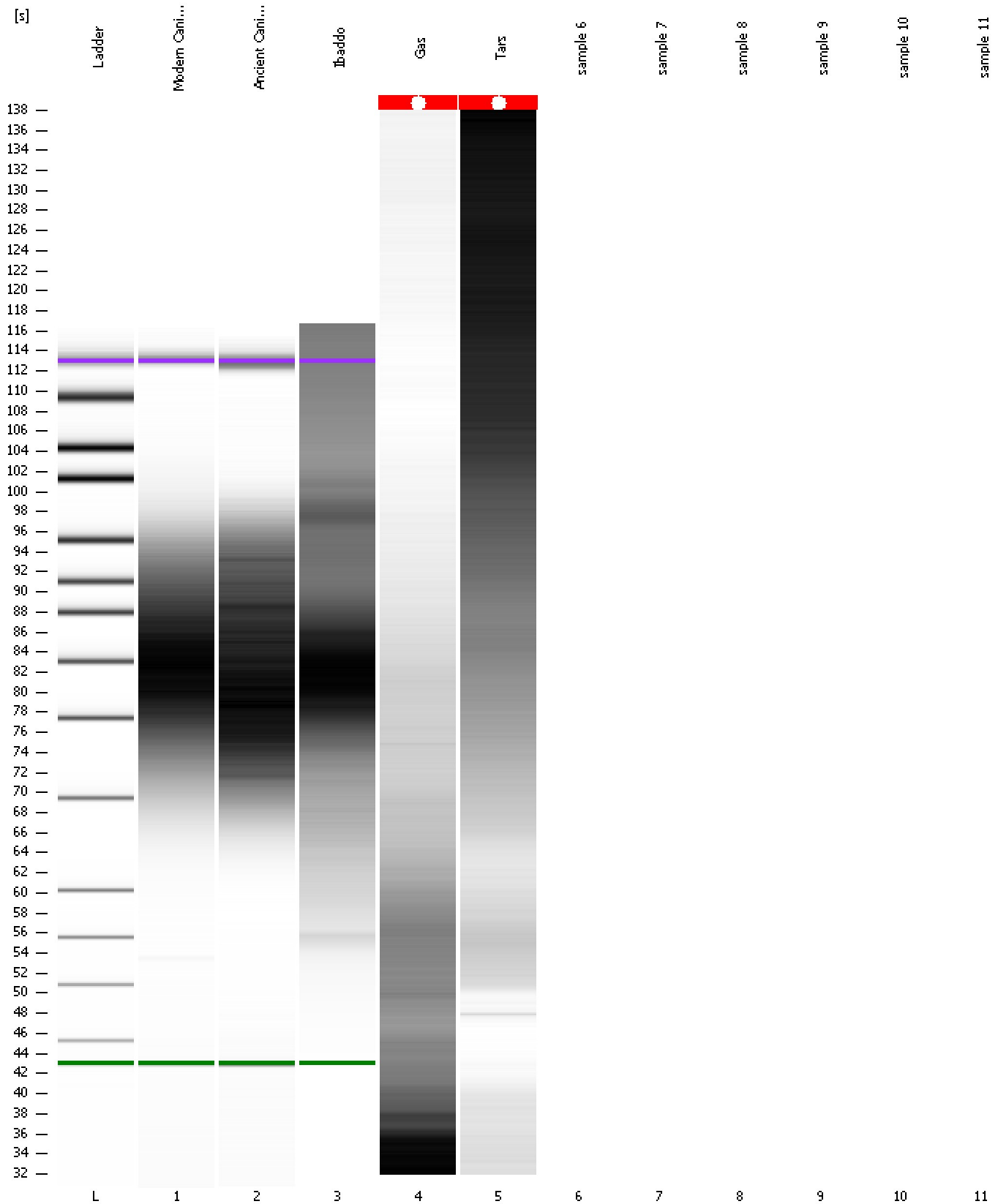
Tars

| Peak | Aligned Migration Time [s] | Size [bp] | Conc. [pg/ μ l] | Molarity [pmol/l] | Observations |
|------|----------------------------|-----------|---------------------|-------------------|--------------|
| 28 | 131.85 | 0 | 0.00 | 0.0 | |
| 29 | 134.00 | 0 | 0.00 | 0.0 | |
| 30 | 135.70 | 0 | 0.00 | 0.0 | |
| 31 | 136.10 | 0 | 0.00 | 0.0 | |

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-04\2014-04-04_001.xad

Created: 4/4/2014 7:51:33 AM
Modified: 4/4/2014 8:18:14 AM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-04\2014-04-04_001.xad

Created: 4/4/2014 7:51:33 AM
Modified: 4/4/2014 8:18:14 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 Created: 4/4/2014 7:51:33 AM
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-04\2014-04-04_001.xad Modified: 4/4/2014 8:18:14 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 | | 4/4/2014 8:15:43 AM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2014-04-04\2014-04-04_001.xad) | | Instrument | Run | | 4/4/2014 7:51:39 AM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Product Number : G2938B | | Instrument | Run | | 4/4/2014 7:51:39 AM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Name : | | Instrument | Run | | 4/4/2014 7:51:39 AM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Vendor : Agilent Technologies | | Instrument | Run | | 4/4/2014 7:51:39 AM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Serial# : DE13701086 | | Instrument | Run | | 4/4/2014 7:51:39 AM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Firmware : C.01.069 | | Instrument | Run | | 4/4/2014 7:51:39 AM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Cartridge : Electrode | | Instrument | Run | | 4/4/2014 7:51:39 AM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |