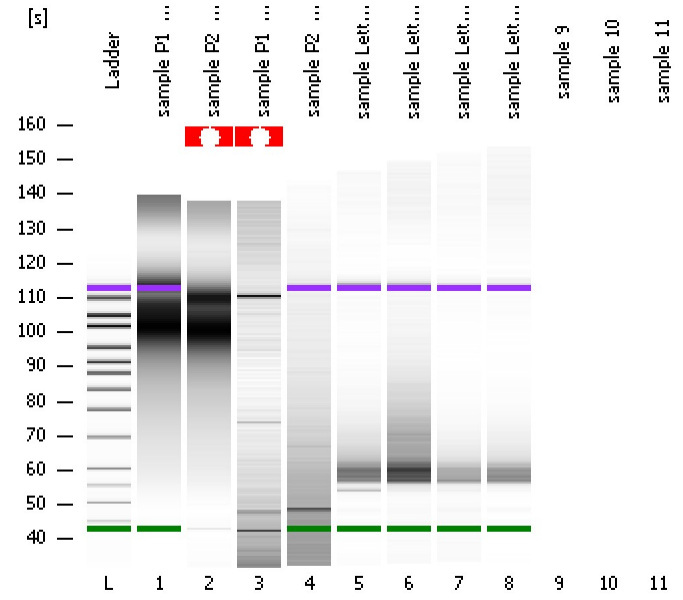
Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-14\2016-12-14_004.xad

Created: 12/14/2016 12:20:37 PM
Modified: 12/14/2016 12:53:19 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

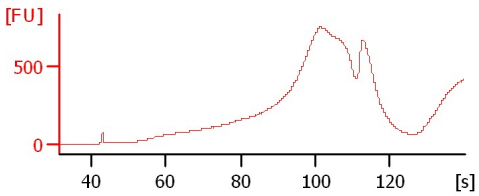
Chip Information:

Chip Lot #:

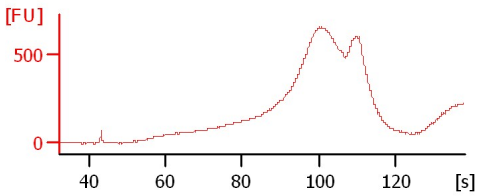
Reagent Kit Lot #:

Chip Comments:

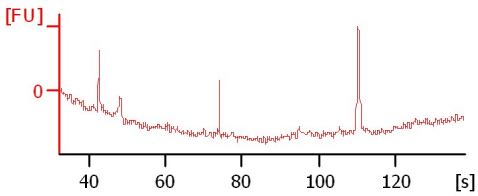
sample P1_beforePCR



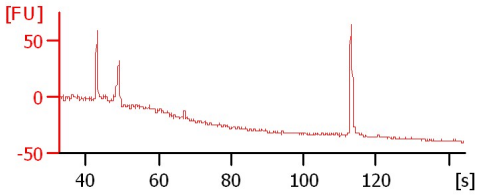
sample P2_beforePCR



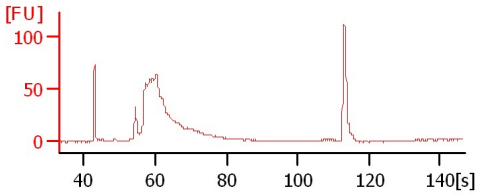
sample P1_afterPCR



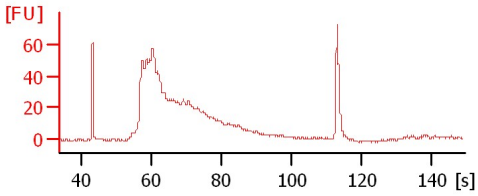
sample P2_afterPCR



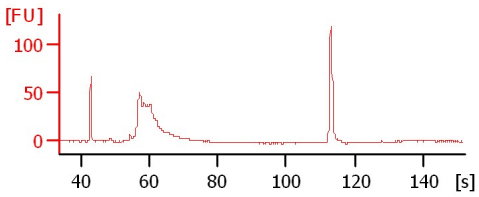
sample Lettuce1



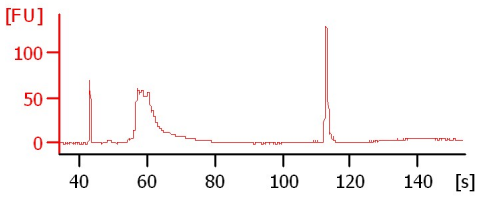
sample Lettuce2



sample Lettuce3



sample Lettuce4



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-14\2016-12-14_004.xad

Created: 12/14/2016 12:20:37 PM
Modified: 12/14/2016 12:53:19 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample P1_beforePCR		☐	✔			
sample P2_beforePCR		☐	✔			
sample P1_afterPCR		☐	✔			
sample P2_afterPCR		☐	✔			
sample Lettuce1		☐	✔			
sample Lettuce2		☐	✔			
sample Lettuce3		☐	✔			
sample Lettuce4		☐	✔			
sample 9		☐				
sample 10		☐				
sample 11		☐				
Ladder		☐	✔			

Chip Lot # **Reagent Kit Lot #**

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-14\2016-12-14_004.xad

Created: 12/14/2016 12:20:37 PM
Modified: 12/14/2016 12:53:19 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

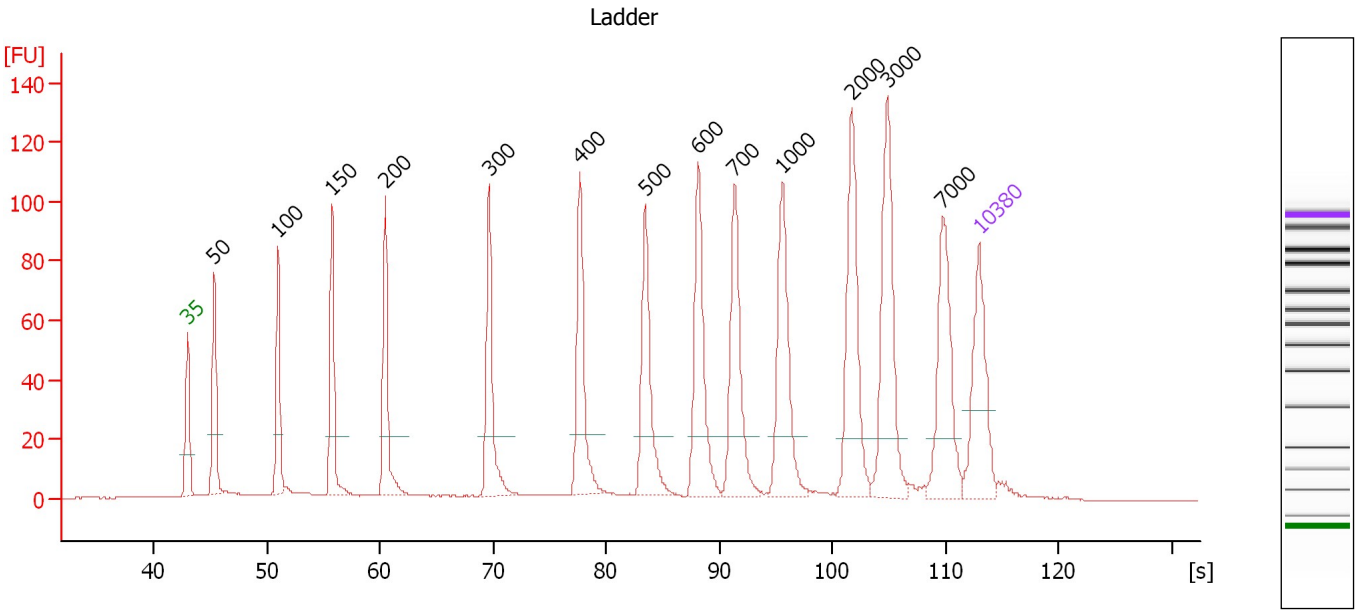
Ladder

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\2016-12-14\2016-12-14_004.xad

Created: 12/14/2016 12:20:37 PM
Modified: 12/14/2016 12:53:19 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

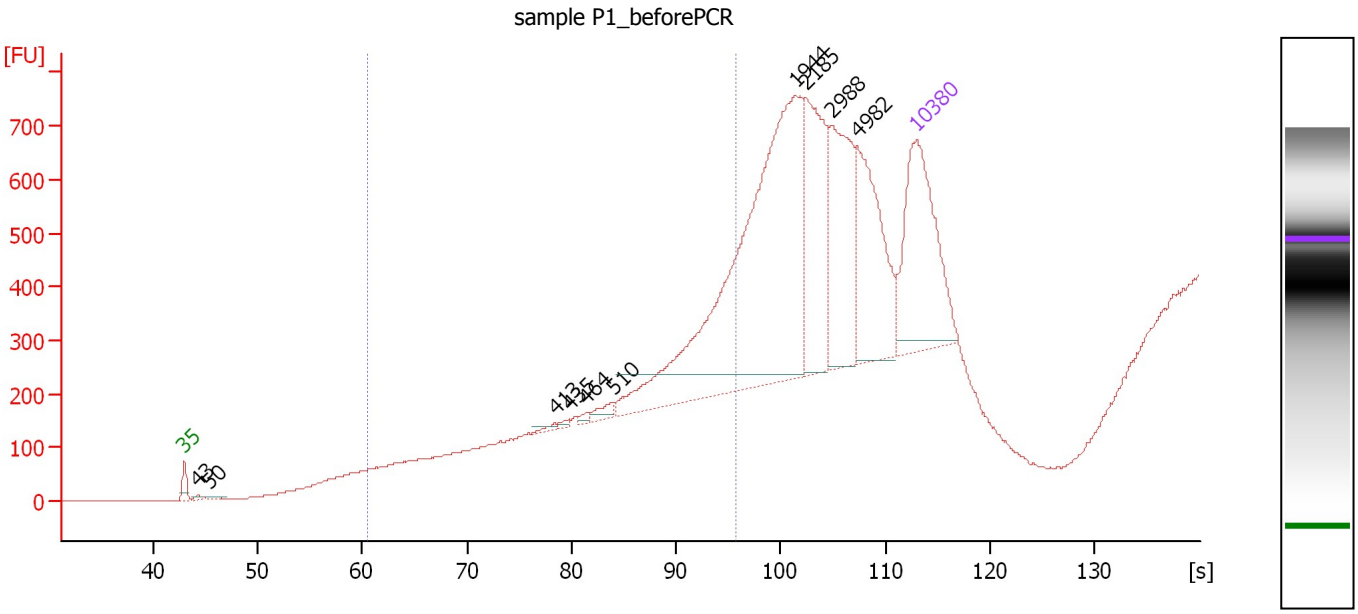
Peak table for Ladder

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	45.37
3		100	150.00	2,272.7	Ladder Peak	51.03
4		150	150.00	1,515.2	Ladder Peak	55.77
5		200	150.00	1,136.4	Ladder Peak	60.48
6		300	150.00	757.6	Ladder Peak	69.64
7		400	150.00	568.2	Ladder Peak	77.72
8		500	150.00	454.5	Ladder Peak	83.51
9		600	150.00	378.8	Ladder Peak	88.16
10		700	150.00	324.7	Ladder Peak	91.39
11		1,000	150.00	227.3	Ladder Peak	95.62
12		2,000	150.00	113.6	Ladder Peak	101.74
13		3,000	150.00	75.8	Ladder Peak	104.88
14		7,000	150.00	32.5	Ladder Peak	109.77
15		10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-14\2016-12-14_004.xad

Created: 12/14/2016 12:20:37 PM
Modified: 12/14/2016 12:53:19 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : sample P1_beforePCR

Number of peaks found:	10	Corr. Area 1:	745.4
Noise:	0.3		

Peak table for sample 1 : sample P1_beforePCR

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	43	1.95	68.5		44.28
3	50	1.97	59.4		45.41
4	413	2.10	7.7		78.46
5	435	1.70	5.9		79.74
6	464	1.96	6.4		81.44
7	510	5.43	16.2		83.95
8	1,944	242.45	189.0		101.40
9	2,185	68.31	47.4		102.33
10	2,988	65.91	33.4		104.84
11	4,982	67.80	20.6		107.30
12	10,380	75.00	10.9	Upper Marker	113.00

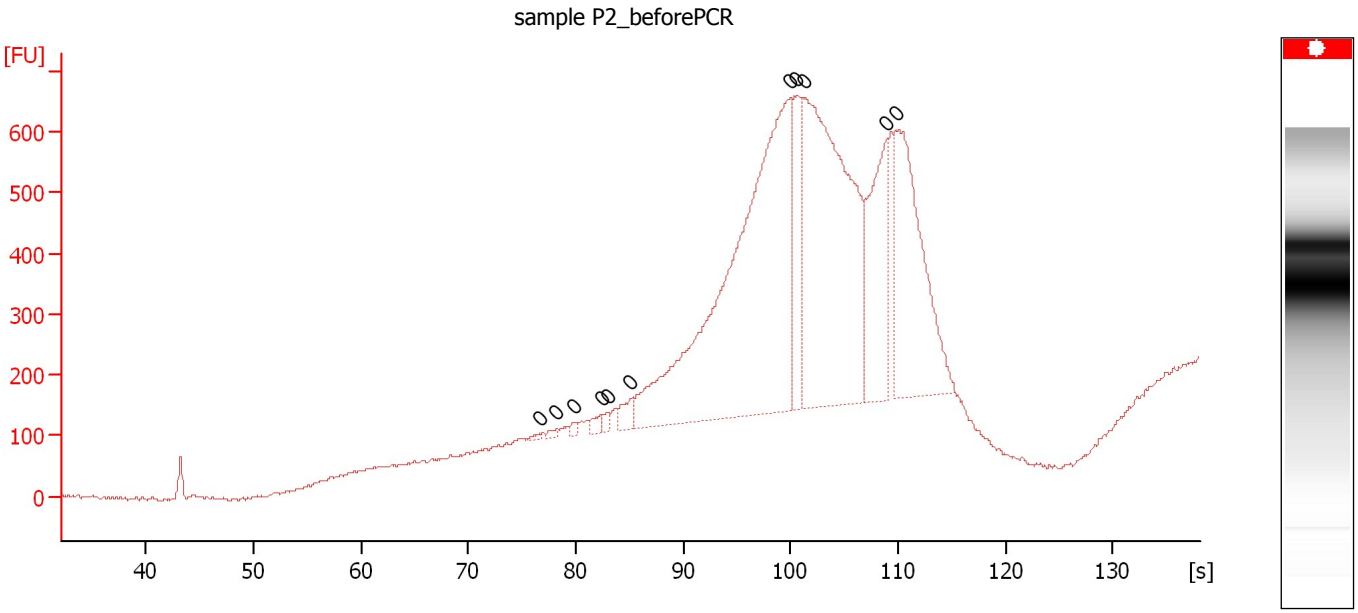
Region table for sample 1 : sample P1_beforePCR

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	821	745.4	109.1	57.77	12	14.8

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-14\2016-12-14_004.xad

Created: 12/14/2016 12:20:37 PM
Modified: 12/14/2016 12:53:19 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : sample P2_beforePCR

Number of peaks found: 0 Noise: 2.3

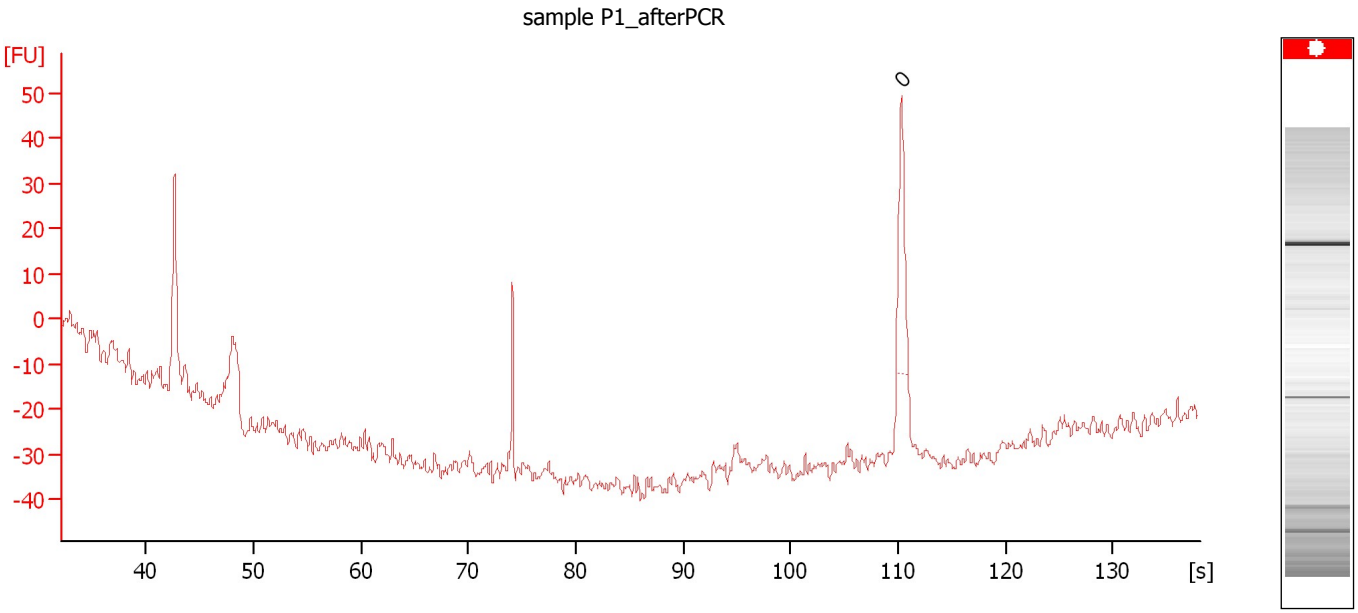
Peak table for sample 2 : sample P2_beforePCR

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0		76.55
2	0	0.00	0.0		78.20
3	0	0.00	0.0		79.80
4	0	0.00	0.0		82.45
5	0	0.00	0.0		82.95
6	0	0.00	0.0		85.10
7	0	0.00	0.0		99.95
8	0	0.00	0.0		100.55
9	0	0.00	0.0		101.30
10	0	0.00	0.0		108.95
11	0	0.00	0.0		109.85

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-14\2016-12-14_004.xad

Created: 12/14/2016 12:20:37 PM
Modified: 12/14/2016 12:53:19 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : sample P1_afterPCR

Number of peaks found: 0 Noise: 2.1

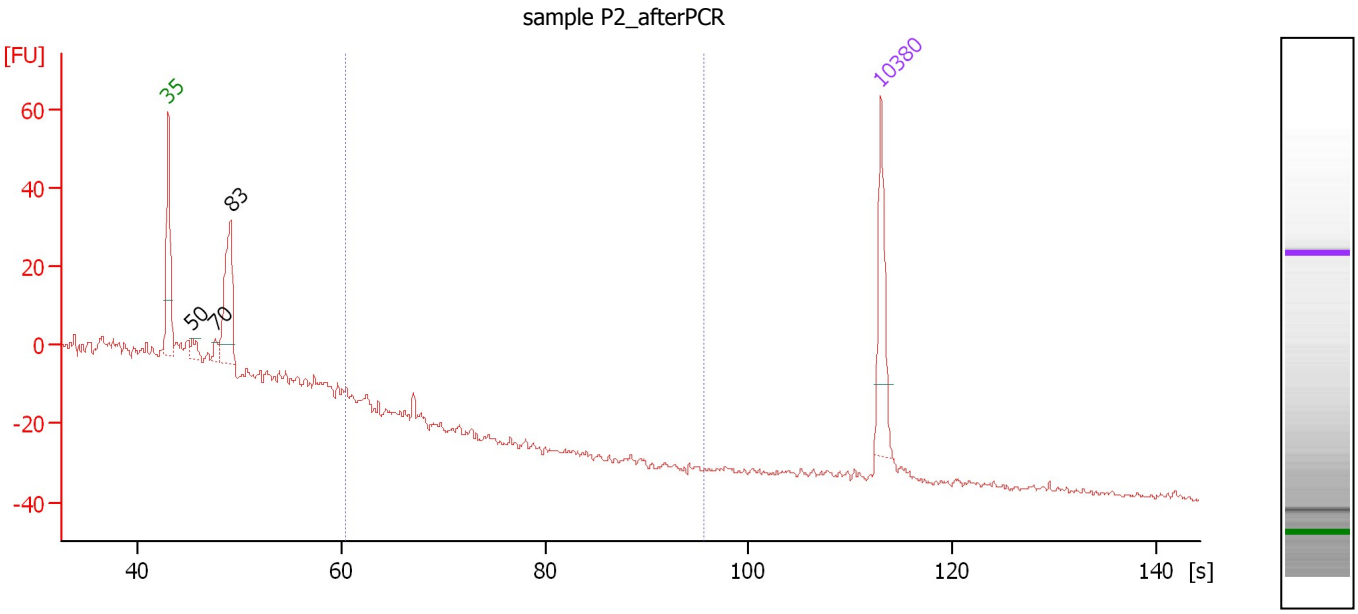
Peak table for sample 3 : sample P1_afterPCR

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0		110.30

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-14\2016-12-14_004.xad

Created: 12/14/2016 12:20:37 PM
Modified: 12/14/2016 12:53:19 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : sample P2_afterPCR

Number of peaks found:	3	Corr. Area 1:	0.0
Noise:	0.8		

Peak table for sample 4 : sample P2_afterPCR

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	17.82	540.0		45.37
3	70	16.18	349.9		47.64
4	83	161.23	2,938.6		49.12
5	10,380	75.00	10.9	Upper Marker	113.00

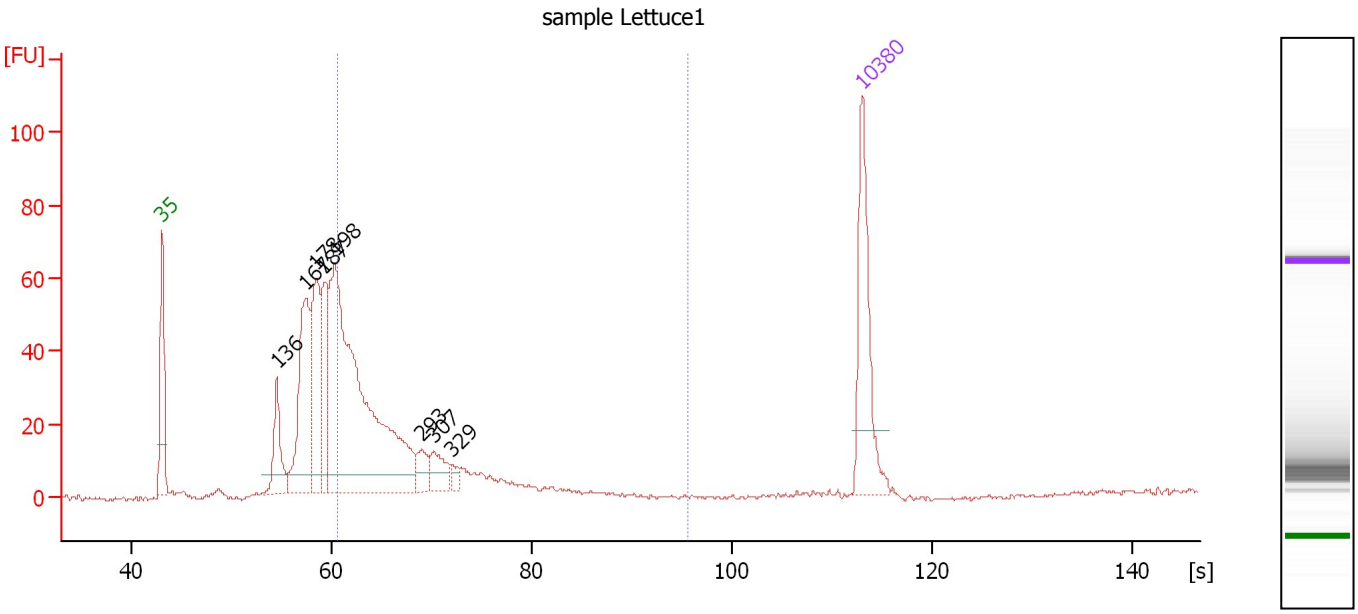
Region table for sample 4 : sample P2_afterPCR

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	272	0.0	0.0	0.00	0	0.0

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-14\2016-12-14_004.xad

Created: 12/14/2016 12:20:37 PM
Modified: 12/14/2016 12:53:19 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : sample Lettuce1

Number of peaks found:	8	Corr. Area 1:	436.4
Noise:	0.5		

Peak table for sample 5 : sample Lettuce1

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	136	56.17	625.9		54.44
3	167	144.03	1,309.2		57.34
4	178	111.82	951.2		58.42
5	187	75.88	615.9		59.22
6	198	454.77	3,488.1		60.24
7	293	21.65	112.0		69.00
8	307	26.37	130.3		70.18
9	329	7.69	35.4		72.01
10	10,380	75.00	10.9	Upper Marker	113.00

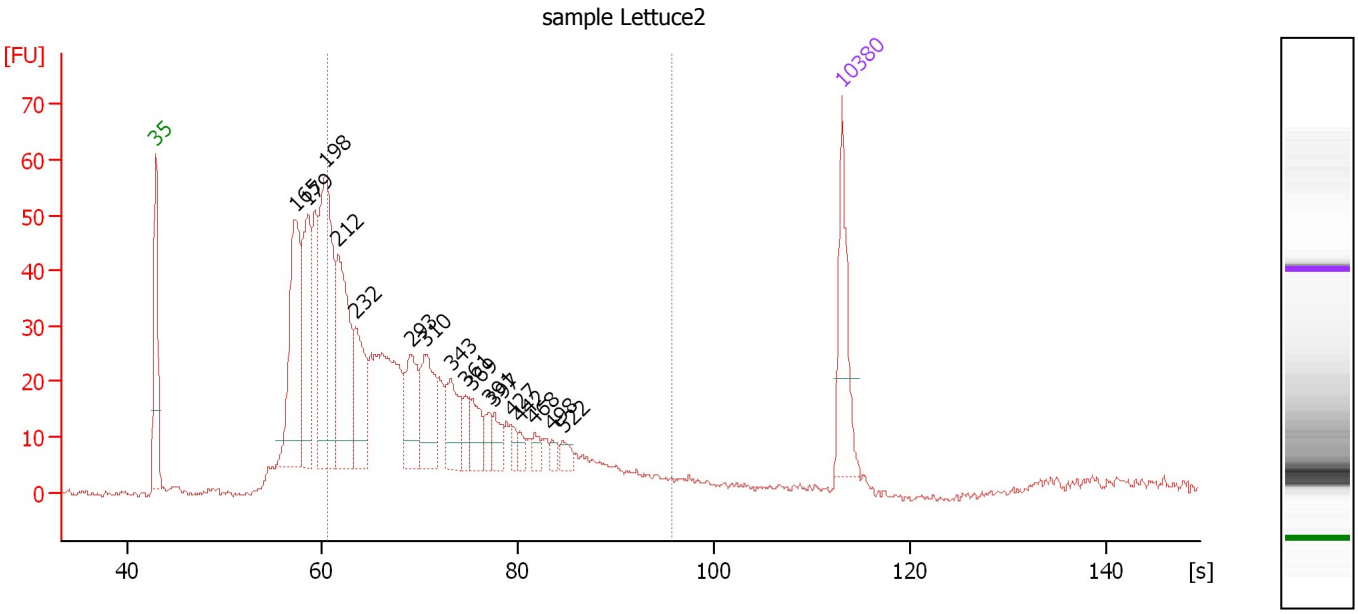
Region table for sample 5 : sample Lettuce1

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	267	436.4	2,782.5	462.88	50	25.2

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-14\2016-12-14_004.xad

Created: 12/14/2016 12:20:37 PM
Modified: 12/14/2016 12:53:19 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : sample Lettuce2

Number of peaks found:	17	Corr. Area 1:	743.6
Noise:	0.6		

Peak table for sample 6 : sample Lettuce2

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	165	249.74	2,291.5		57.20
3	179	170.99	1,446.4		58.51
4	198	313.37	2,393.7		60.32
5	212	211.66	1,512.2		61.58
6	232	110.75	723.9		63.39
7	293	89.53	462.4		69.04
8	310	90.55	442.3		70.46
9	343	61.13	270.2		73.09
10	361	23.51	98.6		74.57
11	369	37.17	152.5		75.23
12	391	19.65	76.1		76.99
13	397	22.74	86.8		77.48
14	427	12.36	43.8		79.29
15	442	11.02	37.8		80.17
16	468	14.00	45.3		81.65
17	498	10.37	31.5		83.40
18	522	14.00	40.6		84.55
19	10,380	75.00	10.9	Upper Marker	113.00

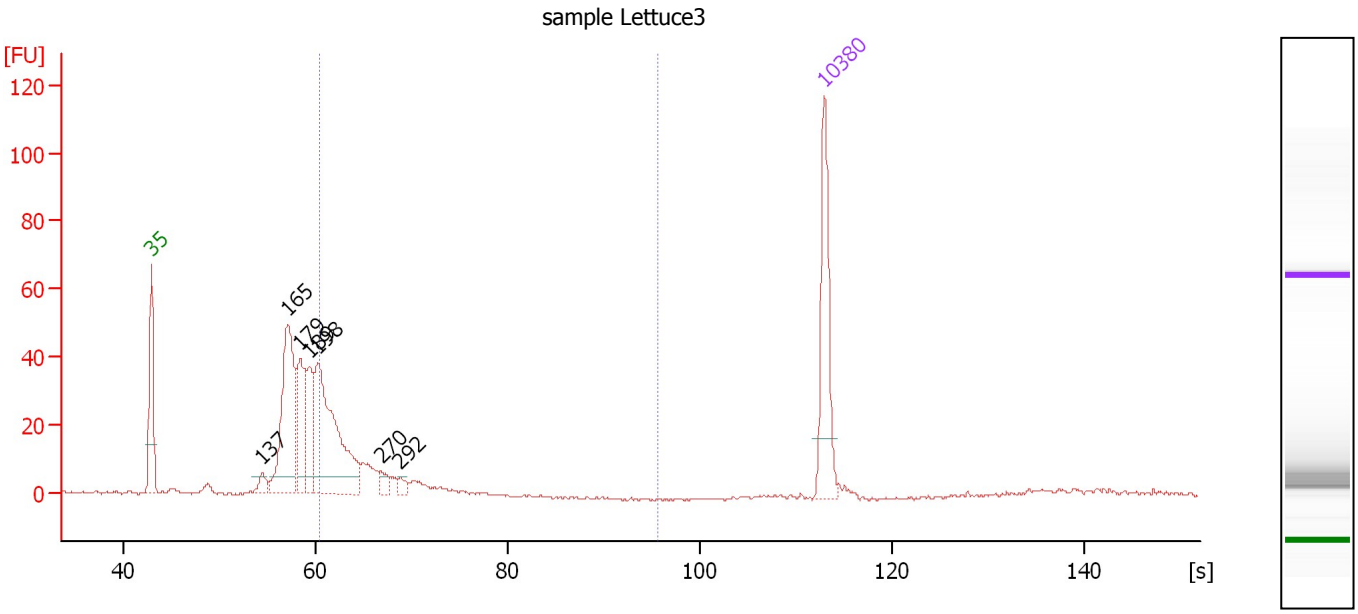
Region table for sample 6 : sample Lettuce2

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	334	743.6	8,048.8	1,528.40	66	38.9

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-14\2016-12-14_004.xad

Created: 12/14/2016 12:20:37 PM
Modified: 12/14/2016 12:53:19 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : sample Lettuce3

Number of peaks found:	7	Corr. Area 1:	176.3
Noise:	0.4		

Peak table for sample 7 : sample Lettuce3

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		137	14.21	157.5		54.52
3		165	182.36	1,678.9		57.15
4		179	82.72	700.8		58.49
5		189	63.25	507.1		59.44
6		198	219.24	1,678.8		60.28
7		270	12.51	70.1		66.93
8		292	8.04	41.7		68.89
9	▶	10,380	75.00	10.9	Upper Marker	113.00

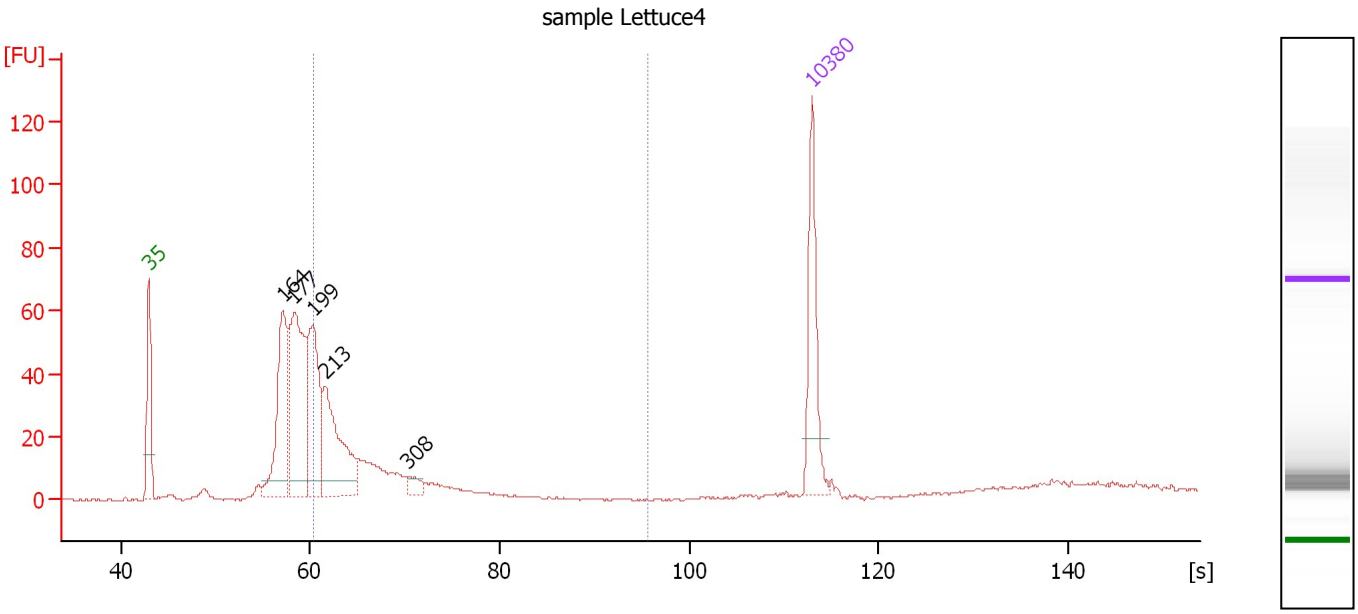
Region table for sample 7 : sample Lettuce3

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	238	176.3	1,456.9	225.86	38	15.1

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-14\2016-12-14_004.xad

Created: 12/14/2016 12:20:37 PM
Modified: 12/14/2016 12:53:19 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : sample Lettuce4

Number of peaks found:	5	Corr. Area 1:	281.6
Noise:	0.3		

Peak table for sample 8 : sample Lettuce4

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	164	172.53	1,591.7		57.11
3	177	231.08	1,972.5		58.36
4	199	158.80	1,211.5		60.34
5	213	149.79	1,066.6		61.65
6	308	13.87	68.1		70.32
7	10,380	75.00	10.9	Upper Marker	113.00

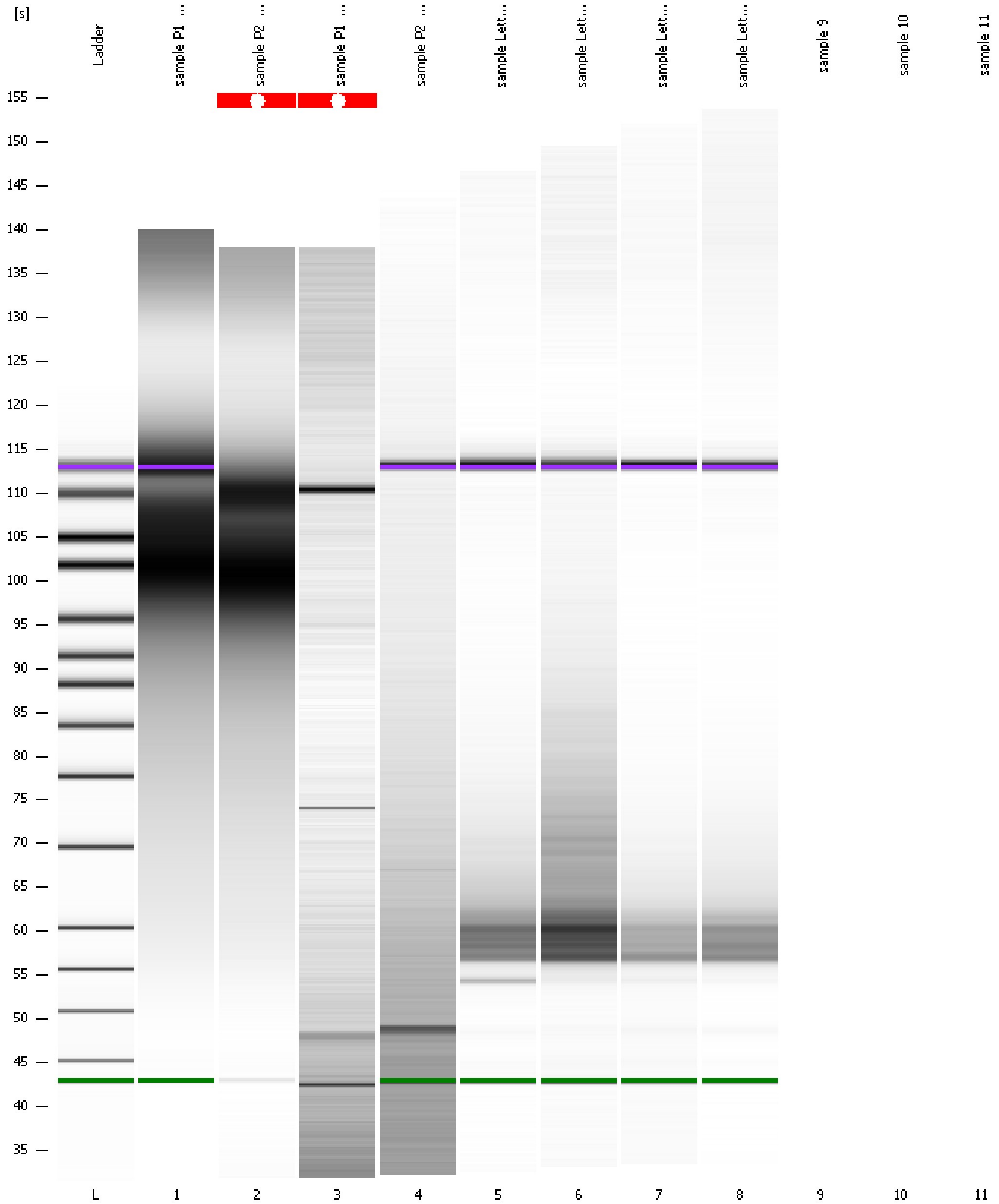
Region table for sample 8 : sample Lettuce4

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	250	281.6	2,167.0	346.35	41	19.6

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-14\2016-12-14_004.xad

Created: 12/14/2016 12:20:37 PM
Modified: 12/14/2016 12:53:19 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-14\2016-12-14_004.xad

Created: 12/14/2016 12:20:37 PM
Modified: 12/14/2016 12:53:19 PM

Invalid Samples

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:\... bioanalyzer\2100 expert\data\2016-12-14\2016-12-14_004.xad

Created: 12/14/2016 12:20:37 PM
Modified: 12/14/2016 12:53:19 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 9)		Instrument	Run		12/14/2016 12:53:18 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2016-12-14\2016-12-14_004.xad)		Instrument	Run		12/14/2016 12:20:43 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		12/14/2016 12:20:43 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		12/14/2016 12:20:43 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		12/14/2016 12:20:43 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		12/14/2016 12:20:42 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		12/14/2016 12:20:42 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		12/14/2016 12:20:42 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1