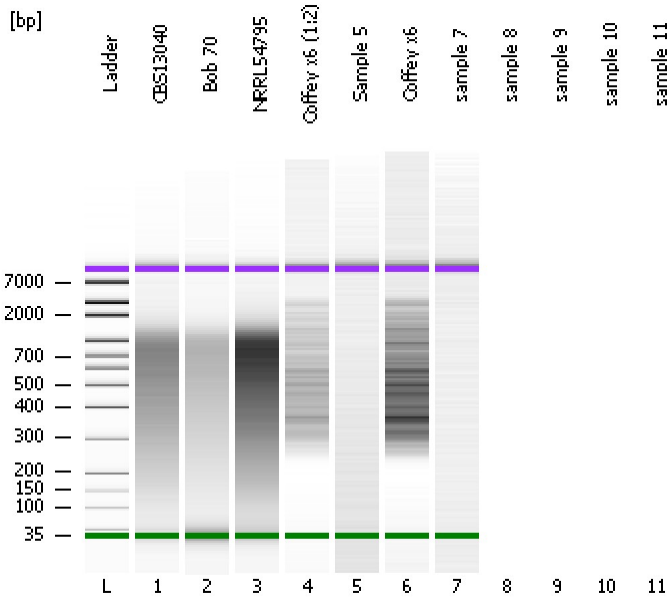


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-22\2015-04-22_006.xad

Created: 4/22/2015 2:37:18 PM
Modified: 4/22/2015 3:07:12 PM

Electrophoresis File Run Summary



Instrument Information:

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

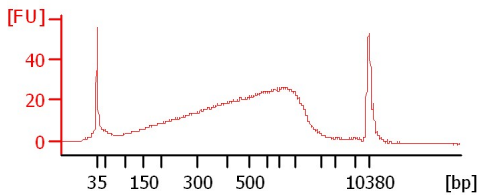
Assay Information:

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

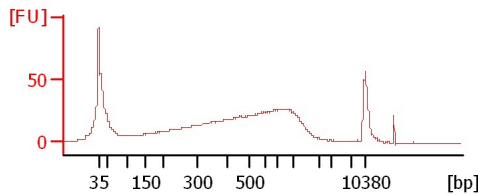
Chip Information:

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

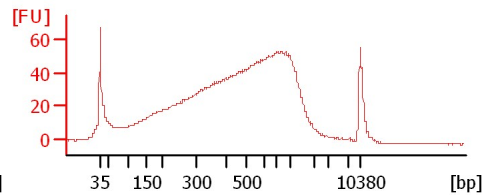
CBS13040



Bob 70

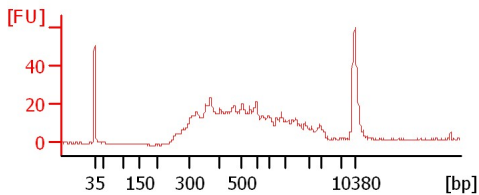


NRRL54795

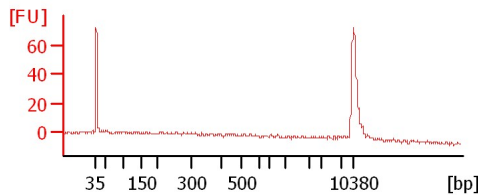


Coffey x6 (1:2)

MiSeq 109 Library pool after 0.8X AMP...

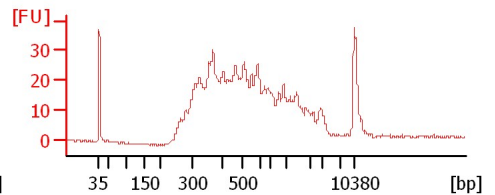


Sample 5

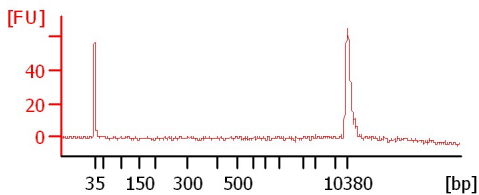


Coffey x6

MiSeq 109 Library pool after 0.8X AMP...



sample 7



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-22\2015-04-22_006.xad

Created: 4/22/2015 2:37:18 PM
Modified: 4/22/2015 3:07:12 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
CBS13040		<input type="checkbox"/>	✓			
Bob 70		<input type="checkbox"/>	✓			
NRRL54795		<input type="checkbox"/>	✓			
Coffey x6 (1:2)	MiSeq 109 Library pool after 0.8X AMPure clean up	<input type="checkbox"/>	✓			
Sample 5		<input type="checkbox"/>	✓			
Coffey x6	MiSeq 109 Library pool after 0.8X AMPure clean up	<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\2015-04-22\2015-04-22_006.xad

Created: 4/22/2015 2:37:18 PM
Modified: 4/22/2015 3:07:12 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

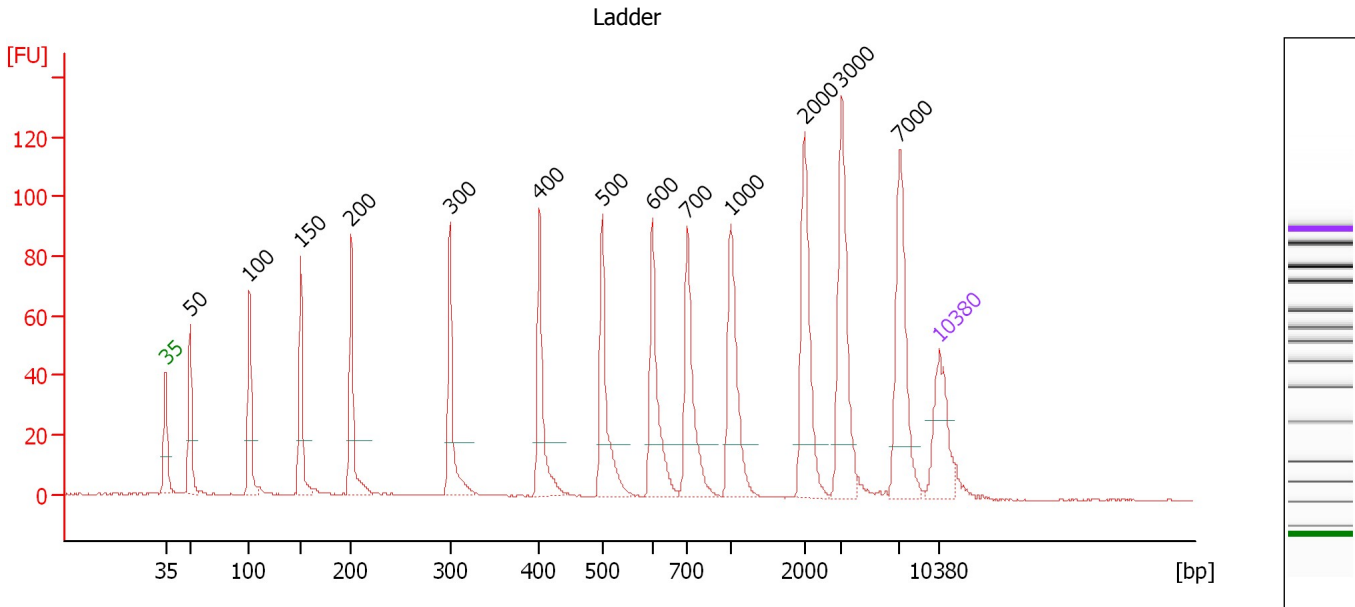
Ladder

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:\...ents and Settings\Bioanalyzer\2015-04-22\2015-04-22_006.xad

Created: 4/22/2015 2:37:18 PM
 Modified: 4/22/2015 3:07:12 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

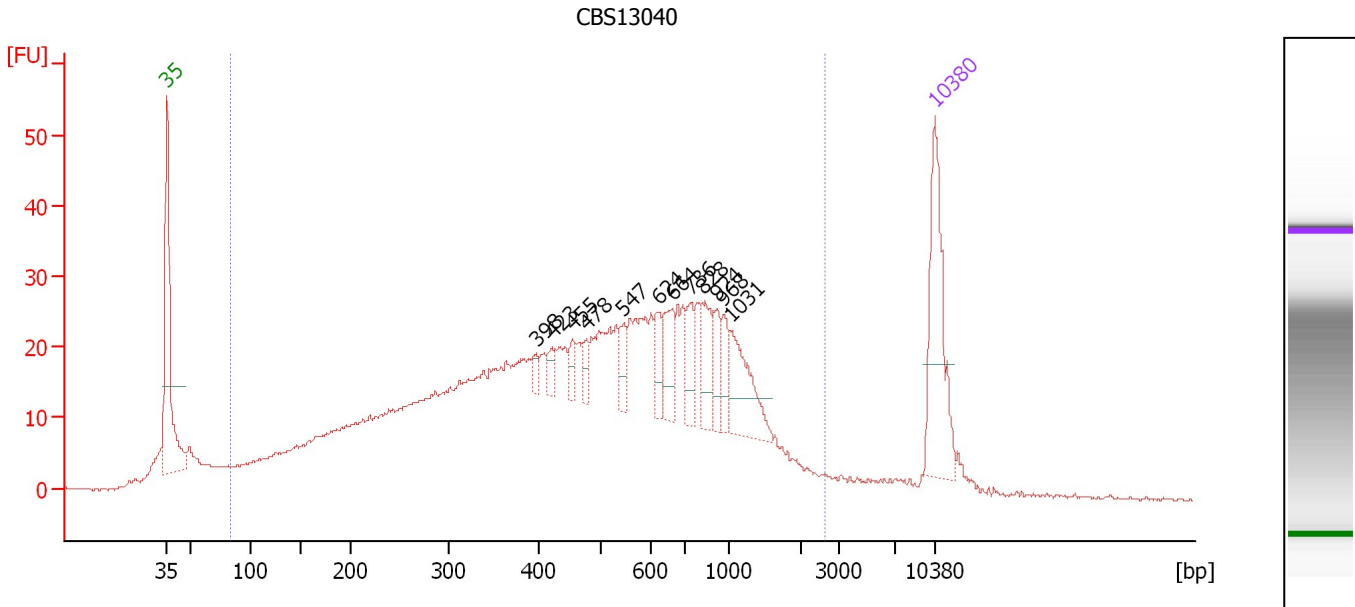
Peak table for Ladder

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	45.22
3	100	150.00	2,272.7	Ladder Peak	50.57
4	150	150.00	1,515.2	Ladder Peak	55.21
5	200	150.00	1,136.4	Ladder Peak	59.79
6	300	150.00	757.6	Ladder Peak	68.71
7	400	150.00	568.2	Ladder Peak	76.82
8	500	150.00	454.5	Ladder Peak	82.51
9	600	150.00	378.8	Ladder Peak	87.05
10	700	150.00	324.7	Ladder Peak	90.18
11	1,000	150.00	227.3	Ladder Peak	94.14
12	2,000	150.00	113.6	Ladder Peak	100.79
13	3,000	150.00	75.8	Ladder Peak	104.17
14	7,000	150.00	32.5	Ladder Peak	109.43
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-22\2015-04-22_006.xad

Created: 4/22/2015 2:37:18 PM
 Modified: 4/22/2015 3:07:12 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : CBS13040

Number of peaks found: 12 Corr. Area 1: 1,093.6
 Noise: 0.2

Peak table for sample 1 : CBS13040

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	398	7.45	28.4		76.62
3	423	11.18	40.1		78.12
4	455	11.15	37.1		79.97
5	478	11.80	37.4		81.23
6	547	16.06	44.5		84.63
7	624	19.46	47.3		87.79
8	664	31.35	71.5		89.05
9	736	23.46	48.3		90.65
10	828	29.73	54.4		91.87
11	924	18.13	29.7		93.13
12	968	16.72	26.2		93.71
13	1,031	49.00	72.0		94.35
14	10,380	75.00	10.9	Upper Marker	113.00

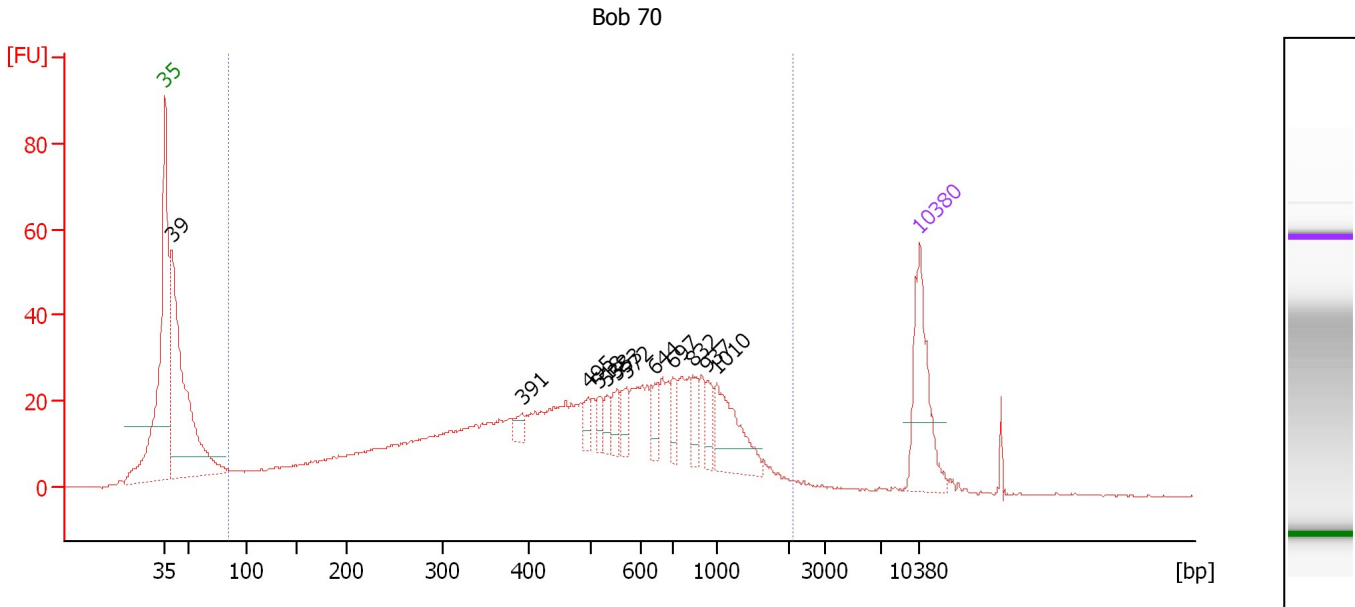
Region table for sample 1 : CBS13040

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
83	578	2,644	1,093.6	8,996.8	92	66.7	1,913.80	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-22\2015-04-22_006.xad

Created: 4/22/2015 2:37:18 PM
 Modified: 4/22/2015 3:07:12 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : Bob 70

Number of peaks found: 12 Corr. Area 1: 995.7
 Noise: 0.2

Peak table for sample 2 : Bob 70

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	39	399.76	15,525.8		43.59
3	391	11.63	45.1		76.10
4	495	12.90	39.5		82.23
5	518	14.40	42.1		83.32
6	533	13.55	38.5		84.01
7	553	18.83	51.6		84.90
8	572	18.51	49.0		85.79
9	644	19.19	45.2		88.41
10	697	19.78	43.0		90.10
11	832	23.55	42.9		91.93
12	937	18.88	30.5		93.31
13	1,010	65.58	98.4		94.20
14	10,380	75.00	10.9	Upper Marker	113.00

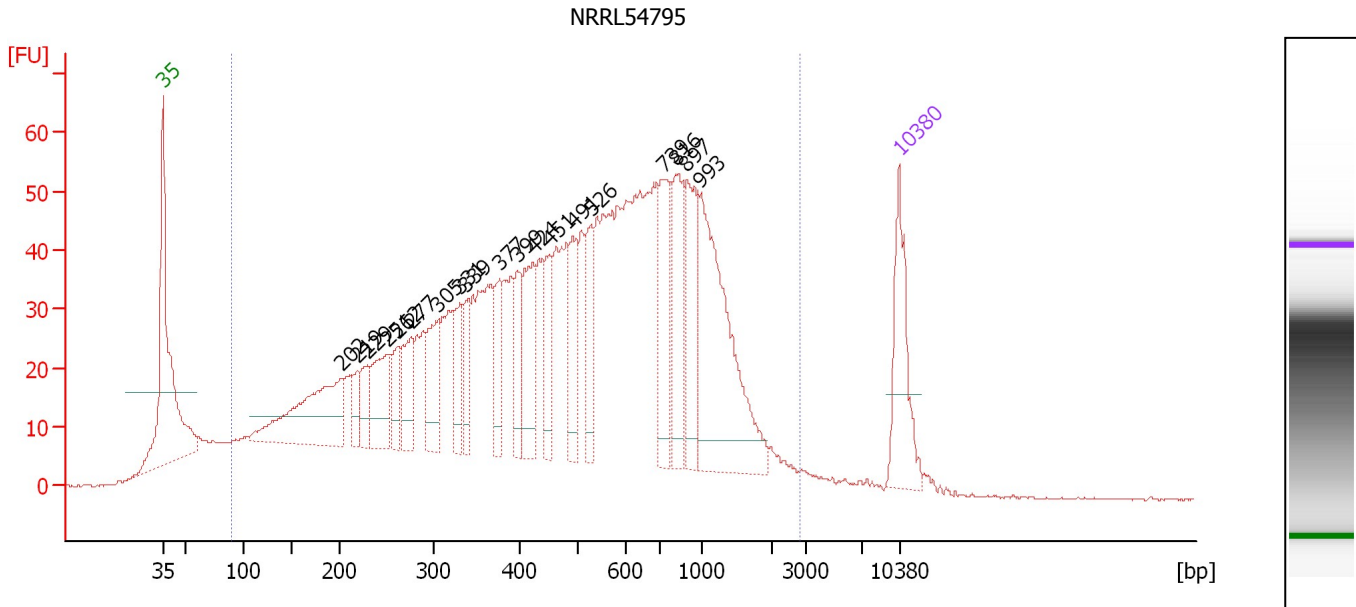
Region table for sample 2 : Bob 70

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
84	574	2,145	995.7	6,500.5	80	61.1	1,398.71	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-22\2015-04-22_006.xad

Created: 4/22/2015 2:37:18 PM
 Modified: 4/22/2015 3:07:12 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : NRRL54795

Number of peaks found: 19 Corr. Area 1: 2,090.8
 Noise: 0.2

Peak table for sample 3 : NRRL54795

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	202	186.02	1,398.2		59.93
3	219	32.66	225.7		61.50
4	229	38.92	257.7		62.36
5	251	84.52	510.2		64.34
6	262	42.39	245.3		65.30
7	277	65.04	356.3		66.62
8	305	68.06	337.6		69.15
9	331	55.46	253.8		71.23
10	339	41.15	184.1		71.84
11	377	46.16	185.3		74.98
12	399	46.59	177.1		76.71
13	424	87.42	312.5		78.18
14	451	56.07	188.6		79.70
15	491	63.13	194.9		81.98
16	526	59.88	172.4		83.70
17	739	101.41	207.9		90.70
18	816	82.54	153.3		91.71
19	897	91.18	154.1		92.78
20	993	219.27	334.6		94.04
21	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 3 : NRRL54795

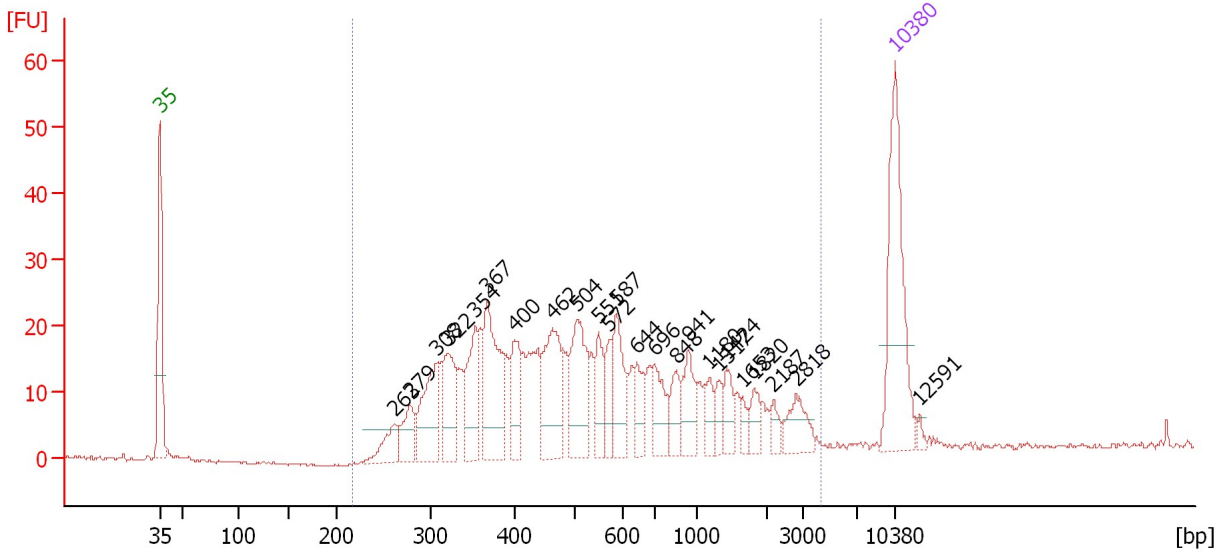
From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
90	584	2,838	2,090.8	15,962.7	96	67.1	3,432.36	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-22\2015-04-22_006.xad

Created: 4/22/2015 2:37:18 PM
 Modified: 4/22/2015 3:07:12 PM

Electropherogram Summary Continued ...

Coffey x6 (1:2) [MiSeq 109 Library pool after 0.8X AMPure clean up]



Overall Results for sample 4 : Coffey x6 (1:2)

Number of peaks found: 24 Corr. Area 1: 586.6
 Noise: 0.2

Peak table for sample 4 : Coffey x6 (1:2)

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	263	23.80	137.3		65.39
3	279	26.15	141.9		66.86
4	308	53.29	262.3		69.35
5	322	46.72	219.7		70.51
6	354	44.60	191.1		73.05
7	367	72.55	299.3		74.17
8	400	32.43	122.9		76.81
9	462	58.59	192.1		80.36
10	504	58.74	176.6		82.70
11	551	23.40	64.3		84.83
12	572	16.64	44.0		85.79
13	587	34.78	89.8		86.45
14	644	17.23	40.5		88.43
15	696	25.04	54.5		90.06
16	848	16.20	28.9		92.14
17	941	22.85	36.8		93.36
18	1,180	12.05	15.5		95.34
19	1,317	9.78	11.3		96.25
20	1,424	13.89	14.8		96.96
21	1,653	5.45	5.0		98.48
22	1,820	10.27	8.5		99.60
23	2,187	6.59	4.6		101.43
24	2,818	18.08	9.7		103.56
25	10,380	75.00	10.9	Upper Marker	113.00


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-22\2015-04-22_006.xad

Created: 4/22/2015 2:37:18 PM
Modified: 4/22/2015 3:07:12 PM

Electropherogram Summary Continued ...**... Peak table for sample 4 : Coffey x6 (1:2)**

Peak	Size [bp]	Conc. [pg/ μ l]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	12,591	0.00	0.0		115.34

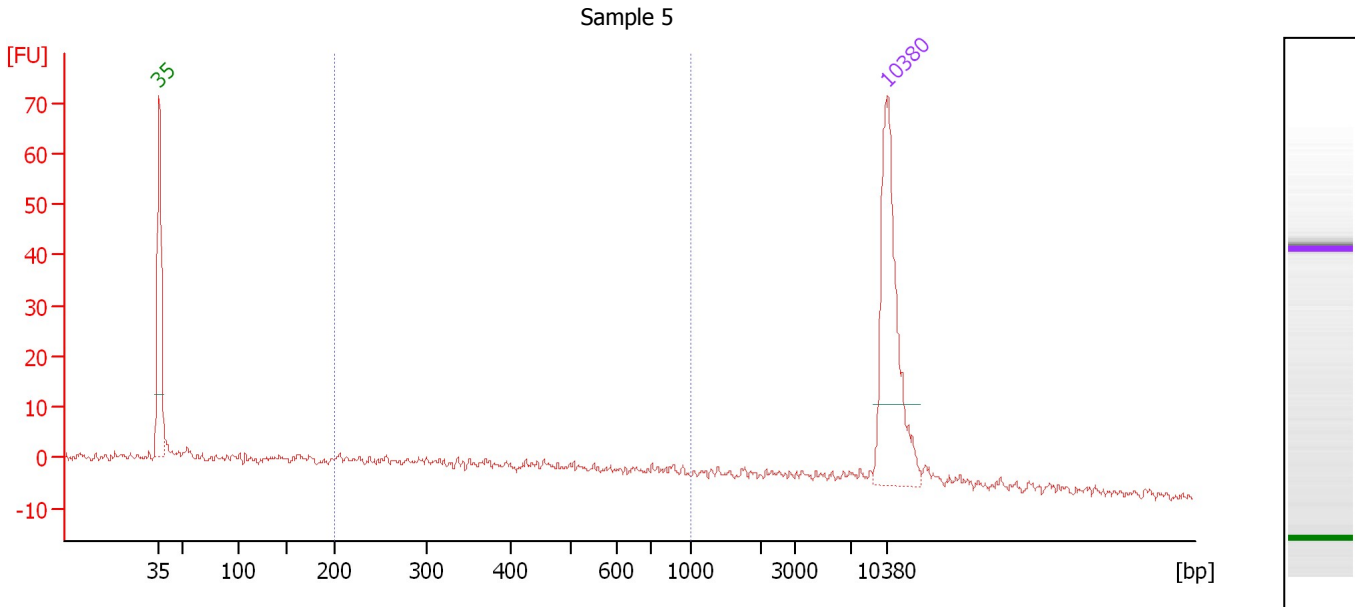
Region table for sample 4 : Coffey x6 (1:2)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/ μ l]	Color
217	718	4,333	586.6	2,503.3	99	82.7	765.27	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-22\2015-04-22_006.xad

Created: 4/22/2015 2:37:18 PM
 Modified: 4/22/2015 3:07:12 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : Sample 5

Number of peaks found: 0 Corr. Area 1: 70.7
 Noise: 0.9

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	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 5 : Sample 5

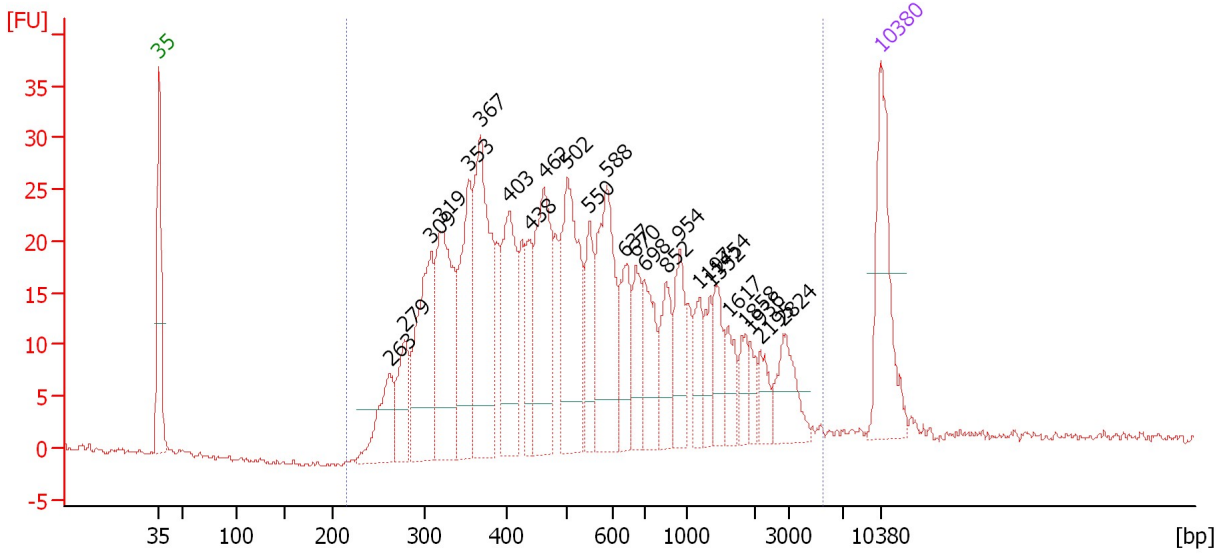
From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	457	1,000	70.7	272.9	43	42.6	64.52	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-22\2015-04-22_006.xad

Created: 4/22/2015 2:37:18 PM
 Modified: 4/22/2015 3:07:12 PM

Electropherogram Summary Continued ...

Coffey x6 [MiSeq 109 Library pool after 0.8X AMPure clean up]



Overall Results for sample 6 : Coffey x6

Number of peaks found: 25 Corr. Area 1: 797.0
 Noise: 0.3

Peak table for sample 6 : Coffey x6

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	263	60.58	349.7		65.37
3	279	50.64	275.3		66.82
4	309	131.52	645.8		69.41
5	319	142.22	676.0		70.23
6	353	105.71	453.4		73.03
7	367	171.81	708.7		74.17
8	403	104.30	392.5		76.96
9	438	40.84	141.2		78.98
10	462	121.29	398.0		80.33
11	502	135.01	407.4		82.61
12	550	48.34	133.2		84.78
13	588	109.14	281.3		86.49
14	637	45.51	108.3		88.20
15	670	39.28	88.8		89.24
16	698	49.60	107.7		90.12
17	852	39.14	69.6		92.19
18	954	42.49	67.5		93.53
19	1,197	25.72	32.6		95.45
20	1,352	21.22	23.8		96.48
21	1,454	27.75	28.9		97.16
22	1,617	20.41	19.1		98.24
23	1,858	15.87	12.9		99.85
24	1,936	11.74	9.2		100.37
25	2,195	15.91	11.0		101.45

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-22\2015-04-22_006.xad

Created: 4/22/2015 2:37:18 PM
 Modified: 4/22/2015 3:07:12 PM

Electropherogram Summary Continued ...

... Peak table for sample 6 : Coffey x6

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	2,824	35.47	19.0		103.58
27	10,380	75.00	10.9	Upper Marker	113.00

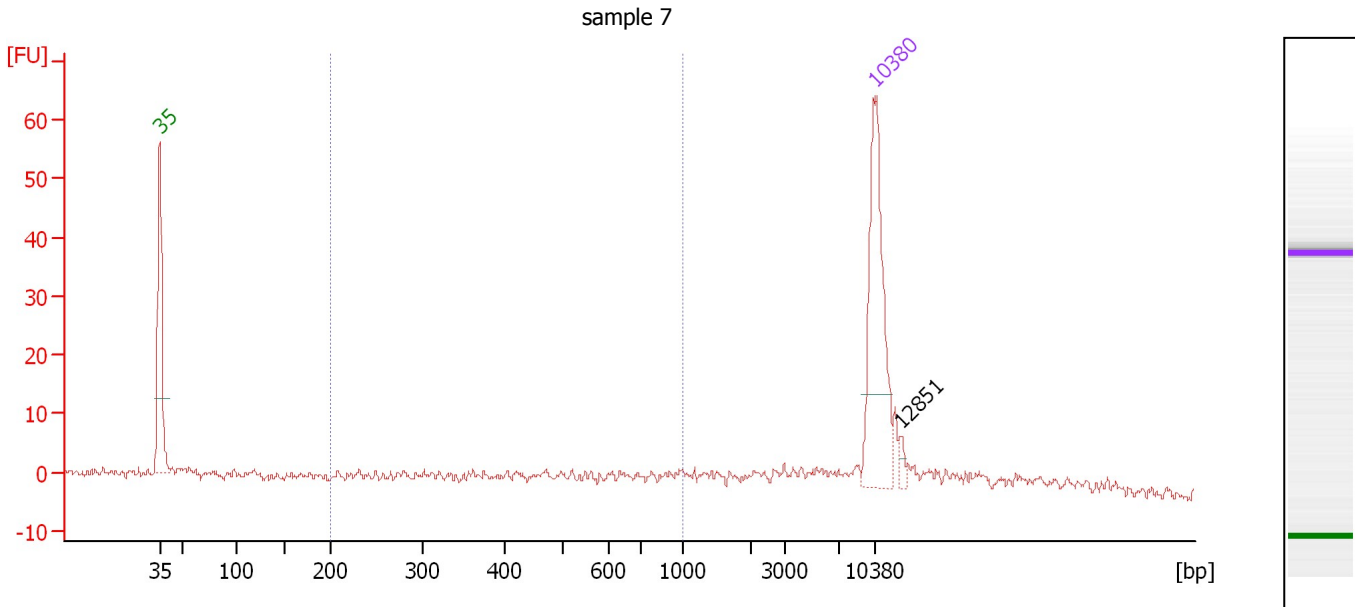
Region table for sample 6 : Coffey x6

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
215	743	5,435	797.0	5,478.2	98	89.6	1,664.35	■

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-22\2015-04-22_006.xad

Created: 4/22/2015 2:37:18 PM
 Modified: 4/22/2015 3:07:12 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : sample 7

Number of peaks found: 1 Corr. Area 1: 64.1
 Noise: 0.9

Peak table for sample 7 : sample 7

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
3	12,851	0.00	0.0		115.61

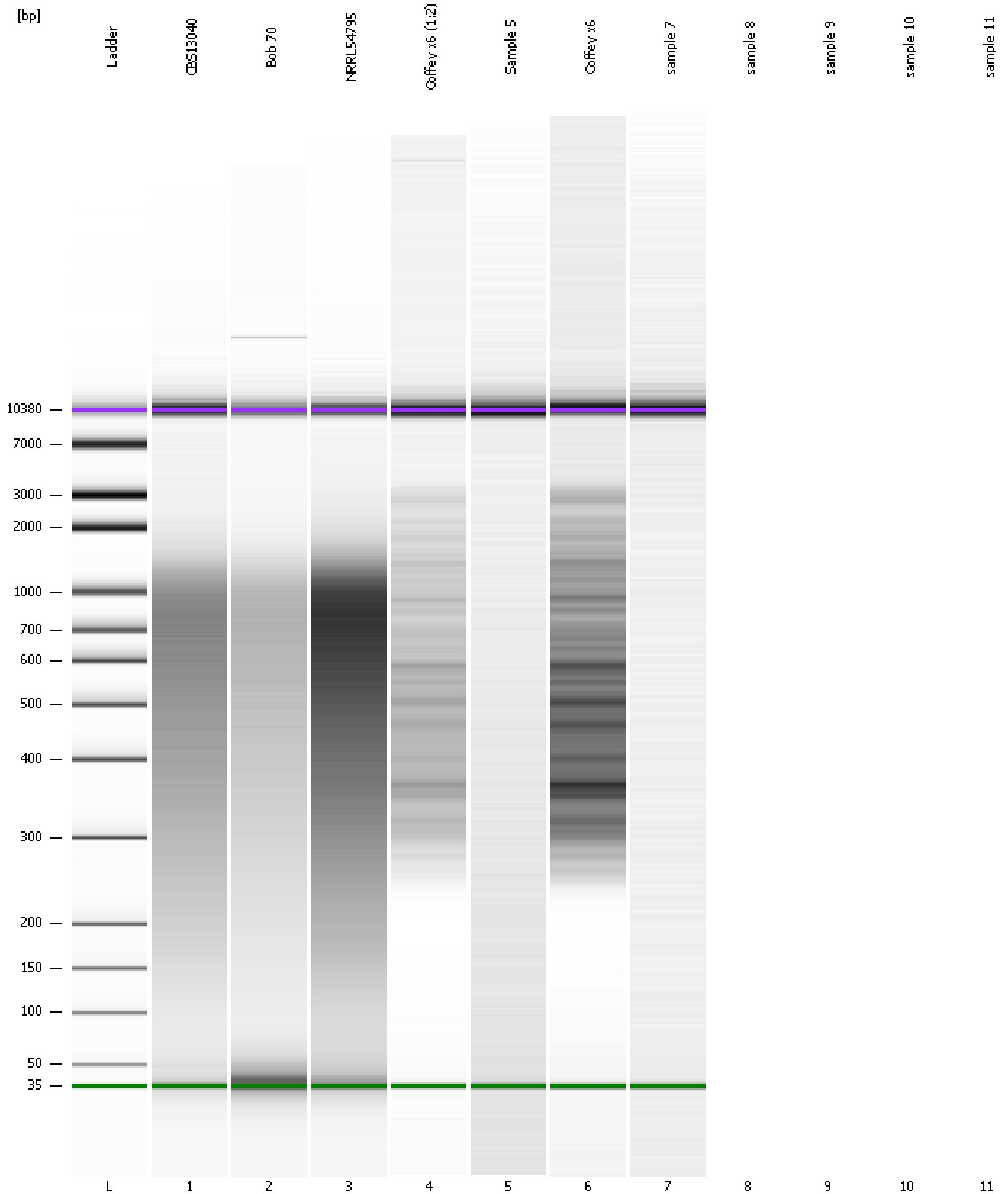
Region table for sample 7 : sample 7

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	508	1,000	64.1	275.1	31	40.6	72.21	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-22\2015-04-22_006.xad

Created: 4/22/2015 2:37:18 PM
Modified: 4/22/2015 3:07:12 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-22\2015-04-22_006.xad

Created: 4/22/2015 2:37:18 PM
Modified: 4/22/2015 3:07:12 PM

Invalid Samples

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\2015-04-22\2015-04-22_006.xad

Created: 4/22/2015 2:37:18 PM
 Modified: 4/22/2015 3:07:12 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 8)		Instrument	Run		4/22/2015 3:07:10 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-04-22\2015-04-22_006.xad)		Instrument	Run		4/22/2015 2:37:24 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		4/22/2015 2:37:24 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/22/2015 2:37:24 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/22/2015 2:37:24 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		4/22/2015 2:37:24 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/22/2015 2:37:24 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/22/2015 2:37:24 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1