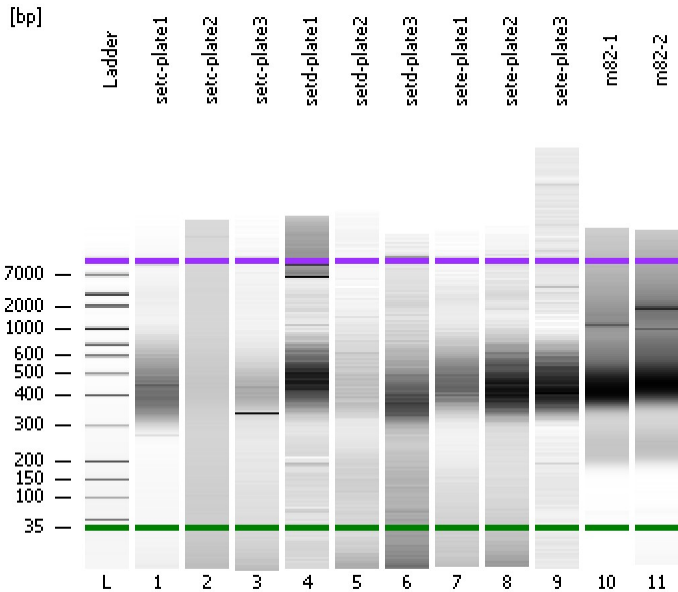


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-07\2013-08-07_004.xad

Created: 8/7/2013 3:39:01 PM
Modified: 8/7/2013 4:24:53 PM

Electrophoresis File Run Summary



Instrument Information:

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

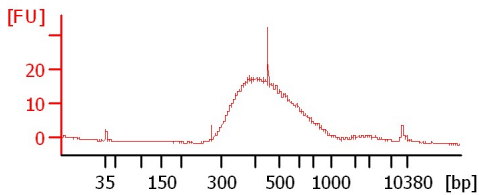
Assay Information:

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

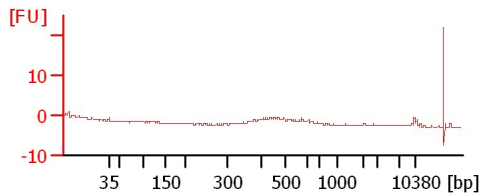
Chip Information:

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

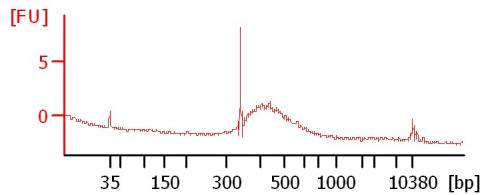
setc-plate1



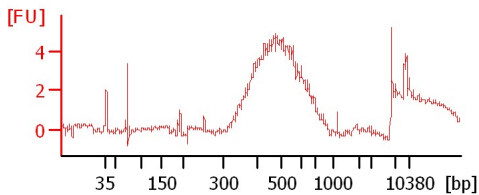
setc-plate2



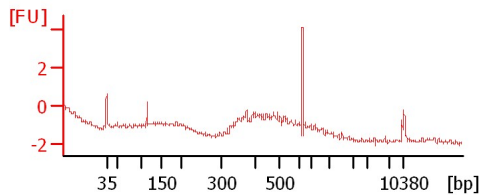
setc-plate3



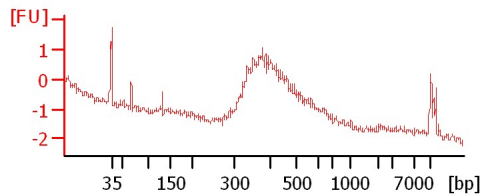
setd-plate1



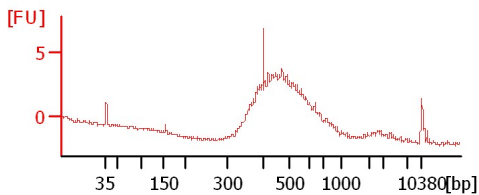
setd-plate2



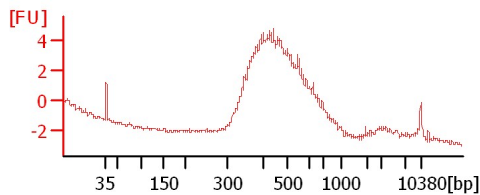
setd-plate3



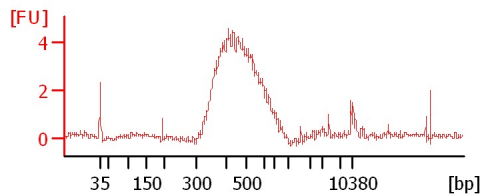
sete-plate1



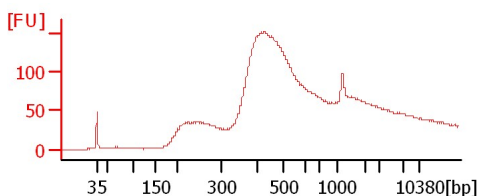
sete-plate2



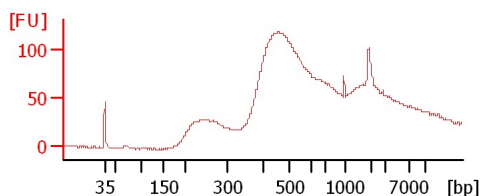
sete-plate3



m82-1



m82-2



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-07\2013-08-07_004.xad

Created: 8/7/2013 3:39:01 PM
Modified: 8/7/2013 4:24:53 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
setc-plate1		<input type="checkbox"/>	✓			
setc-plate2		<input type="checkbox"/>	✓			
setc-plate3		<input type="checkbox"/>	✓			
setd-plate1		<input type="checkbox"/>	✓			
setd-plate2		<input type="checkbox"/>	✓			
setd-plate3		<input type="checkbox"/>	✓			
sete-plate1		<input type="checkbox"/>	✓			
sete-plate2		<input type="checkbox"/>	✓			
sete-plate3		<input type="checkbox"/>	✓			
m82-1		<input type="checkbox"/>	✓			
m82-2		<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\2013-08-07\2013-08-07_004.xad

Created: 8/7/2013 3:39:01 PM
Modified: 8/7/2013 4:24:53 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

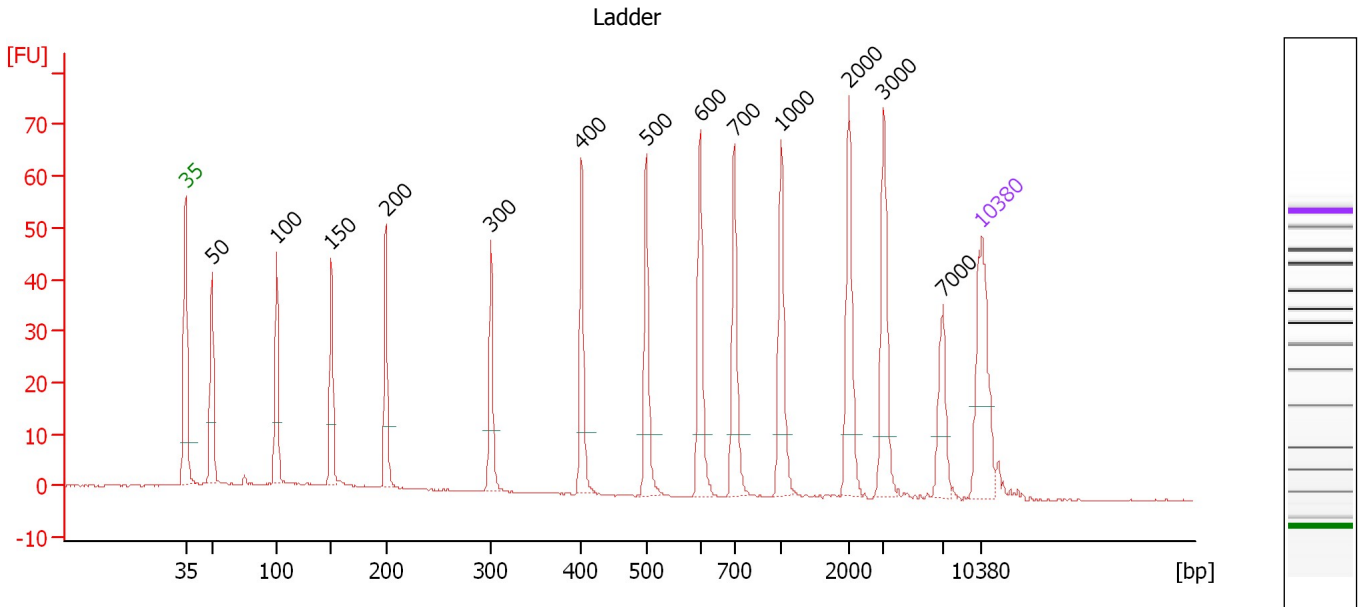
Ladder

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\2013-08-07\2013-08-07_004.xad

Created: 8/7/2013 3:39:01 PM
 Modified: 8/7/2013 4:24:53 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

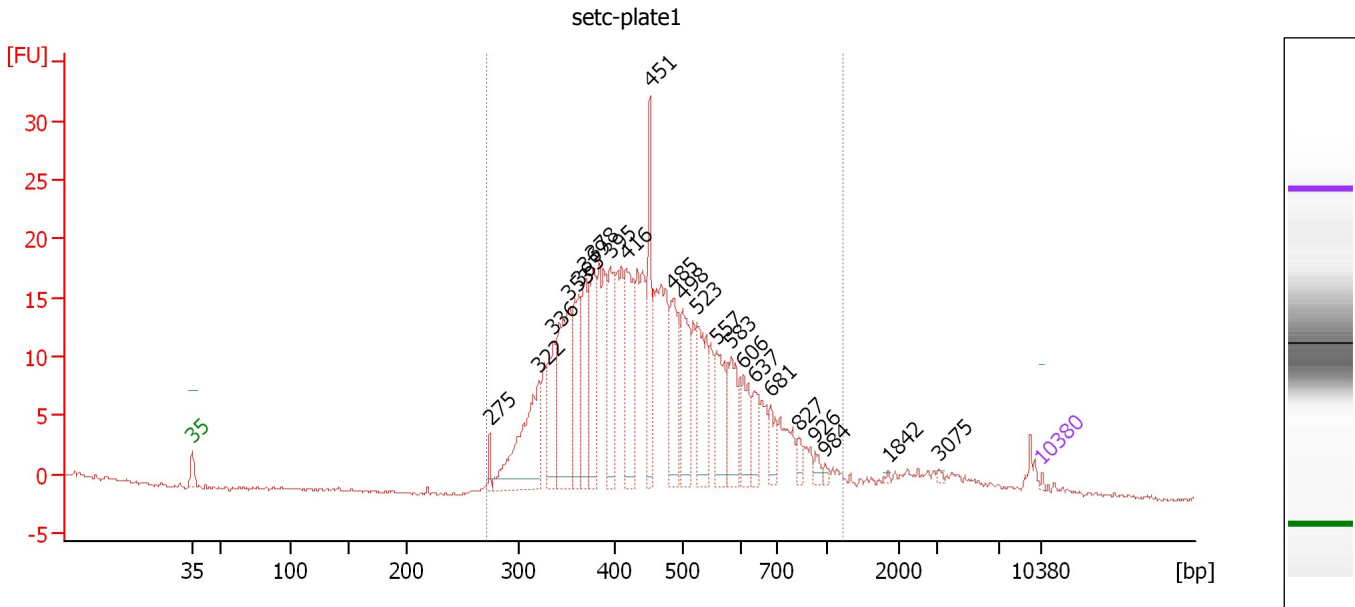
Peak table for Ladder

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	50	150.00	4,545.5	Ladder Peak
3	100	150.00	2,272.7	Ladder Peak
4	150	150.00	1,515.2	Ladder Peak
5	200	150.00	1,136.4	Ladder Peak
6	300	150.00	757.6	Ladder Peak
7	400	150.00	568.2	Ladder Peak
8	500	150.00	454.5	Ladder Peak
9	600	150.00	378.8	Ladder Peak
10	700	150.00	324.7	Ladder Peak
11	1,000	150.00	227.3	Ladder Peak
12	2,000	150.00	113.6	Ladder Peak
13	3,000	150.00	75.8	Ladder Peak
14	7,000	150.00	32.5	Ladder Peak
15	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-07\2013-08-07_004.xad

Created: 8/7/2013 3:39:01 PM
 Modified: 8/7/2013 4:24:53 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 1 : setc-plate1

Height Threshold [FU] : 1

Overall Results for sample 1 : setc-plate1

Number of peaks found: 23 Corr. Area 1: 396.0
 Noise: 0.1

Peak table for sample 1 : setc-plate1


Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	275	606.22	3,342.7	
3	322	7,768.15	36,605.7	
4	336	3,735.37	16,822.8	
5	353	7,829.29	33,607.1	
6	363	4,547.36	18,985.3	
7	369	3,917.07	16,084.9	
8	378	4,648.17	18,641.1	
9	395	3,948.25	15,148.4	
10	416	4,995.78	18,191.4	
11	451	4,775.72	16,045.1	
12	485	4,694.96	14,664.8	
13	498	4,116.15	12,516.9	
14	523	4,672.87	13,538.0	
15	557	3,428.59	9,320.8	
16	583	3,077.15	7,992.5	
17	606	2,206.16	5,516.5	
18	637	1,514.51	3,604.0	
19	681	1,238.03	2,755.8	
20	827	588.74	1,078.3	
21	926	412.26	674.3	
22	984	210.92	324.8	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-07\2013-08-07_004.xad


Created: 8/7/2013 3:39:01 PM
 Modified: 8/7/2013 4:24:53 PM

Electropherogram Summary Continued ...

... Peak table for sample 1 : setc-plate1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
23	1,842	95.18	78.3	
24	3,075	114.46	56.4	
25	 10,380	75.00	10.9	Upper Marker

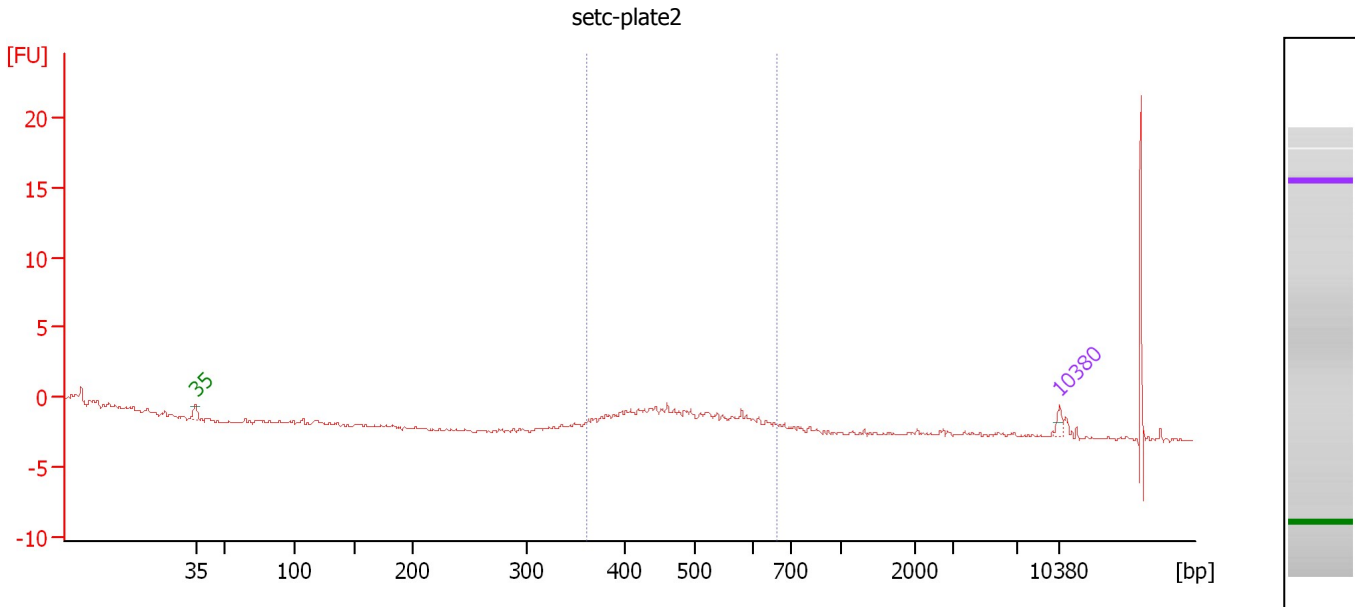
Region table for sample 1 : setc-plate1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
271	1,205	473	381,518.7	108,956.20	396.0	95	28.6	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-07\2013-08-07_004.xad

Created: 8/7/2013 3:39:01 PM
 Modified: 8/7/2013 4:24:53 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 2 : setc-plate2

Height Threshold [FU] : 1

Overall Results for sample 2 : setc-plate2

Number of peaks found: 0 Corr. Area 1: 8.6
 Noise: 0.1

Peak table for sample 2 : setc-plate2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,380	75.00	10.9	Upper Marker

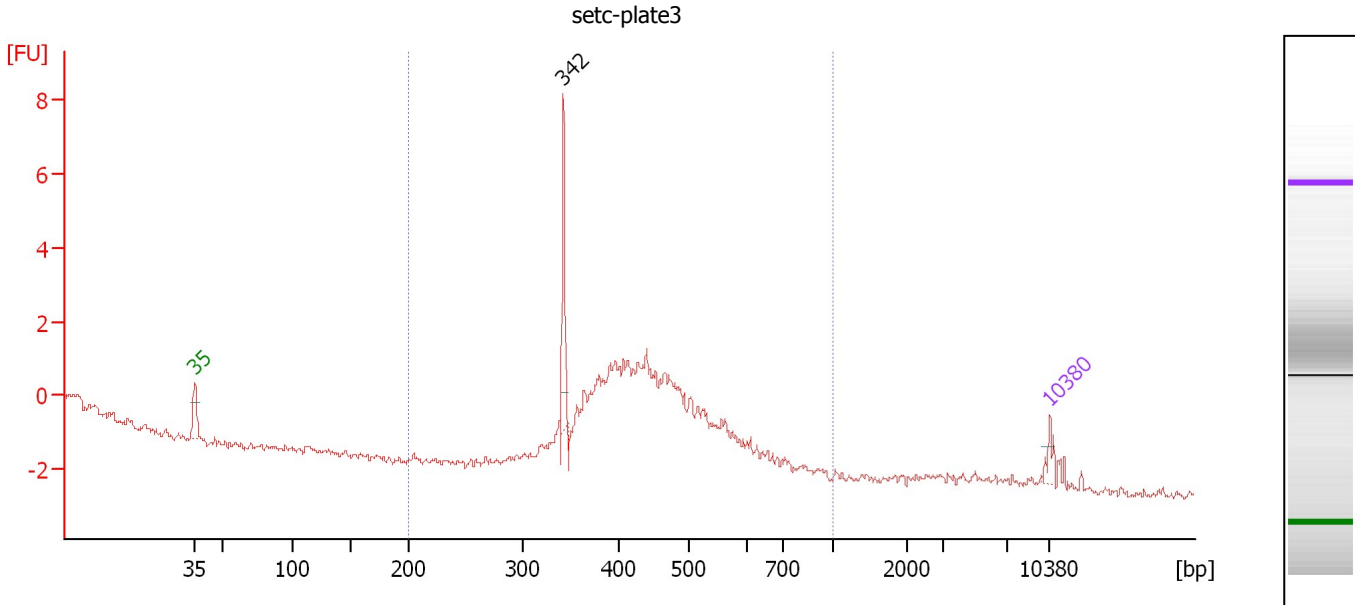
Region table for sample 2 : setc-plate2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
360	660	487	2,843.3	894.32	8.6	61	13.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-07\2013-08-07_004.xad

Created: 8/7/2013 3:39:01 PM
 Modified: 8/7/2013 4:24:53 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 3 : setc-plate3

Height Threshold [FU] : 1

Overall Results for sample 3 : setc-plate3

Number of peaks found: 1 Corr. Area 1: 30.8
 Noise: 0.1

Peak table for sample 3 : setc-plate3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	342	396.90	1,756.7	
3	10,380	75.00	10.9	Upper Marker

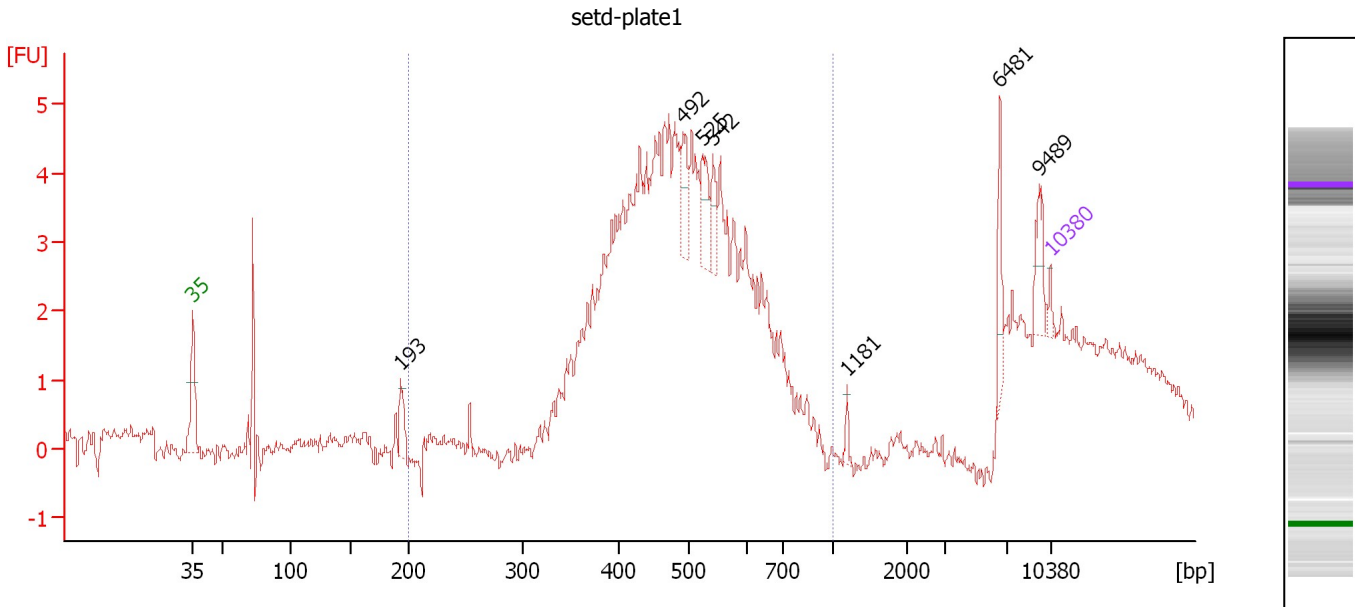
Region table for sample 3 : setc-plate3

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	437	13,061.1	3,655.47	30.8	98	15.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-07\2013-08-07_004.xad

Created: 8/7/2013 3:39:01 PM
 Modified: 8/7/2013 4:24:53 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 4 : setd-plate1

Height Threshold [FU] : 1

Overall Results for sample 4 : setd-plate1

Number of peaks found: 7 Corr. Area 1: 64.5
 Noise: 0.1

Peak table for sample 4 : setd-plate1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	193	391.39	3,067.7	
3	492	471.04	1,451.7	
4	525	473.60	1,367.1	
5	542	338.75	946.3	
6	1,181	86.44	110.9	
7	6,481	370.24	86.6	
8	9,489	339.48	54.2	
9	10,380	75.00	10.9	Upper Marker

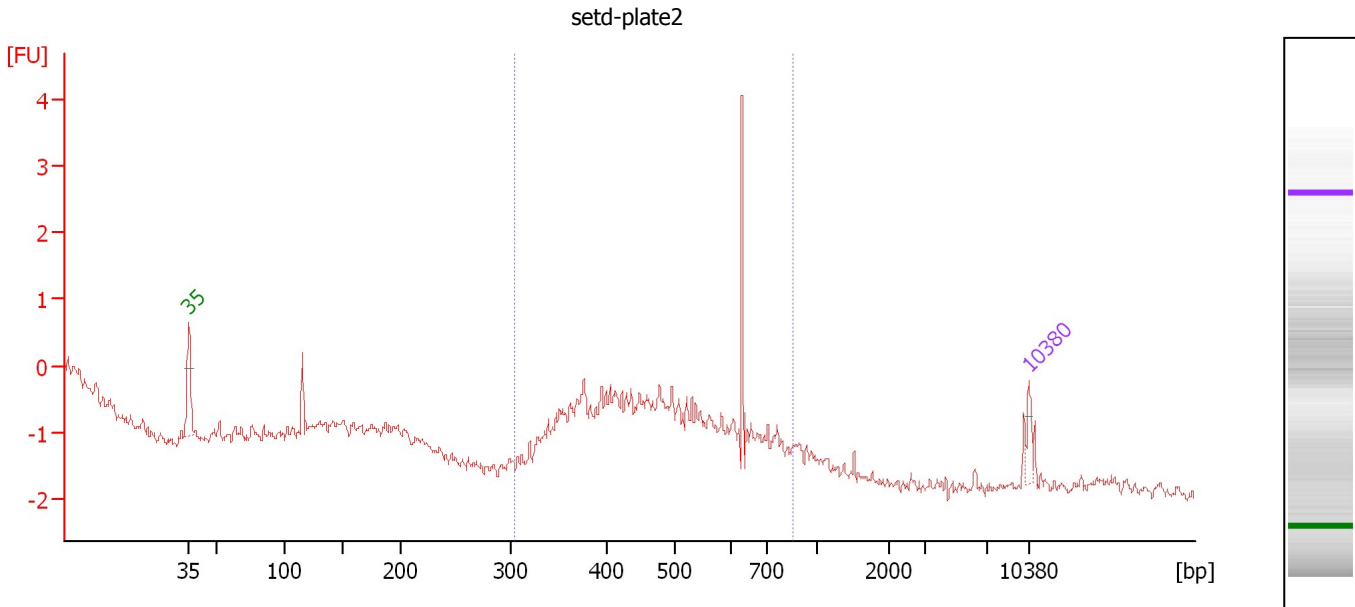
Region table for sample 4 : setd-plate1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	490	70,871.4	21,996.13	64.5	79	17.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-07\2013-08-07_004.xad

Created: 8/7/2013 3:39:01 PM
 Modified: 8/7/2013 4:24:53 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 5 : setd-plate2

Height Threshold [FU] : 1

Overall Results for sample 5 : setd-plate2

Number of peaks found: 0 Corr. Area 1: 9.7
 Noise: 0.1

Peak table for sample 5 : setd-plate2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,380	75.00	10.9	Upper Marker

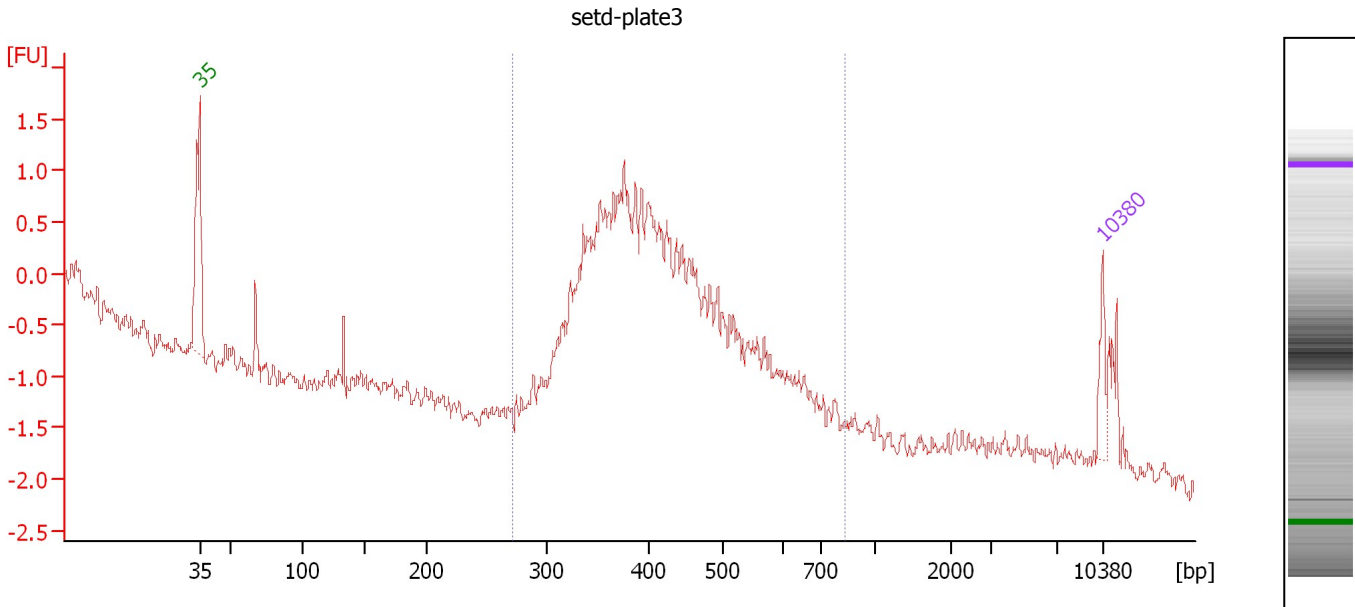
Region table for sample 5 : setd-plate2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
305	860	508	5,382.1	1,706.48	9.7	87	20.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-07\2013-08-07_004.xad

Created: 8/7/2013 3:39:01 PM
 Modified: 8/7/2013 4:24:53 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 6 : setd-plate3

Height Threshold [FU] : 1

Overall Results for sample 6 : setd-plate3

Number of peaks found: 0 Corr. Area 1: 28.7
 Noise: 0.1

Peak table for sample 6 : setd-plate3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,380	75.00	10.9	Upper Marker

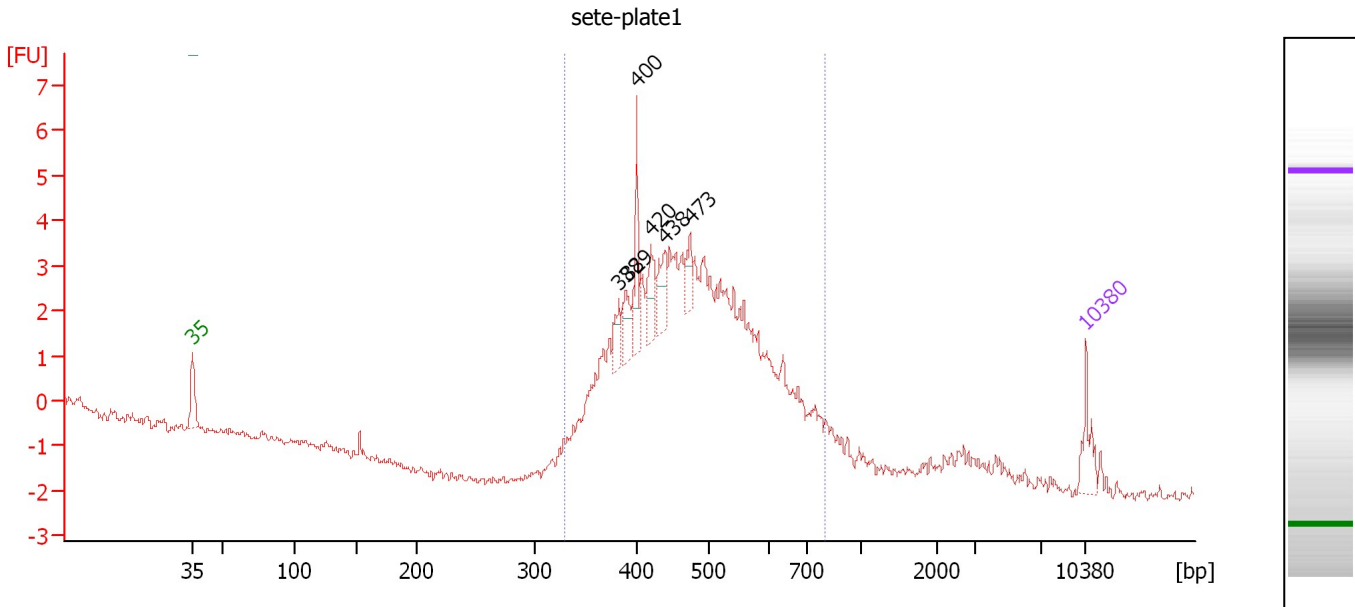
Region table for sample 6 : setd-plate3

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
272	835	432	13,011.6	3,536.85	28.7	88	20.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-07\2013-08-07_004.xad

Created: 8/7/2013 3:39:01 PM
 Modified: 8/7/2013 4:24:53 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 7 : sete-plate1

Height Threshold [FU] : 1

Overall Results for sample 7 : sete-plate1

Number of peaks found: 6 Corr. Area 1: 74.4
 Noise: 0.1

Peak table for sample 7 : sete-plate1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	382	69.85	276.8	
3	389	98.30	382.7	
4	400	117.60	445.8	
5	420	96.24	347.6	
6	438	94.40	326.6	
7	473	62.19	199.1	
8	10,380	75.00	10.9	Upper Marker

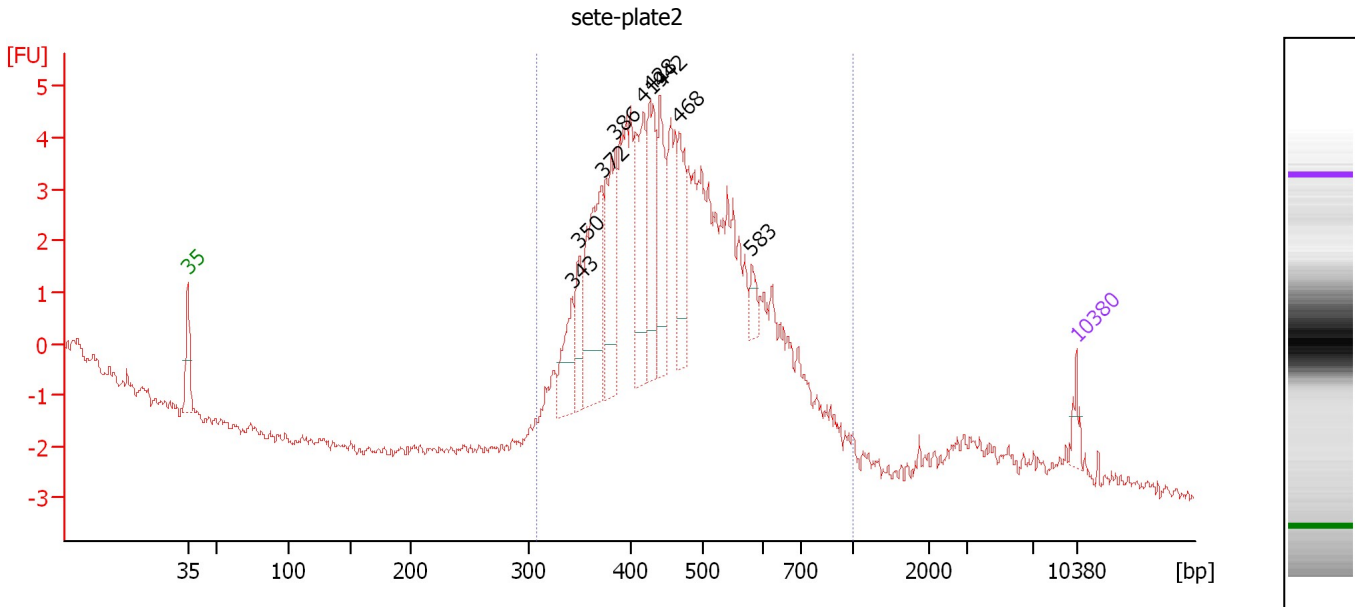
Region table for sample 7 : sete-plate1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
330	801	487	13,638.9	4,194.59	74.4	94	19.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-07\2013-08-07_004.xad

Created: 8/7/2013 3:39:01 PM
 Modified: 8/7/2013 4:24:53 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 8 : sete-plate2

Height Threshold [FU] : 1

Overall Results for sample 8 : sete-plate2

Number of peaks found: 9 Corr. Area 1: 103.6
 Noise: 0.1

Peak table for sample 8 : sete-plate2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	343	346.89	1,530.8	
3	350	279.59	1,209.7	
4	372	851.79	3,466.3	
5	386	638.26	2,505.2	
6	419	654.67	2,368.2	
7	428	577.26	2,044.8	
8	442	504.95	1,731.7	
9	468	438.75	1,421.3	
10	583	98.10	255.0	
11	10,380	75.00	10.9	Upper Marker

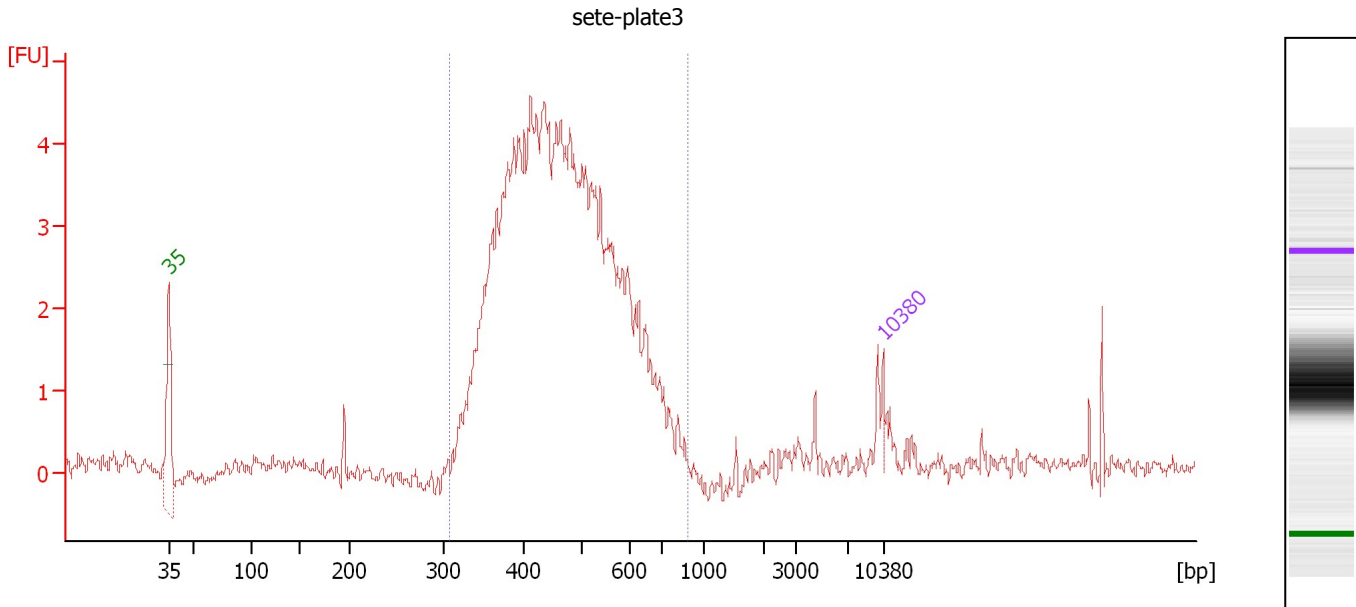
Region table for sample 8 : sete-plate2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
307	1,000	476	35,639.2	10,603.92	103.6	98	21.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-07\2013-08-07_004.xad

Created: 8/7/2013 3:39:01 PM
 Modified: 8/7/2013 4:24:53 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 9 : sete-plate3

Height Threshold [FU] : 1.8

Overall Results for sample 9 : sete-plate3

Number of peaks found: 0 Corr. Area 1: 70.0
 Noise: 0.1

Peak table for sample 9 : sete-plate3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,380	75.00	10.9	Upper Marker

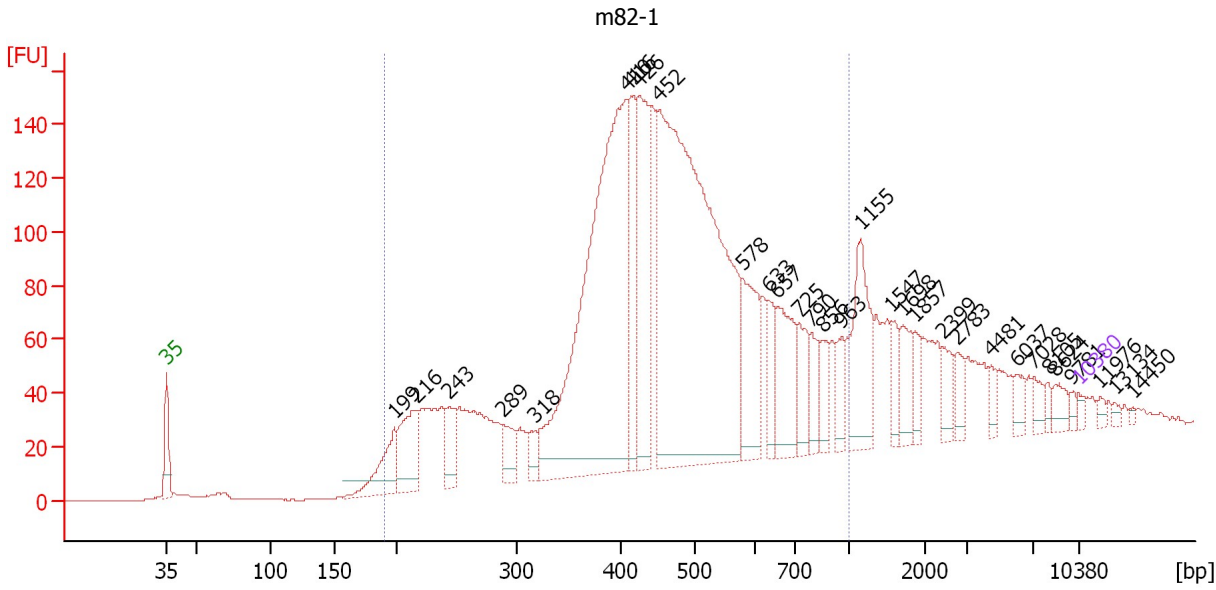
Region table for sample 9 : sete-plate3

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
308	896	472	155,378.4	45,956.35	70.0	92	20.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-07\2013-08-07_004.xad

Created: 8/7/2013 3:39:01 PM
 Modified: 8/7/2013 4:24:53 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : m82-1

Number of peaks found: 31 Corr. Area 1: 2,919.1
 Noise: 0.2

Peak table for sample 10 : m82-1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	199	1,192.28	9,097.9	
3	216	1,491.15	10,447.8	
4	243	698.24	4,356.2	
5	289	586.50	3,075.1	
6	318	314.28	1,497.1	
7	410	10,428.52	38,556.9	
8	416	1,717.01	6,260.0	
9	426	2,810.13	9,985.1	
10	452	12,889.14	43,167.0	
11	578	1,576.31	4,132.6	
12	633	609.66	1,458.3	
13	657	1,362.86	3,144.8	
14	725	681.81	1,425.9	
15	790	543.00	1,041.4	
16	856	427.45	757.0	
17	963	378.43	595.5	
18	1,155	1,452.42	1,905.6	
19	1,547	367.88	360.3	
20	1,698	527.67	470.8	
21	1,857	291.25	237.7	
22	2,399	356.23	225.0	
23	2,783	299.75	163.2	
24	4,481	204.98	69.3	
25	6,037	230.80	57.9	
26	7,028	202.45	43.6	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-07\2013-08-07_004.xad


Created: 8/7/2013 3:39:01 PM
Modified: 8/7/2013 4:24:53 PM

Electropherogram Summary Continued ...

... Peak table for sample 10 : m82-1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	8,105	96.24	18.0	
28	8,624	214.53	37.7	
29	9,781	71.91	11.1	
30	10,380	75.00	10.9	Upper Marker
31	11,976	0.00	0.0	
32	13,134	0.00	0.0	
33	14,450	0.00	0.0	

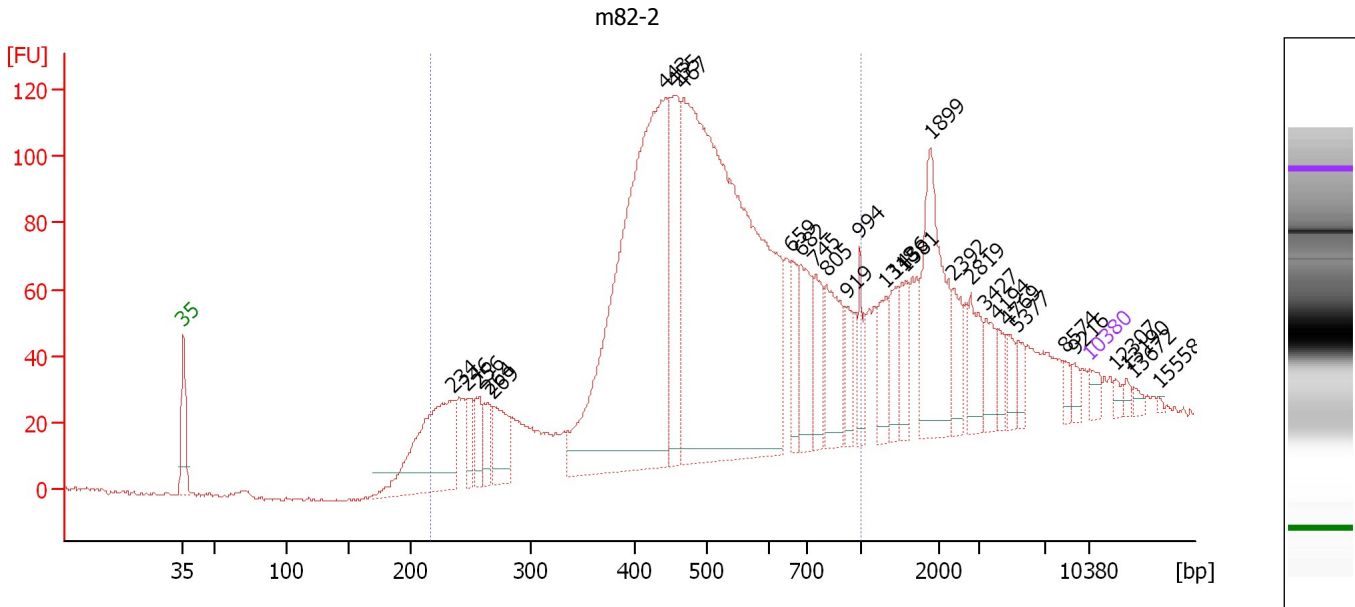
Region table for sample 10 : m82-1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
190	1,000	477	155,018.4	41,573.71	2,919.1	81	32.3	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-07\2013-08-07_004.xad

Created: 8/7/2013 3:39:01 PM
 Modified: 8/7/2013 4:24:53 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : m82-2

Number of peaks found: 30 Corr. Area 1: 2,169.3
 Noise: 0.4

Peak table for sample 11 : m82-2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	234	1,548.14	10,006.3	
3	246	225.79	1,388.1	
4	256	281.39	1,663.6	
5	264	228.17	1,310.2	
6	269	442.95	2,497.1	
7	443	5,039.60	17,254.9	
8	455	1,124.17	3,744.5	
9	467	6,728.58	21,820.1	
10	659	280.87	645.8	
11	682	517.80	1,149.8	
12	745	332.11	675.2	
13	805	562.55	1,058.5	
14	919	180.16	297.0	
15	994	221.12	337.1	
16	1,318	249.81	287.1	
17	1,436	223.05	235.4	
18	1,581	250.74	240.3	
19	1,899	913.11	728.4	
20	2,392	223.05	141.3	
21	2,819	254.93	137.0	
22	3,427	184.84	81.7	
23	4,194	105.34	38.1	
24	4,769	109.89	34.9	
25	5,377	102.14	28.8	
26	8,574	64.91	11.5	


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-07\2013-08-07_004.xad

Created: 8/7/2013 3:39:01 PM
Modified: 8/7/2013 4:24:53 PM

Electropherogram Summary Continued ...**... Peak table for sample 11 : m82-2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	9,216	58.28	9.6	
28	10,380	75.00	10.9	Upper Marker
29	12,307	0.00	0.0	
30	13,190	0.00	0.0	
31	13,672	0.00	0.0	
32	15,558	0.00	0.0	

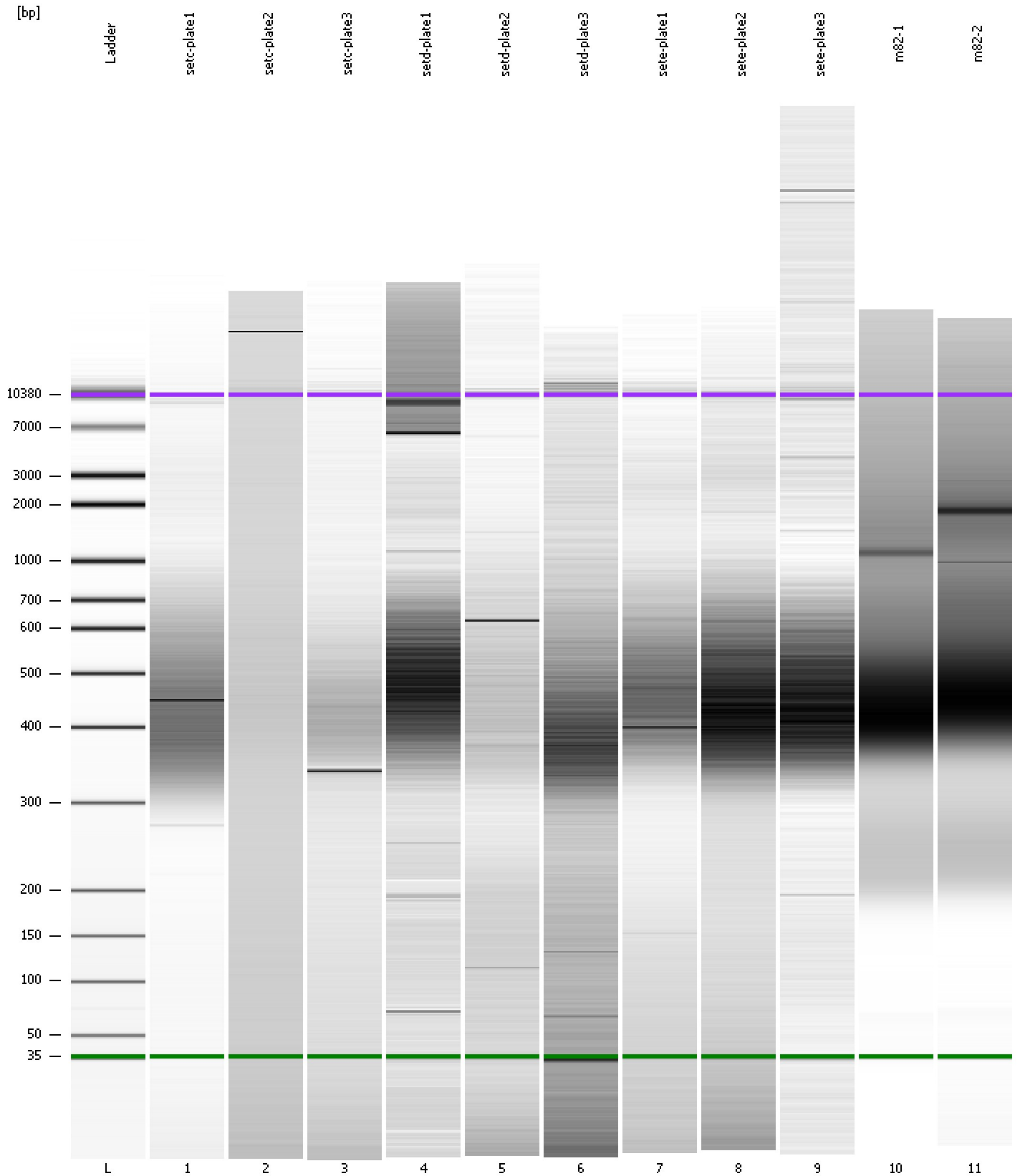
Region table for sample 11 : m82-2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
216	1,000	510	56,157.9	16,339.34	2,169.3	75	31.1	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-07\2013-08-07_004.xad

Created: 8/7/2013 3:39:01 PM
Modified: 8/7/2013 4:24:53 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-07\2013-08-07_004.xad

Created: 8/7/2013 3:39:01 PM
 Modified: 8/7/2013 4:24:53 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 12)		Instrument	Run		8/7/2013 4:19:23 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-08-07\2013-08-07_004.xad)		Instrument	Run		8/7/2013 3:39:02 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		8/7/2013 3:39:02 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		8/7/2013 3:39:02 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		8/7/2013 3:39:02 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		8/7/2013 3:39:02 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		8/7/2013 3:39:02 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		8/7/2013 3:39:02 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1