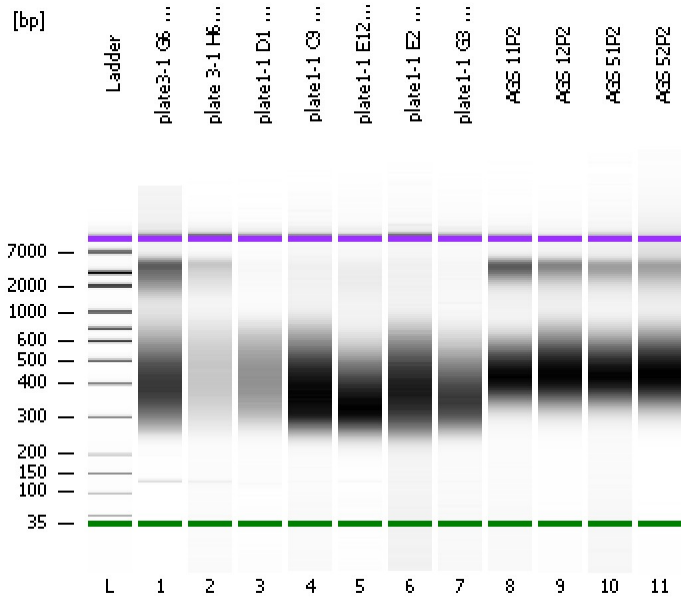


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-05\2014-08-05_004.xad

Created: 8/5/2014 3:59:45 PM
Modified: 8/5/2014 4:40:50 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:

plate3-1 G6 MO1W

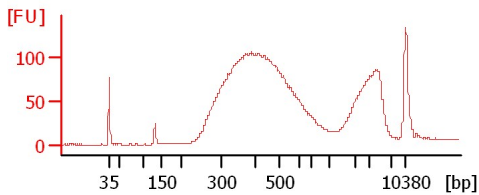


plate 3-1 H6 A680

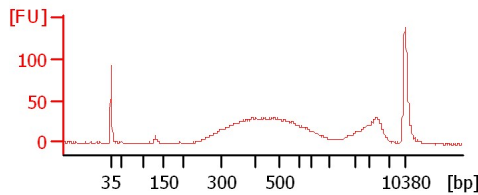


plate1-1 D1 NC300

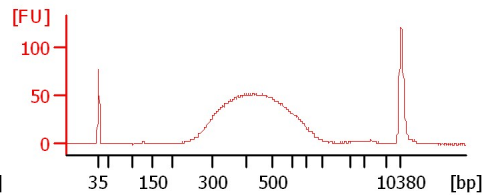


plate1-1 C9 NC360

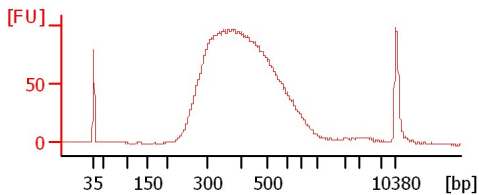


plate1-1 E12 Mo24W

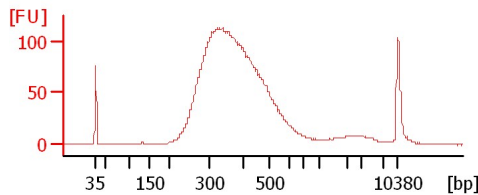


plate1-1 E2 NC340

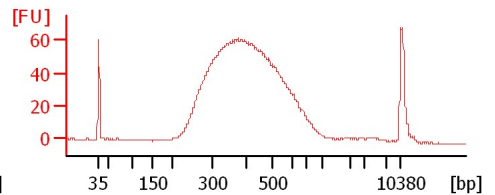
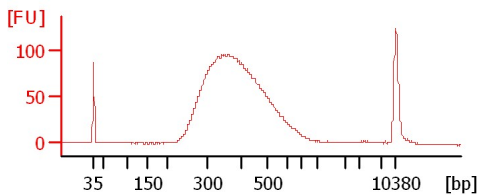
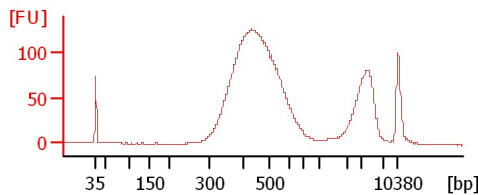


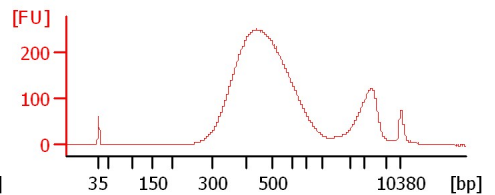
plate1-1 G3 CML254



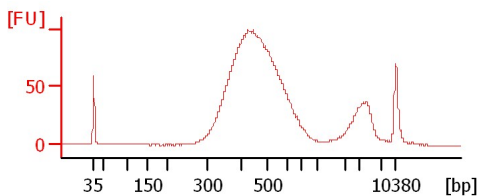
AGS 11P2



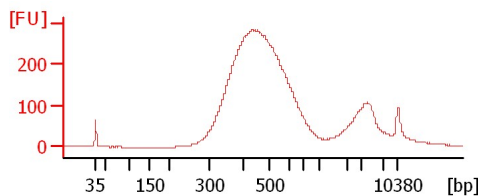
AGS 12P2



AGS 51P2



AGS 52P2



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-05\2014-08-05_004.xad

Created: 8/5/2014 3:59:45 PM
 Modified: 8/5/2014 4:40:50 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
plate3-1 G6 MO1W		<input type="checkbox"/>	✓			
plate 3-1 H6 A680		<input type="checkbox"/>	✓			
plate1-1 D1 NC300		<input type="checkbox"/>	✓			
plate1-1 C9 NC360		<input type="checkbox"/>	✓			
plate1-1 E12 Mo24W		<input type="checkbox"/>	✓			
plate1-1 E2 NC340		<input type="checkbox"/>	✓			
plate1-1 G3 CML254		<input type="checkbox"/>	✓			
AGS 11P2		<input type="checkbox"/>	✓			
AGS 12P2		<input type="checkbox"/>	✓			
AGS 51P2		<input type="checkbox"/>	✓			
AGS 52P2		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-05\2014-08-05_004.xad

Created: 8/5/2014 3:59:45 PM
Modified: 8/5/2014 4:40:50 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

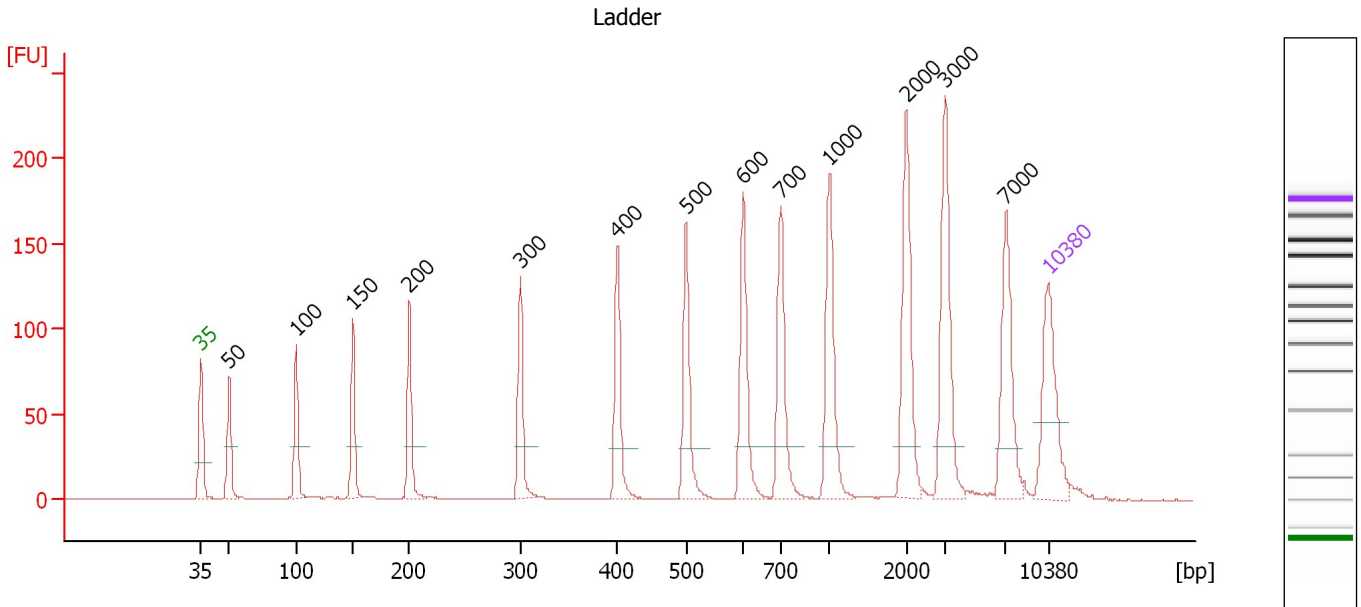
Ladder

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\2014-08-05\2014-08-05_004.xad

Created: 8/5/2014 3:59:45 PM
 Modified: 8/5/2014 4:40:50 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

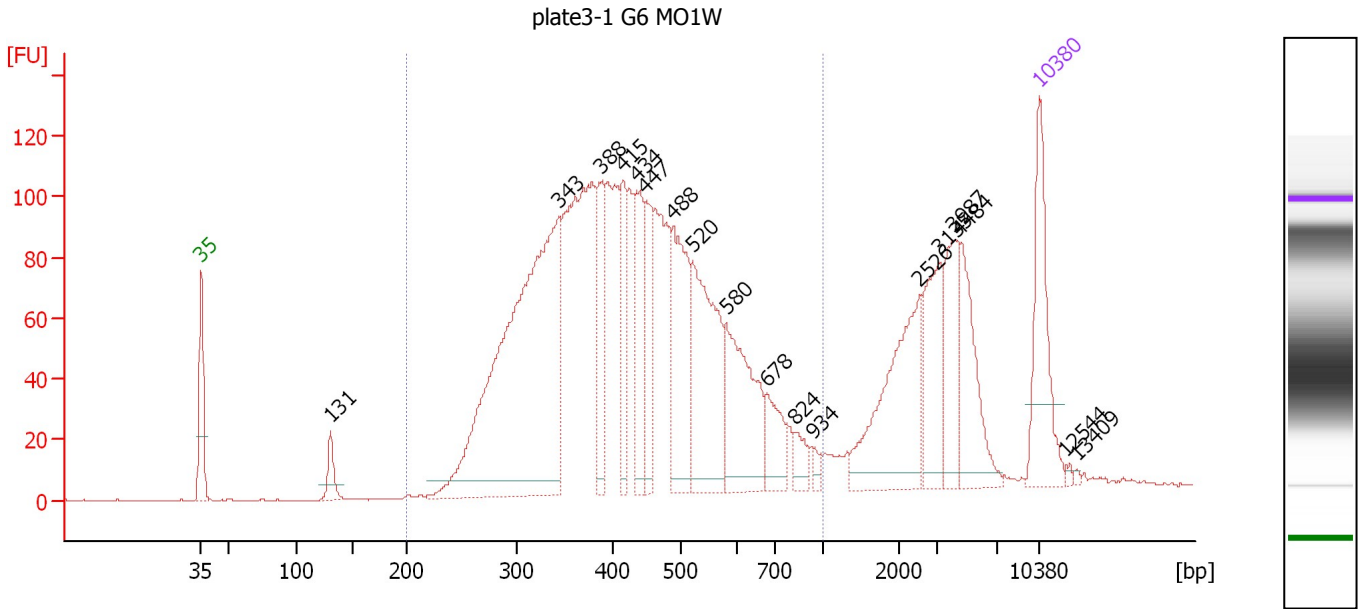
Peak table for Ladder

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:\... bioanalyzer\2100 expert\Data\2014-08-05\2014-08-05_004.xad

Created: 8/5/2014 3:59:45 PM
 Modified: 8/5/2014 4:40:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : plate3-1 G6 MO1W

Number of peaks found: 18 Corr. Area 1: 2,583.7
 Noise: 0.2

Peak table for sample 1 : plate3-1 G6 MO1W

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	131	26.00	300.7	
3	343	544.73	2,404.6	
4	388	79.34	310.1	
5	415	62.49	228.3	
6	434	80.87	282.1	
7	447	69.19	234.6	
8	488	121.98	379.0	
9	520	164.32	478.7	
10	580	120.96	316.2	
11	678	40.29	90.1	
12	824	16.50	30.3	
13	934	7.32	11.9	
14	2,526	119.13	71.4	
15	3,135	64.06	31.0	
16	3,987	57.06	21.7	
17	4,484	68.43	23.1	
18	10,380	75.00	10.9	Upper Marker
19	12,544	0.00	0.0	
20	13,409	0.00	0.0	

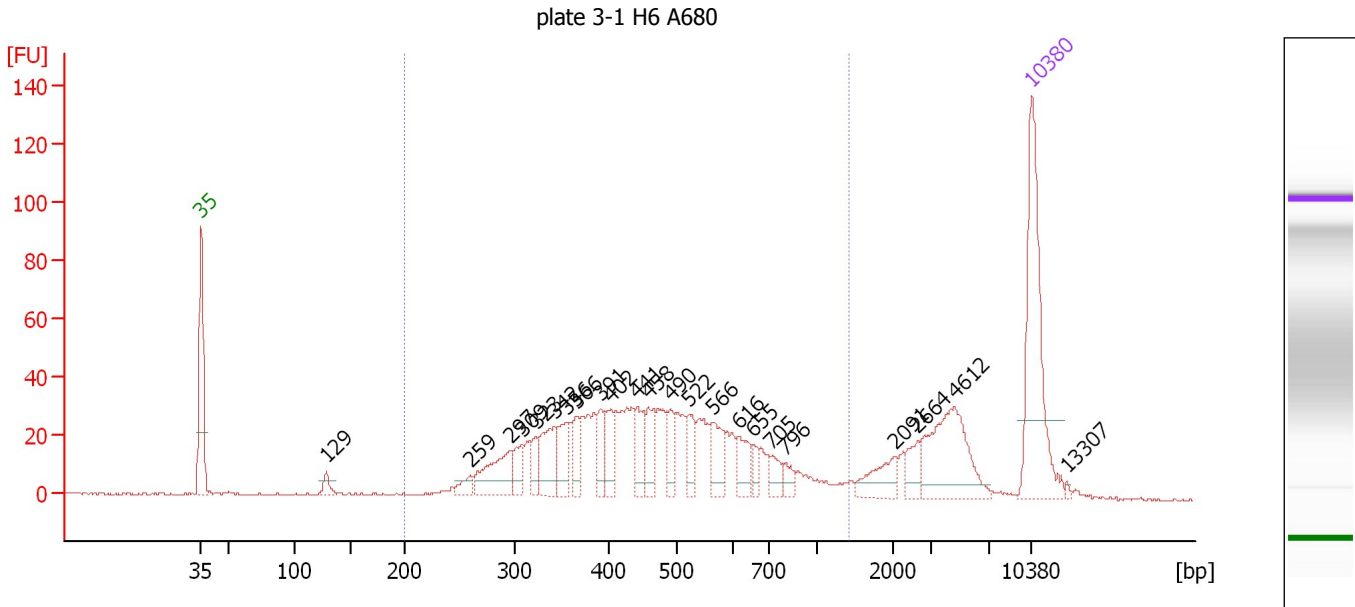
Region table for sample 1 : plate3-1 G6 MO1W

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	1,000	438	7,543.1	1,965.16	2,583.7	80	29.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-05\2014-08-05_004.xad

Created: 8/5/2014 3:59:45 PM
 Modified: 8/5/2014 4:40:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : plate 3-1 H6 A680

Number of peaks found: 23 Corr. Area 1: 845.0
 Noise: 0.3

Peak table for sample 2 : plate 3-1 H6 A680


Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	129	8.09	95.1	
3	259	9.54	55.7	
4	297	40.08	204.6	
5	309	15.27	75.0	
6	323	14.66	68.7	
7	342	30.93	137.1	
8	356	24.41	103.8	
9	366	15.81	65.4	
10	391	16.31	63.2	
11	402	19.59	73.9	
12	441	21.44	73.6	
13	458	20.02	66.3	
14	490	17.12	52.9	
15	522	17.23	50.0	
16	566	21.44	57.4	
17	616	16.99	41.8	
18	655	7.15	16.5	
19	705	9.87	21.2	
20	796	7.48	14.2	
21	2,091	16.60	12.0	
22	2,664	11.09	6.3	
23	4,612	55.42	18.2	
24	10,380	75.00	10.9	Upper Marker
25	13,307	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-05\2014-08-05_004.xad

Created: 8/5/2014 3:59:45 PM
Modified: 8/5/2014 4:40:50 PM

Electropherogram Summary Continued ...

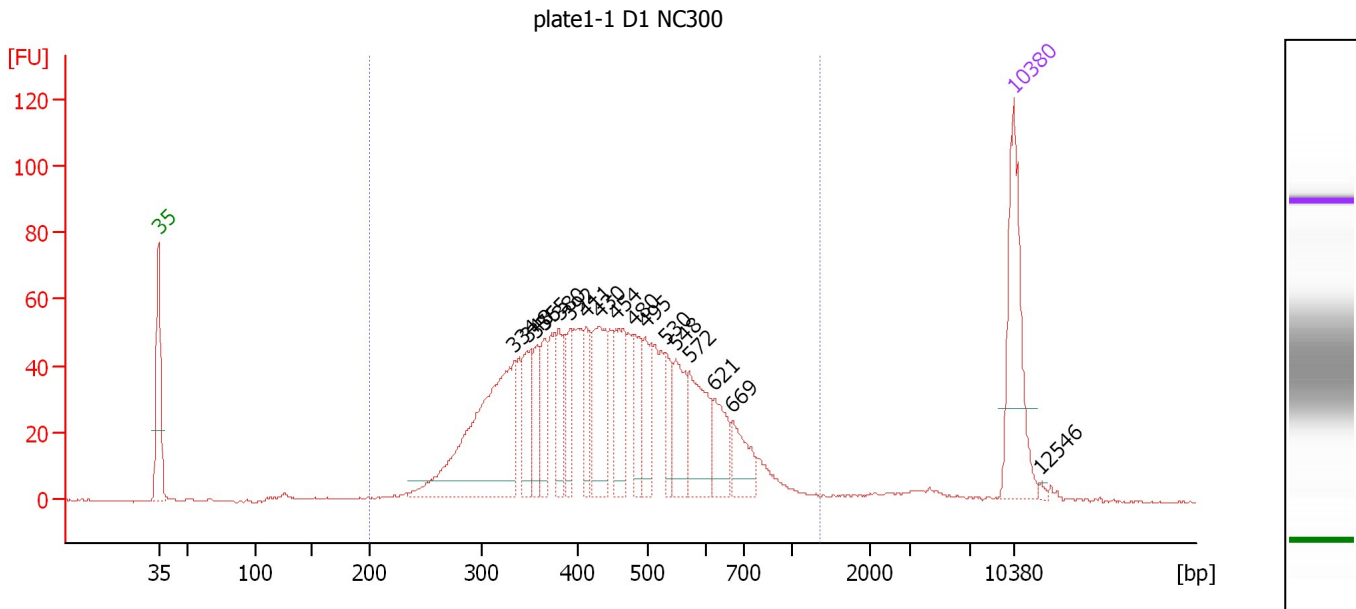
... Region table for sample 2 : plate 3-1 H6 A680

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/ μ l]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	1,418	483	2,019.0	556.03	 845.0	79	36.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-05\2014-08-05_004.xad

Created: 8/5/2014 3:59:45 PM
 Modified: 8/5/2014 4:40:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : plate1-1 D1 NC300

Number of peaks found: 17 Corr. Area 1: 1,338.1
 Noise: 0.2

Peak table for sample 3 : plate1-1 D1 NC300

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	334	209.37	950.8	
3	348	40.64	177.0	
4	355	34.12	145.5	
5	365	34.67	144.0	
6	380	40.48	161.6	
7	392	34.90	135.1	
8	411	31.92	117.6	
9	430	65.53	231.1	
10	454	54.09	180.6	
11	480	35.47	111.9	
12	495	34.03	104.1	
13	530	25.36	72.5	
14	548	42.79	118.2	
15	572	57.89	153.4	
16	621	33.92	82.7	
17	669	30.82	69.8	
18	10,380	75.00	10.9	Upper Marker
19	12,546	0.00	0.0	

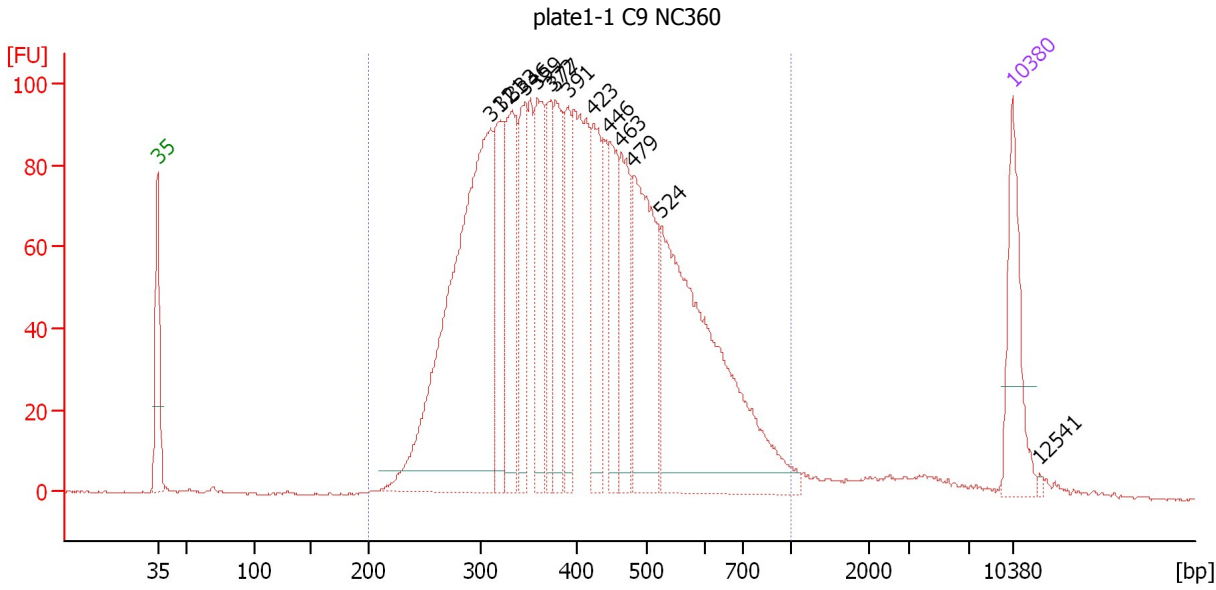
Region table for sample 3 : plate1-1 D1 NC300

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	1,359	455	4,098.6	1,106.09	1,338.1	97	29.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-05\2014-08-05_004.xad

Created: 8/5/2014 3:59:45 PM
 Modified: 8/5/2014 4:40:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : plate1-1 C9 NC360

Number of peaks found: 14 Corr. Area 1: 2,591.0
 Noise: 0.2

Peak table for sample 4 : plate1-1 C9 NC360

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	311	600.08	2,924.8	
3	321	121.95	575.2	
4	333	161.13	732.3	
5	346	106.43	465.9	
6	359	124.51	525.7	
7	372	82.78	337.0	
8	377	106.03	425.7	
9	391	83.75	324.8	
10	423	114.50	410.4	
11	446	91.58	311.4	
12	463	101.25	331.6	
13	479	203.54	643.9	
14	524	432.56	1,251.1	
15	10,380	75.00	10.9	Upper Marker
16	12,541	0.00	0.0	

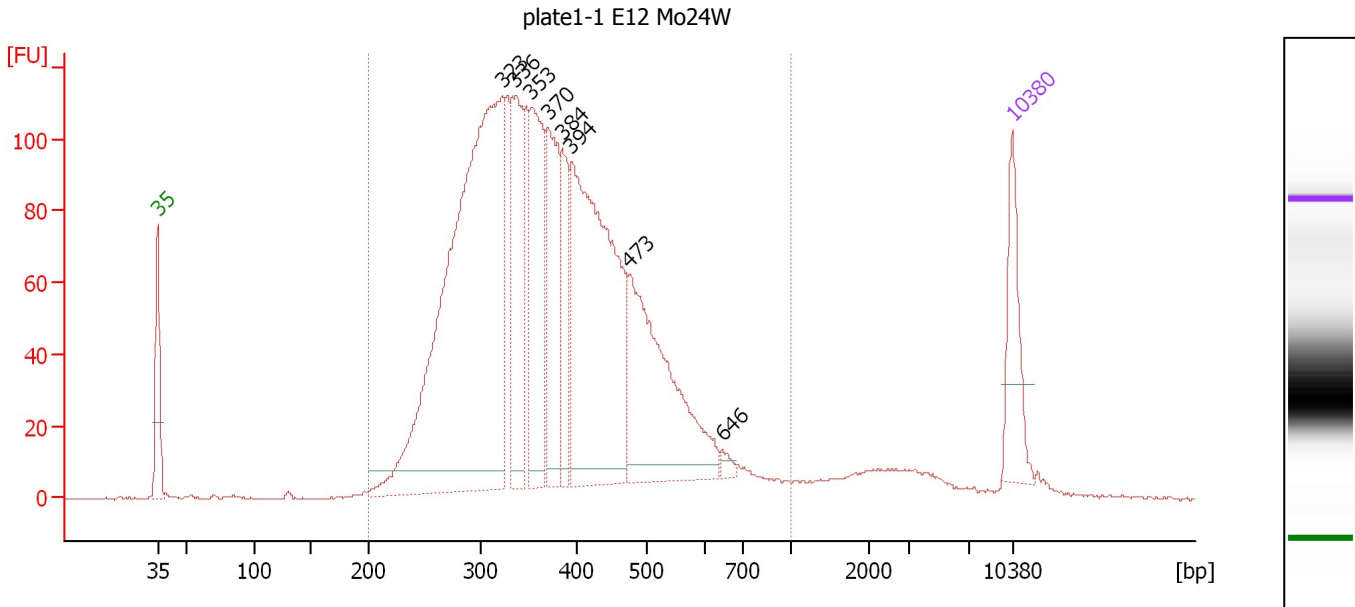
Region table for sample 4 : plate1-1 C9 NC360

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	1,000	422	10,924.4	2,730.17	2,591.0	96	29.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-05\2014-08-05_004.xad

Created: 8/5/2014 3:59:45 PM
 Modified: 8/5/2014 4:40:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : plate1-1 E12 Mo24W

Number of peaks found: 8 Corr. Area 1: 2,517.9
 Noise: 0.3

Peak table for sample 5 : plate1-1 E12 Mo24W

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	323	1,031.24	4,838.7	
3	336	201.65	909.9	
4	353	218.03	936.5	
5	370	189.38	776.1	
6	384	93.47	369.1	
7	394	529.27	2,037.0	
8	473	320.89	1,028.4	
9	646	8.79	20.6	
10	10,380	75.00	10.9	Upper Marker

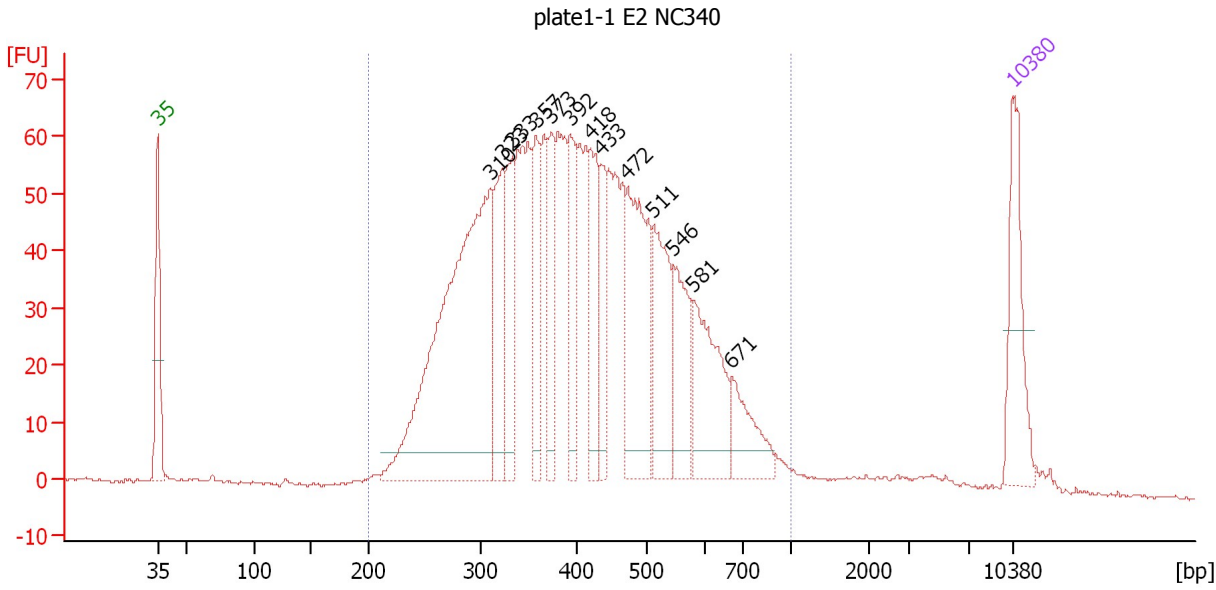
Region table for sample 5 : plate1-1 E12 Mo24W

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	1,000	384	12,984.0	3,018.32	2,517.9	95	27.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-05\2014-08-05_004.xad

Created: 8/5/2014 3:59:45 PM
 Modified: 8/5/2014 4:40:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : plate1-1 E2 NC340

Number of peaks found: 13 Corr. Area 1: 1,672.6
 Noise: 0.3

Peak table for sample 6 : plate1-1 E2 NC340

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	310	545.28	2,663.6	
3	323	122.78	575.6	
4	333	85.76	389.9	
5	357	80.51	341.3	
6	373	73.49	298.2	
7	392	85.65	330.8	
8	418	93.81	339.7	
9	433	61.20	213.9	
10	472	174.66	561.0	
11	511	118.72	351.9	
12	546	83.46	231.4	
13	581	113.89	297.2	
14	671	57.69	130.3	
15	10,380	75.00	10.9	Upper Marker

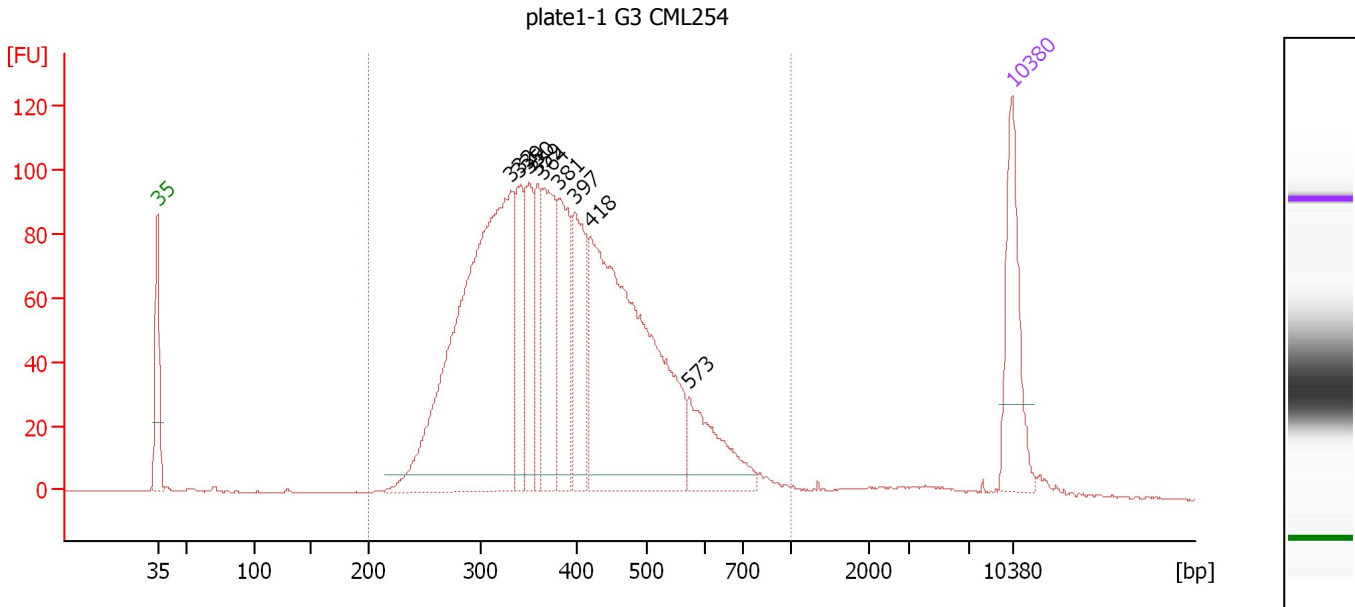
Region table for sample 6 : plate1-1 E2 NC340

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	1,000	421	9,900.8	2,453.10	1,672.6	97	29.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-05\2014-08-05_004.xad

Created: 8/5/2014 3:59:45 PM
 Modified: 8/5/2014 4:40:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : plate1-1 G3 CML254

Number of peaks found: 9 Corr. Area 1: 2,187.3
 Noise: 0.2

Peak table for sample 7 : plate1-1 G3 CML254

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	332	581.16	2,654.3	
3	339	84.37	377.3	
4	350	82.62	357.5	
5	359	65.58	276.7	
6	364	122.55	510.4	
7	381	108.25	430.5	
8	397	110.48	421.6	
9	418	443.60	1,606.3	
10	573	77.20	204.0	
11	10,380	75.00	10.9	Upper Marker

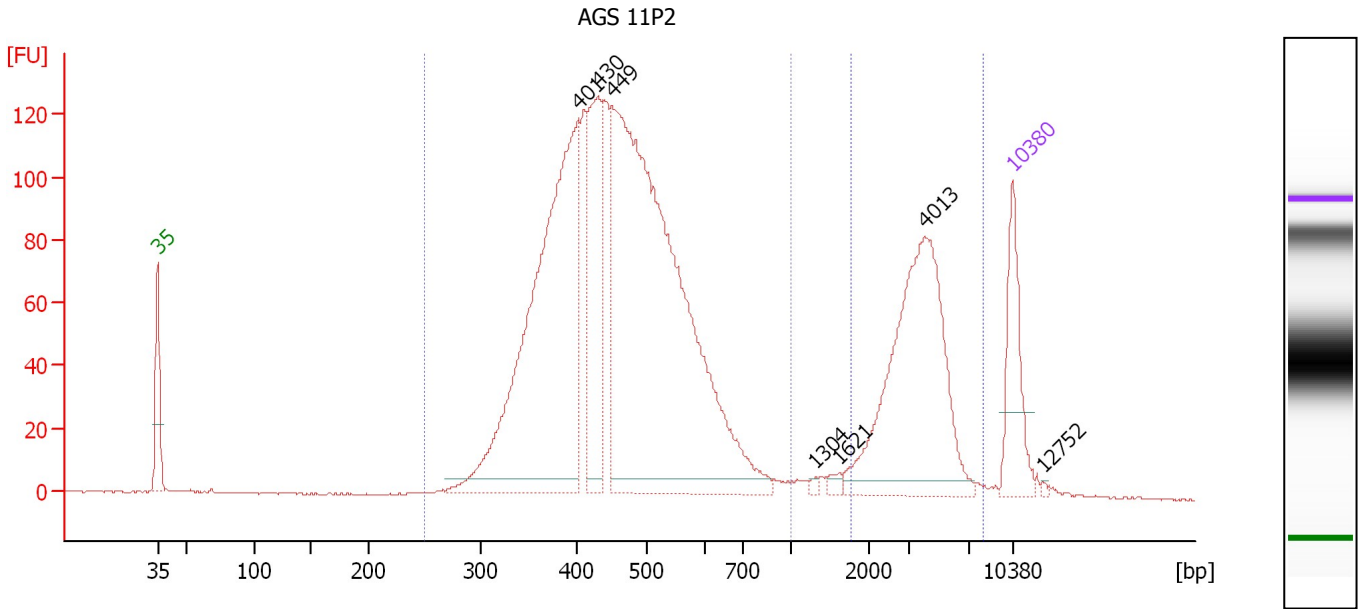
Region table for sample 7 : plate1-1 G3 CML254

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	1,000	399	7,321.2	1,771.10	2,187.3	97	26.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-05\2014-08-05_004.xad

Created: 8/5/2014 3:59:45 PM
 Modified: 8/5/2014 4:40:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : AGS 11P2

Number of peaks found: 7 Corr. Area 1: 2,080.8
 Noise: 0.2 Corr. Area 2: 409.2

Peak table for sample 8 : AGS 11P2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	401	654.52	2,471.8	
3	430	194.20	684.5	
4	449	979.19	3,302.7	
5	1,304	3.31	3.8	
6	1,621	6.53	6.1	
7	4,013	292.88	110.6	
8	10,380	75.00	10.9	Upper Marker
9	12,752	0.00	0.0	

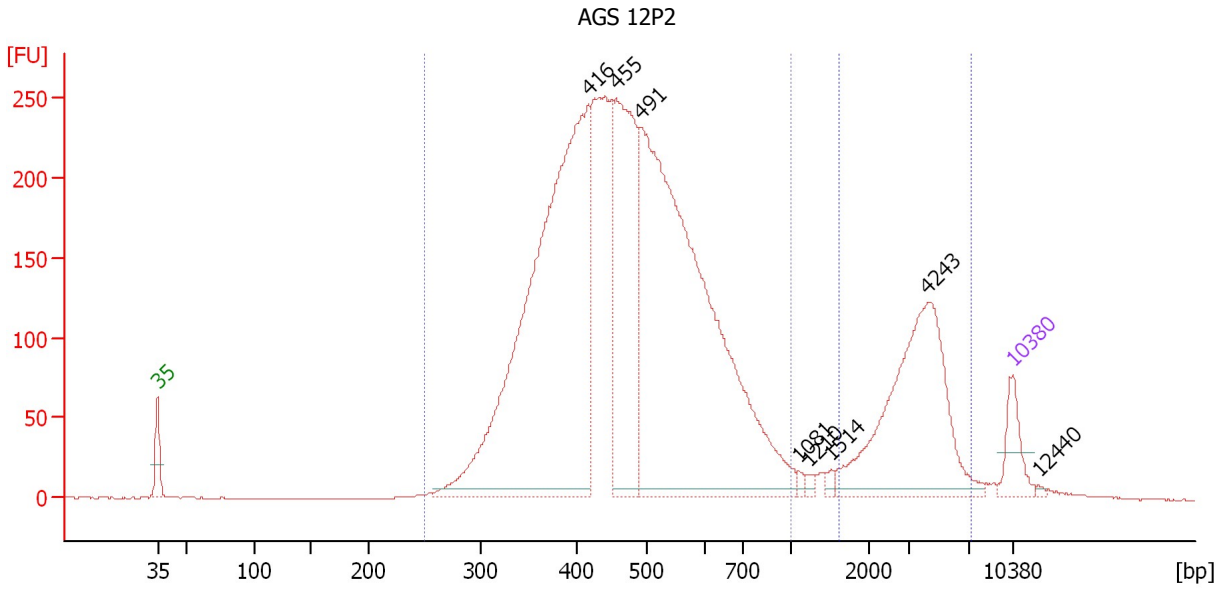
Region table for sample 8 : AGS 11P2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
250	1,000	460	7,049.2	2,030.59	2,080.8	82	20.9
1,763	8,046	3,751	131.7	298.16	409.2	16	33.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-05\2014-08-05_004.xad

Created: 8/5/2014 3:59:45 PM
 Modified: 8/5/2014 4:40:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : AGS 12P2

Number of peaks found: 8 Corr. Area 1: 4,792.1
 Noise: 0.2 Corr. Area 2: 648.2

Peak table for sample 9 : AGS 12P2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	416	1,993.45	7,268.3	
3	455	720.56	2,397.2	
4	491	2,051.74	6,330.6	
5	1,081	10.98	15.4	
6	1,210	10.70	13.4	
7	1,514	12.97	13.0	
8	4,243	549.04	196.1	
9	10,380	75.00	10.9	Upper Marker
10	12,440	0.00	0.0	

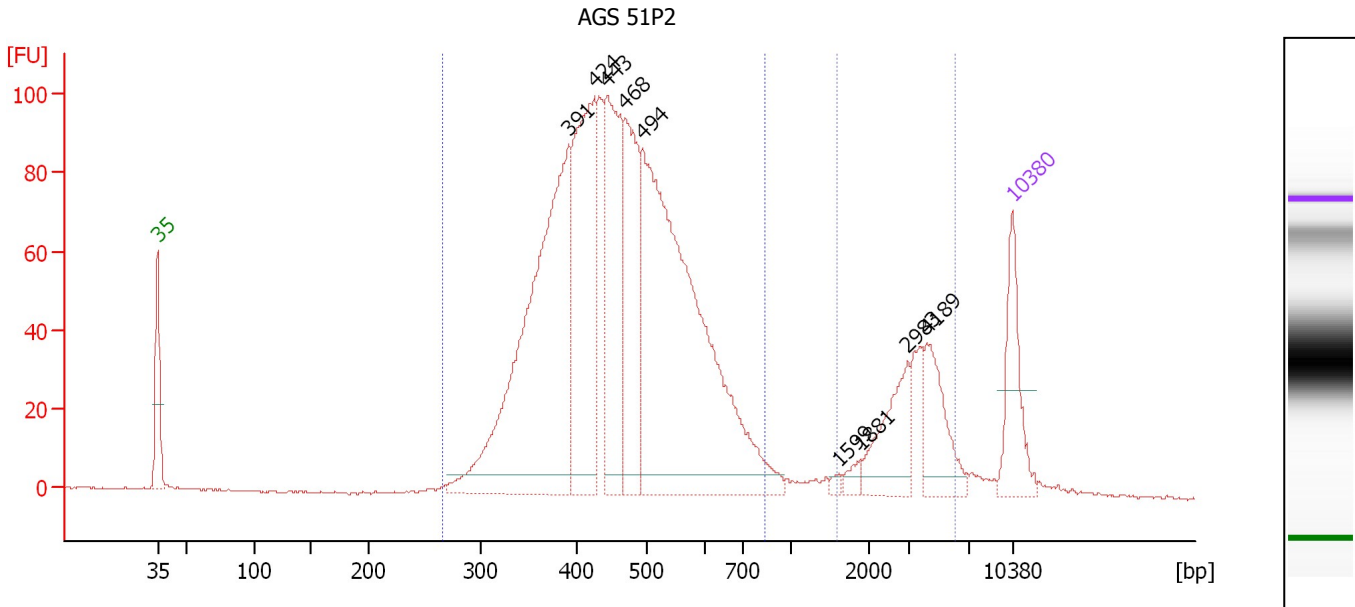
Region table for sample 9 : AGS 12P2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
251	1,000	477	18,741.9	5,488.82	4,792.1	86	24.5
1,597	7,145	3,649	259.3	557.12	648.2	12	35.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-05\2014-08-05_004.xad

Created: 8/5/2014 3:59:45 PM
 Modified: 8/5/2014 4:40:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : AGS 51P2

Number of peaks found: 9 Corr. Area 1: 199.4
 Noise: 0.3 Corr. Area 2: 1,707.7

Peak table for sample 10 : AGS 51P2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	391	620.60	2,407.7	
3	424	336.37	1,201.8	
4	443	252.74	864.8	
5	468	210.49	681.0	
6	494	763.59	2,342.8	
7	1,599	5.25	5.0	
8	1,881	10.99	8.8	
9	2,983	78.35	39.8	
10	4,189	73.45	26.6	
11	10,380	75.00	10.9	Upper Marker

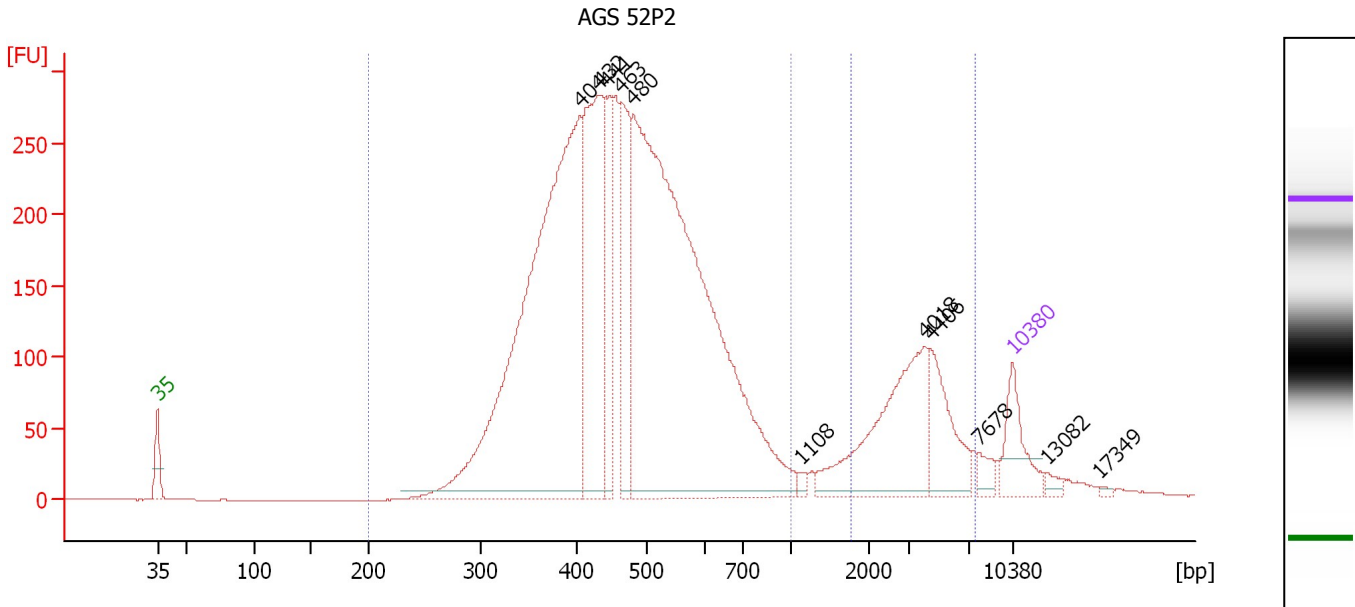
Region table for sample 10 : AGS 51P2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
267	832	463	7,781.5	2,255.32	1,707.7	87	20.4
1,576	6,066	3,473	94.9	196.84	199.4	10	32.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-05\2014-08-05_004.xad

Created: 8/5/2014 3:59:45 PM
 Modified: 8/5/2014 4:40:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : AGS 52P2

Number of peaks found: 11 Corr. Area 1: 5,361.0
 Noise: 0.3 Corr. Area 2: 640.9

Peak table for sample 11 : AGS 52P2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	404	1,386.34	5,204.5	
3	432	476.58	1,671.7	
4	441	173.53	596.9	
5	463	241.81	791.6	
6	480	1,709.82	5,396.7	
7	1,108	9.56	13.1	
8	4,018	276.56	104.3	
9	4,406	117.81	40.5	
10	7,678	20.12	4.0	
11	10,380	75.00	10.9	Upper Marker
12	13,082	0.00	0.0	
13	17,349	0.00	0.0	

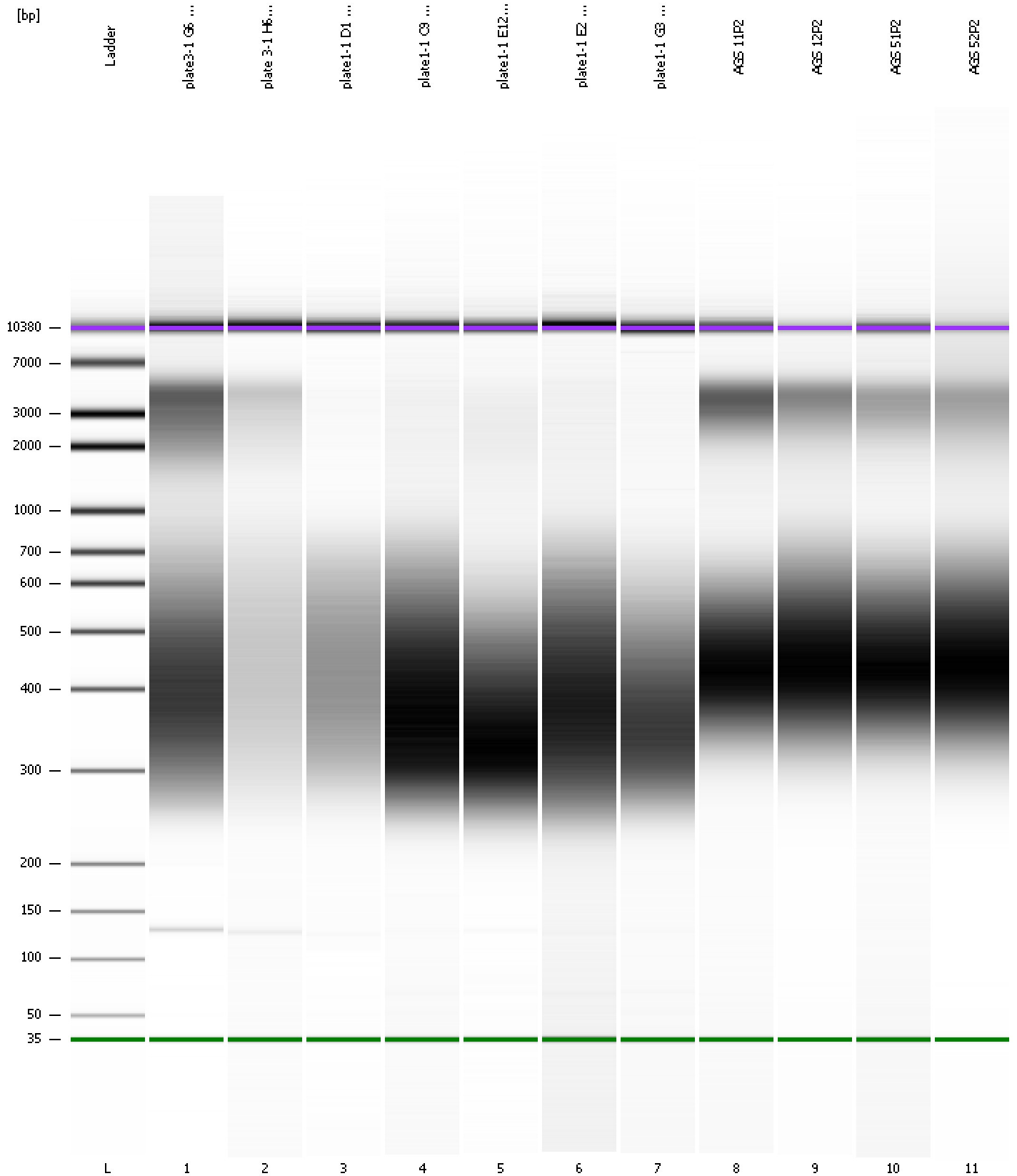
Region table for sample 11 : AGS 52P2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	1,000	474	14,218.5	4,139.36	5,361.0	86	24.2
1,770	7,461	3,773	168.3	370.70	640.9	10	38.2

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-05\2014-08-05_004.xad

Created: 8/5/2014 3:59:45 PM
Modified: 8/5/2014 4:40:50 PM

Gel Image



Assay Class: High Sensitivity DNA Assay Created: 8/5/2014 3:59:45 PM
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-05\2014-08-05_004.xad Modified: 8/5/2014 4:40:50 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		8/5/2014 4:40:13 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\Data\2014-08-05\2014-08-05_004.xad)		Instrument	Run		8/5/2014 3:59:50 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		8/5/2014 3:59:50 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		8/5/2014 3:59:50 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		8/5/2014 3:59:50 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		8/5/2014 3:59:50 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		8/5/2014 3:59:50 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		8/5/2014 3:59:50 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1