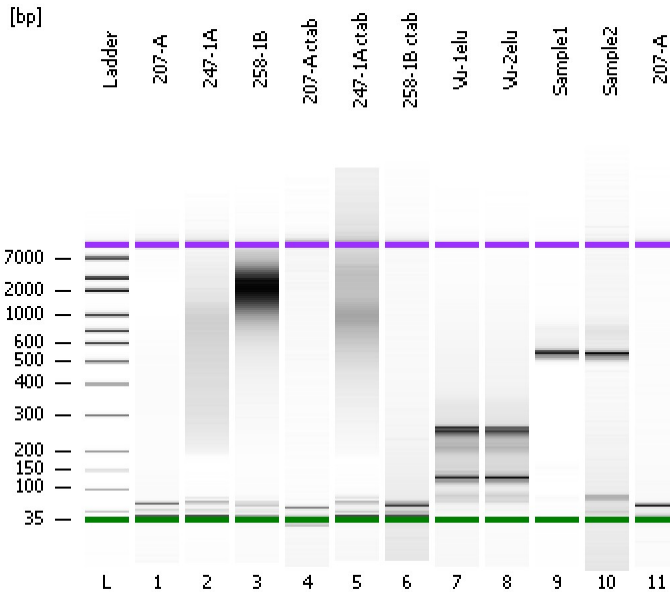


Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-14\2013-02-14_003.xad

Created: 2/14/2013 3:39:21 PM
 Modified: 2/14/2013 5:02:25 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

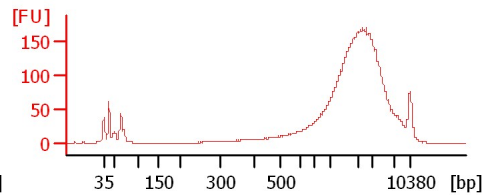
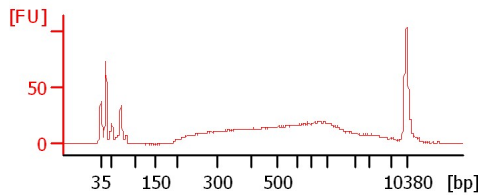
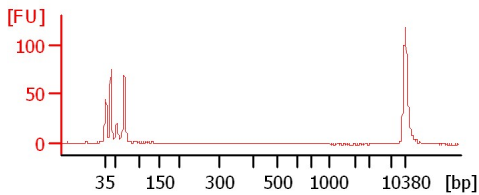
Chip Information:

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

207-A

247-1A

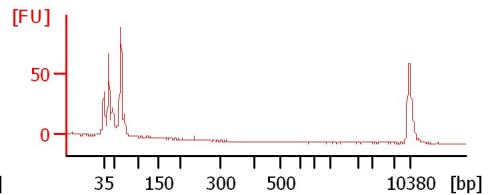
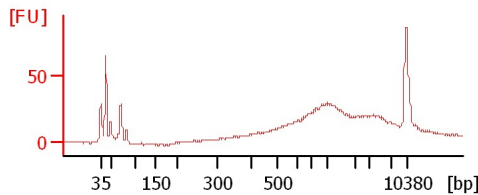
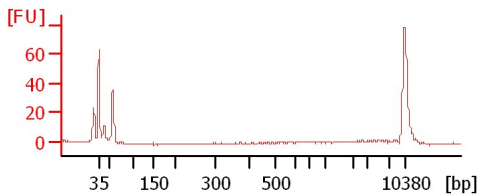
258-1B



207-A ctab

247-1A ctab

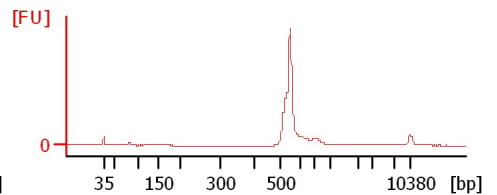
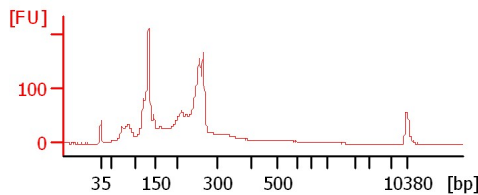
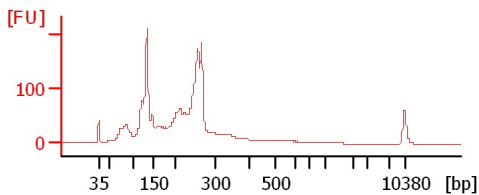
258-1B ctab



Vu-1elu

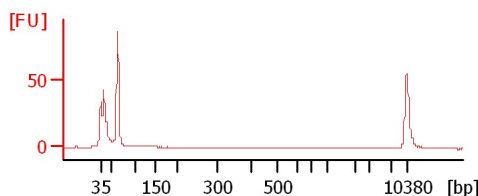
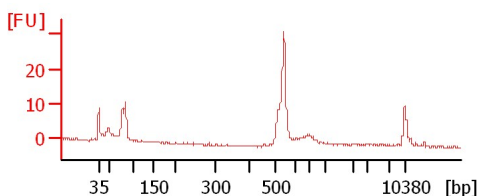
Vu-2elu

Sample1



Sample2

207-A



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-14\2013-02-14_003.xad

Created: 2/14/2013 3:39:21 PM
Modified: 2/14/2013 5:02:25 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
207-A		<input type="checkbox"/>	✓			
247-1A		<input type="checkbox"/>	✓			
258-1B		<input type="checkbox"/>	✓			
207-A ctab		<input type="checkbox"/>	✓			
247-1A ctab		<input type="checkbox"/>	✓			
258-1B ctab		<input type="checkbox"/>	✓			
Vu-1elu		<input type="checkbox"/>	✓			
Vu-2elu		<input type="checkbox"/>	✓			
Sample1		<input type="checkbox"/>	✓			
Sample2		<input type="checkbox"/>	✓			
207-A		<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\2013-02-14\2013-02-14_003.xad

Created: 2/14/2013 3:39:21 PM
Modified: 2/14/2013 5:02:25 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

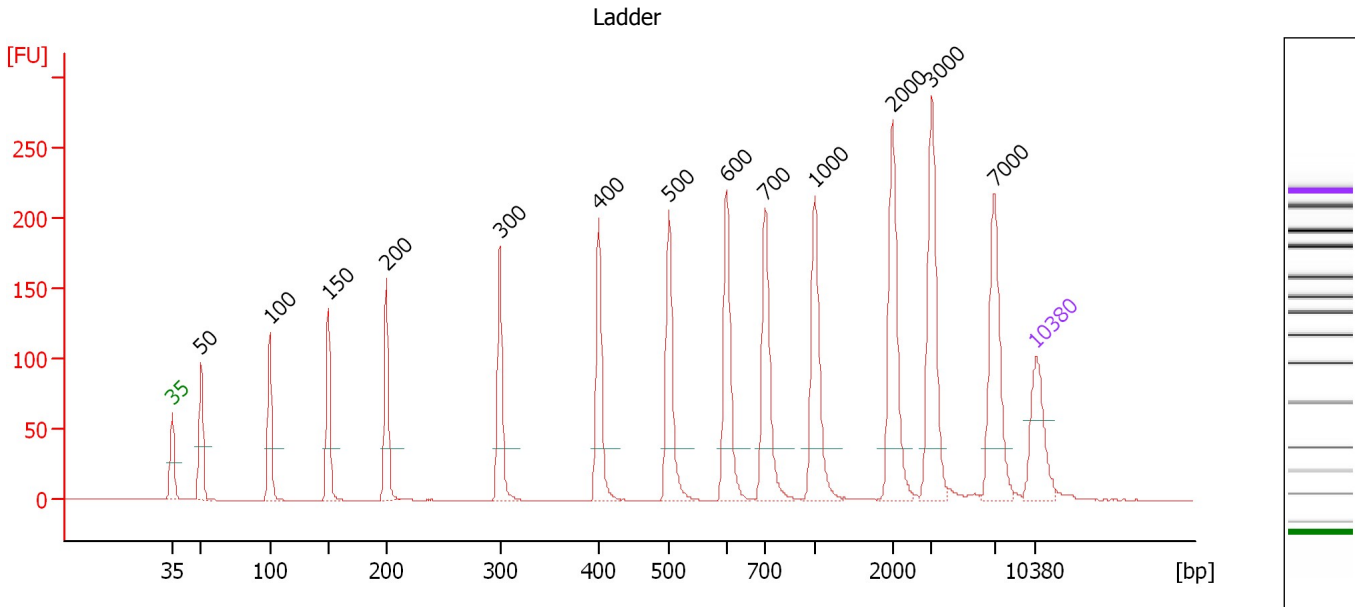
Ladder

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\2013-02-14\2013-02-14_003.xad

Created: 2/14/2013 3:39:21 PM
 Modified: 2/14/2013 5:02:25 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

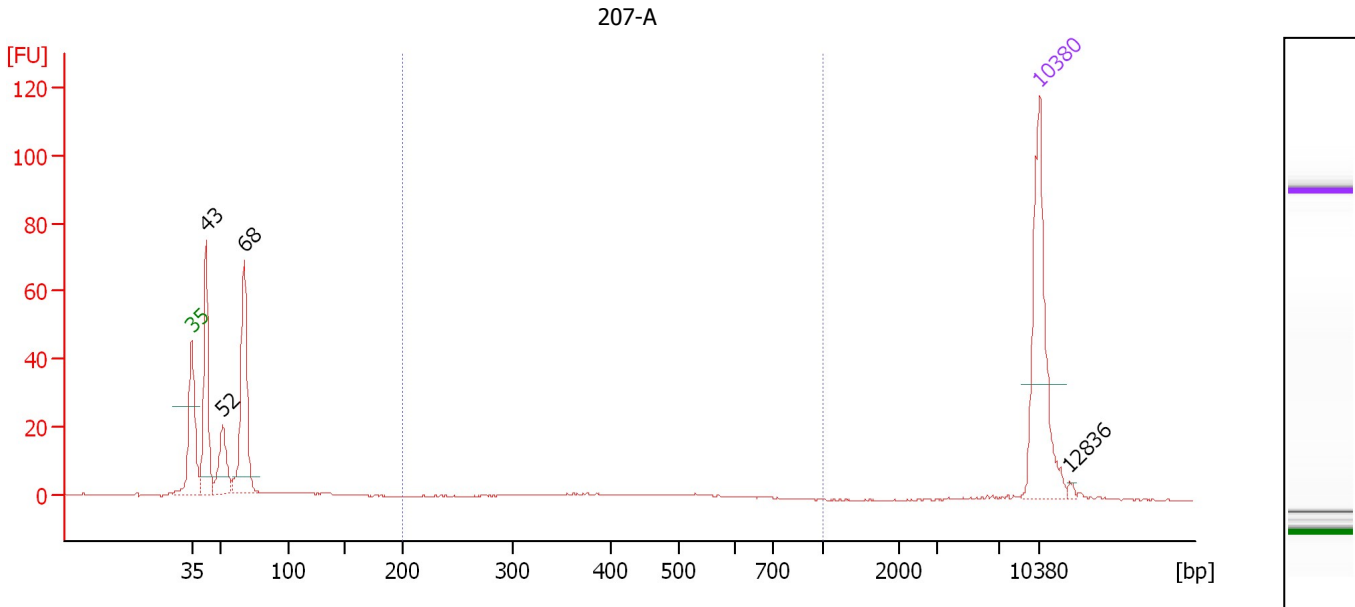
Peak table for Ladder

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\2013-02-14\2013-02-14_003.xad

Created: 2/14/2013 3:39:21 PM
 Modified: 2/14/2013 5:02:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : 207-A

Number of peaks found: 4 Corr. Area 1: 26.3
 Noise: 0.1

Peak table for sample 1 : 207-A

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	43	103.84	3,698.7	
3	52	44.39	1,301.1	
4	68	118.92	2,665.5	
5	10,380	75.00	10.9	Upper Marker
6	12,836	0.00	0.0	

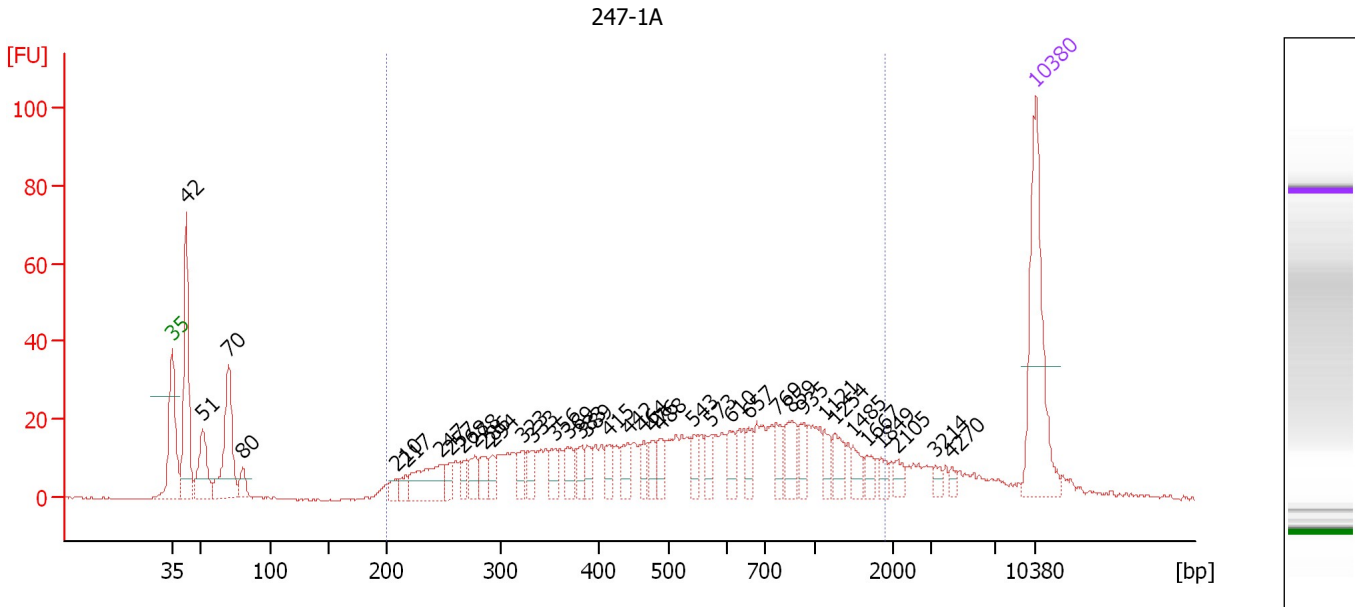
Region table for sample 1 : 207-A

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	421	89.6	22.56	26.3	9	25.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-14\2013-02-14_003.xad

Created: 2/14/2013 3:39:21 PM
 Modified: 2/14/2013 5:02:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : 247-1A

Number of peaks found: 38 Corr. Area 1: 701.4
 Noise: 0.2

Peak table for sample 2 : 247-1A

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	42	121.53	4,351.4	
3	51	48.96	1,452.3	
4	70	87.81	1,902.8	
5	80	13.80	260.2	
6	210	7.75	56.0	
7	217	9.08	63.3	
8	247	42.30	259.3	
9	257	10.02	59.0	
10	268	10.42	58.9	
11	278	13.33	72.6	
12	286	14.93	79.0	
13	294	10.89	56.2	
14	323	13.62	64.0	
15	333	13.61	61.9	
16	356	12.42	52.9	
17	369	15.49	63.6	
18	383	12.82	50.8	
19	389	10.43	40.7	
20	415	11.05	40.3	
21	442	15.70	53.8	
22	464	10.37	33.9	
23	476	11.34	36.1	
24	488	13.13	40.7	
25	543	10.59	29.6	
26	573	12.50	33.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-14\2013-02-14_003.xad

Created: 2/14/2013 3:39:21 PM
 Modified: 2/14/2013 5:02:25 PM

Electropherogram Summary Continued ...

... Peak table for sample 2 : 247-1A

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	610	14.18	35.2	
28	657	11.60	26.8	
29	769	12.71	25.1	
30	859	19.80	35.0	
31	935	11.58	18.8	
32	1,121	8.90	12.0	
33	1,254	13.75	16.6	
34	1,485	8.88	9.1	
35	1,667	7.33	6.7	
36	1,849	5.48	4.5	
37	2,105	6.10	4.4	
38	3,214	4.15	2.0	
39	4,270	2.97	1.1	
40	▶ 10,380	75.00	10.9	Upper Marker

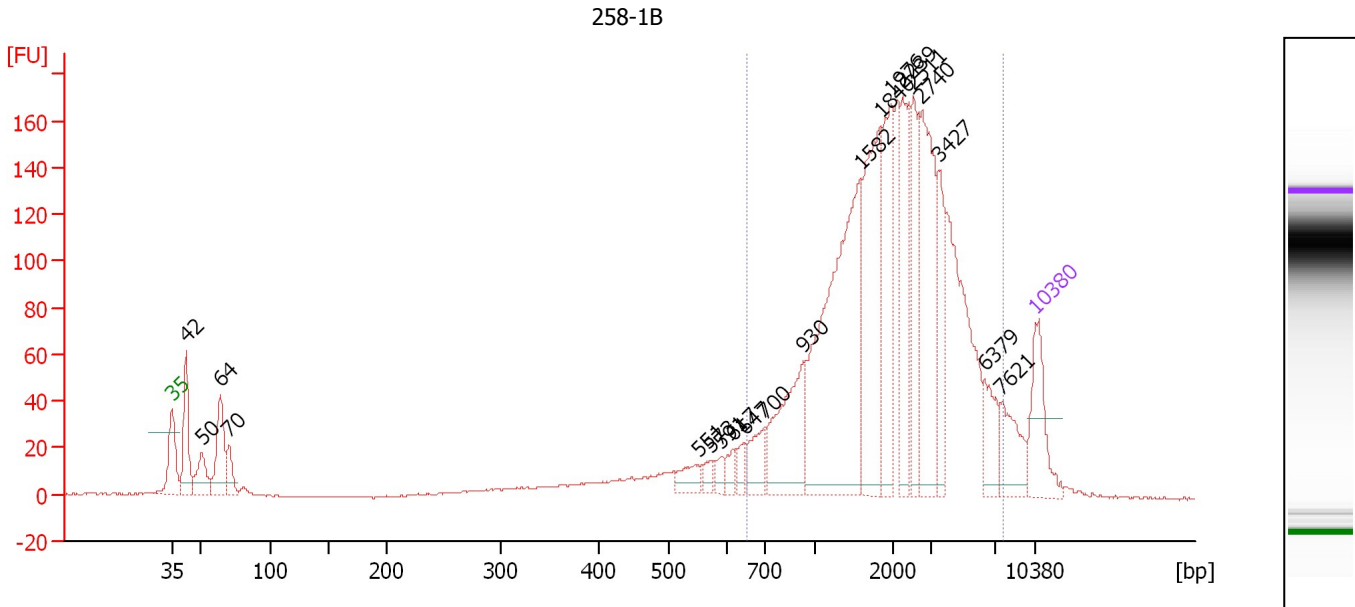
Region table for sample 2 : 247-1A

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,895	633	2,380.4	673.32	701.4	71	59.4	■

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-14\2013-02-14_003.xad

Created: 2/14/2013 3:39:21 PM
 Modified: 2/14/2013 5:02:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 258-1B

Number of peaks found: 20 Corr. Area 1: 2,072.7
 Noise: 0.3

Peak table for sample 3 : 258-1B

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	42	121.42	4,359.9	
3	50	66.27	1,993.9	
4	64	115.49	2,738.9	
5	70	43.50	935.5	
6	551	30.25	83.2	
7	573	14.10	37.3	
8	591	16.37	42.0	
9	617	19.54	48.0	
10	647	18.71	43.8	
11	700	47.16	102.1	
12	930	145.10	236.4	
13	1,582	405.39	388.2	
14	1,840	210.13	173.0	
15	1,976	141.82	108.7	
16	2,239	111.85	75.7	
17	2,511	90.55	54.6	
18	2,740	195.44	108.1	
19	3,427	75.73	33.5	
20	6,379	47.00	11.2	
21	7,621	58.57	11.6	
22	10,380	75.00	10.9	Upper Marker

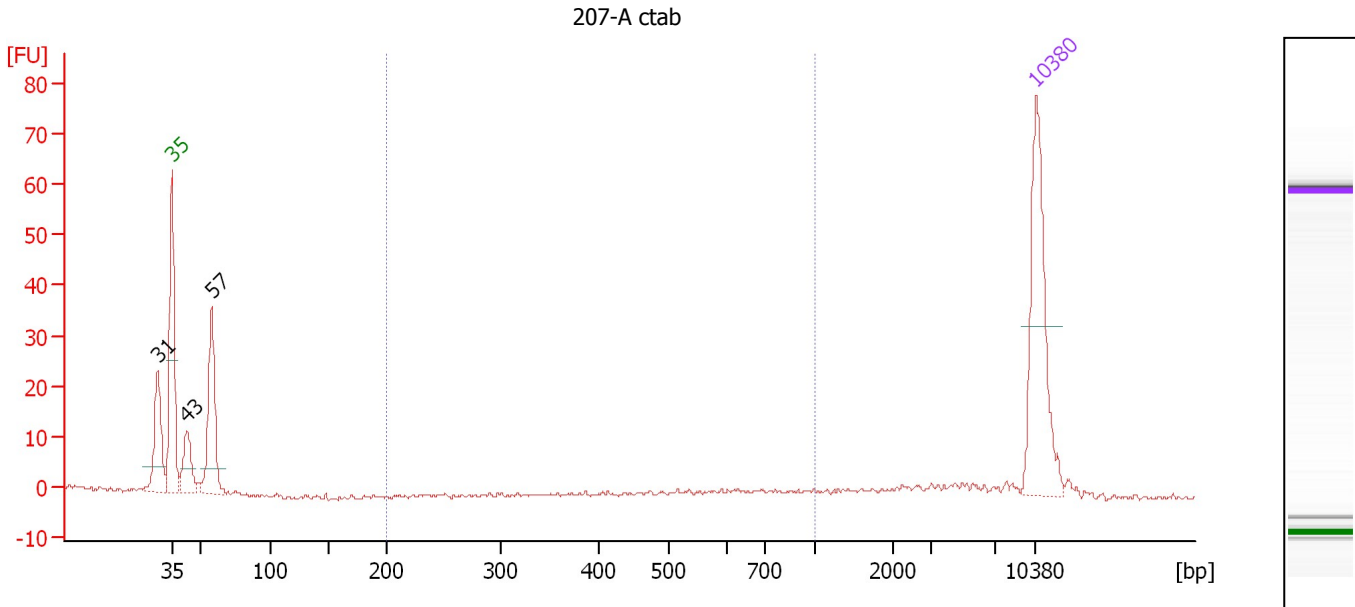
Region table for sample 3 : 258-1B

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
653	7,754	2,493	1,587.2	1,847.80	2,072.7	80	60.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-14\2013-02-14_003.xad

Created: 2/14/2013 3:39:21 PM
 Modified: 2/14/2013 5:02:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : 207-A ctab

Number of peaks found: 3 Corr. Area 1: 10.1
 Noise: 0.3

Peak table for sample 4 : 207-A ctab

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	31	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	43	37.39	1,325.4	
4	57	84.68	2,232.7	
5	10,380	75.00	10.9	Upper Marker

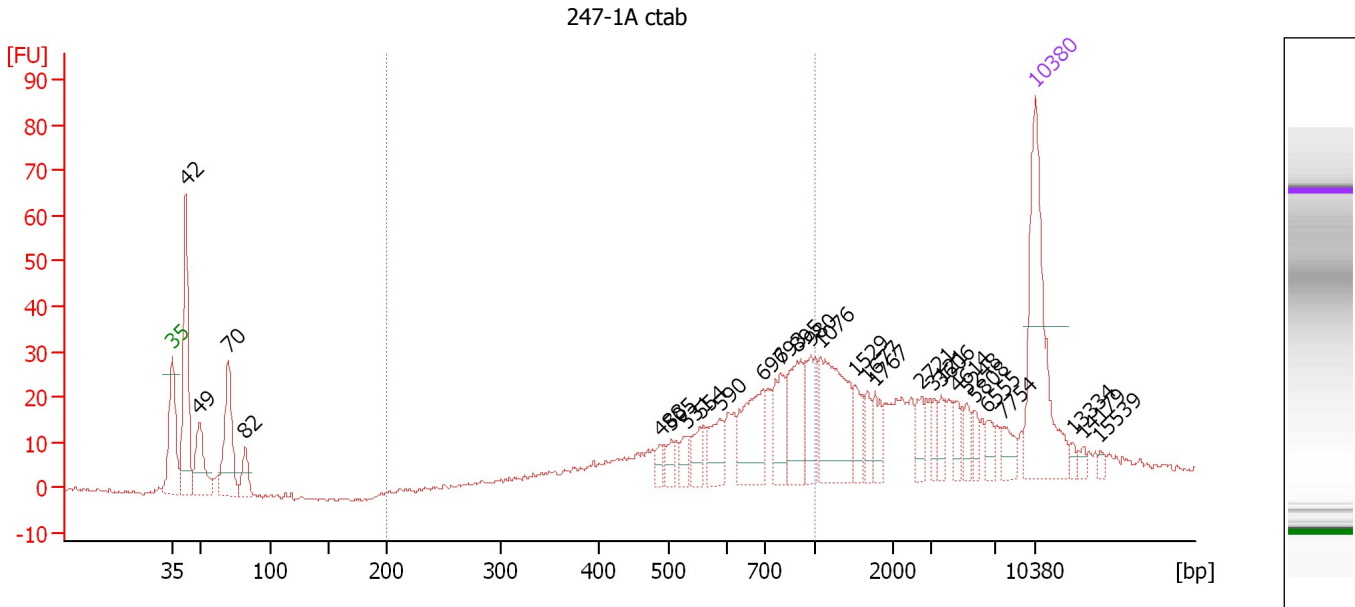
Region table for sample 4 : 207-A ctab

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	688	24.7	10.58	10.1	7	22.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-14\2013-02-14_003.xad

Created: 2/14/2013 3:39:21 PM
 Modified: 2/14/2013 5:02:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : 247-1A ctab

Number of peaks found: 28 Corr. Area 1: 287.7
 Noise: 0.5

Peak table for sample 5 : 247-1A ctab

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	42	110.53	3,972.2	
3	49	46.09	1,424.5	
4	70	68.96	1,495.3	
5	82	19.31	355.9	
6	488	6.67	20.7	
7	505	8.69	26.1	
8	531	8.67	24.7	
9	554	13.33	36.4	
10	590	19.91	51.1	
11	696	45.09	98.1	
12	793	26.23	50.1	
13	895	34.53	58.4	
14	980	26.66	41.2	
15	1,076	61.24	86.2	
16	1,529	13.81	13.7	
17	1,677	9.16	8.3	
18	1,767	12.29	10.5	
19	2,721	9.74	5.4	
20	3,121	7.79	3.8	
21	3,606	7.93	3.3	
22	4,614	7.94	2.6	
23	5,248	8.05	2.3	
24	5,808	6.31	1.6	
25	6,555	6.76	1.6	
26	7,754	9.58	1.9	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-14\2013-02-14_003.xad


Created: 2/14/2013 3:39:21 PM
 Modified: 2/14/2013 5:02:25 PM

Electropherogram Summary Continued ...

... Peak table for sample 5 : 247-1A ctab

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	10,380	75.00	10.9	Upper Marker
28	13,334	0.00	0.0	
29	14,179	0.00	0.0	
30	15,539	0.00	0.0	

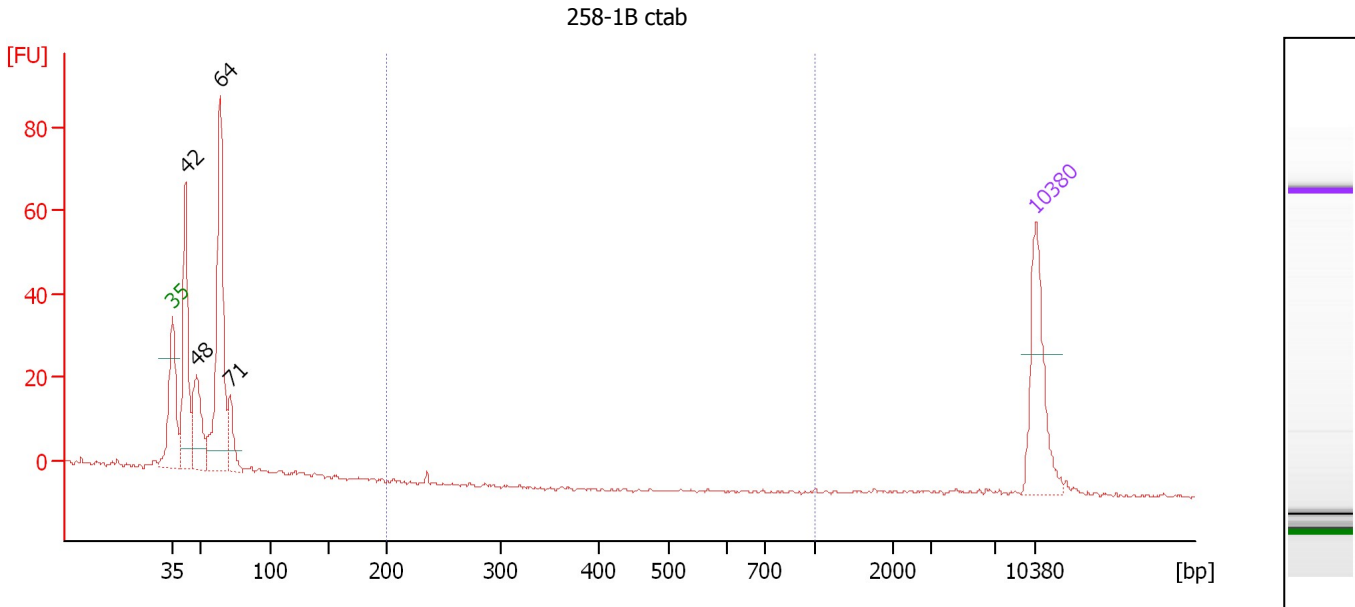
Region table for sample 5 : 247-1A ctab

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	667	668.7	264.26	287.7	38	26.8	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-14\2013-02-14_003.xad

Created: 2/14/2013 3:39:21 PM
 Modified: 2/14/2013 5:02:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : 258-1B ctab

Number of peaks found: 4 Corr. Area 1: 0.0
 Noise: 0.4

Peak table for sample 6 : 258-1B ctab

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	42	175.65	6,340.8	
3	48	89.84	2,851.8	
4	64	272.79	6,453.8	
5	71	45.10	963.2	
6	10,380	75.00	10.9	Upper Marker

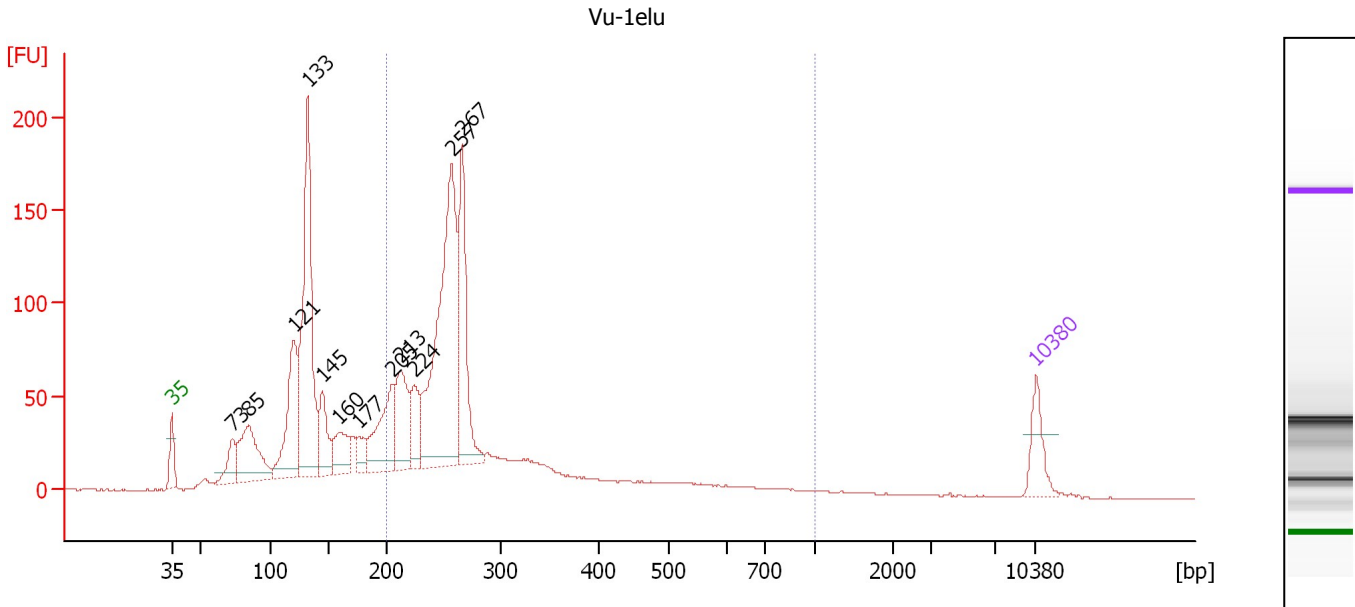
Region table for sample 6 : 258-1B ctab

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	236	0.2	0.03	0.0	0	0.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-14\2013-02-14_003.xad

Created: 2/14/2013 3:39:21 PM
 Modified: 2/14/2013 5:02:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : Vu-1elu

Number of peaks found: 12 Corr. Area 1: 1,264.4
 Noise: 0.3

Peak table for sample 7 : Vu-1elu

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	73	96.71	2,015.6	
3	85	276.49	4,937.8	
4	121	341.07	4,282.6	
5	133	754.18	8,606.8	
6	145	151.81	1,582.0	
7	160	136.91	1,299.8	
8	177	54.61	467.6	
9	205	238.83	1,765.4	
10	213	209.11	1,490.6	
11	224	128.48	867.2	
12	257	856.95	5,042.6	
13	267	385.30	2,189.0	
14	10,380	75.00	10.9	Upper Marker

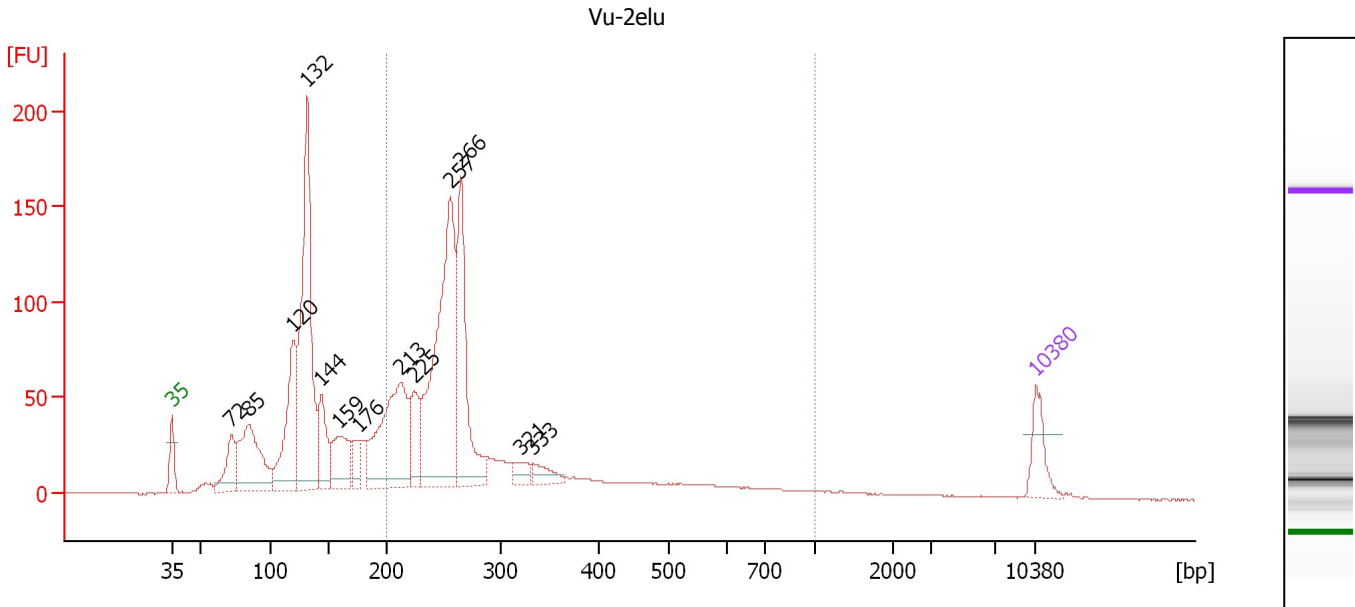
Region table for sample 7 : Vu-1elu

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	293	14,697.2	2,574.52	1,264.4	55	37.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-14\2013-02-14_003.xad

Created: 2/14/2013 3:39:21 PM
 Modified: 2/14/2013 5:02:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : Vu-2elu

Number of peaks found: 13 Corr. Area 1: 1,162.6
 Noise: 0.2

Peak table for sample 8 : Vu-2elu

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	72	145.73	3,072.2	
3	85	363.33	6,505.7	
4	120	359.87	4,530.8	
5	132	840.08	9,638.5	
6	144	174.51	1,832.3	
7	159	179.06	1,704.0	
8	176	65.51	563.1	
9	213	499.54	3,556.3	
10	225	142.26	958.5	
11	257	836.97	4,940.8	
12	266	437.53	2,492.4	
13	321	42.16	198.8	
14	333	50.31	228.7	
15	10,380	75.00	10.9	Upper Marker

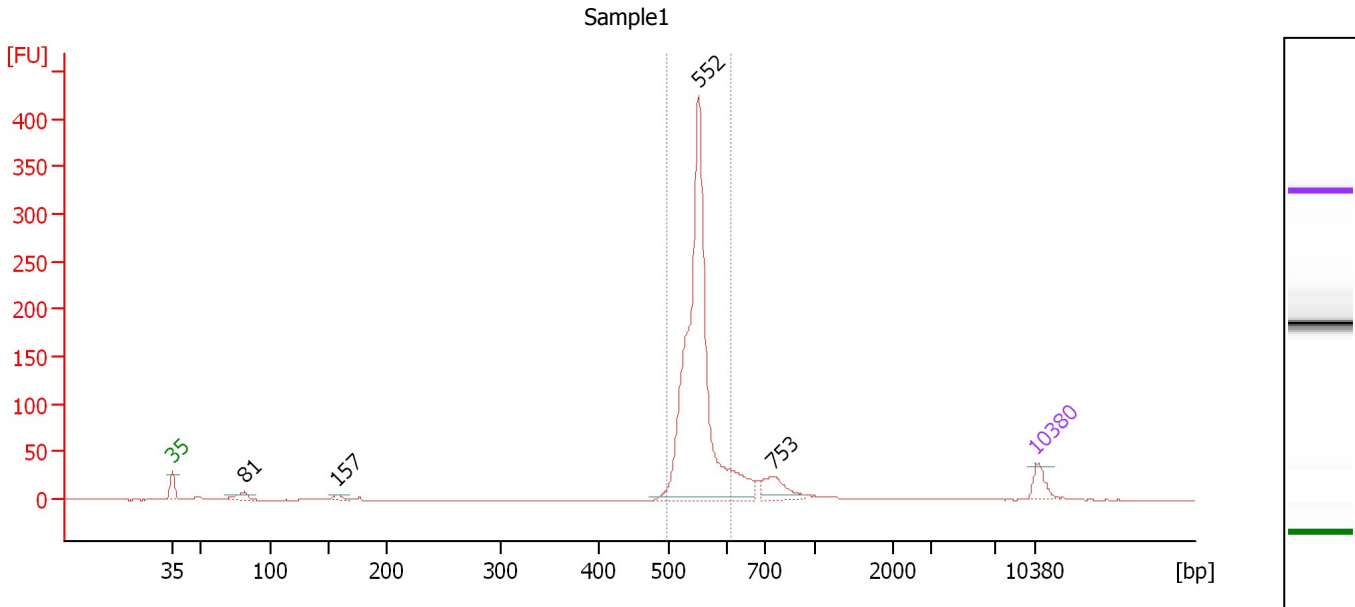
Region table for sample 8 : Vu-2elu

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	299	13,663.5	2,409.65	1,162.6	53	39.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-14\2013-02-14_003.xad

Created: 2/14/2013 3:39:21 PM
 Modified: 2/14/2013 5:02:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : Sample1

Number of peaks found: 4 Corr. Area 1: 815.9
 Noise: 0.2

Peak table for sample 9 : Sample1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	81	73.69	1,371.9	
3	157	37.20	358.0	
4	552	2,408.40	6,611.1	
5	753	162.86	327.5	
6	10,380	75.00	10.9	Upper Marker

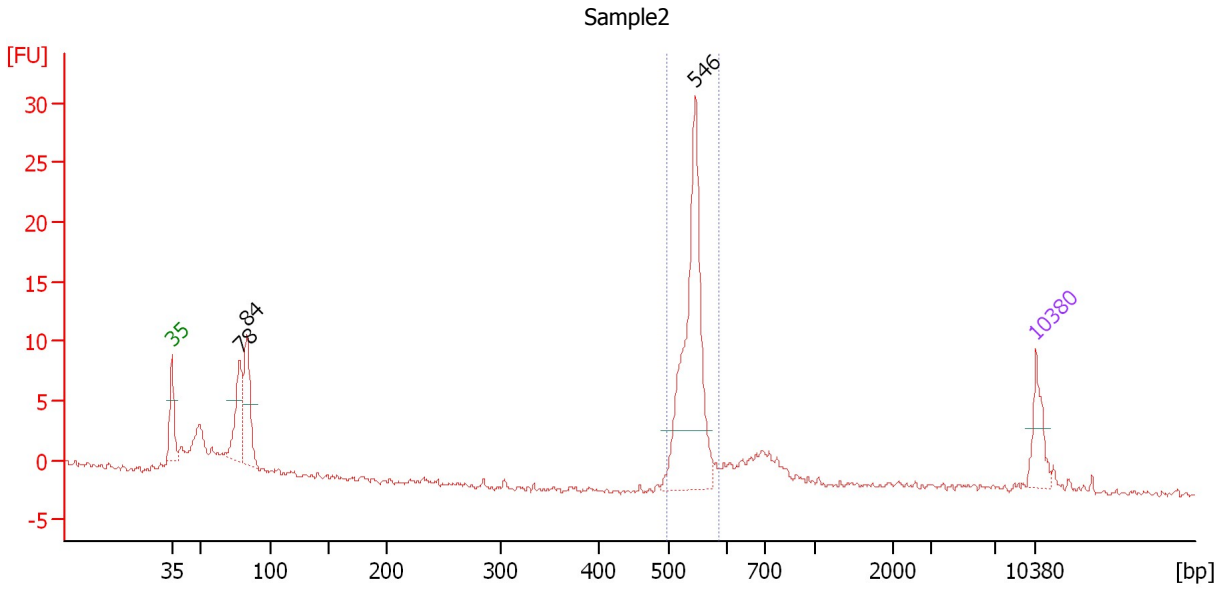
Region table for sample 9 : Sample1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
496	612	548	6,160.7	2,226.94	815.9	81	3.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-14\2013-02-14_003.xad

Created: 2/14/2013 3:39:21 PM
 Modified: 2/14/2013 5:02:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : Sample2

Number of peaks found: 3 Corr. Area 1: 50.0
 Noise: 0.2

Peak table for sample 10 : Sample2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	78	187.69	3,639.1	
3	84	224.28	4,062.5	
4	546	621.25	1,725.2	
5	10,380	75.00	10.9	Upper Marker

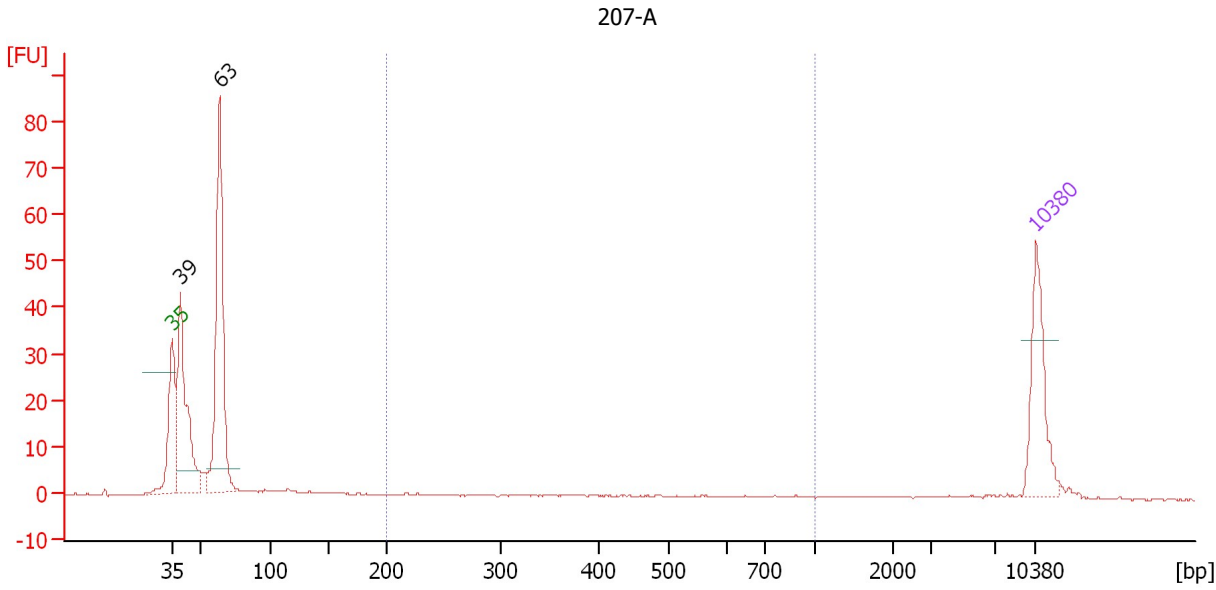
Region table for sample 10 : Sample2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
496	586	540	1,646.3	586.71	50.0	48	3.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-14\2013-02-14_003.xad

Created: 2/14/2013 3:39:21 PM
 Modified: 2/14/2013 5:02:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : 207-A

Number of peaks found: 2 Corr. Area 1: 9.8
 Noise: 0.2

Peak table for sample 11 : 207-A

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	39	229.78	8,888.6	
3	63	320.62	7,668.6	
4	10,380	75.00	10.9	Upper Marker

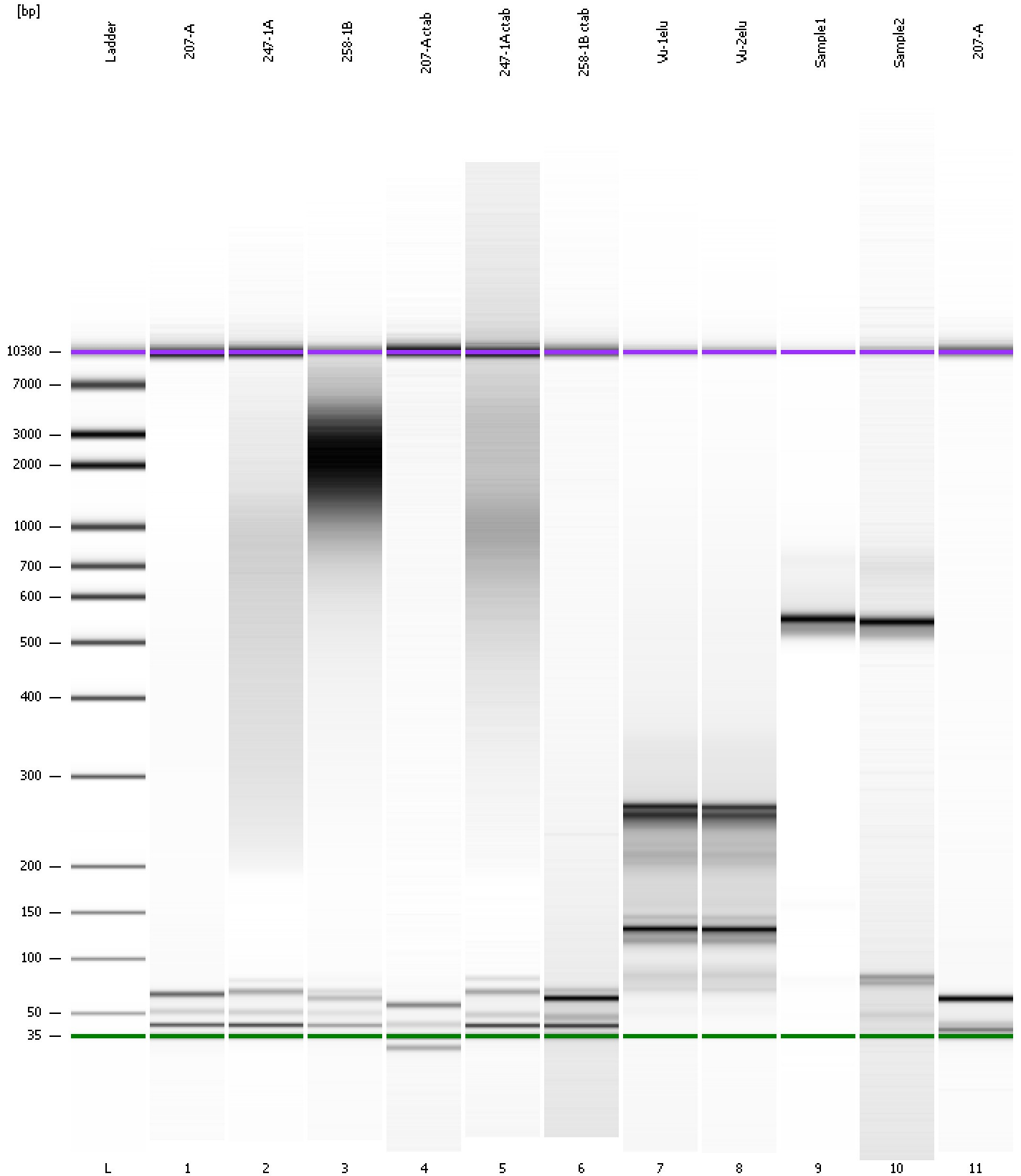
Region table for sample 11 : 207-A

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	476	77.8	18.92	9.8	4	42.1	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-14\2013-02-14_003.xad

Created: 2/14/2013 3:39:21 PM
Modified: 2/14/2013 5:02:25 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-14\2013-02-14_003.xad

Created: 2/14/2013 3:39:21 PM
 Modified: 2/14/2013 5:02:25 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		2/14/2013 4:20:38 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-02-14\2013-02-14_003.xad)		Instrument	Run		2/14/2013 3:39:26 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		2/14/2013 3:39:26 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		2/14/2013 3:39:26 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		2/14/2013 3:39:26 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		2/14/2013 3:39:26 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		2/14/2013 3:39:26 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		2/14/2013 3:39:26 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1