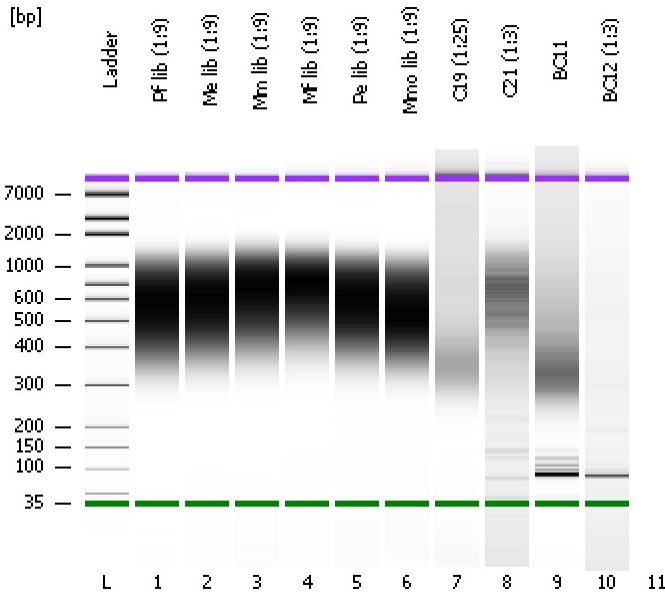


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-27\2014-02-27_002.xad

Created: 2/27/2014 9:57:09 AM
Modified: 2/27/2014 10:44:08 AM

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

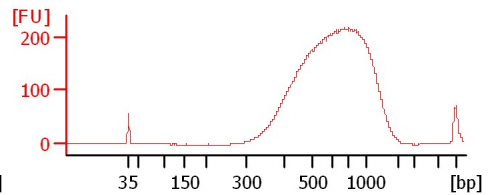
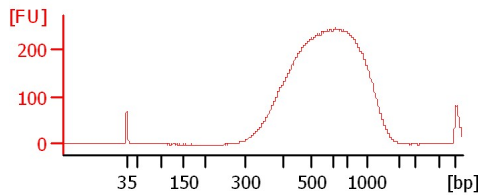
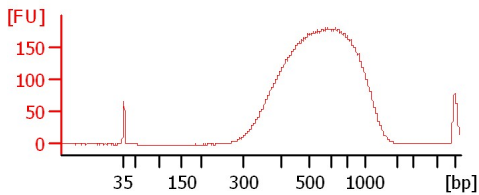
Chip Information:

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

Pf lib (1:9)

Me lib (1:9)

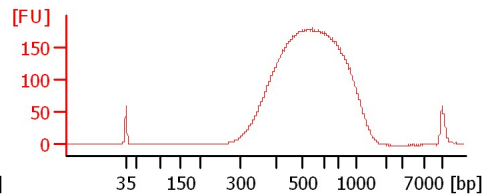
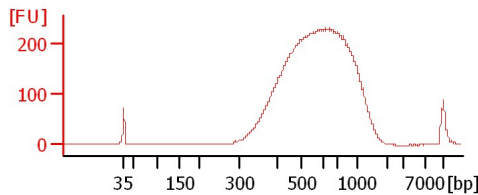
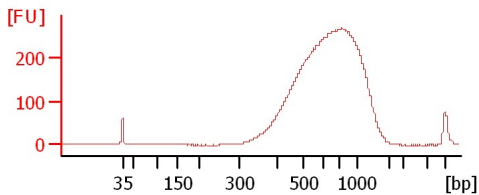
Mm lib (1:9)



Mf lib (1:9)

Pe lib (1:9)

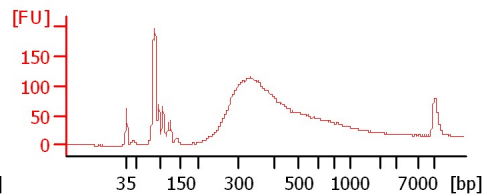
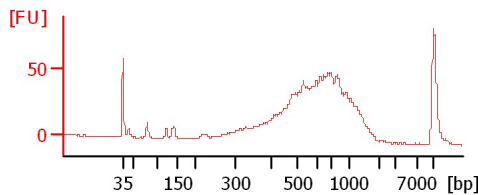
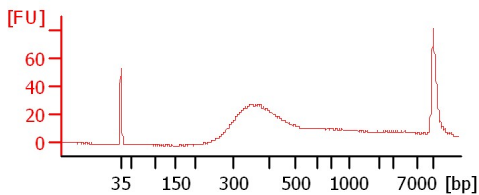
Mmo lib (1:9)



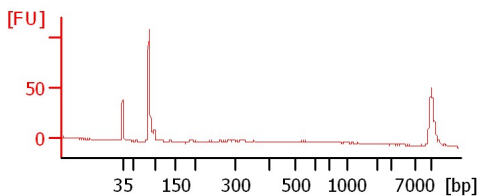
C19 (1:25)

C21 (1:3)

BC11



BC12 (1:3)



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-27\2014-02-27_002.xad

Created: 2/27/2014 9:57:09 AM
 Modified: 2/27/2014 10:44:08 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Pf lib (1:9)		<input type="checkbox"/>	✓			
Me lib (1:9)		<input type="checkbox"/>	✓			
Mm lib (1:9)		<input type="checkbox"/>	✓			
Mf lib (1:9)		<input type="checkbox"/>	✓			
Pe lib (1:9)		<input type="checkbox"/>	✓			
Mmo lib (1:9)		<input type="checkbox"/>	✓			
C19 (1:25)		<input type="checkbox"/>	✓			
C21 (1:3)		<input type="checkbox"/>	✓			
BC11		<input type="checkbox"/>	✓			
BC12 (1:3)		<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\2014-02-27\2014-02-27_002.xad

Created: 2/27/2014 9:57:09 AM
 Modified: 2/27/2014 10:44:08 AM

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

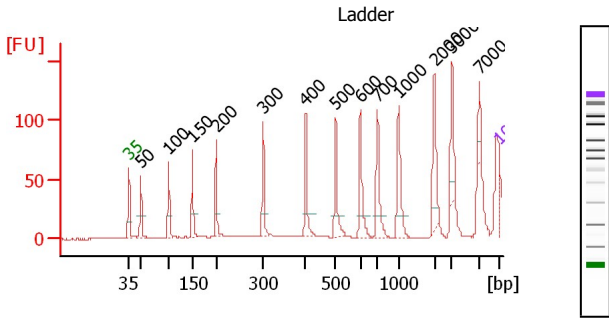
Ladder

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\2014-02-27\2014-02-27_002.xad

Created: 2/27/2014 9:57:09 AM
 Modified: 2/27/2014 10:44:08 AM

Electropherogram Summary



Peak table for Ladder

Peak	Aligned Migration Time	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	45.25	50	150.00	4,545.5	Ladder Peak
3	50.55	100	150.00	2,272.7	Ladder Peak
4	55.06	150	150.00	1,515.2	Ladder Peak
5	59.52	200	150.00	1,136.4	Ladder Peak
6	68.42	300	150.00	757.6	Ladder Peak
7	76.48	400	150.00	568.2	Ladder Peak
8	82.13	500	150.00	454.5	Ladder Peak
9	86.79	600	150.00	378.8	Ladder Peak
10	90.04	700	150.00	324.7	Ladder Peak
11	94.03	1,000	150.00	227.3	Ladder Peak
12	100.79	2,000	150.00	113.6	Ladder Peak
13	104.19	3,000	150.00	75.8	Ladder Peak

Overall Results for Ladder

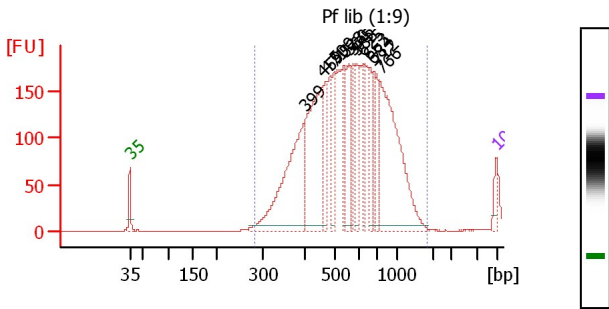
Noise: 0.2

Peak	Aligned Migration Time	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
14	109.32	7,000	150.00	32.5	Ladder Peak
15	113.00	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-27\2014-02-27_002.xad

Created: 2/27/2014 9:57:09 AM
 Modified: 2/27/2014 10:44:08 AM

Electropherogram Summary Continued ...



Peak table for sample 1

Peak	Aligned Migration Time	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	76.37	399	1,310.86	4,982.8	
3	79.83	459	1,169.82	3,858.5	
4	80.51	471	340.18	1,093.5	
5	82.15	500	304.79	923.0	
6	83.90	538	220.53	621.2	
7	84.94	560	397.94	1,076.4	
8	85.61	575	196.92	519.2	
9	86.25	588	222.44	572.8	
10	87.61	625	262.60	636.5	
11	88.84	663	199.10	454.9	
12	89.52	684	222.80	493.5	
13	90.20	712	254.97	542.4	
14	90.92	766	1,374.07	2,717.4	
15	113.00	10,380	75.00	10.9	Upper Marker

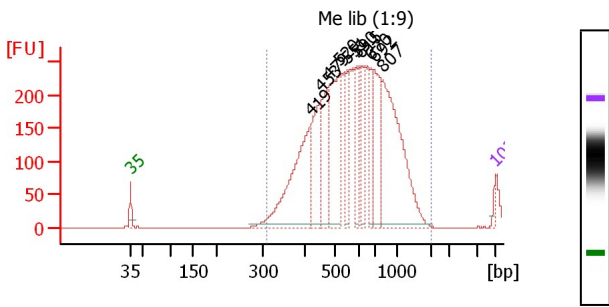
Overall Results for sample 1

Number of peaks found: 13
 Noise: 0.2
 Corr. Area 1: 3,589.1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total Area	% of Size distribution
282	1,836	593	18,474.9	6,420.6	3,589.1	100	32.6

Region table for sample 1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total Area	% of Size distribution
282	1,836	593	18,474.9	6,420.6	3,589.1	100	32.6



Peak table for sample 2

Peak	Aligned Migration Time	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	77.56	419	3,008.49	10,875.7	
3	79.48	453	1,524.89	5,098.8	
4	80.96	479	1,187.74	3,754.2	
5	83.09	520	2,108.60	6,138.2	
6	84.53	551	624.07	1,714.8	
7	86.33	590	571.50	1,467.6	
8	87.29	615	636.74	1,567.9	
9	89.05	670	804.13	1,819.4	
10	89.77	692	1,314.76	2,879.1	
11	91.46	807	3,355.91	6,303.1	
12	113.00	10,380	75.00	10.9	Upper Marker

Overall Results for sample 2

Number of peaks found: 10
 Noise: 0.2
 Corr. Area 1: 4,762.0

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total Area	% of Size distribution
307	1,961	627	41,234.6	15,022.0	4,762.0	100	34.5

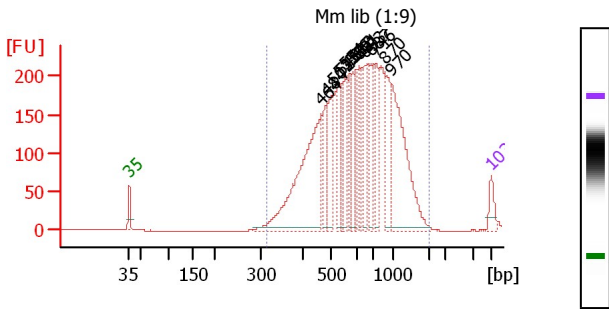
Region table for sample 2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total Area	% of Size distribution
307	1,961	627	41,234.6	15,022.0	4,762.0	100	34.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-27\2014-02-27_002.xad

Created: 2/27/2014 9:57:09 AM
 Modified: 2/27/2014 10:44:08 AM

Electropherogram Summary Continued ...



Peak table for sample 3

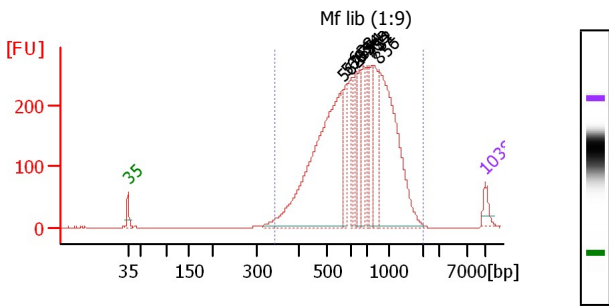
Peak	Aligned Migration Time	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	80.08	464	1,366.22	4,464.3	
3	81.21	484	301.93	945.8	
4	82.22	502	370.97	1,120.0	
5	83.67	533	240.89	684.8	
6	84.03	541	166.68	467.0	
7	84.64	554	194.41	531.9	
8	85.69	576	168.01	441.8	
9	86.21	587	167.74	432.6	
10	86.78	600	167.03	422.1	
11	87.46	621	169.98	415.0	
12	88.51	653	212.77	493.7	
13	89.60	687	174.74	385.6	
14	90.65	746	233.30	473.8	
15	92.30	870	347.76	605.4	
16	93.63	970	842.31	1,315.1	
17	113.00	10,380	75.00	10.9	Upper Marker

Overall Results for sample 3

Number of peaks found: 15
 Noise: 0.2
 Corr. Area 1: 4,685.1

Region table for sample 3

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution Total in CV [%]
313	1,994	696	15,798.5	6,121.1	4,685.1	100	40.9



Peak table for sample 4

Peak	Aligned Migration Time	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	85.02	562	2,384.32	6,427.5	
3	85.80	579	294.29	770.5	
4	87.03	607	195.80	488.5	
5	87.69	628	234.26	565.6	
6	88.55	654	303.15	702.3	
7	89.20	674	227.77	511.8	
8	90.10	705	212.75	457.2	
9	90.76	754	239.26	480.6	
10	91.13	782	387.94	751.6	
11	92.11	856	1,583.23	2,802.6	
12	113.00	10,380	75.00	10.9	Upper Marker

Overall Results for sample 4

Number of peaks found: 10
 Noise: 0.2
 Corr. Area 1: 5,185.9

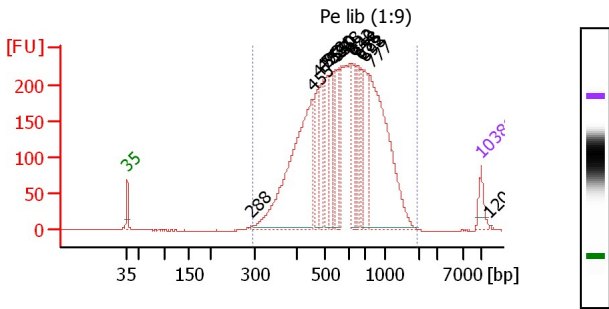
Region table for sample 4

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution Total in CV [%]
341	2,007	727	16,127.1	6,592.2	5,185.9	99	39.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-27\2014-02-27_002.xad

Created: 2/27/2014 9:57:09 AM
 Modified: 2/27/2014 10:44:08 AM

Electropherogram Summary Continued ...



Peak table for sample 5

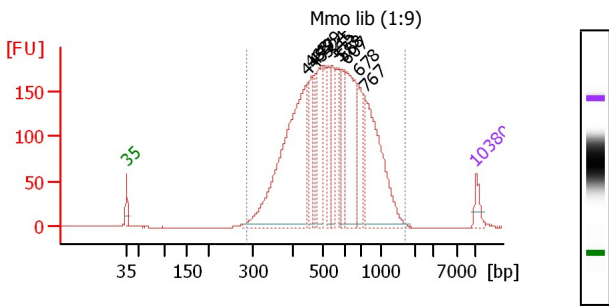
Peak	Aligned Migration Time	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	67.38	288	5.74	30.2	
3	79.61	455	1,416.65	4,712.9	
4	80.89	478	237.59	752.9	
5	81.72	493	221.03	679.7	
6	82.67	512	300.93	891.3	
7	83.58	531	222.70	635.4	
8	83.99	540	161.83	454.1	
9	84.45	550	173.56	478.4	
10	85.31	568	157.98	421.2	
11	87.50	622	165.50	403.2	
12	88.08	640	153.67	363.9	
13	88.66	658	164.32	378.6	
14	89.24	675	173.93	390.2	
15	89.98	698	305.88	663.6	
16	91.06	777	1,156.89	2,256.5	
17	113.00	10,380	75.00	10.9	Upper Marker
18	114.78	12,014	0.00	0.0	

Overall Results for sample 5

Number of peaks found: 16
 Noise: 0.2
 Corr. Area 1: 5,243.2

Region table for sample 5

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Size distribution Total in CV [%]
294	1,946	641	15,732.9	5,720.8	5,243.2	100
			2		2	38.7



Peak table for sample 6

Peak	Aligned Migration Time	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	79.00	445	1,913.86	6,521.1	
3	80.05	463	247.81	810.6	
4	80.84	477	221.96	704.7	
5	82.10	499	511.80	1,552.7	
6	83.27	524	250.45	723.6	
7	84.23	545	200.57	557.6	
8	85.53	573	202.03	534.4	
9	86.24	588	260.71	671.7	
10	87.03	607	678.67	1,693.1	
11	89.33	678	298.89	667.7	
12	90.92	767	946.51	1,870.9	
13	113.00	10,380	75.00	10.9	Upper Marker

Overall Results for sample 6

Number of peaks found: 11
 Noise: 0.3
 Corr. Area 1: 4,223.1

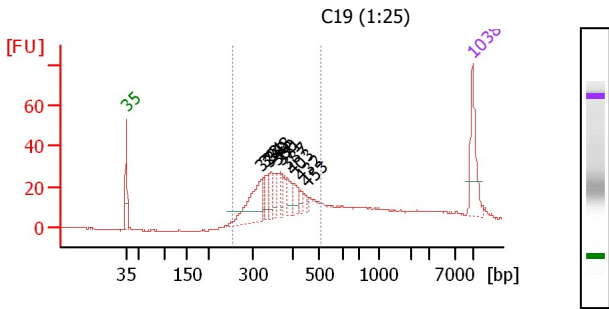
Region table for sample 6

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Size distribution Total in CV [%]
283	1,677	586	19,462.7	6,596.8	4,223.1	100
			0		1	35.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-27\2014-02-27_002.xad

Created: 2/27/2014 9:57:09 AM
 Modified: 2/27/2014 10:44:08 AM

Electropherogram Summary Continued ...



Peak table for sample 7

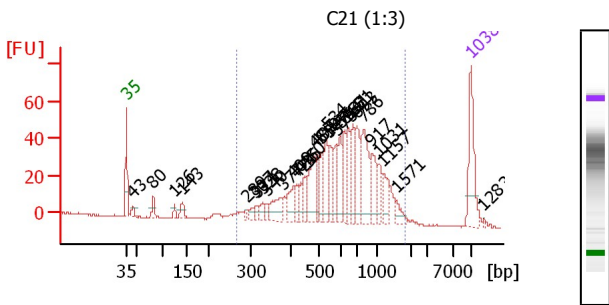
Peak	Aligned Migration Time	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	70.25	323	137.02	643.3	
3	70.92	331	25.11	114.9	
4	71.64	340	23.73	105.7	
5	72.28	348	42.60	185.5	
6	73.29	360	29.83	125.4	
7	74.18	371	29.31	119.6	
8	75.44	387	40.05	156.7	
9	76.67	403	33.55	126.0	
10	78.27	432	13.29	46.6	
11	79.50	453	9.02	30.2	
12	113.00	10,380	75.00	10.9	Upper Marker

Overall Results for sample 7

Number of peaks found: 10
 Noise: 0.2
 Corr. Area 1: 400.7

Region table for sample 7

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Size distribution Total in CV [%]
257	508	372	2,253.7	536.52	400.7	70
						15.4



Peak table for sample 8

Peak	Aligned Migration Time	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	44.27	43	16.50	575.0	
3	48.48	80	22.39	421.9	
4	52.85	126	10.67	128.8	
5	54.46	143	24.73	261.3	
6	67.41	289	6.46	33.9	
7	68.98	307	16.93	83.5	
8	69.53	314	9.04	43.7	
9	70.68	328	17.02	78.6	
10	71.65	340	9.29	41.4	
11	74.63	377	47.47	190.8	
12	77.00	409	45.08	166.9	
13	77.64	421	16.61	59.9	
14	78.49	436	22.14	77.0	
15	79.29	450	25.26	85.1	
16	81.42	487	77.34	240.4	
17	81.84	495	28.71	87.9	
18	82.69	512	26.71	79.1	
19	83.71	534	65.58	186.1	
20	84.30	547	47.95	132.9	
21	85.62	575	40.29	106.2	
22	86.47	593	46.75	119.4	
23	87.28	615	54.59	134.5	
24	88.12	641	37.05	87.6	
25	89.10	671	56.20	126.9	

Overall Results for sample 8

Number of peaks found: 31
 Noise: 0.5
 Corr. Area 1: 1,021.8

Region table for sample 8

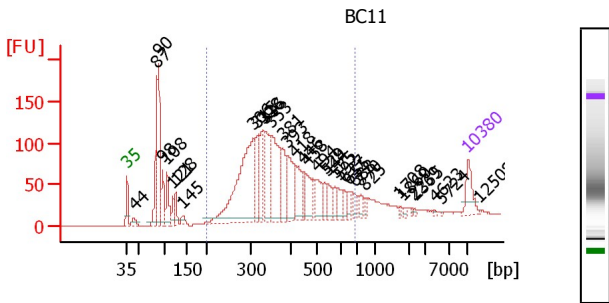
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Size distribution Total in CV [%]
267	1,854	681	2,854.7	1,051.5	1,021.94	42.8
					2	8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-27\2014-02-27_002.xad

Created: 2/27/2014 9:57:09 AM
 Modified: 2/27/2014 10:44:08 AM

Electropherogram Summary Continued ...

Peak	Aligned Migration Time	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
26	89.82	693	56.87	124.3	
27	91.18	786	100.55	193.8	
28	92.92	917	49.82	82.3	
29	94.24	1,031	25.72	37.8	
30	95.09	1,157	36.92	48.4	
31	97.89	1,571	15.85	15.3	
32	113.00	10,380	75.00	10.9	Upper Marker
33	115.67	12,839	0.00	0.0	



Peak table for sample 9 : BC11

Peak	Aligned Migration Time	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	44.41	44	41.54	1,416.9	
3	49.13	87	303.68	5,313.2	
4	49.52	90	377.33	6,335.3	
5	50.37	98	132.54	2,042.1	
6	51.27	108	148.59	2,084.1	
7	52.47	121	59.99	749.1	
8	53.03	128	63.20	750.9	
9	54.62	145	33.44	349.1	
10	68.93	306	782.00	3,866.5	
11	69.66	315	162.96	782.7	
12	70.69	328	171.83	793.2	
13	71.33	336	235.79	1,062.6	
14	72.66	353	357.20	1,534.5	
15	74.94	381	145.55	579.0	
16	75.88	393	194.86	752.1	
17	77.51	418	154.29	559.0	
18	79.09	446	53.03	180.0	
19	79.78	458	105.85	349.9	
20	81.79	494	116.99	358.8	
21	83.47	529	47.99	137.6	
22	84.19	544	65.81	183.2	
23	85.65	575	52.39	137.9	
24	86.42	592	45.94	117.6	
25	87.67	627	38.74	93.6	

Overall Results for sample 9 : BC11

Number of peaks found: 35
 Noise: 0.2
 Corr. Area 1: 2,315.6

Region table for sample 9 : BC11

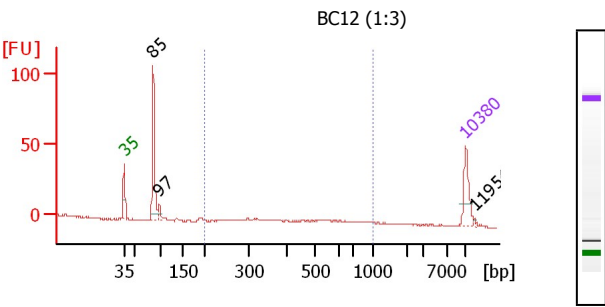
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Size distribution Total in CV [%]
200	687	392	12,271.5	2,898.1	2,315.6	26.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-27\2014-02-27_002.xad

Created: 2/27/2014 9:57:09 AM
 Modified: 2/27/2014 10:44:08 AM

Electropherogram Summary Continued ...

Peak	Aligned Migration Time	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
26	88.57	655	24.96	57.8	
27	89.64	688	24.24	53.4	
28	90.97	770	31.93	62.8	
29	91.70	825	17.83	32.8	
30	98.81	1,708	7.95	7.1	
31	99.84	1,860	7.37	6.0	
32	101.60	2,239	5.55	3.8	
33	102.03	2,365	4.48	2.9	
34	106.27	4,623	3.61	1.2	
35	107.68	5,724	2.42	0.6	
36	113.00	10,380	75.00	10.9	Upper Marker
37	115.31	12,508	0.00	0.0	



Peak table for sample 10

Peak	Aligned Migration Time	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	48.95	85	297.14	5,304.2	
3	50.23	97	32.09	501.3	
4	113.00	10,380	75.00	10.9	Upper Marker
5	114.71	11,954	0.00	0.0	

Overall Results for sample 10

Number of peaks found: 3
 Noise: 0.4
 Corr. Area 1: 47.8

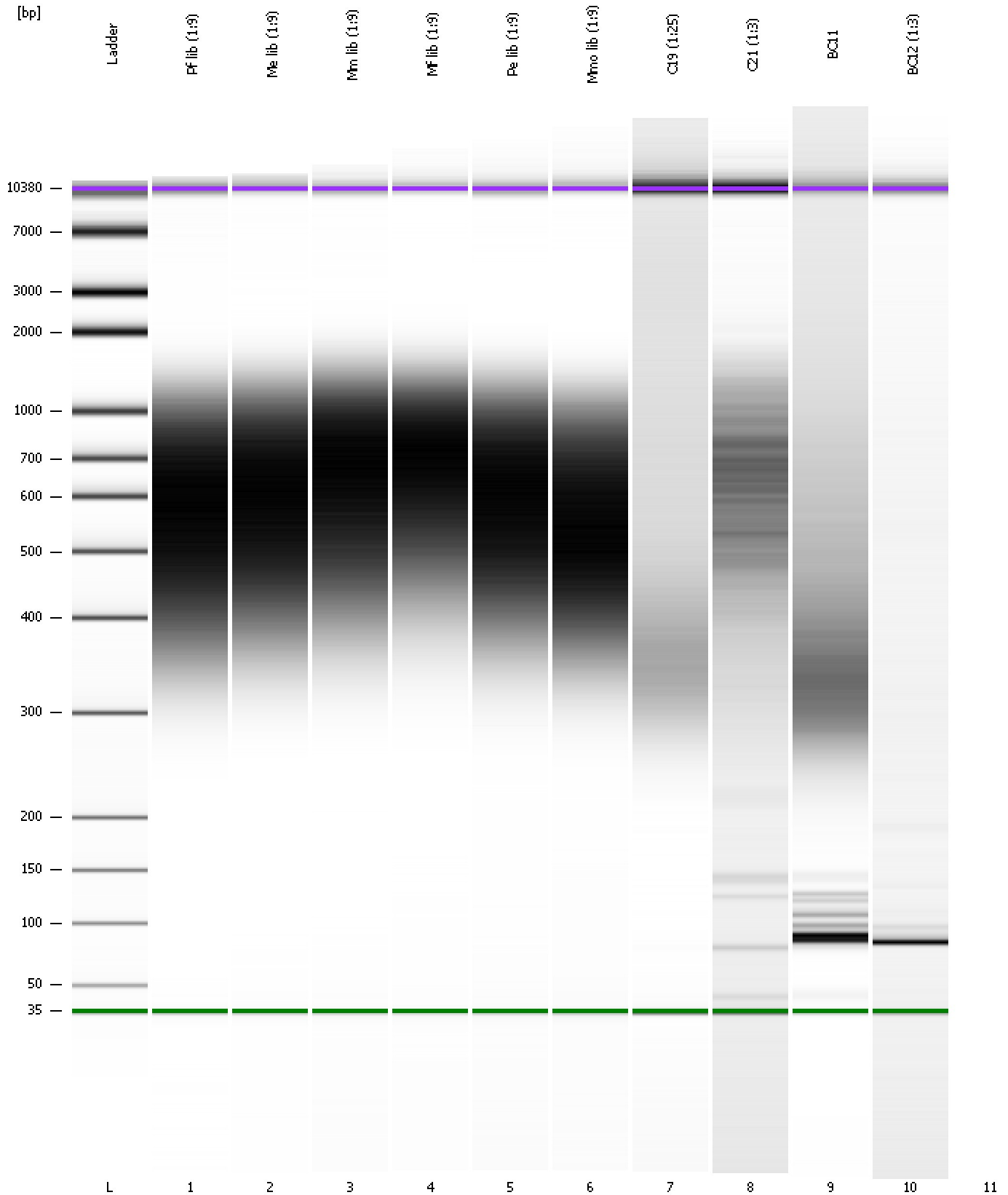
Region table for sample 10

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]
200	1,000	533	270.8	79.96	47.8	24	34.5

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-27\2014-02-27_002.xad

Created: 2/27/2014 9:57:09 AM
Modified: 2/27/2014 10:44:08 AM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-27\2014-02-27_002.xad

Created: 2/27/2014 9:57:09 AM
Modified: 2/27/2014 10:44:08 AM

Invalid Samples

Sample 11 has not been run, no results available.