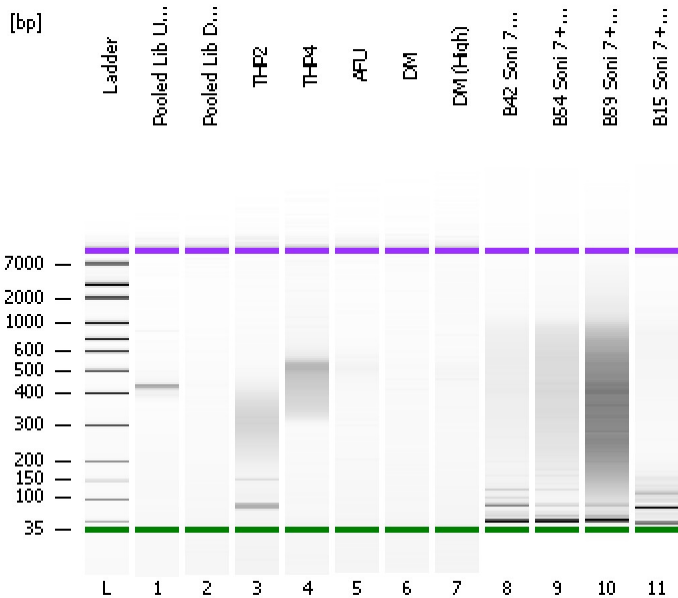


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-12\2012-07-12_008.xad

Created: 7/12/2012 4:09:06 PM
Modified: 7/13/2012 9:39:05 AM

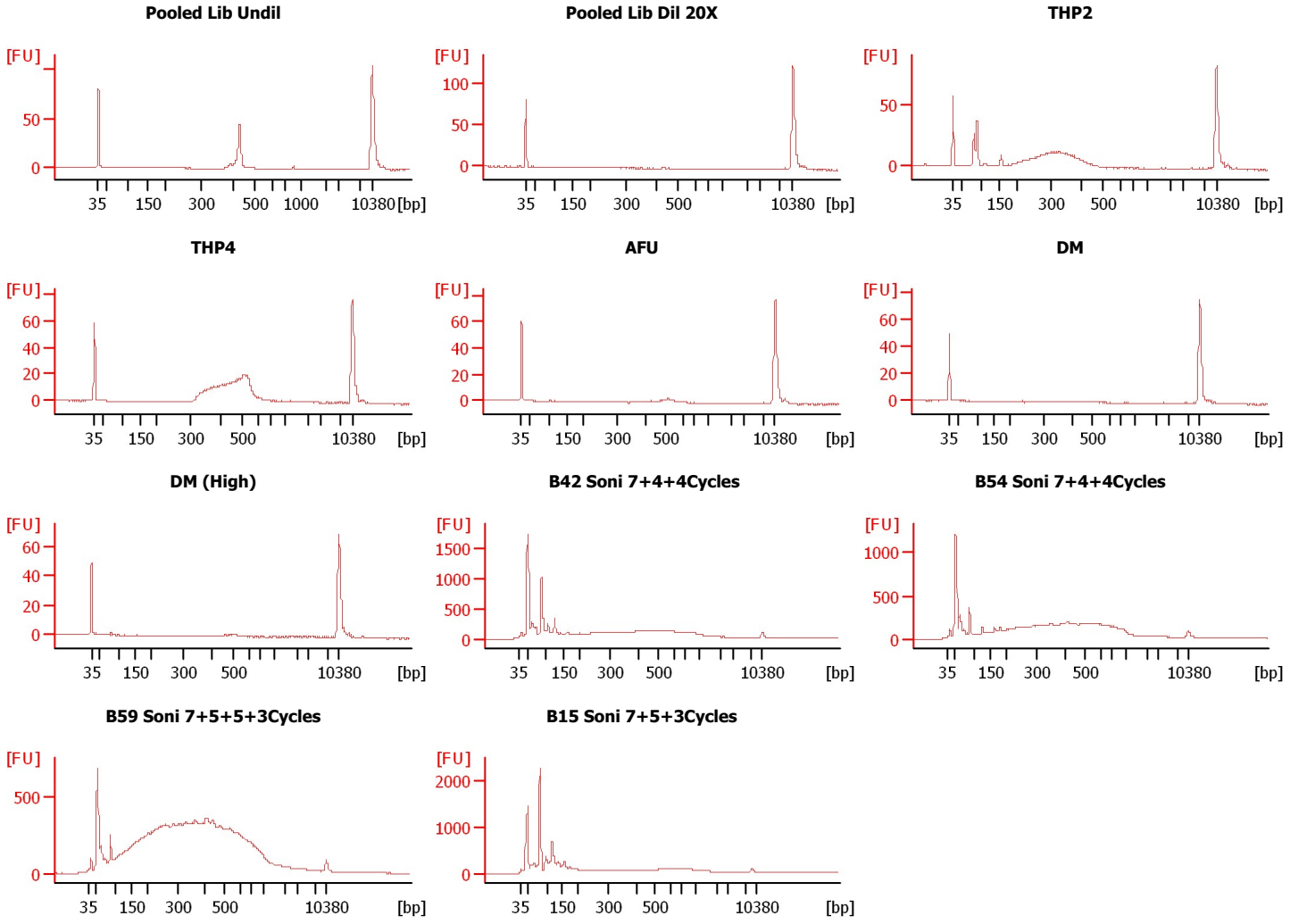
Electrophoresis File Run Summary



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:



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-12\2012-07-12_008.xad

Created: 7/12/2012 4:09:06 PM
 Modified: 7/13/2012 9:39:05 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Pooled Lib Undil		<input type="checkbox"/>	✓			
Pooled Lib Dil 20X		<input type="checkbox"/>	✓			
THP2		<input type="checkbox"/>	✓			
THP4		<input type="checkbox"/>	✓			
AFU		<input type="checkbox"/>	✓			
DM		<input type="checkbox"/>	✓			
DM (High)		<input type="checkbox"/>	✓			
B42 Soni 7+4+4Cycles		<input type="checkbox"/>	✓			
B54 Soni 7+4+4Cycles		<input type="checkbox"/>	✓			
B59 Soni 7+5+5+3Cycles		<input type="checkbox"/>	✓			
B15 Soni 7+5+3Cycles		<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\2012-07-12\2012-07-12_008.xad

Created: 7/12/2012 4:09:06 PM
Modified: 7/13/2012 9:39:05 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

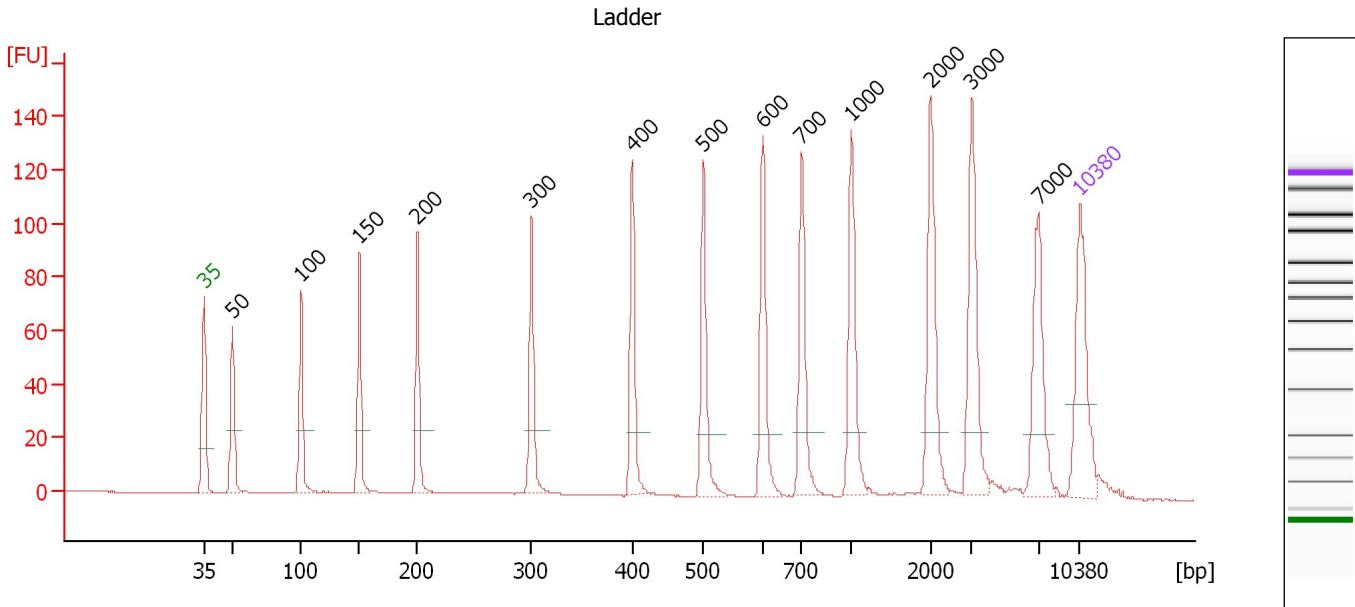
Ladder

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\2012-07-12\2012-07-12_008.xad

Created: 7/12/2012 4:09:06 PM
 Modified: 7/13/2012 9:39:05 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

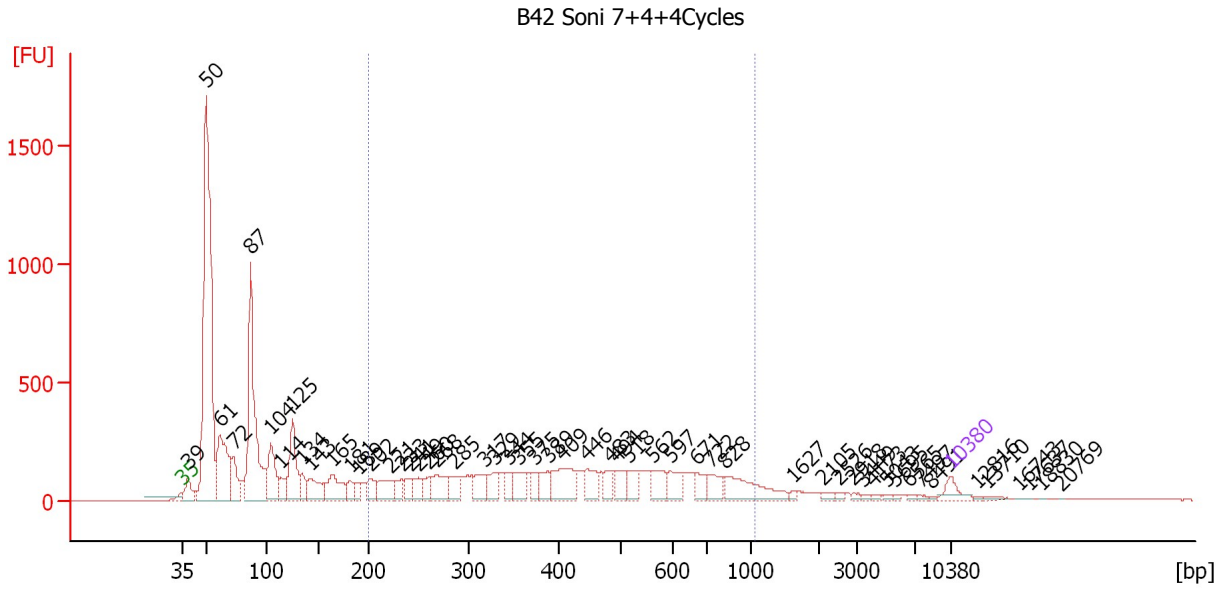
Peak table for Ladder

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\2012-07-12\2012-07-12_008.xad

Created: 7/12/2012 4:09:06 PM
 Modified: 7/13/2012 9:39:05 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : B42 Soni 7+4+4Cycles

Number of peaks found: 54 Corr. Area 1: 5,149.0
 Noise: 0.2

Peak table for sample 8 : B42 Soni 7+4+4Cycles

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	39	217.85	8,567.9	
3	50	3,743.88	114,037.6	
4	61	874.70	21,705.0	
5	72	317.31	6,634.1	
6	87	1,747.12	30,596.9	
7	104	495.04	7,227.3	
8	114	146.03	1,937.9	
9	125	557.13	6,748.8	
10	134	157.28	1,779.6	
11	143	291.81	3,097.4	
12	165	326.56	3,006.7	
13	181	127.02	1,062.3	
14	189	92.84	744.4	
15	202	151.77	1,138.4	
16	221	227.46	1,562.8	
17	233	120.76	786.3	
18	241	125.84	790.6	
19	249	126.99	772.4	
20	260	117.43	683.8	
21	268	256.36	1,451.4	
22	285	160.55	854.9	
23	317	162.90	779.4	
24	329	160.24	737.4	
25	344	106.71	469.7	
26	355	188.64	805.1	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-12\2012-07-12_008.xad


Created: 7/12/2012 4:09:06 PM
 Modified: 7/13/2012 9:39:05 AM

Electropherogram Summary Continued ...

... Peak table for sample 8 : B42 Soni 7+4+4Cycles

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
27	375	93.48	377.9	
28	389	133.03	517.9	
29	409	363.58	1,346.0	
30	446	191.11	649.4	
31	483	124.90	391.5	
32	494	143.55	439.9	
33	518	138.70	406.0	
34	562	180.63	486.9	
35	597	152.13	386.4	
36	671	111.12	251.0	
37	722	144.16	302.4	
38	828	323.27	591.5	
39	1,627	17.99	16.8	
40	2,105	21.02	15.1	
41	2,526	14.19	8.5	
42	2,918	14.75	7.7	
43	3,449	13.95	6.1	
44	4,173	13.88	5.0	
45	5,043	11.65	3.5	
46	5,695	8.57	2.3	
47	6,565	11.50	2.7	
48	7,497	9.91	2.0	
49	8,491	7.63	1.4	
50	10,380	75.00	10.9	Upper Marker
51	12,816	0.00	0.0	
52	13,710	0.00	0.0	
53	16,743	0.00	0.0	
54	17,637	0.00	0.0	
55	18,830	0.00	0.0	
56	20,769	0.00	0.0	

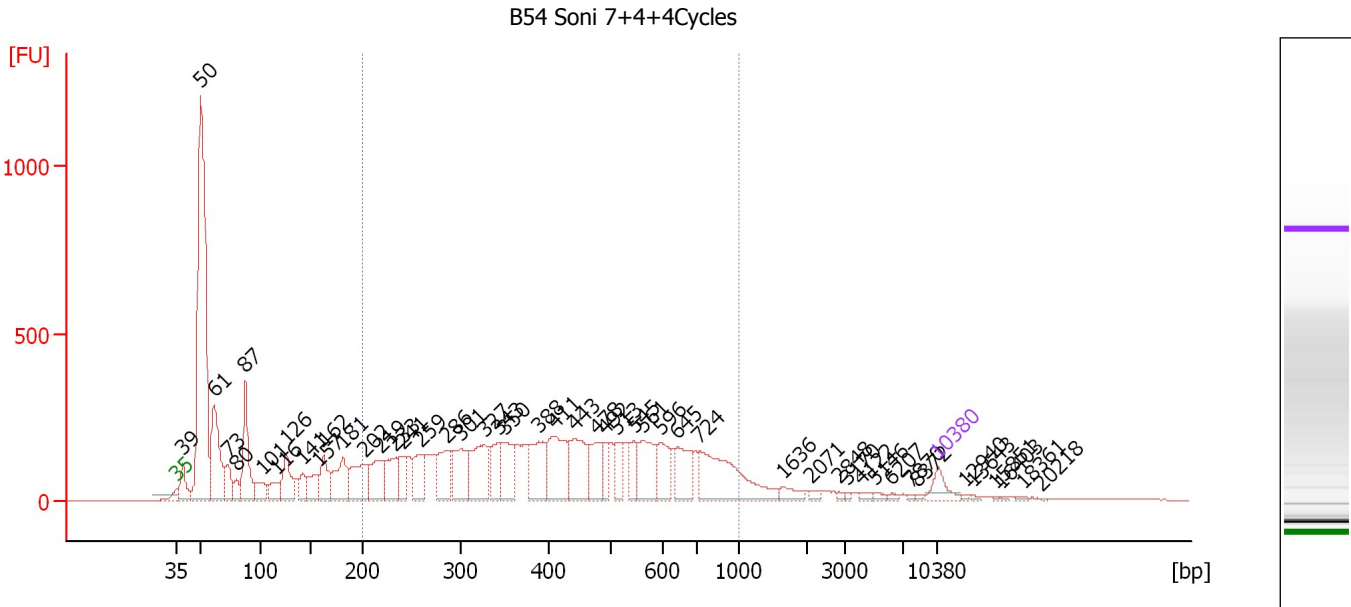
Region table for sample 8 : B42 Soni 7+4+4Cycles

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,060	457	18,999.7	4,569.16	5,148.9	39	40.9	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-12\2012-07-12_008.xad

Created: 7/12/2012 4:09:06 PM
 Modified: 7/13/2012 9:39:05 AM

Electropherogram Summary Continued ...



Overall Results for sample 9 : B54 Soni 7+4+4Cycles

Number of peaks found: 49 Corr. Area 1: 7,106.2
 Noise: 0.6

Peak table for sample 9 : B54 Soni 7+4+4Cycles

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	39	219.34	8,547.1	
3	50	2,651.95	80,544.9	
4	61	693.02	17,110.5	
5	73	177.45	3,688.7	
6	80	91.14	1,726.5	
7	87	507.15	8,824.9	
8	101	142.61	2,140.2	
9	116	133.90	1,746.3	
10	126	276.02	3,329.3	
11	141	131.92	1,414.0	
12	157	162.57	1,573.3	
13	162	226.72	2,116.1	
14	181	292.58	2,446.3	
15	202	332.71	2,492.7	
16	219	290.58	2,012.2	
17	233	234.39	1,526.2	
18	241	140.17	882.3	
19	259	235.81	1,377.3	
20	286	288.69	1,528.8	
21	301	299.04	1,507.2	
22	327	373.81	1,734.0	
23	343	191.12	844.3	
24	350	269.58	1,168.3	
25	388	314.06	1,225.3	
26	411	398.98	1,471.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-12\2012-07-12_008.xad


Created: 7/12/2012 4:09:06 PM
 Modified: 7/13/2012 9:39:05 AM

Electropherogram Summary Continued ...

... Peak table for sample 9 : B54 Soni 7+4+4Cycles

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
27	443	341.01	1,166.9	
28	478	211.43	670.2	
29	492	110.07	339.1	
30	513	140.07	413.9	
31	545	126.27	350.8	
32	561	275.98	745.8	
33	596	180.99	459.8	
34	645	236.01	554.7	
35	724	538.92	1,127.1	
36	1,636	50.45	46.7	
37	2,071	18.58	13.6	
38	2,848	10.08	5.4	
39	3,170	9.74	4.7	
40	4,122	16.94	6.2	
41	5,146	14.50	4.3	
42	6,207	11.19	2.7	
43	7,870	6.86	1.3	
44	8,372	7.92	1.4	
45	10,380	75.00	10.9	Upper Marker
46	12,940	0.00	0.0	
47	13,643	0.00	0.0	
48	15,851	0.00	0.0	
49	16,403	0.00	0.0	
50	18,361	0.00	0.0	
51	20,218	0.00	0.0	

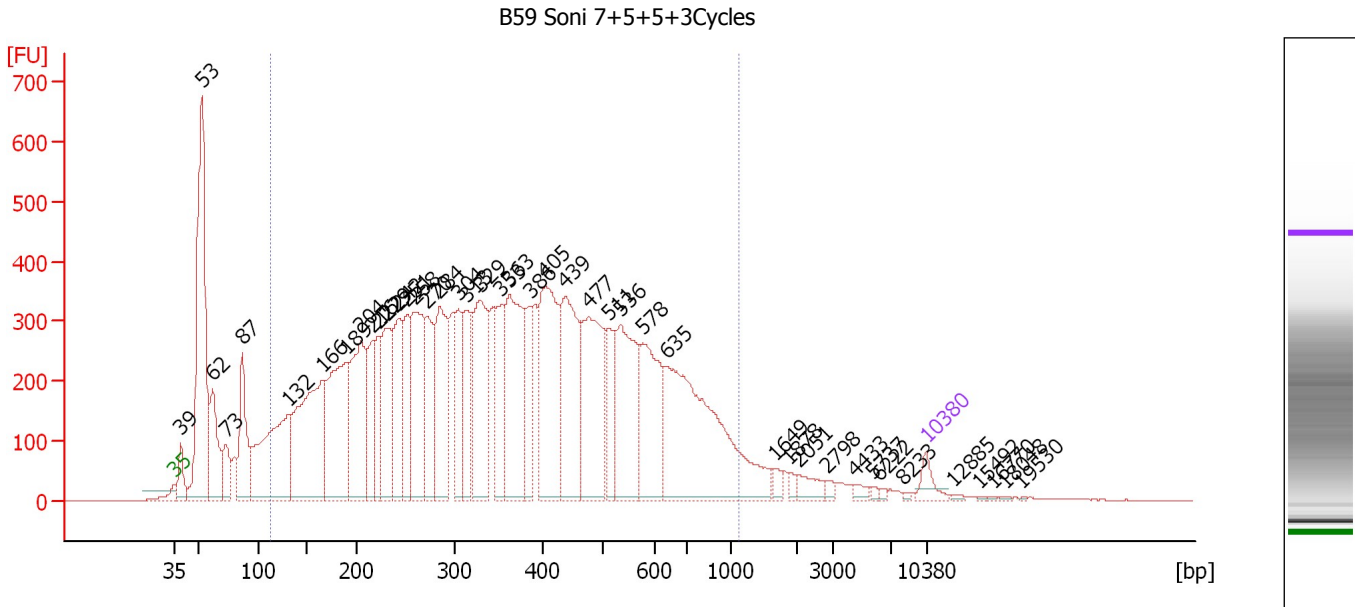
Region table for sample 9 : B54 Soni 7+4+4Cycles

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	449	25,259.9	6,055.78	7,106.2	55	39.5	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-12\2012-07-12_008.xad

Created: 7/12/2012 4:09:06 PM
 Modified: 7/13/2012 9:39:05 AM

Electropherogram Summary Continued ...



Overall Results for sample 10 : B59 Soni 7+5+5+3Cycles

Number of peaks found: 43 Corr. Area 1: 15,880.1
 Noise: 0.6

Peak table for sample 10 : B59 Soni 7+5+5+3Cycles

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	39	210.31	8,179.9	
3	53	2,188.75	62,655.7	
4	62	556.37	13,606.2	
5	73	257.70	5,331.1	
6	87	605.09	10,509.8	
7	132	1,243.77	14,287.5	
8	166	1,432.94	13,072.1	
9	189	1,159.82	9,321.4	
10	204	995.27	7,408.6	
11	216	447.17	3,135.8	
12	222	398.83	2,728.1	
13	229	659.00	4,357.9	
14	242	603.40	3,783.5	
15	251	479.94	2,898.4	
16	258	892.95	5,244.8	
17	270	508.79	2,850.1	
18	284	780.53	4,170.9	
19	304	377.12	1,882.4	
20	313	481.43	2,327.5	
21	329	924.43	4,259.8	
22	353	478.18	2,049.8	
23	363	975.50	4,075.1	
24	386	319.17	1,252.5	
25	405	1,052.44	3,939.4	
26	439	895.27	3,090.4	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-12\2012-07-12_008.xad


Created: 7/12/2012 4:09:06 PM
 Modified: 7/13/2012 9:39:05 AM

Electropherogram Summary Continued ...

... Peak table for sample 10 : B59 Soni 7+5+5+3Cycles

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
27	477	928.92	2,947.8	
28	511	344.70	1,022.8	
29	536	799.27	2,261.0	
30	578	667.50	1,749.0	
31	635	1,597.07	3,809.4	
32	1,649	48.60	44.6	
33	1,878	30.19	24.4	
34	2,051	80.74	59.6	
35	2,798	23.59	12.8	
36	4,433	30.57	10.4	
37	5,737	12.33	3.3	
38	6,222	12.77	3.1	
39	8,233	8.00	1.5	
40	10,380	75.00	10.9	Upper Marker
41	12,885	0.00	0.0	
42	15,492	0.00	0.0	
43	16,770	0.00	0.0	
44	18,048	0.00	0.0	
45	19,530	0.00	0.0	

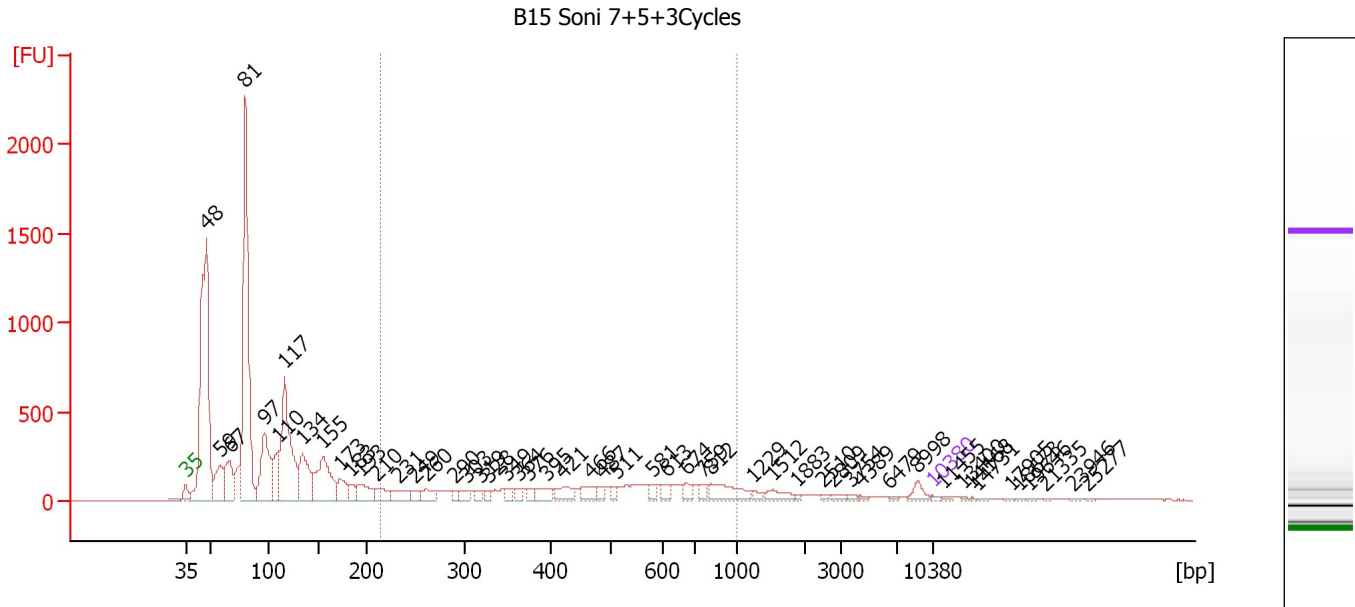
Region table for sample 10 : B59 Soni 7+5+5+3Cycles

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
114	1,139	390	107,990.4	19,813.88	15,880.1	82	47.4	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-12\2012-07-12_008.xad

Created: 7/12/2012 4:09:06 PM
 Modified: 7/13/2012 9:39:05 AM

Electropherogram Summary Continued ...



Overall Results for sample 11 : B15 Soni 7+5+3Cycles

Number of peaks found: 52 Corr. Area 1: 3,036.9
 Noise: 0.4

Peak table for sample 11 : B15 Soni 7+5+3Cycles

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	24,179.41	760,037.0	
3	59	3,278.61	83,784.3	
4	67	3,516.34	79,549.5	
5	81	21,592.46	406,231.9	
6	97	6,221.75	97,377.9	
7	110	2,962.37	40,755.7	
8	117	10,716.06	139,309.2	
9	134	4,304.52	48,598.0	
10	155	5,500.88	53,749.1	
11	173	1,664.71	14,603.4	
12	183	752.16	6,231.5	
13	193	1,825.01	14,323.7	
14	210	1,142.94	8,232.4	
15	231	1,211.18	7,942.1	
16	249	577.26	3,511.9	
17	260	820.12	4,780.3	
18	290	342.74	1,791.2	
19	303	578.54	2,889.3	
20	319	402.91	1,914.8	
21	328	373.17	1,723.4	
22	349	421.90	1,831.3	
23	364	411.14	1,712.0	
24	376	387.54	1,563.4	
25	395	943.55	3,616.2	
26	421	1,063.48	3,823.5	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-12\2012-07-12_008.xad


Created: 7/12/2012 4:09:06 PM
 Modified: 7/13/2012 9:39:05 AM

Electropherogram Summary Continued ...

... Peak table for sample 11 : B15 Soni 7+5+3Cycles

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
27	466	897.02	2,915.7	
28	487	384.55	1,195.9	
29	511	355.42	1,054.2	
30	581	350.68	915.2	
31	613	508.16	1,255.3	
32	674	560.47	1,259.9	
33	759	398.05	794.3	
34	812	1,732.88	3,233.8	
35	1,229	239.80	295.7	
36	1,512	600.71	601.9	
37	1,883	105.21	84.7	
38	2,510	99.24	59.9	
39	2,809	186.05	100.4	
40	3,754	102.97	41.6	
41	4,389	96.21	33.2	
42	6,479	73.36	17.2	
43	8,998	462.98	78.0	
44	10,380	75.00	10.9	Upper Marker
45	11,455	0.00	0.0	
46	13,400	0.00	0.0	
47	14,168	0.00	0.0	
48	14,731	0.00	0.0	
49	17,905	0.00	0.0	
50	18,673	0.00	0.0	
51	19,646	0.00	0.0	
52	21,335	0.00	0.0	
53	23,946	0.00	0.0	
54	25,277	0.00	0.0	

Region table for sample 11 : B15 Soni 7+5+3Cycles

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
214	995	488	70,834.3	18,166.34	3,036.9	21	39.3	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-12\2012-07-12_008.xad

Created: 7/12/2012 4:09:06 PM
Modified: 7/13/2012 9:39:05 AM

Gel Image

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-12\2012-07-12_008.xad

Created: 7/12/2012 4:09:06 PM
 Modified: 7/13/2012 9:39:05 AM

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		7/12/2012 4:50:21 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-07-12\2012-07-12_008.xad)		Instrument	Run		7/12/2012 4:09:06 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		7/12/2012 4:09:06 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		7/12/2012 4:09:06 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		7/12/2012 4:09:06 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		7/12/2012 4:09:06 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		7/12/2012 4:09:06 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		7/12/2012 4:09:06 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1