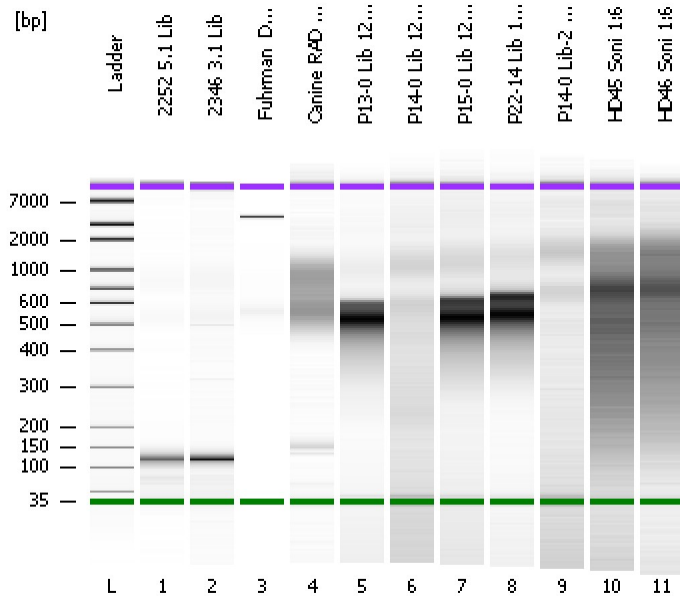


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-12-19\2013-12-19_003.xad

Created: 12/19/2013 12:52:35 PM
Modified: 12/19/2013 1:54:30 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

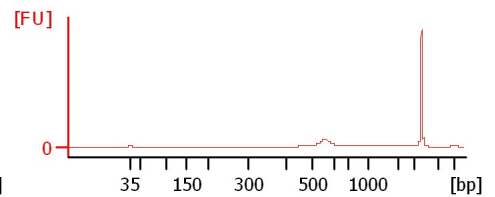
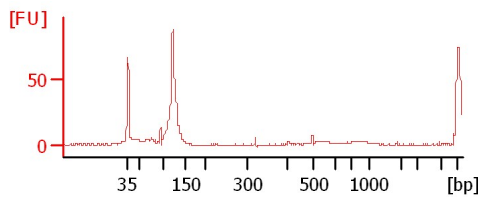
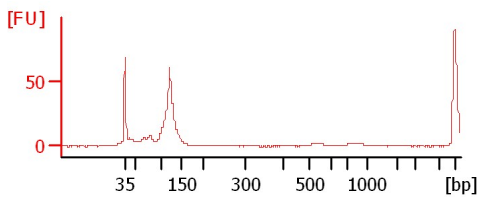
Chip Information:

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

2252 5.1 Lib

2346 3.1 Lib

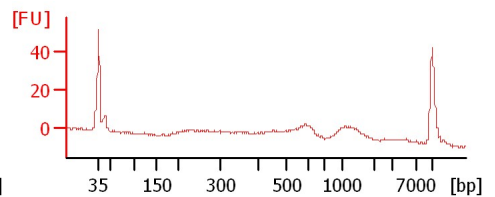
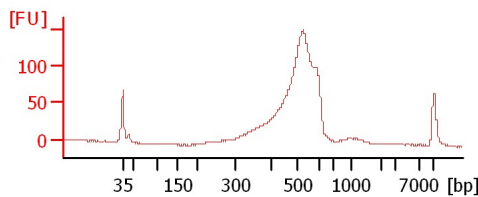
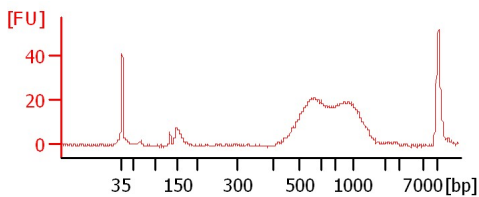
Fuhrman_Dd_Pool 1:4



Canine RAD Seq1 1:4

P13-0 Lib 12/19/13

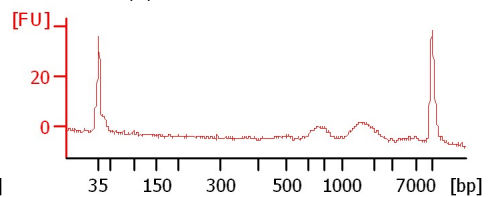
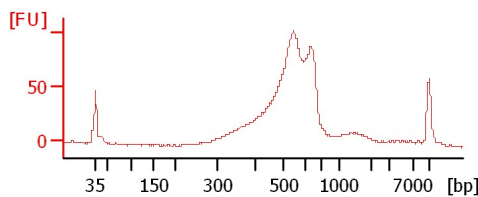
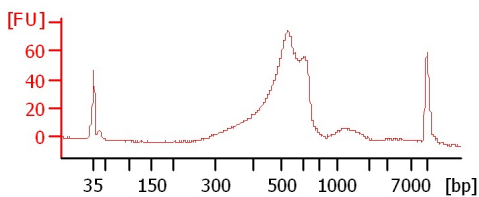
P14-0 Lib 12/19/13



P15-0 Lib 12/19/13

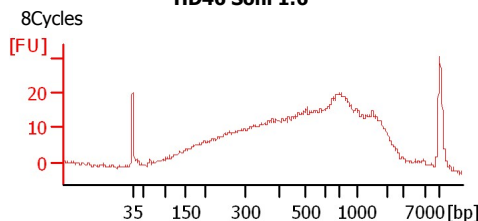
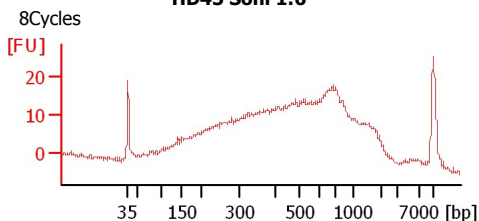
P22-14 Lib 12/19/13

P14-0 Lib-2 12/19/13
DNA from 11/1/13 lib



HD45 Soni 1:6

HD46 Soni 1:6



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-12-19\2013-12-19_003.xad

Created: 12/19/2013 12:52:35 PM
Modified: 12/19/2013 1:54:30 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
2252 5.1 Lib		<input type="checkbox"/>	✓			
2346 3.1 Lib		<input type="checkbox"/>	✓			
Fuhrman_Dd_Pool 1:4		<input type="checkbox"/>	✓			
Canine RAD Seq1 1:4		<input type="checkbox"/>	✓			
P13-0 Lib 12/19/13		<input type="checkbox"/>	✓			
P14-0 Lib 12/19/13		<input type="checkbox"/>	✓			
P15-0 Lib 12/19/13		<input type="checkbox"/>	✓			
P22-14 Lib 12/19/13		<input type="checkbox"/>	✓			
P14-0 Lib-2 12/19/13	DNA from 11/1/13 lib	<input type="checkbox"/>	✓			
HD45 Soni 1:6	8Cycles	<input type="checkbox"/>	✓			
HD46 Soni 1:6	8Cycles	<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\2013-12-19\2013-12-19_003.xad

Created: 12/19/2013 12:52:35 PM
Modified: 12/19/2013 1:54:30 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

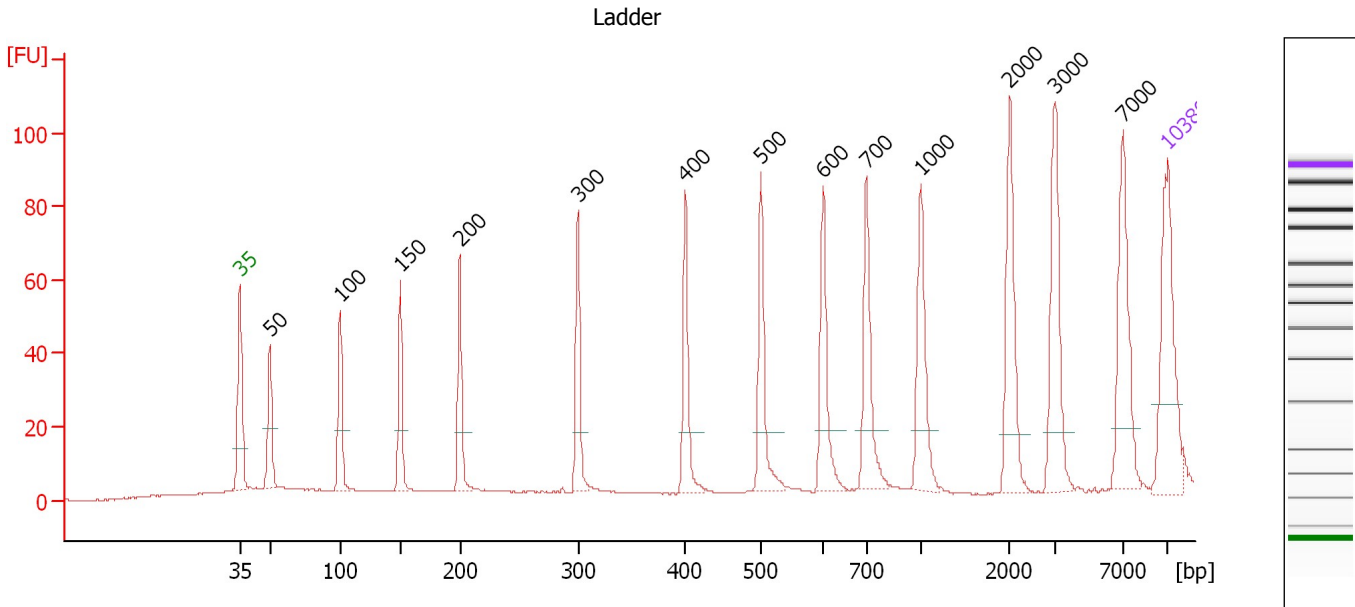
Ladder

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\2013-12-19\2013-12-19_003.xad

Created: 12/19/2013 12:52:35 PM
 Modified: 12/19/2013 1:54:30 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

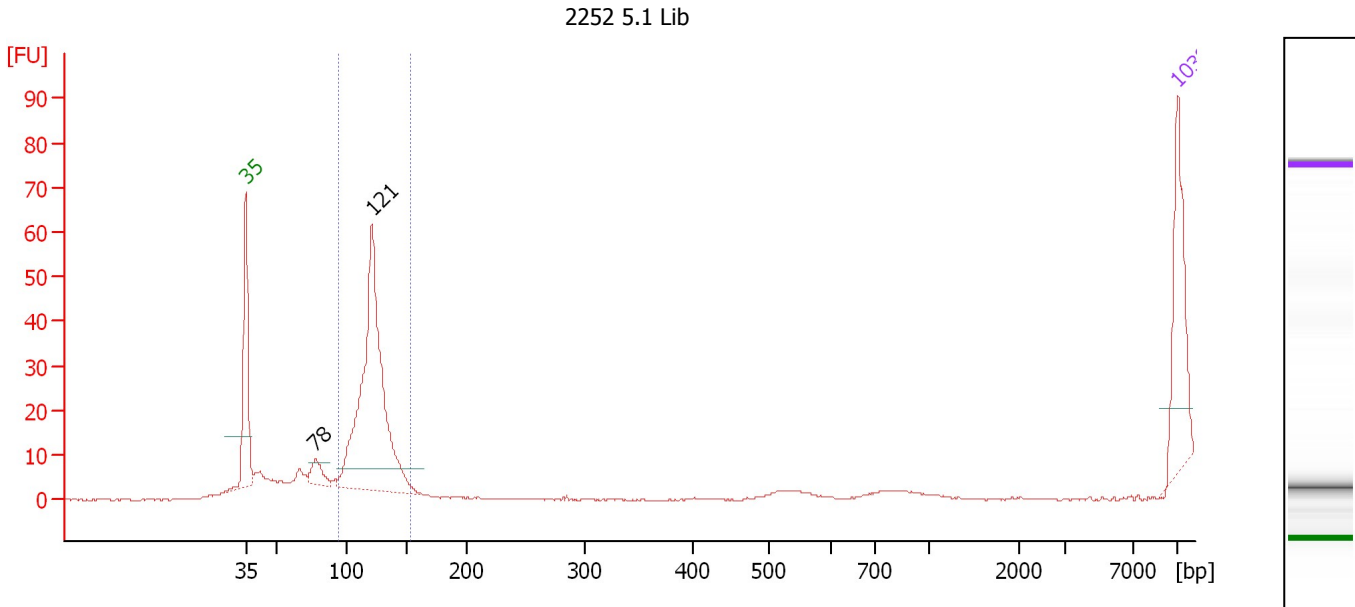
Peak table for Ladder

Peak	Aligned Migration Time [s]	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	50.56	100	150.00	2,272.7	Ladder Peak
4	55.10	150	150.00	1,515.2	Ladder Peak
5	59.61	200	150.00	1,136.4	Ladder Peak
6	68.49	300	150.00	757.6	Ladder Peak
7	76.57	400	150.00	568.2	Ladder Peak
8	82.28	500	150.00	454.5	Ladder Peak
9	86.99	600	150.00	378.8	Ladder Peak
10	90.24	700	150.00	324.7	Ladder Peak
11	94.34	1,000	150.00	227.3	Ladder Peak
12	101.06	2,000	150.00	113.6	Ladder Peak
13	104.48	3,000	150.00	75.8	Ladder Peak
14	109.58	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\2013-12-19\2013-12-19_003.xad

Created: 12/19/2013 12:52:35 PM
 Modified: 12/19/2013 1:54:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : 2252 5.1 Lib

Number of peaks found: 2 Corr. Area 1: 144.7
 Noise: 0.2

Peak table for sample 1 : 2252 5.1 Lib

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	48.25	78	27.26	528.2	
3	52.49	121	435.58	5,442.6	
4	113.00	10,380	75.00	10.9	Upper Marker

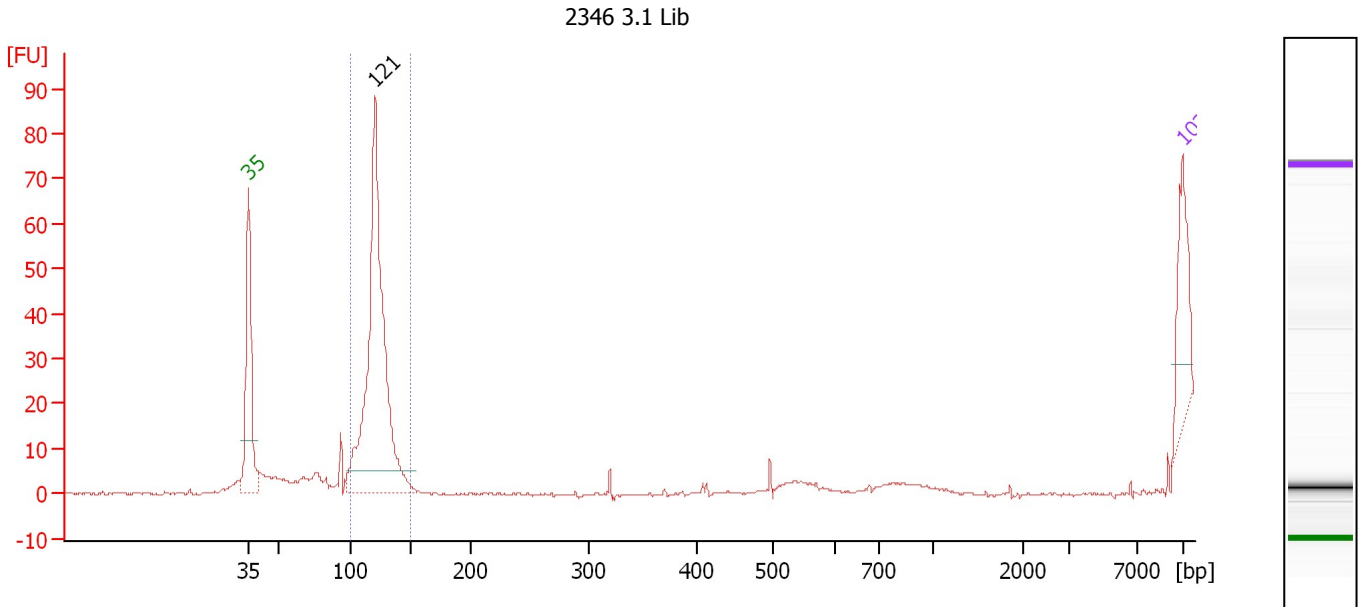
Region table for sample 1 : 2252 5.1 Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
95	153	121	3,825.4	304.25	144.7	97	6.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-12-19\2013-12-19_003.xad

Created: 12/19/2013 12:52:35 PM
 Modified: 12/19/2013 1:54:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : 2346 3.1 Lib

Number of peaks found: 1 Corr. Area 1: 116.3
 Noise: 0.3

Peak table for sample 2 : 2346 3.1 Lib

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	52.47	121	692.40	8,664.3	
3	113.00	10,380	75.00	10.9	Upper Marker

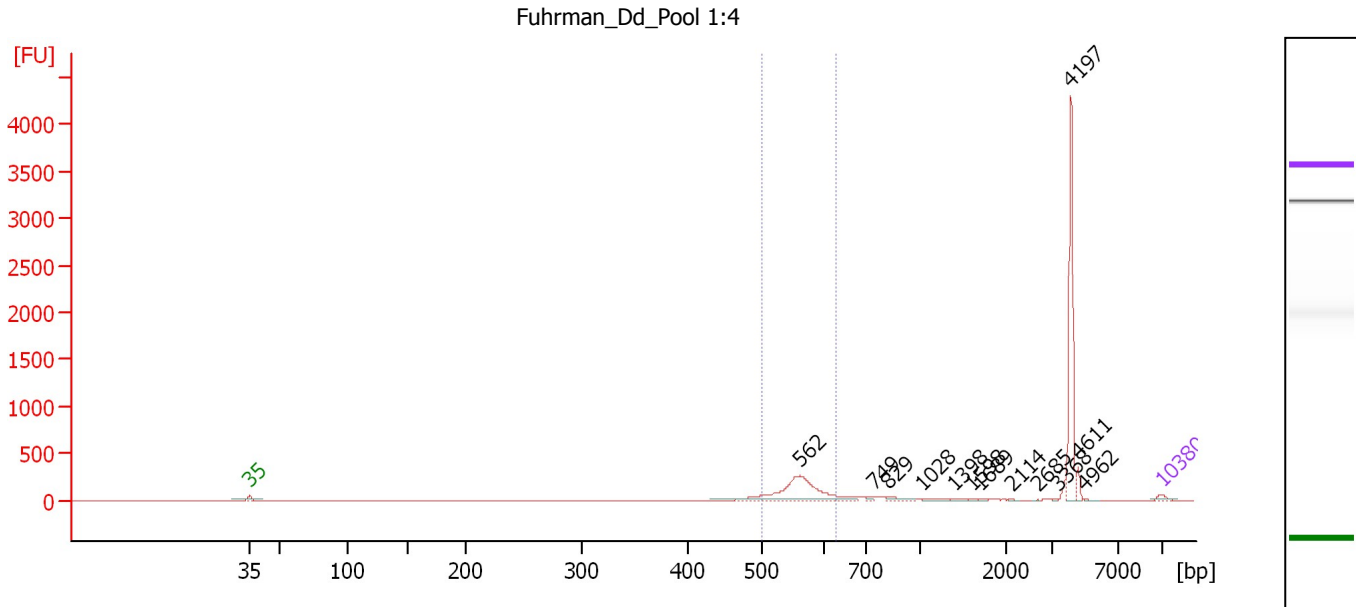
Region table for sample 2 : 2346 3.1 Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
100	150	122	4,355.8	350.58	116.3	100	3.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-12-19\2013-12-19_003.xad

Created: 12/19/2013 12:52:35 PM
 Modified: 12/19/2013 1:54:30 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 3 : Fuhrman Dd Pool 1:4

Height Threshold [FU] : 10

Overall Results for sample 3 : Fuhrman Dd Pool 1:4

Number of peaks found: 13 Corr. Area 1: 933.1
 Noise: 0.2

Peak table for sample 3 : Fuhrman Dd Pool 1:4

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	85.18	562	1,898.60	5,122.4	
3	90.91	749	47.98	97.1	
4	92.01	829	127.37	232.7	
5	94.53	1,028	81.20	119.6	
6	97.02	1,398	34.13	37.0	
7	98.36	1,598	13.61	12.9	
8	98.97	1,689	15.34	13.8	
9	101.45	2,114	12.34	8.8	
10	103.40	2,685	8.61	4.9	
11	104.95	3,368	9.61	4.3	
12	106.00	4,197	1,949.88	703.9	
13	106.53	4,611	146.36	48.1	
14	106.98	4,962	13.24	4.0	
15	113.00	10,380	75.00	10.9	Upper Marker

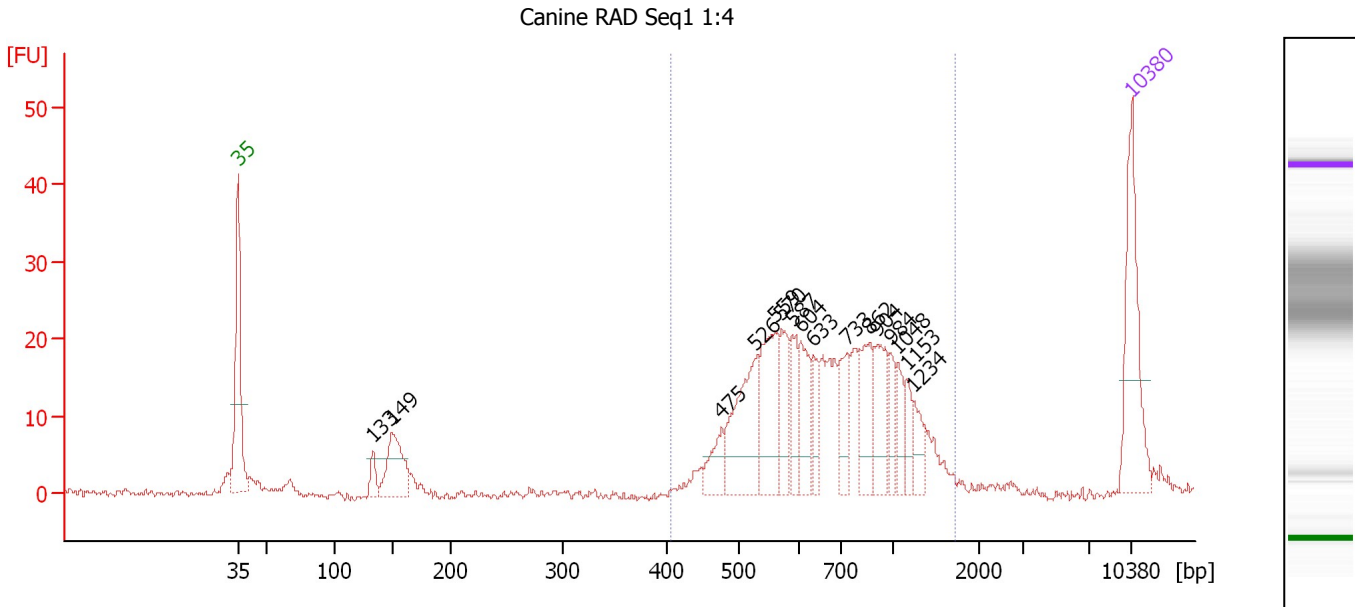
Region table for sample 3 : Fuhrman Dd Pool 1:4

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
502	632	562	4,428.2	1,641.08	933.1	30	5.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-12-19\2013-12-19_003.xad

Created: 12/19/2013 12:52:35 PM
 Modified: 12/19/2013 1:54:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : Canine RAD Seq1 1:4

Number of peaks found: 16 Corr. Area 1: 322.6
 Noise: 0.5

Peak table for sample 4 : Canine RAD Seq1 1:4

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	53.57	133	16.48	187.6	
3	55.03	149	70.14	712.4	
4	80.88	475	26.76	85.3	
5	83.51	526	91.79	264.3	
6	85.06	559	76.52	207.4	
7	85.56	570	44.35	117.9	
8	86.39	587	31.87	82.2	
9	87.11	604	40.21	100.9	
10	88.07	633	24.00	57.4	
11	90.70	733	33.97	70.2	
12	92.45	862	45.82	80.6	
13	93.04	904	44.37	74.3	
14	94.12	984	20.56	31.7	
15	94.66	1,048	19.41	28.1	
16	95.37	1,153	15.50	20.4	
17	95.92	1,234	19.67	24.1	
18	113.00	10,380	75.00	10.9	Upper Marker

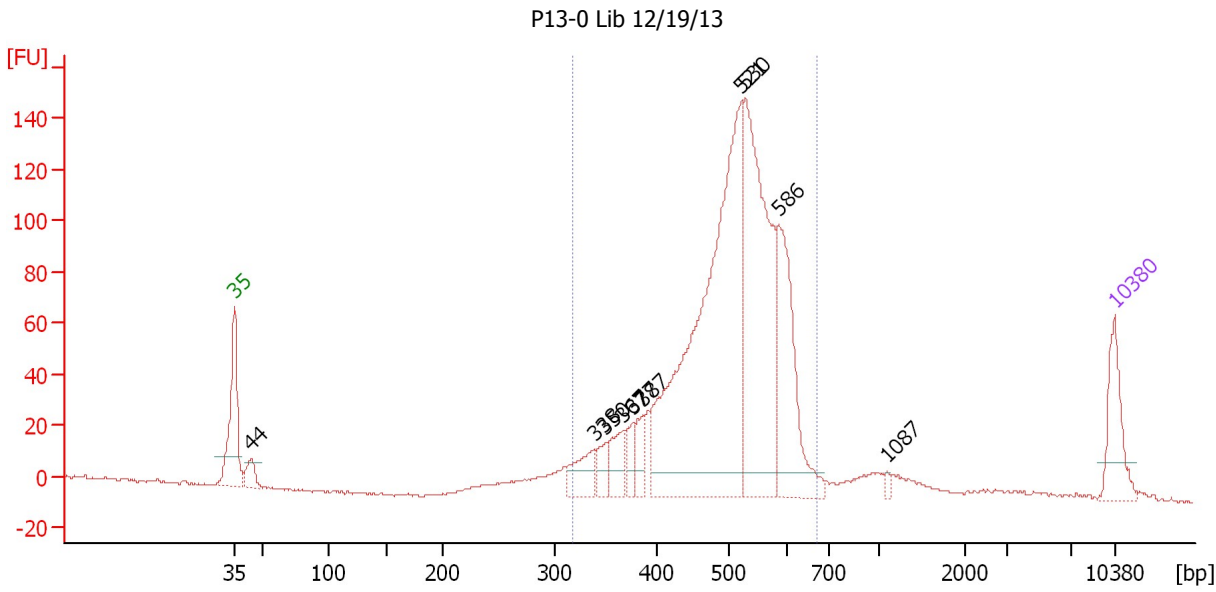
Region table for sample 4 : Canine RAD Seq1 1:4

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
406	1,721	744	1,456.2	636.65	322.6	89	34.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-12-19\2013-12-19_003.xad

Created: 12/19/2013 12:52:35 PM
 Modified: 12/19/2013 1:54:30 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 5 : P13-0 Lib 12/19/13

Height Threshold [FU] : 10

Overall Results for sample 5 : P13-0 Lib 12/19/13

Number of peaks found: 10 Corr. Area 1: 1,480.6
 Noise: 0.5

Peak table for sample 5 : P13-0 Lib 12/19/13

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	44.32	44	45.71	1,582.5	
3	71.59	338	70.30	314.8	Upper Marker
4	72.53	350	38.73	167.7	
5	73.93	367	63.00	259.9	
6	74.69	377	38.90	156.4	
7	75.50	387	41.97	164.5	
8	83.26	521	965.12	2,807.8	
9	83.68	530	547.53	1,565.8	
10	86.32	586	267.05	690.8	
11	94.93	1,087	6.72	9.4	
12	113.00	10,380	75.00	10.9	

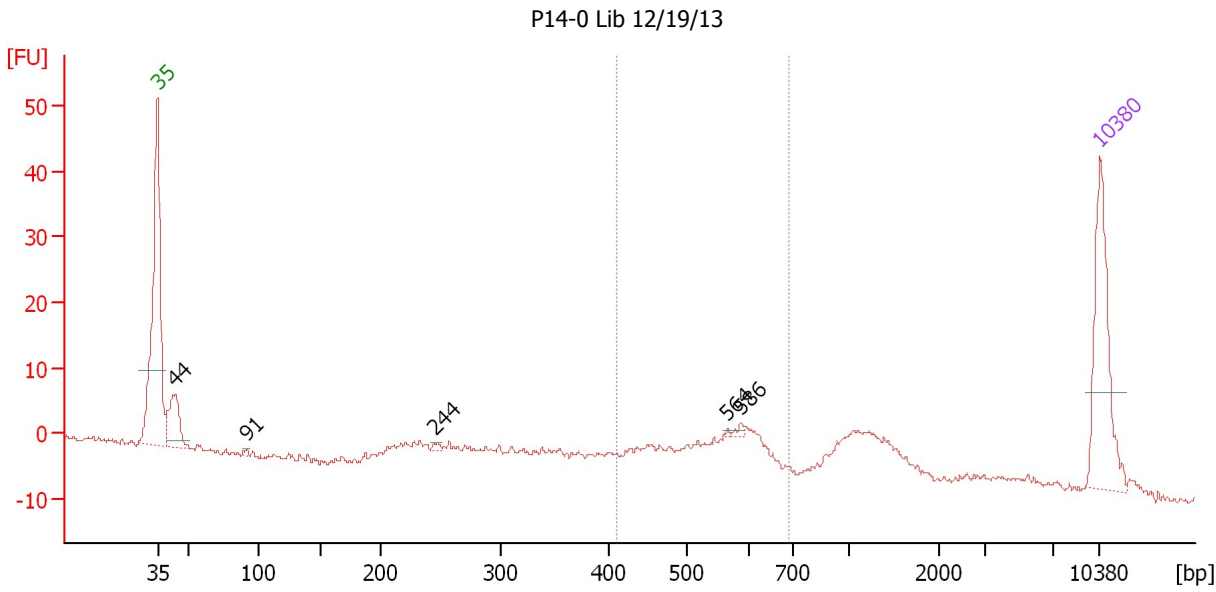
Region table for sample 5 : P13-0 Lib 12/19/13

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
318	671	503	6,225.7	1,999.03	1,480.6	91	14.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-12-19\2013-12-19_003.xad

Created: 12/19/2013 12:52:35 PM
 Modified: 12/19/2013 1:54:30 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 6 : P14-0 Lib 12/19/13

Height Threshold [FU] : 1

Overall Results for sample 6 : P14-0 Lib 12/19/13

Number of peaks found: 5 Corr. Area 1: 70.7
 Noise: 0.4

Peak table for sample 6 : P14-0 Lib 12/19/13

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	44.28	44	52.98	1,842.9	
3	49.59	91	2.24	37.3	
4	63.55	244	2.41	15.0	
5	85.30	564	1.03	2.8	
6	86.33	586	2.55	6.6	
7	113.00	10,380	75.00	10.9	Upper Marker

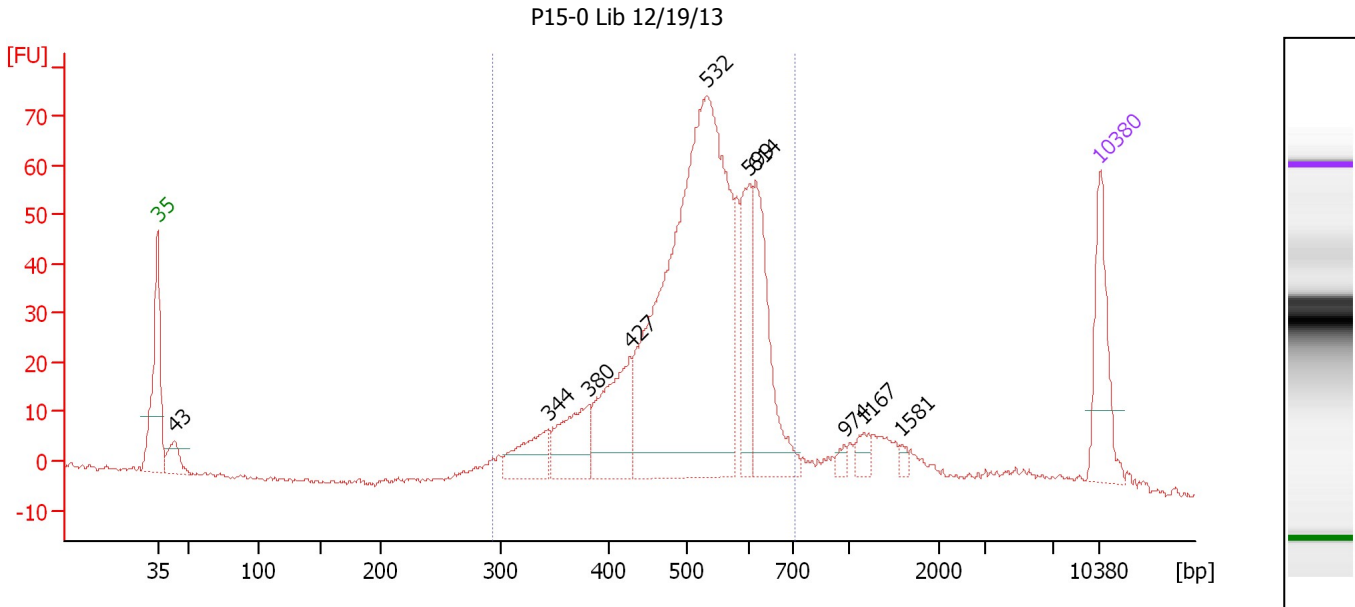
Region table for sample 6 : P14-0 Lib 12/19/13

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
409	690	542	381.3	133.28	70.7	31	12.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-12-19\2013-12-19_003.xad

Created: 12/19/2013 12:52:35 PM
 Modified: 12/19/2013 1:54:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : P15-0 Lib 12/19/13

Number of peaks found: 10 Corr. Area 1: 870.4
 Noise: 0.5

Peak table for sample 7 : P15-0 Lib 12/19/13

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	44.26	43	38.72	1,352.1	
3	72.03	344	66.02	290.9	
4	74.98	380	85.06	338.9	
5	78.11	427	130.65	463.7	
6	83.79	532	799.52	2,276.5	
7	86.92	599	101.67	257.4	
8	87.44	614	158.16	390.3	
9	93.99	974	6.85	10.6	
10	95.47	1,167	14.49	18.8	
11	98.24	1,581	5.32	5.1	
12	113.00	10,380	75.00	10.9	Upper Marker

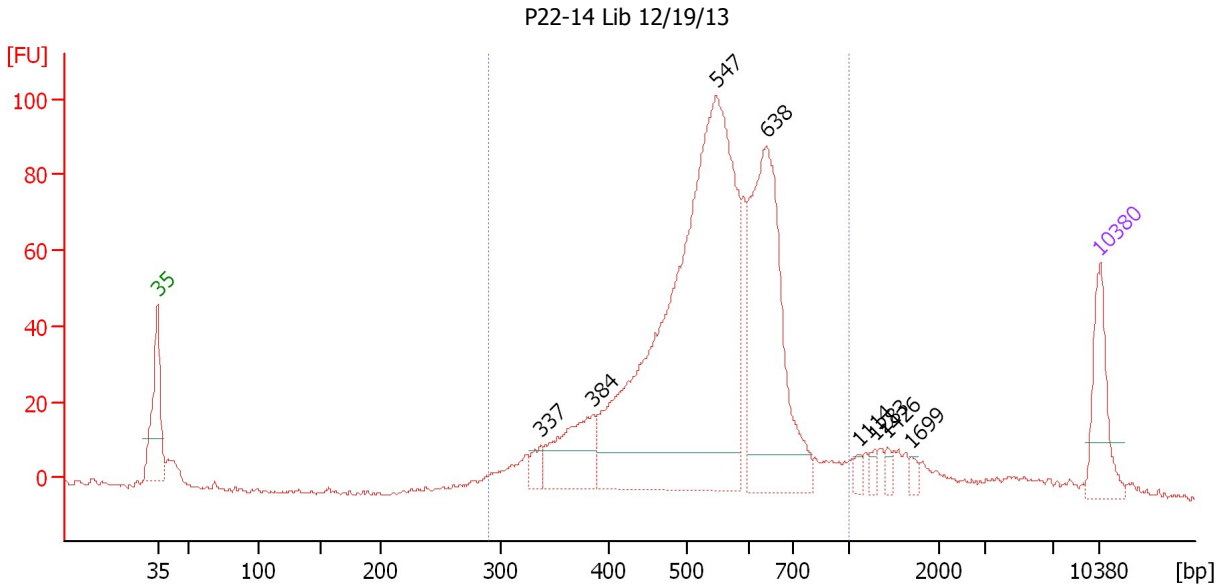
Region table for sample 7 : P15-0 Lib 12/19/13

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
293	703	511	4,520.7	1,458.25	870.4	86	16.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-12-19\2013-12-19_003.xad

Created: 12/19/2013 12:52:35 PM
 Modified: 12/19/2013 1:54:30 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 8 : P22-14 Lib 12/19/13

Height Threshold [FU] : 10

Overall Results for sample 8 : P22-14 Lib 12/19/13

Number of peaks found: 8 Corr. Area 1: 1,202.4
 Noise: 0.6

Peak table for sample 8 : P22-14 Lib 12/19/13

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	71.50	337	23.07	103.7	
3	75.29	384	132.06	520.8	
4	84.50	547	1,098.11	3,040.6	
5	88.21	638	429.60	1,020.8	
6	95.11	1,114	9.79	13.3	
7	96.24	1,283	9.29	11.0	
8	97.20	1,426	8.81	9.4	
9	99.03	1,699	8.73	7.8	
10	113.00	10,380	75.00	10.9	Upper Marker

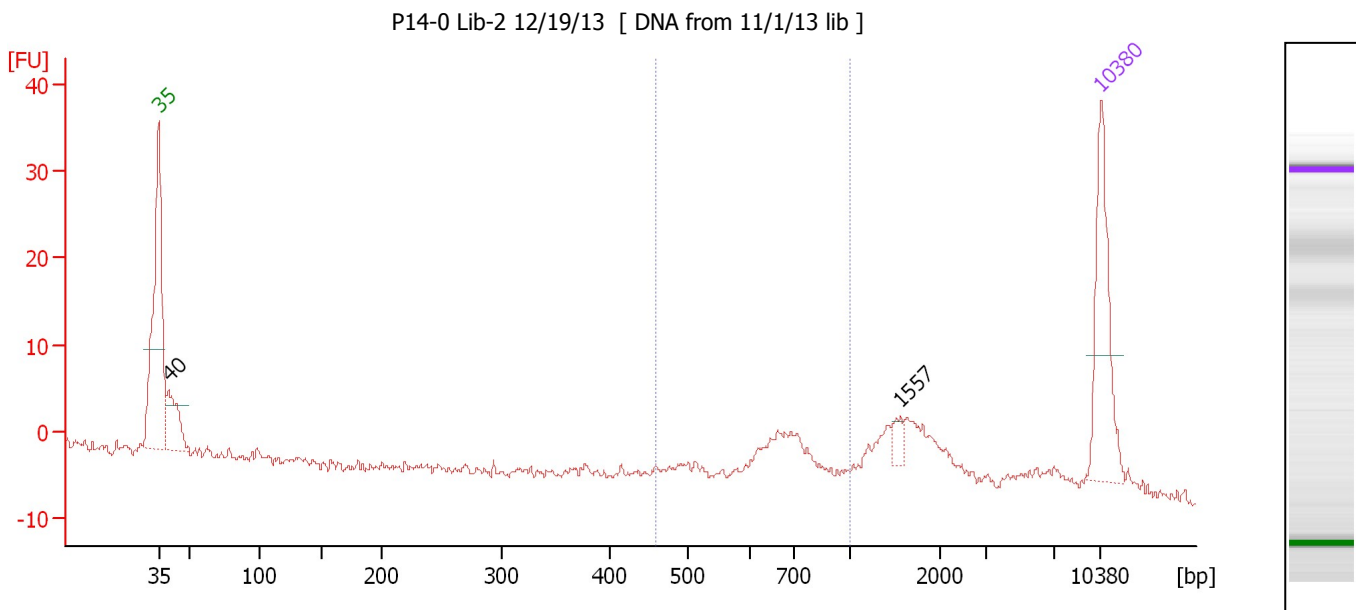
Region table for sample 8 : P22-14 Lib 12/19/13

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
290	1,000	541	5,511.8	1,854.98	1,202.4	90	19.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-12-19\2013-12-19_003.xad

Created: 12/19/2013 12:52:35 PM
 Modified: 12/19/2013 1:54:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : P14-0 Lib-2 12/19/13

Number of peaks found: 2 Corr. Area 1: 33.6
 Noise: 0.6

Peak table for sample 9 : P14-0 Lib-2 12/19/13

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/ μ l]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	43.74	40	59.16	2,245.2	
3	98.09	1,557	8.55	8.3	
4	113.00	10,380	75.00	10.9	Upper Marker

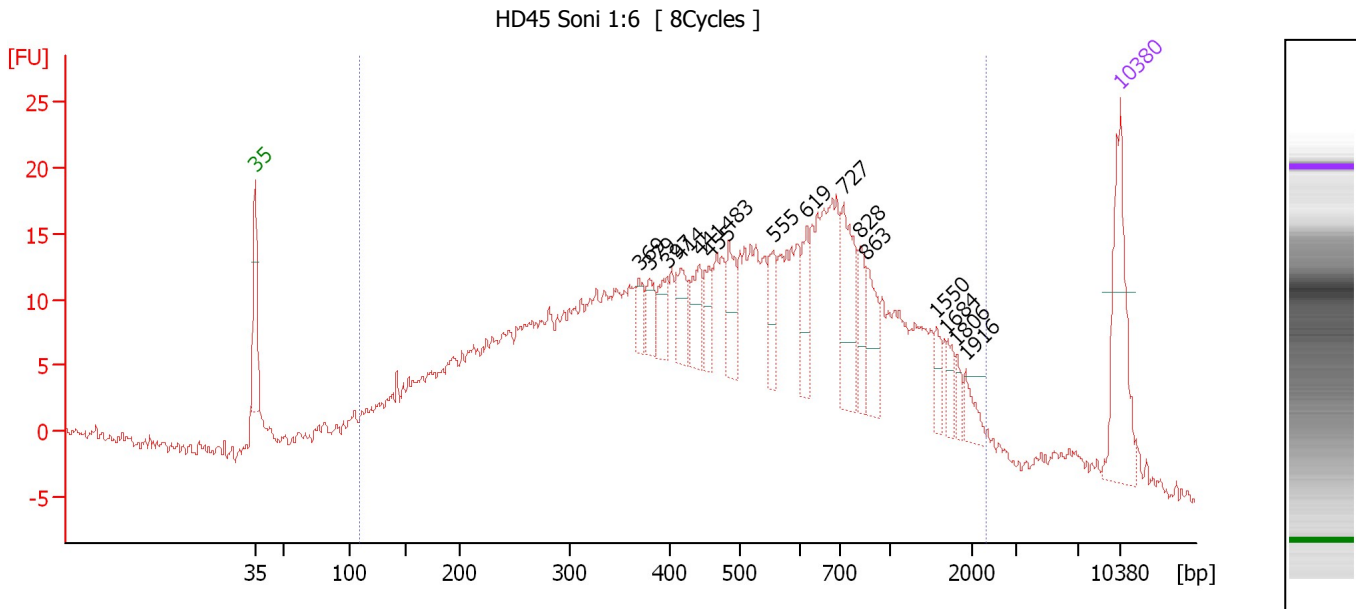
Region table for sample 9 : P14-0 Lib-2 12/19/13

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/ μ l]	Corr. Area	% of Total	Size distribution in CV [%]	Color
459	1,000	686	175.6	76.97	33.6	28	16.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-12-19\2013-12-19_003.xad

Created: 12/19/2013 12:52:35 PM
 Modified: 12/19/2013 1:54:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : HD45 Soni 1:6

Number of peaks found: 16 Corr. Area 1: 757.9
 Noise: 0.5

Peak table for sample 10 : HD45 Soni 1:6

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	74.05	369	14.46	59.4	
3	74.87	379	21.37	85.4	
4	76.30	397	26.23	100.2	
5	77.37	414	29.57	108.2	
6	78.93	441	32.57	111.8	
7	79.70	455	23.00	76.6	
8	81.30	483	37.56	117.9	
9	84.88	555	28.91	78.9	
10	87.60	619	30.27	74.1	
11	90.62	727	64.89	135.2	
12	92.00	828	26.64	48.7	
13	92.47	863	36.03	63.3	
14	98.03	1,550	13.69	13.4	
15	98.94	1,684	14.53	13.1	
16	99.76	1,806	9.04	7.6	
17	100.49	1,916	14.33	11.3	
18	113.00	10,380	75.00	10.9	Upper Marker

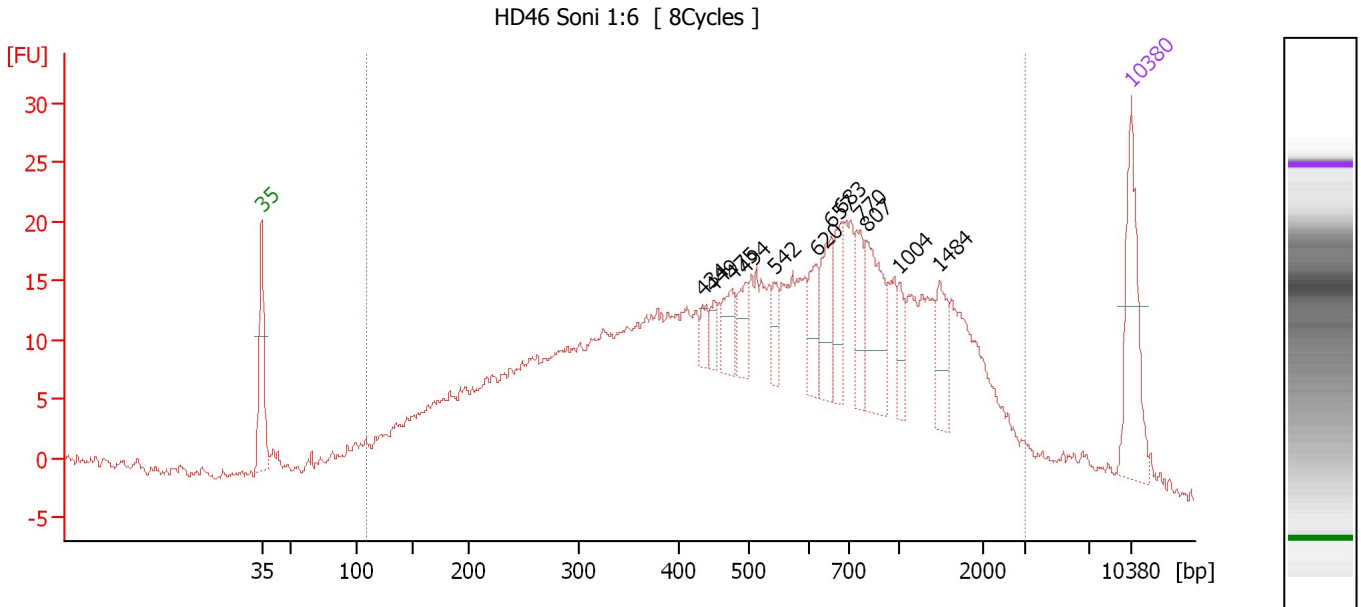
Region table for sample 10 : HD45 Soni 1:6

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
110	2,318	601	11,792.3	2,725.09	757.9	95	68.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-12-19\2013-12-19_003.xad

Created: 12/19/2013 12:52:35 PM
 Modified: 12/19/2013 1:54:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : HD46 Soni 1:6

Number of peaks found: 12 Corr. Area 1: 830.1
 Noise: 0.4

Peak table for sample 11 : HD46 Soni 1:6

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	78.49	434	15.40	53.8	
3	79.39	449	14.13	47.6	
4	80.85	475	31.02	98.9	
5	81.93	494	26.79	82.2	
6	84.24	542	19.83	55.5	
7	87.64	620	34.23	83.7	
8	88.84	657	50.27	116.0	
9	89.70	683	38.20	84.7	
10	91.20	770	34.30	67.5	
11	91.71	807	74.11	139.1	
12	94.37	1,004	18.18	27.4	
13	97.59	1,484	35.13	35.9	
14	113.00	10,380	75.00	10.9	Upper Marker

Region table for sample 11 : HD46 Soni 1:6

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
110	3,039	702	11,769.3	2,855.51	830.1	95	76.7	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-12-19\2013-12-19_003.xad

Created: 12/19/2013 12:52:35 PM
Modified: 12/19/2013 1:54:30 PM

Gel Image

