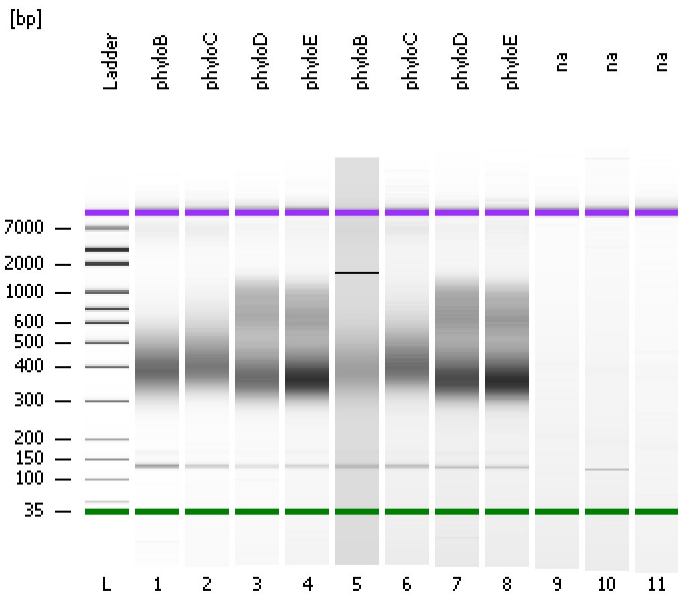


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2014-05-14\2014-05-14_004.xad

Created: 5/14/2014 4:13:20 PM
Modified: 5/14/2014 5:13:32 PM

Electrophoresis File Run Summary



Instrument Information:

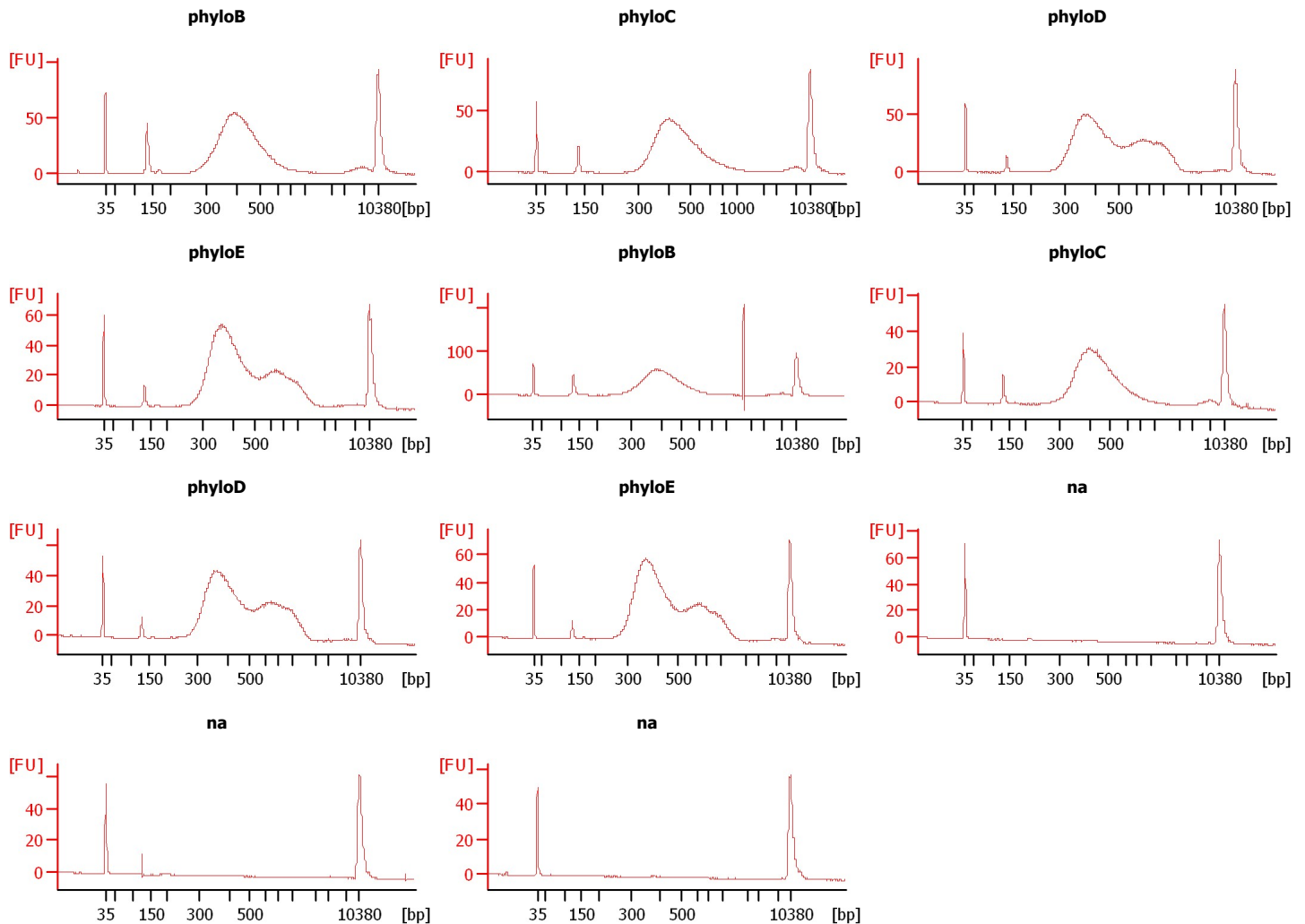
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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:



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2014-05-14\2014-05-14_004.xad

Created: 5/14/2014 4:13:20 PM
 Modified: 5/14/2014 5:13:32 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
phyloB		<input type="checkbox"/>	✓			
phyloC		<input type="checkbox"/>	✓			
phyloD		<input type="checkbox"/>	✓			
phyloE		<input type="checkbox"/>	✓			
phyloB		<input type="checkbox"/>	✓			
phyloC		<input type="checkbox"/>	✓			
phyloD		<input type="checkbox"/>	✓			
phyloE		<input type="checkbox"/>	✓			
na		<input type="checkbox"/>	✓			
na		<input type="checkbox"/>	✓			
na		<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\2014-05-14\2014-05-14_004.xad

Created: 5/14/2014 4:13:20 PM
Modified: 5/14/2014 5:13:32 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

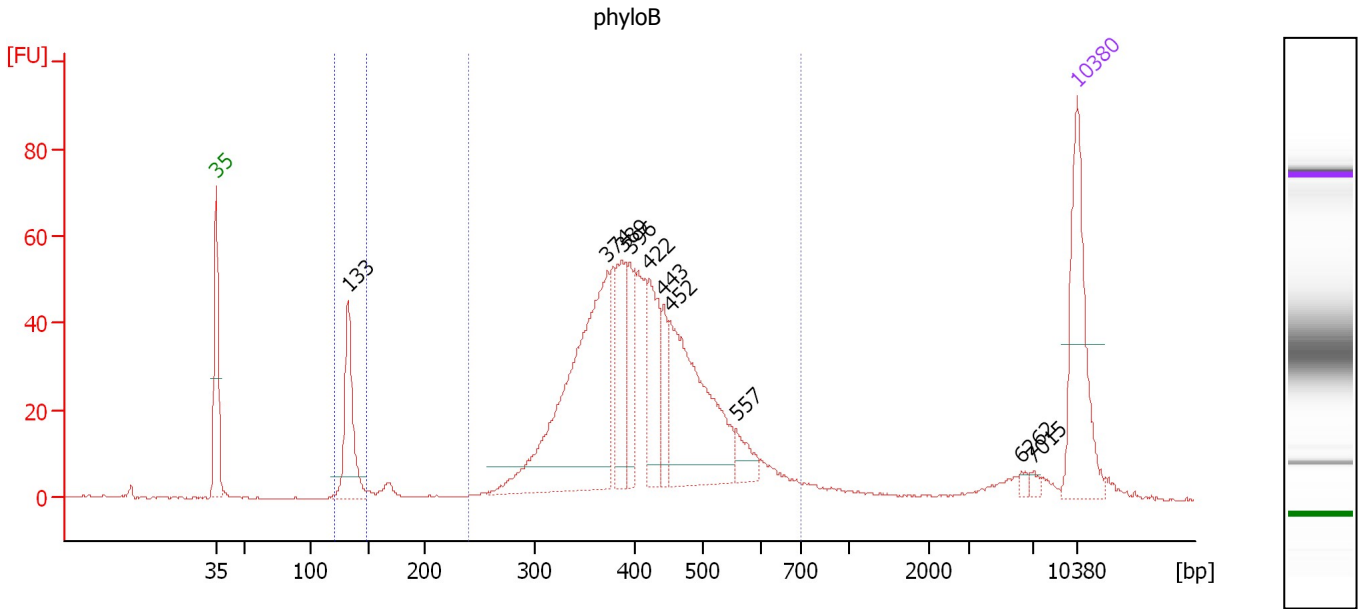
Ladder

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\2014-05-14\2014-05-14_004.xad

Created: 5/14/2014 4:13:20 PM
 Modified: 5/14/2014 5:13:32 PM

Electropherogram Summary



Overall Results for sample 1 : phyloB

Number of peaks found: 10 Corr. Area 1: 857.0
 Noise: 0.2 Corr. Area 2: 66.4

Peak table for sample 1 : phyloB

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	133	88.93	1,015.9	
3	374	257.49	1,044.5	
4	389	66.18	258.1	
5	396	41.72	159.6	
6	422	61.73	221.6	
7	443	27.19	93.0	
8	452	158.79	532.1	
9	557	17.79	48.4	
10	6,262	3.00	0.7	
11	7,015	3.37	0.7	
12	10,380	75.00	10.9	Upper Marker

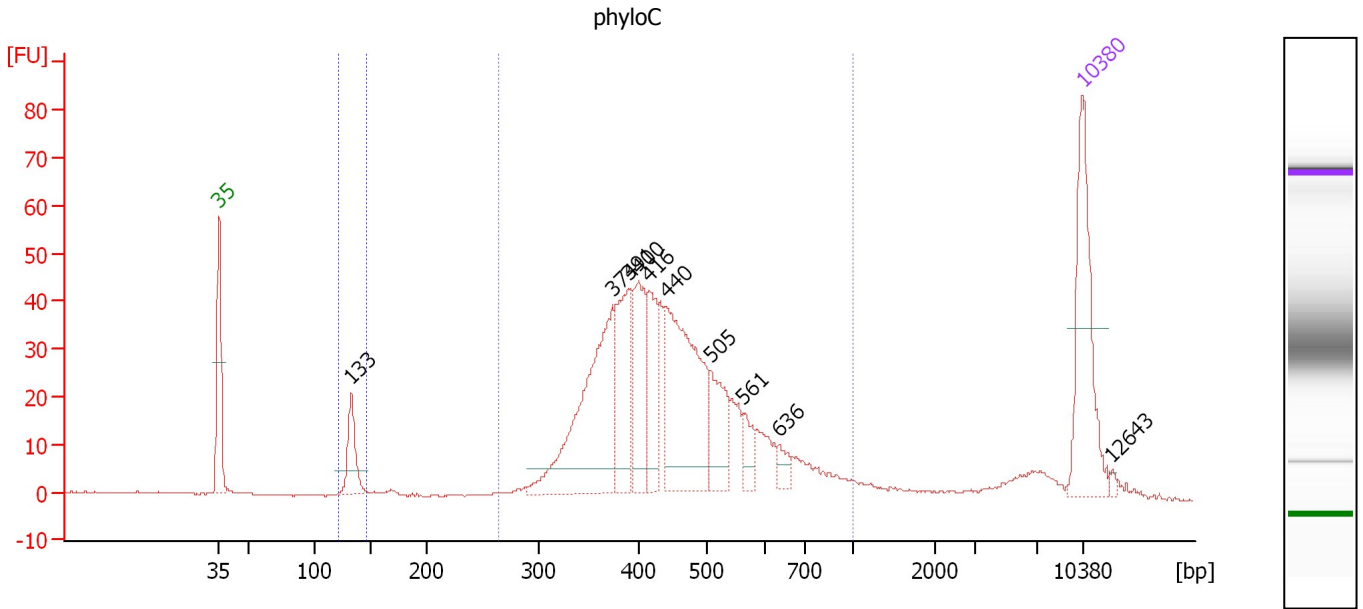
Region table for sample 1 : phyloB

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
121	149	134	979.0	86.56	66.4	7	3.2
241	700	419	3,067.9	811.32	857.0	87	18.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2014-05-14\2014-05-14_004.xad

Created: 5/14/2014 4:13:20 PM
 Modified: 5/14/2014 5:13:32 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : phyloC

Number of peaks found: 10 Corr. Area 1: 722.0
 Noise: 0.2 Corr. Area 2: 29.6

Peak table for sample 2 : phyloC

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	133	42.47	484.8	
3	374	172.54	698.2	
4	391	78.21	303.4	
5	400	64.49	244.1	
6	416	53.72	195.8	
7	440	153.21	527.4	
8	505	46.76	140.2	
9	561	17.57	47.5	
10	636	10.04	23.9	
11	10,380	75.00	10.9	Upper Marker
12	12,643	0.00	0.0	

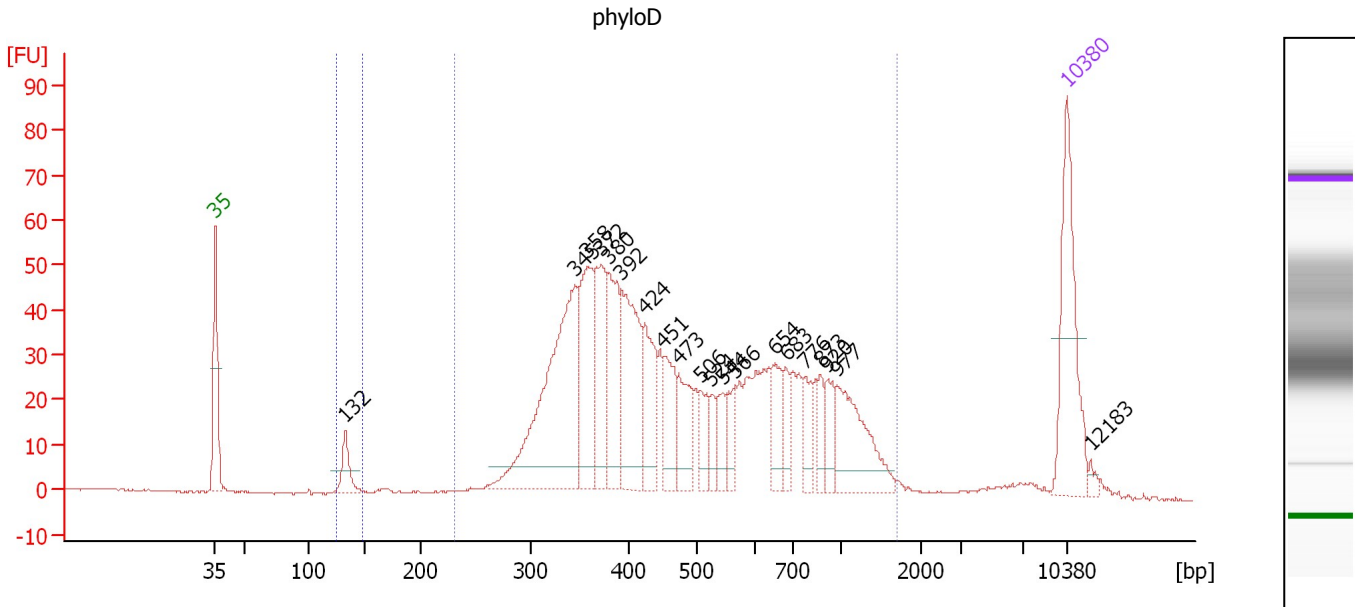
Region table for sample 2 : phyloC

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
122	146	134	488.8	43.08	29.6	4	2.8
264	1,000	458	2,641.3	748.77	722.0	89	24.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2014-05-14\2014-05-14_004.xad

Created: 5/14/2014 4:13:20 PM
 Modified: 5/14/2014 5:13:32 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : phyloD

Number of peaks found: 20 Corr. Area 1: 1,150.9
 Noise: 0.2 Corr. Area 2: 17.9

Peak table for sample 3 : phyloD

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	132	26.54	303.6	
3	345	215.48	946.2	
4	358	91.86	388.7	
5	372	75.10	305.7	
6	380	69.78	278.3	
7	392	104.41	403.1	
8	424	55.53	198.4	
9	451	42.01	141.0	
10	473	39.01	124.9	
11	506	21.38	64.0	
12	524	14.66	42.4	
13	544	18.79	52.3	
14	566	20.12	53.9	
15	654	29.15	67.5	
16	683	16.71	37.1	
17	776	19.33	37.7	
18	873	14.07	24.4	
19	920	20.50	33.8	
20	977	64.02	99.2	
21	10,380	75.00	10.9	Upper Marker
22	12,183	0.00	0.0	

Region table for sample 3 : phyloD


From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
125	148	133	289.5	25.49	17.9	1	2.8

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2014-05-14\2014-05-14_004.xad

Created: 5/14/2014 4:13:20 PM
Modified: 5/14/2014 5:13:32 PM

Electropherogram Summary Continued ...

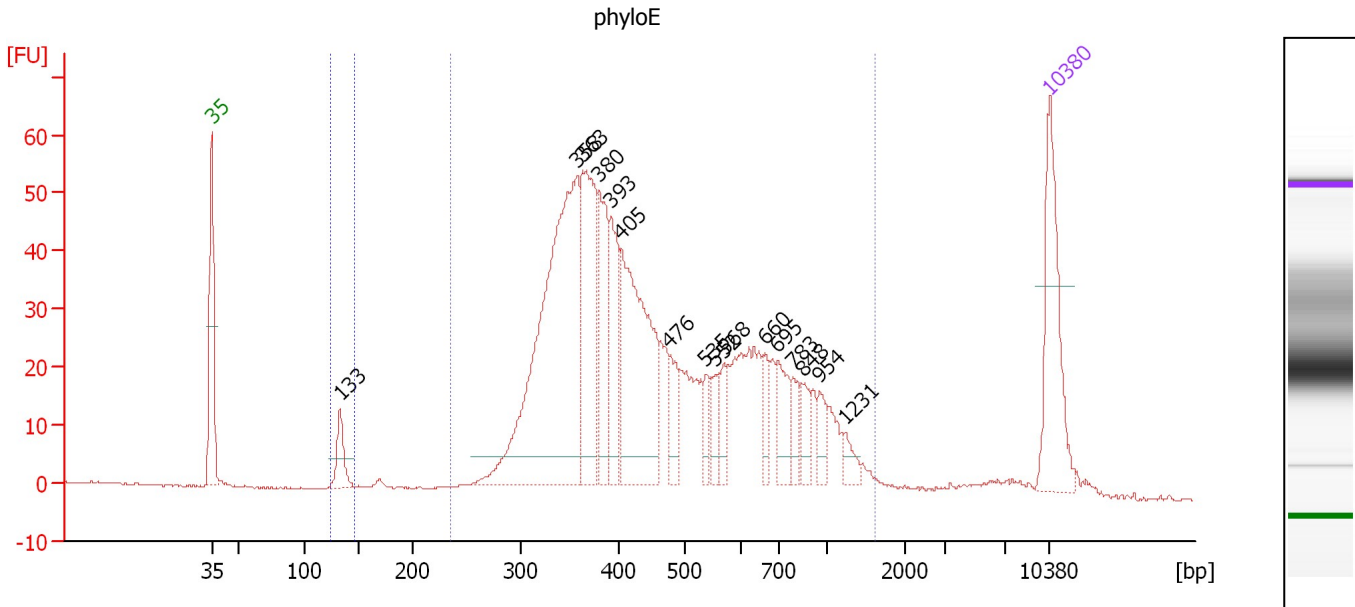
... Region table for sample 3 : phyloD

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/ μ l]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
232	1,696	547	3,951.1	1,154.34	 1,150.9	95	48.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2014-05-14\2014-05-14_004.xad

Created: 5/14/2014 4:13:20 PM
 Modified: 5/14/2014 5:13:32 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : phyloE

Number of peaks found: 16 Corr. Area 1: 1,047.9
 Noise: 0.2 Corr. Area 2: 16.2

Peak table for sample 4 : phyloE

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	133	32.12	366.2	
3	358	383.35	1,623.5	
4	363	140.86	587.5	
5	380	76.18	303.4	
6	393	67.01	258.6	
7	405	183.63	686.5	
8	476	31.75	101.1	
9	535	16.80	47.6	
10	552	17.91	49.1	
11	568	17.26	46.0	
12	660	19.67	45.2	
13	695	33.89	73.9	
14	783	15.38	29.8	
15	848	16.80	30.0	
16	954	16.57	26.3	
17	1,231	10.00	12.3	
18	10,380	75.00	10.9	Upper Marker

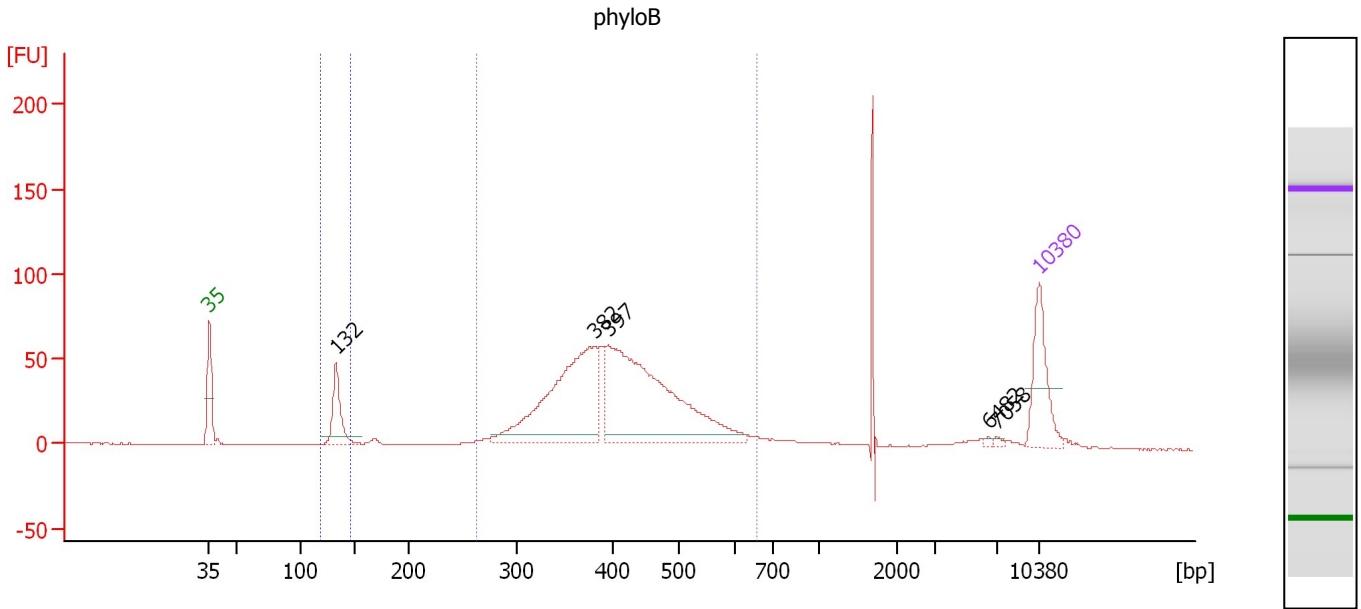
Region table for sample 4 : phyloE

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
125	146	133	342.7	30.20	16.2	1	2.4
235	1,610	503	4,965.6	1,394.63	1,047.9	96	43.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2014-05-14\2014-05-14_004.xad

Created: 5/14/2014 4:13:20 PM
 Modified: 5/14/2014 5:13:32 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : phyloB

Number of peaks found: 5 Corr. Area 1: 929.0
 Noise: 0.2 Corr. Area 2: 69.3

Peak table for sample 5 : phyloB

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	132	97.34	1,116.6	
3	382	335.63	1,332.8	
4	397	433.37	1,655.5	
5	6,482	3.03	0.7	
6	7,058	3.38	0.7	
7	10,380	75.00	10.9	Upper Marker

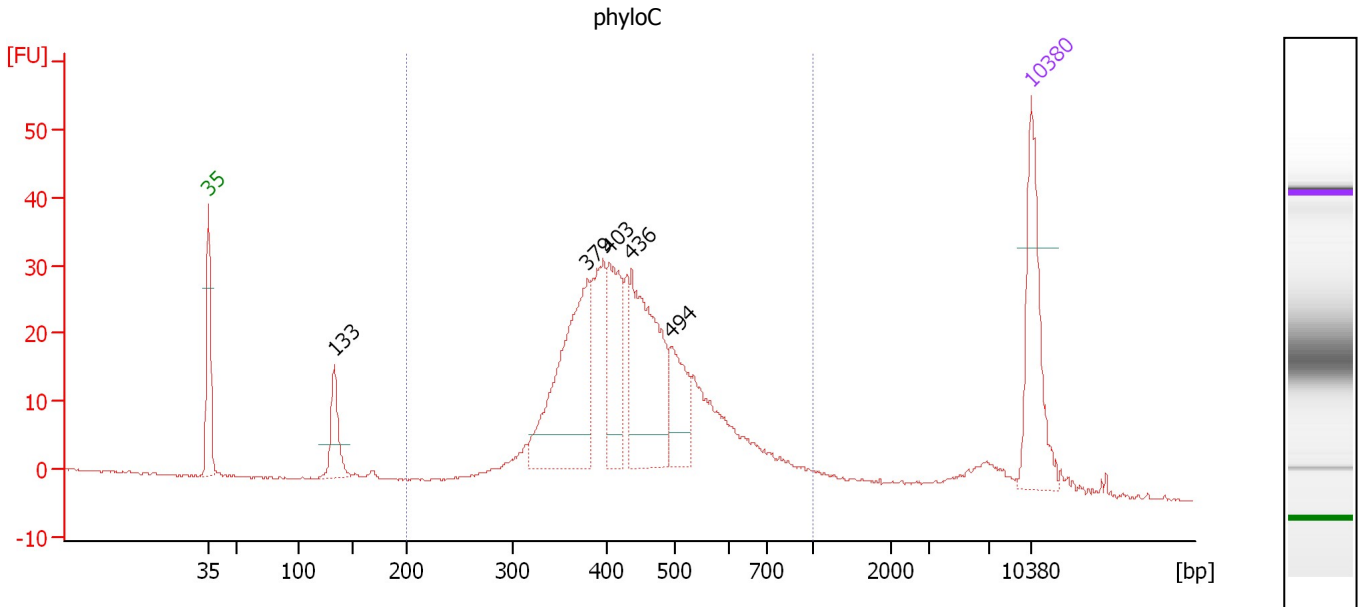
Region table for sample 5 : phyloB

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
119	146	133	1,034.0	91.02	69.3	6	3.0
263	659	416	3,371.5	886.85	929.0	82	18.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2014-05-14\2014-05-14_004.xad

Created: 5/14/2014 4:13:20 PM
 Modified: 5/14/2014 5:13:32 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : phyloC

Number of peaks found: 5 Corr. Area 1: 529.0
 Noise: 0.1

Peak table for sample 6 : phyloC

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	133	51.73	591.2	
3	379	181.68	726.8	
4	403	82.33	309.8	
5	436	156.44	543.1	
6	494	56.78	174.0	
7	10,380	75.00	10.9	Upper Marker

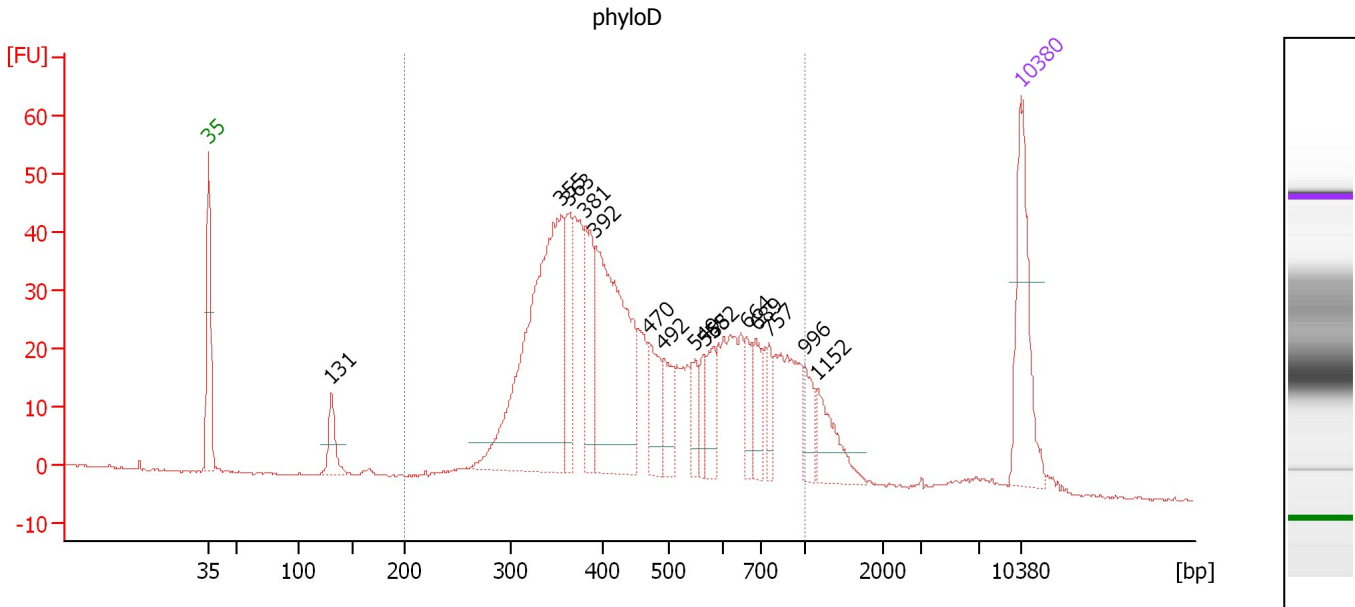
Region table for sample 6 : phyloC

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	456	2,982.9	838.59	529.0	88	24.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2014-05-14\2014-05-14_004.xad

Created: 5/14/2014 4:13:20 PM
 Modified: 5/14/2014 5:13:32 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : phyloD

Number of peaks found: 15 Corr. Area 1: 954.6
 Noise: 0.1

Peak table for sample 7 : phyloD

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	131	35.31	408.4	
3	355	329.69	1,408.6	
4	363	57.76	241.3	
5	381	70.08	278.8	
6	392	218.85	846.5	
7	470	43.07	138.7	
8	492	32.51	100.0	
9	549	24.64	68.0	
10	565	19.17	51.4	
11	582	29.19	76.0	
12	664	22.91	52.3	
13	689	30.40	66.9	
14	757	19.45	38.9	
15	996	24.35	37.0	
16	1,152	38.28	50.4	
17	10,380	75.00	10.9	Upper Marker

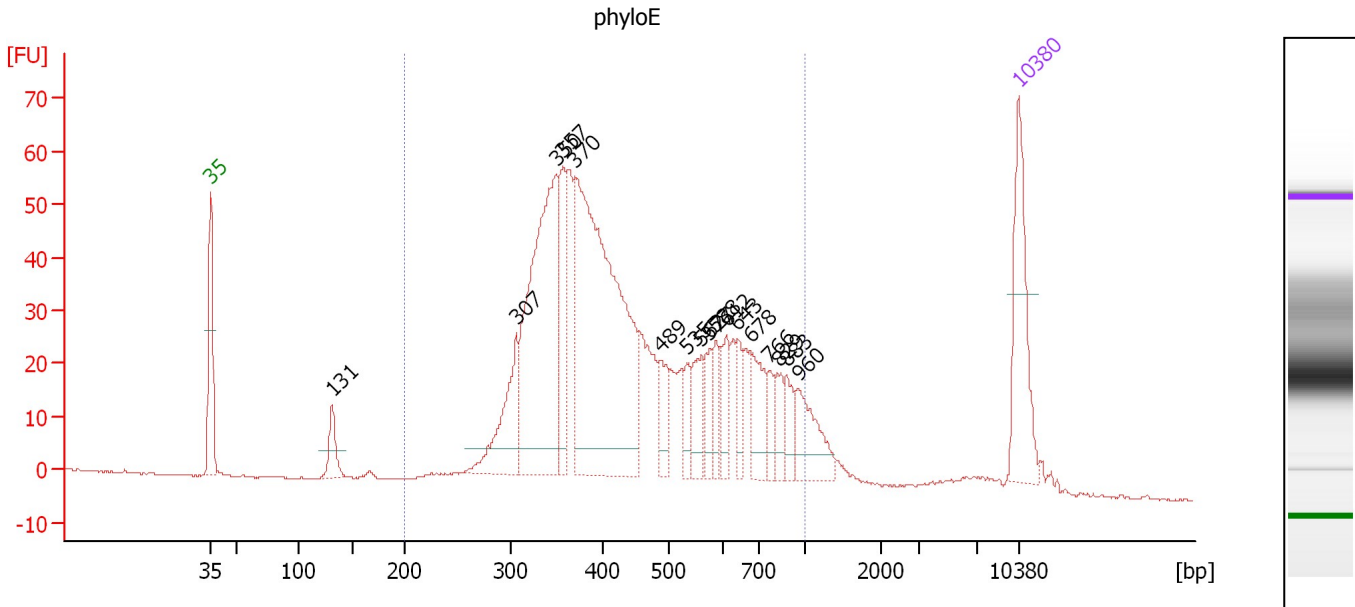
Region table for sample 7 : phyloD

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	488	4,827.0	1,355.51	954.6	90	34.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2014-05-14\2014-05-14_004.xad

Created: 5/14/2014 4:13:20 PM
 Modified: 5/14/2014 5:13:32 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : phyloE

Number of peaks found: 17 Corr. Area 1: 1,115.5
 Noise: 0.1

Peak table for sample 8 : phyloE

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	131	32.82	380.7	
3	307	88.45	436.1	
4	350	292.77	1,268.3	
5	357	76.85	326.0	
6	370	429.06	1,755.1	
7	489	33.96	105.3	
8	535	19.57	55.5	
9	562	33.46	90.2	
10	577	23.87	62.7	
11	588	21.55	55.6	
12	612	29.84	73.8	
13	643	21.49	50.6	
14	678	45.83	102.5	
15	766	17.69	35.0	
16	829	21.29	38.9	
17	883	20.37	35.0	
18	960	48.49	76.5	
19	10,380	75.00	10.9	Upper Marker

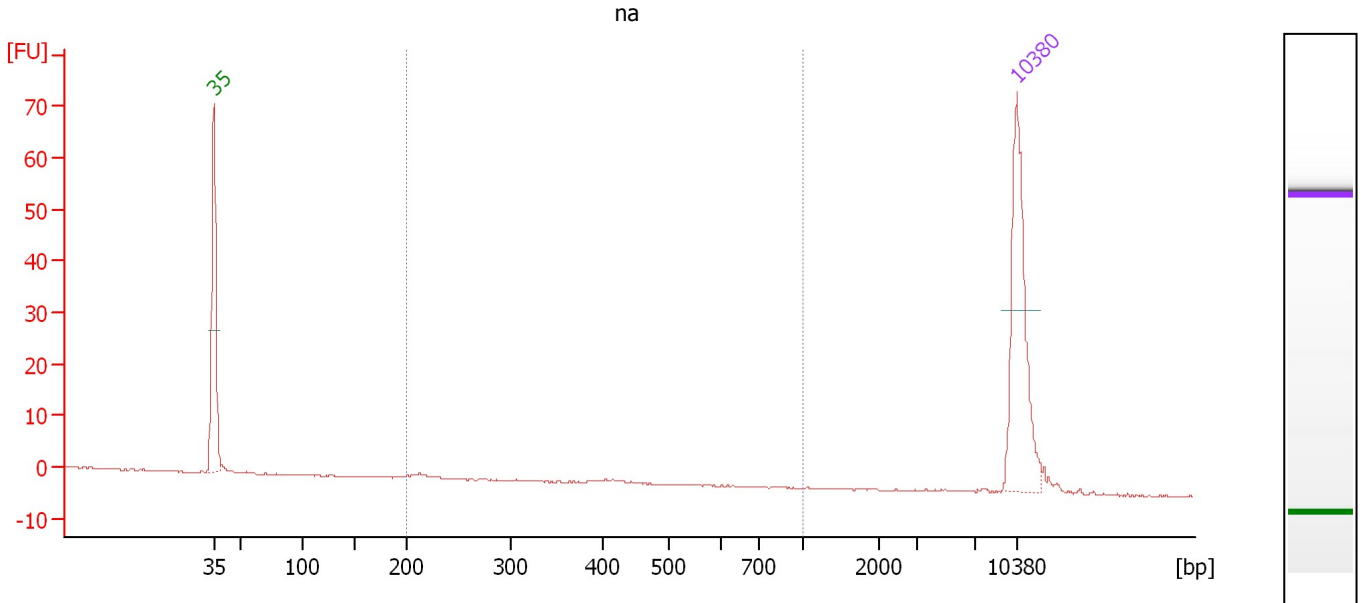
Region table for sample 8 : phyloE

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	469	5,521.3	1,506.74	1,115.5	92	34.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2014-05-14\2014-05-14_004.xad

Created: 5/14/2014 4:13:20 PM
 Modified: 5/14/2014 5:13:32 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : na

Number of peaks found: 0 Corr. Area 1: 1.3
 Noise: 0.1

Peak table for sample 9 : na

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,380	75.00	10.9	Upper Marker

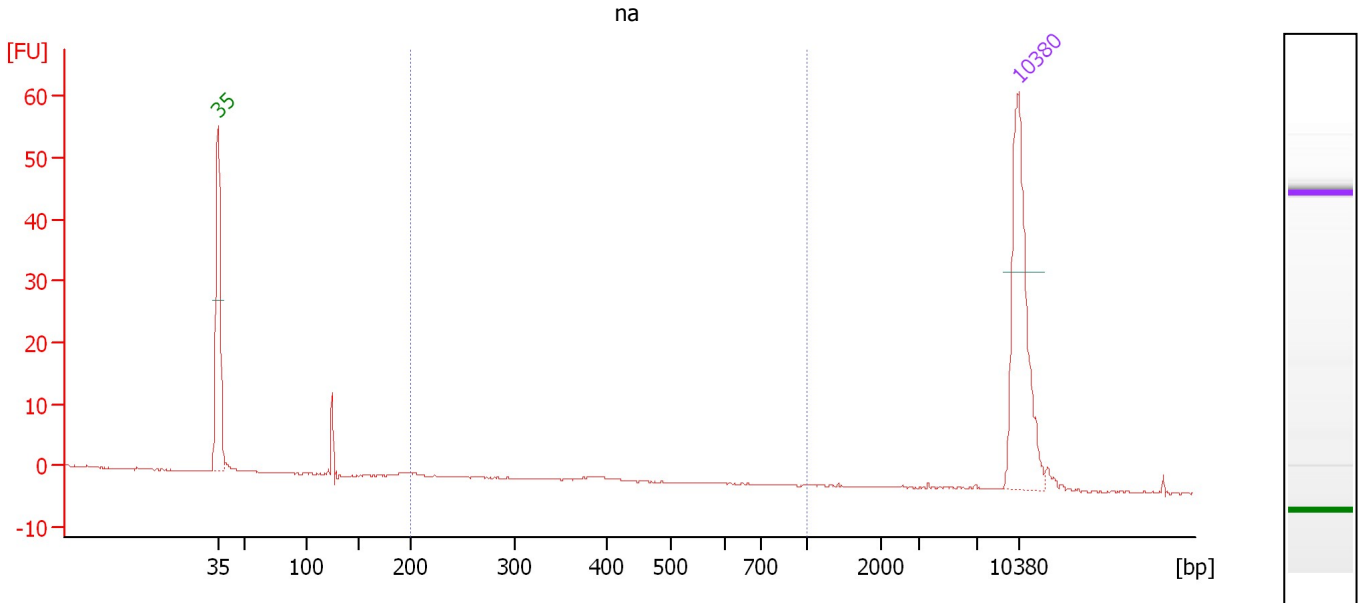
Region table for sample 9 : na

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	320	9.7	1.70	1.3	17	31.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2014-05-14\2014-05-14_004.xad

Created: 5/14/2014 4:13:20 PM
 Modified: 5/14/2014 5:13:32 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : na

Number of peaks found: 0 Corr. Area 1: 0.9
 Noise: 0.1

Peak table for sample 10 : na

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,380	75.00	10.9	Upper Marker

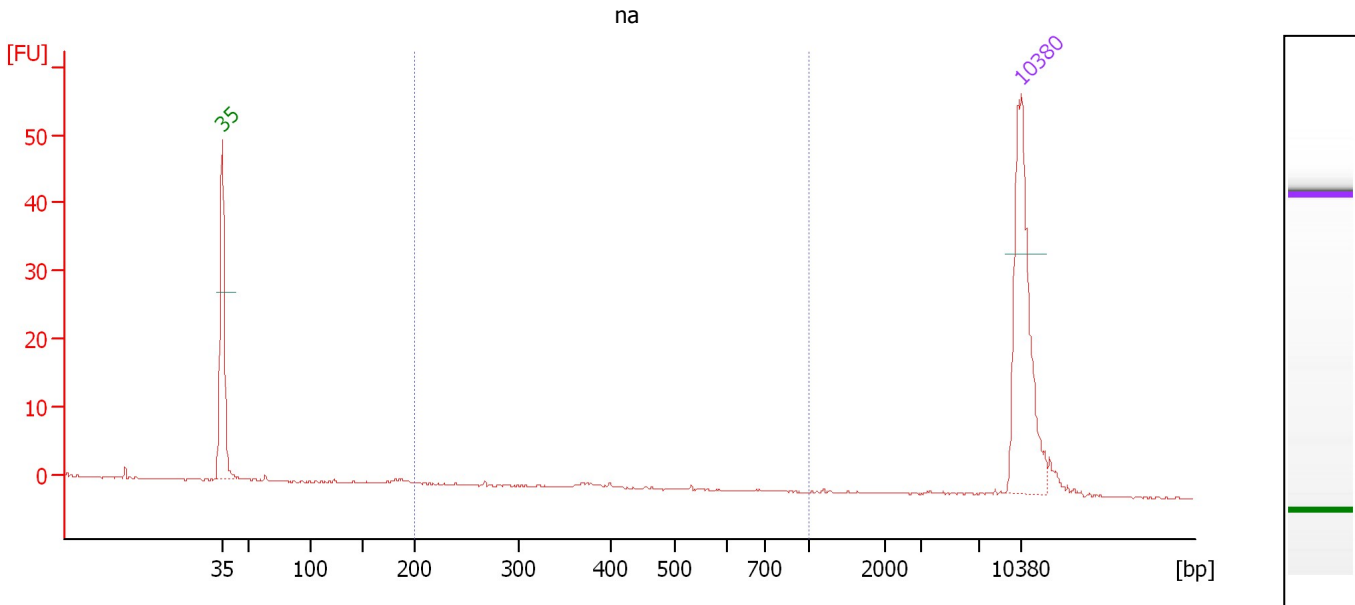
Region table for sample 10 : na

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	368	5.4	1.21	0.9	9	16.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2014-05-14\2014-05-14_004.xad

Created: 5/14/2014 4:13:20 PM
 Modified: 5/14/2014 5:13:32 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : na

Number of peaks found: 0 Corr. Area 1: 2.5
 Noise: 0.1

Peak table for sample 11 : na

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,380	75.00	10.9	Upper Marker

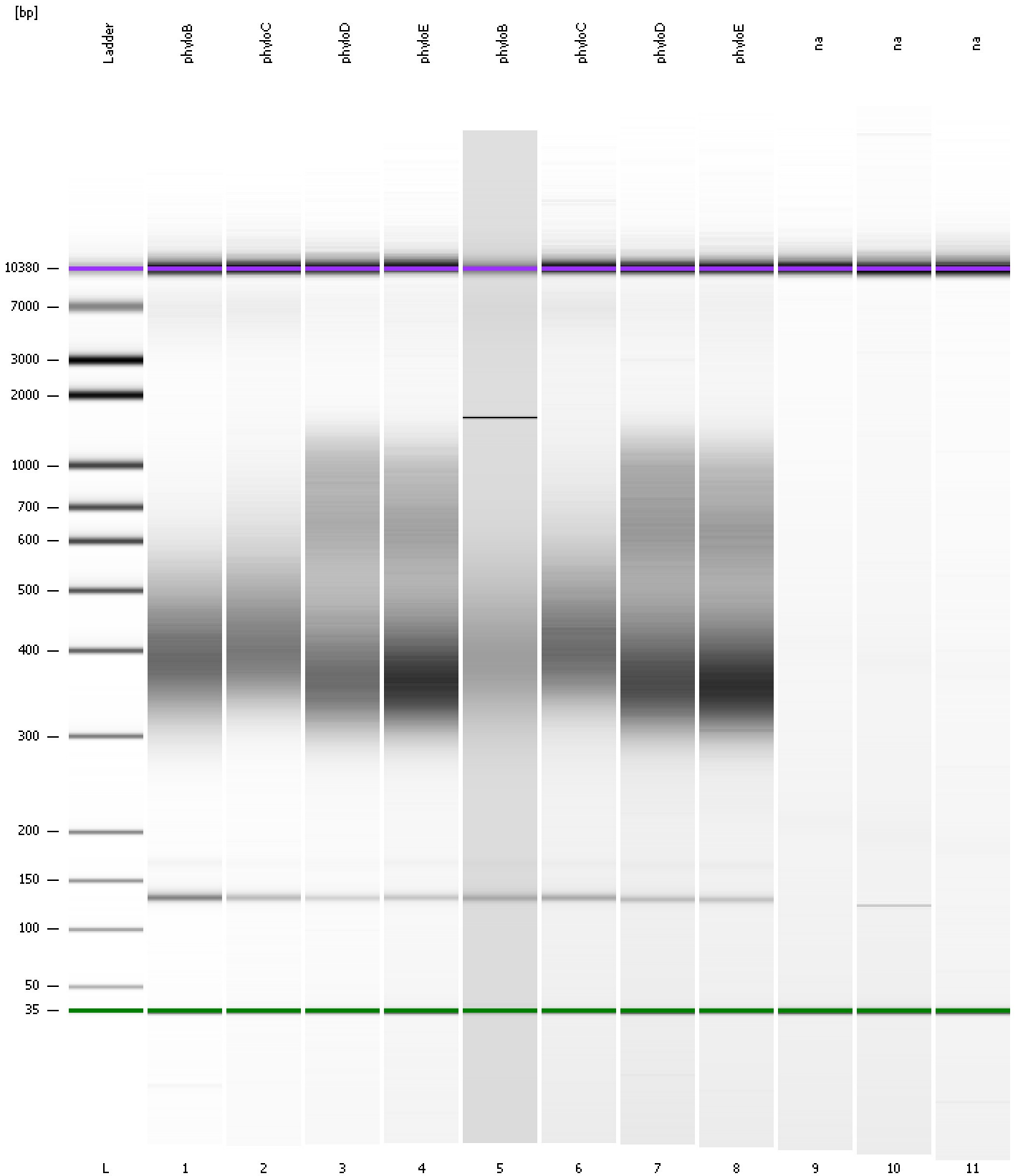
Region table for sample 11 : na

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	388	14.9	3.55	2.5	17	22.9

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2014-05-14\2014-05-14_004.xad

Created: 5/14/2014 4:13:20 PM
Modified: 5/14/2014 5:13:32 PM

Gel Image

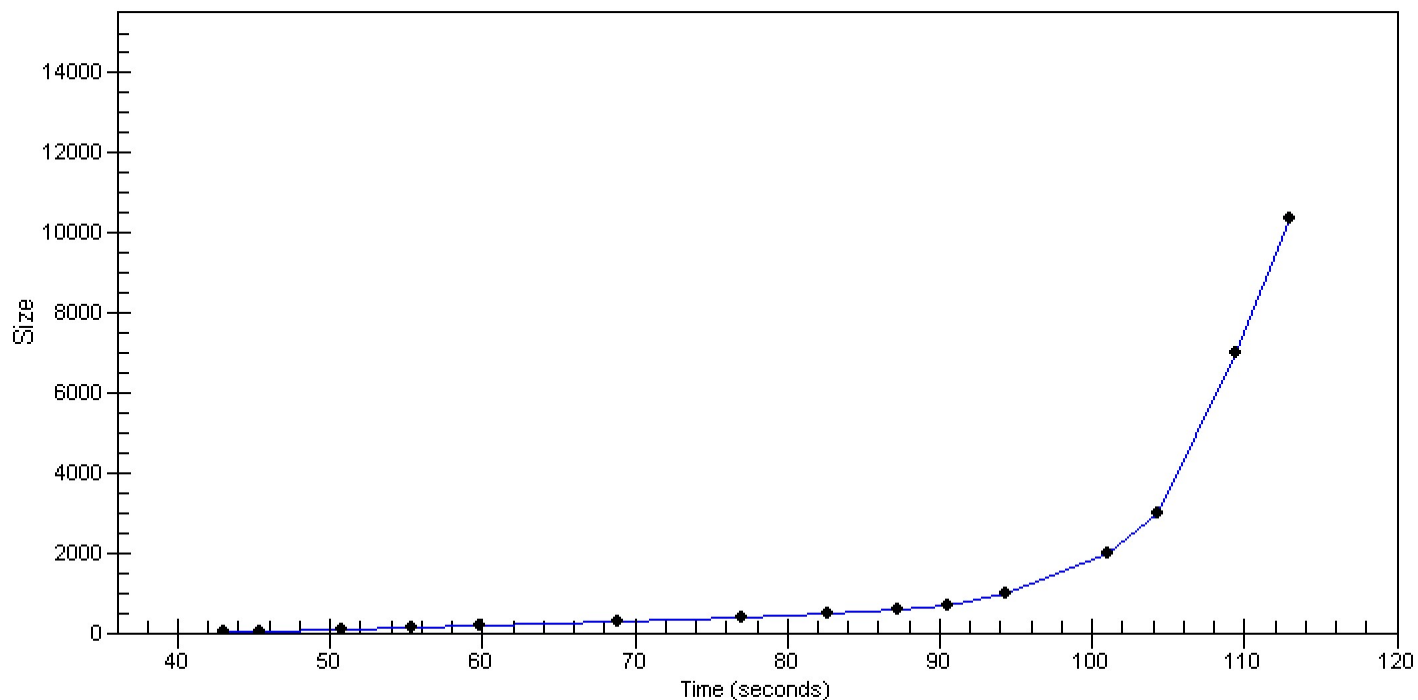


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2014-05-14\2014-05-14_004.xad

Created: 5/14/2014 4:13:20 PM
Modified: 5/14/2014 5:13:32 PM

Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2014-05-14\2014-05-14_004.xad

Created: 5/14/2014 4:13:20 PM
 Modified: 5/14/2014 5:13:32 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		5/14/2014 4:54:38 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\2014-05-14\2014-05-14_004.xad)		Instrument	Run		5/14/2014 4:13:25 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		5/14/2014 4:13:25 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		5/14/2014 4:13:25 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		5/14/2014 4:13:25 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		5/14/2014 4:13:25 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		5/14/2014 4:13:25 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		5/14/2014 4:13:25 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1