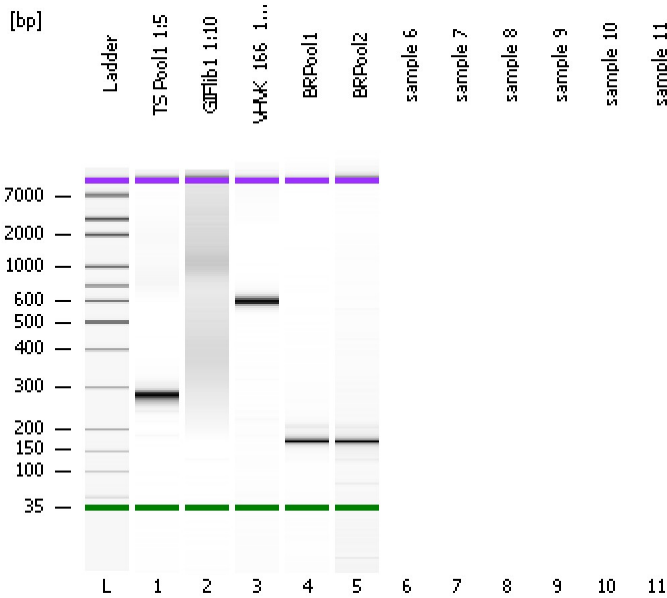


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ttings\Bioanalyzer\2014-09-11\2014-09-11\2014-09-11_001.xad

Created: 9/11/2014 3:38:03 PM
Modified: 9/11/2014 4:11:42 PM

Electrophoresis File Run Summary



Instrument Information:

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

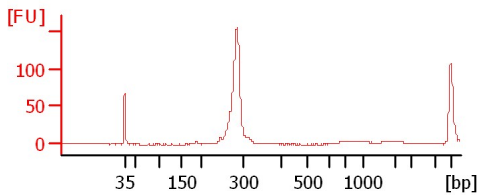
Assay Information:

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

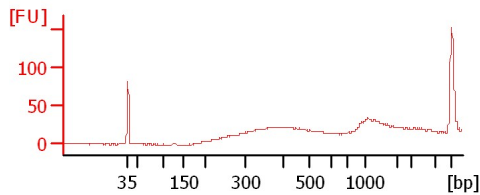
Chip Information:

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

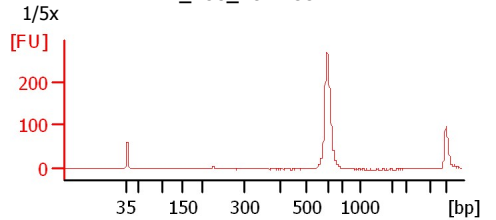
TS Pool1 1:5



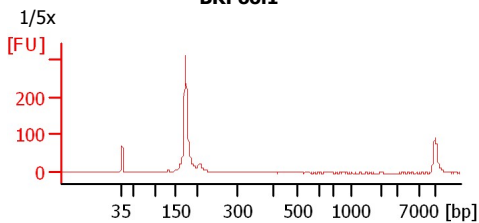
GIFlib1 1:10



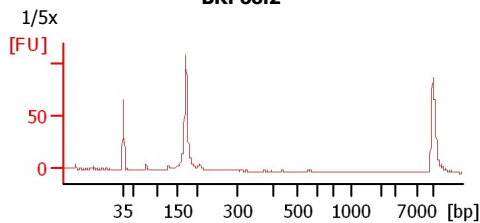
VHK_166_167 Pool 1:2



BRPool1



BRPool2



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ttings\Bioanalyzer\2014-09-11\2014-09-11\2014-09-11_001.xad

Created: 9/11/2014 3:38:03 PM
Modified: 9/11/2014 4:11:42 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
TS Pool1 1:5		<input type="checkbox"/>	✓			
GIFlib1 1:10		<input type="checkbox"/>	✓			
VHVK_166_167 Pool 1:2	1/5x	<input type="checkbox"/>	✓			
BRPool1	1/5x	<input type="checkbox"/>	✓			
BRPool2	1/5x	<input type="checkbox"/>	✓			
sample 6		<input type="checkbox"/>				
sample 7		<input type="checkbox"/>				
sample 8		<input type="checkbox"/>				
sample 9		<input type="checkbox"/>				
sample 10		<input type="checkbox"/>				
sample 11		<input type="checkbox"/>				
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ttings\Bioanalyzer\2014-09-11\2014-09-11\2014-09-11_001.xad

Created: 9/11/2014 3:38:03 PM
 Modified: 9/11/2014 4:11:42 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

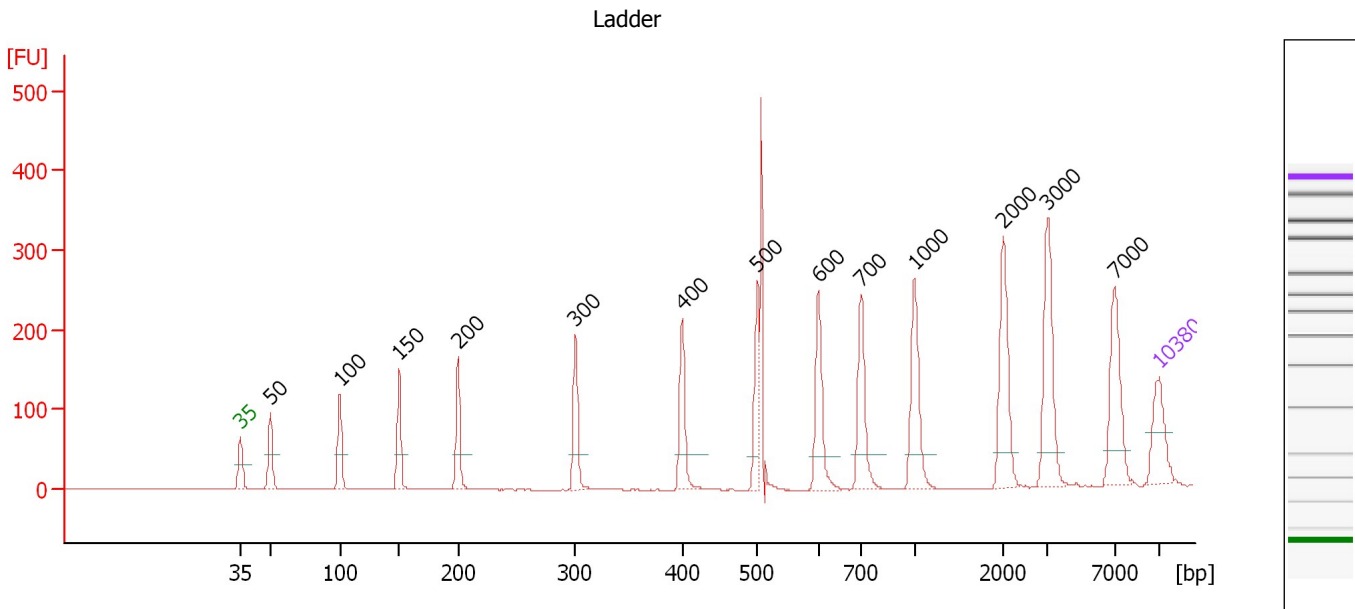
Ladder

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:\...ttings\Bioanalyzer\2014-09-11\2014-09-11\2014-09-11_001.xad

Created: 9/11/2014 3:38:03 PM
 Modified: 9/11/2014 4:11:42 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

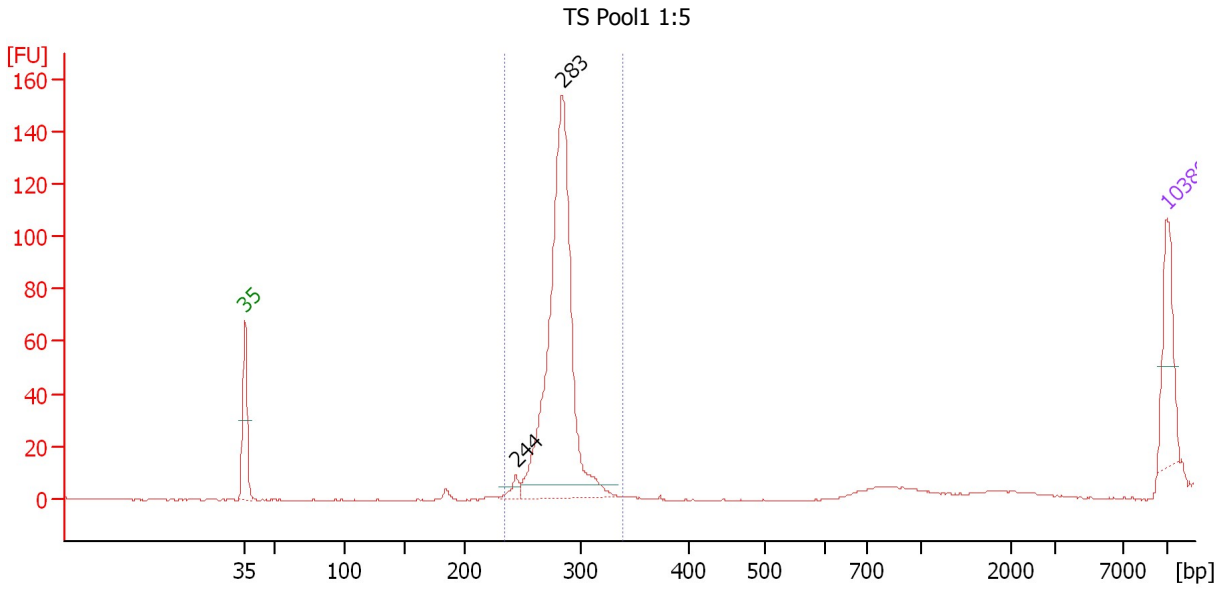
Peak table for Ladder

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:\...ttings\Bioanalyzer\2014-09-11\2014-09-11\2014-09-11_001.xad

Created: 9/11/2014 3:38:03 PM
 Modified: 9/11/2014 4:11:42 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : TS Pool1 1:5

Number of peaks found: 2 Corr. Area 1: 450.1
 Noise: 0.2

Peak table for sample 1 : TS Pool1 1:5

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	244	18.07	112.1	
3	283	711.62	3,807.9	
4	10,380	75.00	10.9	Upper Marker

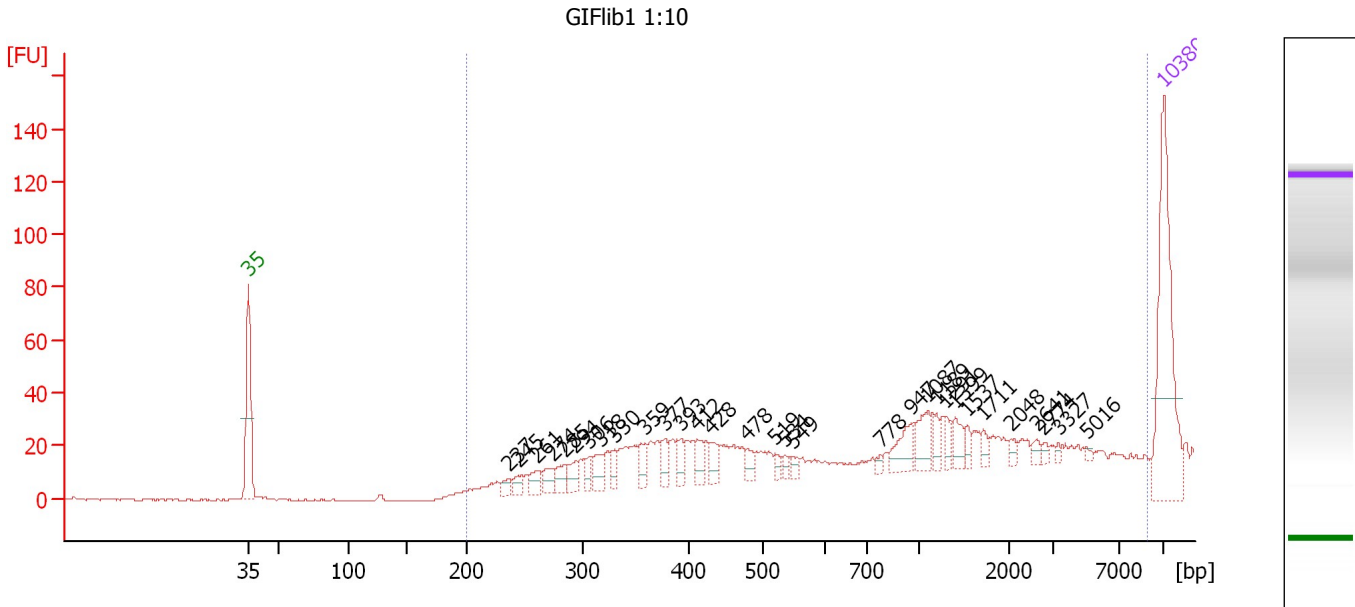
Region table for sample 1 : TS Pool1 1:5

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
235	281	338	450.1	98	4.1	695.43	3,756.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ttings\Bioanalyzer\2014-09-11\2014-09-11\2014-09-11_001.xad

Created: 9/11/2014 3:38:03 PM
 Modified: 9/11/2014 4:11:42 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : GIFlib1 1:10

Number of peaks found: 31 Corr. Area 1: 349.5
 Noise: 0.2

Peak table for sample 2 : GIFlib1 1:10


Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	237	5.95	38.0	
3	245	7.55	46.7	
4	261	10.17	59.1	
5	274	10.31	57.0	
6	285	10.52	55.9	
7	294	10.19	52.5	
8	306	7.68	38.0	
9	318	12.83	61.2	
10	330	8.55	39.2	
11	359	12.31	52.0	
12	377	9.65	38.7	
13	393	9.88	38.1	
14	412	10.49	38.6	
15	428	8.99	31.8	
16	478	7.12	22.6	
17	519	4.42	12.9	
18	534	3.74	10.6	
19	549	4.19	11.6	
20	778	2.75	5.4	
21	947	15.97	25.5	
22	1,087	14.94	20.8	
23	1,189	7.54	9.6	
24	1,291	5.99	7.0	
25	1,399	9.35	10.1	
26	1,537	4.44	4.4	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ttings\Bioanalyzer\2014-09-11\2014-09-11\2014-09-11_001.xad


Created: 9/11/2014 3:38:03 PM
 Modified: 9/11/2014 4:11:42 PM

Electropherogram Summary Continued ...

... Peak table for sample 2 : GIFlib1 1:10

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
27	1,711	4.45	3.9	
28	2,048	3.62	2.7	
29	2,641	3.29	1.9	
30	2,774	2.40	1.3	
31	3,327	1.76	0.8	
32	5,016	1.26	0.4	
33	 10,380	75.00	10.9	Upper Marker

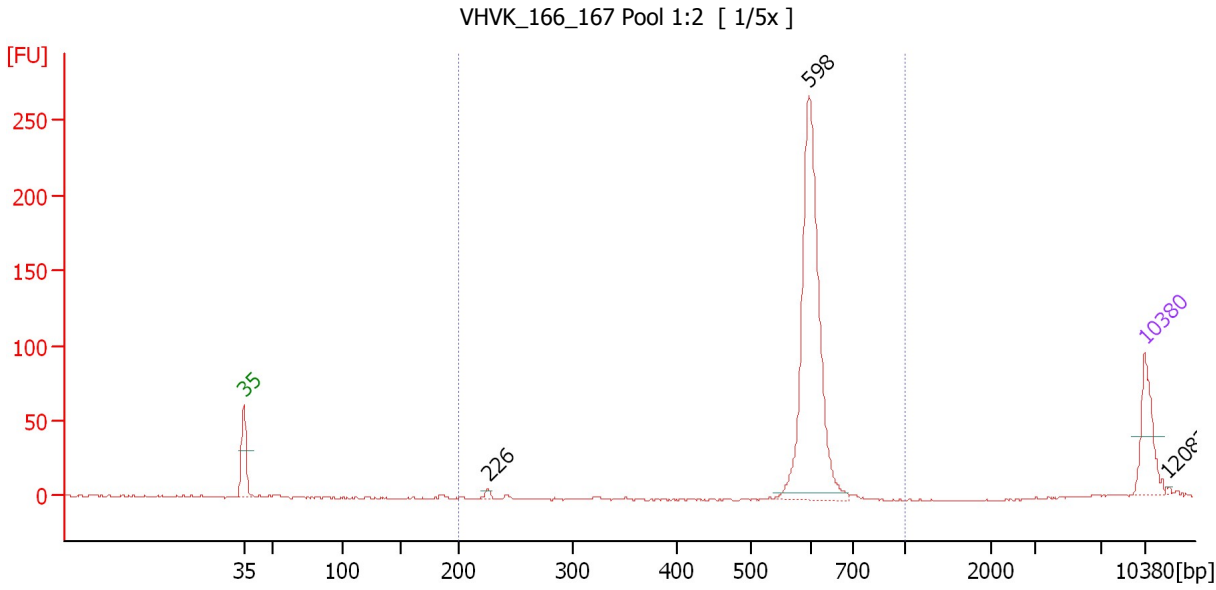
Region table for sample 2 : GIFlib1 1:10

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
200	941	9,090	349.5	100	84.8	224.98	688.8	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ttings\Bioanalyzer\2014-09-11\2014-09-11\2014-09-11_001.xad

Created: 9/11/2014 3:38:03 PM
 Modified: 9/11/2014 4:11:42 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : VHKV 166 167 Pool 1:2

Number of peaks found: 3 Corr. Area 1: 473.7
 Noise: 0.6

Peak table for sample 3 : VHKV 166 167 Pool 1:2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	226	6.68	44.7	
3	598	562.85	1,426.9	
4	10,380	75.00	10.9	Upper Marker
5	12,083	0.00	0.0	

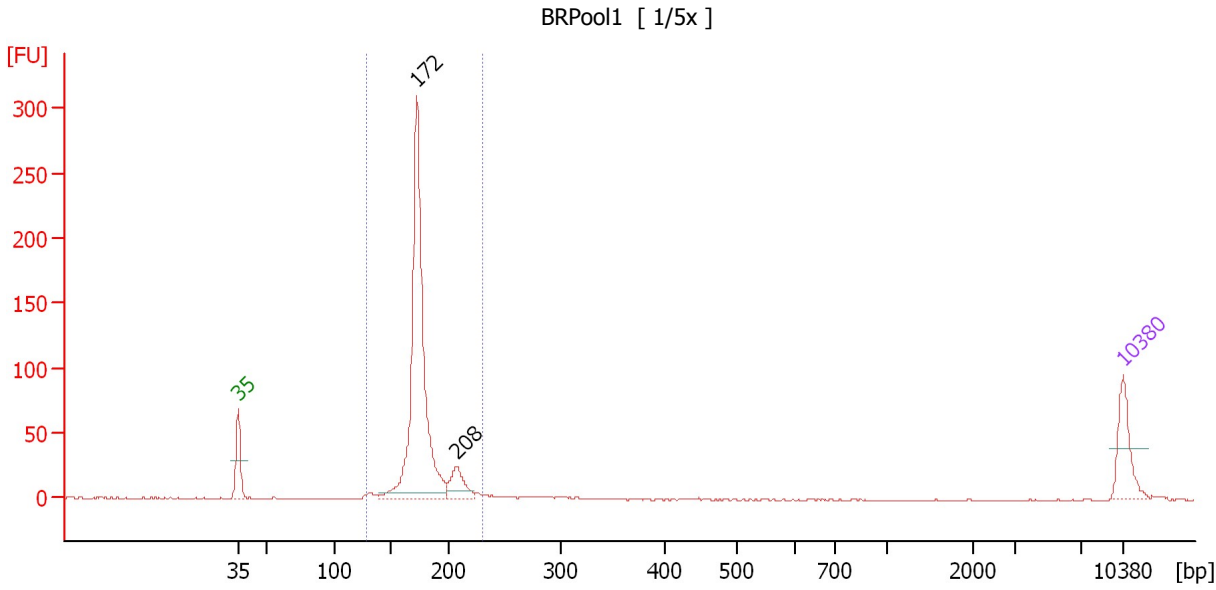
Region table for sample 3 : VHKV 166 167 Pool 1:2

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	602	1,000	473.7	98	5.0	546.36	1,389.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ttings\Bioanalyzer\2014-09-11\2014-09-11\2014-09-11_001.xad

Created: 9/11/2014 3:38:03 PM
 Modified: 9/11/2014 4:11:42 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : BRPool1

Number of peaks found: 2 Corr. Area 1: 641.2
 Noise: 0.4

Peak table for sample 4 : BRPool1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	172	890.51	7,822.3	
3	208	74.74	545.4	
4	10,380	75.00	10.9	Upper Marker

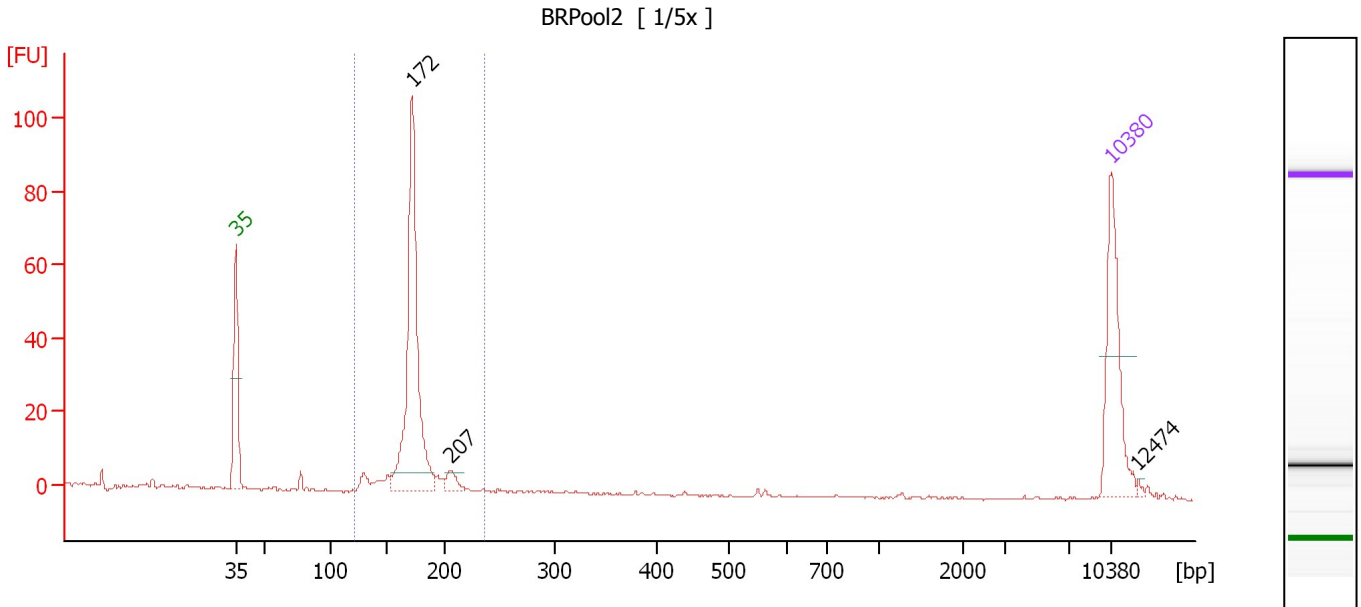
Region table for sample 4 : BRPool1

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
128	177	230	641.2	97	7.9	975.33	8,408.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ttings\Bioanalyzer\2014-09-11\2014-09-11\2014-09-11_001.xad

Created: 9/11/2014 3:38:03 PM
 Modified: 9/11/2014 4:11:42 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : BRPool2

Number of peaks found: 3 Corr. Area 1: 199.5
 Noise: 0.2

Peak table for sample 5 : BRPool2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	172	275.10	2,426.9	
3	207	13.25	97.1	
4	10,380	75.00	10.9	Upper Marker
5	12,474	0.00	0.0	

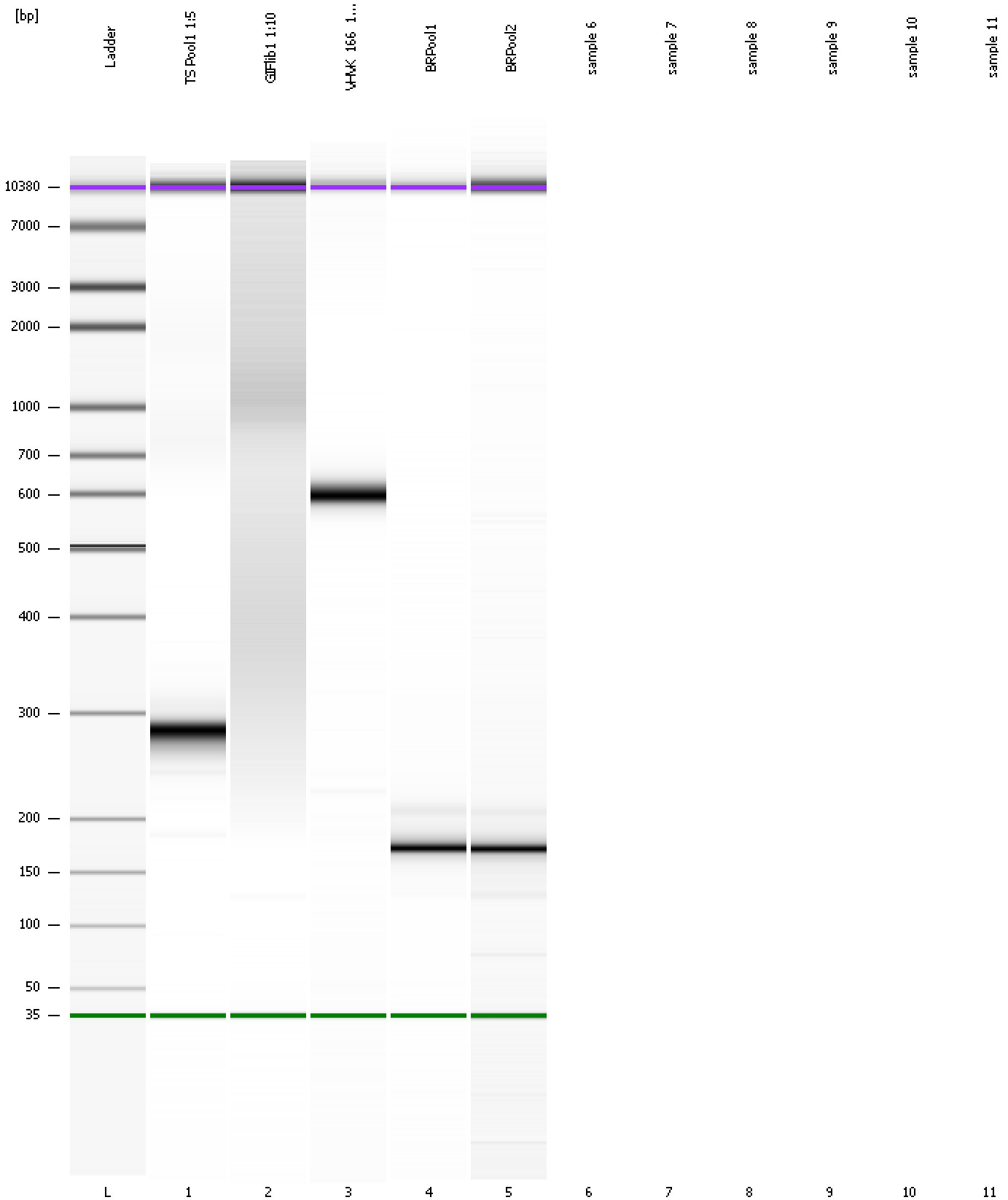
Region table for sample 5 : BRPool2

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
120	173	237	199.5	93	7.6	308.29	2,723.1	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ttings\Bioanalyzer\2014-09-11\2014-09-11\2014-09-11_001.xad

Created: 9/11/2014 3:38:03 PM
Modified: 9/11/2014 4:11:42 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ttings\Bioanalyzer\2014-09-11\2014-09-11\2014-09-11_001.xad

Created: 9/11/2014 3:38:03 PM
Modified: 9/11/2014 4:11:42 PM

Invalid Samples

Sample 6 has not been run, no results available.

Sample 7 has not been run, no results available.

Sample 8 has not been run, no results available.

Sample 9 has not been run, no results available.

Sample 10 has not been run, no results available.

Sample 11 has not been run, no results available.

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ttings\Bioanalyzer\2014-09-11\2014-09-11\2014-09-11_001.xad

Created: 9/11/2014 3:38:03 PM
 Modified: 9/11/2014 4:11:42 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 6)		Instrument	Run		9/11/2014 4:02:08 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2014-09-11\2014-09-11\2014-09-11_001.xad)		Instrument	Run		9/11/2014 3:38:04 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		9/11/2014 3:38:04 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		9/11/2014 3:38:04 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		9/11/2014 3:38:04 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		9/11/2014 3:38:04 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		9/11/2014 3:38:04 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		9/11/2014 3:38:04 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1