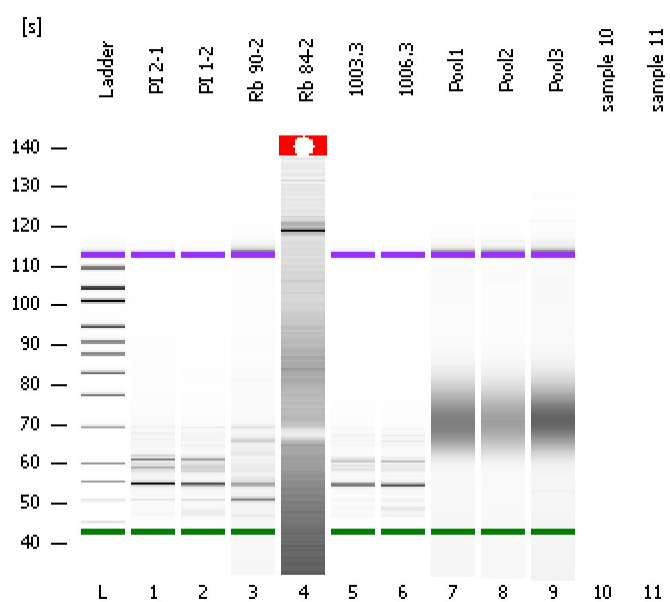


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-08\2014-08-08_001.xad

Created: 8/8/2014 11:54:40 AM
Modified: 8/8/2014 12:30:38 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

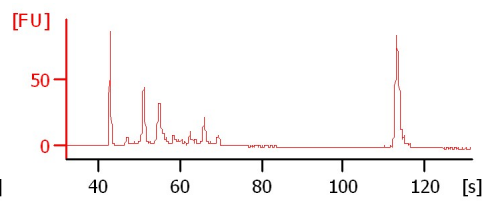
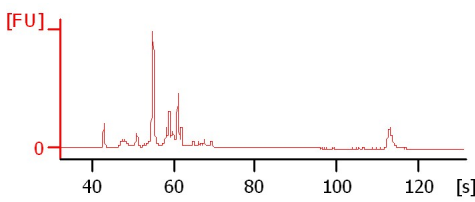
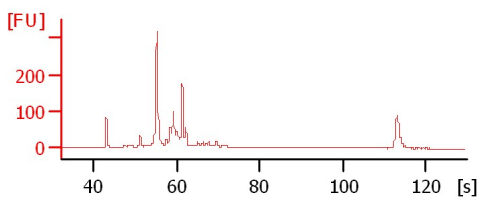
Chip Information:

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

PI 2-1

PI 1-2

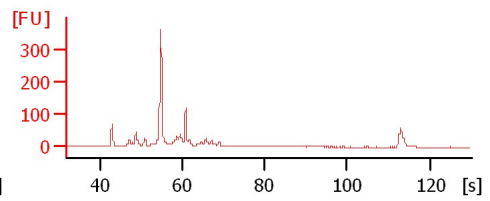
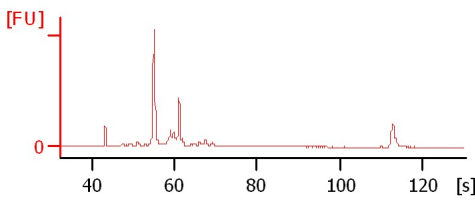
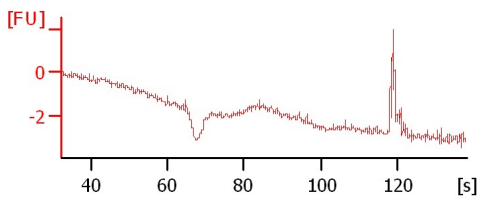
Rb 90-2



Rb 84-2

1003.3

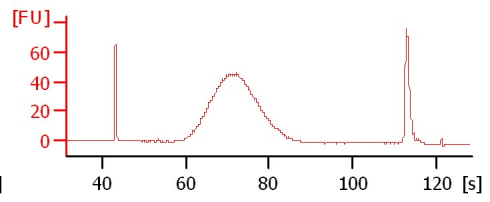
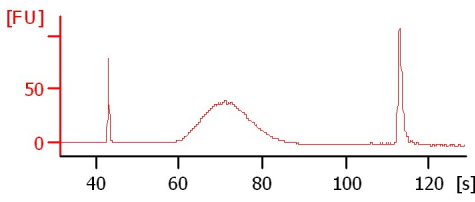
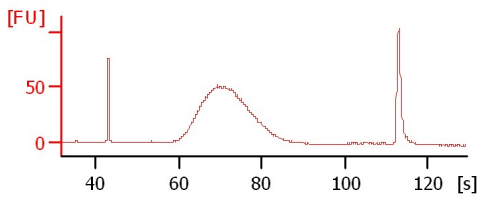
1006.3



Pool1

Pool2

Pool3



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-08\2014-08-08_001.xad

Created: 8/8/2014 11:54:40 AM
 Modified: 8/8/2014 12:30:38 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
PI 2-1		<input type="checkbox"/>	✓			
PI 1-2		<input type="checkbox"/>	✓			
Rb 90-2		<input type="checkbox"/>	✓			
Rb 84-2		<input type="checkbox"/>	✓			
1003.3		<input type="checkbox"/>	✓			
1006.3		<input type="checkbox"/>	✓			
Pool1		<input type="checkbox"/>	✓			
Pool2		<input type="checkbox"/>	✓			
Pool3		<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:\... bioanalyzer\2100 expert\Data\2014-08-08\2014-08-08_001.xad

Created: 8/8/2014 11:54:40 AM
Modified: 8/8/2014 12:30:38 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

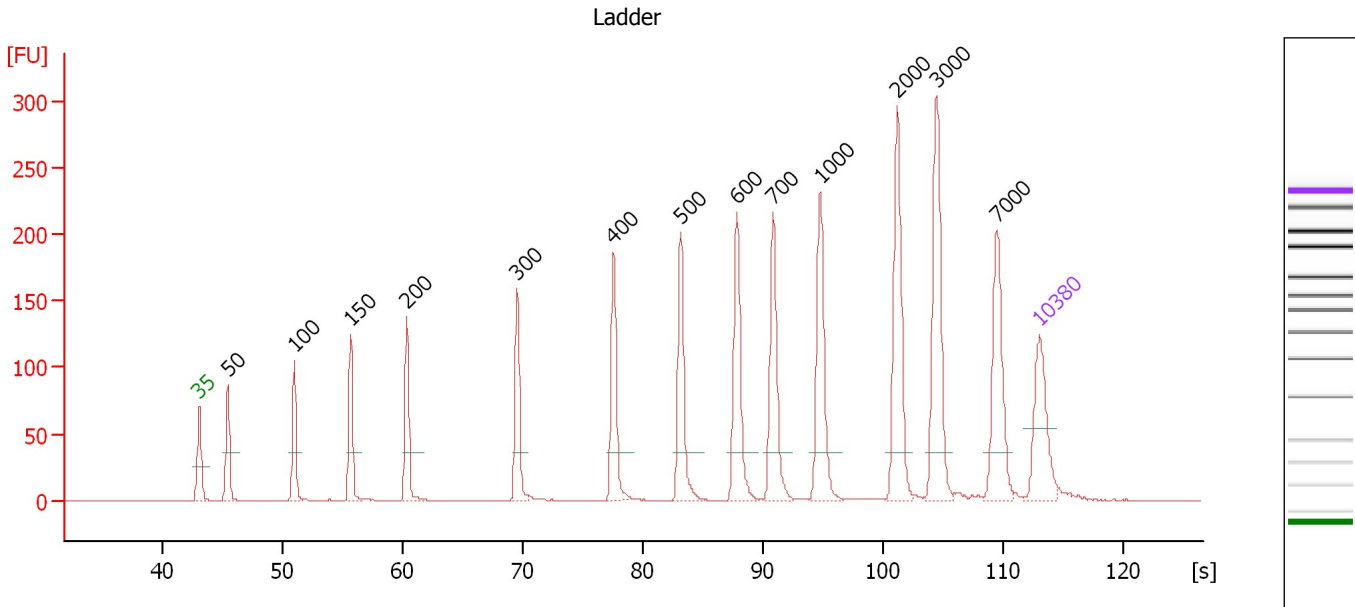
Ladder

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\2014-08-08\2014-08-08_001.xad

Created: 8/8/2014 11:54:40 AM
 Modified: 8/8/2014 12:30:38 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

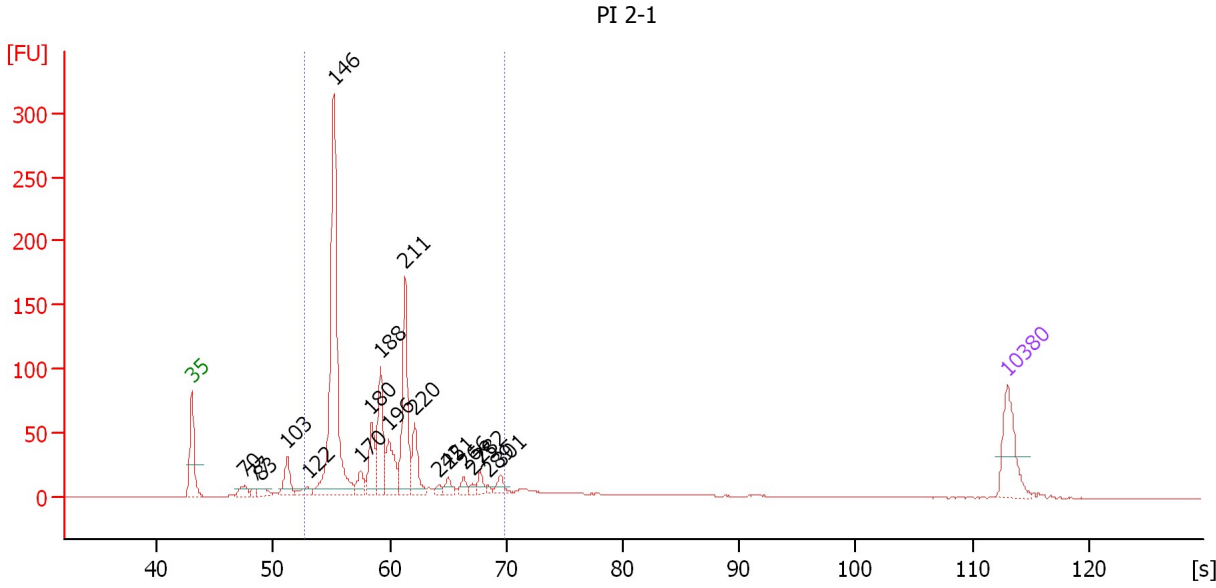
Peak table for Ladder

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:\... bioanalyzer\2100 expert\Data\2014-08-08\2014-08-08_001.xad

Created: 8/8/2014 11:54:40 AM
 Modified: 8/8/2014 12:30:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : PI 2-1

Number of peaks found: 19 Corr. Area 1: 1,008.7
 Noise: 0.2

Peak table for sample 1 : PI 2-1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	70	23.29	505.9	
3	77	10.46	206.4	
4	83	20.28	371.9	
5	103	59.41	873.6	
6	122	22.18	276.2	
7	146	613.13	6,374.8	
8	170	31.77	282.7	
9	180	81.20	683.3	
10	188	133.63	1,074.6	
11	196	87.39	676.3	
12	211	204.17	1,464.4	
13	220	73.42	505.0	
14	242	9.06	56.6	
15	251	17.34	104.5	
16	266	16.36	93.2	
17	275	8.65	47.7	
18	282	18.65	100.3	
19	289	5.71	30.0	
20	301	19.93	100.4	
21	10,380	75.00	10.9	Upper Marker

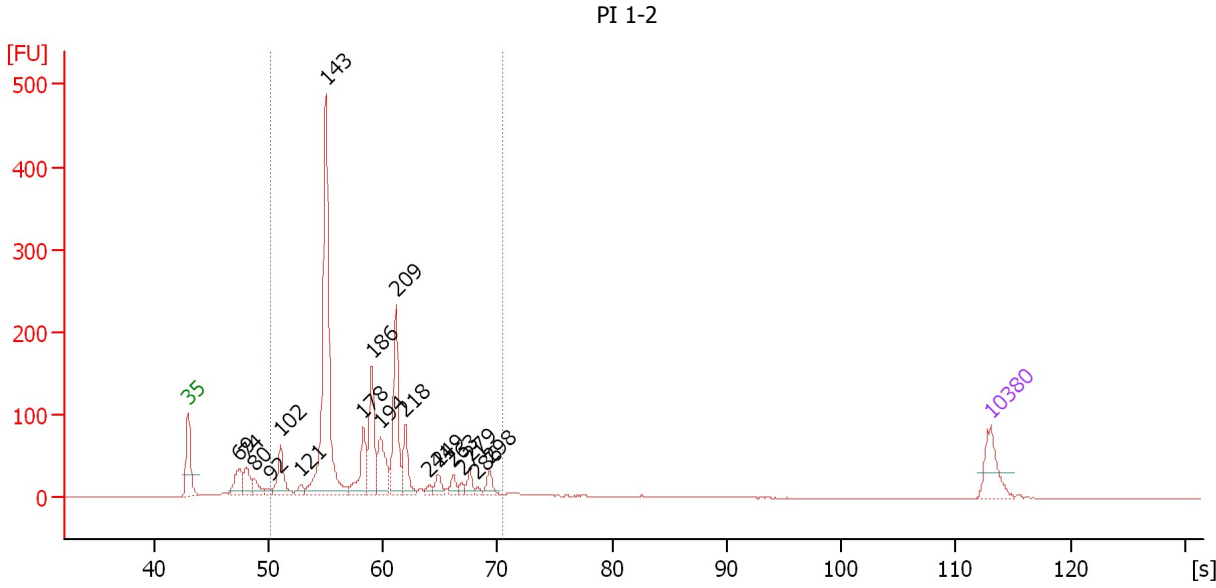
Region table for sample 1 : PI 2-1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
119	306	187	12,453.3	1,439.83	1,008.7	81	22.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-08\2014-08-08_001.xad

Created: 8/8/2014 11:54:40 AM
 Modified: 8/8/2014 12:30:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : PI 1-2

Number of peaks found: 19 Corr. Area 1: 1,587.6
 Noise: 0.2

Peak table for sample 2 : PI 1-2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	69	85.22	1,877.2	
3	74	75.78	1,554.7	
4	80	45.96	868.4	
5	92	15.26	250.1	
6	102	123.48	1,842.0	
7	121	25.02	314.5	
8	143	895.74	9,457.8	
9	178	135.22	1,148.2	
10	186	196.69	1,598.6	
11	194	133.15	1,037.7	
12	209	256.75	1,860.4	
13	218	102.31	711.7	
14	241	16.08	101.2	
15	249	33.50	203.9	
16	263	27.96	160.9	
17	271	15.48	86.4	
18	279	31.17	169.2	
19	286	9.59	50.8	
20	298	35.77	181.8	
21	10,380	75.00	10.9	Upper Marker

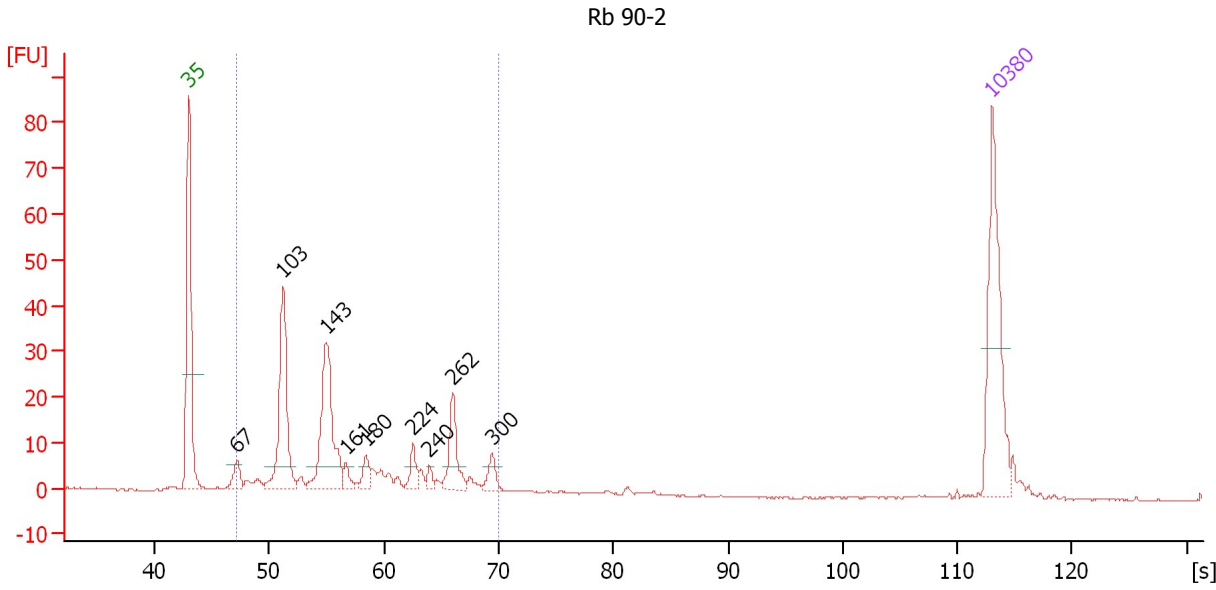
Region table for sample 2 : PI 1-2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
93	313	181	20,220.8	2,210.39	1,587.6	85	26.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-08\2014-08-08_001.xad

Created: 8/8/2014 11:54:40 AM
 Modified: 8/8/2014 12:30:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : Rb 90-2

Number of peaks found: 9 Corr. Area 1: 264.3
 Noise: 0.2

Peak table for sample 3 : Rb 90-2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	67	16.25	369.7	
3	103	122.89	1,799.9	
4	143	121.35	1,287.3	
5	161	10.35	97.2	
6	180	14.17	119.2	
7	224	15.02	101.6	
8	240	6.11	38.6	
9	262	36.48	210.6	
10	300	12.39	62.6	
11	10,380	75.00	10.9	Upper Marker

Region table for sample 3 : Rb 90-2

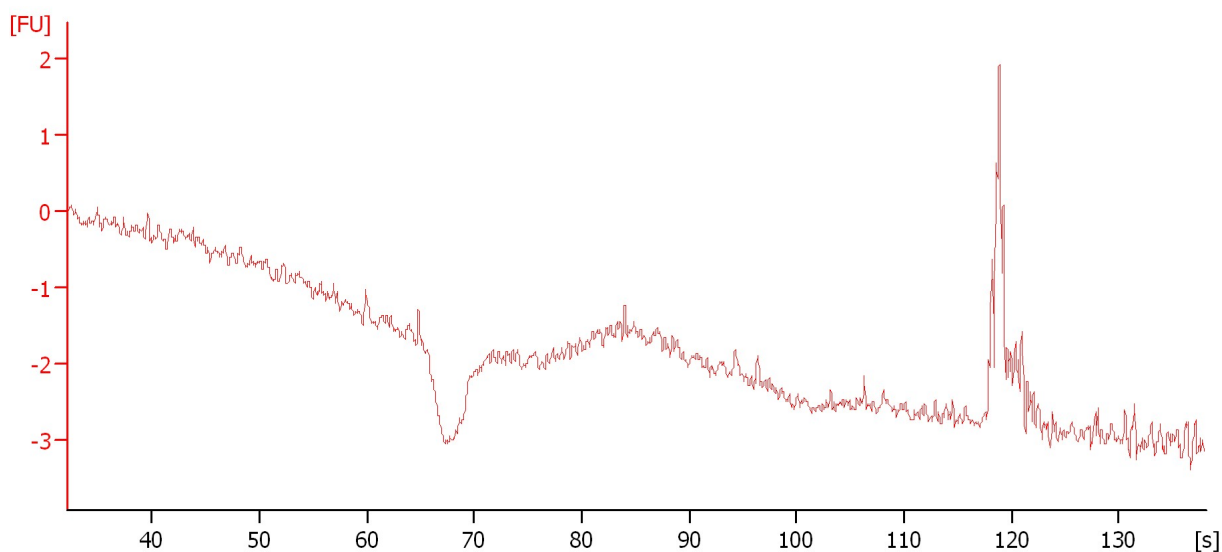
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
66	307	170	4,622.6	428.61	264.3	91	38.7

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-08\2014-08-08_001.xad

Created: 8/8/2014 11:54:40 AM
Modified: 8/8/2014 12:30:38 PM

Electropherogram Summary Continued ...

Rb 84-2



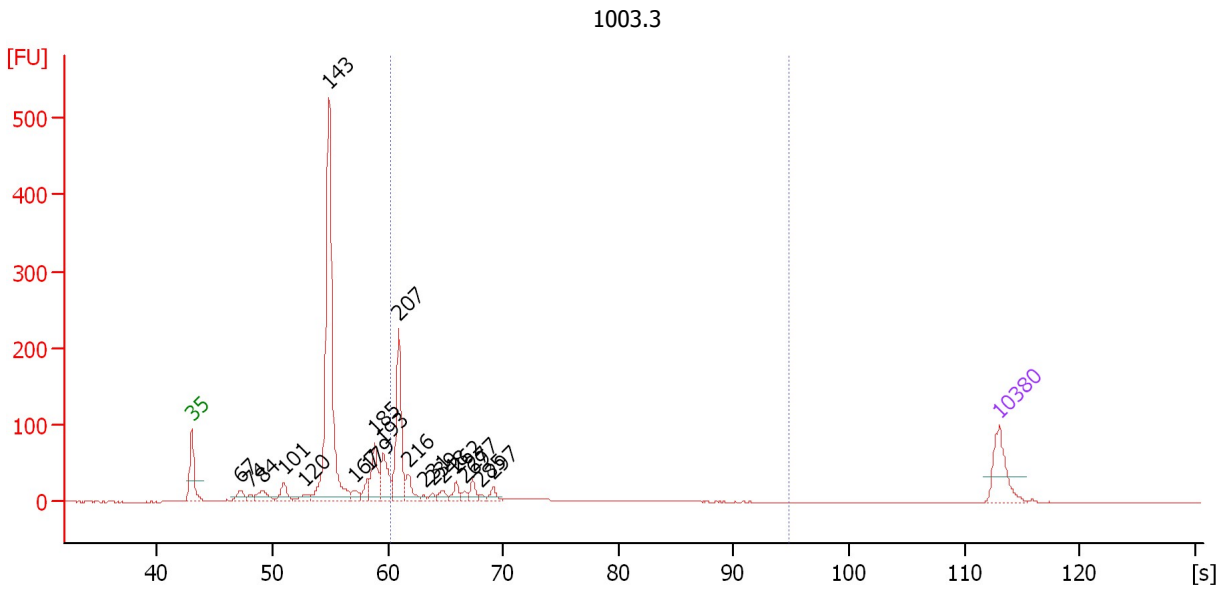
Overall Results for sample 4 : Rb 84-2

Noise: 0.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-08\2014-08-08_001.xad

Created: 8/8/2014 11:54:40 AM
 Modified: 8/8/2014 12:30:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : 1003.3

Number of peaks found: 20 Corr. Area 1: 432.3
 Noise: 0.1

Peak table for sample 5 : 1003.3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	67	27.94	629.5	
3	74	13.70	279.0	
4	84	42.66	772.8	
5	101	42.36	635.5	
6	120	21.32	269.5	
7	143	838.52	8,906.5	
8	167	21.14	191.9	
9	179	31.49	266.8	
10	185	94.61	775.7	
11	193	98.75	776.4	
12	207	227.13	1,660.2	
13	216	44.47	311.3	
14	231	6.30	41.4	
15	239	9.58	60.6	
16	248	17.53	106.9	
17	262	24.46	141.6	
18	269	10.93	61.5	
19	277	24.04	131.3	
20	285	7.30	38.8	
21	297	17.56	89.7	
22	10,380	75.00	10.9	Upper Marker

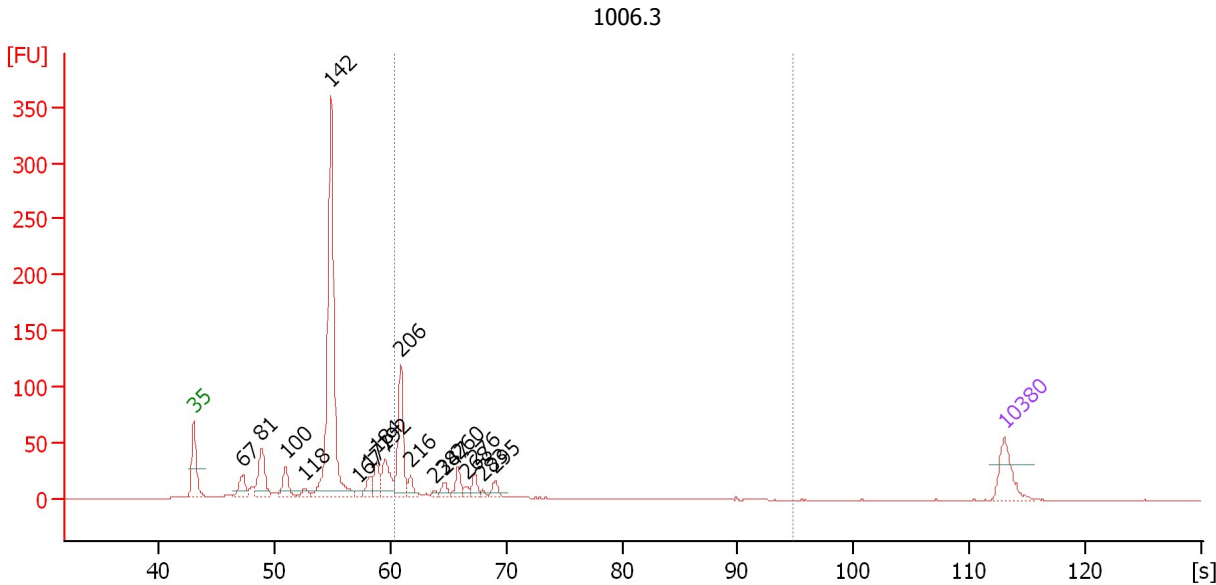
Region table for sample 5 : 1003.3

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	261	3,067.1	489.11	432.3	30	35.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-08\2014-08-08_001.xad

Created: 8/8/2014 11:54:40 AM
 Modified: 8/8/2014 12:30:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : 1006.3

Number of peaks found: 18 Corr. Area 1: 265.5
 Noise: 0.1

Peak table for sample 6 : 1006.3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	67	69.83	1,586.7	
3	81	153.55	2,861.0	
4	100	80.47	1,217.2	
5	118	27.11	348.3	
6	142	979.17	10,437.3	
7	167	14.85	134.5	
8	177	40.66	347.6	
9	184	68.21	562.8	
10	192	103.13	815.8	
11	206	213.73	1,572.1	
12	216	34.32	241.2	
13	238	10.39	66.2	
14	247	27.95	171.1	
15	260	47.25	275.2	
16	268	16.24	91.7	
17	276	32.20	176.9	
18	283	10.07	53.8	
19	295	27.60	141.7	
20	10,380	75.00	10.9	Upper Marker

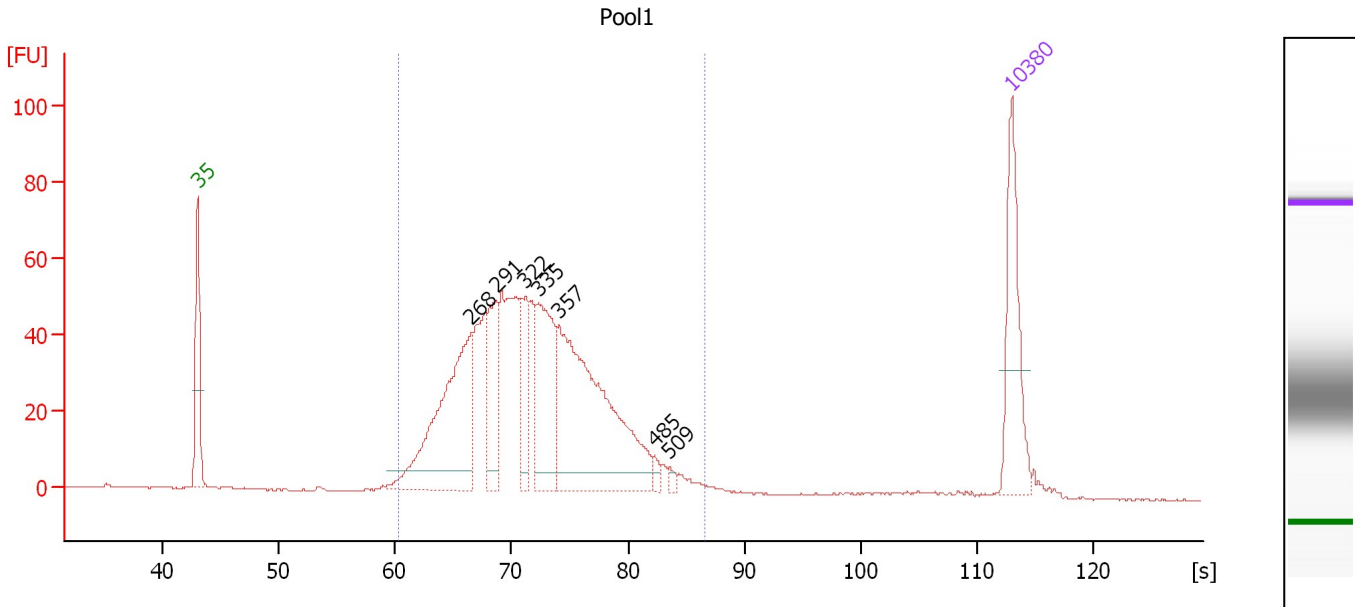
Region table for sample 6 : 1006.3

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	256	3,218.3	516.22	265.5	26	30.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-08\2014-08-08_001.xad

Created: 8/8/2014 11:54:40 AM
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Electropherogram Summary Continued ...



Overall Results for sample 7 : Pool1

Number of peaks found: 7 Corr. Area 1: 1,040.5
 Noise: 0.1

Peak table for sample 7 : Pool1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	268	233.46	1,322.1	
3	291	85.38	444.2	
4	322	60.84	286.7	
5	335	128.89	583.4	
6	357	296.47	1,257.9	
7	485	7.55	23.6	
8	509	4.85	14.4	
9	10,380	75.00	10.9	Upper Marker

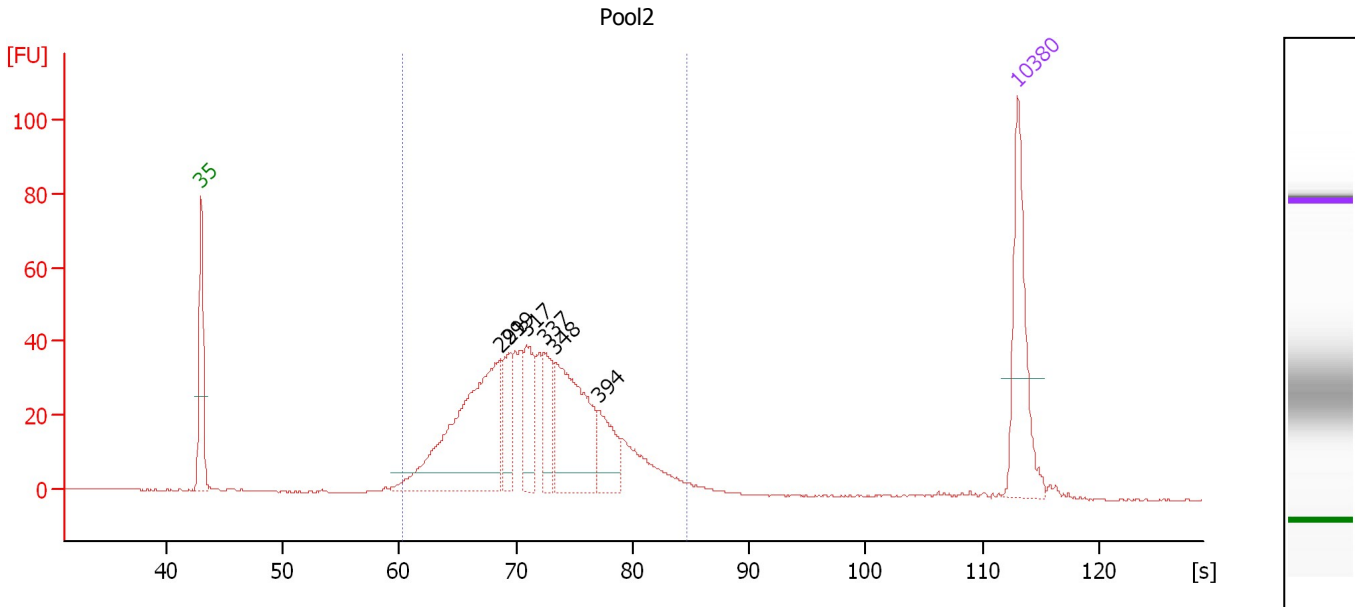
Region table for sample 7 : Pool1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	574	332	5,360.5	1,110.71	1,040.5	96	20.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-08\2014-08-08_001.xad

Created: 8/8/2014 11:54:40 AM
 Modified: 8/8/2014 12:30:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : Pool2

Number of peaks found: 6 Corr. Area 1: 758.8
 Noise: 0.1

Peak table for sample 8 : Pool2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	291	247.96	1,291.2	
3	299	46.22	234.6	
4	317	56.17	268.3	
5	337	51.50	231.8	
6	348	140.61	612.1	
7	394	43.15	166.0	
8	10,380	75.00	10.9	Upper Marker

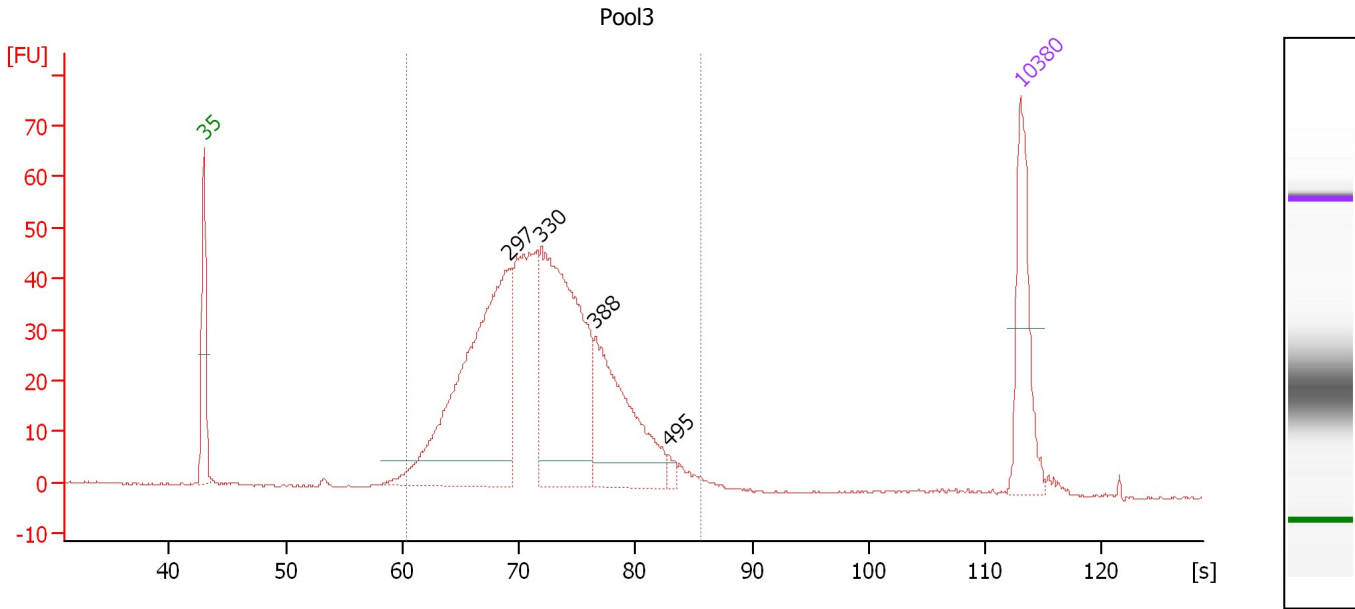
Region table for sample 8 : Pool2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	533	331	3,645.0	756.03	758.8	96	19.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-08\2014-08-08_001.xad

Created: 8/8/2014 11:54:40 AM
 Modified: 8/8/2014 12:30:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : Pool3

Number of peaks found: 4 Corr. Area 1: 876.7
 Noise: 0.2

Peak table for sample 9 : Pool3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	297	411.08	2,097.1	
3	330	343.93	1,580.2	
4	388	172.02	671.6	
5	495	7.20	22.0	
6	10,380	75.00	10.9	Upper Marker

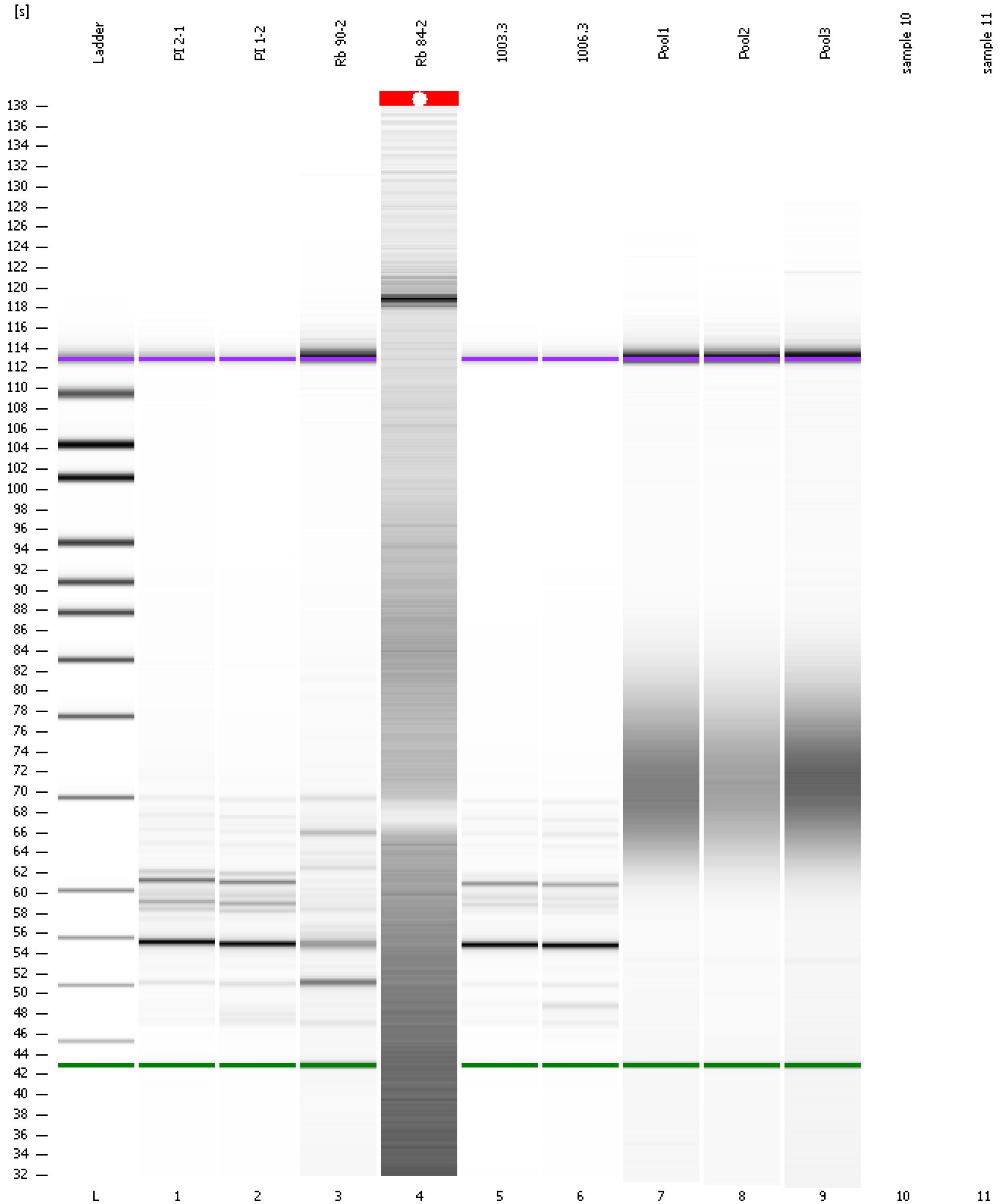
Region table for sample 9 : Pool3

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	552	334	5,523.9	1,158.25	876.7	97	19.6

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-08\2014-08-08_001.xad

Created: 8/8/2014 11:54:40 AM
Modified: 8/8/2014 12:30:38 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-08\2014-08-08_001.xad

Created: 8/8/2014 11:54:40 AM
Modified: 8/8/2014 12:30:38 PM

Invalid Samples

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:\... bioanalyzer\2100 expert\Data\2014-08-08\2014-08-08_001.xad

Created: 8/8/2014 11:54:40 AM
 Modified: 8/8/2014 12:30:38 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 10)		Instrument	Run		8/8/2014 12:30:14 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\2014-08-08\2014-08-08_001.xad)		Instrument	Run		8/8/2014 11:54:46 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		8/8/2014 11:54:46 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		8/8/2014 11:54:46 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		8/8/2014 11:54:46 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		8/8/2014 11:54:46 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		8/8/2014 11:54:46 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		8/8/2014 11:54:46 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1