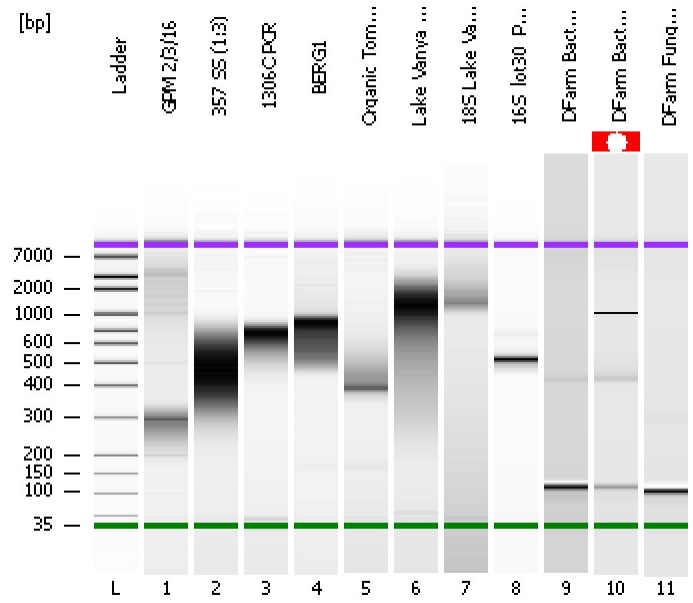
Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-03\2016-02-03_003.xad

Created: 2/3/2016 4:00:29 PM
Modified: 2/3/2016 4:40:54 PM

Electrophoresis File Run Summary



Instrument Information:

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

Assay Information:

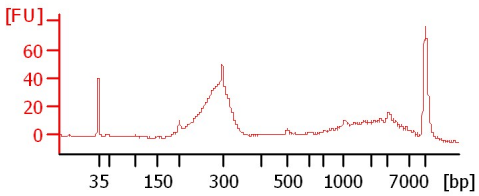
Assay Origin Path: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\assays\dsDNA\High Sensitivity DNA.xsy

Assay Class: High Sensitivity DNA Assay
Version: 1.03
Assay Comments: Copyright © 2003-2010 Agilent Technologies

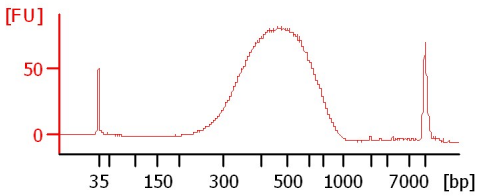
Chip Information:

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

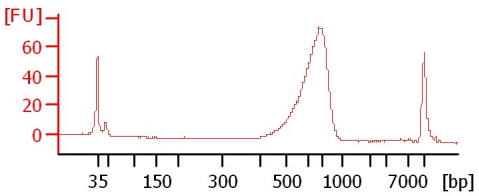
GPM 2/3/16



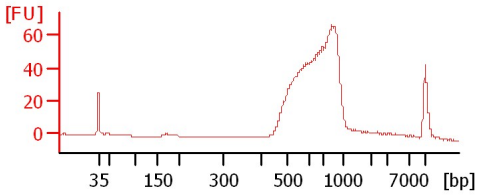
357 SS (1:3)



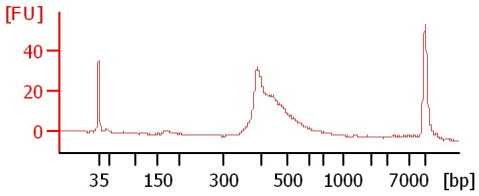
1306C PCR



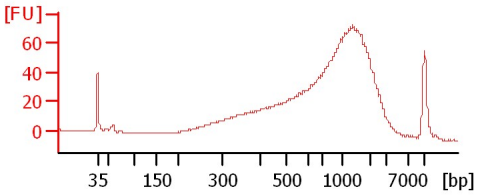
BERG1



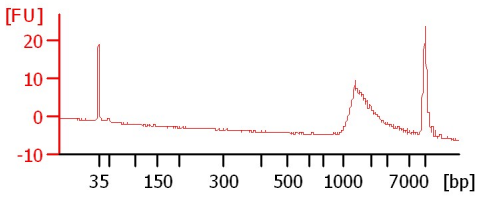
Organic Tomato Pool2



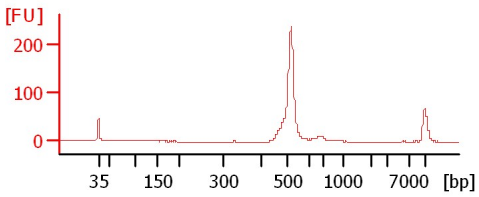
Lake Vanya Green2 (1:3)



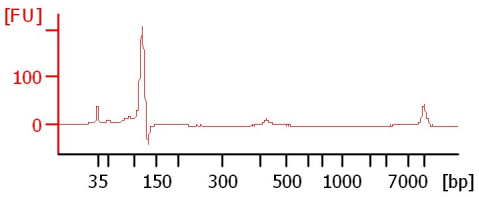
18S Lake Vanda



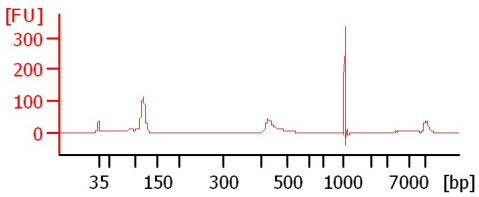
16S_lot30_PostTi 1:10 (1:3)



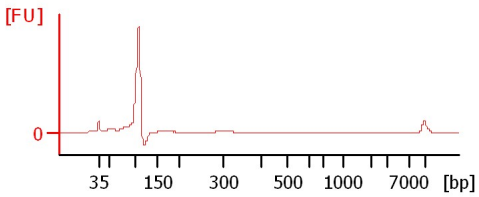
DFarm Bact1 (B1)



DFarm Bact2 (B2)



DFarm Fungi1 (F1)



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-03\2016-02-03_003.xad

Created: 2/3/2016 4:00:29 PM
Modified: 2/3/2016 4:40:54 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
GPM 2/3/16		☐	✓			
357 SS (1:3)		☐	✓			
1306C PCR		☐	✓			
BERG1		☐	✓			
Organic Tomato Pool2		☐	✓			
Lake Vanya Green2 (1:3)		☐	✓			
18S Lake Vanda		☐	✓			
16S_lot30_PostTi 1:10 (1:3)		☐	✓			
DFarm Bact1 (B1)		☐	✓			
DFarm Bact2 (B2)		☐	⚠			
DFarm Fungi1 (F1)		☐	✓			
Ladder		☐	✓			

Chip Lot # **Reagent Kit Lot #**

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-03\2016-02-03_003.xad

Created: 2/3/2016 4:00:29 PM
Modified: 2/3/2016 4:40:54 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

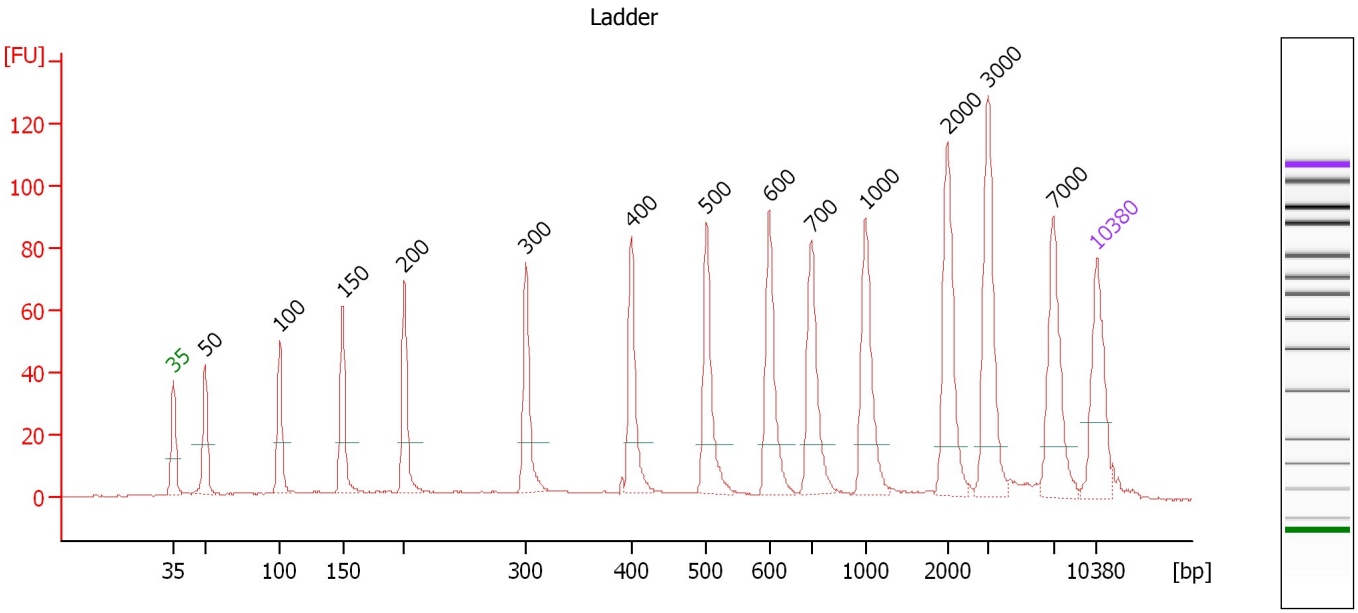
Ladder

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\2016-02-03\2016-02-03_003.xad

Created: 2/3/2016 4:00:29 PM
Modified: 2/3/2016 4:40:54 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

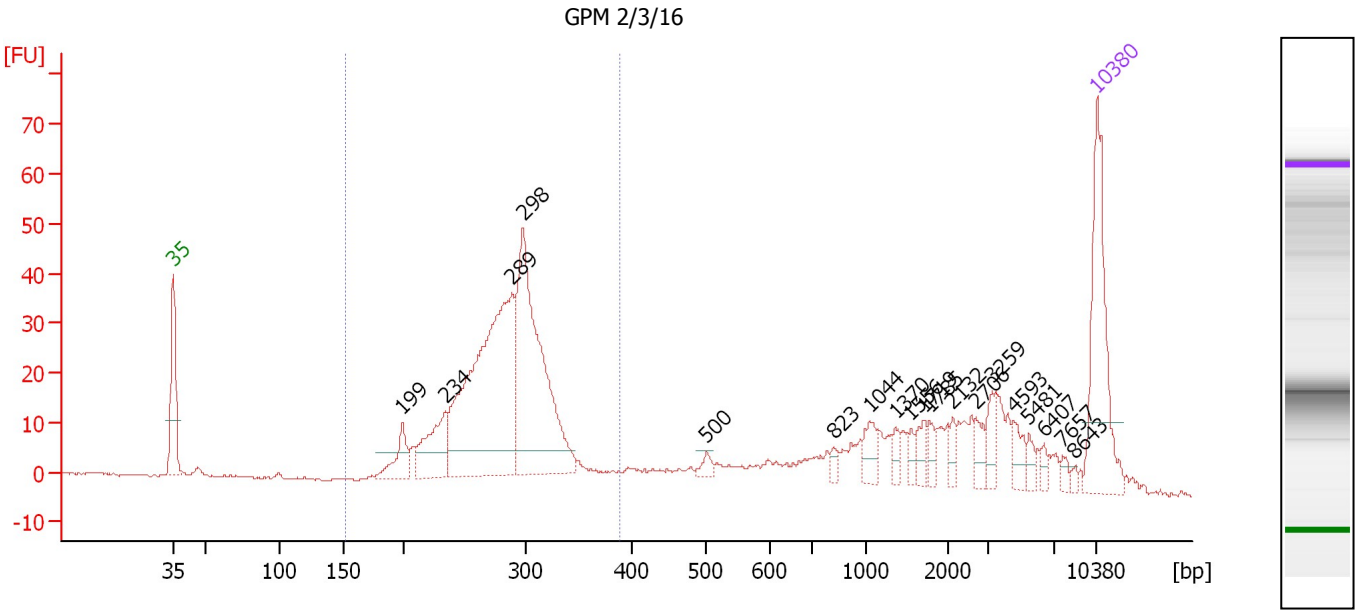
Peak table for Ladder

Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1		35	125.00	5,411.3	Lower Marker	43.00
2		50	150.00	4,545.5	Ladder Peak	45.38
3		100	150.00	2,272.7	Ladder Peak	51.06
4		150	150.00	1,515.2	Ladder Peak	55.83
5		200	150.00	1,136.4	Ladder Peak	60.50
6		300	150.00	757.6	Ladder Peak	69.71
7		400	150.00	568.2	Ladder Peak	77.73
8		500	150.00	454.5	Ladder Peak	83.41
9		600	150.00	378.8	Ladder Peak	88.17
10		700	150.00	324.7	Ladder Peak	91.33
11		1,000	150.00	227.3	Ladder Peak	95.45
12		2,000	150.00	113.6	Ladder Peak	101.64
13		3,000	150.00	75.8	Ladder Peak	104.75
14		7,000	150.00	32.5	Ladder Peak	109.70
15		10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-03\2016-02-03_003.xad

Created: 2/3/2016 4:00:29 PM
Modified: 2/3/2016 4:40:54 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : GPM 2/3/16

Number of peaks found:	19	Corr. Area 1:	450.4
Noise:	0.2		

Peak table for sample 1 : GPM 2/3/16

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	199	29.45	224.8		60.36
3	234	54.03	350.1		63.62
4	289	279.23	1,466.2		68.65
5	298	215.16	1,095.7		69.48
6	500	6.42	19.5		83.41
7	823	5.06	9.3		93.03
8	1,044	14.64	21.2		95.73
9	1,370	7.19	8.0		97.74
10	1,556	6.42	6.3		98.89
11	1,719	10.11	8.9		99.90
12	1,785	7.62	6.5		100.31
13	2,132	7.15	5.1		102.05
14	2,706	9.21	5.2		103.84
15	3,259	12.06	5.6		105.07
16	4,593	11.64	3.8		106.72
17	5,481	6.30	1.7		107.82
18	6,407	4.47	1.1		108.97
19	7,657	4.33	0.9		110.34
20	8,643	2.36	0.4		111.30
21	10,380	75.00	10.9	Upper Marker	113.00

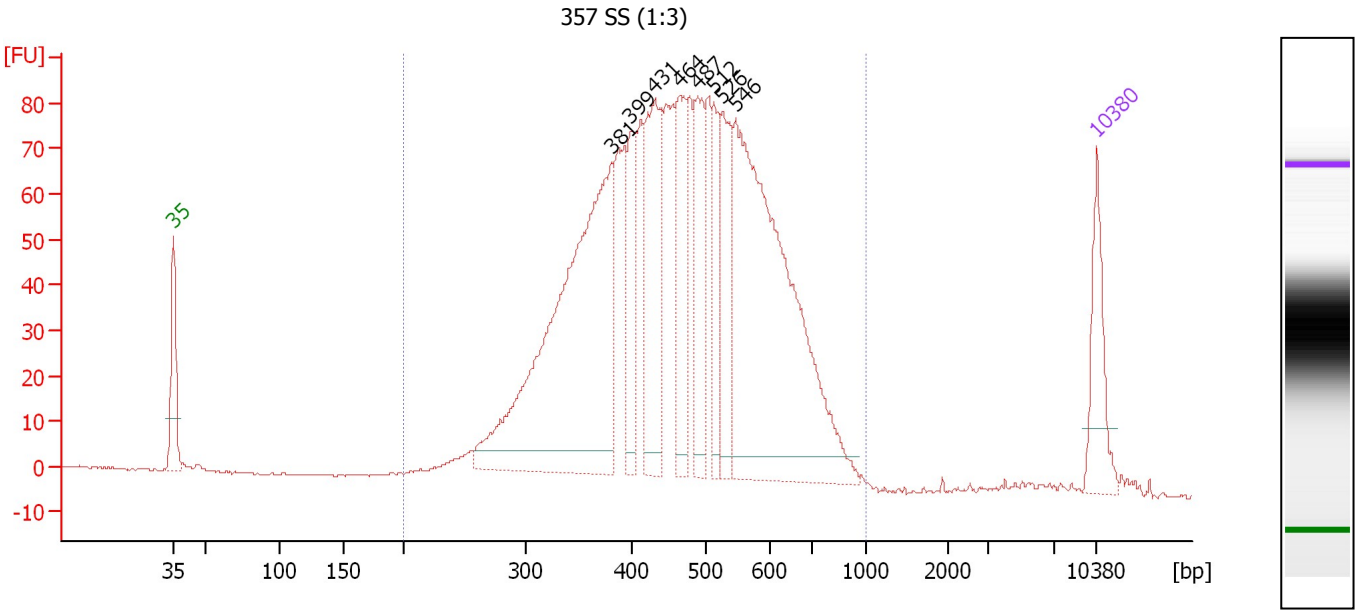
Region table for sample 1 : GPM 2/3/16

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
153	389	280	450.4	3,603.6	652.39	59	13.6

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-03\2016-02-03_003.xad

Created: 2/3/2016 4:00:29 PM
Modified: 2/3/2016 4:40:54 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : 357 SS (1:3)

Number of peaks found:	8	Corr. Area 1:	1,904.8
Noise:	0.1		

Peak table for sample 2 : 357 SS (1:3)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	381	735.99	2,926.0		76.21
3	399	112.45	426.8		77.66
4	431	213.79	752.0		79.47
5	464	141.30	461.1		81.38
6	487	138.24	429.8		82.69
7	512	90.25	267.3		83.96
8	526	132.09	380.6		84.64
9	546	687.47	1,908.4		85.59
10	10,380	75.00	10.9	Upper Marker	113.00

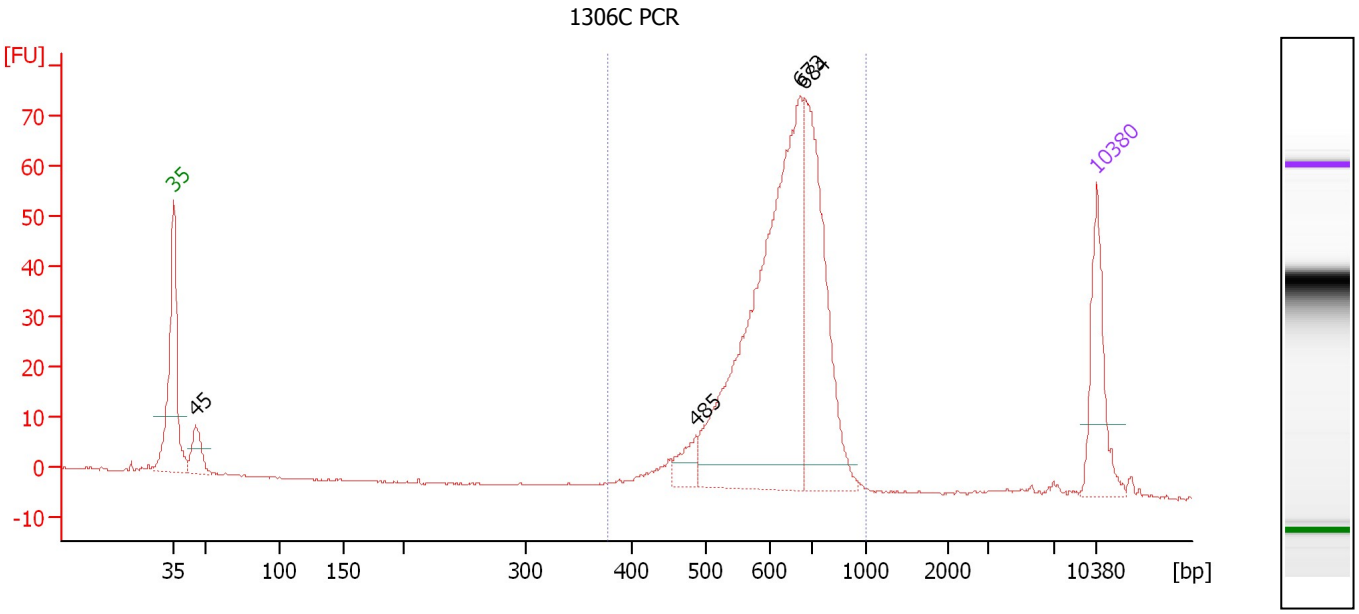
Region table for sample 2 : 357 SS (1:3)

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	472	1,904.8	10,583.9	3,013.42	98	25.2

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-03\2016-02-03_003.xad

Created: 2/3/2016 4:00:29 PM
Modified: 2/3/2016 4:40:54 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 1306C PCR

Number of peaks found:	4	Corr. Area 1:	551.6
Noise:	0.2		

Peak table for sample 3 : 1306C PCR

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	45	47.81	1,599.9		44.63
3	485	30.68	95.8		82.58
4	673	566.54	1,276.1		90.47
5	684	272.37	603.2		90.83
6	10,380	75.00	10.9	Upper Marker	113.00

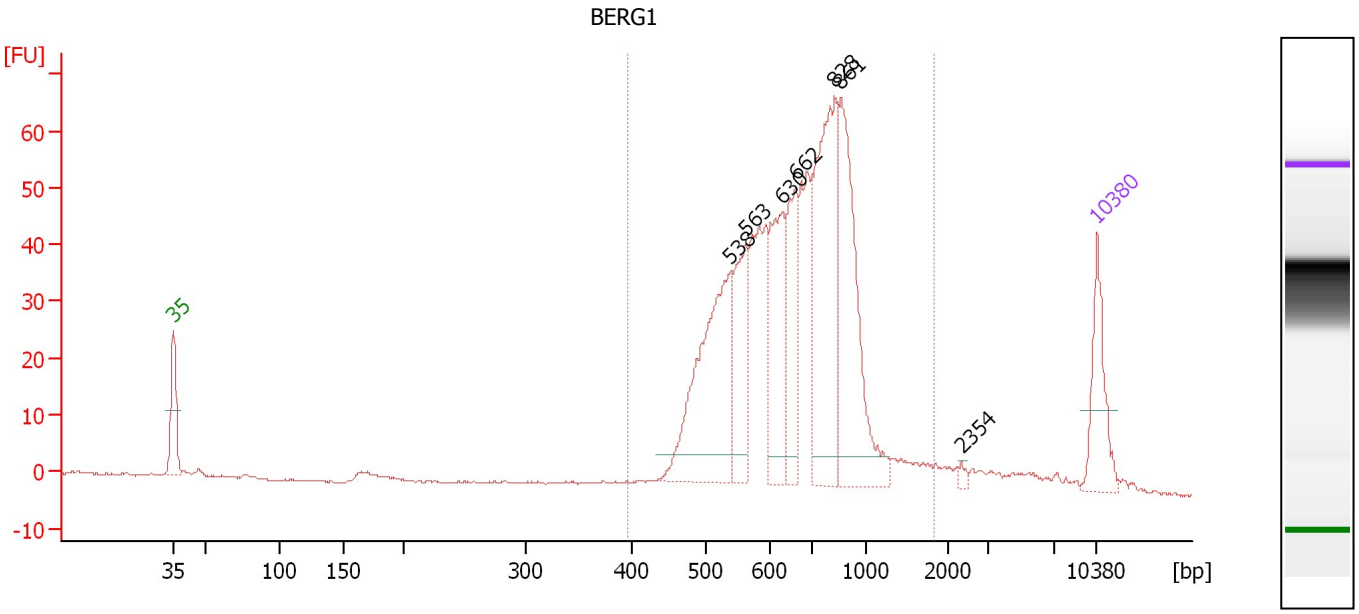
Region table for sample 3 : 1306C PCR

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color	Conc. [pg/µl]	% of Total	Size distribution in CV [%]
378	1,000	641	551.6	2,137.1		882.05	95	14.4

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-03\2016-02-03_003.xad

Created: 2/3/2016 4:00:29 PM
Modified: 2/3/2016 4:40:54 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : BERG1

Number of peaks found:	7	Corr. Area 1:	739.3
Noise:	0.2		

Peak table for sample 4 : BERG1

Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	◀	35	125.00	5,411.3	Lower Marker	43.00
2		538	305.02	858.5		85.23
3		563	137.97	371.6		86.39
4		630	160.11	385.2		89.11
5		662	123.34	282.3		90.13
6		828	306.88	561.8		93.09
7		861	266.74	469.2		93.55
8		2,354	5.68	3.7		102.74
9	▶	10,380	75.00	10.9	Upper Marker	113.00

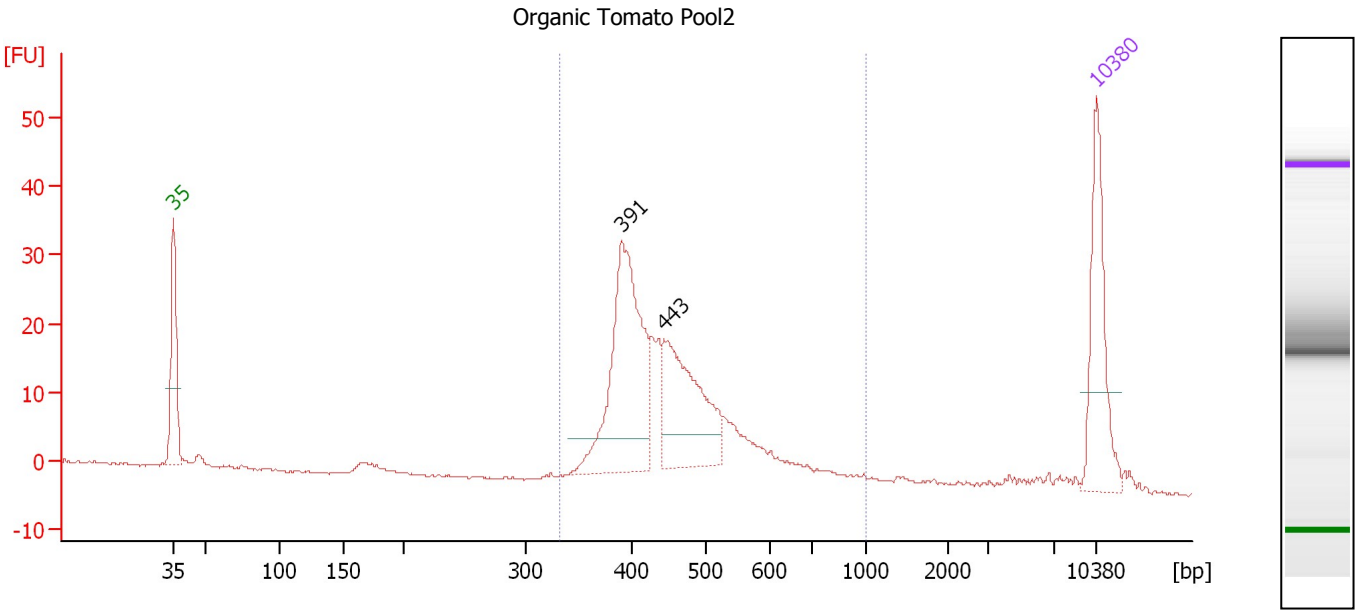
Region table for sample 4 : BERG1

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
396	1,832	710	739.3	3,989.9	1,728.48	93	29.1

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-03\2016-02-03_003.xad

Created: 2/3/2016 4:00:29 PM
Modified: 2/3/2016 4:40:54 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : Organic Tomato Pool2

Number of peaks found:	2	Corr. Area 1:	281.2
Noise:	0.2		

Peak table for sample 5 : Organic Tomato Pool2

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	391	212.83	825.6		76.97
3	443	134.75	461.1		80.15
4	10,380	75.00	10.9	Upper Marker	113.00

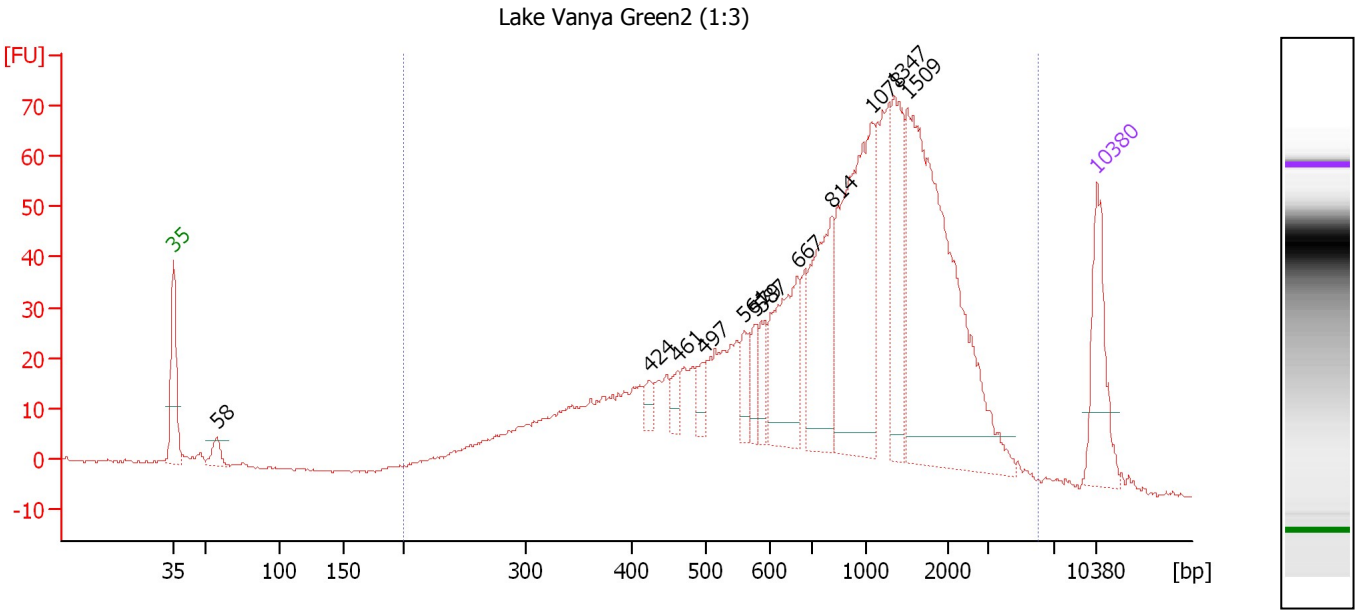
Region table for sample 5 : Organic Tomato Pool2

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color	Conc. [pg/µl]	% of Total	Size distribution in CV [%]
332	1,000	466	281.2	1,694.5		499.43	90	21.2

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-03\2016-02-03_003.xad

Created: 2/3/2016 4:00:29 PM
Modified: 2/3/2016 4:40:54 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : Lake Vanya Green2 (1:3)

Number of peaks found:	12	Corr. Area 1:	1,460.0
Noise:	0.2		

Peak table for sample 6 : Lake Vanya Green2 (1:3)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	58	23.25	608.6		46.28
3	424	15.32	54.8		79.07
4	461	15.17	49.8		81.21
5	497	20.90	63.7		83.25
6	561	29.99	81.1		86.29
7	579	25.46	66.7		87.15
8	587	28.36	73.3		87.53
9	667	129.41	294.0		90.28
10	814	141.50	263.4		92.90
11	1,078	252.67	355.0		95.94
12	1,347	97.98	110.2		97.60
13	1,509	395.06	396.7		98.60
14	10,380	75.00	10.9	Upper Marker	113.00

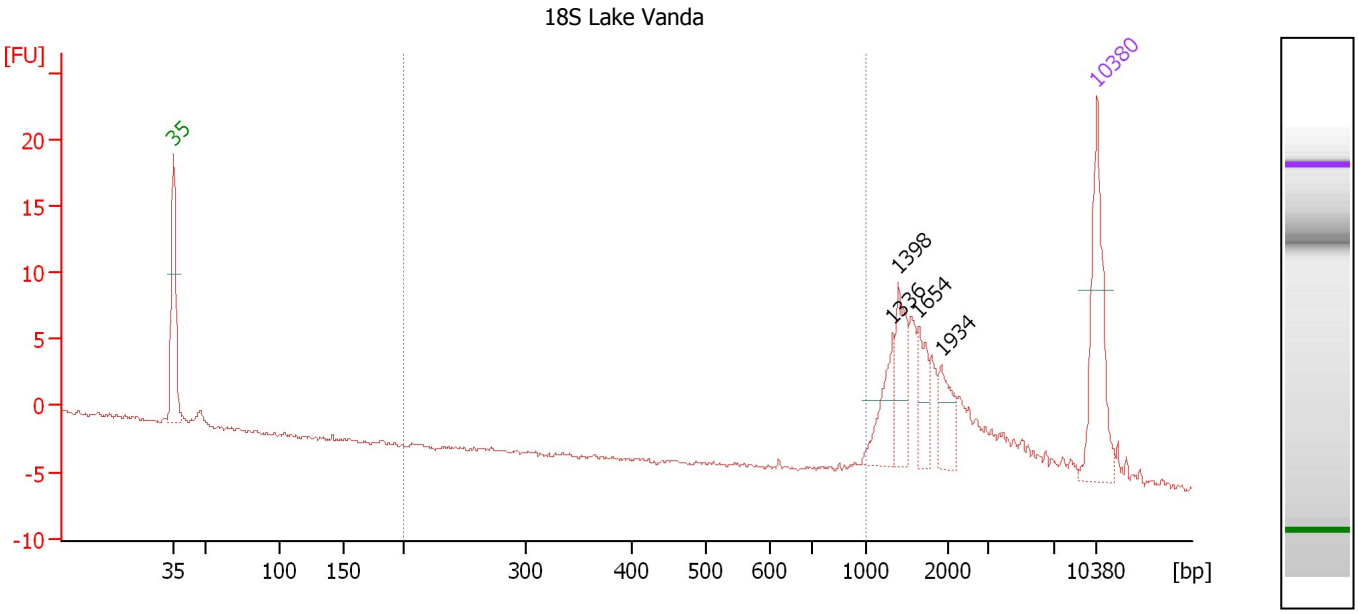
Region table for sample 6 : Lake Vanya Green2 (1:3)

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	6,026	1,094	1,460.0	5,252.8	2,204.49	98	68.8

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-03\2016-02-03_003.xad

Created: 2/3/2016 4:00:29 PM
Modified: 2/3/2016 4:40:54 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : 18S Lake Vanda

Number of peaks found:	4	Corr. Area 1:	0.1
Noise:	0.2		

Peak table for sample 7 : 18S Lake Vanda

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	1,336	34.85	39.5		97.53
3	1,398	41.18	44.6		97.91
4	1,654	26.16	24.0		99.50
5	1,934	27.28	21.4		101.23
6	10,380	75.00	10.9	Upper Marker	113.00

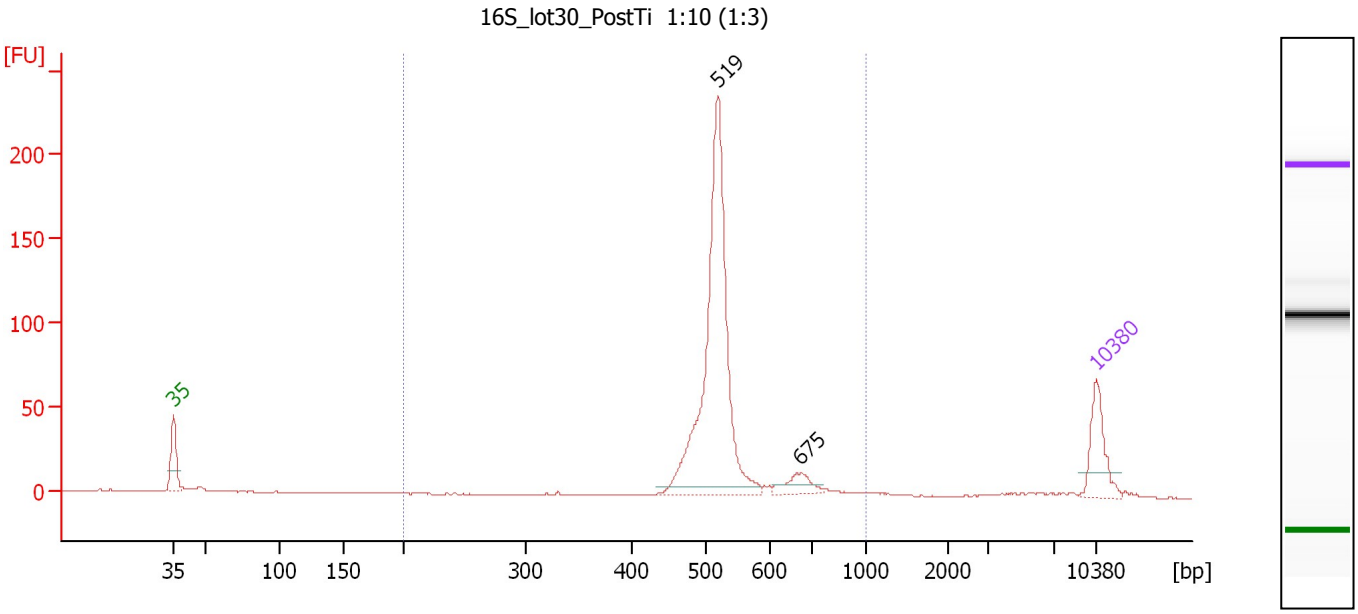
Region table for sample 7 : 18S Lake Vanda

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	992	0.1	0.7	0.44	0	0.5

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-03\2016-02-03_003.xad

Created: 2/3/2016 4:00:29 PM
Modified: 2/3/2016 4:40:54 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : 16S_lot30_PostTi 1:10 (1:3)

Number of peaks found:	2	Corr. Area 1:	560.0
Noise:	0.1		

Peak table for sample 8 : 16S_lot30_PostTi 1:10 (1:3)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	519	686.66	2,006.5		84.29
3	675	41.13	92.4		90.53
4	10,380	75.00	10.9	Upper Marker	113.00

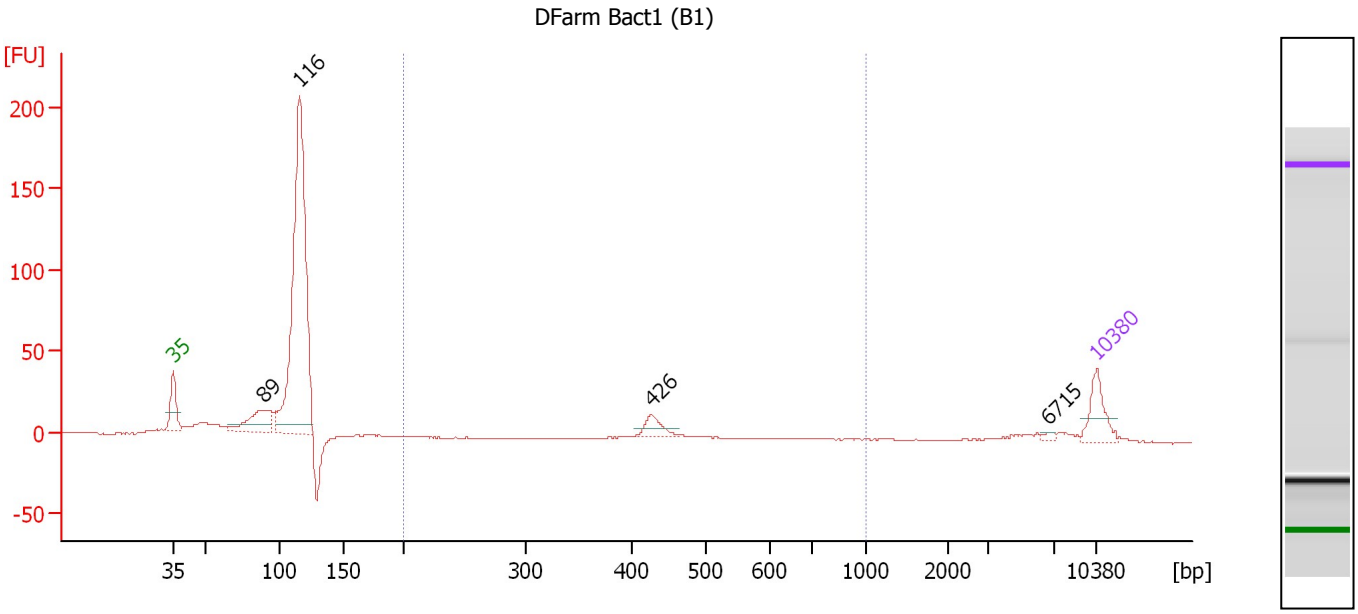
Region table for sample 8 : 16S_lot30_PostTi 1:10 (1:3)

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color	Conc. [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	532	560.0	2,230.6		771.18	92	12.8

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-03\2016-02-03_003.xad

Created: 2/3/2016 4:00:29 PM
Modified: 2/3/2016 4:40:54 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : DFarm Bact1 (B1)

Number of peaks found:	4	Corr. Area 1:	36.2
Noise:	0.2		

Peak table for sample 9 : DFarm Bact1 (B1)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	89	178.35	3,037.8		49.81
3	116	1,374.96	17,987.4		52.57
4	426	54.37	193.3		79.21
5	6,715	8.27	1.9		109.35
6	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 9 : DFarm Bact1 (B1)

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	458	36.2	262.6	77.59	6	16.4

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-03\2016-02-03_003.xad

Created: 2/3/2016 4:00:29 PM
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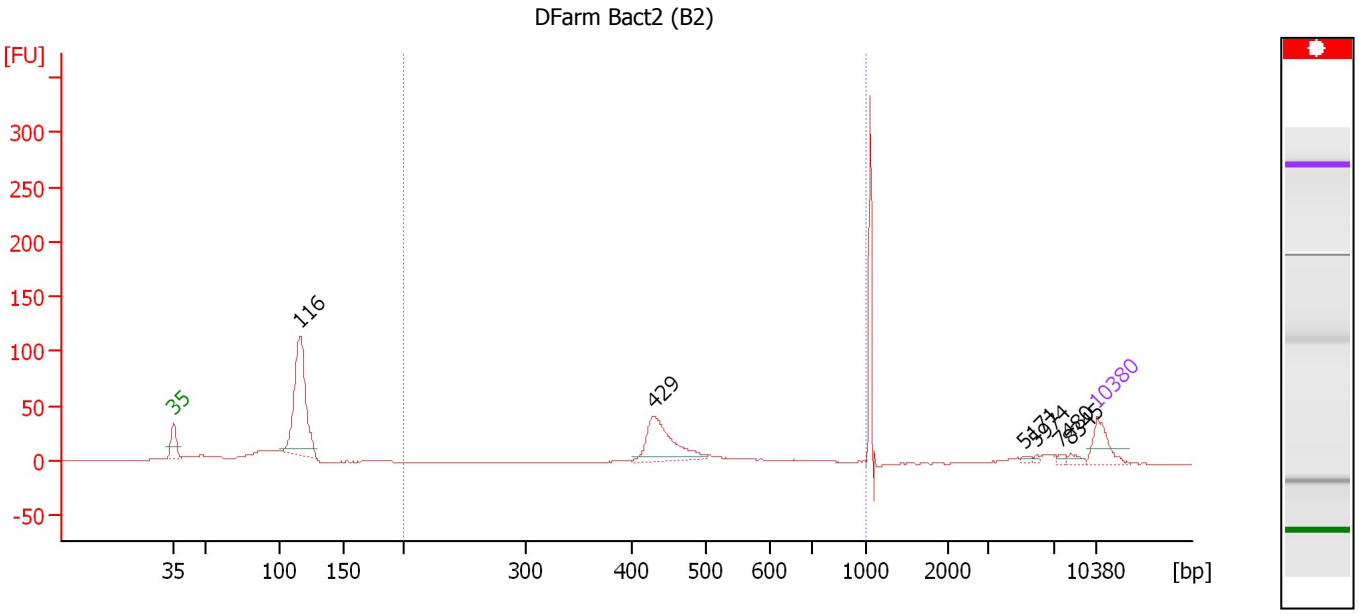
Electropherogram Summary Continued ...



Overall Results for sample 10 : DFarm Bact2 (B2)

Number of peaks found:	6	Corr. Area 1:	178.8
Noise:	0.2		

Peak table for sample 10 : DFarm Bact2 (B2)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	116	651.02	8,507.9		52.58
3	429	254.11	896.8		79.39
4	5,171	8.25	2.4		107.44
5	5,974	6.64	1.7		108.43
6	7,480	8.48	1.7		110.17
7	8,345	13.35	2.4		111.01
8	10,380	75.00	10.9	Upper Marker	113.00

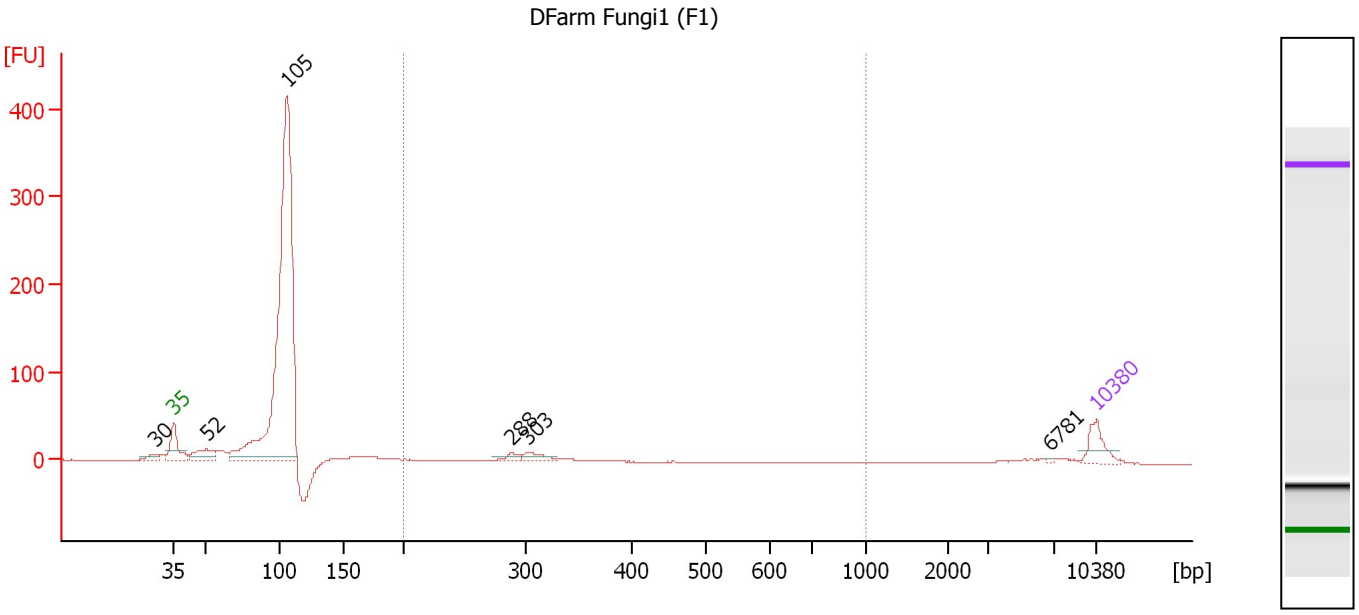
Region table for sample 10 : DFarm Bact2 (B2)

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	492	178.8	1,216.2	379.01	28	21.7

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-03\2016-02-03_003.xad

Created: 2/3/2016 4:00:29 PM
Modified: 2/3/2016 4:40:54 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : DFarm Fungi1 (F1)

Number of peaks found:	6	Corr. Area 1:	58.4
Noise:	0.2		

Peak table for sample 11 : DFarm Fungi1 (F1)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	30	0.00	0.0		41.56
2	35	125.00	5,411.3	Lower Marker	43.00
3	52	120.13	3,518.9		45.58
4	105	2,498.17	35,914.9		51.58
5	288	31.62	166.2		68.63
6	303	54.67	273.7		69.92
7	6,781	3.77	0.8		109.43
8	10,380	75.00	10.9	Upper Marker	113.00

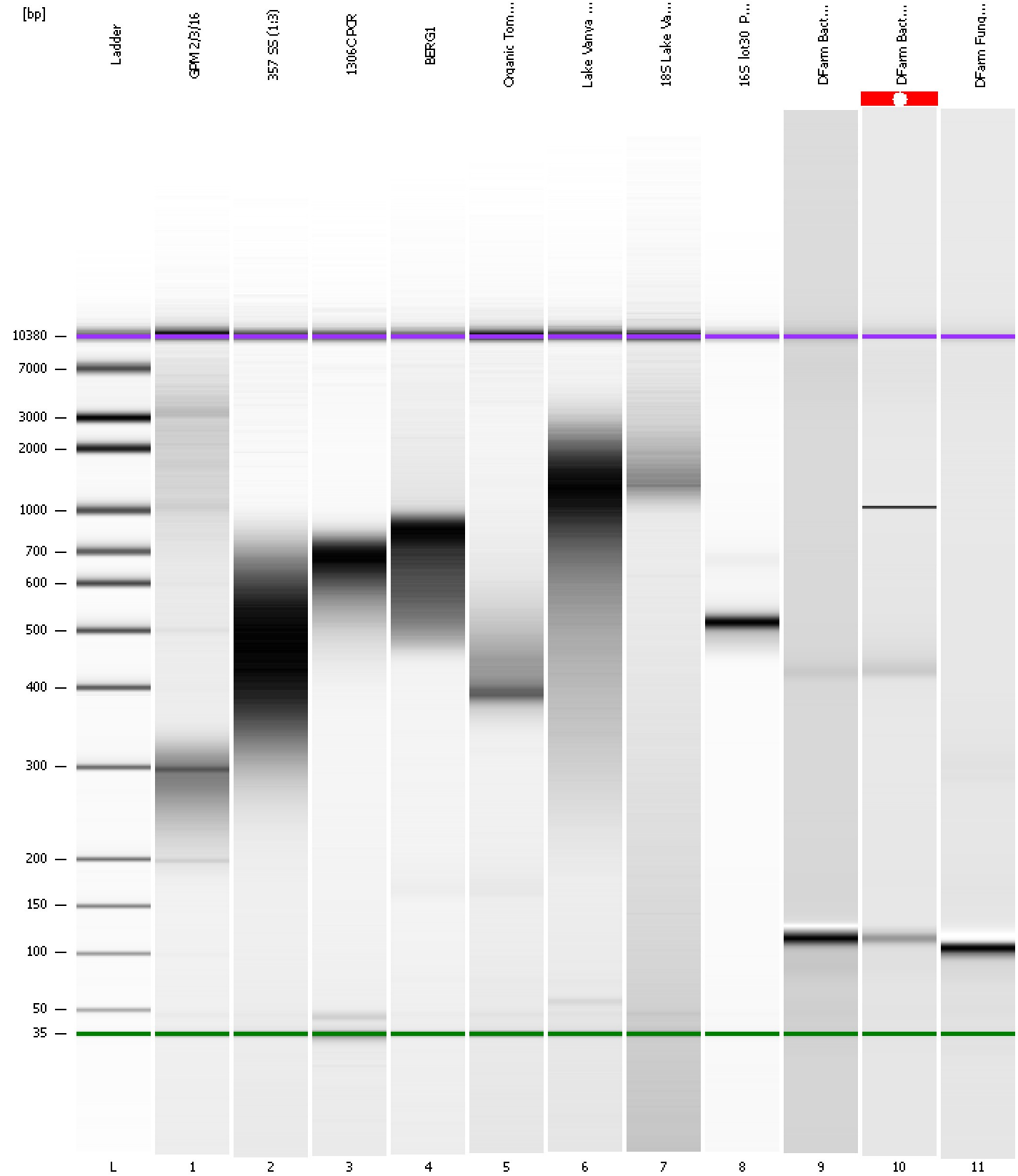
Region table for sample 11 : DFarm Fungi1 (F1)

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	309	58.4	581.1	117.39	5	11.2

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-03\2016-02-03_003.xad

Created: 2/3/2016 4:00:29 PM
Modified: 2/3/2016 4:40:54 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-02-03\2016-02-03_003.xad

Created: 2/3/2016 4:00:29 PM
Modified: 2/3/2016 4:40:54 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		2/3/2016 4:40:52 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Instrument error occurred on port 1, Optical signal too high (1605h)	559	Instrument	Run	Sample 10	2/3/2016 4:37:08 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2016-02-03\2016-02-03_003.xad)		Instrument	Run		2/3/2016 4:00:29 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		2/3/2016 4:00:29 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		2/3/2016 4:00:29 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		2/3/2016 4:00:29 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		2/3/2016 4:00:29 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		2/3/2016 4:00:29 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		2/3/2016 4:00:29 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1