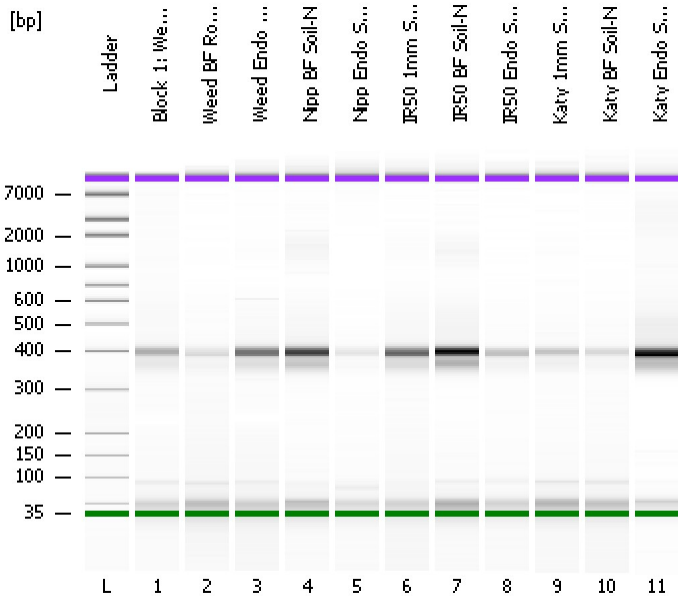


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-12-28\2012-12-28_003.xad

Created: 12/28/2012 2:10:44 PM
Modified: 12/28/2012 3:04:00 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

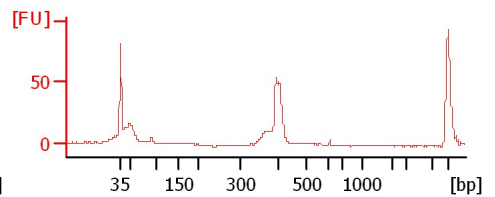
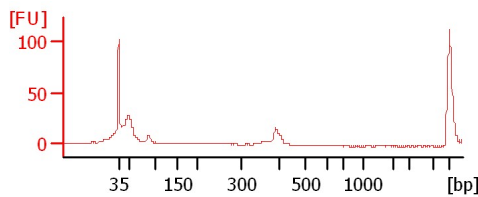
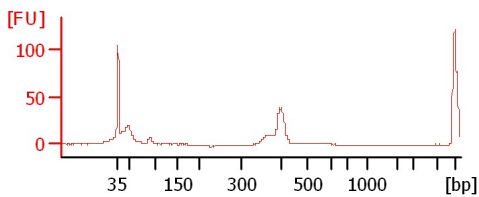
Chip Information:

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

Block 1: Weed 1mm Root-N

Weed BF Root-N

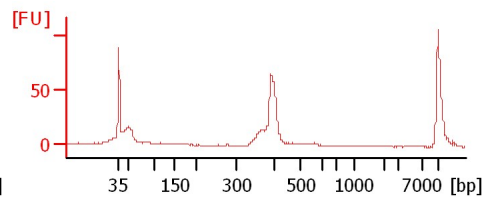
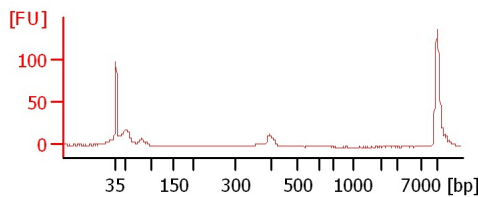
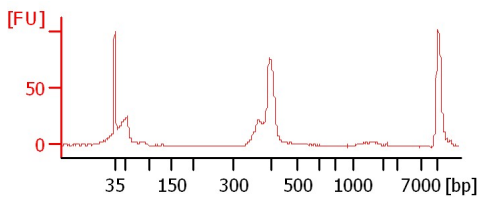
Weed Endo Root-N



Nipp BF Soil-N

Nipp Endo Soil-N

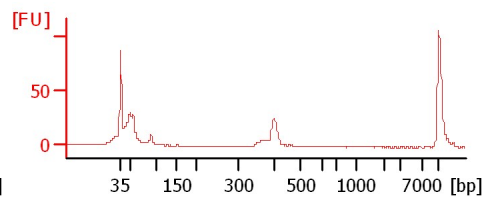
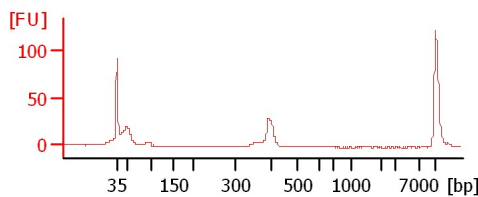
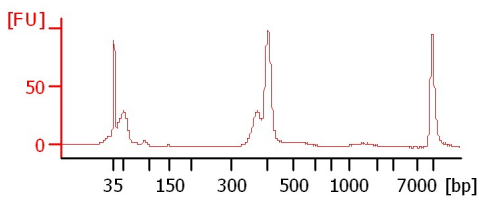
IR50 1mm Soil-N



IR50 BF Soil-N

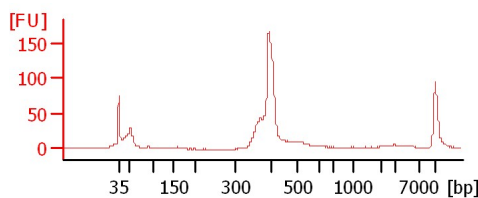
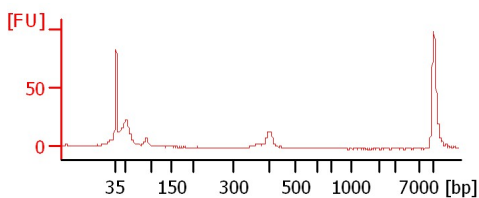
IR50 Endo Soil-N

Katy 1mm Soil-N



Katy BF Soil-N

Katy Endo Soil-N



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-12-28\2012-12-28_003.xad

Created: 12/28/2012 2:10:44 PM
 Modified: 12/28/2012 3:04:00 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Block 1: Weed 1mm Root-N		<input type="checkbox"/>	✓			
Weed BF Root-N		<input type="checkbox"/>	✓			
Weed Endo Root-N		<input type="checkbox"/>	✓			
Nipp BF Soil-N		<input type="checkbox"/>	✓			
Nipp Endo Soil-N		<input type="checkbox"/>	✓			
IR50 1mm Soil-N		<input type="checkbox"/>	✓			
IR50 BF Soil-N		<input type="checkbox"/>	✓			
IR50 Endo Soil-N		<input type="checkbox"/>	✓			
Katy 1mm Soil-N		<input type="checkbox"/>	✓			
Katy BF Soil-N		<input type="checkbox"/>	✓			
Katy Endo Soil-N		<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\2012-12-28\2012-12-28_003.xad

Created: 12/28/2012 2:10:44 PM
Modified: 12/28/2012 3:04:00 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

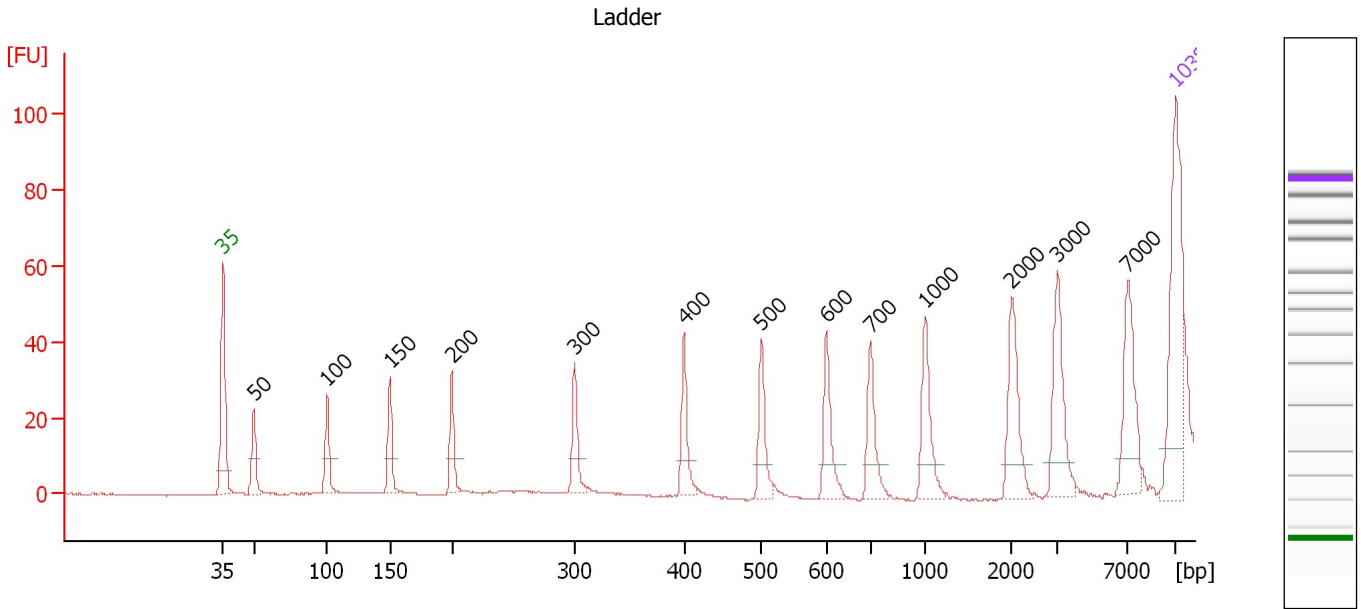
Ladder

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\2012-12-28\2012-12-28_003.xad

Created: 12/28/2012 2:10:44 PM
 Modified: 12/28/2012 3:04:00 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

Peak table for Ladder

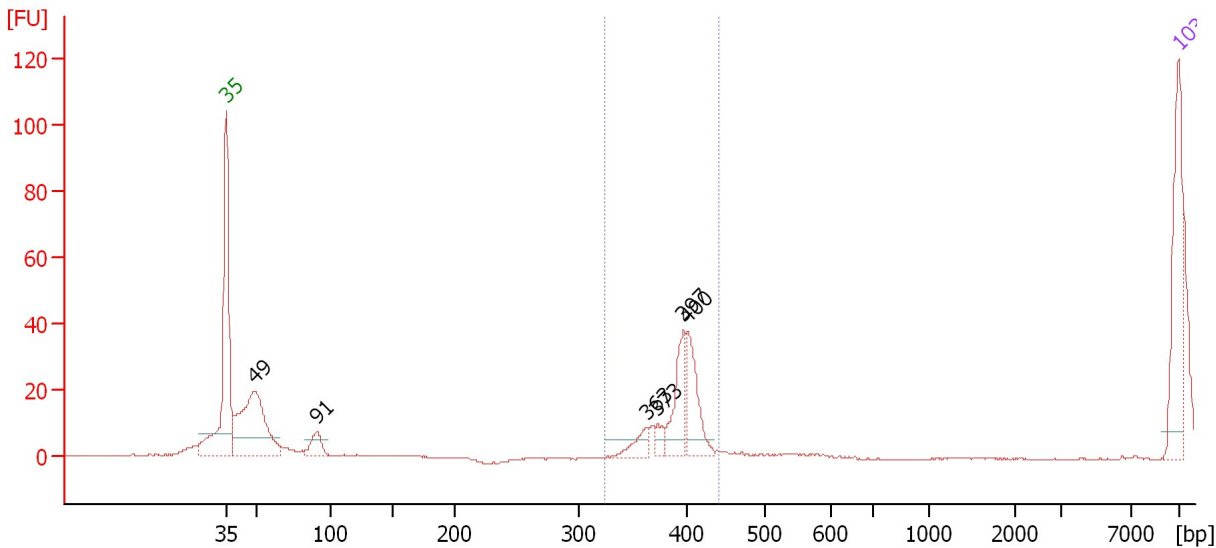
Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	50	150.00	4,545.5	Ladder Peak
3	100	150.00	2,272.7	Ladder Peak
4	150	150.00	1,515.2	Ladder Peak
5	200	150.00	1,136.4	Ladder Peak
6	300	150.00	757.6	Ladder Peak
7	400	150.00	568.2	Ladder Peak
8	500	150.00	454.5	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:\...ents and Settings\Bioanalyzer\2012-12-28\2012-12-28_003.xad

Created: 12/28/2012 2:10:44 PM
 Modified: 12/28/2012 3:04:00 PM

Electropherogram Summary Continued ...

Block 1: Weed 1mm Root-N



Overall Results for sample 1 : Block 1: Weed 1mm Root-N

Number of peaks found: 6 Corr. Area 1: 18.3
 Noise: 0.1

Peak table for sample 1 : Block 1: Weed 1mm Root-N

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	49	200.01	6,191.2	
3	91	26.47	441.0	
4	363	22.24	92.9	
5	373	11.79	47.9	
6	397	57.95	221.4	
7	400	61.64	233.5	
8	10,380	75.00	10.9	Upper Marker

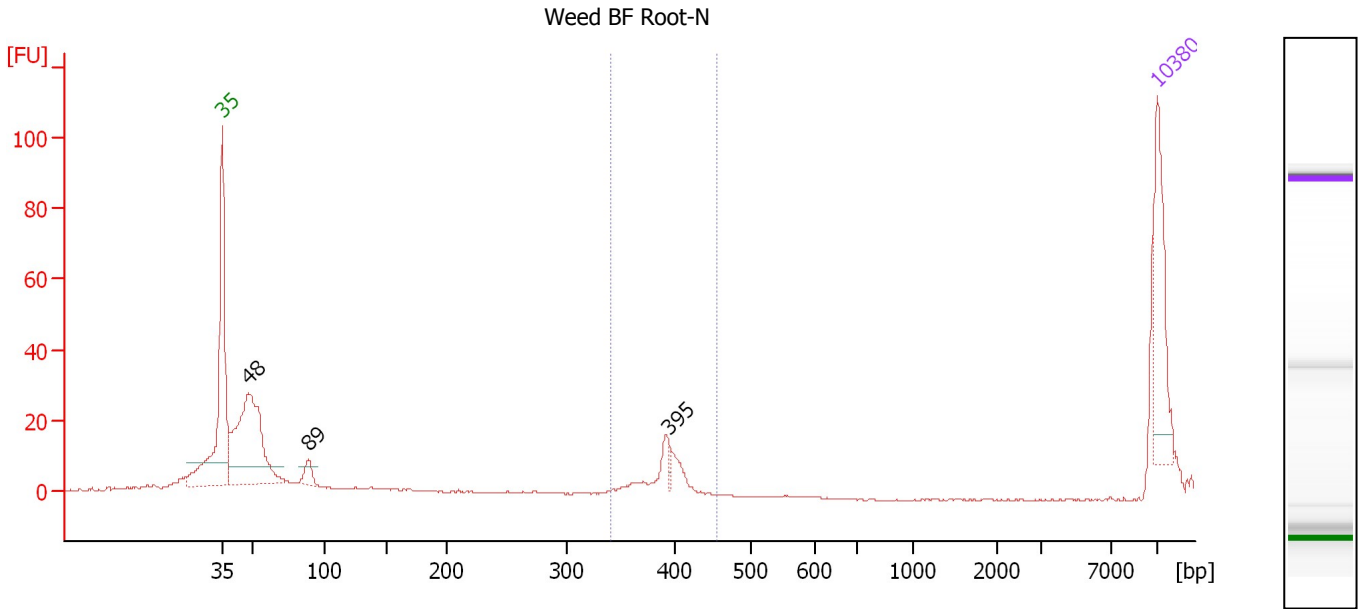
Region table for sample 1 : Block 1: Weed 1mm Root-N

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
324	441	399	88.8	23.38	18.3	24	1.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-12-28\2012-12-28_003.xad

Created: 12/28/2012 2:10:44 PM
 Modified: 12/28/2012 3:04:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : Weed BF Root-N

Number of peaks found: 3 Corr. Area 1: 25.1
 Noise: 0.2

Peak table for sample 2 : Weed BF Root-N

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	256.72	8,038.3	
3	89	18.73	319.9	
4	395	2.64	10.1	
5	10,380	75.00	10.9	Upper Marker

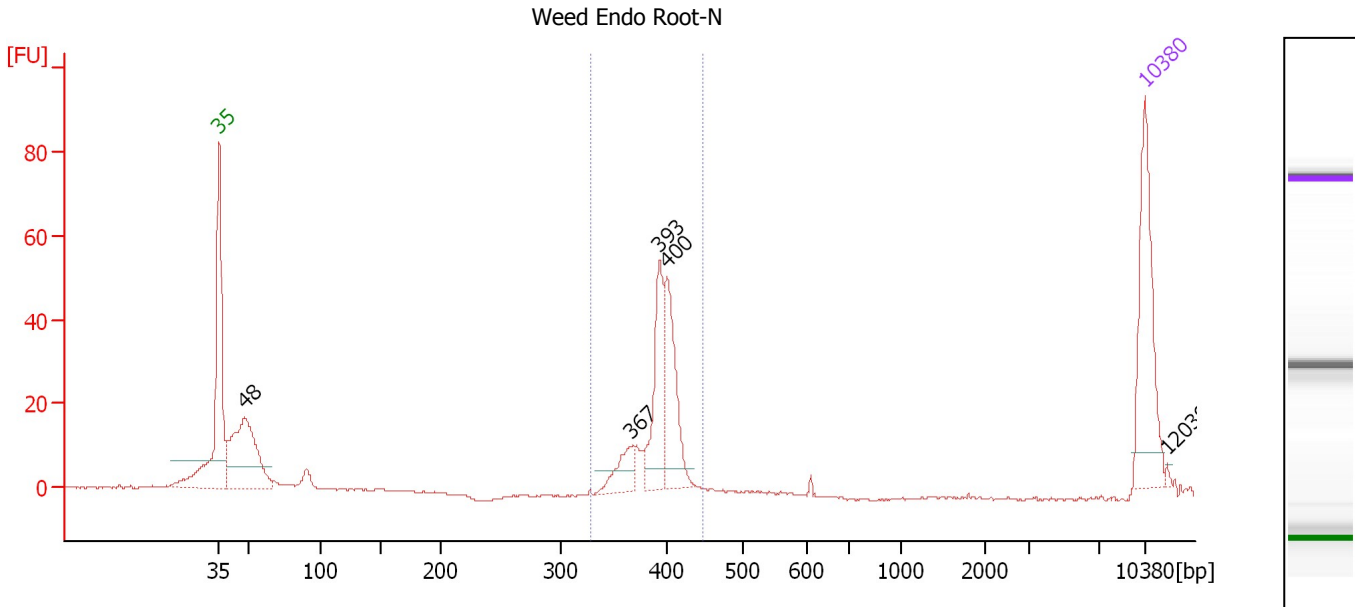
Region table for sample 2 : Weed BF Root-N

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
340	455	395	120.6	31.42	25.1	10	2.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-12-28\2012-12-28_003.xad

Created: 12/28/2012 2:10:44 PM
 Modified: 12/28/2012 3:04:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : Weed Endo Root-N

Number of peaks found: 5 Corr. Area 1: 165.0
 Noise: 0.2

Peak table for sample 3 : Weed Endo Root-N

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	150.74	4,759.5	
3	367	27.68	114.3	
4	393	73.98	285.4	
5	400	77.37	293.2	
6	10,380	75.00	10.9	Upper Marker
7	12,039	0.00	0.0	

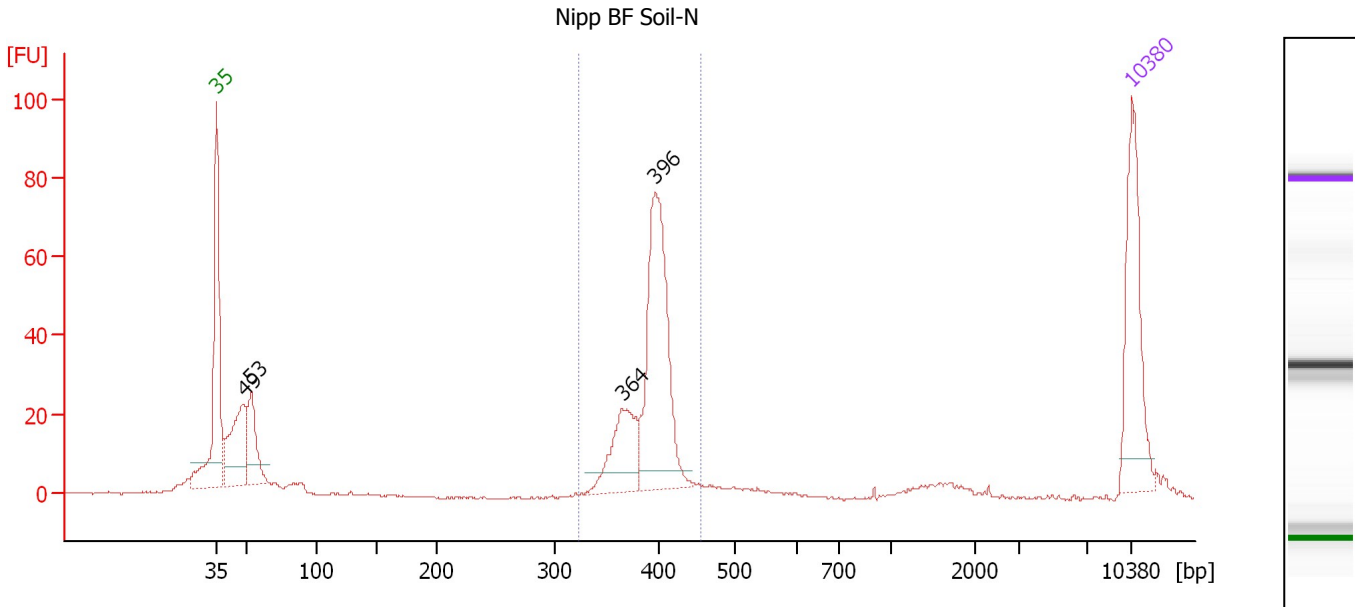
Region table for sample 3 : Weed Endo Root-N

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
328	448	393	717.1	185.73	165.0	60	4.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-12-28\2012-12-28_003.xad

Created: 12/28/2012 2:10:44 PM
 Modified: 12/28/2012 3:04:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : Nipp BF Soil-N

Number of peaks found: 4 Corr. Area 1: 276.3
 Noise: 0.2

Peak table for sample 4 : Nipp BF Soil-N

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	49	99.55	3,098.0	
3	53	58.48	1,657.3	
4	364	69.13	287.6	
5	396	183.68	703.4	
6	10,380	75.00	10.9	Upper Marker

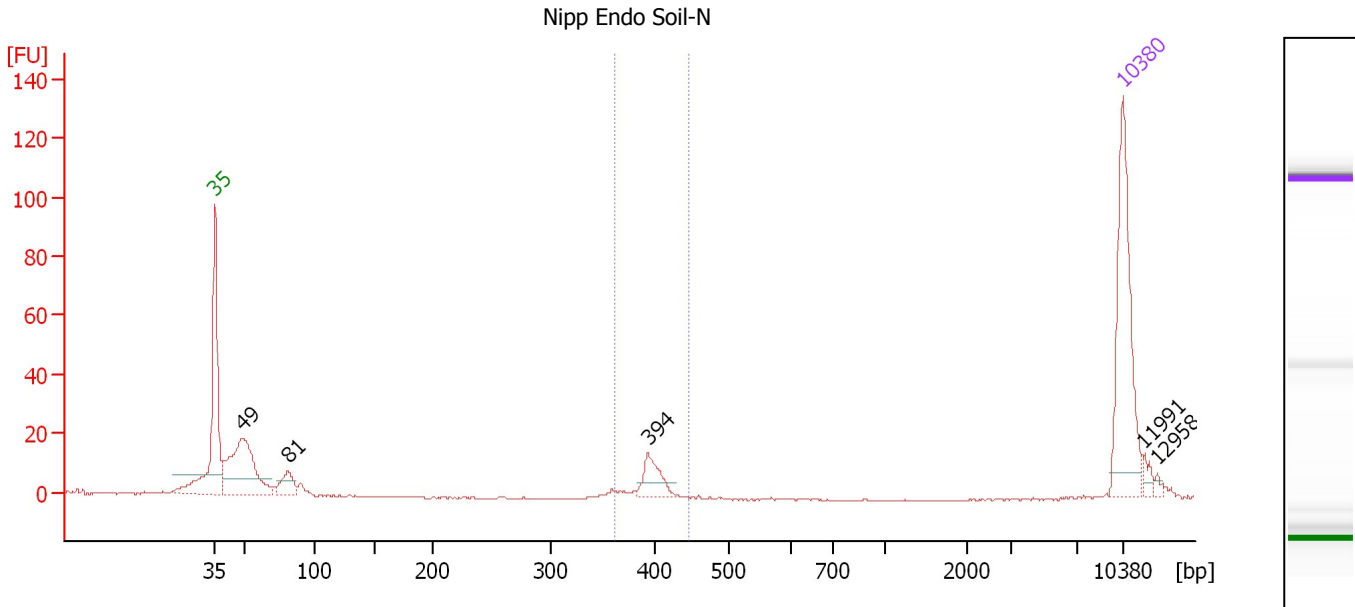
Region table for sample 4 : Nipp BF Soil-N

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
323	456	391	1,027.0	264.76	276.3	58	5.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-12-28\2012-12-28_003.xad

Created: 12/28/2012 2:10:44 PM
 Modified: 12/28/2012 3:04:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : Nipp Endo Soil-N

Number of peaks found: 5 Corr. Area 1: 28.7
 Noise: 0.2

Peak table for sample 5 : Nipp Endo Soil-N

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	49	117.78	3,656.9	
3	81	22.03	410.1	
4	394	22.80	87.7	
5	10,380	75.00	10.9	Upper Marker
6	11,991	0.00	0.0	
7	12,958	0.00	0.0	

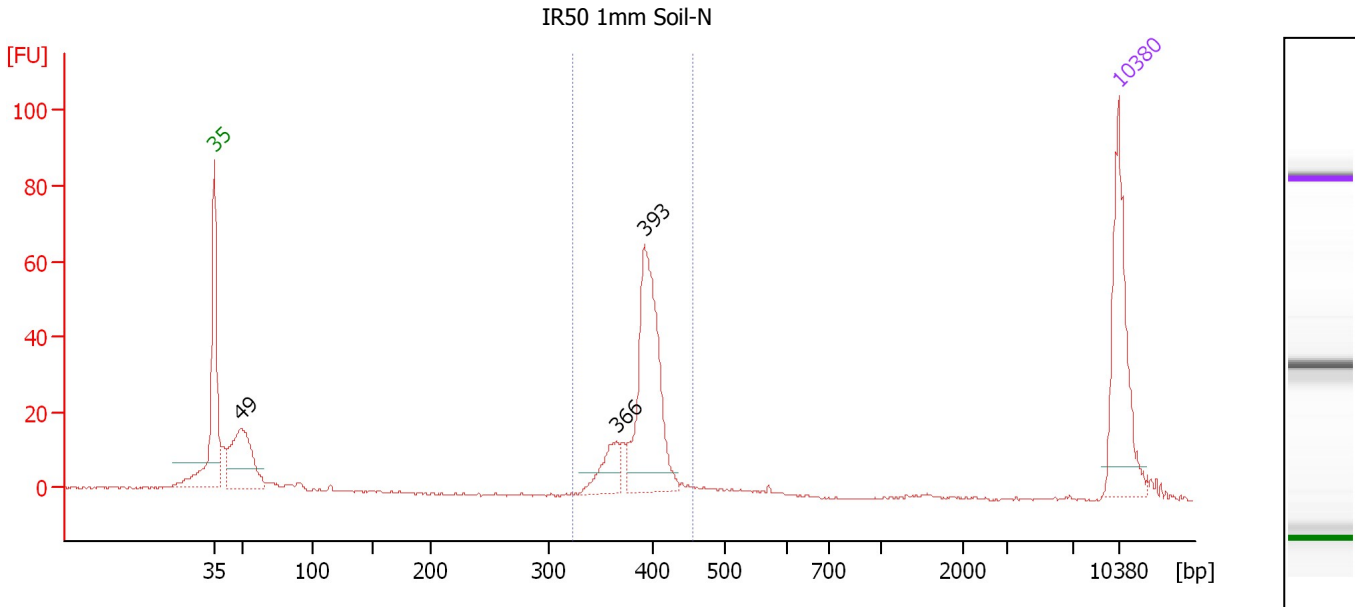
Region table for sample 5 : Nipp Endo Soil-N

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
361	445	397	81.8	21.43	28.7	17	2.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-12-28\2012-12-28_003.xad

Created: 12/28/2012 2:10:44 PM
 Modified: 12/28/2012 3:04:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : IR50 1mm Soil-N

Number of peaks found: 3 Corr. Area 1: 213.3
 Noise: 0.2

Peak table for sample 6 : IR50 1mm Soil-N

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	49	104.22	3,251.0	
3	366	30.74	127.2	
4	393	155.51	599.8	
5	10,380	75.00	10.9	Upper Marker

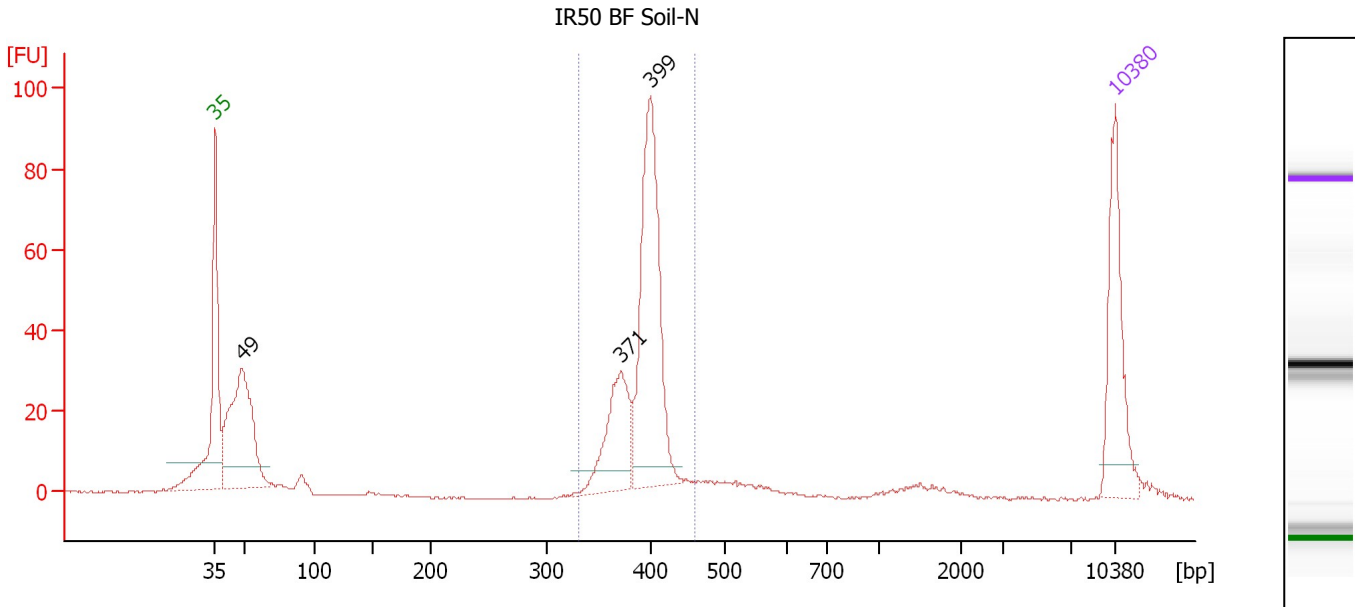
Region table for sample 6 : IR50 1mm Soil-N

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
324	457	392	776.2	200.60	213.3	65	5.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-12-28\2012-12-28_003.xad

Created: 12/28/2012 2:10:44 PM
 Modified: 12/28/2012 3:04:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : IR50 BF Soil-N

Number of peaks found: 3 Corr. Area 1: 334.2
 Noise: 0.2

Peak table for sample 7 : IR50 BF Soil-N

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	49	222.57	6,894.4	
3	371	90.92	371.2	
4	399	224.79	852.6	
5	10,380	75.00	10.9	Upper Marker

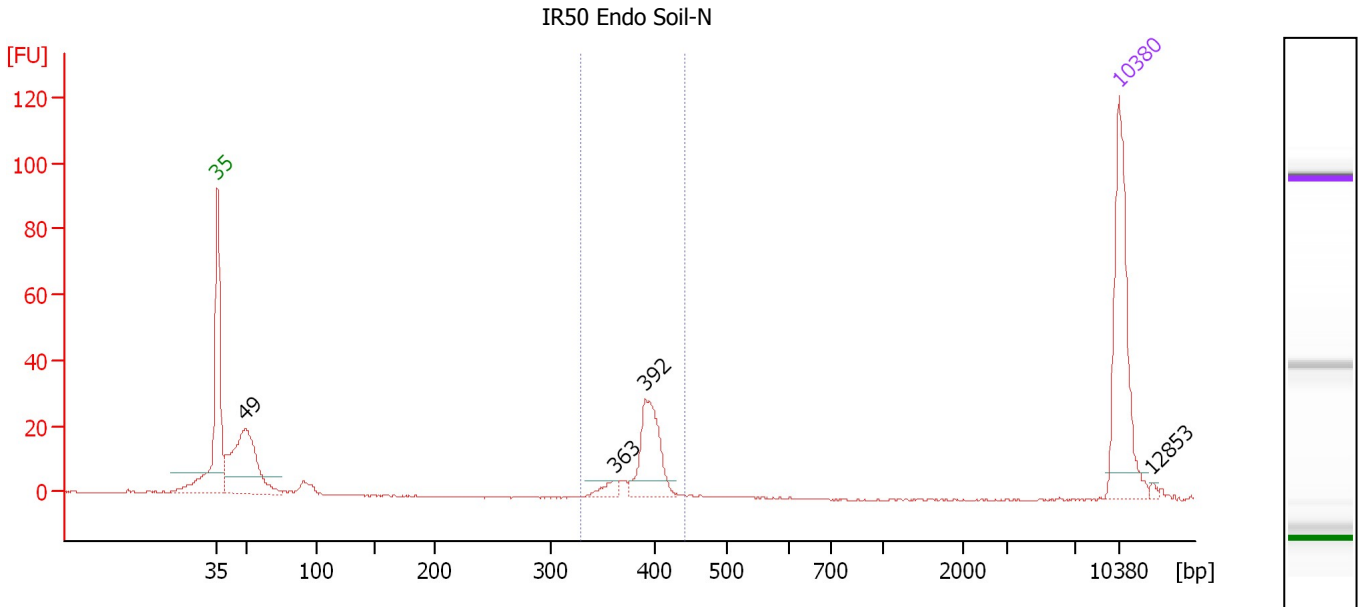
Region table for sample 7 : IR50 BF Soil-N

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
331	461	393	1,316.1	340.31	334.2	60	5.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-12-28\2012-12-28_003.xad

Created: 12/28/2012 2:10:44 PM
 Modified: 12/28/2012 3:04:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : IR50 Endo Soil-N

Number of peaks found: 4 Corr. Area 1: 82.7
 Noise: 0.2

Peak table for sample 8 : IR50 Endo Soil-N

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	49	130.38	3,995.3	
3	363	8.45	35.3	
4	392	60.07	232.5	
5	10,380	75.00	10.9	Upper Marker
6	12,853	0.00	0.0	

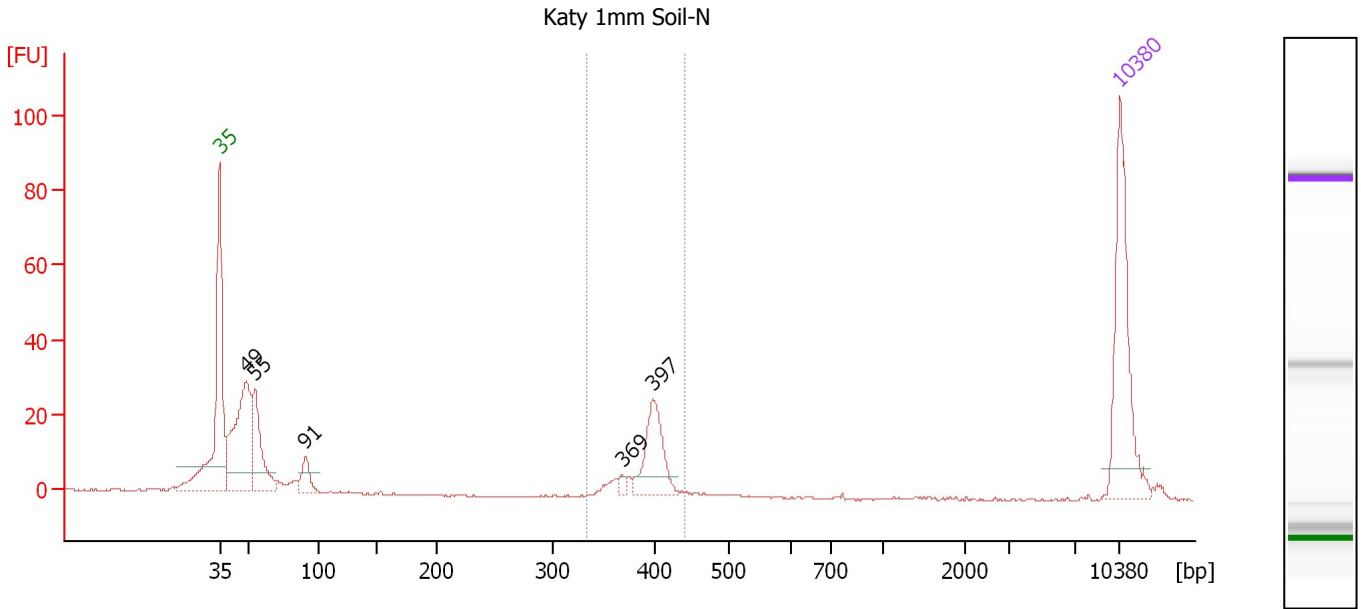
Region table for sample 8 : IR50 Endo Soil-N

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
330	441	392	265.7	68.68	82.7	41	4.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-12-28\2012-12-28_003.xad

Created: 12/28/2012 2:10:44 PM
 Modified: 12/28/2012 3:04:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : Katy 1mm Soil-N

Number of peaks found: 5 Corr. Area 1: 72.3
 Noise: 0.2

Peak table for sample 9 : Katy 1mm Soil-N

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	49	147.62	4,572.5	
3	55	73.36	2,034.4	
4	91	21.48	357.5	
5	369	4.11	16.9	
6	397	53.62	204.4	
7	10,380	75.00	10.9	Upper Marker

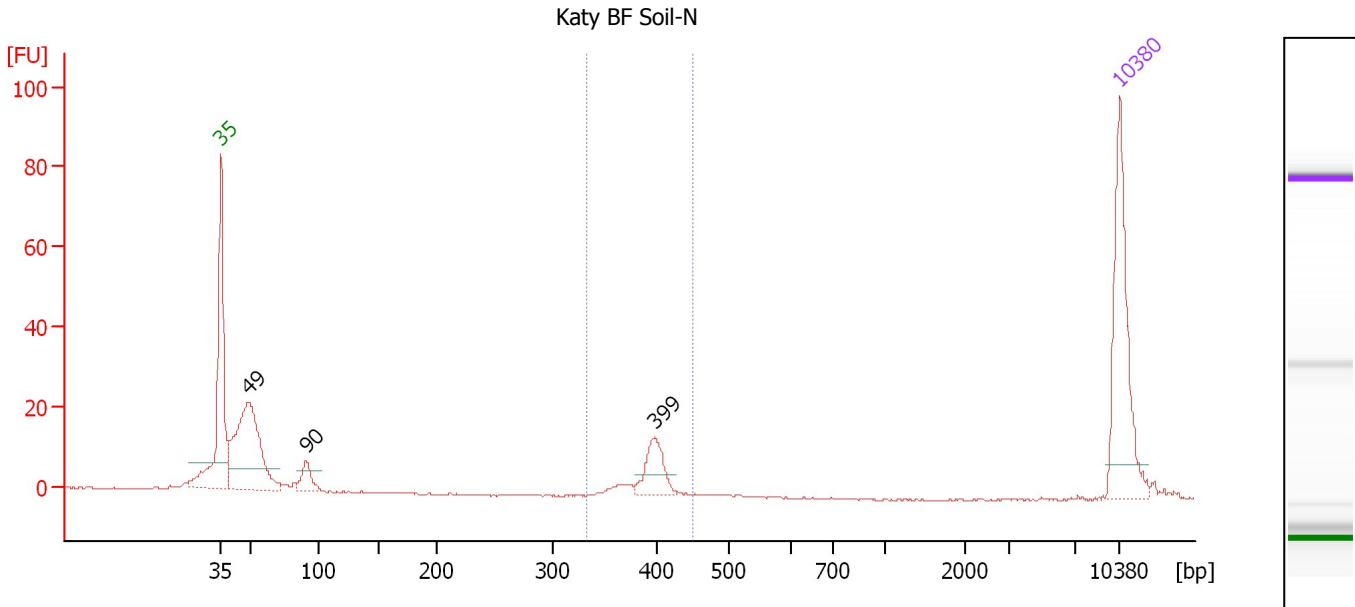
Region table for sample 9 : Katy 1mm Soil-N

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
334	439	393	265.5	68.78	72.3	26	4.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-12-28\2012-12-28_003.xad

Created: 12/28/2012 2:10:44 PM
 Modified: 12/28/2012 3:04:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : Katy BF Soil-N

Number of peaks found: 3 Corr. Area 1: 36.6
 Noise: 0.2

Peak table for sample 10 : Katy BF Soil-N

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	49	173.27	5,334.8	
3	90	21.34	357.8	
4	399	31.87	121.1	
5	10,380	75.00	10.9	Upper Marker

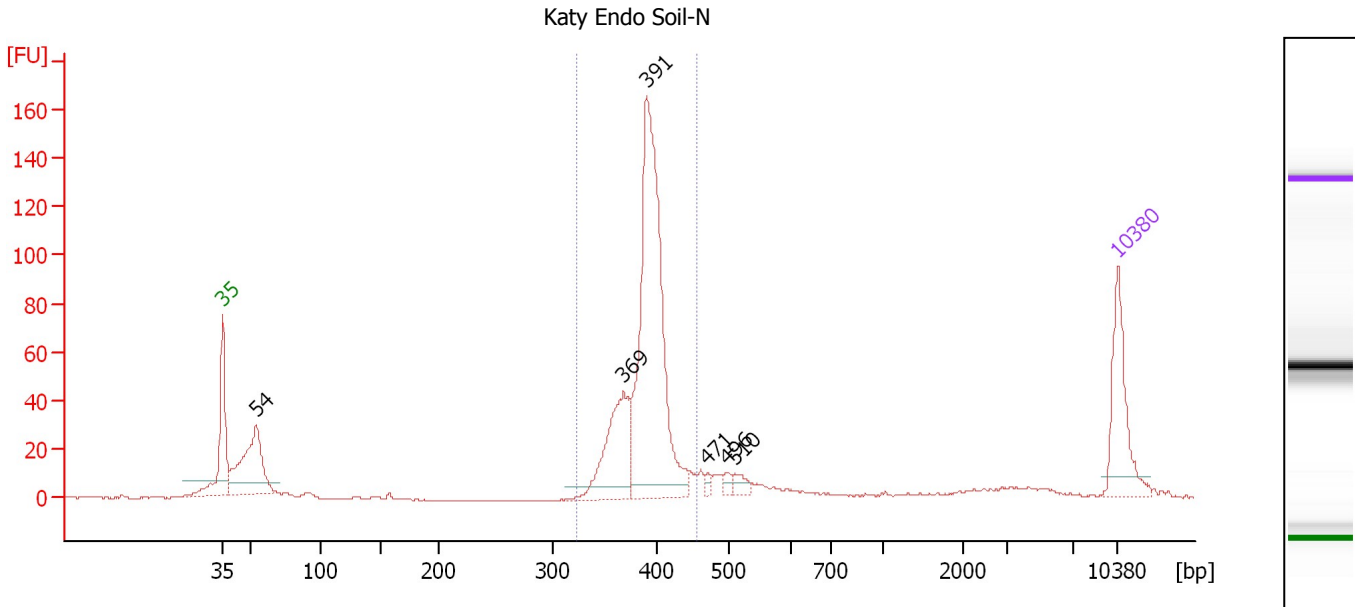
Region table for sample 10 : Katy BF Soil-N

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
333	451	394	141.4	36.76	36.6	20	3.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-12-28\2012-12-28_003.xad

Created: 12/28/2012 2:10:44 PM
 Modified: 12/28/2012 3:04:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : Katy Endo Soil-N

Number of peaks found: 6 Corr. Area 1: 567.6
 Noise: 0.2

Peak table for sample 11 : Katy Endo Soil-N

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	54	178.34	5,039.9	
3	369	136.50	561.2	
4	391	449.56	1,742.9	
5	471	6.34	20.4	
6	496	7.57	23.1	
7	510	12.43	36.9	
8	10,380	75.00	10.9	Upper Marker

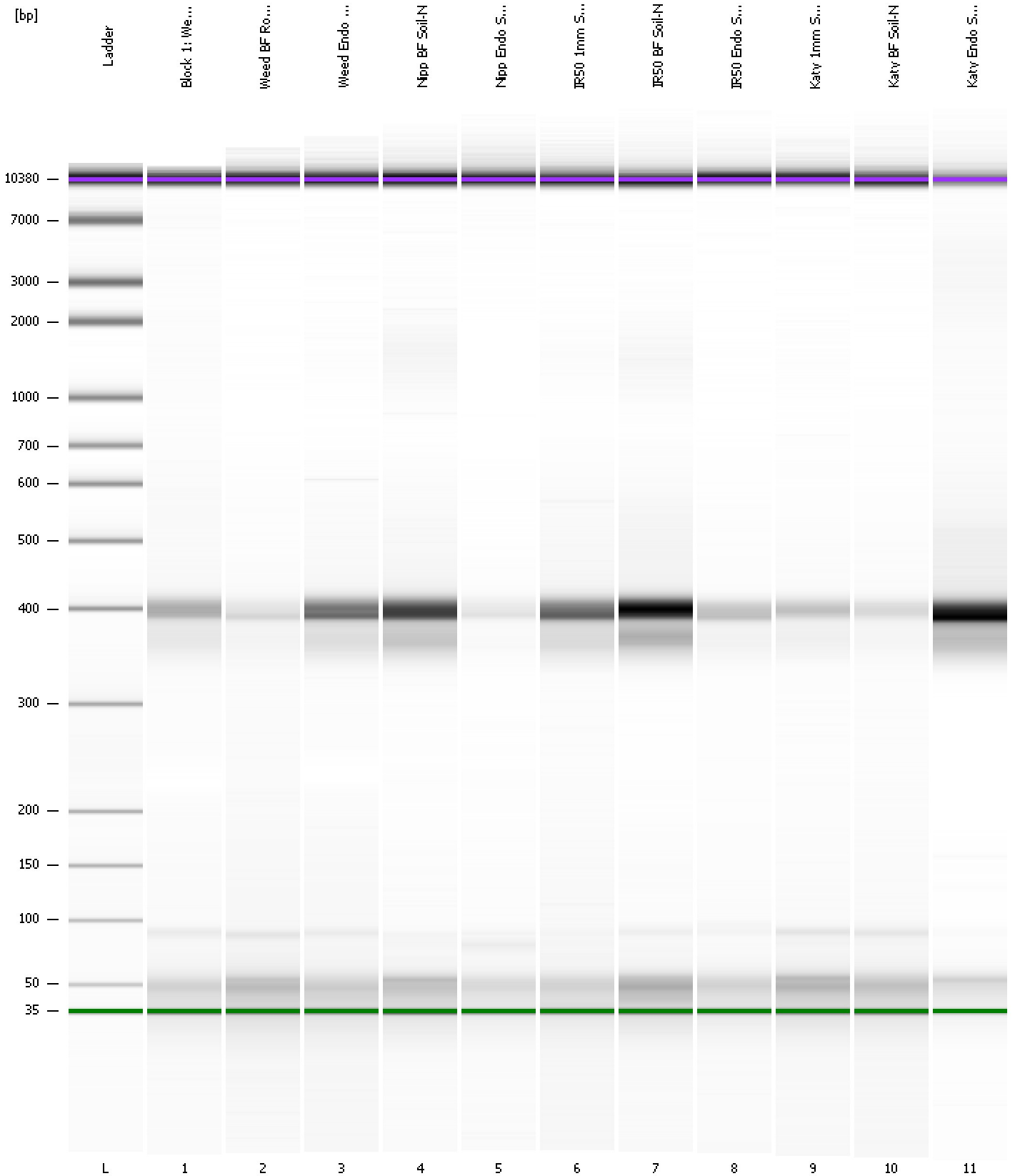
Region table for sample 11 : Katy Endo Soil-N

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
323	457	391	2,271.6	584.33	567.6	70	5.4	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-12-28\2012-12-28_003.xad

Created: 12/28/2012 2:10:44 PM
Modified: 12/28/2012 3:04:00 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-12-28\2012-12-28_003.xad

Created: 12/28/2012 2:10:44 PM
 Modified: 12/28/2012 3:04:00 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		12/28/2012 2:52:02 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-12-28\2012-12-28_003.xad)		Instrument	Run		12/28/2012 2:10:49 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		12/28/2012 2:10:49 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		12/28/2012 2:10:49 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		12/28/2012 2:10:49 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		12/28/2012 2:10:49 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		12/28/2012 2:10:49 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		12/28/2012 2:10:49 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1