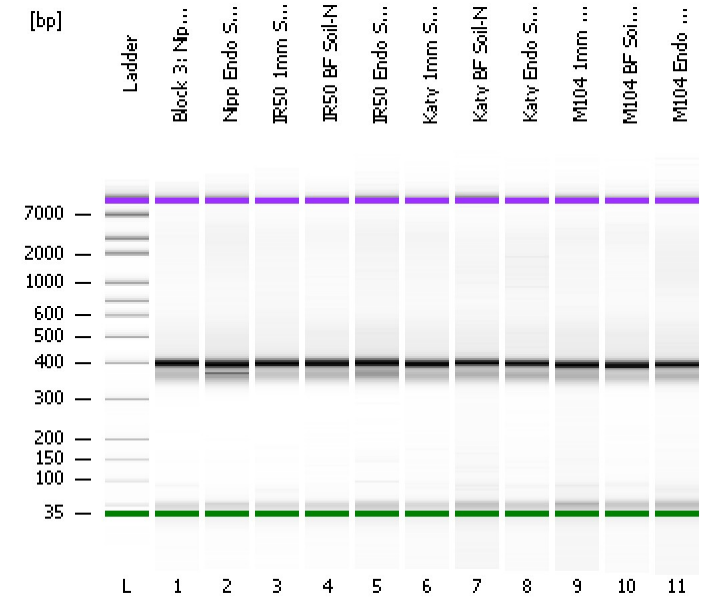
Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-04\2013-01-04_004.xad

Created: 1/4/2013 2:49:34 PM
Modified: 1/4/2013 3:33:08 PM

Electrophoresis File Run Summary



Instrument Information:

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

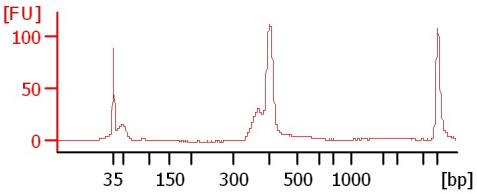
Assay Information:

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

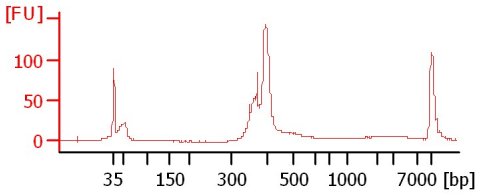
Chip Information:

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

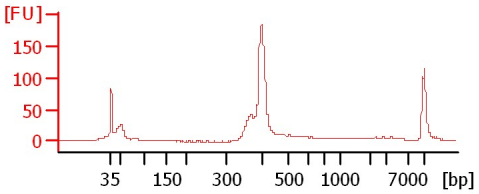
Block 3: Nipp BF Soil-N



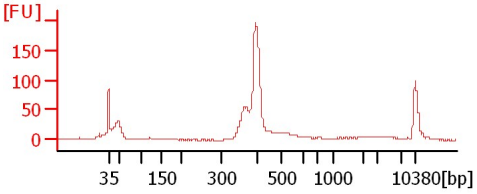
Nipp Endo Soil-N



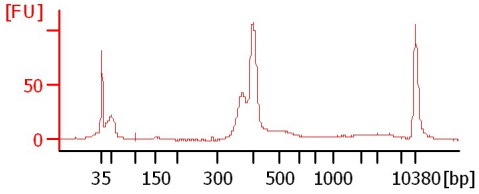
IR50 1mm Soil-N



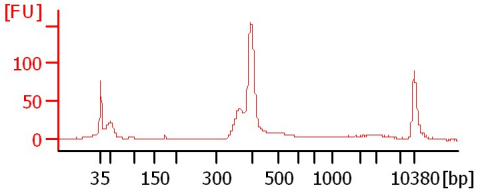
IR50 BF Soil-N



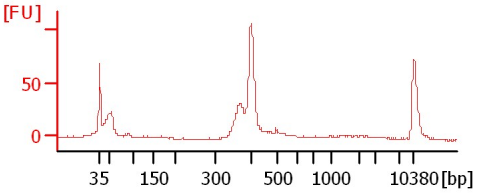
IR50 Endo Soil-N



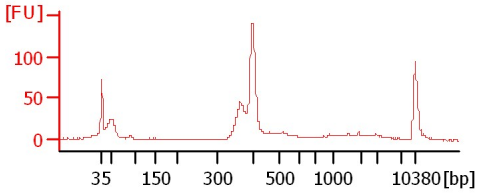
Katy 1mm Soil-N



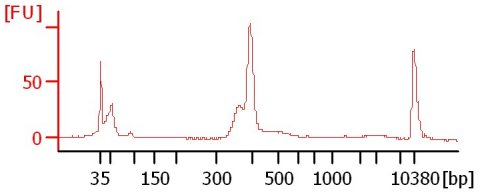
Katy BF Soil-N



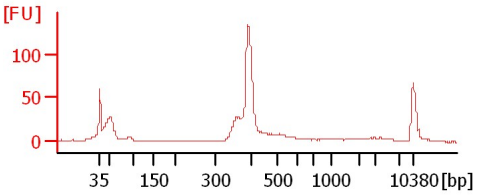
Katy Endo Soil-N



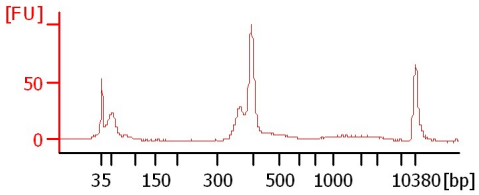
M104 1mm Soil-N



M104 BF Soil-N



M104 Endo Soil-N



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-04\2013-01-04_004.xad

Created: 1/4/2013 2:49:34 PM
Modified: 1/4/2013 3:33:08 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Block 3: 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		☐	✔			
M104 1mm Soil-N		☐	✔			
M104 BF Soil-N		☐	✔			
M104 Endo Soil-N		☐	✔			
Ladder		☐	✔			

Chip Lot # **Reagent Kit Lot #**

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-04\2013-01-04_004.xad

Created: 1/4/2013 2:49:34 PM
Modified: 1/4/2013 3:33:08 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

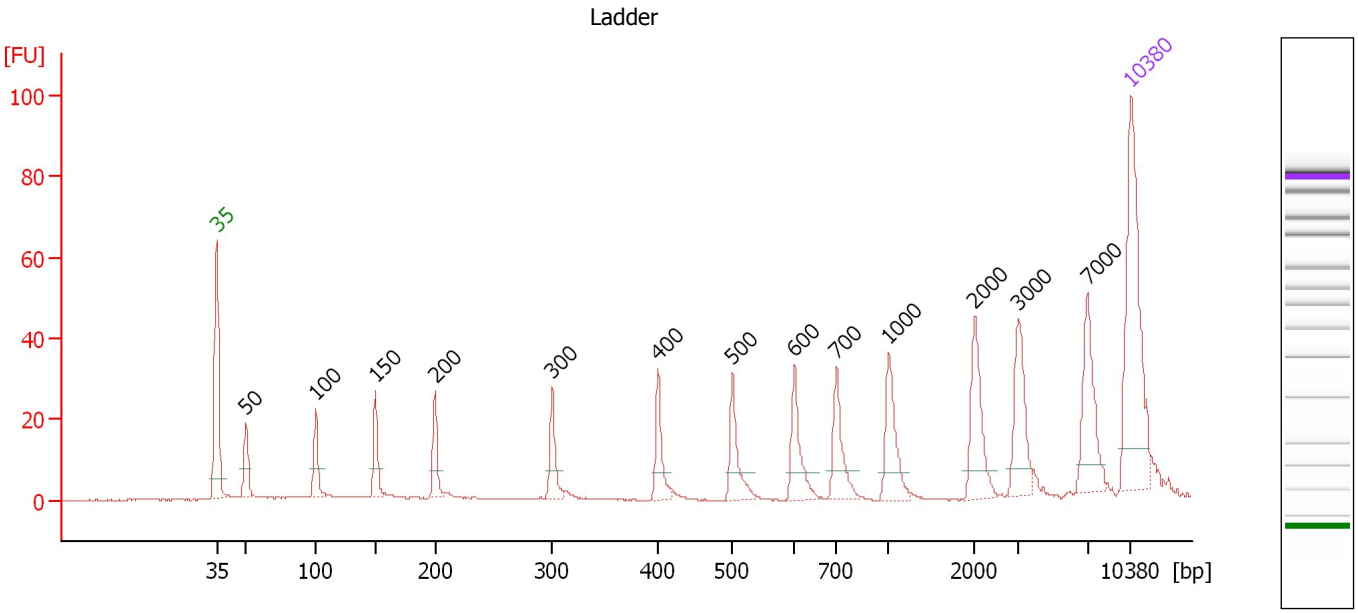
Ladder

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\2013-01-04\2013-01-04_004.xad

Created: 1/4/2013 2:49:34 PM
Modified: 1/4/2013 3:33:08 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

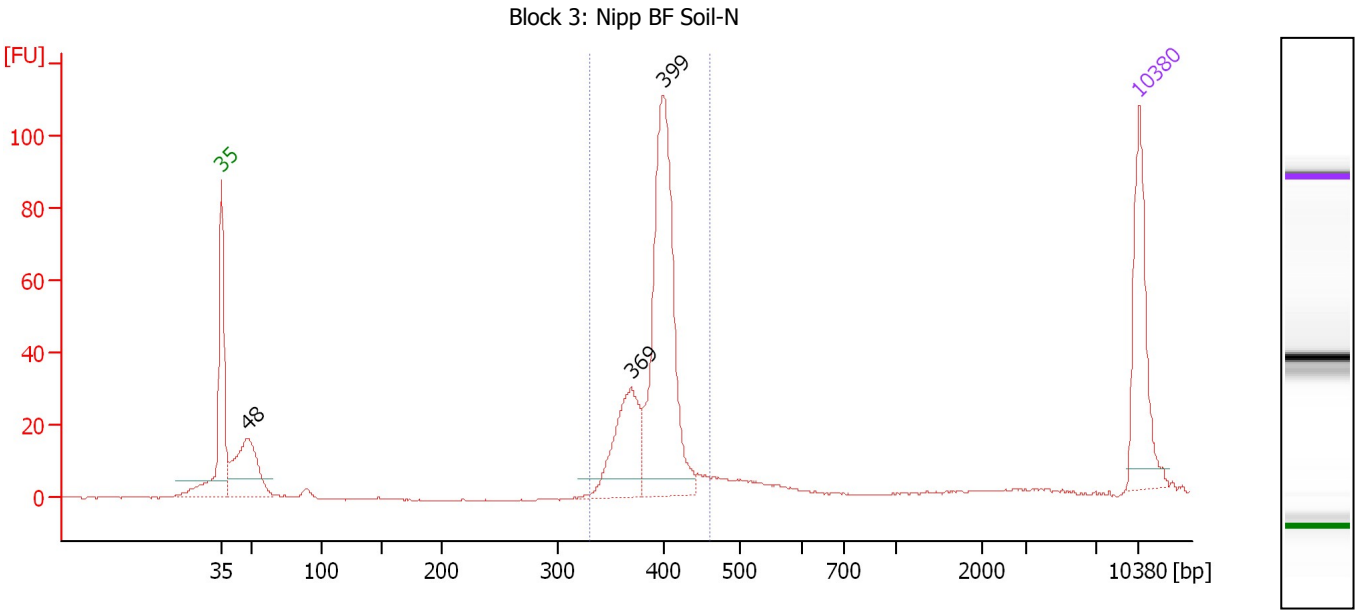
Peak table for Ladder

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:\...ents and Settings\Bioanalyzer\2013-01-04\2013-01-04_004.xad

Created: 1/4/2013 2:49:34 PM
Modified: 1/4/2013 3:33:08 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : Block 3: Nipp BF Soil-N

Number of peaks found:	3	Corr. Area 1:	376.3
Noise:	0.1		

Peak table for sample 1 : Block 3: Nipp BF Soil-N

Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1		35	125.00	5,411.3	Lower Marker
2		48	118.39	3,713.0	
3		369	98.44	404.6	
4		399	277.13	1,052.9	
5		10,380	75.00	10.9	Upper Marker

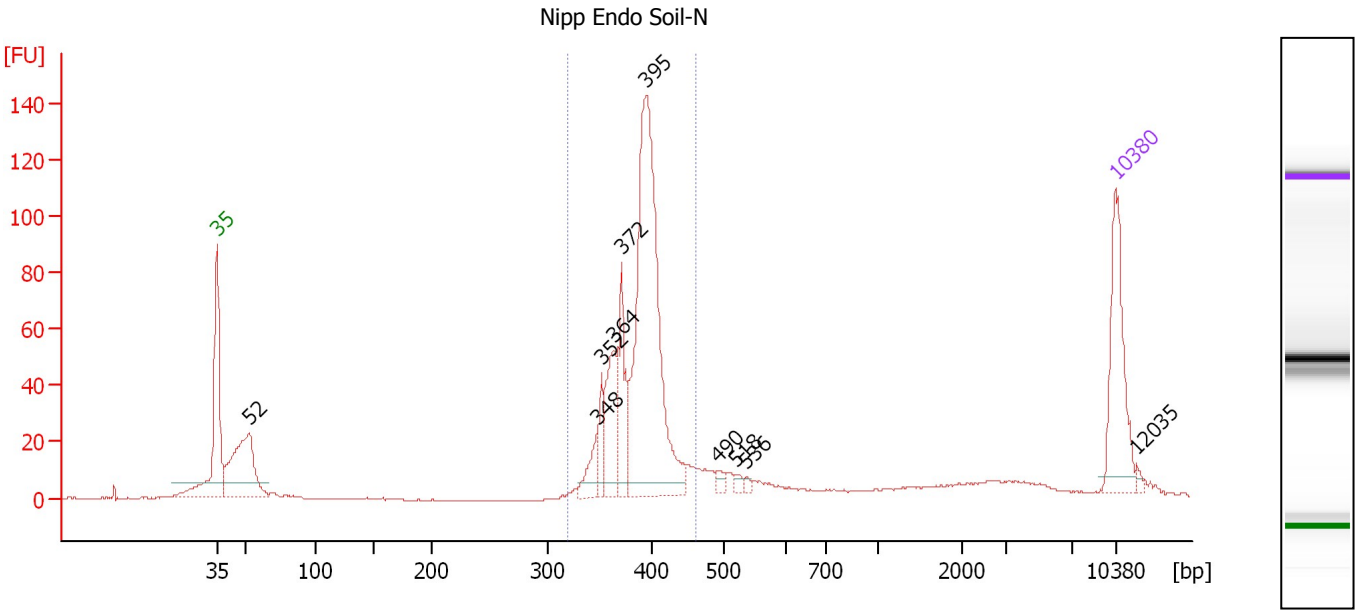
Region table for sample 1 : Block 3: Nipp BF Soil-N

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
329	461	392	1,459.2	377.17	376.3	76	5.4	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-04\2013-01-04_004.xad

Created: 1/4/2013 2:49:34 PM
Modified: 1/4/2013 3:33:08 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : Nipp Endo Soil-N

Number of peaks found:	10	Corr. Area 1:	578.7
Noise:	0.2		

Peak table for sample 2 : Nipp Endo Soil-N

Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	◀	35	125.00	5,411.3	Lower Marker
2		52	142.61	4,131.4	
3		348	26.80	116.6	
4		352	26.44	113.8	
5		364	68.96	287.0	
6		372	57.46	234.2	
7		395	356.41	1,365.8	
8		490	7.18	22.2	
9		518	5.40	15.8	
10		536	3.17	9.0	
11	🔒	10,380	75.00	10.9	Upper Marker
12		12,035	0.00	0.0	

Region table for sample 2 : 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
320	462	389	2,125.3	543.83	578.7	71	6.1	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-04\2013-01-04_004.xad

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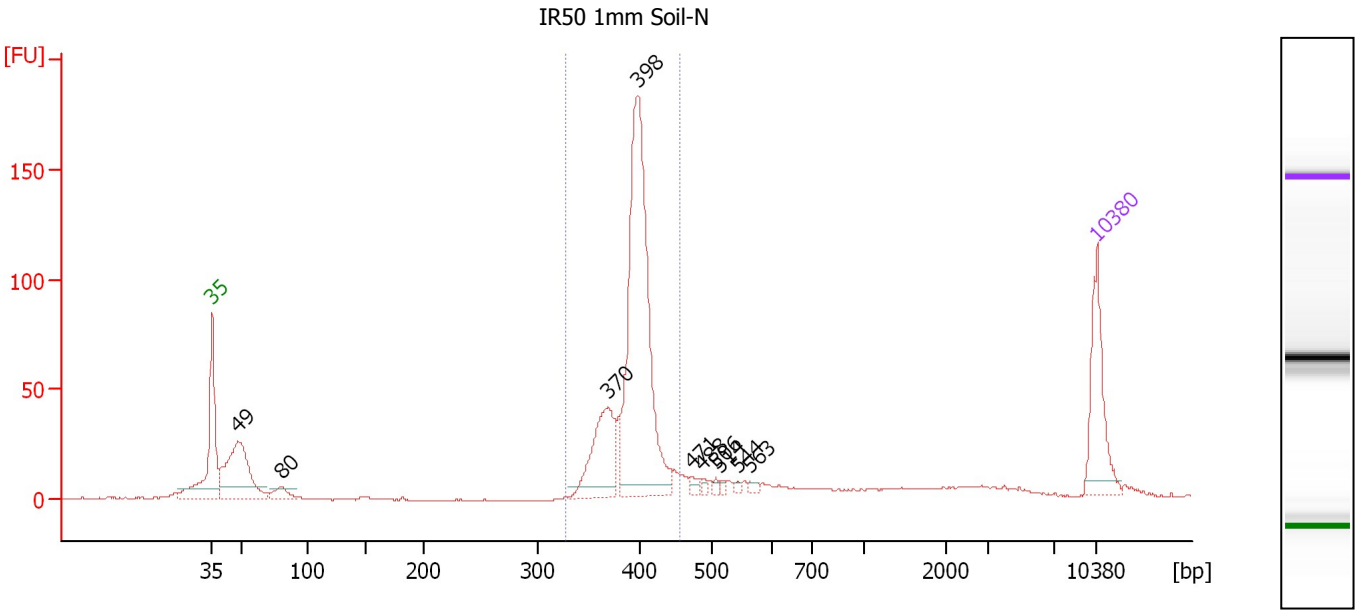
Modified: 1/4/2013 3:33:08 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : IR50 1mm Soil-N

Number of peaks found:	10	Corr. Area 1:	600.8
Noise:	0.3		

Peak table for sample 3 : 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	189.30	5,876.5	
3		80	23.08	437.7	
4		370	119.03	488.1	
5		398	435.09	1,655.5	
6		471	7.34	23.6	
7		488	4.70	14.6	
8		506	4.25	12.7	
9		514	3.91	11.5	
10		544	3.56	9.9	
11		563	5.25	14.1	
12	🔒	10,380	75.00	10.9	Upper Marker

Region table for sample 3 : 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
329	455	394	2,260.0	586.96	600.8	64	5.2	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-04\2013-01-04_004.xad

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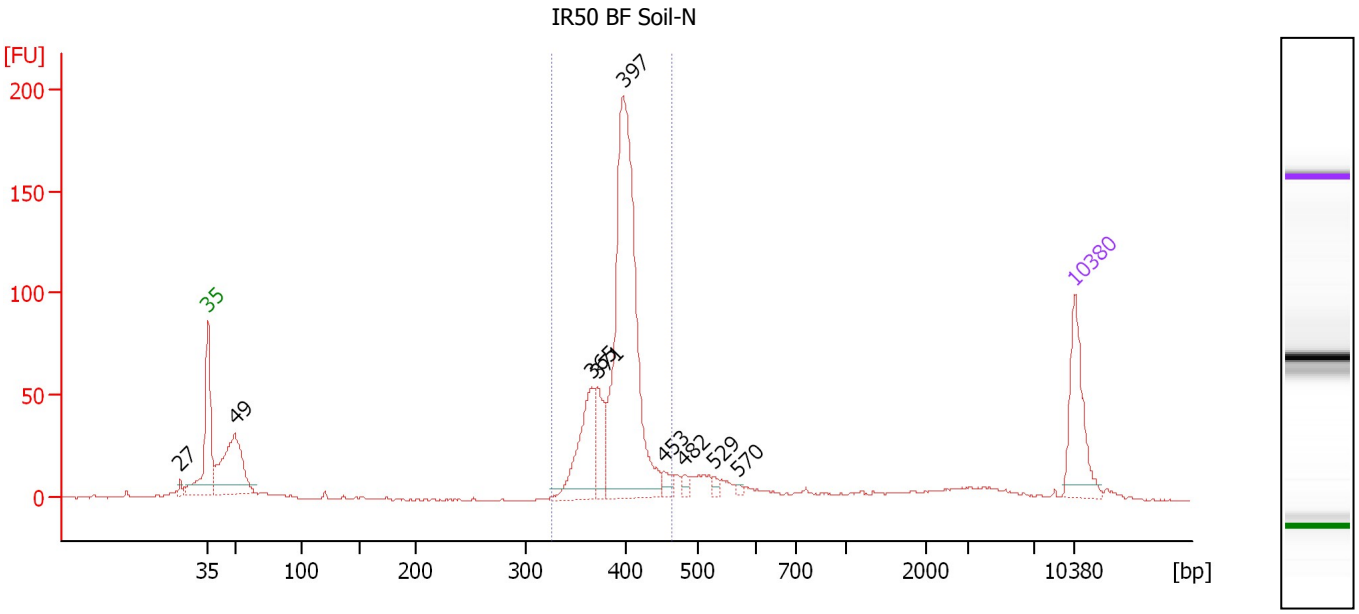

Overall Results for sample 4 : IR50 BF Soil-N

Number of peaks found:	9	Corr. Area 1:	712.6
Noise:	0.4		

Peak table for sample 4 : IR50 BF Soil-N

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	27	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	49	185.54	5,692.6	
4	365	118.54	491.6	
5	371	59.23	242.1	
6	397	509.57	1,945.8	
7	453	14.76	49.4	
8	482	9.91	31.1	
9	529	6.61	18.9	
10	570	3.27	8.7	
11	10,380	75.00	10.9	Upper Marker

Region table for sample 4 : 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
326	465	394	2,704.9	701.14	712.6	66	5.8	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-04\2013-01-04_004.xad

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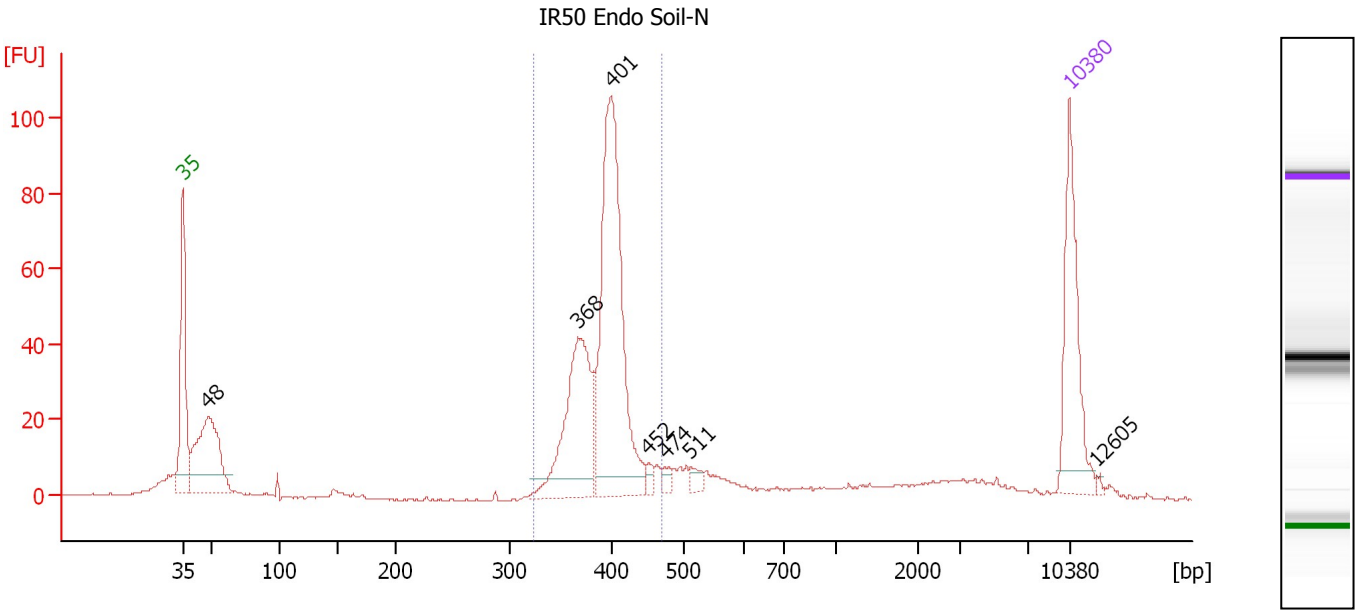

Overall Results for sample 5 : IR50 Endo Soil-N

Number of peaks found:	7	Corr. Area 1:	429.8
Noise:	0.3		

Peak table for sample 5 : IR50 Endo Soil-N

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	145.88	4,568.4	
3	368	143.90	593.3	
4	401	266.27	1,007.3	
5	452	6.55	22.0	
6	474	6.21	19.8	
7	511	7.50	22.2	
8	10,380	75.00	10.9	Upper Marker
9	12,605	0.00	0.0	

Region table for sample 5 : 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
324	469	393	1,646.3	426.04	429.8	62	6.3	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-04\2013-01-04_004.xad

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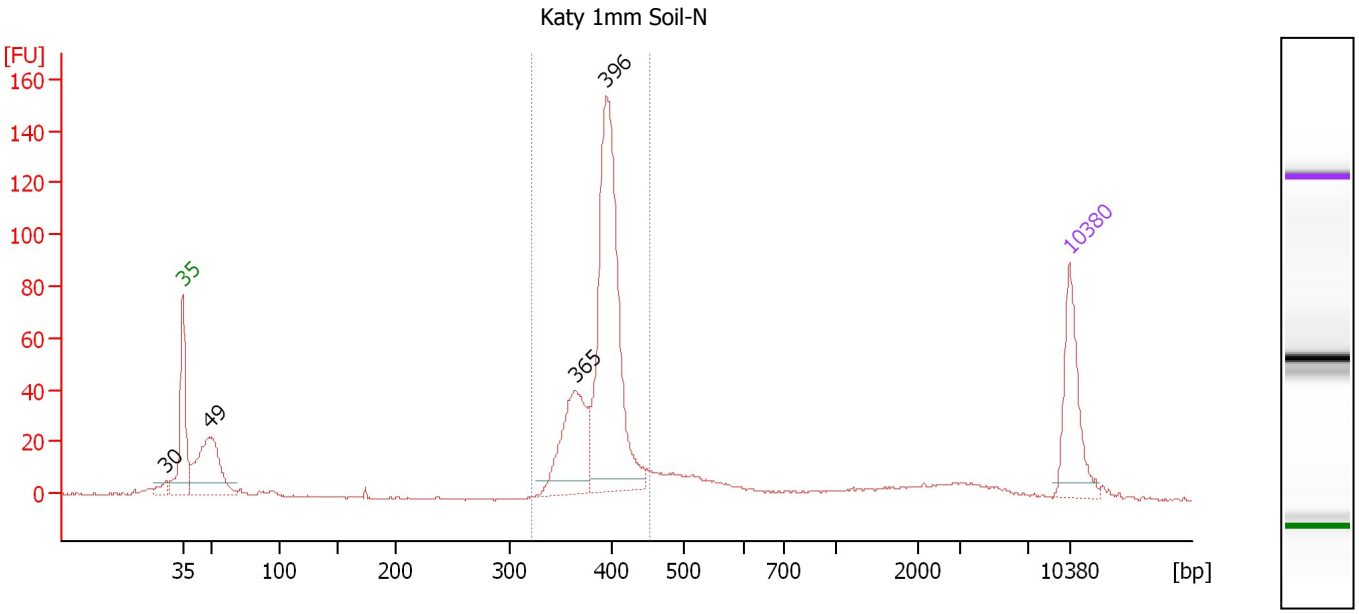
Modified: 1/4/2013 3:33:08 PM

Electropherogram Summary Continued ...



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

Number of peaks found:	4	Corr. Area 1:	537.9
Noise:	0.4		

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

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	30	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	49	170.59	5,302.1	
4	365	137.56	571.3	
5	396	387.29	1,483.0	
6	10,380	75.00	10.9	Upper Marker

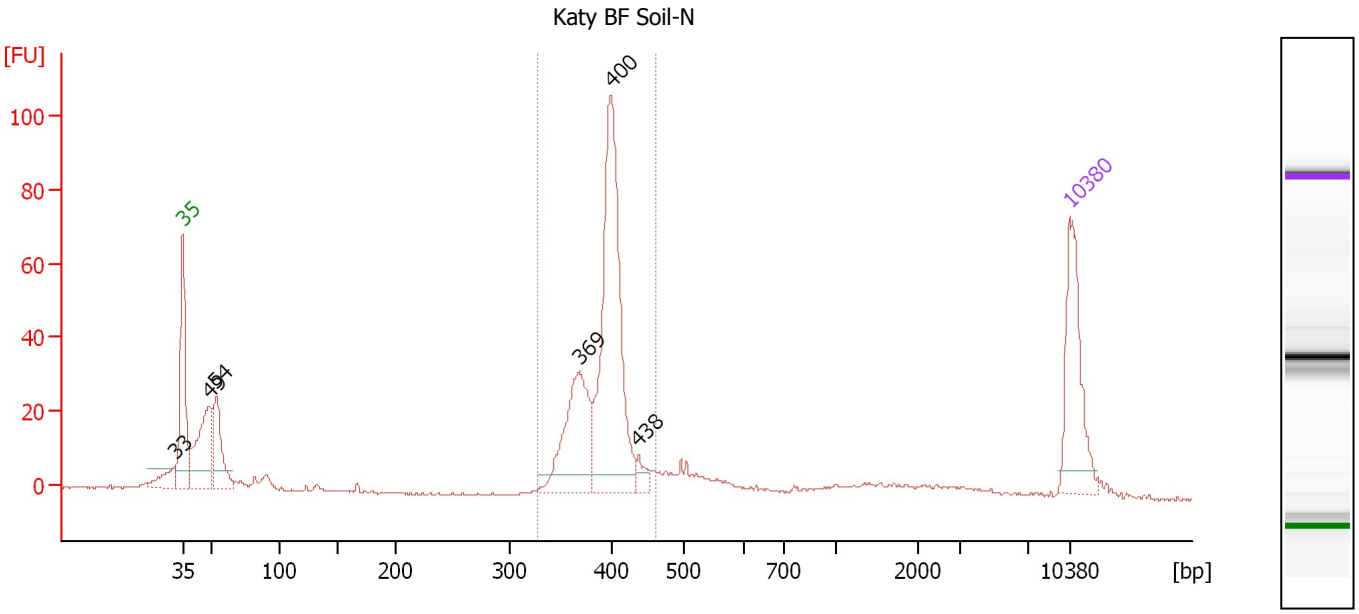
Region table for sample 6 : Katy 1mm Soil-N

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
322	454	391	2,153.1	554.74	537.9	63	5.5	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-04\2013-01-04_004.xad

Created: 1/4/2013 2:49:34 PM
Modified: 1/4/2013 3:33:08 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : Katy BF Soil-N

Number of peaks found:	6	Corr. Area 1:	355.2
Noise:	0.2		

Peak table for sample 7 : Katy BF Soil-N

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	33	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	49	116.24	3,628.9	
4	54	77.31	2,180.8	
5	369	123.83	509.0	
6	400	270.88	1,026.9	
7	438	12.04	41.6	
8	10,380	75.00	10.9	Upper Marker

Region table for sample 7 : 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
328	461	393	1,612.4	417.13	355.2	57	5.8	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-04\2013-01-04_004.xad

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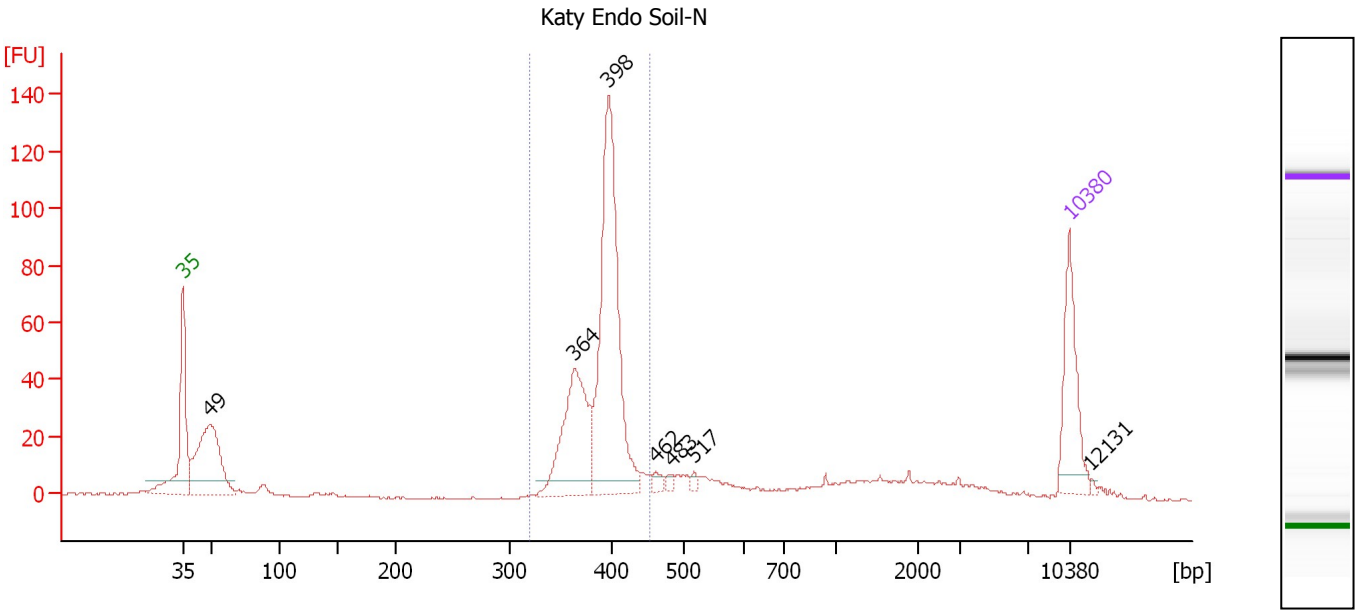
Modified: 1/4/2013 3:33:08 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : Katy Endo Soil-N

Number of peaks found:	7	Corr. Area 1:	457.6
Noise:	0.2		

Peak table for sample 8 : Katy Endo Soil-N

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	49	210.07	6,446.0	
3	364	175.44	730.6	
4	398	351.14	1,338.3	
5	462	8.54	28.0	
6	483	6.19	19.4	
7	517	4.26	12.5	
8	10,380	75.00	10.9	Upper Marker
9	12,131	0.00	0.0	

Region table for sample 8 : 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
320	455	390	2,120.5	544.65	457.6	59	5.7	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-04\2013-01-04_004.xad

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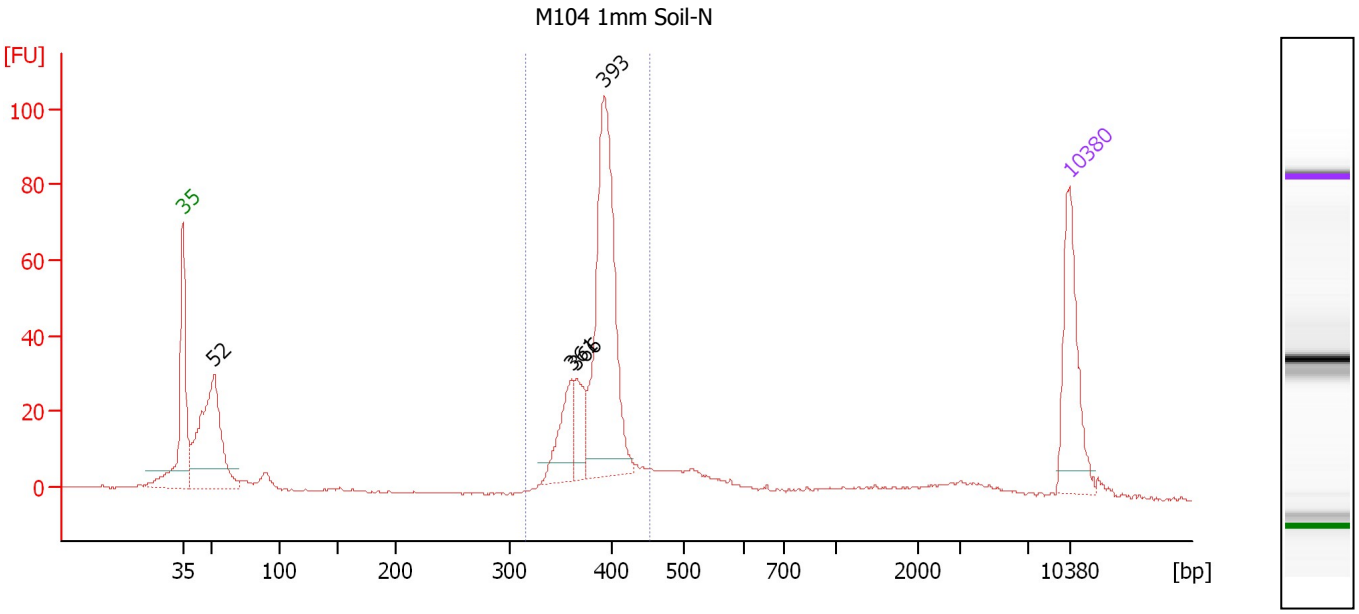
Modified: 1/4/2013 3:33:08 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : M104 1mm Soil-N

Number of peaks found:	4	Corr. Area 1:	366.4
Noise:	0.2		

Peak table for sample 9 : M104 1mm Soil-N

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	52	215.80	6,282.0	
3	361	59.99	251.6	
4	366	38.20	158.3	
5	393	262.01	1,010.5	
6	10,380	75.00	10.9	Upper Marker

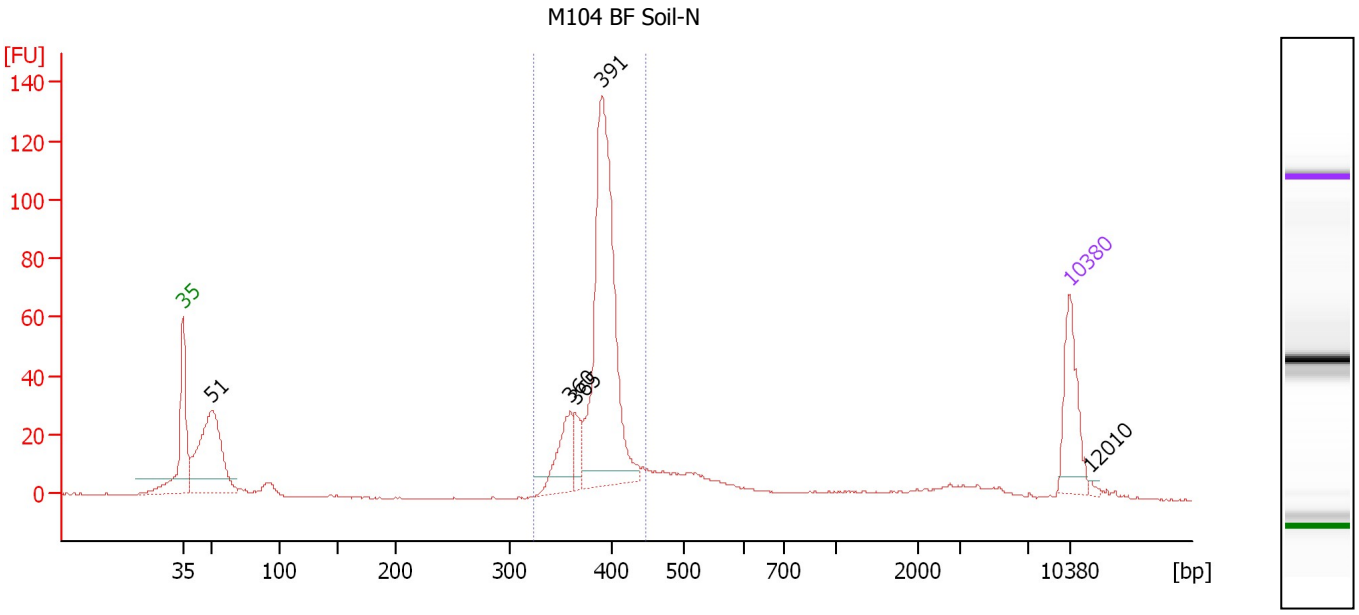
Region table for sample 9 : M104 1mm Soil-N

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
317	454	388	1,630.6	416.22	366.4	58	5.6	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-04\2013-01-04_004.xad

Created: 1/4/2013 2:49:34 PM
Modified: 1/4/2013 3:33:08 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : M104 BF Soil-N

Number of peaks found:	5	Corr. Area 1:	431.7
Noise:	0.2		

Peak table for sample 10 : M104 BF Soil-N

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	51	279.91	8,391.8	
3	360	79.36	333.6	
4	365	33.96	141.1	
5	391	463.23	1,794.6	
6	10,380	75.00	10.9	Upper Marker
7	12,010	0.00	0.0	

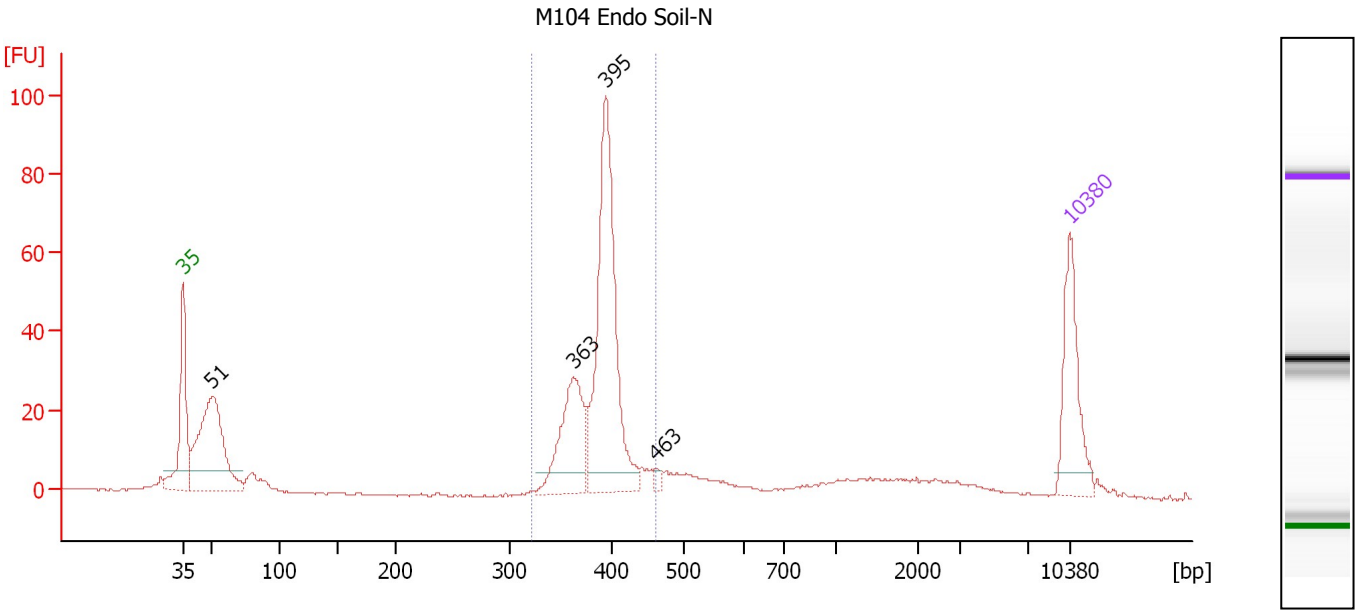
Region table for sample 10 : M104 BF Soil-N

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
324	448	389	2,441.7	626.26	431.7	60	5.2	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-04\2013-01-04_004.xad

Created: 1/4/2013 2:49:34 PM
Modified: 1/4/2013 3:33:08 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : M104 Endo Soil-N

Number of peaks found:	4	Corr. Area 1:	320.3
Noise:	0.2		

Peak table for sample 11 : M104 Endo Soil-N

Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	◀	35	125.00	5,411.3	Lower Marker
2		51	241.07	7,207.7	
3		363	117.25	489.6	
4		395	288.43	1,106.9	
5		463	5.38	17.6	
6	▶	10,380	75.00	10.9	Upper Marker

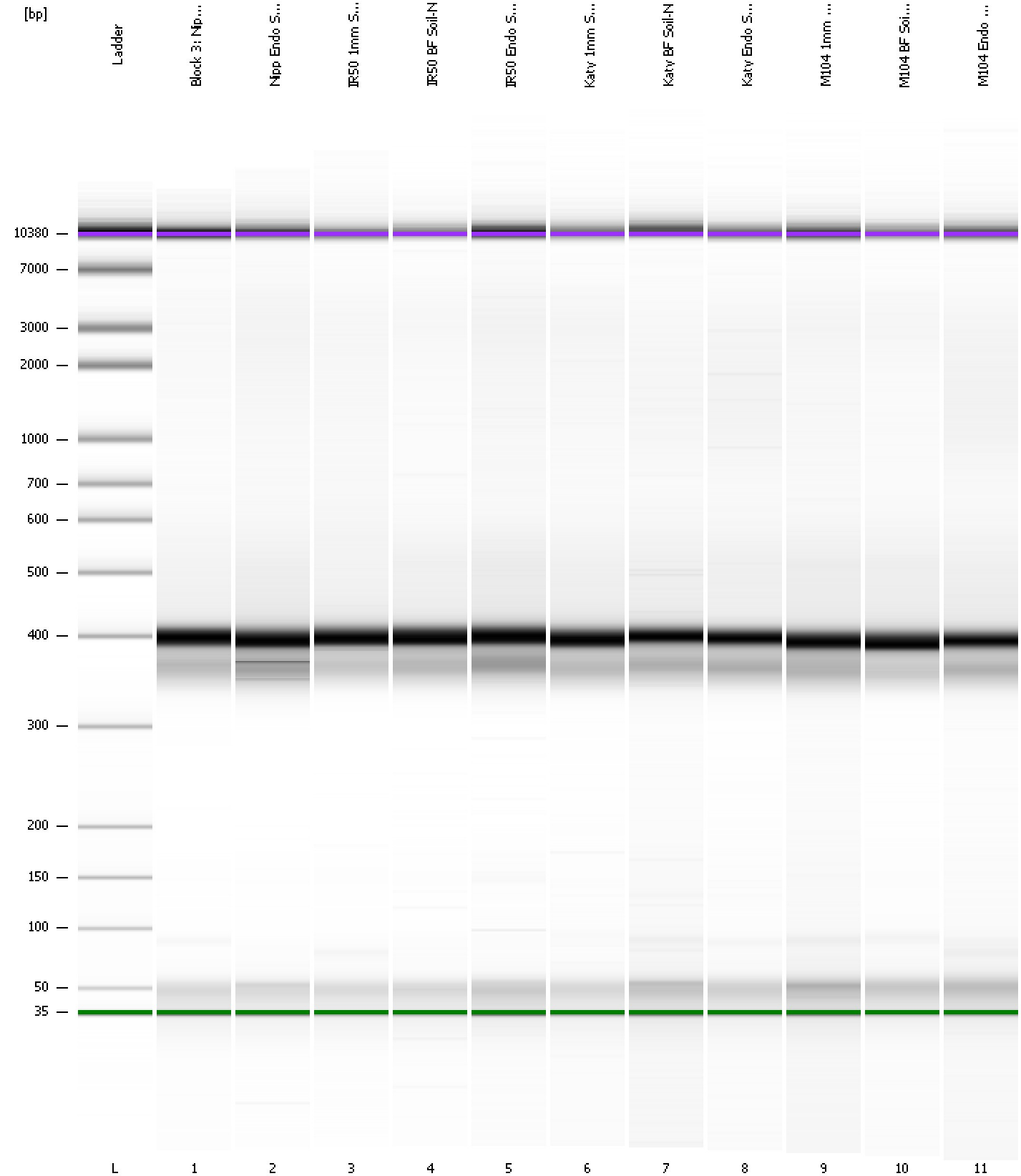
Region table for sample 11 : M104 Endo Soil-N

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
321	461	389	1,700.3	435.53	320.3	55	5.9	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-04\2013-01-04_004.xad

Created: 1/4/2013 2:49:34 PM
Modified: 1/4/2013 3:33:08 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-01-04\2013-01-04_004.xad

Created: 1/4/2013 2:49:34 PM
Modified: 1/4/2013 3:33:08 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		1/4/2013 3:30:53 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-01-04\2013-01-04_004.xad)		Instrument	Run		1/4/2013 2:49:40 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		1/4/2013 2:49:40 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		1/4/2013 2:49:40 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		1/4/2013 2:49:40 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		1/4/2013 2:49:40 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		1/4/2013 2:49:40 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		1/4/2013 2:49:40 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1