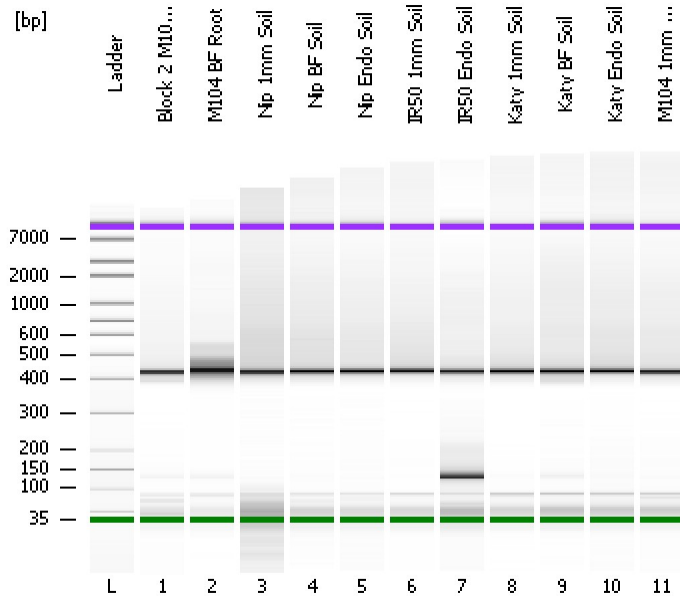


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-12-19\2012-12-19_004.xad

Created: 12/19/2012 1:24:40 PM
Modified: 12/19/2012 2:07:03 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

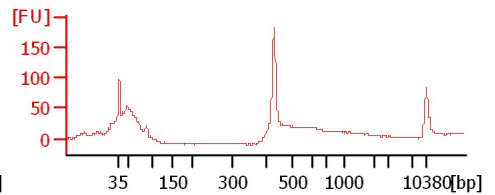
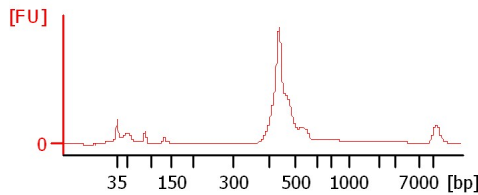
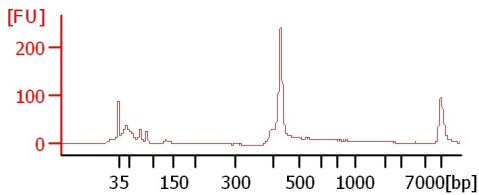
Chip Information:

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

Block 2 M104 1mm Root

M104 BF Root

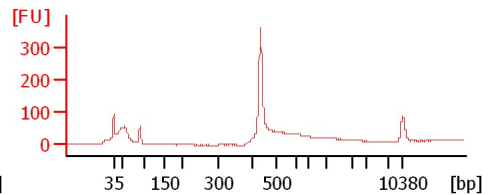
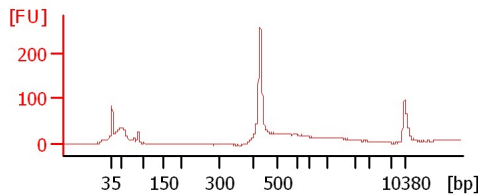
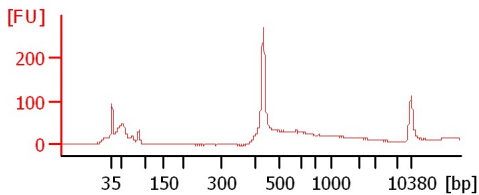
Nip 1mm Soil



Nip BF Soil

Nip Endo Soil

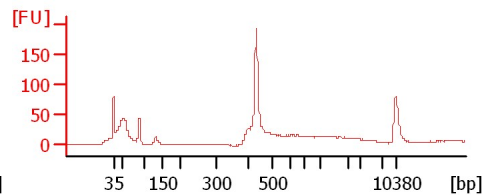
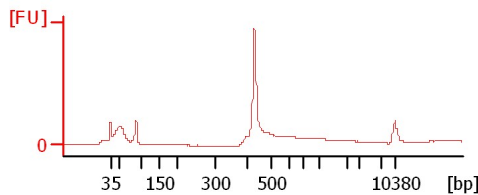
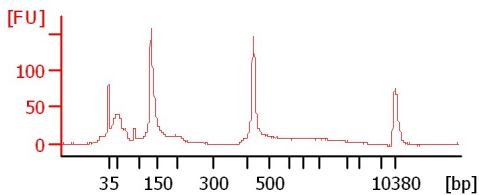
IR50 1mm Soil



IR50 Endo Soil

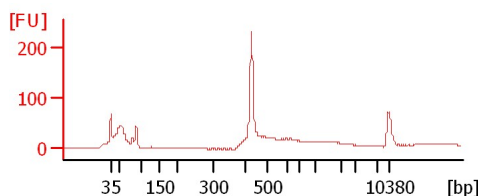
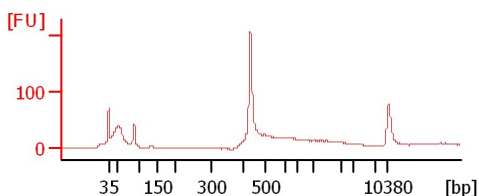
Katy 1mm Soil

Katy BF Soil



Katy Endo Soil

M104 1mm Soil



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-12-19\2012-12-19_004.xad

Created: 12/19/2012 1:24:40 PM
 Modified: 12/19/2012 2:07:03 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Block 2 M104 1mm Root		<input type="checkbox"/>	✓			
M104 BF Root		<input type="checkbox"/>	✓			
Nip 1mm Soil		<input type="checkbox"/>	✓			
Nip BF Soil		<input type="checkbox"/>	✓			
Nip Endo Soil		<input type="checkbox"/>	✓			
IR50 1mm Soil		<input type="checkbox"/>	✓			
IR50 Endo Soil		<input type="checkbox"/>	✓			
Katy 1mm Soil		<input type="checkbox"/>	✓			
Katy BF Soil		<input type="checkbox"/>	✓			
Katy Endo Soil		<input type="checkbox"/>	✓			
M104 1mm Soil		<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\2012-12-19\2012-12-19_004.xad

Created: 12/19/2012 1:24:40 PM
Modified: 12/19/2012 2:07:03 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

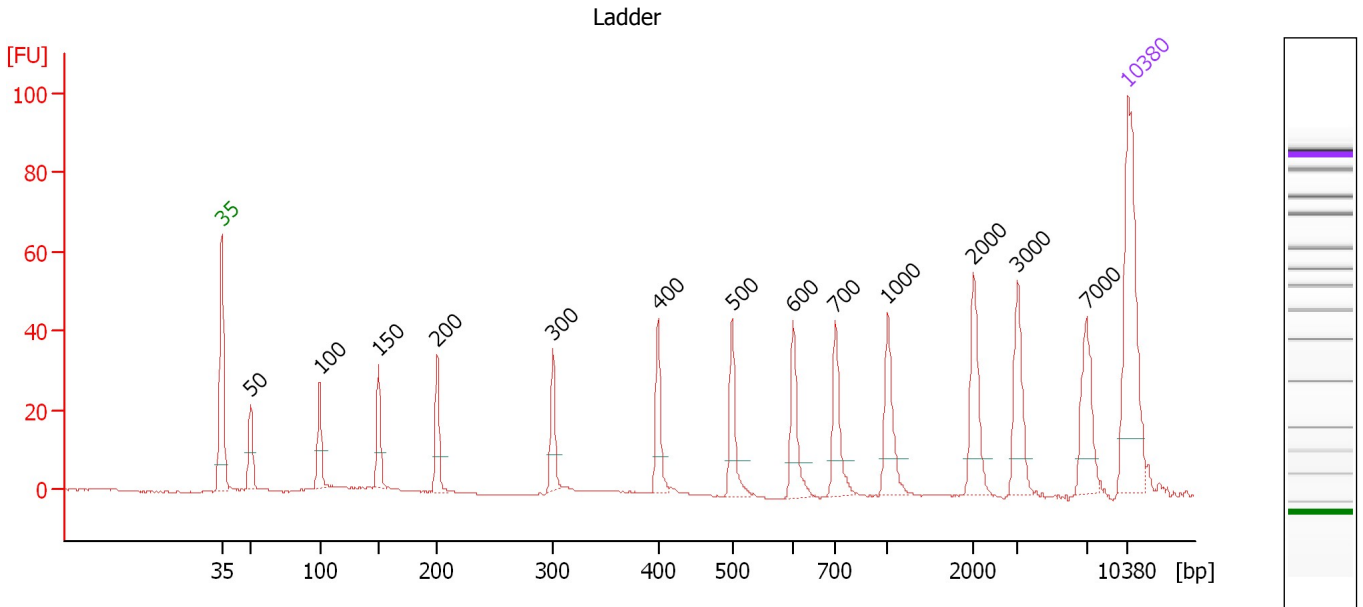
Ladder

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\2012-12-19\2012-12-19_004.xad

Created: 12/19/2012 1:24:40 PM
 Modified: 12/19/2012 2:07:03 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

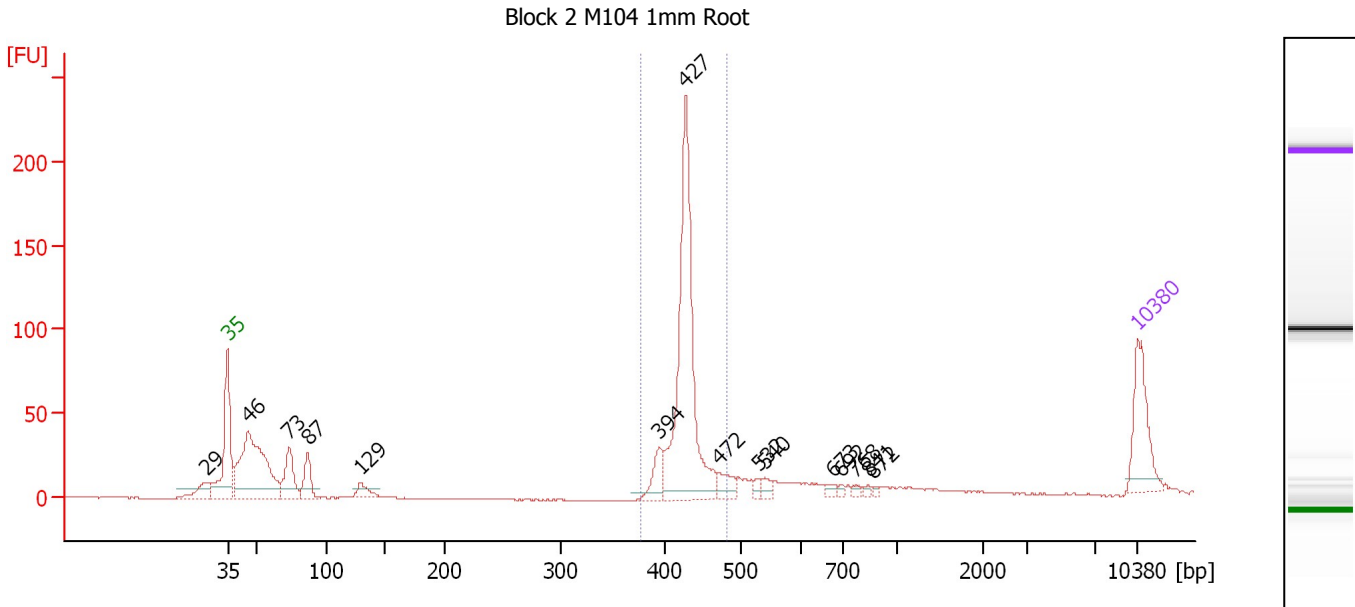
Peak table for Ladder

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\2012-12-19\2012-12-19_004.xad

Created: 12/19/2012 1:24:40 PM
 Modified: 12/19/2012 2:07:03 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : Block 2 M104 1mm Root

Number of peaks found: 15 Corr. Area 1: 420.8
 Noise: 0.1

Peak table for sample 1 : Block 2 M104 1mm Root

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	29	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	46	326.10	10,790.7	
4	73	80.54	1,665.2	
5	87	52.11	910.9	
6	129	27.33	320.7	
7	394	43.61	167.6	
8	427	406.13	1,441.2	
9	472	28.27	90.7	
10	532	10.10	28.8	
11	540	11.74	33.0	
12	673	6.88	15.5	
13	692	5.06	11.1	
14	768	5.30	10.5	
15	841	4.59	8.3	
16	872	3.38	5.9	
17	10,380	75.00	10.9	Upper Marker

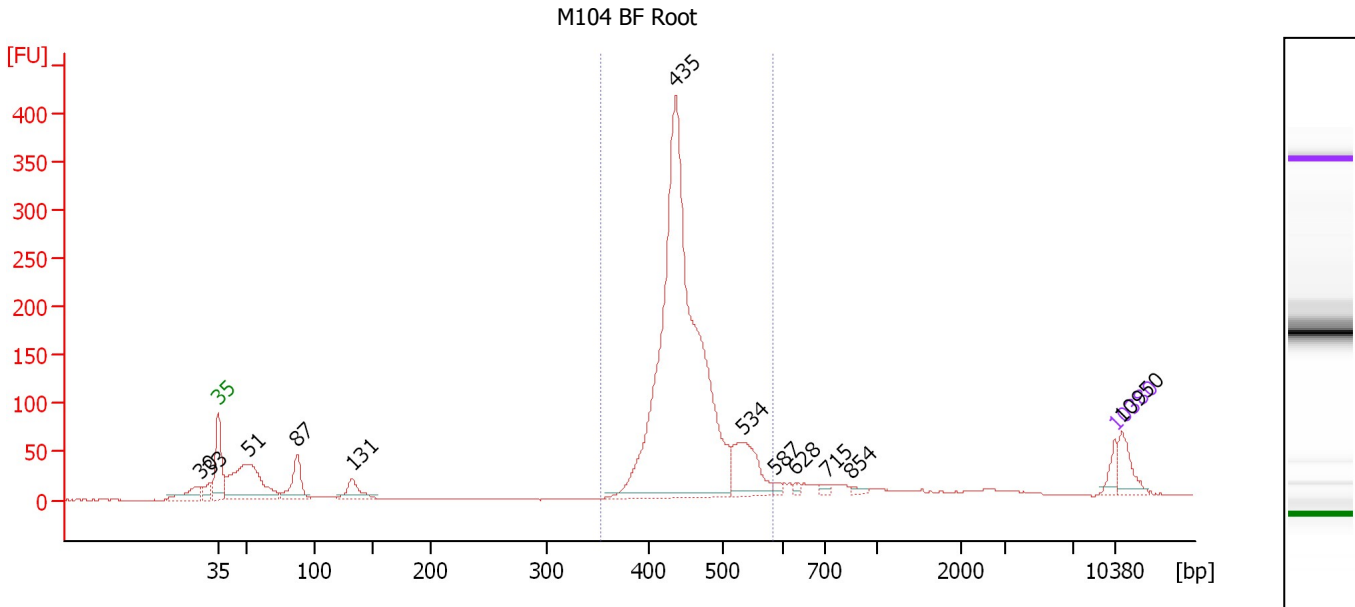
Region table for sample 1 : Block 2 M104 1mm Root

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
376	483	427	1,547.3	435.25	420.8	48	4.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-12-19\2012-12-19_004.xad

Created: 12/19/2012 1:24:40 PM
 Modified: 12/19/2012 2:07:03 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : M104 BF Root

Number of peaks found: 12 Corr. Area 1: 1,805.4
 Noise: 0.3

Peak table for sample 2 : M104 BF Root

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	30	0.00	0.0	
2	33	0.00	0.0	
3	35	125.00	5,411.3	Lower Marker
4	51	1,096.86	32,828.5	
5	87	391.91	6,841.2	
6	131	215.72	2,489.6	
7	435	5,036.41	17,541.3	
8	534	486.81	1,381.2	
9	587	28.42	73.4	
10	628	25.82	62.3	
11	715	28.03	59.4	
12	854	23.92	42.4	
13	10,380	75.00	10.9	Upper Marker
14	10,950	0.00	0.0	

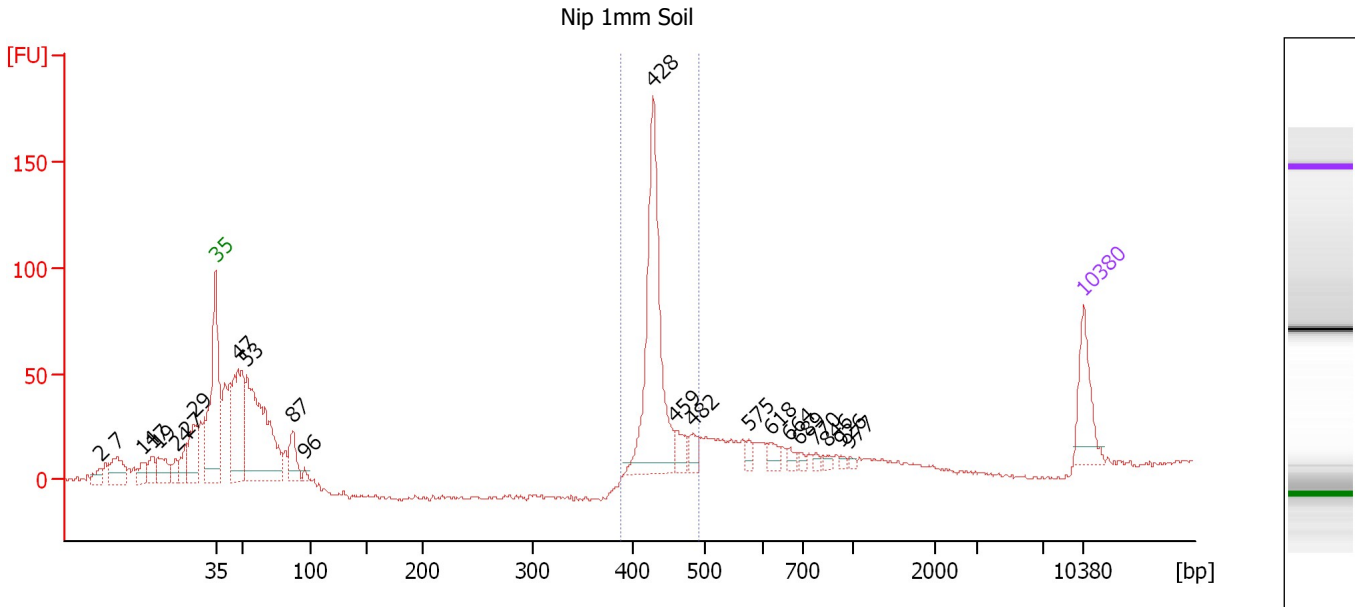
Region table for sample 2 : M104 BF Root

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
354	583	452	18,607.4	5,508.47	1,805.4	71	8.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-12-19\2012-12-19_004.xad

Created: 12/19/2012 1:24:40 PM
 Modified: 12/19/2012 2:07:03 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : Nip 1mm Soil

Number of peaks found: 23 Corr. Area 1: 315.6
 Noise: 0.9

Peak table for sample 3 : Nip 1mm Soil


Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	2	0.00	0.0	
2	7	0.00	0.0	
3	14	0.00	0.0	
4	17	0.00	0.0	
5	19	0.00	0.0	
6	24	0.00	0.0	
7	27	0.00	0.0	
8	29	0.00	0.0	
9	35	125.00	5,411.3	Lower Marker
10	47	289.18	9,286.3	
11	53	478.28	13,796.5	
12	87	71.05	1,242.2	
13	96	9.04	142.3	
14	428	420.44	1,490.0	
15	459	33.26	109.8	
16	482	26.75	84.0	
17	575	13.21	34.8	
18	618	21.12	51.8	
19	664	12.22	27.9	
20	689	7.41	16.3	
21	770	7.19	14.2	
22	846	8.60	15.4	
23	926	4.66	7.6	
24	977	5.00	7.8	
25	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-12-19\2012-12-19_004.xad

Created: 12/19/2012 1:24:40 PM
Modified: 12/19/2012 2:07:03 PM

Electropherogram Summary Continued ...

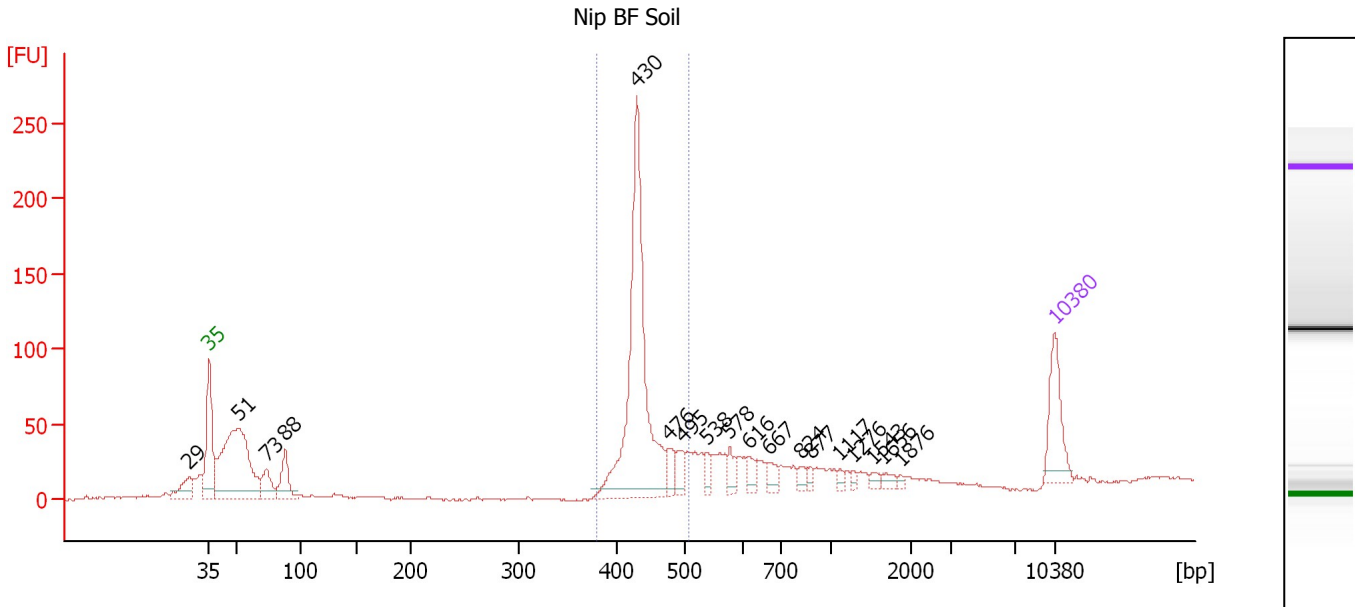
... Region table for sample 3 : Nip 1mm Soil

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/ μ l]	Corr. Area	% of Total	Size distribution in CV [%]	Color
388	492	435	1,616.9	463.69	315.6	27	4.3	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-12-19\2012-12-19_004.xad

Created: 12/19/2012 1:24:40 PM
 Modified: 12/19/2012 2:07:03 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : Nip BF Soil

Number of peaks found: 18 Corr. Area 1: 507.5
 Noise: 0.6

Peak table for sample 4 : Nip BF Soil

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	29	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	51	441.04	13,078.7	
4	73	59.23	1,223.2	
5	88	79.89	1,378.5	
6	430	509.92	1,795.3	
7	476	32.07	102.1	
8	495	30.54	93.5	
9	538	18.99	53.5	
10	578	25.06	65.7	
11	616	20.66	50.9	
12	667	20.65	46.9	
13	824	12.37	22.7	
14	877	9.74	16.8	
15	1,117	8.09	11.0	
16	1,276	6.19	7.3	
17	1,543	7.85	7.7	
18	1,656	10.63	9.7	
19	1,876	4.19	3.4	
20	10,380	75.00	10.9	Upper Marker

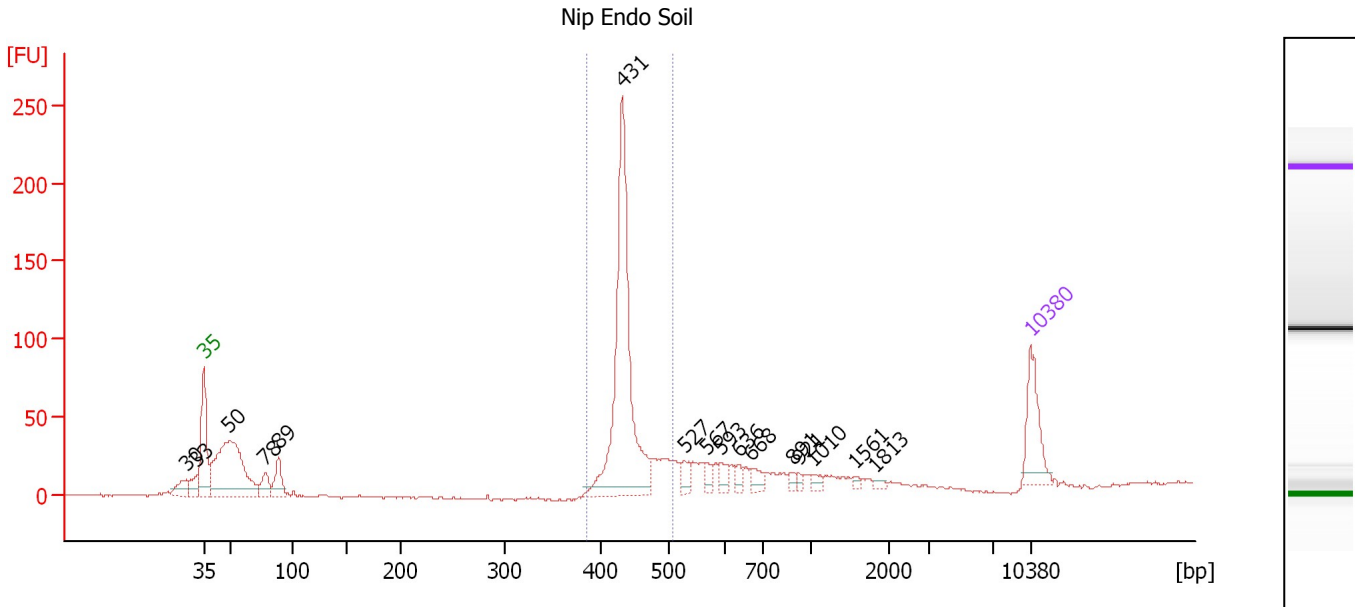
Region table for sample 4 : Nip BF Soil

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
380	505	438	1,825.9	527.62	507.5	40	5.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-12-19\2012-12-19_004.xad

Created: 12/19/2012 1:24:40 PM
 Modified: 12/19/2012 2:07:03 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : Nip Endo Soil

Number of peaks found: 16 Corr. Area 1: 449.6
 Noise: 0.6

Peak table for sample 5 : Nip Endo Soil

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	30	0.00	0.0	
2	33	0.00	0.0	
3	35	125.00	5,411.3	Lower Marker
4	50	379.55	11,590.9	
5	78	42.95	832.8	
6	89	59.94	1,024.2	
7	431	506.05	1,777.7	
8	527	22.84	65.7	
9	567	16.60	44.4	
10	593	18.59	47.5	
11	636	14.02	33.4	
12	668	20.05	45.5	
13	891	8.51	14.5	
14	921	6.95	11.4	
15	1,010	10.50	15.8	
16	1,561	5.00	4.9	
17	1,813	5.16	4.3	
18	10,380	75.00	10.9	Upper Marker

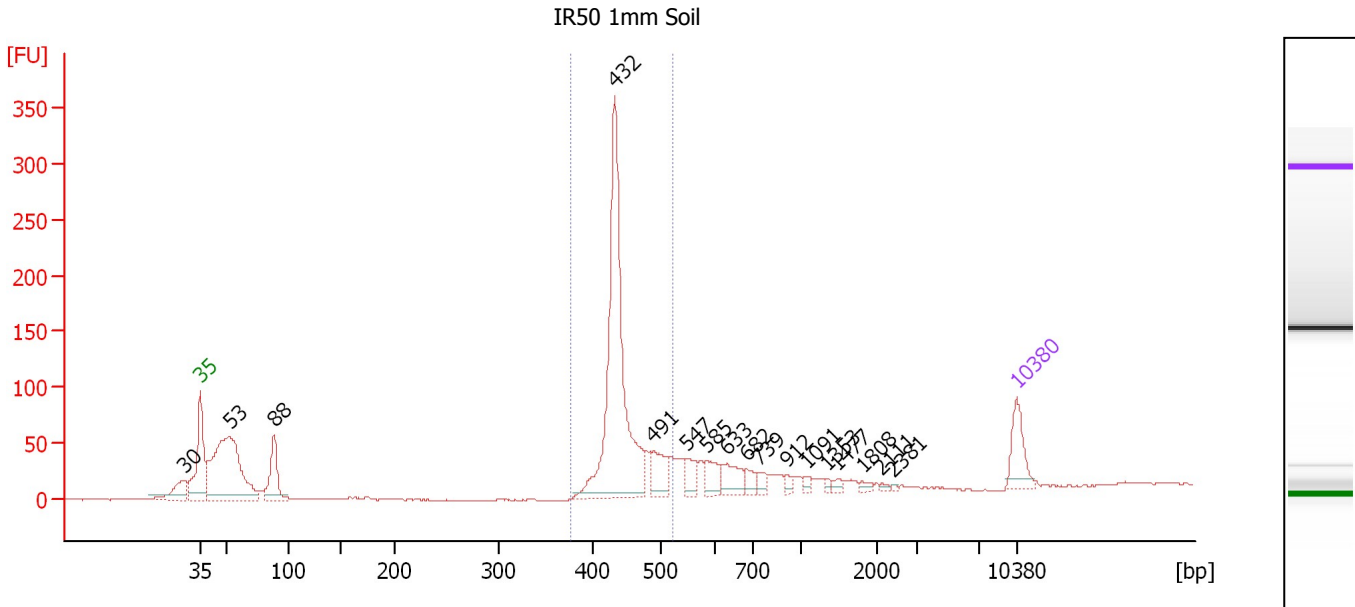
Region table for sample 5 : Nip Endo Soil

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
385	505	438	1,792.8	518.00	449.6	46	4.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-12-19\2012-12-19_004.xad

Created: 12/19/2012 1:24:40 PM
 Modified: 12/19/2012 2:07:03 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : IR50 1mm Soil

Number of peaks found: 17 Corr. Area 1: 698.3
 Noise: 0.6

Peak table for sample 6 : IR50 1mm Soil

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	53	668.16	19,202.7	
4	88	159.18	2,735.6	
5	432	808.45	2,834.1	
6	491	96.09	296.8	
7	547	46.54	128.8	
8	585	54.89	142.1	
9	633	69.19	165.6	
10	682	26.49	58.8	
11	739	22.09	45.3	
12	912	13.17	21.9	
13	1,091	10.96	15.2	
14	1,353	8.25	9.2	
15	1,477	12.42	12.7	
16	1,808	10.38	8.7	
17	2,111	5.25	3.8	
18	2,381	2.99	1.9	
19	10,380	75.00	10.9	Upper Marker

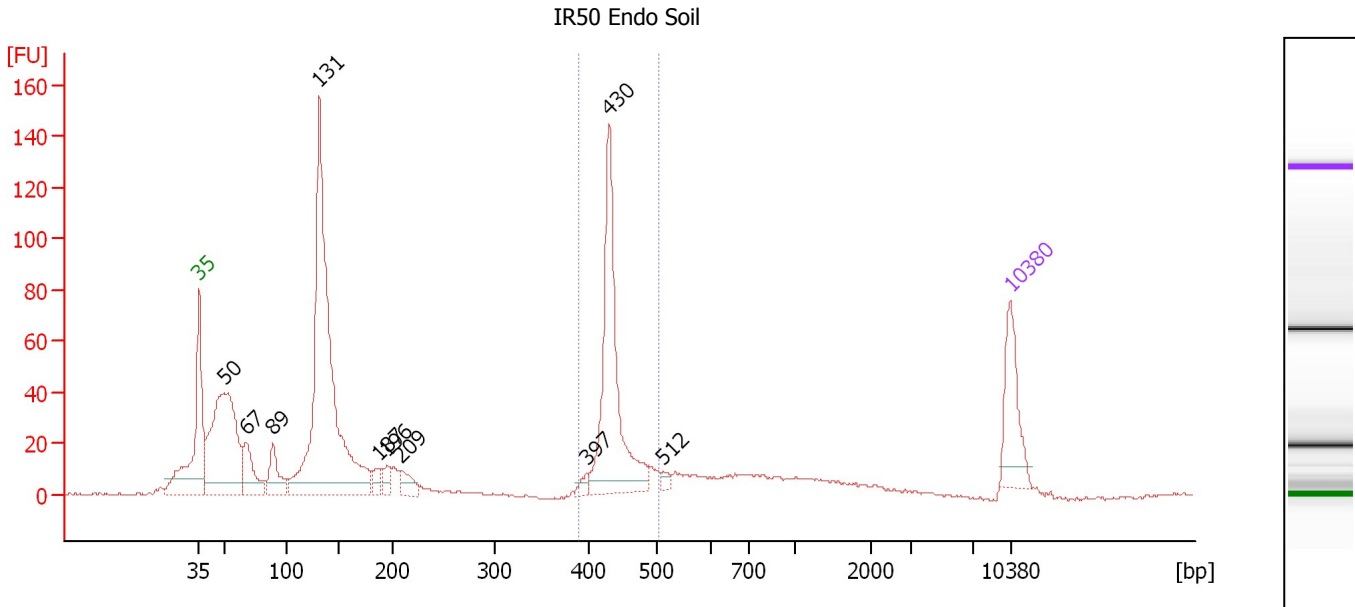
Region table for sample 6 : IR50 1mm Soil

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
376	524	445	2,988.6	876.06	698.3	47	6.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-12-19\2012-12-19_004.xad

Created: 12/19/2012 1:24:40 PM
 Modified: 12/19/2012 2:07:03 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : IR50 Endo Soil

Number of peaks found: 10 Corr. Area 1: 269.9
 Noise: 0.5

Peak table for sample 7 : IR50 Endo Soil

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	50	420.81	12,776.8	
3	67	95.92	2,167.3	
4	89	69.91	1,196.1	
5	131	834.13	9,671.8	
6	187	23.22	188.6	
7	196	21.54	166.8	
8	209	31.70	230.3	
9	397	12.68	48.4	
10	430	312.71	1,102.2	
11	512	9.44	27.9	
12	10,380	75.00	10.9	Upper Marker

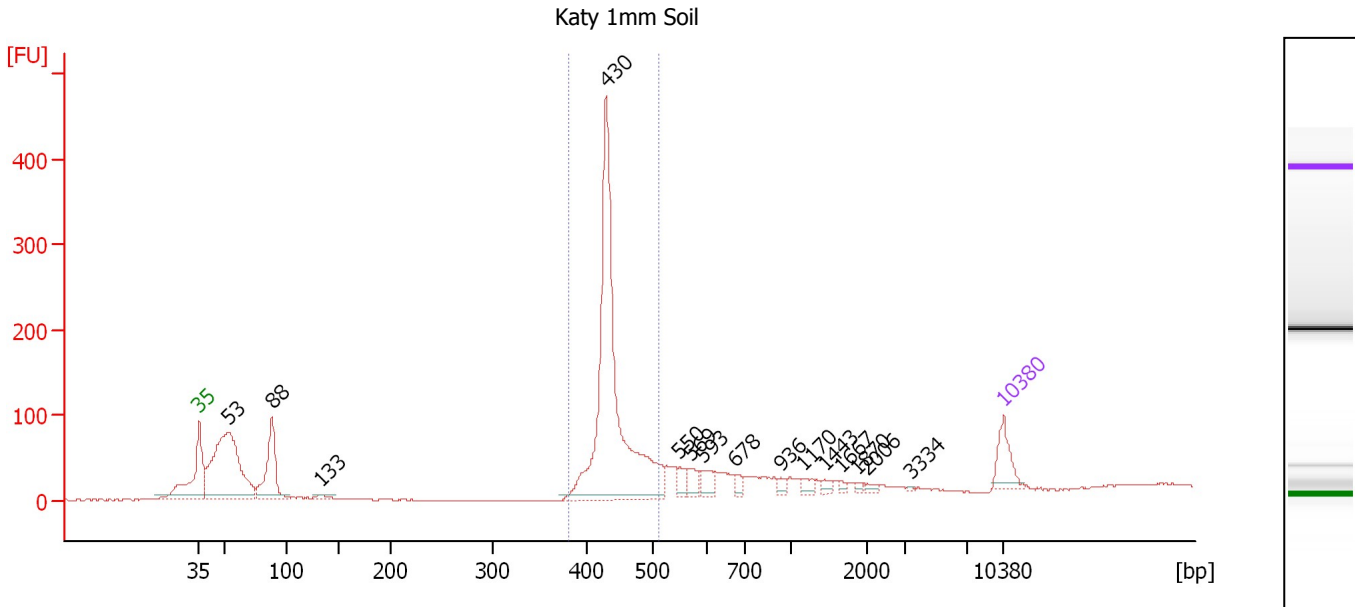
Region table for sample 7 : IR50 Endo Soil

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
389	504	437	1,178.9	339.79	269.9	21	5.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-12-19\2012-12-19_004.xad

Created: 12/19/2012 1:24:40 PM
 Modified: 12/19/2012 2:07:03 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : Katy 1mm Soil

Number of peaks found: 15 Corr. Area 1: 900.0
 Noise: 0.5

Peak table for sample 8 : Katy 1mm Soil

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	53	801.49	22,885.9	
3	88	295.79	5,083.5	
4	133	19.66	224.6	
5	430	1,147.89	4,045.6	
6	550	37.10	102.1	
7	569	41.87	111.5	
8	593	44.93	114.9	
9	678	20.24	45.3	
10	936	15.31	24.8	
11	1,170	19.58	25.4	
12	1,443	14.45	15.2	
13	1,667	8.40	7.6	
14	1,870	8.21	6.7	
15	2,006	10.15	7.7	
16	3,334	2.54	1.2	
17	10,380	75.00	10.9	Upper Marker

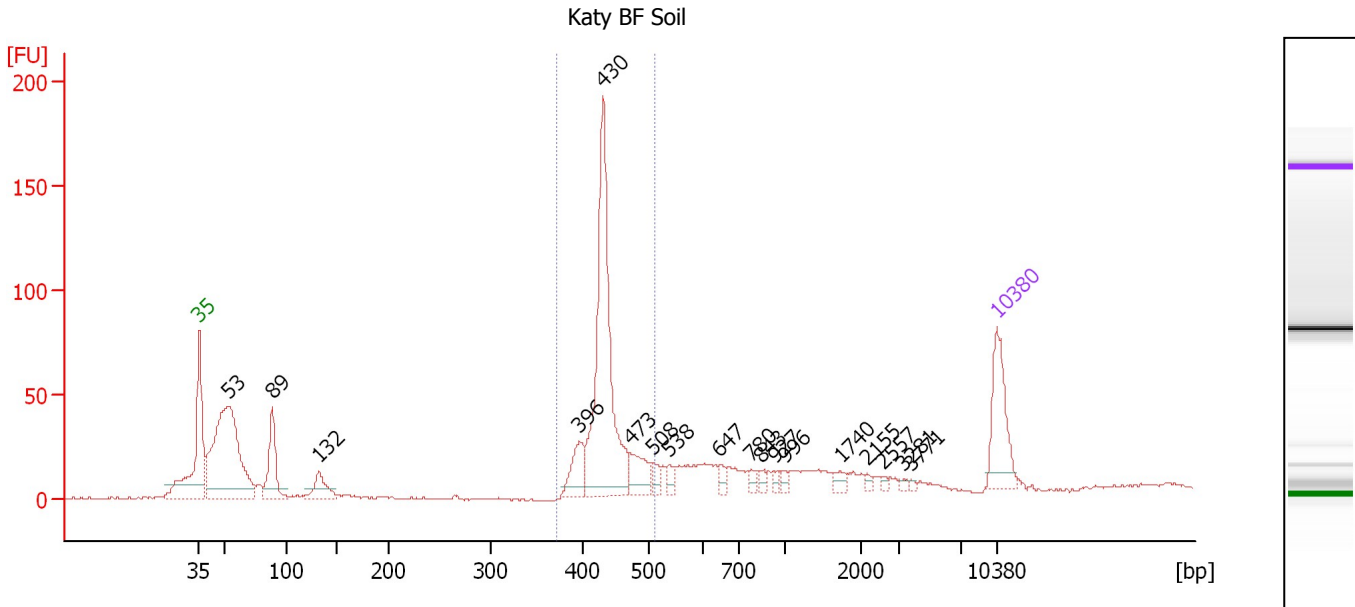
Region table for sample 8 : Katy 1mm Soil

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
381	511	440	3,513.9	1,017.94	900.0	46	5.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-12-19\2012-12-19_004.xad

Created: 12/19/2012 1:24:40 PM
 Modified: 12/19/2012 2:07:03 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : Katy BF Soil

Number of peaks found: 18 Corr. Area 1: 399.5
 Noise: 0.7

Peak table for sample 9 : Katy BF Soil

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	53	433.52	12,432.6	
3	89	102.82	1,748.3	
4	132	48.77	559.5	
5	396	49.06	187.7	
6	430	370.80	1,305.4	
7	473	48.98	156.9	
8	508	15.92	47.5	
9	538	14.50	40.8	
10	647	10.55	24.7	
11	780	9.48	18.4	
12	843	7.92	14.2	
13	927	6.68	10.9	
14	996	6.49	9.9	
15	1,740	9.66	8.4	
16	2,155	5.21	3.7	
17	2,557	4.10	2.4	
18	3,281	3.48	1.6	
19	3,771	2.67	1.1	
20	10,380	75.00	10.9	Upper Marker

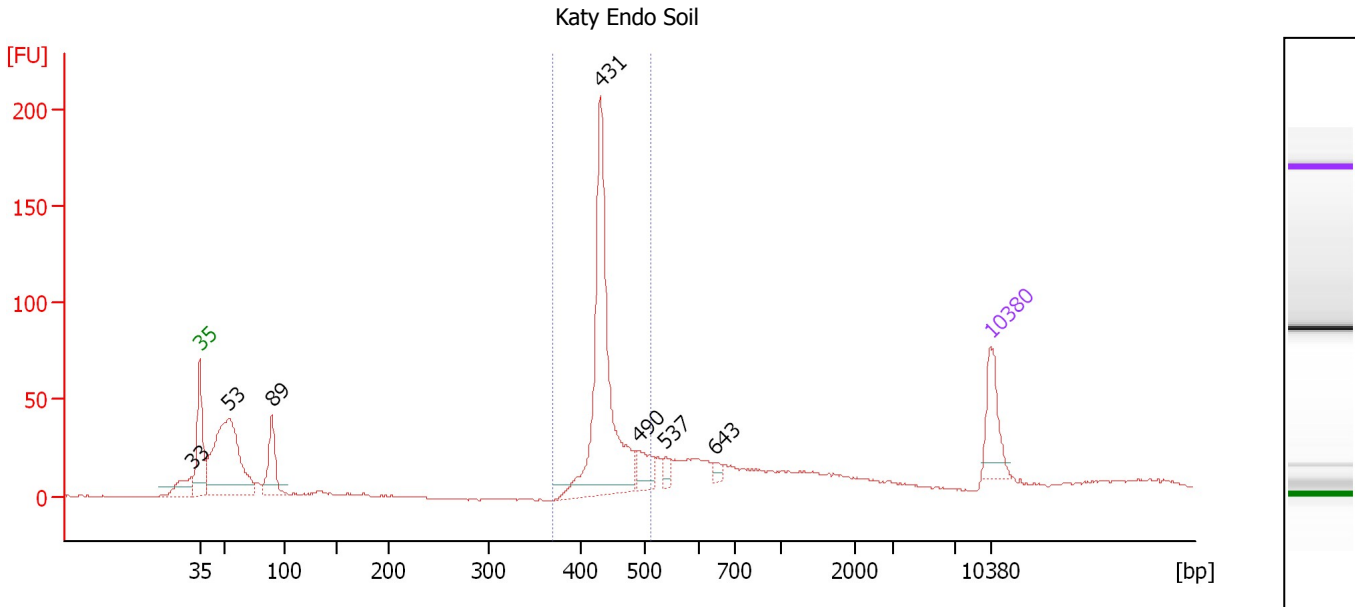
Region table for sample 9 : Katy BF Soil

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
372	511	435	1,569.6	450.06	399.5	40	5.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-12-19\2012-12-19_004.xad

Created: 12/19/2012 1:24:40 PM
 Modified: 12/19/2012 2:07:03 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : Katy Endo Soil

Number of peaks found: 7 Corr. Area 1: 392.0
 Noise: 0.5

Peak table for sample 10 : Katy Endo Soil

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	53	503.65	14,268.9	
4	89	126.78	2,164.4	
5	431	543.07	1,909.8	
6	490	54.88	169.6	
7	537	20.98	59.2	
8	643	12.74	30.0	
9	10,380	75.00	10.9	Upper Marker

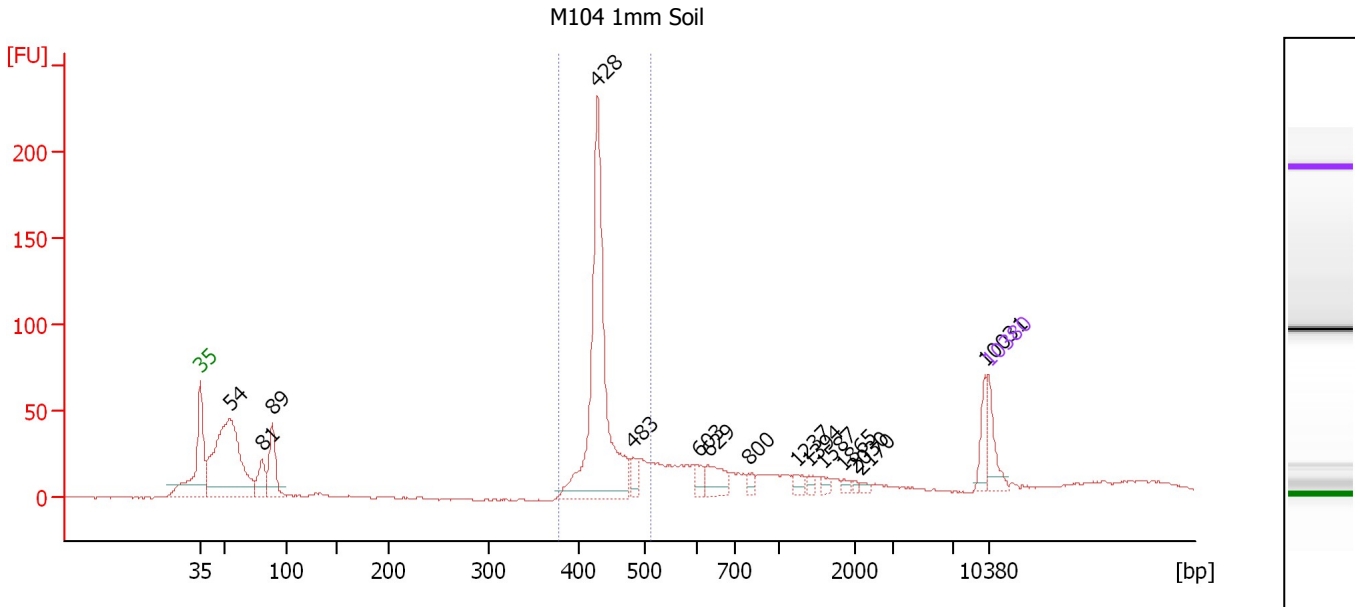
Region table for sample 10 : Katy Endo Soil

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
370	512	442	1,944.6	566.89	392.0	38	5.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-12-19\2012-12-19_004.xad

Created: 12/19/2012 1:24:40 PM
 Modified: 12/19/2012 2:07:03 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : M104 1mm Soil

Number of peaks found: 15 Corr. Area 1: 421.1
 Noise: 0.4

Peak table for sample 11 : M104 1mm Soil

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	54	847.50	23,777.5	
3	81	107.63	2,024.5	
4	89	182.27	3,104.6	
5	428	893.25	3,162.3	
6	483	43.92	137.7	
7	603	35.19	88.4	
8	629	81.25	195.7	
9	800	20.65	39.1	
10	1,237	24.12	29.6	
11	1,394	15.21	16.5	
12	1,587	13.89	13.3	
13	1,865	11.88	9.7	
14	2,030	6.80	5.1	
15	2,170	8.43	5.9	
16	10,031	50.41	7.6	
17	10,380	75.00	10.9	Upper Marker

Region table for sample 11 : M104 1mm Soil

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
378	514	438	3,217.5	928.11	421.1	40	5.7	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-12-19\2012-12-19_004.xad

Created: 12/19/2012 1:24:40 PM
Modified: 12/19/2012 2:07:03 PM

Gel Image

