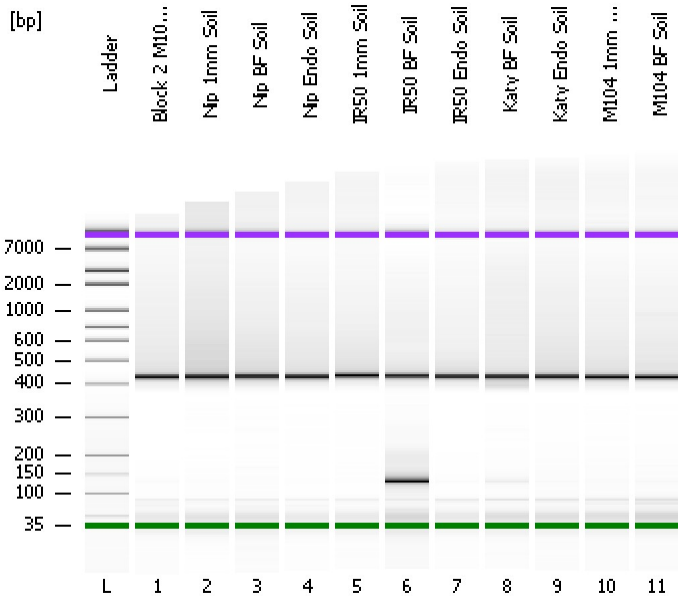


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-12-19\2012-12-19\_005.xad

Created: 12/19/2012 2:11:31 PM  
Modified: 12/19/2012 2:57:25 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

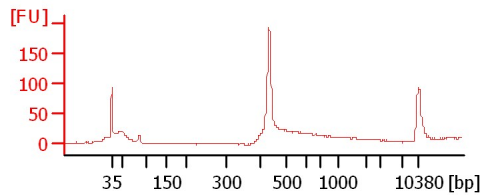
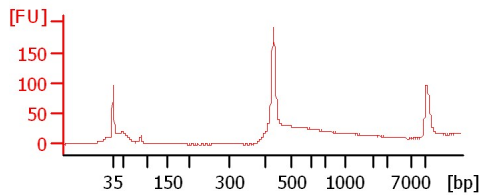
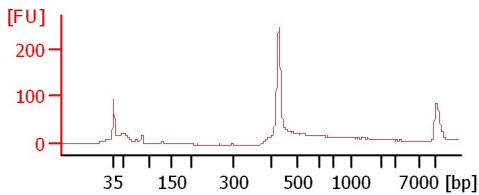
Chip Information:

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

**Block 2 M104 BF Root**

**Nip 1mm Soil**

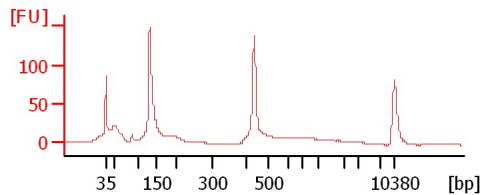
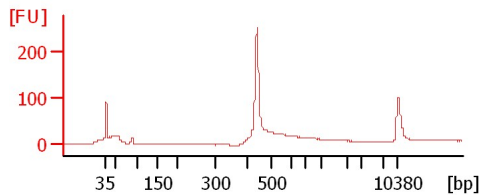
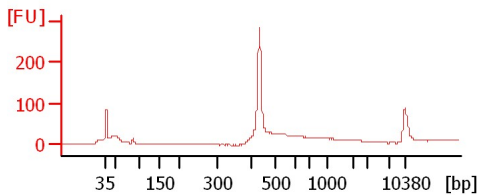
**Nip BF Soil**



**Nip Endo Soil**

**IR50 1mm Soil**

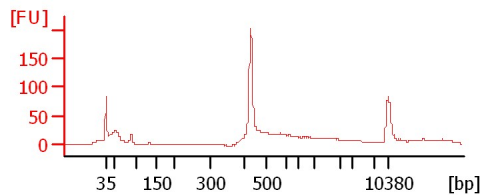
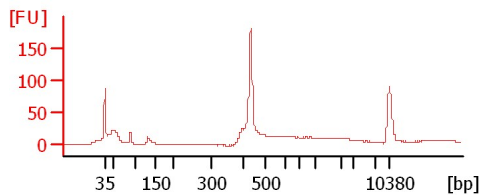
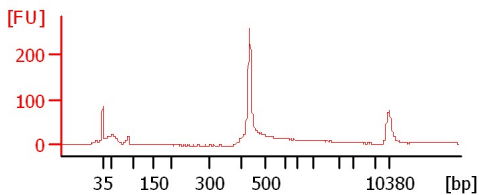
**IR50 BF Soil**



**IR50 Endo Soil**

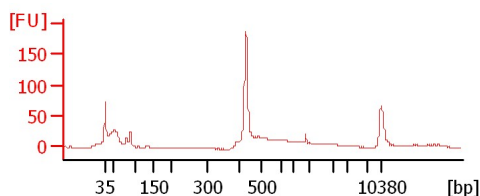
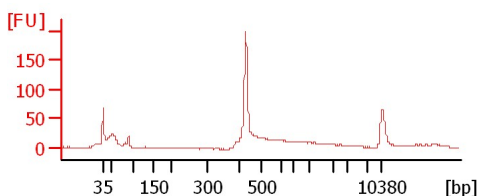
**Katy BF Soil**

**Katy Endo Soil**



**M104 1mm Soil**

**M104 BF Soil**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-12-19\2012-12-19\_005.xad

Created: 12/19/2012 2:11:31 PM  
 Modified: 12/19/2012 2:57:25 PM

**Electrophoresis File Run Summary (Chip Summary)**

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Block 2 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 BF Soil		<input type="checkbox"/>	✓			
IR50 Endo Soil		<input type="checkbox"/>	✓			
Katy BF Soil		<input type="checkbox"/>	✓			
Katy Endo Soil		<input type="checkbox"/>	✓			
M104 1mm Soil		<input type="checkbox"/>	✓			
M104 BF 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\_005.xad

Created: 12/19/2012 2:11:31 PM  
Modified: 12/19/2012 2:57:25 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

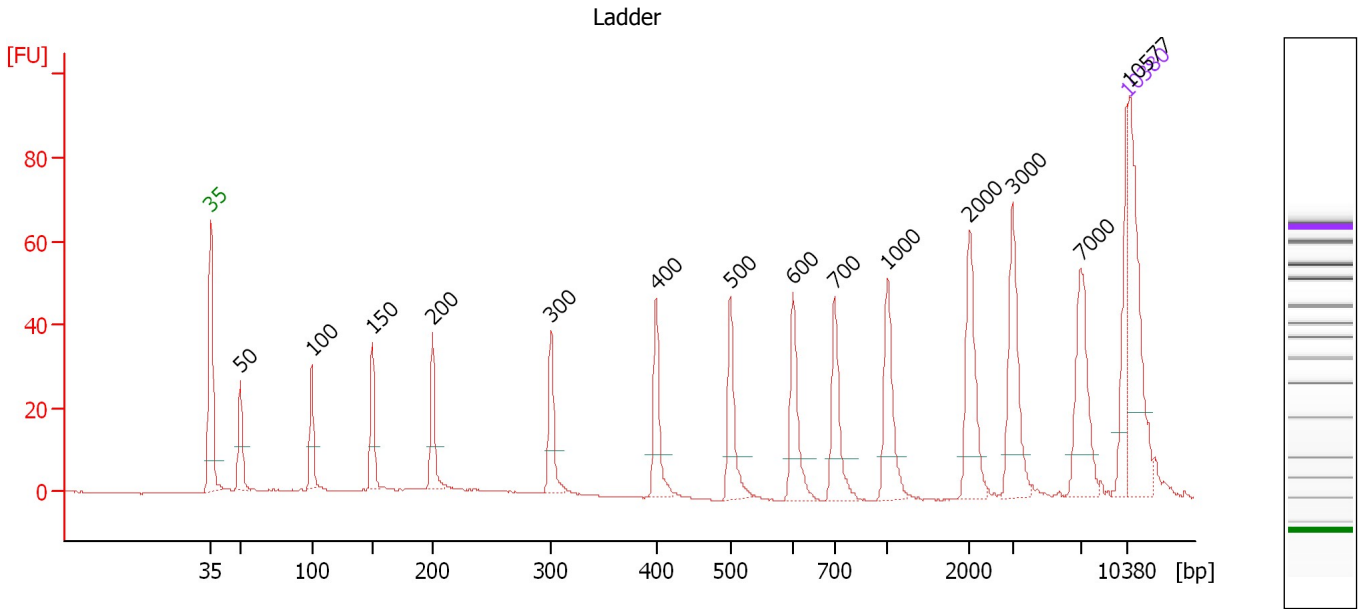
**Ladder**

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\_005.xad

Created: 12/19/2012 2:11:31 PM  
 Modified: 12/19/2012 2:57:25 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

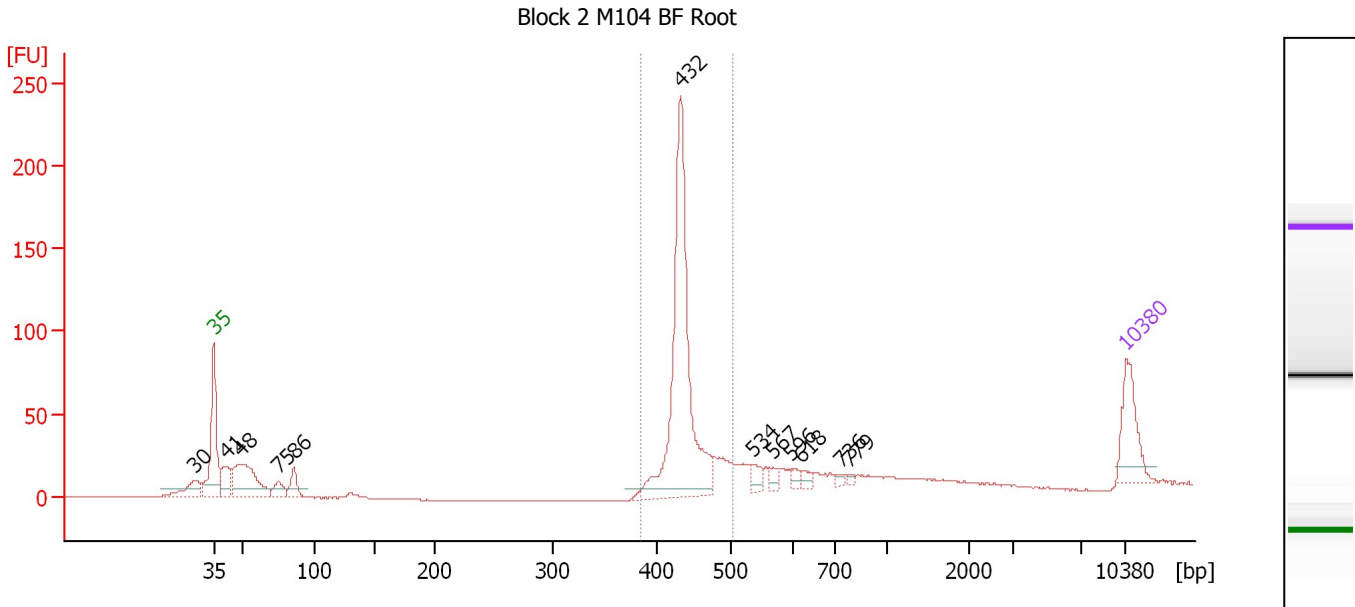
**Peak table for Ladder**

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
16	10,577	0.00	0.0	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-12-19\2012-12-19\_005.xad

Created: 12/19/2012 2:11:31 PM  
 Modified: 12/19/2012 2:57:25 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : Block 2 M104 BF Root**

Number of peaks found: 12                      Corr. Area 1: 440.5  
 Noise: 0.2

**Peak table for sample 1 : Block 2 M104 BF Root**

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	41	68.25	2,504.3	
4	48	182.50	5,712.0	
5	75	34.55	700.0	
6	86	41.81	739.7	
7	432	535.57	1,879.7	
8	534	21.55	61.2	
9	567	13.99	37.4	
10	596	11.46	29.1	
11	618	11.64	28.5	
12	736	7.89	16.2	
13	779	5.62	10.9	
14	10,380	75.00	10.9	Upper Marker

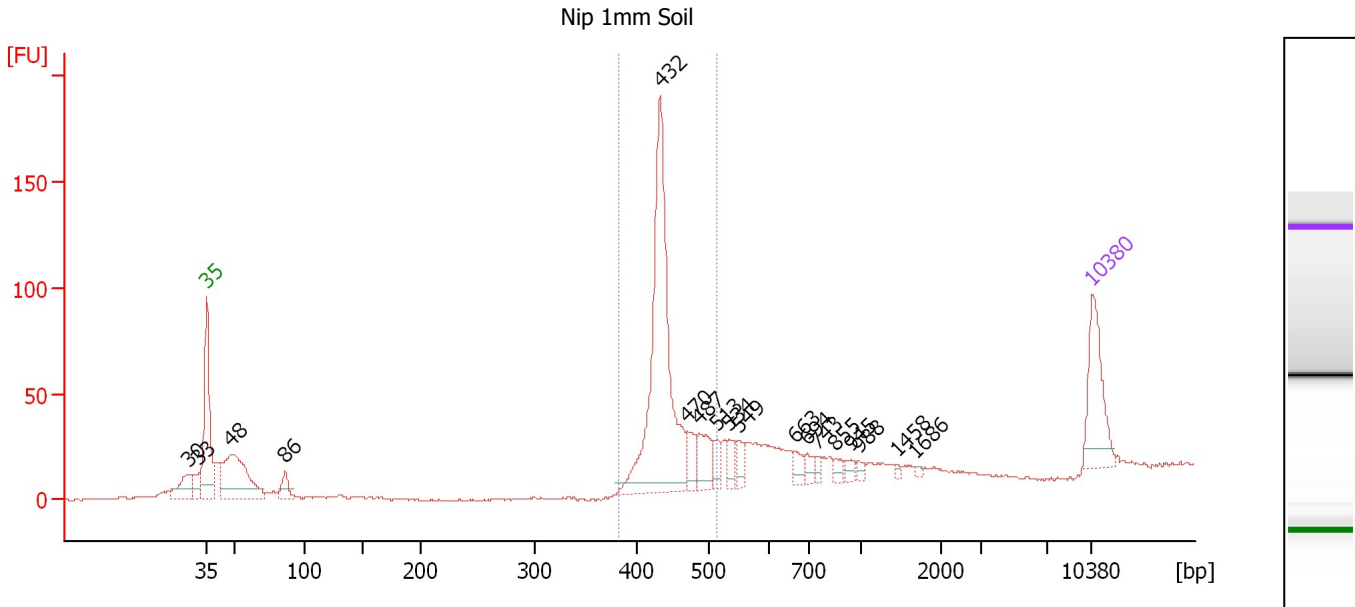
**Region table for sample 1 : Block 2 M104 BF Root**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
383	503	438	1,840.8	531.68	440.5	54	4.7	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-12-19\2012-12-19\_005.xad

Created: 12/19/2012 2:11:31 PM  
Modified: 12/19/2012 2:57:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : **Nip 1mm Soil**

Number of peaks found: 18      Corr. Area 1: 392.1  
Noise: 0.4

Peak table for sample 2 : **Nip 1mm 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	48	193.97	6,125.8	
5	86	31.74	557.8	
6	432	418.64	1,469.0	
7	470	30.30	97.6	
8	487	47.79	148.7	
9	513	20.46	60.4	
10	534	18.04	51.2	
11	549	18.47	51.0	
12	663	14.65	33.5	
13	694	12.70	27.7	
14	743	8.37	17.1	
15	855	10.14	18.0	
16	945	9.37	15.0	
17	988	7.06	10.8	
18	1,458	3.38	3.5	
19	1,686	2.58	2.3	
20	10,380	75.00	10.9	Upper Marker

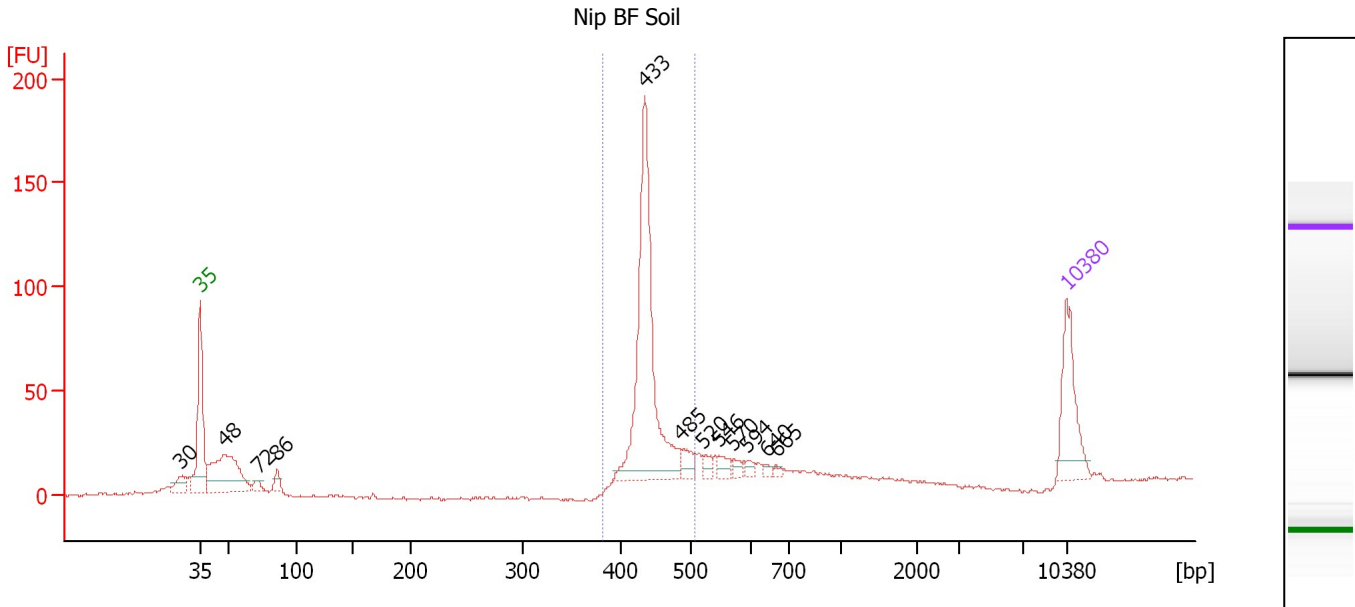
Region table for sample 2 : **Nip 1mm Soil**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
383	513	442	1,511.2	440.68	392.1	51	5.6	<span style="background-color: blue; color: blue;"> </span>

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-12-19\2012-12-19\_005.xad

Created: 12/19/2012 2:11:31 PM  
 Modified: 12/19/2012 2:57:25 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : Nip BF Soil**

Number of peaks found: 12                      Corr. Area 1: 376.5  
 Noise: 0.6

**Peak table for sample 3 : Nip BF 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	48	174.72	5,517.9	
4	72	11.81	248.2	
5	86	15.61	274.1	
6	433	355.90	1,245.7	
7	485	22.81	71.2	
8	520	10.53	30.7	
9	546	13.62	37.8	
10	570	9.32	24.8	
11	594	7.31	18.6	
12	640	5.38	12.7	
13	665	3.79	8.6	
14	10,380	75.00	10.9	Upper Marker

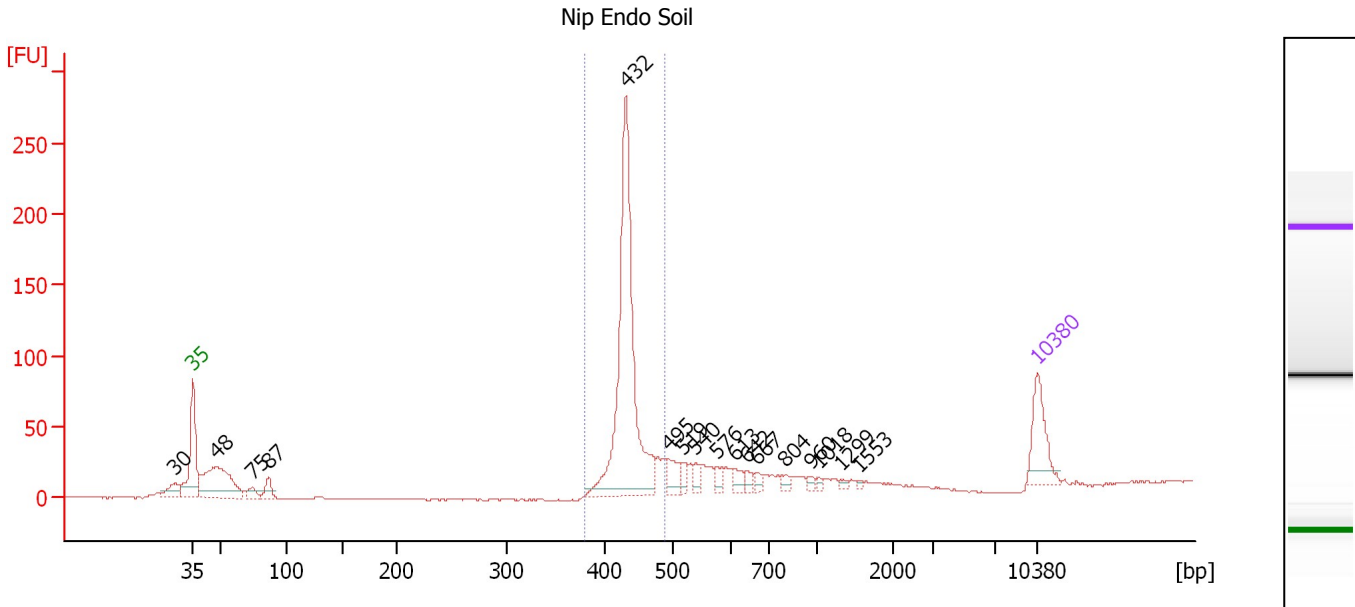
**Region table for sample 3 : Nip BF Soil**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
382	505	440	1,403.4	407.54	376.5	53	5.0	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-12-19\2012-12-19\_005.xad

Created: 12/19/2012 2:11:31 PM  
 Modified: 12/19/2012 2:57:25 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : Nip Endo Soil**

Number of peaks found: 17                      Corr. Area 1: 485.6  
 Noise: 0.6

**Peak table for sample 4 : Nip Endo 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	48	247.84	7,823.3	
4	75	21.66	439.0	
5	87	33.63	586.6	
6	432	599.45	2,101.9	
7	495	42.22	129.2	
8	519	18.13	52.9	
9	540	16.91	47.4	
10	576	18.15	47.7	
11	613	18.06	44.7	
12	642	13.02	30.7	
13	667	11.91	27.0	
14	804	9.62	18.1	
15	960	7.29	11.5	
16	1,018	5.85	8.7	
17	1,299	4.90	5.7	
18	1,553	3.28	3.2	
19	10,380	75.00	10.9	Upper Marker

**Region table for sample 4 : Nip Endo Soil**

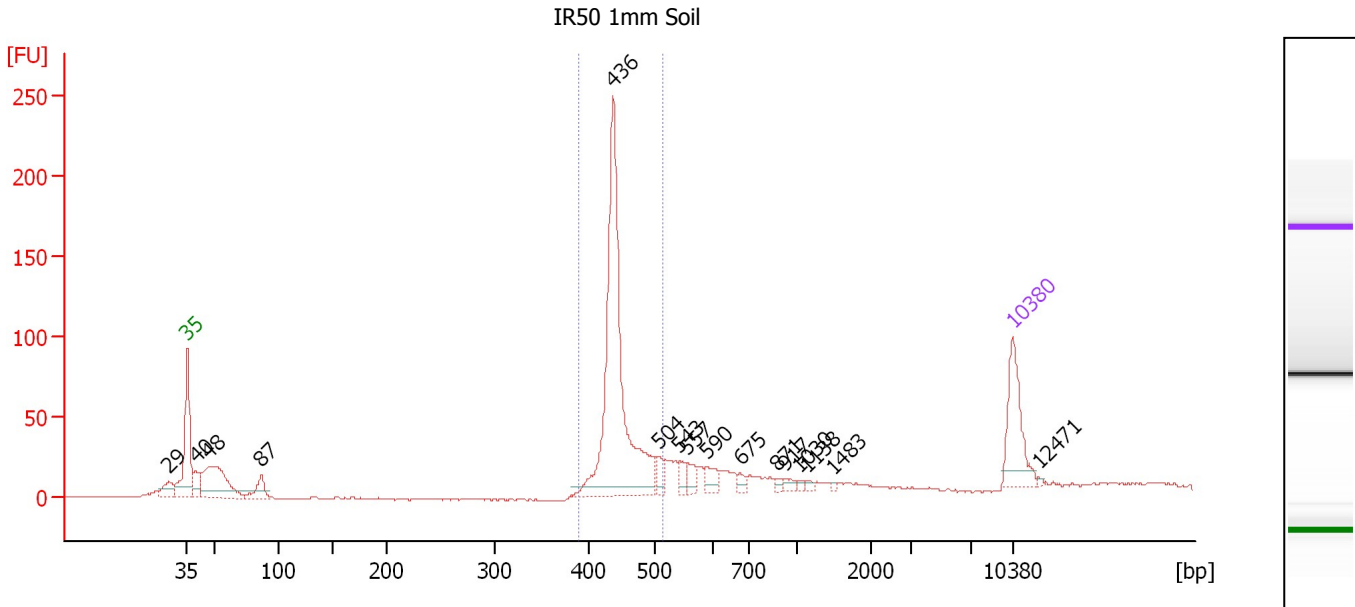
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
380	488	436	2,017.4	580.11	485.6	56	3.8	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-12-19\2012-12-19\_005.xad

Created: 12/19/2012 2:11:31 PM  
 Modified: 12/19/2012 2:57:25 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : IR50 1mm Soil**

Number of peaks found: 16      Corr. Area 1: 470.9  
 Noise: 0.5

**Peak table for sample 5 : IR50 1mm 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	40	37.61	1,430.3	
4	48	161.23	5,121.8	
5	87	37.70	656.7	
6	436	468.85	1,627.7	
7	504	18.75	56.4	
8	543	13.52	37.8	
9	557	17.55	47.8	
10	590	21.97	56.5	
11	675	8.66	19.5	
12	871	5.46	9.5	
13	917	8.22	13.6	
14	1,030	3.50	5.2	
15	1,138	4.09	5.4	
16	1,483	2.54	2.6	
17	10,380	75.00	10.9	Upper Marker
18	12,471	0.00	0.0	

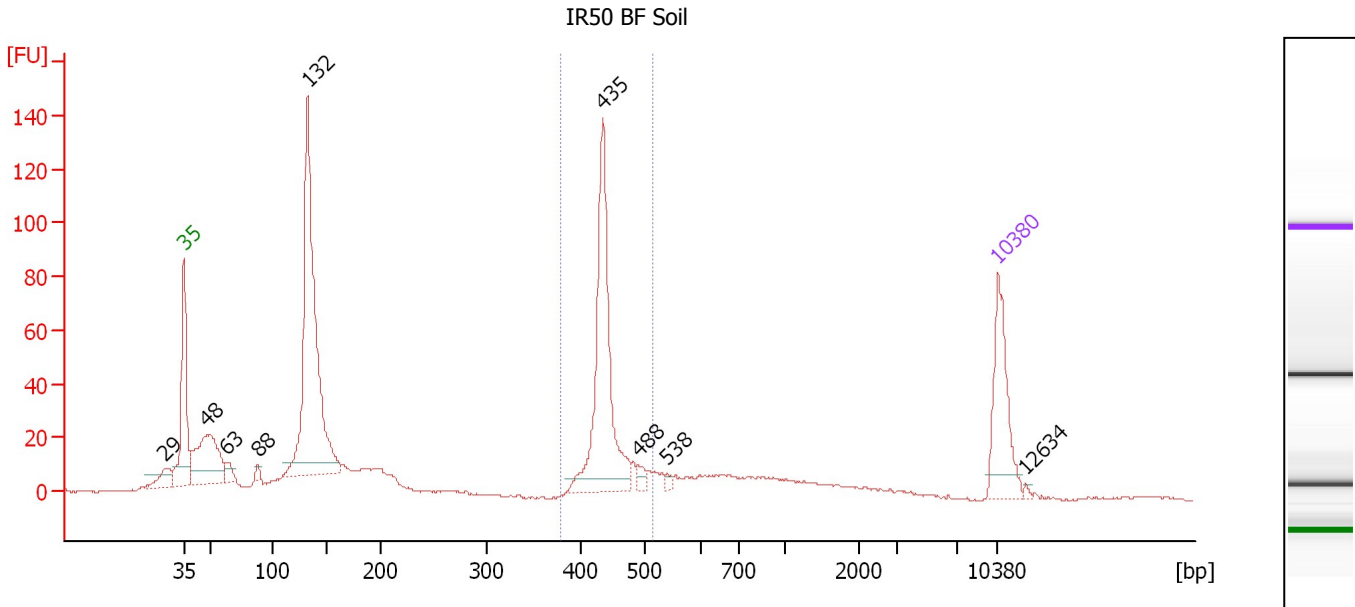
**Region table for sample 5 : IR50 1mm Soil**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
390	514	445	1,568.9	460.58	470.9	55	5.1	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-12-19\2012-12-19\_005.xad

Created: 12/19/2012 2:11:31 PM  
 Modified: 12/19/2012 2:57:25 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : IR50 BF Soil**

Number of peaks found: 9                      Corr. Area 1: 272.1  
 Noise: 0.4

**Peak table for sample 6 : IR50 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	48	158.08	4,939.2	
4	63	18.16	439.3	
5	88	6.51	112.3	
6	132	469.94	5,413.8	
7	435	249.45	868.6	
8	488	9.01	27.9	
9	538	4.62	13.0	
10	10,380	75.00	10.9	Upper Marker
11	12,634	0.00	0.0	

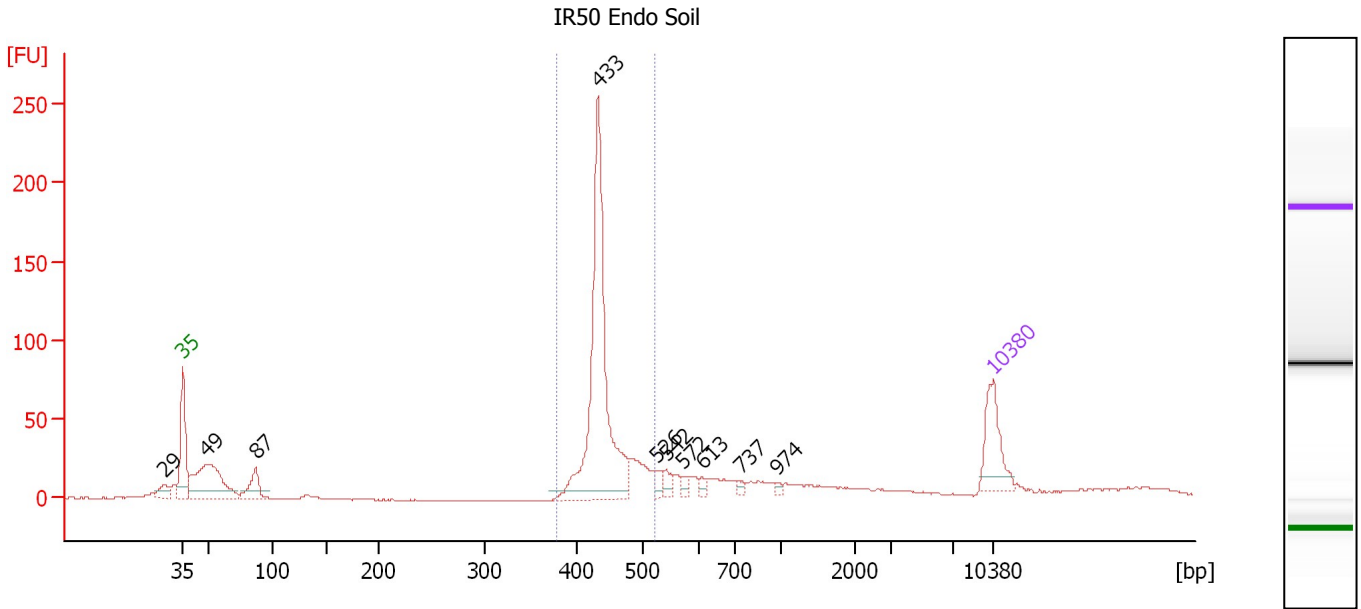
**Region table for sample 6 : IR50 BF Soil**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
380	511	441	979.5	284.74	272.1	24	5.1	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-12-19\2012-12-19\_005.xad

Created: 12/19/2012 2:11:31 PM  
 Modified: 12/19/2012 2:57:25 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : IR50 Endo Soil**

Number of peaks found: 10      Corr. Area 1: 499.1  
 Noise: 0.3

**Peak table for sample 7 : IR50 Endo 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	49	232.86	7,173.8	
4	87	61.84	1,073.8	
5	433	519.19	1,817.7	
6	526	15.11	43.5	
7	542	17.63	49.2	
8	572	10.67	28.3	
9	613	10.56	26.1	
10	737	7.83	16.1	
11	974	5.42	8.4	
12	10,380	75.00	10.9	Upper Marker

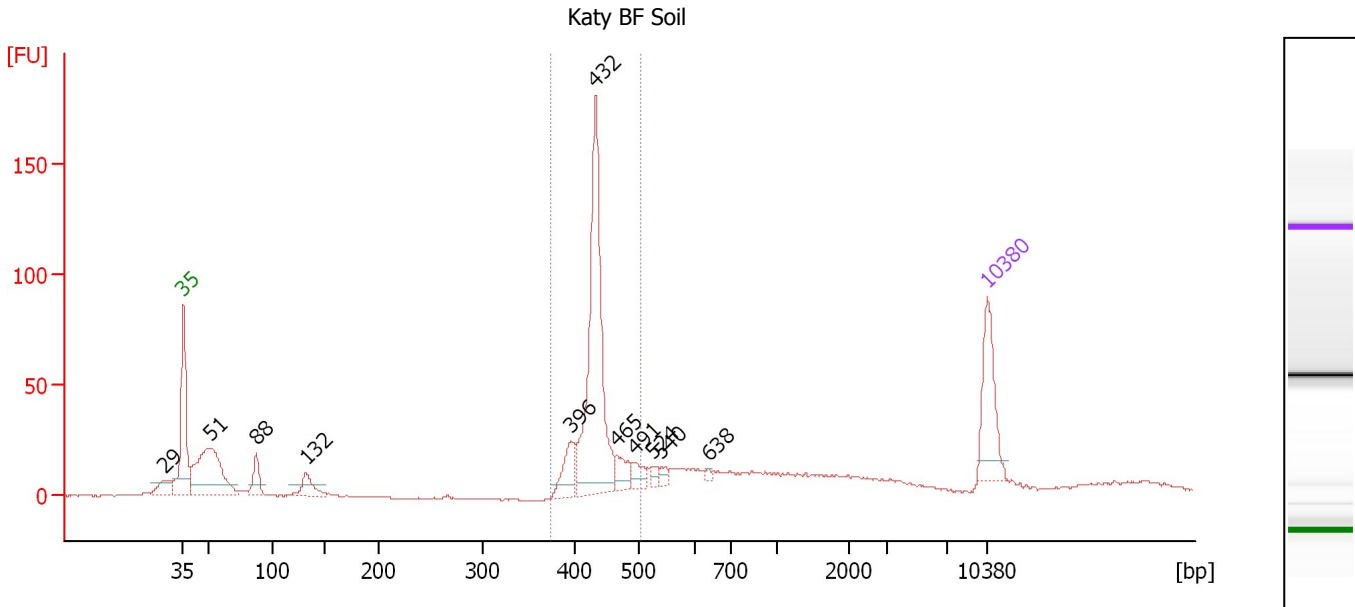
**Region table for sample 7 : IR50 Endo Soil**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
379	524	443	1,931.3	562.96	499.1	53	5.9	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-12-19\2012-12-19\_005.xad

Created: 12/19/2012 2:11:31 PM  
 Modified: 12/19/2012 2:57:25 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : Katy BF Soil**

Number of peaks found: 11                      Corr. Area 1: 356.3  
 Noise: 0.4

**Peak table for sample 8 : Katy 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	225.24	6,728.5	
4	88	41.21	712.2	
5	132	40.06	460.0	
6	396	50.01	191.2	
7	432	341.44	1,196.2	
8	465	29.77	97.0	
9	491	21.60	66.6	
10	524	9.45	27.3	
11	540	9.06	25.4	
12	638	3.64	8.6	
13	10,380	75.00	10.9	Upper Marker

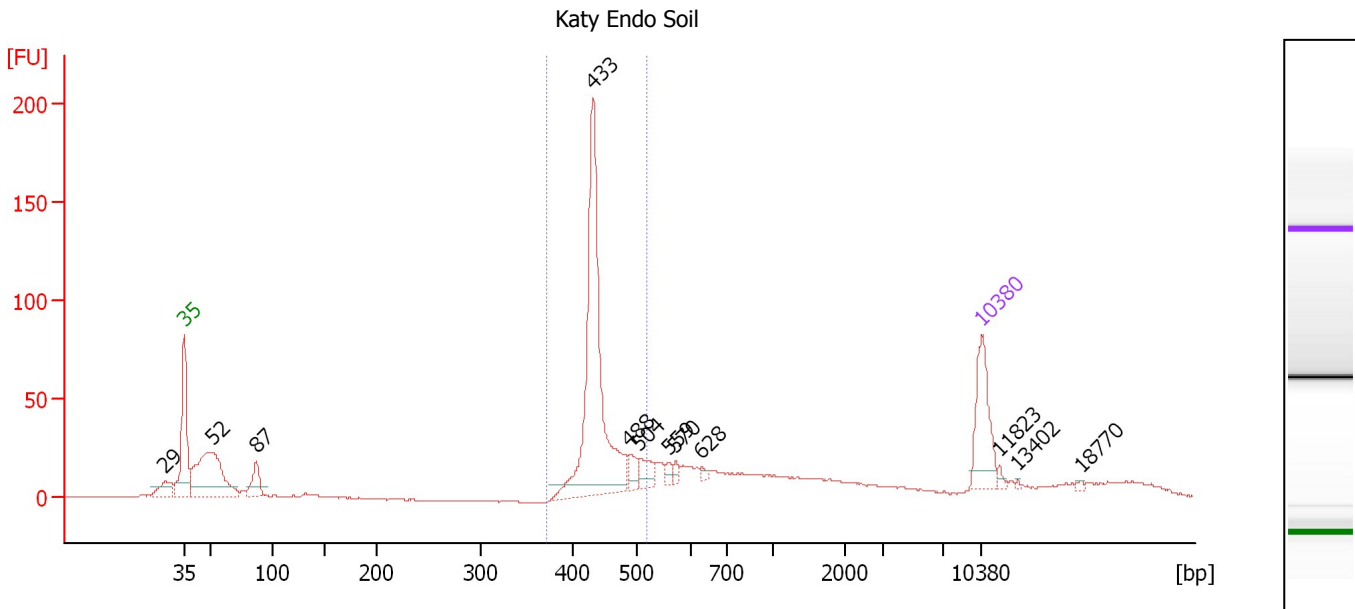
**Region table for sample 8 : Katy BF Soil**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
375	501	434	1,480.3	423.05	356.3	46	5.2	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-12-19\2012-12-19\_005.xad

Created: 12/19/2012 2:11:31 PM  
 Modified: 12/19/2012 2:57:25 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : Katy Endo Soil**

Number of peaks found: 12                      Corr. Area 1: 402.9  
 Noise: 0.4

**Peak table for sample 9 : Katy Endo 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	52	237.81	6,963.1	
4	87	46.29	803.5	
5	433	421.75	1,477.2	
6	488	22.07	68.5	
7	504	27.65	83.1	
8	559	8.72	23.6	
9	570	8.88	23.6	
10	628	5.14	12.4	
11	10,380	75.00	10.9	Upper Marker
12	11,823	0.00	0.0	
13	13,402	0.00	0.0	
14	18,770	0.00	0.0	

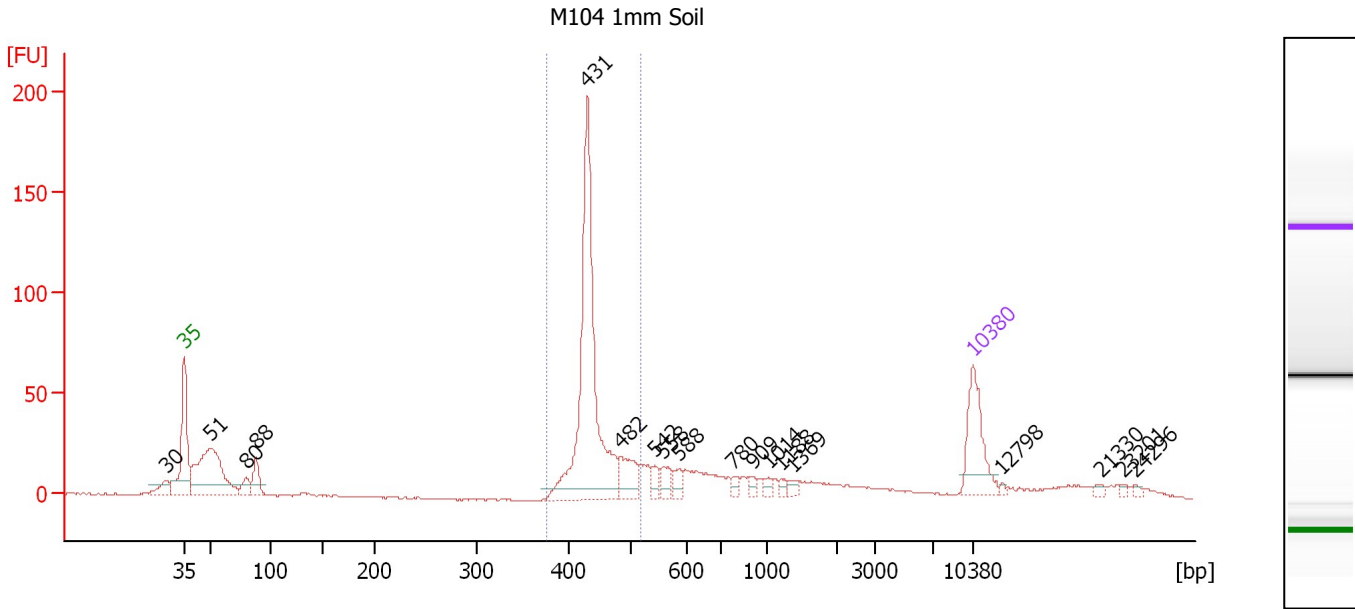
**Region table for sample 9 : Katy Endo Soil**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
371	517	443	1,600.5	466.98	402.9	42	5.8	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-12-19\2012-12-19\_005.xad

Created: 12/19/2012 2:11:31 PM  
 Modified: 12/19/2012 2:57:25 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : M104 1mm Soil**

Number of peaks found: 18      Corr. Area 1: 385.2  
 Noise: 0.5

**Peak table for sample 10 : M104 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	51	253.92	7,587.9	
4	80	26.19	497.7	
5	88	44.56	767.7	
6	431	444.76	1,564.7	
7	482	52.04	163.4	
8	542	15.83	44.2	
9	558	20.65	56.1	
10	588	14.97	38.6	
11	780	8.26	16.0	
12	909	9.45	15.7	
13	1,014	8.41	12.6	
14	1,188	6.49	8.3	
15	1,369	7.64	8.5	
16	10,380	75.00	10.9	Upper Marker
17	12,798	0.00	0.0	
18	21,330	0.00	0.0	
19	23,201	0.00	0.0	
20	24,296	0.00	0.0	

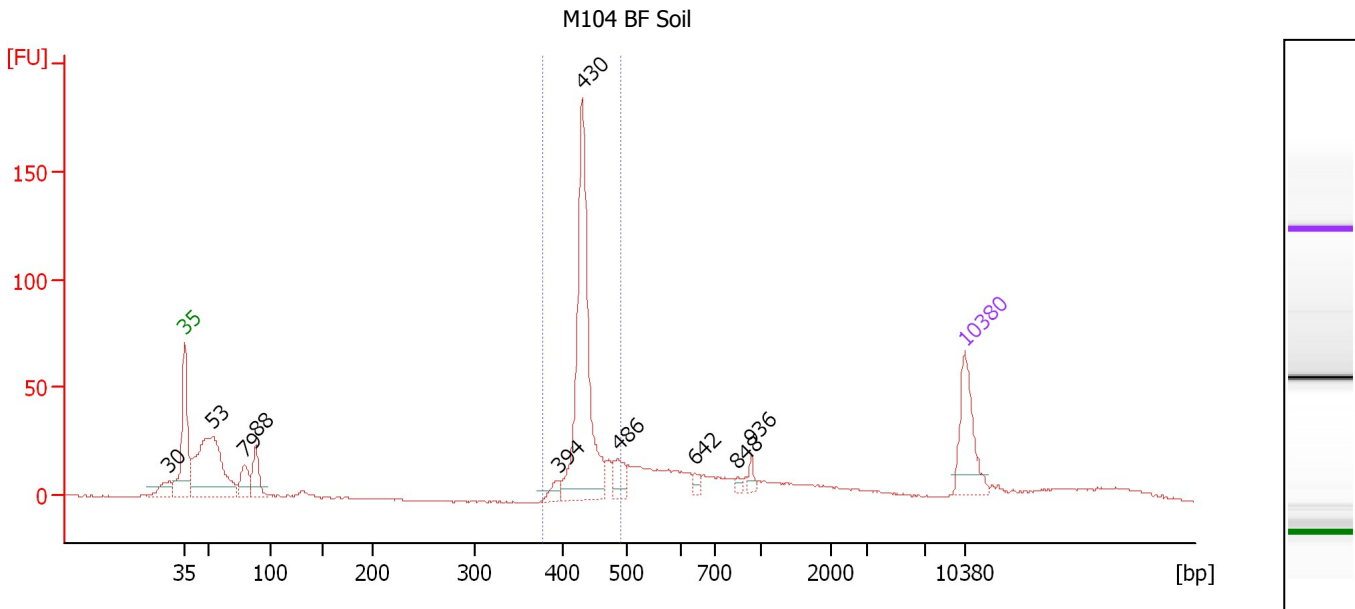
**Region table for sample 10 : M104 1mm Soil**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
377	515	440	1,639.7	475.19	385.2	43	5.8	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-12-19\2012-12-19\_005.xad

Created: 12/19/2012 2:11:31 PM  
 Modified: 12/19/2012 2:57:25 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : M104 BF Soil**

Number of peaks found: 10      Corr. Area 1: 319.9  
 Noise: 0.3

**Peak table for sample 11 : M104 BF 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	335.04	9,635.0	
4	79	53.64	1,035.0	
5	88	65.53	1,126.2	
6	394	17.43	67.1	
7	430	378.59	1,334.0	
8	486	35.98	112.2	
9	642	9.43	22.3	
10	848	6.14	11.0	
11	936	10.26	16.6	
12	10,380	75.00	10.9	Upper Marker

**Region table for sample 11 : M104 BF Soil**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
377	490	434	1,469.5	421.08	319.9	36	4.5	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-12-19\2012-12-19\_005.xad

Created: 12/19/2012 2:11:31 PM  
Modified: 12/19/2012 2:57:25 PM

**Gel Image**

