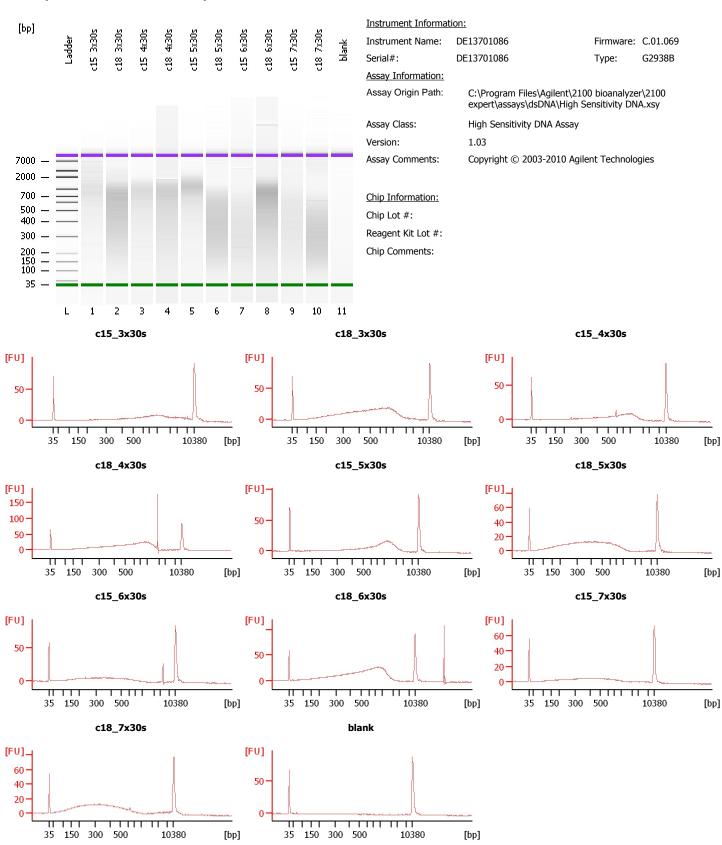
2012-07-24_003.xad Page 1 of 15

Assay Class: High Sensitivity DNA Assay Created: 7/24/2012 11:15:39 AM Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-24\2012-07-24_003.xad C:\...ents and Settings\Bioanalyzer\2012-07-24\2012-07-24_003.xad Created: 7/24/2012 11:56:15 AM

Electrophoresis File Run Summary



2012-07-24_003.xad Page 2 of 15

High Sensitivity DNA Assay C:\...ents and Settings\Bioanalyzer\2012-07-24\2012-07-24_003.xad 7/24/2012 11:15:39 AM 7/24/2012 11:56:15 AM Assay Class: Created: Data Path: Modified: **Electrophoresis File Run Summary (Chip Summary) Sample Name** Sample Comment Rest. Digest Status Observation **Result Label Result Color** c15_3x30s c18_3x30s c15_4x30s c18_4x30s c15_5x30s c18_5x30s c15_6x30s c18_6x30s c15_7x30s c18_7x30s

Chip Lot # Reagent Kit Lot #

Chip Comments:

blank Ladder

2012-07-24_003.xad Page 3 of 15

Assay Class: High Sensitivity DNA Assay Created: 7/24/2012 11:15:39 AM Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-24\2012-07-24_003.xad Created: 7/24/2012 11:56:15 AM

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

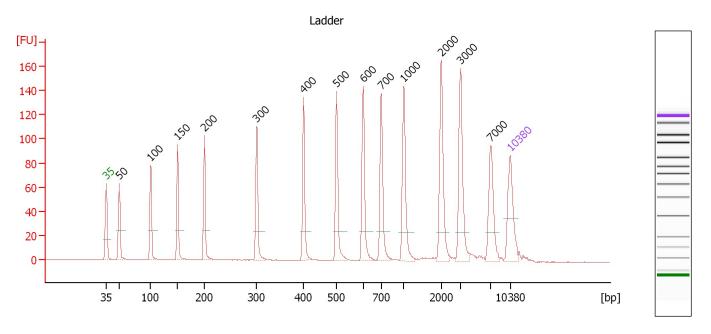
Ladder

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

2012-07-24_003.xad Page 4 of 15

Assay Class: High Sensitivity DNA Assay C:\...ents and Settings\Bioanalyzer\2012-07-24\2012-07-24_003.xad Created: 7/24/2012 11:15:39 AM Modified: 7/24/2012 11:56:15 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

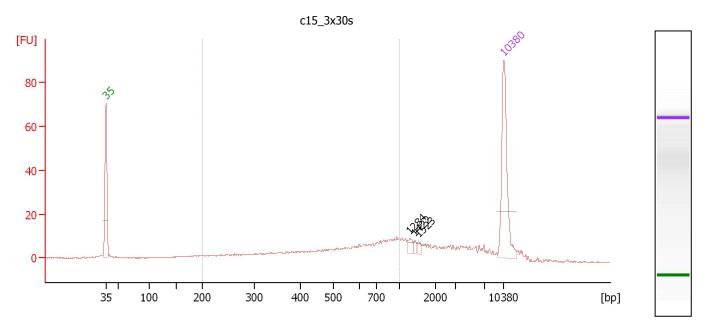
Peak	table	for	Ladder
reak	Lavic	101	Lauuci

Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	4	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

2012-07-24_003.xad Page 5 of 15

Assay Class: High Sensitivity DNA Assay C:\...ents and Settings\Bioanalyzer\2012-07-24\2012-07-24_003.xad Created: 7/24/2012 11:15:39 AM Modified: 7/24/2012 11:56:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 1: <u>c15 3x30s</u>

Number of peaks found: 3 Corr. Area 1: 190.9

Noise: 0.2

Peak table for sample 1:		for sample 1:	c15 3x30s				
Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations		
1	4	35	125.00	5,411.3	Lower Marker		
2		1,284	6.12	7.2			
3		1,422	3.67	3.9			
4		1,523	4.01	4.0			
5		10,380	75.00	10.9	Upper Marker		

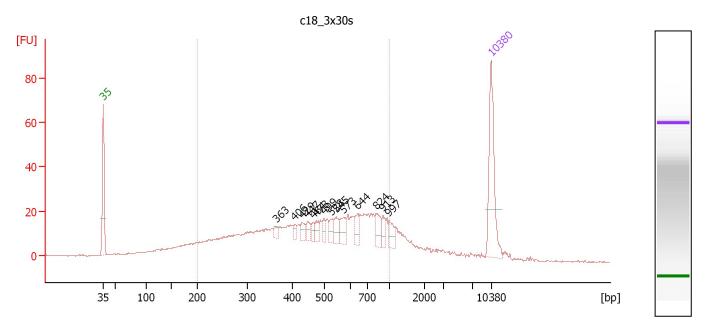
Region table for sample 1: <u>c15 3x30s</u>

From [bp]	To [bp] Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Co lor
200	1,000	555	787.1	225.93	190.9	55	37.9	

2012-07-24_003.xad Page 6 of 15

Assay Class: High Sensitivity DNA Assay C:\...ents and Settings\Bioanalyzer\2012-07-24\2012-07-24_003.xad Created: 7/24/2012 11:15:39 AM Modified: 7/24/2012 11:56:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : <u>c18 3x30s</u>

Number of peaks found: 14 Corr. Area 1: 655.2

Noise: 0.1

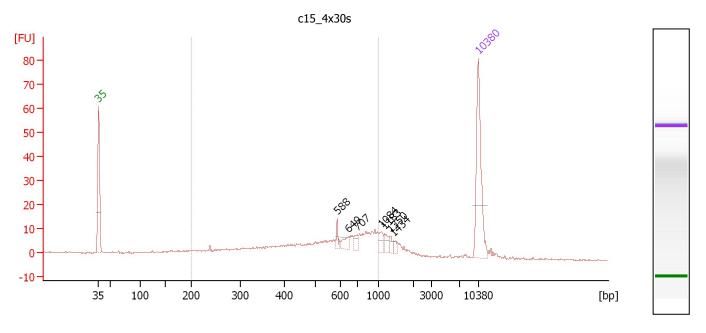
Peak table	for sample 2:	c18 3x30s		
Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	363	7.19	30.0	
3	406	7.32	27.3	
4	429	11.16	39.4	
5	447	11.15	37.8	
6	464	8.02	26.2	
7	473	10.66	34.1	
8	499	10.30	31.3	
9	528	12.54	36.0	
10	545	17.16	47.7	
11	573	18.37	48.6	
12	644	14.59	34.3	
13	824	20.59	37.8	
14	913	11.49	19.1	
15	997	14.26	21.7	
16	10,380	75.00	10.9	Upper Marker
Region tab	le for sample 2	: <u>c18 3x30s</u>		

Region	таріе то	r sample 2:	<u>C18_3X3</u>	<u>US</u>				
From [bp]	To [bp] Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Co lor
200	1,000	499	3,206.6	838.39	655.2	75	39.1	

2012-07-24_003.xad Page 7 of 15

Assay Class: High Sensitivity DNA Assay C:\...ents and Settings\Bioanalyzer\2012-07-24\2012-07-24_003.xad Created: 7/24/2012 11:15:39 AM Modified: 7/24/2012 11:56:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 3: <u>c15 4x30s</u>

Number of peaks found: 7 Corr. Area 1: 210.8

Noise: 0.2

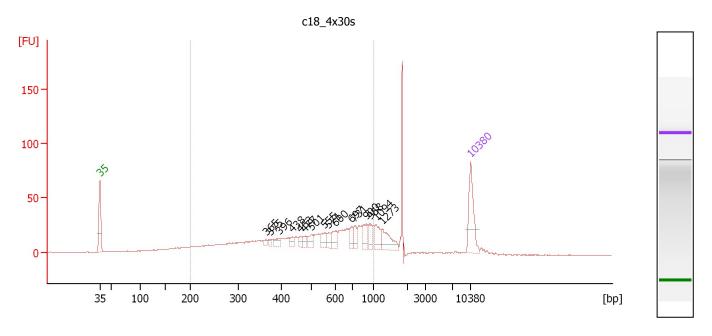
Peak t	able	for sample 3:	<u>c15 4x30s</u>		
Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	◀	35	125.00	5,411.3	Lower Marker
2		588	6.36	16.4	
3		649	10.91	25.5	
4		707	8.28	17.7	
5		1,084	9.23	12.9	
6		1,183	7.78	10.0	
7		1,350	4.76	5.3	
8		1,434	5.23	5.5	
9		10,380	75.00	10.9	Upper Marker

Region	table to	r sample 3:	C15_4X3	<u>US</u>				
From [bp]	To [bp] Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Co lor
200	1,000	554	1,052.6	303.72	210.8	70	37.4	

2012-07-24_003.xad Page 8 of 15

Assay Class: High Sensitivity DNA Assay C:\...ents and Settings\Bioanalyzer\2012-07-24\2012-07-24_003.xad Created: 7/24/2012 11:15:39 AM Modified: 7/24/2012 11:56:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 4: <u>c18 4x30s</u>

Number of peaks found: 16 Corr. Area 1: 635.6

Noise: 0.1

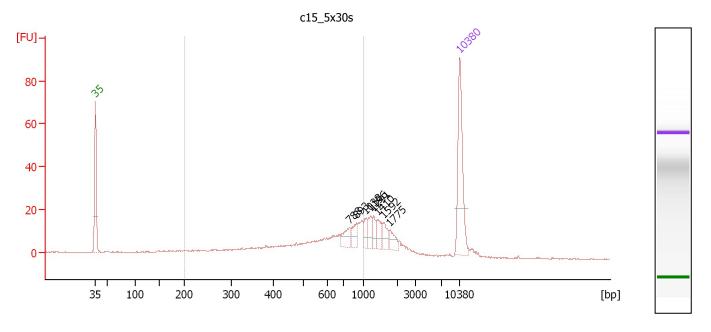
Peak table	for sample 4:	c18 4x30s		
Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	365	8.08	33.5	
3	375	7.78	31.4	
4	396	15.17	58.1	
5	438	13.60	47.1	
6	463	10.58	34.6	
7	477	12.93	41.0	
8	501	19.18	58.0	
9	555	25.45	69.5	
10	571	16.71	44.3	
11	600	26.69	67.5	
12	697	20.14	43.8	
13	731	23.43	48.6	
14	900	25.11	42.3	
15	958	21.67	34.3	
16	1,094	29.27	40.5	
17	1,273	48.24	57.4	
18	10,380	75.00	10.9	Upper Marker
Region tab	le for sample 4	: <u>c18_4x30s</u>		

Region t	able to	r sample 4 :	<u>C18 4X3</u>	<u>US</u>				
From [bp]	To [bp] Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Co lor
200	1,000	531	3,224.7	890.47	635.6	72	38.7	

2012-07-24_003.xad Page 9 of 15

Assay Class: High Sensitivity DNA Assay C:\...ents and Settings\Bioanalyzer\2012-07-24\2012-07-24_003.xad Created: 7/24/2012 11:15:39 AM Modified: 7/24/2012 11:56:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 5: <u>c15 5x30s</u>

Number of peaks found: 8 Corr. Area 1: 217.4

Noise: 0.2

Peak t	able	for sample 5	c15 5x30s		
Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	4	35	125.00	5,411.3	Lower Marker
2		788	17.63	33.9	
3		893	14.23	24.1	
4		1,038	9.94	14.5	
5		1,196	14.35	18.2	
6		1,291	10.78	12.6	
7		1,410	15.10	16.2	
8		1,592	13.93	13.3	
9		1,775	11.88	10.1	
10		10,380	75.00	10.9	Upper Marker

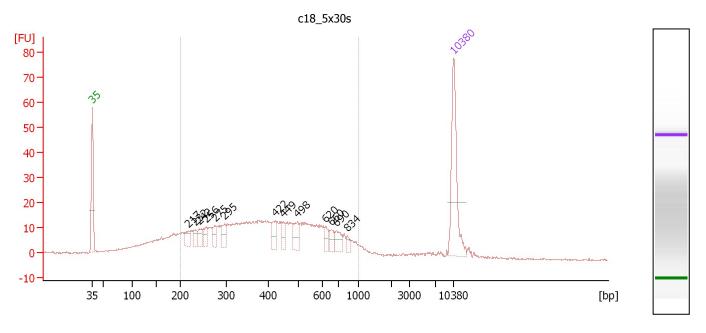
Region	table for sample 5:	<u>c15_5x3</u>	<u>0s</u>			
From	To [bp] Average Size	Molarity	Conc.	Corr.	% of	Size distribu

From [bp]	To [bp] Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Co lor
200	1,000	592	869.2	268.43	217.4	59	36.0	

2012-07-24_003.xad Page 10 of 15

Assay Class: High Sensitivity DNA Assay C:\...ents and Settings\Bioanalyzer\2012-07-24\2012-07-24_003.xad Created: 7/24/2012 11:15:39 AM Modified: 7/24/2012 11:56:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 6: <u>c18_5x30s</u>

Number of peaks found: 13 Corr. Area 1: 512.2

Noise: 0.2

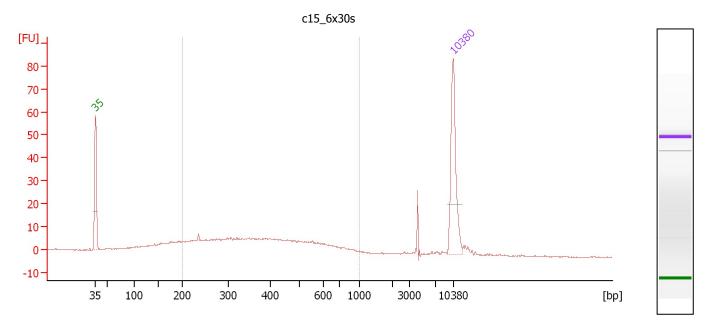
Peak ta	able	for sample 6:	<u>c18_5x30s</u>		
Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	4	35	125.00	5,411.3	Lower Marker
2		217	14.27	99.6	
3		232	11.37	74.1	
4		242	14.37	90.1	
5		256	14.96	88.4	
6		275	13.24	72.9	
7		295	15.66	80.4	
8		422	15.80	56.8	
9		449	11.64	39.3	
10		498	23.88	72.7	
11		620	9.47	23.1	
12		660	9.77	22.4	
13		690	15.84	34.8	
14		834	6.43	11.7	
15		10,380	75.00	10.9	Upper Marker

Region table for sample 6:		: <u>c18_5x3</u>	<u>0s</u>				
From [bp]	To [bp] Average S [bp]	ize Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Co lor
200	1,000 434	2,924.8	687.94	512.2	79	38.5	

2012-07-24_003.xad Page 11 of 15

Assay Class: High Sensitivity DNA Assay Created: 7/24/2012 11:15:39 AM Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-24\2012-07-24_003.xad Created: 7/24/2012 11:56:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 7: <u>c15 6x30s</u>

Number of peaks found: 0 Corr. Area 1: 224.9

Noise: 0.2

Peak table for sample 7: c15 6x30s

 Peak
 Size [bp]
 Conc. [pg/μl]
 Molarity [pmol/l]
 Observations

 1
 ◀
 35
 125.00
 5,411.3
 Lower Marker

 2
 ▶
 10,380
 75.00
 10.9
 Upper Marker

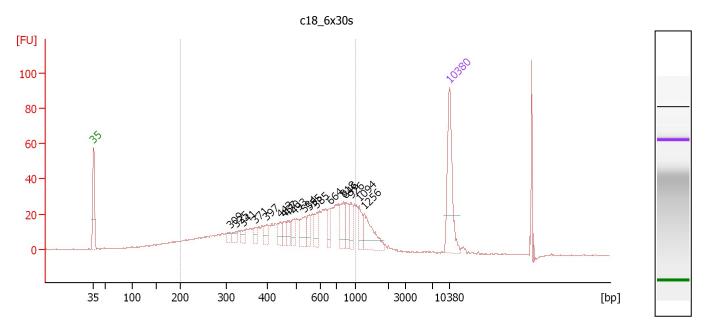
Region table for sample 7: <u>c15 6x30s</u>

From To [bp] Average Size **Molarity** Conc. Corr. % of Size distribution in Co **Total** [bp] [bp] [pmol/l] [pg/µl] Area CV [%] lor 200 1,000 1,327.4 298.48 224.9 71 37.8 409

2012-07-24_003.xad Page 12 of 15

Assay Class: High Sensitivity DNA Assay C:\...ents and Settings\Bioanalyzer\2012-07-24\2012-07-24_003.xad Created: 7/24/2012 11:15:39 AM Modified: 7/24/2012 11:56:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : <u>c18 6x30s</u>

Number of peaks found: 18 Corr. Area 1: 671.4

Noise: 0.2

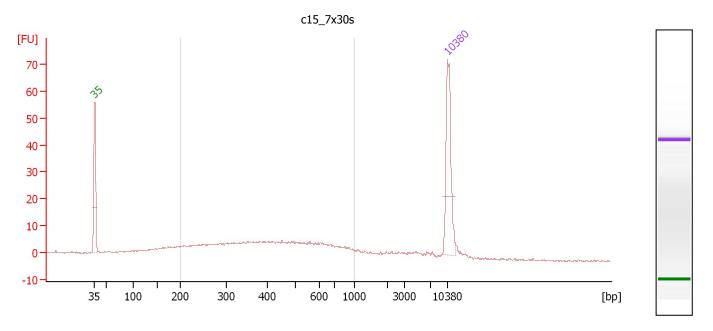
Peak table for sample 8: <u>c18 6x30s</u>								
Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations				
1	35	125.00	5,411.3	Lower Marker				
2	309	10.06	49.3					
3	325	11.43	53.4					
4	341	10.11	44.9					
5	371	11.94	48.8					
6	397	13.43	51.2					
7	443	17.82	60.9					
8	457	13.68	45.4					
9	470	14.10	45.5					
10	493	19.42	59.7					
11	534	29.89	84.9					
12	555	15.15	41.3					
13	585	21.74	56.3					
14	664	18.00	41.1					
15	818	32.74	60.6					
16	846	22.28	39.9					
17	926	19.84	32.4					
18	1,094	21.94	30.4					
19	1,256	45.34	54.7					
20	10,380	75.00	10.9	Upper Marker				
Region ta	Region table for sample 8: <u>c18_6x30s</u>							

ixegion c	ubic 101	Sumple 0 1	CIO CAD	55				
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Co lor
200	1,000	532	2,774.2	773.31	671.4	77	37.9	

2012-07-24_003.xad Page 13 of 15

Assay Class: High Sensitivity DNA Assay Created: 7/24/2012 11:15:39 AM Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-24\2012-07-24_003.xad Created: 7/24/2012 11:56:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 9: <u>c15 7x30s</u>

Number of peaks found: 0 Corr. Area 1: 194.7

Noise: 0.1

Peak table for sample 9: <u>c15 7x30s</u>

 Peak
 Size [bp]
 Conc. [pg/μl]
 Molarity [pmol/l]
 Observations

 1
 ◀
 35
 125.00
 5,411.3
 Lower Marker

 2
 ▶
 10,380
 75.00
 10.9
 Upper Marker

Region table for sample 9: $\underline{c15 7x30s}$

From To [bp] Average Size **Molarity** Conc. Corr. % of Size distribution in Co **Total** [bp] [bp] [pmol/l] [pg/µl] Area CV [%] lor 200 1,000 1,212.7 292.11 194.7 72 39.3 450

2012-07-24_003.xad Page 14 of 15

High Sensitivity DNA Assay C:\...ents and Settings\Bioanalyzer\2012-07-24\2012-07-24_003.xad Created: Modified: 7/24/2012 11:15:39 AM 7/24/2012 11:56:15 AM Assay Class: Data Path: **Gel Image** [bp] c15 5x30s c18 5x30s c15 3x30s c18 3x30s blank 10380 -7000 — 3000 -2000 — 1000 — 700 — 600 — 500 — 400 — 300 — = 200 — = 150 — = 100 — 50 -1 3 5 6 7 8 9 10 11

2012-07-24_003.xad Page 15 of 15

Assay Class: High Sensitivity DNA Assay C:\...ents and Settings\Bioanalyzer\2012-07-24\2012-07-24_003.xad Created: 7/24/2012 11:15:39 AM Modified: 7/24/2012 11:56:15 AM

Curves

Standard Curve

