Bode Technology

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Supplemental Forensic Case Report
January 25, 2011

To:
Stephen L. Braga
Ropes & Gray LLP
One Metro Center
700 12th St., NW, Suite 900
Washington, DC 20005

Bode Case #: 2S04-114
Agency ID #: 1993-WVS-05716; 93-05-0666

List of evidence received on August 10, 2007 for possible DNA analysis:

Bode Sample Name	Agency Sample ID	Agency Description
2S04-114-47	#1	Labeled as "partial denture" [Terry Hobbs]
2S04-114-48	#2	Labeled as "Five knives"
2S04-114-48a		*Gold plated knife with gold plated sheath*
2S04-114-48a1		*Handle*
2S04-114-48a2		*Blade*
2S04-114-48a3		*Inside Sheath*
2S04-114-48b		*Folding knife with silver handle*
2S04-114-48b1		*Handle*
2S04-114-48b2		*Blade*
2S04-114-48c		*Folding knife with three inner blades*
2S04-114-48c1		*Handle*
2S04-114-48c2		*Blade 1*
2S04-114-48c3		*Blade 2*
2S04-114-48c4		*Blade 3*
2S04-114-48d		*Folding knife with wooden handle*
2S04-114-48d1		*Handle*
2S04-114-48d2		*Blade 1*
2S04-114-48d3		*Blade 2*
2S04-114-48e		*Folding knife with brass colored ends*
2S04-114-48e1		*Handle*
2S04-114-48e2		*Blade*
2S04-114-49	#3	Labeled as "One knife"
2S04-114-49a1		*Handle*
2S04-114-49a2		*Blade*
2S04-114-49a3		*Hilt*
2S04-114-49a4		*Inside sheath*
2S04-114-50	#4	Labeled as "Two knives and one file"
2S04-114-50a		*Folding knife with wooden handle*
2S04-114-50a1		*Handle*
2S04-114-50a2		*Blade*
2S04-114-50b		*Knife with wooden handle and brass colored end*
2S04-114-50b1		*Handle*
2S04-114-50b2		*Blade*
2S04-114-50b3		*Hilt*
2S04-114-50b4		*Inside sheath*
2S04-114-50c		*One file*

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2S04-114-51	#5	Labeled as "Three knives"
2S04-114-51a		*Knife with wooden handle*
2S04-114-51a1		*Handle*
2S04-114-51a2		*Blade*
2S04-114-51a3		*Hilt*
2S04-114-51a4		*Inside sheath*
2S04-114-51b		*Decorative knife with tassels*
2S04-114-51b1		*Handle*
2S04-114-51b2		*Blade*
2S04-114-51b3		*Hilt*
2S04-114-51b4		*Inside sheath*
2S04-114-51c		*Knife with black handle*
2S04-114-51c1		*Handle*
2S04-114-51c2		*Blade*

List of evidence received on April 5, 2007 for DNA analysis:

Bode Sample Name	Agency Sample ID	Agency Description
2S04-114-41	93-05716/ME-329-93	Labeled as "Dried Bld Sample James M. Moore"
2S04-114-43	93-05717/ME-330-93	Labeled as "Dried Blood Sample Steve Branch"
2S04-114-45	93-05718/ME-331-93	Labeled as "Dried Blood Sample Christopher Byers"

Human DNA Screening Results:

1. The following samples were screened for human DNA. The results were below the limit of detection for the samples listed below; therefore these samples were not processed further.

2S04-114-48a1
2S04-114-48a3
2S04-114-48b1
2S04-114-48c1
2S04-114-48c2
2S04-114-48c4
2S04-114-49a3
2S04-114-50a1
2S04-114-50a2
2S04-114-50b1
2S04-114-50b4
2S04-114-51a3
2S04-114-51b2
2S04-114-51b4

DNA Processing:

Samples 2S04-114-47, -48a2, -48b2, -48c3, -48d1, -48d2, -48d3, -48e1, -48e2, -49a1, -49a2, -49a4, -50b2, -50b3, -51a1, -51a2, -51a4, -51b1, -51b3, -51c1 and -51c2 were processed for DNA typing by analysis of the 13 CODIS Short Tandem Repeat loci, the D2S1338 locus, the D19S433 locus, and the Amelogenin locus using the Applied Biosystems AmpFlSTR Identifiler kit.

Samples 2S04-114-48b2, -48c3, -48d1, -48d2, -49a1, -51a1, -51a4, -51b3, -51c1 and -51c2 were also processed for DNA typing by analysis of the following loci: D13S317, D7S820, D2S1338, D21S11, D16S539, D18S51, CSF1PO, FGA, and the gender determining locus Amelogenin using the Applied Biosystems AmpFlSTR MiniFiler kit.

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DNA Processing (*continued*):

Appropriate positive and negative controls were used concurrently throughout the analysis. The DNA profiles reported in this case were determined by procedures that have been validated according to standards established by the Scientific Working Group on DNA Analysis Methods (SWGDAM) and adopted as Federal Standards.

DNA Results, Conclusions and Statistics:

1. DNA profiles were previously obtained from samples 2S04-114-41 (Moore), 2S04-114-43 (Branch), and 2S04-114-45 (Byers).

2. A DNA profile was obtained from sample 2S04-114-47 (Terry Hobbs).

3. No DNA profile was obtained from samples 2S04-114-48e1, 2S04-114-48e2, 2S04-114-49a2, 2S04-114-49a4, 2S04-114-50b2, 2S04-114-50b3, 2S04-114-51a2 or 2S04-114-51c2.

4. A partial mixture DNA profile was obtained from sample 2S04-114-48a2. Due to the limited data obtained, no conclusions can be made on this partial profile.

5. The partial DNA profile obtained from sample 2S04-114-48b2 is consistent with a mixture of at least two individuals including a major male contributor (Male 1). The individual associated with 2S04-114-47 (Terry Hobbs) cannot be excluded as a possible contributor of the partial major component DNA profile deduced from sample 2S04-114-48b2.

   The probability of randomly selecting an unrelated individual with this DNA profile at 10 of 15 loci tested is:

   1 in 660 Billion in the US Caucasian population
   1 in 17.0 Trillion in the US African American population
   1 in 200 Billion in the US Hispanic population

   The following loci were not used in the statistical calculation due to no results being obtained: TH01, vWA, TPOX and D5S818. The following locus was not used in the statistical calculation due to the inability to resolve a major component: D21S11.

   Due to the limited data obtained, no conclusions can be made on the minor alleles present in sample 2S04-114-48b2.

6. A partial DNA profile was obtained from sample 2S04-114-48c3. Due to the limited data obtained, no conclusions can be made on this partial profile.

7. A partial mixture DNA profile was obtained from sample 2S04-114-48d1. Due to the limited data obtained, no conclusions can be made on this partial profile.

8. The DNA profile obtained from sample 2S04-114-48d2 is consistent with a male contributor (Male 1). The DNA profile obtained from sample 2S04-114-48d2 matches the DNA profile obtained from sample 2S04-114-47 (Terry Hobbs).

   The probability of randomly selecting an unrelated individual with this DNA profile at 14 of 15 loci tested is:

   1 in 10 Quadrillion in the US Caucasian population
   1 in 14 Quintillion in the US African American population
   1 in 5.5 Quadrillion in the US Hispanic population

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DNA Results, Conclusions and Statistics (*continued*):

Therefore, within a reasonable degree of scientific certainty, Terry Hobbs (2S04-114-47) is the source of the DNA profile obtained from the sample noted above. The following locus was not used in the statistical calculation due to no results being obtained: TPOX.

9. The DNA profile obtained from sample 2S04-114-48d3 is consistent with a male contributor (Male 1). The DNA profile obtained from sample 2S04-114-48d3 matches the DNA profile obtained from sample 2S04-114-47 (Terry Hobbs).

   The probability of randomly selecting an unrelated individual with this DNA profile at 13 of 15 loci tested is:

   1 in 140 Trillion in the US Caucasian population
   1 in 14.0 Quadrillion in the US African American population
   1 in 55.0 Trillion in the US Hispanic population

   Therefore, within a reasonable degree of scientific certainty, Terry Hobbs (2S04-114-47) is the source of the DNA profile obtained from the sample noted above. The following loci were not used in the statistical calculation due to no results being obtained: CSF1PO and D18S51.

10. The DNA profile obtained from sample 2S04-114-49a1 is consistent with a mixture of at least two individuals including at least one male contributor. Due to the possibility of allelic dropout, the individual associated with 2S04-114-47 (Terry Hobbs) cannot be included or excluded as a possible contributor to the mixture DNA profile obtained from sample 2S04-114-49a1.

    The individuals associated with samples 2S04-114-41 (Moore), 2S04-114-43 (Branch), and 2S04-114-45 (Byers) are excluded as possible contributors to the mixture profile obtained from sample 2S04-114-49a1.

11. The partial DNA profile obtained from sample 2S04-114-51a1 is consistent with a mixture of at least two individuals. Due to the limited data obtained, no conclusions can be made on this partial profile.

12. The partial DNA profile obtained from sample 2S04-114-51a4 is consistent with a mixture of at least two individuals including a major male contributor (Male 1). The individual associated with 2S04-114-47 (Terry Hobbs) cannot be excluded as a possible contributor of the partial major component DNA profile deduced from sample 2S04-114-51a4.

    The probability of randomly selecting an unrelated individual with this DNA profile at 9 of 15 loci tested is:

    1 in 20.0 Billion in the US Caucasian population
    1 in 830 Billion in the US African American population
    1 in 5.8 Billion in the US Hispanic population

    The following loci were not used in the statistical calculation due to no results being obtained: D3S1358, TH01, vWA, TPOX and D5S818. The following locus was not used in the statistical calculation due to the inability to resolve a major component: D21S11.

    Due to the limited data obtained, no conclusions can be made on the minor alleles present in sample 2S04-114-51a4.

13. The partial DNA profile obtained from sample 2S04-114-51b1 is consistent with a mixture of at least two individuals including at least one male contributor. Due to the limited data obtained, no conclusions can be made on this partial profile. 210

DNA Results, Conclusions and Statistics (*continued*):

14. The DNA profile obtained from sample 2S04-114-51b3 is consistent with a male contributor (Male 1). The DNA profile obtained from sample 2S04-114-51b3 matches the DNA profile obtained from sample 2S04-114-47 (Terry Hobbs).

    The probability of randomly selecting an unrelated individual with this DNA profile at 10 of 15 loci tested is:

    1 in 50 Trillion in the US Caucasian population
    1 in 2.0 Quadrillion in the US African American population
    1 in 14 Trillion in the US Hispanic population

    Therefore, within a reasonable degree of scientific certainty, Terry Hobbs (2S04-114-47) is the source of the DNA profile obtained from the sample noted above. The following loci were not used in the statistical calculation due to no results being obtained: D3S1358, TH01, vWA, TPOX and D5S818.

15. A partial mixture DNA profile was obtained from sample 2S04-114-51c1. Due to the limited data obtained, no conclusions can be made on this partial profile.

See **Tables One and Two** for summary of alleles reported for each sample.

NOTES:

1. Any reference to body fluids in evidence descriptions are based on the written descriptions of the samples by the submitting agency.
2. Sample 2S04-114-50c was inventoried but not processed further.
3. The DNA profiles obtained from samples 2S04-114-48a2, 2S04-114-48d1 and 2S04-114-51b1 were reported as mixtures; however, the allele table reflects single source patterns. Alleles below threshold were observed in the samples.
4. A supplemental STR case report was issued due to request for additional testing. Please refer to reports dated: June 4, 2008, April 10, 2008, March 7, 2008, September 27, 2007, January 2, 2007, and December 30, 2005 for complete lists of items received/tested for STRs.
5. The remaining evidence and extracts will be retained at Bode until notified by client.

Report submitted by,

Lisa A. Ricci, MFS
DNA Analyst III

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Bode Case #: 2S04-114
Agency Case #: 1993-WVS-05716; 93-05-0666

Date: January 25, 2011

Table One: Analysis of Short Tandem Repeat Loci

Locus	2S04-114-47a1 (Terry Hobbs)	2S04-114-48a2	2S04-114-48b2	2S04-114-48b2 (Deduced Major Component)	2S04-114-48c3	2S04-114-48d1	2S04-114-48d2
D8S1179	10,10	12,13	10,10	10,10	NO RESULTS	NO RESULTS	10,10
D21S11	29,30.2	NO RESULTS	29,30.2	INCONCLUSIVE	NO RESULTS	NO RESULTS	30.2,---
D7S820	8,10	NO RESULTS	8,10	8,10	NO RESULTS	NO RESULTS	8,10
CSF1PO	11,13	NO RESULTS	11,(12),13	11,13	NO RESULTS	11,13	11,13
D3S1358	16,17	NO RESULTS	16,---	16,---	NO RESULTS	NO RESULTS	17,---
TH01	8,9.3	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	9.3,---
D13S317	8,12	NO RESULTS	8,12	8,---	NO RESULTS	NO RESULTS	8,12
D16S539	9,12	NO RESULTS	9,(12)	9,---	9,---	9,12	9,12
D2S1338	17,18	NO RESULTS	17,18	17,---	21,---	17,---	17,18
D19S433	14,14	14,---	14,14	14,14	NO RESULTS	14,---	14,14
vWA	18,20	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	18,---
TPOX	8,11	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS
D18S51	16,18	NO RESULTS	16,18	16,18	NO RESULTS	NO RESULTS	16,18
Amel.	X,Y	X,---	X,Y	X,Y	X,---	X,---	X,Y
D5S818	11,12	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	11,---
FGA	23.2,25	NO RESULTS	23.2,25	23.2,25	22,---	NO RESULTS	23.2,25

KEY: --- = Possible Additional Alleles
( ) = Minor Allele

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Table One: Analysis of Short Tandem Repeat Loci (*continued*)

Locus	2S04-114-48d3	2S04-114-48e1	2S04-114-48e2	2S04-114-49a1	2S04-114-49a2	2S04-114-49a4	2S04-114-50b2
D8S1179	10,10	NO RESULTS	NO RESULTS	10,(13)	NO RESULTS	NO RESULTS	NO RESULTS
D21S11	29,---	NO RESULTS	NO RESULTS	(27),(28),29,30.2	NO RESULTS	NO RESULTS	NO RESULTS
D7S820	8,---	NO RESULTS	NO RESULTS	8,10	NO RESULTS	NO RESULTS	NO RESULTS
CSF1PO	NO RESULTS	NO RESULTS	NO RESULTS	(9),11,(12),13	NO RESULTS	NO RESULTS	NO RESULTS
D3S1358	16,17	NO RESULTS	NO RESULTS	16,17	NO RESULTS	NO RESULTS	NO RESULTS
TH01	8,9.3	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS
D13S317	8,12	NO RESULTS	NO RESULTS	8,(11),12	NO RESULTS	NO RESULTS	NO RESULTS
D16S539	9,12	NO RESULTS	NO RESULTS	9,11,12	NO RESULTS	NO RESULTS	NO RESULTS
D2S1338	17,---	NO RESULTS	NO RESULTS	17,18,(24),(25)	NO RESULTS	NO RESULTS	NO RESULTS
D19S433	14,14	NO RESULTS	NO RESULTS	14,14	NO RESULTS	NO RESULTS	NO RESULTS
vWA	18,20	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS
TPOX	8,11	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS
D18S51	NO RESULTS	NO RESULTS	NO RESULTS	16,18,(19)	NO RESULTS	NO RESULTS	NO RESULTS
Amel.	X,Y	NO RESULTS	NO RESULTS	X,Y	NO RESULTS	NO RESULTS	NO RESULTS
D5S818	11,12	NO RESULTS	NO RESULTS	12,---	NO RESULTS	NO RESULTS	NO RESULTS
FGA	23.2,---	NO RESULTS	NO RESULTS	23.2,25	NO RESULTS	NO RESULTS	NO RESULTS

KEY: --- = Possible Additional Alleles
( ) = Minor Allele

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Table One: Analysis of Short Tandem Repeat Loci (*continued*)

Locus	2S04-114-50b3	2S04-114-51a1	2S04-114-51a2	2S04-114-51a4	2S04-114-51a4 (Deduced Major Component)	2S04-114-51b1	2S04-114-51b3
D8S1179	NO RESULTS	NO RESULTS	NO RESULTS	10,---	10,---	10,---	10,---
D21S11	NO RESULTS	28,---	NO RESULTS	29,---	INCONCLUSIVE	NO RESULTS	29,30.2
D7S820	NO RESULTS	8,---	NO RESULTS	10,---	10,---	NO RESULTS	8,10
CSF1PO	NO RESULTS	10,11	NO RESULTS	11,13	11,13	NO RESULTS	11,13
D3S1358	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS
TH01	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS
D13S317	NO RESULTS	NO RESULTS	NO RESULTS	8,---	8,---	NO RESULTS	8,12
D16S539	NO RESULTS	9,12	NO RESULTS	9,12	9,12	NO RESULTS	9,12
D2S1338	NO RESULTS	17,23,24	NO RESULTS	17,18,(23)	17,18	NO RESULTS	17,18
D19S433	NO RESULTS	14,---	NO RESULTS	14,---	14,---	14,---	14,---
vWA	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS
TPOX	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS
D18S51	NO RESULTS	NO RESULTS	NO RESULTS	16,18	16,18	NO RESULTS	16,18
Amel.	NO RESULTS	X,---	NO RESULTS	X,Y	X,Y	Y,---	X,Y
D5S818	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	11,---	NO RESULTS
FGA	NO RESULTS	NO RESULTS	NO RESULTS	23.2,25	23.2,25	NO RESULTS	23.2,25

KEY: --- = Possible Additional Alleles
( ) = Minor Allele

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Table One: Analysis of Short Tandem Repeat Loci (*continued*)

Locus	2S04-114-51c1	2S04-114-51c2
D8S1179	NO RESULTS	NO RESULTS
D21S11	NO RESULTS	NO RESULTS
D7S820	NO RESULTS	NO RESULTS
CSF1PO	11,---	NO RESULTS
D3S1358	NO RESULTS	NO RESULTS
TH01	NO RESULTS	NO RESULTS
D13S317	NO RESULTS	NO RESULTS
D16S539	11,---	NO RESULTS
D2S1338	23,---	NO RESULTS
D19S433	NO RESULTS	NO RESULTS
vWA	NO RESULTS	NO RESULTS
TPOX	NO RESULTS	NO RESULTS
D18S51	NO RESULTS	NO RESULTS
Amel.	X,---	NO RESULTS
D5S818	NO RESULTS	NO RESULTS
FGA	20,---	NO RESULTS

KEY: --- = Possible Additional Alleles

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Table Two: Previously Reported Analysis of Short Tandem Repeat Loci

LOCUS	41A Reference sample for MOORE	43A Reference sample for BRANCH	45A Reference sample for BYERS
D3S1358	14,18	14,17	14,16
TH01	8,9.3	6,9.3	9.3,9.3
D21S11	29,32.2	29,29	30,32.2
D18S51	14,16	12,15	12,17
Penta E	NT	NT	NT
D5S818	9,13	10,12	11,12
D13S317	11,12	8,11	8,12
D7S820	8,9	8,10	9,12
D16S539	9,13	9,12	9,11
CSF1PO	10,10	12,12	10,13
Penta D	NT	NT	NT
Amelogenin	X,Y	X,Y	X,Y
vWA	18,19	18,19	17,19
D8S1179	12,14	12,13	12,14
TPOX	8,8	8,11	8,8
FGA	22,23	21,24	22,25
D2S1338	17,23	23,24	18,24
D19S433	14,14	14,17	14,15

KEY: NT = Not Tested

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Bode Technology™

INVOICE

Client:
Ropes and Gray LLP
Attn: Stephen Braga
One Metro Center
700 12th St NW Suite 900
Washington, DC 20005

Invoice Date: 1/28/2011

Invoice #: Sales770
Net Terms: 30 Days

PO Number:

Invoice Grand Total: $ 10,915.00

Requester: Stephen Braga
Phone: 202-508-4655
Fax:
email:

Bode Project #.: 2S04-114

Agency Case No.: 1993-WVS-06716 93-05-0666

Line Item Number	Quantity	Item / Part Number	Description	Unit Price	Sales Amount
0001	1	STR	Analysis of Evidence Items (excluding skeletal remains)	$ 1,095.00	$ 1,095.00
0002	20	STR	Analysis of extracted DNA	$ 247.50	$ 4,950.00
0003	10	MiniSTR	Analysis of extracted DNA	$ 487.00	$ 4,870.00

TOTAL AMOUNT DUE $ 10,915.00

Remit To:

The Bode Technology Group, Inc.
c/o GlobalOptions, Inc
Dept. AT 952056
Atlanta, GA 31192

Bank Information:

Silicon Valley Bank
Santa Clara, CA 95054
ABA# 121140399
Credit to: GlobalOptions, Inc.
Account # 3300418500

Bode TIN: 54-1750293

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01/31/11

Jamia Fillinger

From: TrackingUpdates@fedex.com
Sent: Tuesday, February 01, 2011 9:28 AM
To: Jamia Fillinger
Subject: FedEx Shipment 794373172616 Delivered

This tracking update has been requested by:

Company Name:	Bode Technology
Name:	Bode Technology
E-mail:	lisa.ricci@bodetech.com

Our records indicate that the following shipment has been delivered:

Reference:	2S04-114
Ship (P/U) date:	Jan 31, 2011
Delivery date:	Feb 1, 2011 9:22 AM
Sign for by:	J.PARNELL
Delivery location:	WASHINGTON, DC
Delivered to:	Mailroom
Service type:	FedEx Priority Overnight
Packaging type:	FedEx Envelope
Number of pieces:	1
Weight:	0.50 lb.
Special handling/Services:	Deliver Weekday
Tracking number:	794373172616

Shipper Information	Recipient Information
Bode Technology	Stephen L. Braga
Bode Technology	Ropes & Gray LLP
10430 Furnace Road	700 12TH ST NW STE 900
Suite 107	ONE METRO CENTER
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Thank you for your business.

Bode Technology

Review Form: Complete Case File

Shipment or Case #: 2S04-114-47-51

Case File Documentation	Core Forms and Controls	Data and Report
Technical Review		
- Case submission form or submitted manifest complete - Client paperwork complete - Client communication documented* - Chain of custody (COC) completed and correct - Project guidelines followed* - Inventory sheet accurate and consistent with COC - Photodocumentation of all evidence complete* - Permission to consume documented* - Case notes complete and accurate - All pages have case or shipment #, date, initials	- Lab worksheets complete - Sample numbering correct throughout - Controls gave appropriate results : Allelic ladders Positive control(s) Negative controls(s) - Electropherograms documented properly - Internal lane standard verified - Two independent analyses performed and edits consistent - Index accurate* - Correct core forms and controls included for case+	- Electropherograms documented properly - Internal lane standard verified - Two independent analyses performed and edits consistent - Index accurate* - Allele table included and accurate* - Results accurate - Conclusions accurate* - Statistics provided* - Statistic calculations correct* Self review [illegible] 01/27/11
Administrative Review		
- COC accurate - Core forms and controls review form included+	- Case notes accurate* - Positive control correct	- Report editorially accurate and includes: case identifier, evidence examined, methodology, loci or kit, results and/or conclusions, interpretative statement, date issued, disposition of evidence, signature of person accepting responsibility

**if applicable, + For case files supplemented with controls and core forms*

[illegible] SVP Forensic CPS [illegible] SVP Tech

Name and Title ☒ Date-Type of review

Sha[illegible] Weitz, Forensic Biology Analyst 1/28/11 Admin

Name and Title ☑ Date- Type of review

Name and Title ☐ Date- Type of review

Name and Title ☐ Date- Bode Search including Staff DNA Search*

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Population Statistics

BodeStats 4.0 MAC

Case # 2S04-114-48b2 major

Date 1/25/2011

Analyst LAR

	D8S1179		D21S11		D7S820		CSF1PO		D3S1358		TH01		D13S317		D16S539		D2S1338		D19S433		vWA		TPOX		D18S51		D5S818		FGA	
	10	10	0	0	8	10	11	13	16	0	0	0	8	0	9	0	17	0	14	14	0	0	0	0	16	18	[illegible]	[illegible]	[illegible]	[illegible]
US CAUC POPS	[illegible]	[illegible]	1	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1	[illegible]	1	[illegible]	1	[illegible]	1	[illegible]	[illegible]	1	1	1	1	[illegible]	[illegible]	1	1	[illegible]	[illegible]
US AFR-AMER	[illegible]	[illegible]	1	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1	[illegible]	1	[illegible]	1	[illegible]	1	[illegible]	[illegible]	1	1	1	1	[illegible]	[illegible]	1	1	[illegible]	[illegible]
US HISPANIC	[illegible]	[illegible]	1	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1	[illegible]	1	[illegible]	1	[illegible]	1	[illegible]	[illegible]	1	1	1	1	[illegible]	[illegible]	1	1	[illegible]	[illegible]

	D8S1179	D21S11	D7S820	CSF1PO	D3S1358	TH01	D13S317	D16S539	D2S1338	D19S433	vWA	TPOX	D18S51	D5S818	FGA
COMBINED CAU	0.01110899	1	0.073386	0.057792	0.506	1	0.226	0.226	0.364	0.13848939	1	1	0.021128	1	0.001136
COMBINED AA	0.00112259	1	0.156232	0.018426	0.67	1	0.066	0.392	0.198	0.05146171	1	1	0.038868	1	0.00248
COMBINED HIS	0.0109	1	0.070906	0.035746	0.572	1	0.242	0.278	0.392	0.14296875	1	1	0.018496	1	0.004356

OVERALL CAU	1.5E-12 OR 1 IN	6.6E+11 OR 1 IN	660.0 BILLION
OVERALL AA	5.6E-14 OR 1 IN	1.7E+13 OR 1 IN	17.0 TRILLION
OVERALL HIS.	4.9E-12 OR 1 IN	2.0E+11 OR 1 IN	200.0 BILLION

Formulas used for calculations
2p for alleles with zygosity in question
2pq for heterozygotes
p2 +.p (1-p)θ for homozygotes

THETA= 0.01

Minimum allele frequency= 5/2N
MV= Microvariant or off-ladder allele not present in database table. Frequency = 5/2N

Allele frequencies taken from "Allele Frequencies for 15 Autosomal STR Loci on U.S. Caucasian, African American and Hispanic Populations". John M. Butler, Ph.D., Richard Schoske, M.A., Peter M. Vallone, Ph.D., Janette W. Redman and Margaret C. Kline, M.S. J Forensic Sci 2003;48(4): 908 - 911.

Document: [illegible] Sapin Source ID (WS)
Revision: [illegible]
Effective: [illegible]

200

Lar
012611

Population Statistics

BodeStats 4.0 MAC

Case # 2S04-114-48d2 Date 1/25/2011 Analyst LAR

	D8S1179		D21S11		D7S820		CSF1PO		D3S1358		TH01		D13S317		D16S539		D2S1338		D19S433		vWA		TPOX		D18S51		D5S818		FGA	
	10	10	30.2	0	8	10	11	13	17	0	9.3	0	8	12	9	12	17	18	14	14	18	0	0	0	16	18	11	0	23.2	23.2
US CAUC POOL	[illegible]	[illegible]	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1	[illegible]	[illegible]	[illegible]	1	[illegible]	[illegible]
US AFR AMER	[illegible]	[illegible]	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1	[illegible]	[illegible]	[illegible]	1	[illegible]	[illegible]
US HISPANIC	[illegible]	[illegible]	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1	[illegible]	[illegible]	[illegible]	1	[illegible]	[illegible]

	D8S1179	D21S11	D7S820	CSF1PO	D3S1358	TH01	D13S317	D16S539	D2S1338	D19S433	vWA	TPOX	D18S51	D5S818	FGA
COMBINED CAU	0.01110899	0.056	0.073386	0.057792	0.43	0.736	0.056048	0.073676	0.028756	0.13848939	0.4	1	0.021128	0.722	0.001136
COMBINED AA	0.00112259	0.02	0.156232	0.018426	0.41	0.21	0.027984	0.076832	0.007722	0.05146171	0.31	1	0.038868	0.466	0.00248
COMBINED HIS	0.0109	0.078	0.070906	0.035746	0.408	0.492	0.053482	0.070612	0.0392	0.14296875	0.342	1	0.018496	0.7	0.004356

OVERALL CAU	9.6E-17 OR 1 IN	1.0E+16 OR 1 IN	10.0 QUADRILLION
OVERALL AA	6.7E-20 OR 1 IN	1.4E+19 OR 1 IN	14.0 QUINTILLION
OVERALL HIS	1.8E-16 OR 1 IN	5.5E+15 OR 1 IN	5.5 QUADRILLION

Formulas used for calculations
2p for alleles with zygosity in question
2pq for heterozygotes
p2 + p (1-p)θ for homozygotes

THETA= 0.01

Minimum allele frequency= 5/2N
MV= Microvariant or off-ladder allele not present in database table. Frequency = 5/2N

Allele frequencies taken from "Allele Frequencies for 15 Autosomal STR Loci on U.S. Caucasian, African American and Hispanic Populations", John M. Butler, Ph.D., Richard Schoske, M.A., Peter M. Vallone, Ph.D. Janette W. Redman and Margaret C. Kline, M.S., J Forensic Sci 2003;48(4): 908 - 911.

Document: [illegible] - Single Source ID (WS)
Revision: 2
Effective: [illegible]

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Lar 01/26/11

Population Statistics

BodeStats 4.0 MAC

Case # 2S04-114-48d3 Date 1/25/2011 Analyst LAR

	D8S1179		D21S11		D7S820		CSF1PO		D3S1358		TH01		D13S317		D16S539		D2S1338		D19S433		vWA		TPOX		D18S51		D5S818		FGA	
	10	10	29	0	8	0	0	0	16	17	8	9.3	8	12	9	12	17	0	14	14	18	20	8	11	0	0	[illegible]	[illegible]	[illegible]	[illegible]
US CAUC POPS	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	[illegible]	[illegible]	[illegible]	1
US AFR AMER	[illegible]	[illegible]	[illegible]	1	[illegible]	1	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	[illegible]	[illegible]	[illegible]	1
US HISPANIC	[illegible]	[illegible]	[illegible]	1	[illegible]	1	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	[illegible]	[illegible]	[illegible]	1

	D8S1179	D21S11	D7S820	CSF1PO	D3S1358	TH01	D13S317	D16S539	D2S1338	D19S433	vWA	TPOX	D18S51	D5S818	FGA
COMBINED CAU	0.01110899	0.39	0.302	1	0.10879	0.061824	0.056048	0.073676	0.364	0.13848939	0.0032	0.26001	1	0.277248	0.016
COMBINED AA	0.00112259	0.396	0.472	1	0.13735	0.04074	0.027984	0.076832	0.198	0.05146171	0.00496	0.162936	1	0.164498	0.02
COMBINED HIS	0.0109	0.4	0.242	1	0.116688	0.047232	0.053482	0.070612	0.392	0.14296875	0.006156	0.25905	1	0.245	0.036

OVERALL CAU	6.8E-15 OR 1 IN	1.4E+14 OR 1 IN	140.0 TRILLION
OVERALL AA	6.9E-17 OR 1 IN	1.4E+16 OR 1 IN	14.0 QUADRILLION
OVERALL HIS.	1.8E-14 OR 1 IN	5.5E+13 OR 1 IN	55.0 TRILLION

Formulas used for calculations
2p for alleles with zygosity in question
2pq for heterozygotes
p2 + p (1-p)θ for homozygotes

THETA= 0.01

Minimum allele frequency= 5/2N
MV= Microvariant or off-ladder allele not present in database table Frequency = 5/2N

Allele frequencies taken from "Allele Frequencies for 15 Autosomal STR Loci on U.S. Caucasian, African American and Hispanic Populations". John M. Butler, Ph.D., Richard Schoske, M.A., Peter M. Vallone, Ph.D., Janette W. Redman and Margaret C. Kline, M.S.. J Forensic Sci 2003;48(4): 908 - 911.

Document: [illegible] - Single Source ID (WS)
Revision: 2
Effective: [illegible]

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Population Statistics

BodeStats 4.0 MAC

Case # 2S04-114-51a4 major

Date 1/25/2011

Analyst LAR

	D8S1179		D21S11		D7S820		CSF1PO		D3S1358		TH01		D13S317		D16S539		D2S1338		D19S433		vWA		TPOX		D18S51		D5S818		FGA	
	10	0	0	0	10	0	11	13	0	0	0	0	8	0	9	12	17	18	14	0	0	0	0	0	16	18	[illegible]	[illegible]	[illegible]	[illegible]
US CAUC POPS	[illegible]	1	1	1	[illegible]	1	[illegible]	[illegible]	1	1	1	1	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1	1	1	[illegible]	[illegible]	1	1	[illegible]	[illegible]
US AFR-AMER	[illegible]	1	1	1	[illegible]	1	[illegible]	[illegible]	1	1	1	1	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1	1	1	[illegible]	[illegible]	1	1	[illegible]	[illegible]
US HISPANIC	[illegible]	1	1	1	[illegible]	1	[illegible]	[illegible]	1	1	1	1	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1	1	1	[illegible]	[illegible]	1	1	[illegible]	[illegible]

	D8S1179	D21S11	D7S820	CSF1PO	D3S1358	TH01	D13S317	D16S539	D2S1338	D19S433	vWA	TPOX	D18S51	D5S818	FGA
COMBINED CAU	0.202	1	0.486	0.057792	1	1	0.226	0.073676	0.028756	0.738	1	1	0.021128	1	0.001136
COMBINED AA	0.058	1	0.662	0.018426	1	1	0.066	0.076832	0.007722	0.446	1	1	0.038868	1	0.00248
COMBINED HIS	0.2	1	0.586	0.035746	1	1	0.242	0.070612	0.0392	0.75	1	1	0.018496	1	0.004356

OVERALL CAU	4.9E-11 OR 1 IN	2.0E+10 OR 1 IN	20.0 BILLION
OVERALL AA	1.2E-12 OR 1 IN	8.3E+11 OR 1 IN	830.0 BILLION
OVERALL HIS.	1.7E-10 OR 1 IN	5.8E+09 OR 1 IN	5.8 BILLION

Formulas used for calculations
2p for alleles with zygosity in question
2pq for heterozygotes
p2 + p (1-p)θ for homozygotes

THETA= 0.01

Minimum allele frequency = 5/2N
MV= Microvariant or off-ladder allele not present in database table. Frequency = 5/2N

Allele frequencies taken from "Allele Frequencies for 15 Autosomal STR Loci on U.S. Caucasian, African American and Hispanic Populations". John M. Butler, Ph.D., Richard Schoske, M.A., Peter M. Vallone, Ph.D., Janette W. Redman and Margaret C. Kline, M.S. J Forensic Sci 2003;48(4): 906 - 911.

Document: [illegible] - Single Source ID [illegible]
Revision: 2
Effective: [illegible]

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Mar 01/2011

Population Statistics

BodeStats 4.0 MAC

Case # 2S04-114-51b3 Date 1/25/2011 Analyst LAR

	D8S1179		D21S11		D7S820		CSF1PO		D3S1358		TH01		D13S317		D16S539		D2S1338		D19S433		vWA		TPOX		D18S51		D5S818		FGA	
	10	0	29	30.2	8	10	11	13	0	0	0	0	8	12	9	12	17	18	14	0	0	0	0	0	16	18	[illegible]	[illegible]	[illegible]	[illegible]
US CAUC	[illegible]		[illegible]		[illegible]		[illegible]						[illegible]		[illegible]		[illegible]		[illegible]						[illegible]				[illegible]	
DOPS	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1	1	1	[illegible]	[illegible]	1	1	[illegible]	[illegible]
US AFR - AMCM	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1	1	1	[illegible]	[illegible]	1	1	[illegible]	[illegible]
US HISPANIC	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1	1	1	[illegible]	[illegible]	1	1	[illegible]	[illegible]

	D8S1179	D21S11	D7S820	CSF1PO	D3S1358	TH01	D13S317	D16S539	D2S1338	D19S433	vWA	TPOX	D18S51	D5S818	FGA
COMBINED CAU	0.202	0.01092	0.073386	0.057792	1	1	0.056048	0.073676	0.028756	0.738	1	1	0.021128	1	0.001136
COMBINED AA	0.058	0.00396	0.156232	0.018426	1	1	0.027984	0.076832	0.007722	0.446	1	1	0.038868	1	0.00248
COMBINED HIS	0.2	0.0156	0.070906	0.035746	1	1	0.053482	0.070612	0.0392	0.75	1	1	0.018496	1	0.004356

OVERALL CAU	2.0E-14 OR 1 IN	5.0E+13 OR 1 IN	50.0 TRILLION
OVERALL AA	4.8E-16 OR 1 IN	2.0E+15 OR 1 IN	2.0 QUADRILLION
OVERALL HIS.	7.1E-14 OR 1 IN	1.4E+13 OR 1 IN	14.0 TRILLION

Formulas used for calculations
2p for alleles with zygosity in question
2pq for heterozygotes
p2 + p (1-p)θ for homozygotes

THETA= 0.01

Minimum allele frequency = 5/2N
MV= Microvariant or off-ladder allele not present in database table. Frequency = 5/2N

Allele frequencies taken from "Allele Frequencies for 15 Autosomal STR Loci on U.S. Caucasian, African American and Hispanic Populations", John M. Butler, Ph.D., Richard Schoske, M.A., Peter M. Vallone, Ph.D., Janette W. Redman and Margaret C. Kline, M.S.. J Forensic Sci 2003;48(4): 908 - 911.

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Effective: [illegible]

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1/26/11

Phone Contact Form

Bode Technology

Case Number/Subject: 2S04-114 Date: 01/25/11

____ Incoming call

_X_ Outgoing call

Person calling	Organization	Phone Number
Lisa A. Ricci	Bode Technology	(703) 646-9785

Receiver of call	Organization	Phone Number
Stephen L. Braga	Ropes & Gray LLP	(202) 508-4655

Notes: Called to inform client that we were not able to obtain any results from sample 2S04-114-51c2. Also, I requested the name of the individual associated with sample 2S04-114-47 (denture plate), which is "Terry Hobbs" per the client.

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01/25/11

CHAIN OF CUSTODY

The Bode Technology Group, Inc.

Case Number: 2S04-114-47 to 51 **Agency ID Number:**

Submitting Agency Information

Name State Crime Laboratory
Address 3 Natural Resouces Drive
Little Rock, AR 72205

Victim
Suspect

Contact/Attorney Lisa Channell
Additional Authorized Contacts

Phone Number 501-683-6100
Phone Number

Custody Record

Method of Delivery to Bode Fed Ex
Condition Good (Sealed)
Date Delivered 8/10/2007 Time: 9:19 AM
Delivered By Fed Ex
Signature TRK# 8605 8356 3290
Delivered To Carmen Pozo
Signature Carmen Pozo

Date / Time	Item No.	Released by (print) / (sign)	Received by (print) / (sign)	Purpose of change:
Date 8/10/07 Time 9:20 AM	47 to 51	Released by (print) Carmen Pozo (sign) Carmen Pozo	Received by (print) Joann Topacio, for EMS (sign)	Accessioning/Storage
Date 5.12.08 Time 10:28AM	47-51	Released by (print) RACHEL WORTMAN, for EMS (sign) Rachel Wortman	Received by (print) Amy Jeanguenat (sign) Amy Jeanguenat	Purpose of change: catalysis
Date 051509 Time 3:17PM	47-51	Released by (print) Amy Jeanguenat (sign) Amy Jeanguenat	Received by (print) Maggie Redmond, for EMS (sign) M. Redmond	Purpose of change: Storage
Date 6/15/09 Time 2:00pm	48-51	Released by (print) Maggie Redmond, for EMS (sign) M. Redmond	~~Received by~~ Sent via: Fedex (print) Trk # 7976 7990 4160	Purpose of change: sent to Microtrace
Date Time	Item No.	Released by (print) (sign)	Sent via: Tracking No	Purpose of change: FINAL DISPOSITION

Evidence Inventory

Bode Case #	Agency Item ID	Agency Description
2S04-114-47	#1	Labeled as " partial denture " AMJ 05-12-08
2S04-114-48	#2	Labeled as " Five knives " AMJ 05-12-08
2S04-114-49	#3	Labeled as " One knife " AMJ 05-12-08
2S04-114-50	#4	Labeled as " Two knives and one file " AMJ 051208
2S04-114-51	#5	Labeled as " Three knives " AMJ 051208

Storage of Evidence: Secure evidence room

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CHAIN OF CUSTODY

The Bode Technology Group, Inc.

Case Number: 2S04-114-47 to 51

Agency Item ID Number:

Date / Time	Item No.	Released by (print / sign)	Received by (print / sign)	Purpose of change:
10/6/09 2:20pm	48 to 51	Fedex TRK# 797991047650	Ben Bever	evidence returned to Bode
10/6/09 2:25pm	48 to 51	Ben Bever	RACHEL LOORTMAN, for FNC	storage
12/4/09 1:05pm	48 to 51	Maggie Redmond for EMS N. Redmond	Lindsay Murray	analysis
7/9/10 9:00am	48 to 51	Lindsay Murray	Maggie Redmond, for EMS N. Redmond	storage
12/2/10 9:20am	47	Maggie Redmond, for EMS N. Redmond	Shannon Weitz	analysis
12/20/10 2:35pm	47	Shannon Weitz	Maggie Redmond, for EMS N. Redmond	storage

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Copy
UR 01271

Lisa Ricci

From: Braga, Stephen [Stephen.Braga@ropesgray.com]
Sent: Wednesday, January 26, 2011 1:02 PM
To: Lisa Ricci
Cc: Andrea Borchardt; Angela Williamson
Subject: RE: Read ASAP Re: Further Testing

Great

Stephen L. Braga
ROPES & GRAY LLP
T +1 202 508 4655 | F +1 202 383 9821
One Metro Center, 700 12th Street, NW, Suite 900
Washington, DC 20005-3948
Stephen.Braga@ropesgray.com
www.ropesgray.com

From: Lisa Ricci [mailto:Lisa.Ricci@bodetech.com]
Sent: Wednesday, January 26, 2011 1:00 PM
To: Braga, Stephen
Cc: Andrea Borchardt; Angela Williamson
Subject: RE: Read ASAP Re: Further Testing

Hi Steve,

We will definitely have the remainder of the DNA extracts returned. We will also be able to email you the report by COB on Friday.

Thanks,

Lisa

From: Braga, Stephen [mailto:Stephen.Braga@ropesgray.com]
Sent: Wednesday, January 26, 2011 10:18 AM
To: Lisa Ricci; Angela Williamson
Cc: Andrea Borchardt
Subject: Re: Read ASAP Re: Further Testing

Lisa,

Also can you (1) save whatever material can be saved, and (2) send me a separate report on the expedited testing for 51c2 indicating - as I understand it - that there was insufficient material to generate any testing results.

Thanks,

Steve

Stephen L. Braga
ROPES & GRAY LLP
T +1 202 508 4655 | F +1 202 383 9821
One Metro Center, 700 12th Street, NW, Suite 900
Washington, DC 20005-3948

192
2504-114
UM 01261

Stephen.Braga@ropesgray.com
www.ropesgray.com

From: Braga, Stephen
To: 'Lisa.Ricci@bodetech.com' <Lisa.Ricci@bodetech.com>; 'Angela.Williamson@bodetech.com' <Angela.Williamson@bodetech.com>
Cc: 'Andrea.Borchardt@bodetech.com' <Andrea.Borchardt@bodetech.com>
Sent: Wed Jan 26 09:46:34 2011
Subject: Re: Read ASAP Re: Further Testing

Okay. Thank you for the report. Please complete the assignment as indicated.

From: Lisa Ricci <Lisa.Ricci@bodetech.com>
To: Braga, Stephen; Angela Williamson <Angela.Williamson@bodetech.com>
Cc: Andrea Borchardt <Andrea.Borchardt@bodetech.com>
Sent: Wed Jan 26 09:44:29 2011
Subject: RE: Read ASAP Re: Further Testing

Hello Steve,

I have already completed all of the additional miniSTR testing that was prior discussed and approved. This includes testing on the following samples:

2S04-114-48b2
2S04-114-48c3
2S04-114-48d1
2S04-114-48d2
2S04-114-49a1
2S04-114-51a1
2S04-114-51a4
2S04-114-51b3
2S04-114-51c1
2S04-114-51c2

There is little to no DNA extract remaining for any of the above listed samples. We are currently writing the report for the results of this round of testing & comparison to the three victims and Terry Hobbs. However, the case file needs to be reviewed before we can issue the results or the report, and we are planning to have this completed by next week!

If you have any other questions, please let us know!

Best,

Lisa

From: Braga, Stephen [mailto:Stephen.Braga@ropesgray.com]
Sent: Tuesday, January 25, 2011 8:35 PM
To: Angela Williamson
Cc: Andrea Borchardt; Lisa Ricci
Subject: Re: Read ASAP Re: Further Testing

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2804-114
cm 01/26/11

I spoke with Lisa regarding the expedited 51c2 testing today, and its result of insufficient material for testing. She told me that she hoped to have a report out on the rest of the testing next week. We didn't discuss whether the additional testing had already been done for the remaining samples. Has it been?

I am trying to stop any further steps in testing the additional samples if doing so will preserve biological material for some or all of those additional, non-expedited samples.

Thx

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www.ropesgray.com

From: Angela Williamson <Angela.Williamson@bodetech.com>
To: Braga, Stephen
Cc: Andrea Borchardt <Andrea.Borchardt@bodetech.com>; Lisa Ricci <Lisa.Ricci@bodetech.com>
Sent: Tue Jan 25 20:27:26 2011
Subject: RE: Read ASAP Re: Further Testing

Hi Steve,

Lisa Ricci conducted the MiniFiler testing for this case. She was going to try and call you this afternoon. She has completed the lab work and is in the process of finalising the report.

I have cc'd both Andrea and Lisa on this email.

Perhaps we should have a conference call tomorrow so that we can discuss exactly what has been done, and what you would like us to do going forward?

Thanks
Angela

From: Braga, Stephen [mailto:Stephen.Braga@ropesgray.com]
Sent: Tue 1/25/2011 8:10 PM
To: Angela Williamson
Subject: Fw: Read ASAP Re: Further Testing

Angela,

Wasn't sure if you might see this before Andrea or Lesley (whose proper e-mail address I don't have), but I need a response to it ASAP.

Thanks,

Steve

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2804-114
CW 02611

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----- Original Message -----
From: Braga, Stephen
To: 'Andrea.Borchardt@bodetech.com' <Andrea.Borchardt@bodetech.com>
Cc: 'leslie.ritchie@bodetech.com' <leslie.ritchie@bodetech.com>
Sent: Tue Jan 25 20:00:36 2011
Subject: Read ASAP Re: Further Testing

Andrea and/or Leslie,

Two points of Very High Importance:

1) Is it possible to stop all of the non-51c2 mini str testing immediately and still preserve the biological material for all other samples for which testing was authorized? If so, please do so immediately. Thank you. Our situation has changed a bit and I thus need to change the previous testing request.

2) With respect to my question re the hair sample in the PS below, please do not do any new testing to make that determination, if you can. Thank you.

Please respond to this e-mail as soon as possible.

Best,

Steve

----- Original Message -----
From: Braga, Stephen
To: 'Andrea Borchardt' <Andrea.Borchardt@bodetech.com>
Sent: Tue Jan 25 15:56:34 2011
Subject: RE: Further Testing

Andrea,

Terry Hobbs is the individual associated with the dental plate.

Yes, you can address the report to me at that address.

I will be in touch regarding additional testing issues in the days to come.

Thanks,

Steve

PS - Also, we need to answer the following question: whether hair sample 2S04-114-21 is a pubic hair or not? Can you, or anyone else at Bode, make that determination for us?

-----Original Message-----
From: Andrea Borchardt [mailto:Andrea.Borchardt@bodetech.com]
Sent: Monday, January 24, 2011 3:34 PM
To: Braga, Stephen
Subject: RE: Further Testing

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2S04-114
cm 012611

That will be no problem. We have started the requested testing.

Can you please let me know the name of the individual associated with the dental plate so this can be included in the report? If this information is unavailable, we can just refer to the dental plate by Bode sample ID.

Also, to whom should the report be addressed? To you at the address listed in your email signature?

Thank you.

-Andrea

-----Original Message-----
From: Braga, Stephen [mailto:Stephen.Braga@ropesgray.com]
Sent: Friday, January 21, 2011 9:16 AM
To: Andrea Borchardt
Subject: Re: Further Testing

Thanks, and let's compare all the additional testing we've been discussing to the three victims' DNA and the dental plate DNA.

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----- Original Message -----
From: Andrea Borchardt <Andrea.Borchardt@bodetech.com>
To: Braga, Stephen
Sent: Fri Jan 21 09:12:36 2011
Subject: RE: Further Testing

We didn't test the sample from the blade because the quant (estimate of the amount of DNA present) indicated that if there was DNA present, it was below our detection threshold. We typically would not see results from samples with quants such as these. So any of the samples with this type of quant (indicated as <0.005ng/uL on the spreadsheet) we did not recommend for further testing.

We don't have a lot of background on these knives as to which ones are more important than others, so our recommendations are purely based on the data we are obtaining in the lab. Based on the case and sample background, if you have priority samples in mind that you want us to take forward for testing, please feel free to let us know and we will be happy to conduct the tests.

That all being said, we can definitely take this sample (51c2 from the knife blade) forward for testing at your request. I will go in the lab and get it started right now.

Thanks!

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2804-114
on 012611

-Andrea

-----Original Message-----
From: Braga, Stephen [mailto:Stephen.Braga@ropesgray.com]
Sent: Friday, January 21, 2011 6:19 AM
To: Andrea Borchardt
Subject: Further Testing

Andrea,

A few further questions regarding the additional testing we have been discussing this week. On reviewing your spreadsheet again, it appears to indicate that no testing was done on Sample 51c2 - the blade of this knife. Is that right? If so, why wasn't the blade tested?

In any event, in addition to the testing I authorized yesterday, I would now like to ask you to conduct expedited 5 day TAT testing on the 51c2 blade of this knife.

Thanks for your help,

Steve

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LMR 01261

Description	Slide	Sample Name	Area	Test (y/n)	DNA Amt. (ng/uL)	DNA Results	Candidate for miniSTRs
		2S04-114-47a1	Dental Plate	Yes		Full Profile	no
Gold plate knife with gold plate sheath, ~ 6 inches in length	52	2S04-114-48a1	Handle	no	<0.005		
		2S04-114-48a2	Blade	yes	0.0144	Partial Mixture Profile	no
		2S04-114-48a3	Inside Sheath	no	<0.005		
Folding knife, silver ends with cream colored center handle	58	2S04-114-48b1	Handle	no	<0.005		
		2S04-114-48b2	Blade	yes	0.0186	Partial Profile	yes
Folding knife with 3 inner knives, handle beige/brown one one side and silver on other	63	2S04-114-48c1	Handle	no	<0.005		
		2S04-114-48c2	Blade 1	no	<0.005		
		2S04-114-48c3	Blade 2	yes	0.00732	No DNA profile	no
		2S04-114-48c4	Blade 3	no	<0.005		
Folding knife with apparent wooden handle, medium brown with reddish center, 2 inner knives	70	2S04-114-48d1	Handle	yes	0.0187	One allele	yes
		2S04-114-48d2	Blade 1	yes	0.0261	Partial Profile	yes
		2S04-114-48d3	Blade 2	yes	0.162	Full DNA profile	yes, but unnecessary
Folding knife, ~3-4 inches, dark brown handle with brass colored ends	76	2S04-114-48e1	Handle	yes	<0.005	No DNA profile	no
		2S04-114-48e2	Blade	yes	<0.005	No DNA profile	no
Larger knife with black leather sheath. Knife with brass colored hilt. Handle dark brown in color with floral inlay	2	2S04-114-49a1	Handle	yes	0.0523	Partial Profile	yes
		2S04-114-49a2	Blade	yes	0.00528	No DNA profile	no
		2S04-114-49a3	Hilt	no	<0.005		
		2S04-114-49a4	Inside Sheath	yes	0.0105	No DNA profile	no
Folding knife in black pouch. Handle beige with darker brown wood-like pattern.	13/14	2S04-114-50a1	Handle	no	<0.005		
		2S04-114-50a2	Blade	no	<0.005		
Knife with black leather sheath. Sheath with metal clip. Wooden handle with brass colored hilt.	21	2S04-114-50b1	Handle	no	<0.005		
		2S04-114-50b2	Blade	yes	0.00517	No DNA profile	no
		2S04-114-50b3	Hilt	yes	0.0245	No DNA profile	no
		2S04-114-50b4	Inside Sheath	no	<0.005		
Knife with beige colored sheath. Handle wooden colored with three metallic colored dots and with no hilt.	30	2S04-114-51a1	Handle	yes	0.0241	One allele	yes
		2S04-114-51a2	Blade	yes	0.00506	No DNA profile	no
		2S04-114-51a3	Hilt	no	<0.005		
		2S04-114-51a4	Inside Sheath	yes	0.0266	Partial Profile	yes
Ornate copper colored knife with tassles on end and with ornate sheath.	39	2S04-114-51b1	Handle	yes	0.032	Partial Mixture Profile	no
		2S04-114-51b2	Blade	no	<0.005		
		2S04-114-51b3	Hilt	yes	0.0262	Partial Profile	yes
		2S04-114-51b4	Inside Sheath	no	<0.005		
Folding knife with black handle with metal strip. Knife with circle hole cut-out	46	2S04-114-51c1	Handle	yes	0.0143	No DNA profile	no
		2S04-114-51c2	Blade	no	<0.005		

2804-114 18b
LM
5/26/11

Andrea Borchardt

From: Braga, Stephen [Stephen.Braga@ropesgray.com]
Sent: Thursday, January 20, 2011 11:01 AM
To: Andrea Borchardt
Cc: don@riordan-horgan.com; Angela Williamson
Subject: RE: Sample Name/Number Correlation Question
Follow Up Flag: Follow up
Flag Status: Completed

Andrea,

Having now looked over your materials, it looks like the confusion arises – in part - from the fact that there appear to be three different knives under Sample No. 51, right? I didn't realize that until you sent this latest spreadsheet. From the description, 51c appears to be the one I sent you a photo of the other night, right? That is the knife that I was interested in having expedited testing done on, but unfortunately it appears from this spreadsheet that there is nothing to test for that knife, right?

If this is all correct, then there will be no need for expedited testing. But with this e-mail, I hereby authorize you to commence regular schedule miniSTR testing for the eight samples marked "yes" in the far right column of the your spreadsheet.

Thanks,

Steve

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From: Andrea Borchardt [mailto:Andrea.Borchardt@bodetech.com]
Sent: Wednesday, January 19, 2011 2:40 PM
To: Braga, Stephen
Cc: don@riordan-horgan.com; Angela Williamson
Subject: RE: Sample Name/Number Correlation Question

I'm getting myself confused whether you are interested in sample 50 or 51 and which one(s) you want to take forward. I should have done this in the first place, but just to make sure we are all on he same page with everything, the attached spreadsheet is updated to include brief descriptions as well as reference page numbers for the pdf Dr. Williamson sent earlier today.

Please verify which sample(s) you would like to take forward for rush miniSTR testing.

A 5 day TAT typically has a $1000/sample fee (on top of the normal miniSTR charges, $487/sample, as listed in the 11/9/10 quotation). But since we are already in the middle of processing we can do it for an additional $487/sample, basically double the regular miniSTR charge.

I want to make sure that you are aware that by performing the miniSTR testing we will consume the

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samples we have taken from the knives.

Please let me know specifically which samples you would like to take forward and that you approve consumption of these samples.

Thanks!

-Andrea

From: Braga, Stephen [mailto:Stephen.Braga@ropesgray.com]
Sent: Wednesday, January 19, 2011 12:22 PM
To: Andrea Borchardt
Cc: 'don@riordan-horgan.com'
Subject: Re: Sample Name/Number Correlation Question

Very helpful. Thank you.

Yes, please include the 51a2 sample in the testing as well.

How long will it take to complete expedited testing?

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From: Andrea Borchardt <Andrea.Borchardt@bodetech.com>
To: Braga, Stephen
Cc: don@riordan-horgan.com <don@riordan-horgan.com>
Sent: Wed Jan 19 09:59:57 2011
Subject: RE: Sample Name/Number Correlation Question

A partial profile is when we only obtain data at some of the locations tested. A mixture is when there is DNA from more than one contributor. So a partial mixture sample has data at only some locations and the DNA we do see is from more than one contributor.

As for the miniSTR recommendations, you definitely may take the non-recommended samples forward and have them tested. Let me explain our recommendations and you can let me know if you want to test any other samples.

If the STR result is 'no DNA profile' - We don't recommend miniSTR testing on these samples because we don't typically obtain any results using miniSTRs either. MiniSTRs are good for single source samples (DNA from only one contributor) that are old or degraded. Unfortunately they don't help if there is just a no/low amount of DNA as is indicated in the data from these samples.

If the STR result is 'mixture or partial mixture DNA profile' – We don't recommend miniSTR testing on these samples because we need stronger results (i.e. more DNA) for miniSTRs to make conclusive statements with mixtures. So since the data we did obtain was so low using STRs, it is not likely that we will have enough DNA to make a conclusive statement if we then test with mini's.

Yes, we will start the miniSTR testing on sample -51. This testing will include the sample from the handle (-51a1) and the sample from the inside sheath (-51a4). Based on outline of our recommendations above, please let me know if you would like to include the sample from the blade (-51a2) in this testing. I will wait to hear back from you before we test.

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I hope all this helps. Please let me know if you have any questions.

Thanks!

-Andrea

From: Braga, Stephen [mailto:Stephen.Braga@ropesgray.com]
Sent: Wednesday, January 19, 2011 6:13 AM
To: Andrea Borchardt
Cc: 'don@riordan-horgan.com'
Subject: Re: Sample Name/Number Correlation Question

Andrea,

Can you now commence as soon as possible, and expedite, the further tests you have recommended for Sample 2S04-114-51?

The testing should include the sheath, or black holder, that accompanied that knife.

Finally, can you tell me exactly what is meant by a "partial mix" finding and why you do not recommend any further testing of the "partial mix" found on this sample?

Thank you,

Steve

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From: Andrea Borchardt <Andrea.Borchardt@bodetech.com>
To: Braga, Stephen
Cc: don@riordan-horgan.com <don@riordan-horgan.com>
Sent: Tue Jan 18 18:06:17 2011
Subject: RE: Sample Name/Number Correlation Question

From the picture, this looks like it corresponds to Bode sample 2S04-114-51. There is the same black handle with a metal strip, an apparent serrated edge and the circle cut-out in the blade.

Please let me know if you need anything else.

Thanks!

-Andrea

From: Braga, Stephen [mailto:Stephen.Braga@ropesgray.com]
Sent: Tuesday, January 18, 2011 6:00 PM
To: Andrea Borchardt
Cc: don@riordan-horgan.com
Subject: Sample Name/Number Correlation Question

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Andrea,

This is the photo of the knife I just mentioned in my e-mail.

Thanks,

Steve

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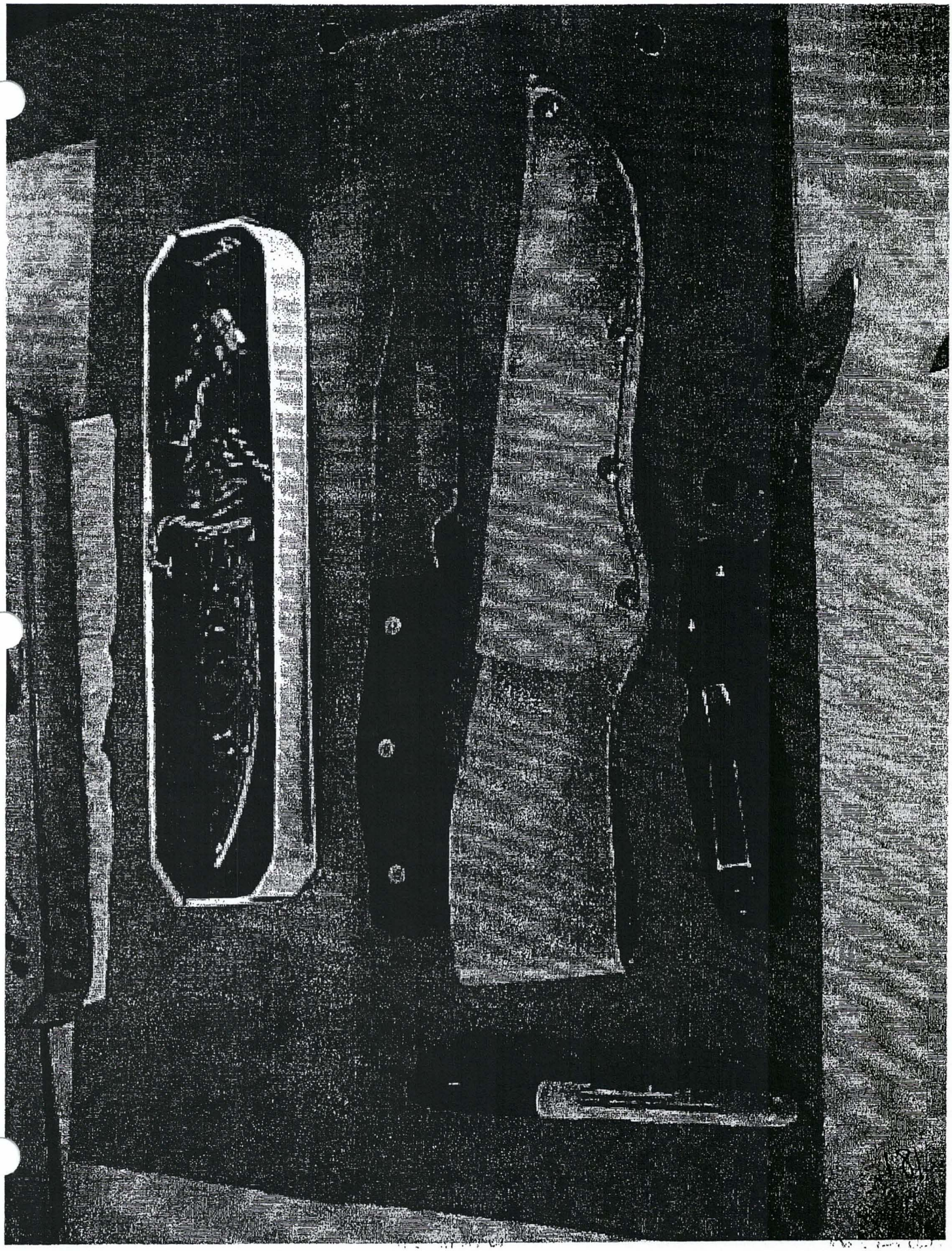

Andrea Borchardt

From: Andrea Borchardt
Sent: Tuesday, January 18, 2011 5:46 PM
To: 'Braga, Stephen'
Cc: 'don@riordan-horgan.com'; Angela Williamson
Subject: RE: 2S04-114, Echols Further Testing
Attachments: Knife Testing STR results 011811.xls

Hello Mr. Horgan and Mr. Braga,

My name is Andrea Borchardt-Gardner and I have been working on this most recent round of DNA testing. I have included my supervisor, Dr. Williamson, on this email chain as she has been overseeing this case and will contact you to discuss your proposed visit. If you need any information from either of us, please do not hesitate to contact us. I can be reached at 703-646-9746 and Dr. Williamson can be reached at 703-646-9825.

Below is a chart I made up of the samples we have tested during this most recent round. I have also attached an excel version for easier viewing. The chart below only includes the samples taken forward for STR testing. There were also a number of samples we collectively decided not to take forward due to their low quant values (a quant is an estimate of the amount of DNA present).

For each sample below, we processed the samples such that we would leave the miniSTR testing option open. This means we have ~1/2 the sample remaining if we decide we want to take it forward for mini's. Below are my recommendations based on the STR data we have thus far (samples recommended for mini's are highlighted in purple).

Please note that any results listed below have not yet been through our review process. They should therefore be used to determine further testing options only.

Sample Name	Area	Test (y/n)	DNA Amt. (ng/uL)	DNA Results	Candidate for miniSTRs
2S04-114-47a1	Dental Plate	Yes	N/A	Full Profile	no
2S04-114-48a2	Blade	yes	0.0144	Partial Mixture Profile	no
2S04-114-48b2	Blade	yes	0.0185	Partial Profile	yes
2S04-114-48c3	Blade 2	yes	0.00732	No DNA profile	yes
2S04-114-48d1	Handle	yes	0.0187	One allele	yes
2S04-114-48d2	Blade 1	yes	0.0261	Partial Profile	yes
2S04-114-48d3	Blade 2	yes	0.162	Full DNA profile, consistent with the profile from the dental plate	yes, but unnecessary
2S04-114-48e1	Handle	yes	<0.005	No DNA profile	no
2S04-114-48e2	Blade	yes	<0.005	No DNA profile	no
2S04-114-49a1	Handle	yes	0.0523	Partial Profile	yes
2S04-114-49a2	Blade	yes	0.00528	No DNA profile	no
2S04-114-49a4	Inside Sheath	yes	0.0105	No DNA profile	no

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2S04-114-50b2	Blade	yes	0.00517	No DNA profile	no
2S04-114-50b3	Hilt	yes	0.0245	No DNA profile	no
2S04-114-51a1	Handle	yes	0.0241	One allele	yes
2S04-114-51a2	Blade	yes	0.00506	No DNA profile	no
2S04-114-51a4	Inside Sheath	yes	0.0266	Partial Profile	yes
2S04-114-51b1	Handle	yes	0.032	Partial Mixture Profile	no
2S04-114-51b3	Hilt	yes	0.0262	Partial Profile	yes
2S04-114-51c1	Handle	yes	0.0143	No DNA profile	no

I hope this is what you were looking for. If there is anything else you need or if you have any questions about anything, please feel free to contact me. I will be happy to assist in any way possible

Thanks!

-Andrea

Andrea Borchardt-Gardner
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From: Braga, Stephen [mailto:Stephen.Braga@ropesgray.com]
Sent: Tuesday, January 18, 2011 4:55 PM
To: Andrea Borchardt
Cc: 'don@riordan-horgan.com'
Subject: RE: 2S04-114, Echols Further Testing

Andrea,

Thanks for your e-mail to Don earlier today about the "comprehensive list indicating sample ID's." I look forward to receiving it.

In the meantime, would it be possible for me to visit you at Bode on Friday? Anytime that works for you that day will work for me; I live just across the river. I am having some difficulty following identification of the various knives being tested, and I thought it might help to view them in person -in a controlled environment of course – in order to correlate the various knives with the ID numbers being used to describe them. We could also discuss some additional testing issues as well.

Let me know.

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Best,

Steve

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Andrea Borchardt

From: Angela Williamson
Sent: Wednesday, December 22, 2010 10:17 AM
To: Andrea Borchardt
Subject: FW: Damien Echols, Bode Case No. 2S04-114
Please retain in casefile.

From: Don Horgan [mailto:don@riordan-horgan.com]
Sent: Tue 12/21/2010 5:18 PM
To: Angela Williamson
Subject: Damien Echols, Bode Case No. 2S04-114

Dear Angela,

This is to confirm my voice mail message informing you that I will be stepping aside as the contact attorney for Mr. Echols on this case. Stephen Braga, an attorney with offices in Washington, D.C., will now take over for me. His contact information is as follows:

Stephen L. Braga
ROPES & GRAY LLP
T 202-508-4655 | F 202-383-9821
One Metro Center, 700 12th Street, NW, Suite 900
Washington, DC 20005-3948
Stephen.Braga@ropesgray.com
www.ropesgray.com

Mr. Braga should be getting in touch with you in the very near future.

It has been a real pleasure working with you, Amy, Lindsey, Shannon, Andrea, and everyone else at Bode. My best wishes to all of you.

Don Horgan

Donald M. Horgan
Riordan & Horgan
523 Octavia Street
San Francisco, CA 94102
(415) 431-3472
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Andrea Borchardt

From: Andrea Borchardt

Sent: Friday, December 17, 2010 3:30 PM

To: 'don@riordan-horgan.com'

Cc: Angela Williamson

Subject: 2S04-114, Echols' Further Testing

Hi Mr. Horgan,

Below is a summary of our conversation earlier today. Please note that any results listed below have not yet been through our review process. They should therefore be used to determine further testing options only.

I have preliminary data from the testing of the knives and dental plate.

- Of the 19 samples taken from the knives and tested for STRs, one (sample -48d3) produced a partial DNA profile suitable for comparison purposes.
- Nine of the remaining samples are good candidates for miniSTRs.
- The other 10 samples produced little or no data using STRs and are not good candidates for miniSTR testing. This includes the 'priority samples (-48e)'.
- I obtained a full DNA profile from the testing of the dental plate. This profile is consistent with the partial DNA profile obtained from sample -48d3 (mentioned above). This profile is not consistent with any of the three victims or three current suspects for this case.

I understand you need some time to decide whether to proceed with the miniSTR testing on the knives. If you need a comprehensive list indicating sample ID's, please let me know and this can be provided.

If you have any questions regarding the testing or anything else, please do not hesitate to call. I will be out from Dec. 23 through Jan.4, but my supervisor, Dr. Williamson will be available if you need assistance during that time.

Thank you and have a great holiday.

-Andrea

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Andrea Borchardt

From: Andrea Borchardt
Sent: Friday, December 10, 2010 5:27 PM
To: 'don@riordan-horgan.com'
Cc: Angela Williamson
Subject: RE: Bode Case 2S04-114, Echols' further testing

Hello Mr. Horgan,

I wanted to follow-up on this email. I have completed my testing of the dental plate and have preliminary results. I wasn't sure how you wanted us to proceed with this and the results from the knives. Please let me know your thoughts.

Thanks!

-Andrea

From: Andrea Borchardt
Sent: Friday, December 03, 2010 6:35 PM
To: 'don@riordan-horgan.com'
Cc: Angela Williamson
Subject: Bode Case 2S04-114, Echols' further testing

Hi Mr. Horgan,

My name is Andrea Borchardt-Gardner and I am the DNA Analyst processing this round of DNA for Echols' further testing (AKA Bode Case 2S04-114).

I wanted to give you an update as to where we are right now:

1. I have amplified the samples as discussed in Lindsey Murray's email dated 1/6/10, and further discussed in emails between you and Dr. Williamson in late November of this year. I took the 19 samples forward and was able to obtain partial DNA profiles from some of the samples using traditional STR's. Prior to deciding which are best to attempt miniSTRs, can you provide any additional background on the items? Are you interested in comparing any data obtained to the victims or the suspects? Once I have that information I can advise on which samples might be good candidates for miniSTRs.

2. The sample from the dental plate is currently in process. I hope to have preliminary data for you late next week.

I think that's everything we are working on right now. Please don't hesitate to contact me if you have any questions. I am available via phone or email.

Thank you and I hope you have a great weekend.

-Andrea

Andrea Borchardt-Gardner
DNA Analyst III
Customized Casework
The Bode Technology Group
10430 Furnace Rd. Suite 107
Lorton, VA 22079
Andrea.Borchardt@bodetech.com
Phone (703) 646-9746

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Angela Williamson

From: Angela Williamson
Sent: Tuesday, November 23, 2010 1:51 PM
To: 'Don Horgan'
Cc: Dennis P. Riordan
Subject: RE: Echols: further testing

Hi Don,

Thanks for your emails.

I hope this email clearly explains the breakdown of the associated testing costs. You recently received an invoice for ~19K. This covers the extraction and quantitation of the below samples (pertaining to knives). This testing was conducted almost a year ago and was then put on-hold per your instruction. Since we are now proceeding with the amplification step for some of these samples, we thought it easier to bill for the testing that was already completed on these samples, and we will bill you at a later date for the amplification step (refer to invoice dated 11/09/10). Please note, samples -48e1 and -48e2 were missing from this quote, so they will also incur a charge of $247.50 ea.

The cost for processing the dental plate will be $1,095 if we obtain a sufficient quant value and it goes all the way through to amplification.

Please let me know if you have any additional questions.

Kind regards
Angela

Sample Name	Area	Test (y/n)	DNA Amt. (ng/uL)
2S04-114-48a1	Handle	no	<0.005
2S04-114-48a2	**Blade**	**yes**	**0.0144**
2S04-114-48a3	Inside Sheath	no	<0.005
2S04-114-48b1	Handle	no	<0.005
2S04-114-48b2	**Blade**	**yes**	**0.0185**
2S04-114-48c1	Handle	no	<0.005
2S04-114-48c2	Blade 1	no	<0.005
2S04-114-48c3	**Blade 2**	**yes**	**0.00732**
2S04-114-48c4	Blade 3	no	<0.005
2S04-114-48d1	**Handle**	**yes**	**0.0187**
2S04-114-48d2	**Blade 1**	**yes**	**0.0261**
2S04-114-48d3	**Blade 2**	**yes**	**0.162**
2S04-114-48e1	**Handle**	**?**	**<0.005**
2S04-114-48e2	**Blade**	**?**	**<0.005**
2S04-114-49a1	**Handle**	**yes**	**0.0523**

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2S04-114

AG-1-24-11

2S04-114-49a2	**Blade**	**yes**	**0.00528**
2S04-114-49a3	Hilt	no	<0.005
2S04-114-49a4	**Inside Sheath**	**yes**	**0.0105**
2S04-114-50a1	Handle	no	<0.005
2S04-114-50a2	Blade	no	<0.005
2S04-114-50b1	Handle	no	<0.005
2S04-114-50b2	**Blade**	**yes**	**0.00517**
2S04-114-50b3	**Hilt**	**yes**	**0.0245**
2S04-114-50b4	Inside Sheath	no	<0.005
2S04-114-51a1	**Handle**	**yes**	**0.0241**
2S04-114-51a2	**Blade**	**yes**	**0.00506**
2S04-114-51a3	Hilt	no	<0.005
2S04-114-51a4	**Inside Sheath**	**yes**	**0.0266**
2S04-114-51b1	**Handle**	**yes**	**0.032**
2S04-114-51b2	Blade	no	<0.005
2S04-114-51b3	**Hilt**	**yes**	**0.0262**
2S04-114-51b4	Inside Sheath	no	<0.005
2S04-114-51c1	**Handle**	**yes**	**0.0143**
2S04-114-51c2	Blade	no	<0.005

From: Don Horgan [mailto:don@riordan-horgan.com]
Sent: Friday, November 19, 2010 6:40 PM
To: Angela Williamson
Cc: Dennis P. Riordan
Subject: Echols: further testing

Dear Angela,

I am forwarding (under separate cover) the two e-mails sent me by Lindsey Murray in December, 2009, and January, 2010 with her recommendations about how to proceed with further testing of materials located on the knives. This is to confirm that we would like you to proceed with the testing exactly as Lindsey recommends, i.e., go ahead and test everything that might yield a meaningful result. This would include testing of the material recovered from item 48-e, as to which Lindsey's e-mail states:

> I believe -48e was a priority sample (samples highlighted in blue). As you can see from the table below, the samples quanted <0.005ng/uL. This number is what we use as our limit of detection; therefore based on this result, there was no DNA within our limit of detection. However, **we can take it forward for DNA regardless of this to see if there is anything we can pick up.**

Of course, we have also authorized you to proceed with the testing of the dental plates, and I assume that testing is now ongoing.

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I look forward to receiving a breakdown of the outstanding charges we have generated in earlier processing of the various knives so that I can pass it along to our funders.

Best,

Don Horgan
Donald M. Horgan
Riordan & Horgan
523 Octavia Street
San Francisco, CA 94102
(415) 431-3472

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Angela Williamson

From: Don Horgan [don@riordan-horgan.com]
Sent: Friday, November 19, 2010 6:40 PM
To: Angela Williamson
Cc: Dennis P. Riordan
Subject: Echols: further testing
Follow Up Flag: Follow up
Flag Status: Red

Dear Angela,

I am forwarding (under separate cover) the two e-mails sent me by Lindsey Murray in December, 2009, and January, 2010 with her recommendations about how to proceed with further testing of materials located on the knives. This is to confirm that we would like you to proceed with the testing exactly as Lindsey recommends, i.e., go ahead and test everything that might yield a meaningful result. This would include testing of the material recovered from item 48-e, as to which Lindsey's e-mail states:

> I believe -48e was a priority sample (samples highlighted in blue). As you can see from the table below, the samples quanted <0.005ng/uL. This number is what we use as our limit of detection; therefore based on this result, there was no DNA within our limit of detection. However, **we can take it forward for DNA regardless of this to see if there is anything we can pick up.**

Of course, we have also authorized you to proceed with the testing of the dental plates, and I assume that testing is now ongoing.

I look forward to receiving a breakdown of the outstanding charges we have generated in earlier processing of the various knives so that I can pass it along to our funders.

Best,

Don Horgan
Donald M. Horgan
Riordan & Horgan
523 Octavia Street
San Francisco, CA 94102
(415) 431-3472

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Angela Williamson

From: Don Horgan [don@riordan-horgan.com]
Sent: Friday, November 19, 2010 6:41 PM
To: Angela Williamson
Subject: FW: 2S04-114 (additional testing)

Donald M. Horgan
Riordan & Horgan
523 Octavia Street
San Francisco, CA 94102
(415) 431-3472

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From: Lindsey Murray [mailto:Lindsey.Murray@bodetech.com]
Sent: Wednesday, December 16, 2009 1:19 PM
To: don@riordan-horgan.com
Cc: Amy Jeanguenat; Angela Williamson
Subject: 2S04-114 (additional testing)

Hi Don,

Below are the quantification results for each of the samples taken from the knives. Listed in the table is the sample name, area the sample was taken, amount of DNA, and recommendation for taking the sample forward or not. All the quantifications are low and may not result in a profile, but if you would like to move forward with DNA, I would suggest taking only the samples that quanted above 0.005ng/uL (those highlighted in yellow). Although the samples highlighted in red are above 0.005ng, they are still very low and are just as likely not to yield results as those highlighted in yellow.

For the samples you would like to test, I would recommend starting with regular STRs (Identifiler) and taking it forward to miniSTRs (Minifiler) if we get a partial profile that is not a mixture. I would also recommend concentrating the DNA down as much as possible. If we do that, is it ok to consume the extracts (or would you like us to save a portion of it for future testing)?

I believe -48e was a priority sample (samples highlighted in blue). As you can see from the table below, the samples quanted <0.005ng/uL. This number is what we use as our limit of detection; therefore based on this result, there was no DNA within our limit of detection. However, we can take it forward for DNA regardless of this to see if there is anything we can pick up.

I also wanted to let you know that once the samples for -48b and -48e were inspected more closely, we decided it would be better suited to test the entire handle as a whole, rather than testing 2/3 of the handle and the distal end separately. For samples -48c and -48d we initially thought there would only be one blade per knife, however when we began testing we realized that they each had more than one blade and therefore tested each blade separately.

Sample Name	Area	Test (y/n)	DNA Amt. (ng/uL)
2S04-114-48a1	Handle	no	<0.005

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2S04-114-48a2	**Blade**	**yes**	**0.0144**
2S04-114-48a3	Inside Sheath	no	<0.005
2S04-114-48b1	Handle	no	<0.005
2S04-114-48b2	**Blade**	**yes**	**0.0185**
2S04-114-48c1	Handle	no	<0.005
2S04-114-48c2	Blade 1	no	<0.005
2S04-114-48c3	**Blade 2**	**yes**	**0.00732**
2S04-114-48c4	Blade 3	no	<0.005
2S04-114-48d1	**Handle**	**yes**	**0.0187**
2S04-114-48d2	**Blade 1**	**yes**	**0.0261**
2S04-114-48d3	**Blade 2**	**yes**	**0.162**
2S04-114-48e1	**Handle**	**?**	**<0.005**
2S04-114-48e2	**Blade**	**?**	**<0.005**
2S04-114-49a1	**Handle**	**yes**	**0.0523**
2S04-114-49a2	**Blade**	**yes**	**0.00528**
2S04-114-49a3	Hilt	no	<0.005
2S04-114-49a4	**Inside Sheath**	**yes**	**0.0105**
2S04-114-50a1	Handle	no	<0.005
2S04-114-50a2	Blade	no	<0.005
2S04-114-50b1	Handle	no	<0.005
2S04-114-50b2	**Blade**	**yes**	**0.00517**
2S04-114-50b3	**Hilt**	**yes**	**0.0245**
2S04-114-50b4	Inside Sheath	no	<0.005
2S04-114-51a1	**Handle**	**yes**	**0.0241**
2S04-114-51a2	**Blade**	**yes**	**0.00506**
2S04-114-51a3	Hilt	no	<0.005
2S04-114-51a4	**Inside Sheath**	**yes**	**0.0266**
2S04-114-51b1	**Handle**	**yes**	**0.032**
2S04-114-51b2	Blade	no	<0.005
2S04-114-51b3	**Hilt**	**yes**	**0.0262**
2S04-114-51b4	Inside Sheath	no	<0.005
2S04-114-51c1	**Handle**	**yes**	**0.0143**
2S04-114-51c2	Blade	no	<0.005

Please let me know your thoughts on these results and how many samples (if any) you would like us to take forward. If you would like to discuss this in further detail, please feel free to call me at 703-646-9860.

Thank you,

Lindsey Murray, MS

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11/23/2010

DNA Analyst III
10430 Furnace Rd, Suite 107
Lorton, VA 22079
(703) 646 9860

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11/23/2010

10430 Furnace Rd. Suite 107
Lorton VA 22079
Phone: 866-Bode-4-ID (866-263-3443)
Fax: 703-646-9741
e-mail: bode.service@bodetech.com
www.bodetech.com

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Part of GlobalOptions Group

CUSTOMIZED PRODUCT AND SERVICES - QUOTATION FORM

Customer Name:	**Don Horgan**
Company:	**Riordan & Horgan**
Address:	**523 Octavia Street**
City, State Zip Code:	**San Francisco, CA 94102**

Tel#: 415-461-3472	**Fax#:**	**Other Info.:** don@riordan-horgan.com	
Date: 11/9/10	**Customer ID:**	**Quote#:** 1110-011	**Account Manager:**

TERMS AND CONDITIONS:

Prices are valid until May 30, 2011
Prices are valid for sample analysis following Bode Technology's validated protocols.
Sample will not be consumed without written permission from the authorized points of contact(s).
Prices quoted include a 30% discount.
Standard Processing Turn Around Times: STR/miniSTR 4-6 weeks.
Bode will conduct this testing once the invoice for the extraction and quantitation of samples 2S04-114-48 through -52 has been paid in full.

Sample	Area/Description	Extraction, Quant & STR processing	Optional: MiniSTR processing
2S04-114-48a2	Blade	$247.50	$487.00
2S04-114-48b2	Blade	$247.50	$487.00
2S04-114-48c3	Blade 2	$247.50	$487.00
2S04-114-48d1	Handle	$247.50	$487.00
2S04-114-48d2	Blade 1	$247.50	$487.00
2S04-114-48d3	Blade 2	$247.50	$487.00
2S04-114-49a1	Handle	$247.50	$487.00
2S04-114-49a2	Blade	$247.50	$487.00
2S04-114-49a4	Inside Sheath	$247.50	$487.00
2S04-114-50b2	Blade	$247.50	$487.00
2S04-114-50b3	Hilt	$247.50	$487.00
2S04-114-51a1	Handle	$247.50	$487.00
2S04-114-51a2	Blade	$247.50	$487.00
2S04-114-51a4	Inside Sheath	$247.50	$487.00
2S04-114-51b1	Handle	$247.50	$487.00
2S04-114-51b3	Hilt	$247.50	$487.00
2S04-114-51c1	Handle	$247.50	$487.00

Authorized signature:

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Angela Williamson

From: Amy Jeanguenat
Sent: Tuesday, November 16, 2010 2:14 PM
To: Angela Williamson
Subject: FW: 2S04-114 (additional testing)
Follow Up Flag: Follow up
Flag Status: Red

FYI

From: Don Horgan [mailto:don@riordan-horgan.com]
Sent: Tuesday, November 16, 2010 1:06 PM
To: Amy Jeanguenat
Subject: RE: 2S04-114 (additional testing)

Amy, yes please go ahead and send an invoice for past work and please also proceed w/ completing testing of the knife samples in accordance with Lindsey's 1-10 recommendations as well as testing of the Hobbs dental plate. In the meantime I will arrange for transmission of the crate to Bode so that you can make a more informed assessment of how items it contains might be processed.

Can you please also send me Angela's e-mail address?

Many Thanks, Don
Donald M. Horgan
Riordan & Horgan
523 Octavia Street
San Francisco, CA 94102
(415) 431-3472

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From: Amy Jeanguenat [mailto:Amy.Jeanguenat@bodetech.com]
Sent: Thursday, November 11, 2010 12:51 PM
To: Don Horgan
Cc: Angela Williamson
Subject: RE: 2S04-114 (additional testing)

Dear Don:

I am going back through our records and I see we have previously created a pricing plan for these samples below which included stopping at quant or proceeding etc. However, I don't see that we charged for quanting although this was done a long time ago. I was hoping you could verify with your records that you also did not receive an invoice for this work? Otherwise we'll probably bill for the work completed and send out the plan for performing DNA testing on the remaining samples. We can also create a pricing option for the submission of the crate samples. For some of the items, such as the tent, there could be an unlimited amount of samples to take forward. So we would probably want to minimize areas to concentrate on or # of samples per item to test. A vacuum bag depending on how full could also lead to limitless testing. The option for testing the vacuum bag contents is not ideal as the contents have all intermingled and potentially have been contaminated with other contents. If you would like to talk further about this we definitely can! I've also included Angela Williamson on the email. She is the supervisor of

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the group that has been working on this case and members of her team will continue with testing. She will follow up on your requests for new testing. You can definitely still contact me especially for case history type questions.

-Amy

Angela Williamson (703) 646-9825.

Amy Jeanguenat, MFS
Technical Leader, Forensic Operations
Bode Technology
10430 Furnace Road, Suite 107
(t):703-646-9745
(f):703-646-9741
www.bodetech.com

From: Don Horgan [mailto:don@riordan-horgan.com]
Sent: Friday, November 05, 2010 5:28 PM
To: Amy Jeanguenat
Subject: FW: 2S04-114 (additional testing)

Amy, here's the second of two from Lindsey. Don
Donald M. Horgan
Riordan & Horgan
523 Octavia Street
San Francisco, CA 94102
(415) 431-3472

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From: Lindsey Murray [mailto:Lindsey.Murray@bodetech.com]
Sent: Wednesday, January 06, 2010 12:40 PM
To: Don M. Horgan
Cc: Amy Jeanguenat; Angela Williamson
Subject: RE: 2S04-114 (additional testing)

Dear Don,

Below is a summary of what we discussed in our conversation earlier today.

1. At this time, we will hold off on processing any samples until further notice.
2. Samples that quanted at <0.005ng/uL are not recommended for further testing at this time
   (samples in yellow—amount of DNA in these samples are too low for detection).
3. Recommended that the samples taken forward be concentrated down as much as possible and consumed.
   (Samples will be consumed only if both normal STRs and miniSTRs are used; if just STRs are used, some DNA extract will remain following concentration. Will take samples forward for miniSTRs only if we obtain a partial single source STR profile. If no STR profile is obtained or if it is a mixture, miniSTRs will not be recommended.)
4. If samples are not concentrated down, then the likelihood of obtaining even a partial profile decreases significantly.
5. In my experience, samples that quant above 0.05ng/uL and are concentrated down have the best chance of producing a profile or partial profile. Samples that quant between 0.005ng/uL and 0.05ng/uL generally produce only a low partial profile or no profile.
   (This is, of course, dependent on the quality and age of the DNA. If the DNA is degraded then samples that have higher quant results may still only produce a low partial profile or no profile at all).

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For reference, I've included the chart that I sent in the previous email. Please let me know if you need me to clarify any of this further or if I've left anything out. Looking forward to hearing from you!

Thank you,

Lindsey Murray, MS
DNA Analyst III
10430 Furnace Rd, Suite 107
Lorton, VA 22079
(703) 646 9860

Sample Name	Area	Test (y/n)	DNA Amt. (ng/uL)
2S04-114-48a1	Handle	no	<0.005
2S04-114-48a2	**Blade**	**yes**	**0.0144**
2S04-114-48a3	Inside Sheath	no	<0.005
2S04-114-48b1	Handle	no	<0.005
2S04-114-48b2	**Blade**	**yes**	**0.0185**
2S04-114-48c1	Handle	no	<0.005
2S04-114-48c2	Blade 1	no	<0.005
2S04-114-48c3	**Blade 2**	**yes**	**0.00732**
2S04-114-48c4	Blade 3	no	<0.005
2S04-114-48d1	**Handle**	**yes**	**0.0187**
2S04-114-48d2	**Blade 1**	**yes**	**0.0261**
2S04-114-48d3	**Blade 2**	**yes**	**0.162**
2S04-114-48e1	**Handle**	**?**	**<0.005**
2S04-114-48e2	**Blade**	**?**	**<0.005**
2S04-114-49a1	**Handle**	**yes**	**0.0523**
2S04-114-49a2	**Blade**	**yes**	**0.00528**
2S04-114-49a3	Hilt	no	<0.005
2S04-114-49a4	**Inside Sheath**	**yes**	**0.0105**
2S04-114-50a1	Handle	no	<0.005
2S04-114-50a2	Blade	no	<0.005
2S04-114-50b1	Handle	no	<0.005
2S04-114-50b2	**Blade**	**yes**	**0.00517**
2S04-114-50b3	**Hilt**	**yes**	**0.0245**
2S04-114-50b4	Inside Sheath	no	<0.005
2S04-114-51a1	**Handle**	**yes**	**0.0241**
2S04-114-51a2	**Blade**	**yes**	**0.00506**
2S04-114-51a3	Hilt	no	<0.005

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2S04-114

AB-124-11

2S04-114-51a4	**Inside Sheath**	**yes**	**0.0266**
2S04-114-51b1	**Handle**	**yes**	**0.032**
2S04-114-51b2	Blade	no	<0.005
2S04-114-51b3	**Hilt**	**yes**	**0.0262**
2S04-114-51b4	Inside Sheath	no	<0.005
2S04-114-51c1	**Handle**	**yes**	**0.0143**
2S04-114-51c2	Blade	no	<0.005

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Lindsey Murray

From: Amy Jeanguenat
Sent: Tuesday, November 10, 2009 3:25 PM
To: Don M. Horgan
Cc: Lindsey Murray; Angela Williamson; Shannon Weitz
Subject: 2S04-114 knife testing
Follow Up Flag: Follow up
Flag Status: Red

Hi Don:

Below is summary of our phone conversation today.

- The report from Microtrace was discussed. Based on the report it appears the fibers were only microscopically examined at this time and that further testing would be needed to verify any possible matches.
- Bode will contact Microtrace and let them know Don will be calling them to discuss in more detail the analysis performed. (Alternatively we could set up a conference call if you wish)
- Bode is to begin processing the knives. This work will be done non-expedited. The invoice outlined approx. 8 week TAT and suggested evaluating the samples at quant to determine downstream processing.
- Bode can process the samples as outlined in the email sent 10-26-09. We should use our best judgment on how many samples to take and should not take more than 5 per knife.
- There is still interest in results from -48E as a priority.
- Based on the TAT the work is estimated to be completed at the end of the year or the first week in January.

-Amy

Amy Jeanguenat, MFS
Technical Leader, Forensic Operations
10430 Furnace Road, Suite 107, Lorton, VA 22079
tel.703.646.9745 fax.703.646.9741
amy.jeanguenat@bodetech.com
www.bodetech.com

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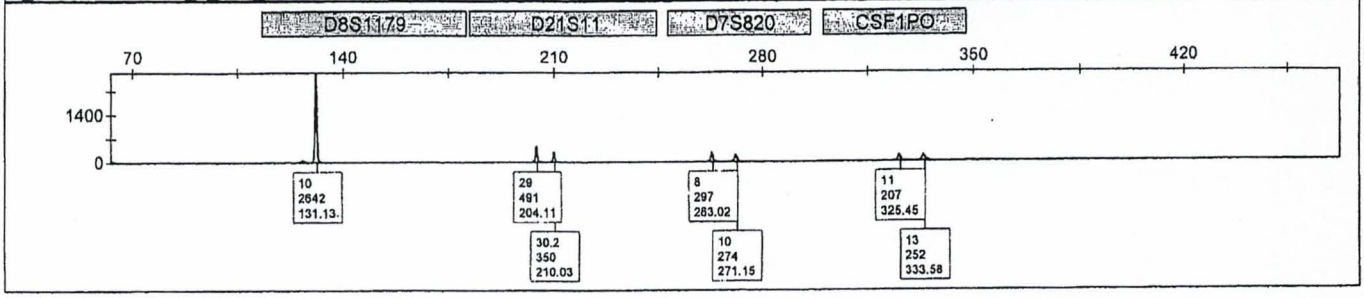
Applied Biosystems

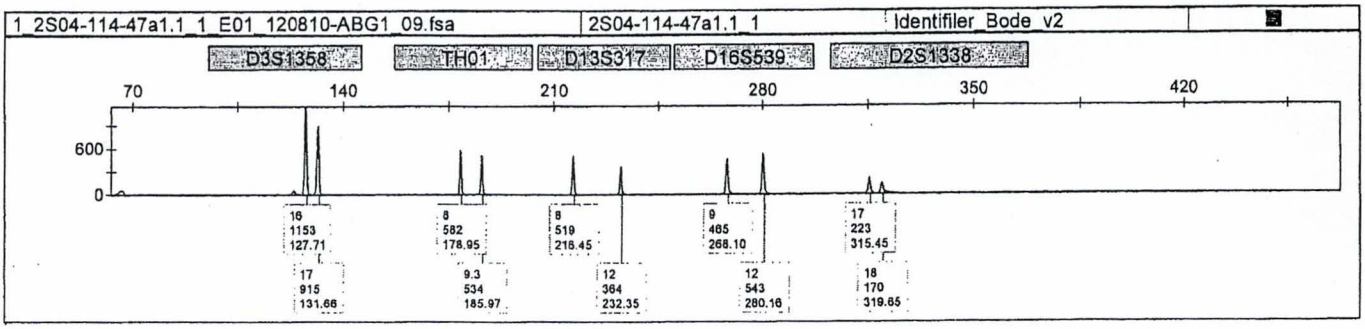
GeneMapper ID v3.2.1

[redacted] GMID3_120810-ABG1_2S04-114_ABG_ID [redacted]

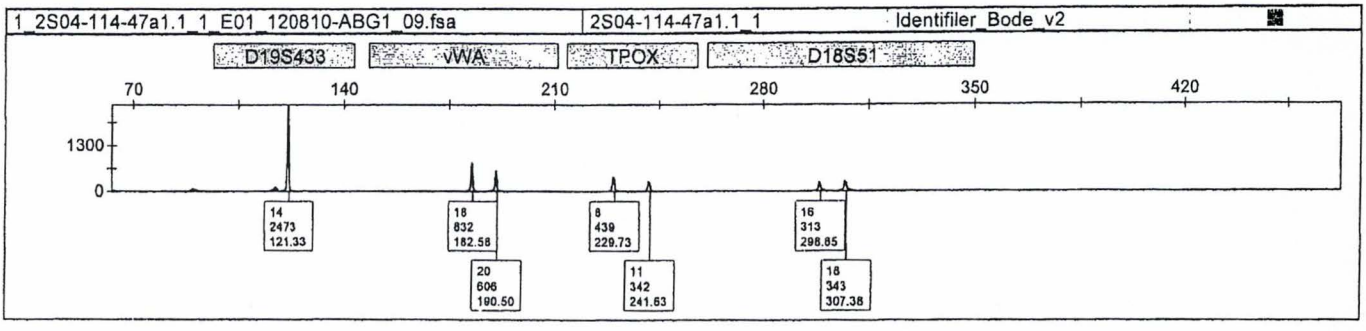
Sample File	Sample Name	Panel	SQ
1_2S04-114-47a1.1_1_E01_120810-ABG1_09.fsa	2S04-114-47a1.1_1	Identifiler_Bode_v2	



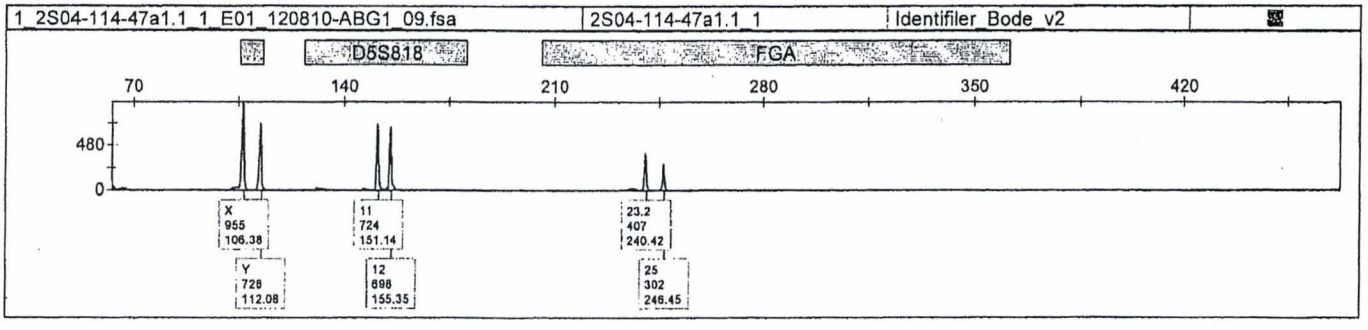
1_2S04-114-47a1.1_1_E01_120810-ABG1_09.fsa	2S04-114-47a1.1_1	Identifiler_Bode_v2	



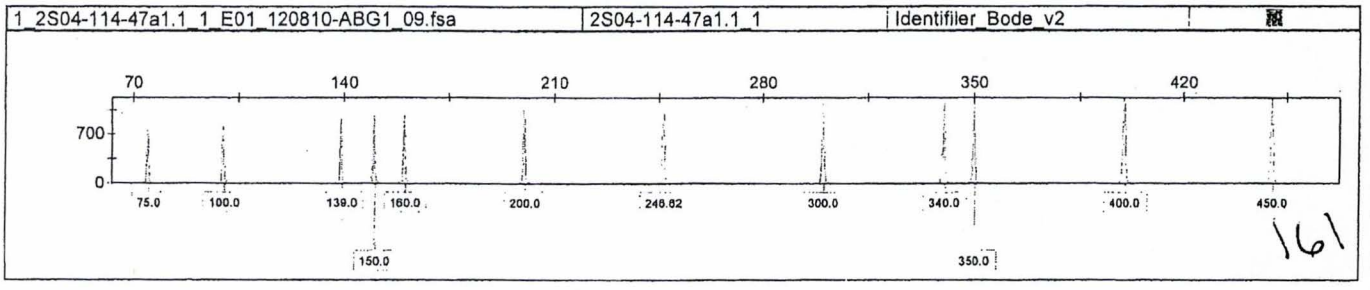
1_2S04-114-47a1.1_1_E01_120810-ABG1_09.fsa	2S04-114-47a1.1_1	Identifiler_Bode_v2	



1_2S04-114-47a1.1_1_E01_120810-ABG1_09.fsa	2S04-114-47a1.1_1	Identifiler_Bode_v2	



1_2S04-114-47a1.1_1_E01_120810-ABG1_09.fsa	2S04-114-47a1.1_1	Identifiler_Bode_v2	



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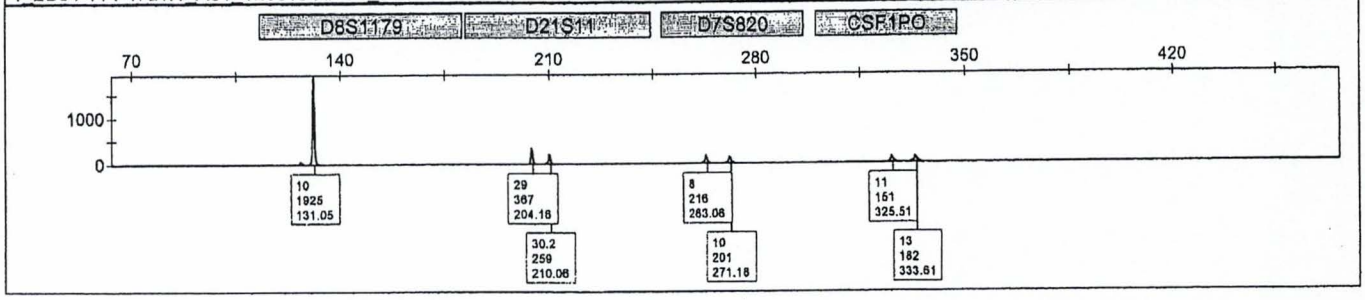
Applied Biosystems

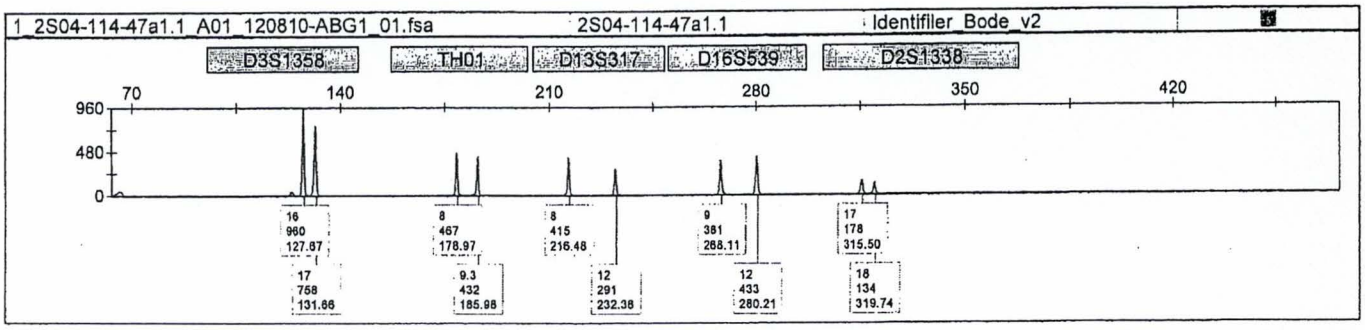
GeneMapper ID v3.2.1

[redacted] GMID3_120810-ABG1_2S04-114_ABG_ID [redacted]

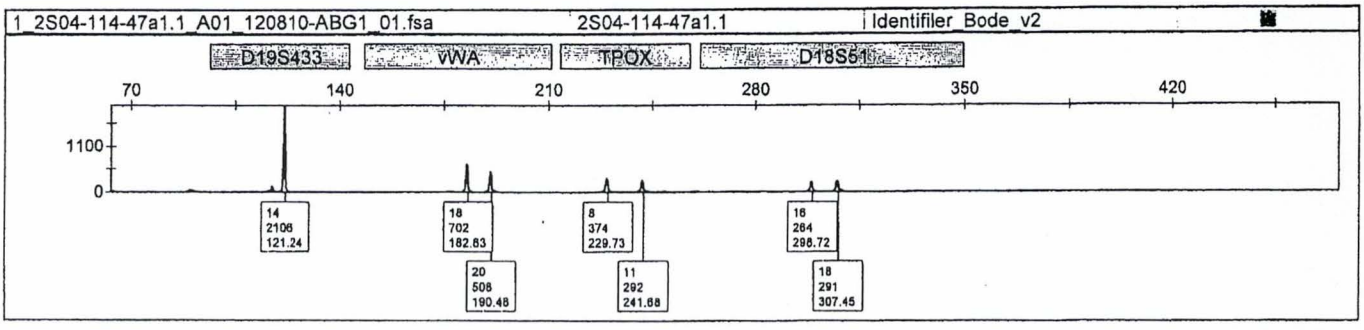
Sample File	Sample Name	Panel	SQ
1_2S04-114-47a1.1_A01_120810-ABG1_01.fsa	2S04-114-47a1.1	Identifiler_Bode_v2	[redacted]



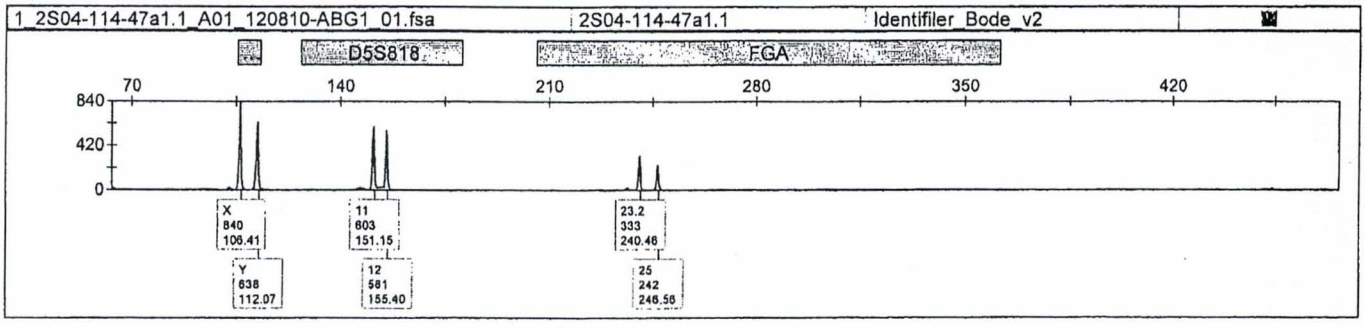
1_2S04-114-47a1.1_A01_120810-ABG1_01.fsa	2S04-114-47a1.1	Identifiler_Bode_v2	[redacted]



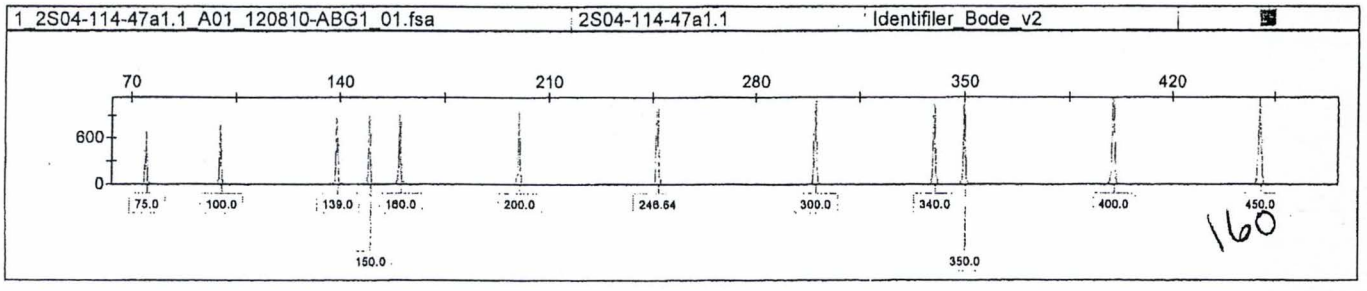
1_2S04-114-47a1.1_A01_120810-ABG1_01.fsa	2S04-114-47a1.1	Identifiler_Bode_v2	[redacted]



1_2S04-114-47a1.1_A01_120810-ABG1_01.fsa	2S04-114-47a1.1	Identifiler_Bode_v2	[redacted]



1_2S04-114-47a1.1_A01_120810-ABG1_01.fsa	2S04-114-47a1.1	Identifiler_Bode_v2	[redacted]



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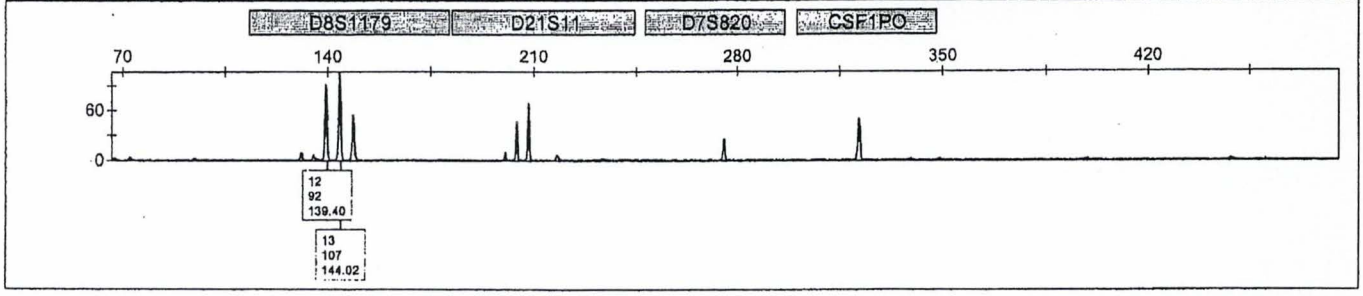
Applied Biosystems

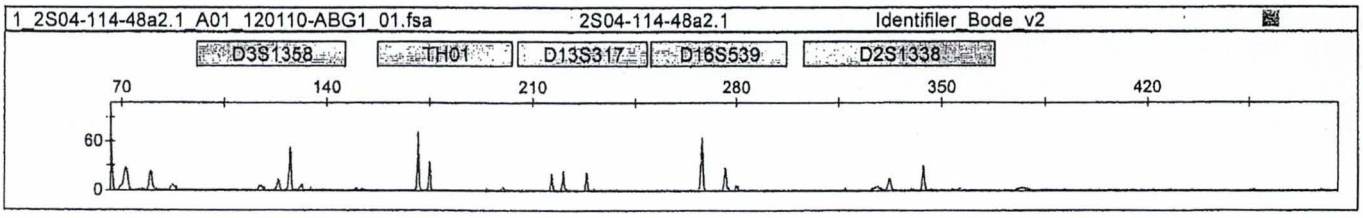
GeneMapper ID v3.2.1

[redacted] GMID14_120110-ABG1_2S04-114_ABG_ID [redacted]

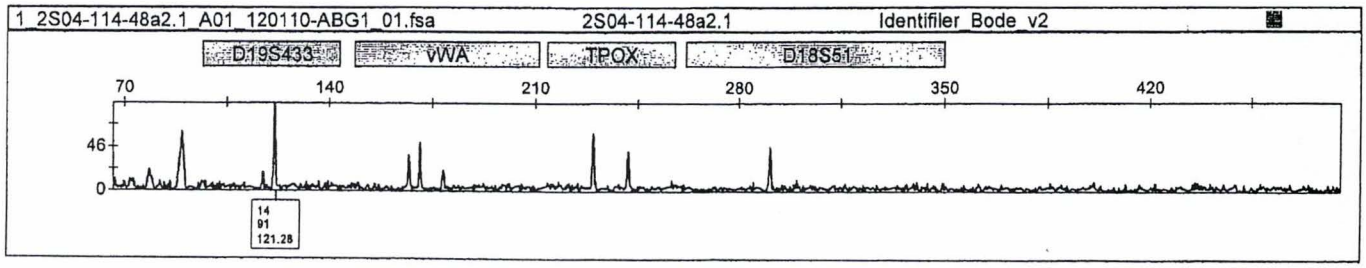
Sample File	Sample Name	Panel	SQ
1_2S04-114-48a2.1_A01_120110-ABG1_01.fsa	2S04-114-48a2.1	Identifiler_Bode_v2	



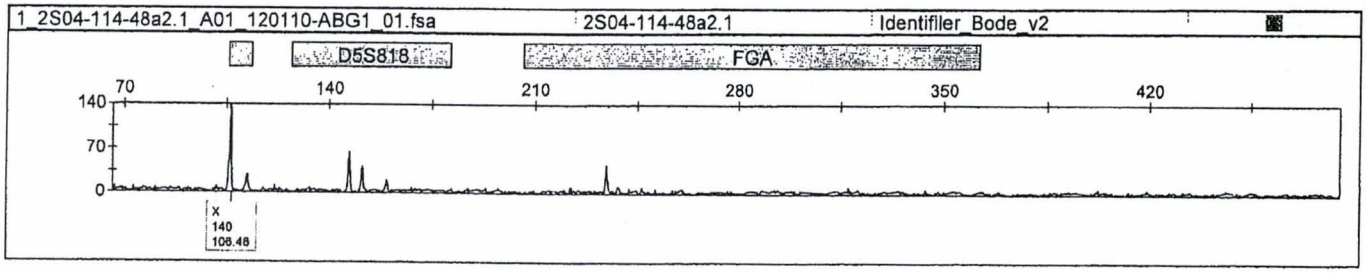
1_2S04-114-48a2.1_A01_120110-ABG1_01.fsa 2S04-114-48a2.1 Identifiler_Bode_v2



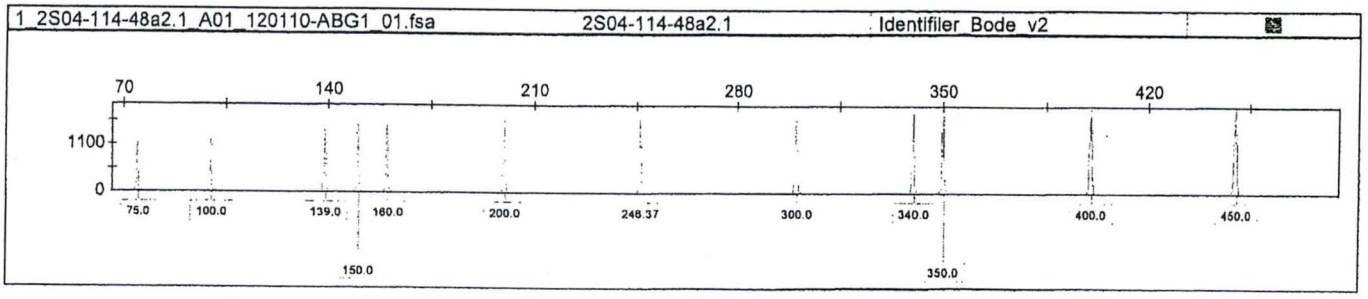
1_2S04-114-48a2.1_A01_120110-ABG1_01.fsa 2S04-114-48a2.1 Identifiler_Bode_v2



1_2S04-114-48a2.1_A01_120110-ABG1_01.fsa 2S04-114-48a2.1 Identifiler_Bode_v2



1_2S04-114-48a2.1_A01_120110-ABG1_01.fsa 2S04-114-48a2.1 Identifiler_Bode_v2



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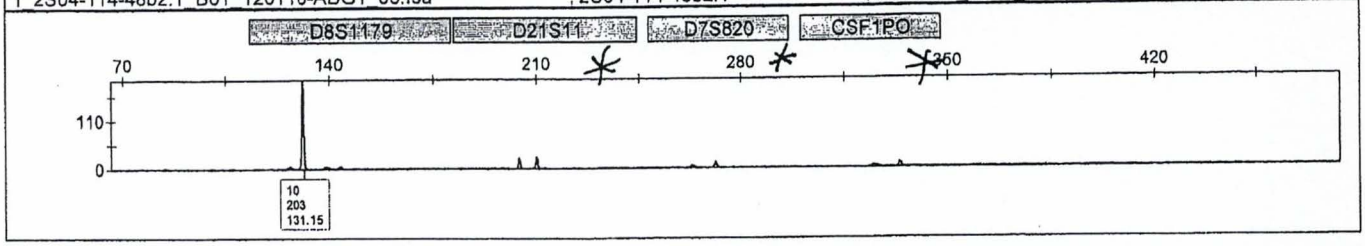
Applied Biosystems

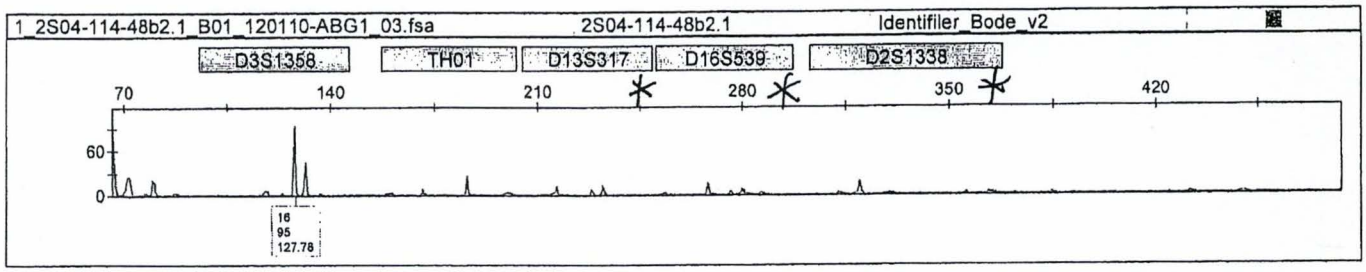
GeneMapper ID v3.2.1

GMID14_120110-ABG1_2S04-114_ABG_ID

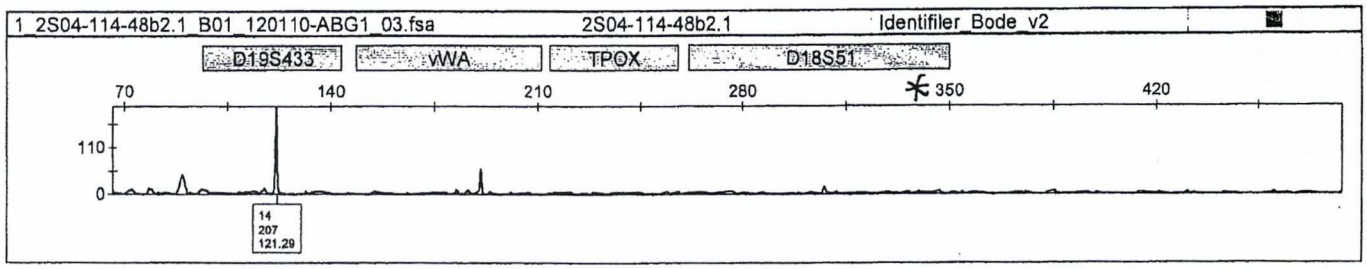
Sample File	Sample Name	Panel	SQ
1_2S04-114-48b2.1_B01_120110-ABG1_03.fsa	2S04-114-48b2.1	Identifiler_Bode_v2	



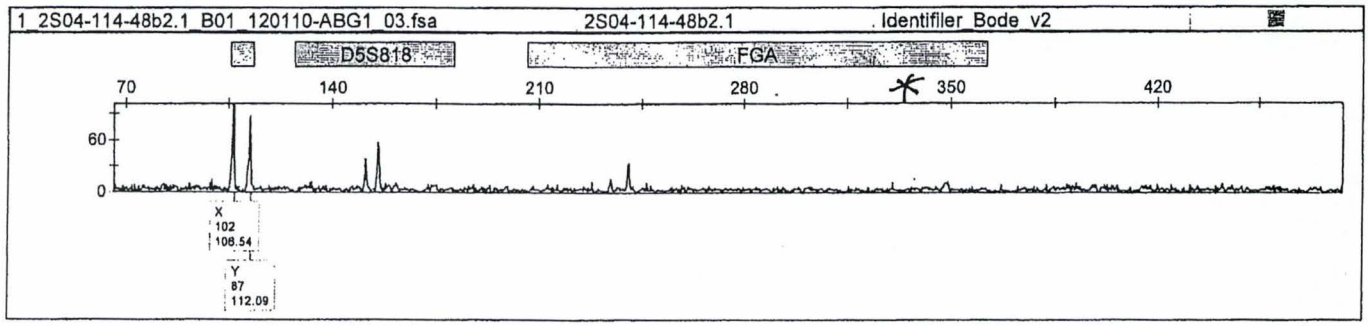
1_2S04-114-48b2.1_B01_120110-ABG1_03.fsa	2S04-114-48b2.1	Identifiler_Bode_v2



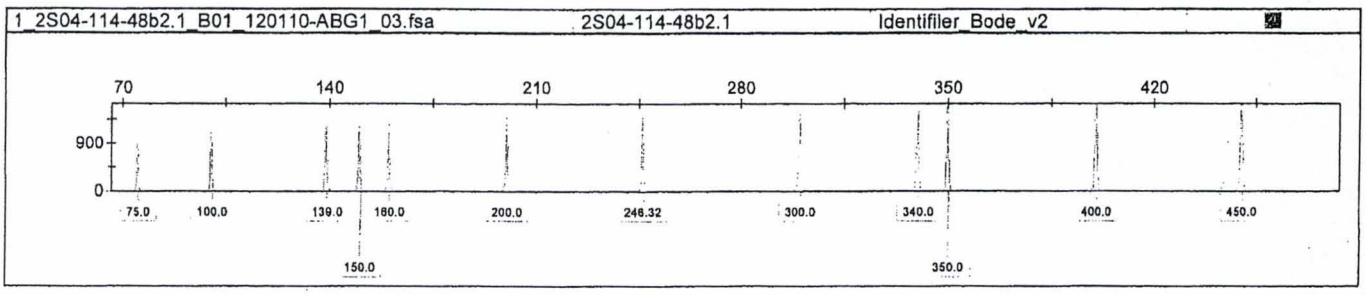
1_2S04-114-48b2.1_B01_120110-ABG1_03.fsa	2S04-114-48b2.1	Identifiler_Bode_v2



1_2S04-114-48b2.1_B01_120110-ABG1_03.fsa	2S04-114-48b2.1	Identifiler_Bode_v2



1_2S04-114-48b2.1_B01_120110-ABG1_03.fsa	2S04-114-48b2.1	Identifiler_Bode_v2

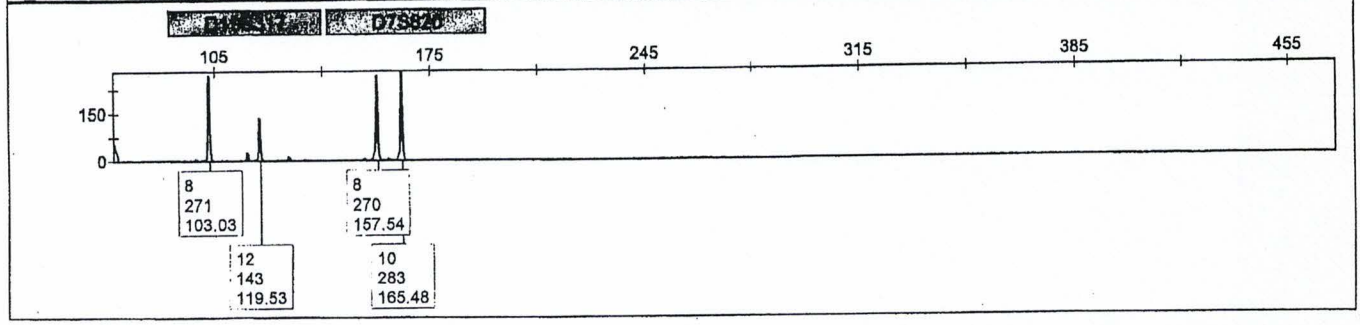


* see .2 for additional alleles @ D21, D7, CSF, D13, D16, D2, D18 & FGA. um 012511 158

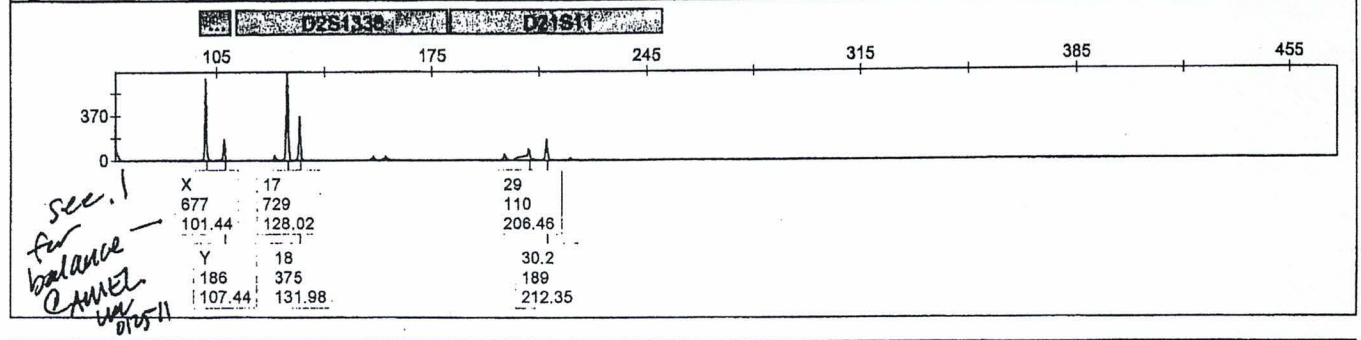
Applied Biosystems
GeneMapper ID v3.2.1

GMID10_012411-LAR1_2S04-114_LAR_MF

Sample File	Panel	SQO	SQ
1_2S04-114-48b2.2_A01_012411-LAR1_01.fsa	MiniFiler_GS500_v1		

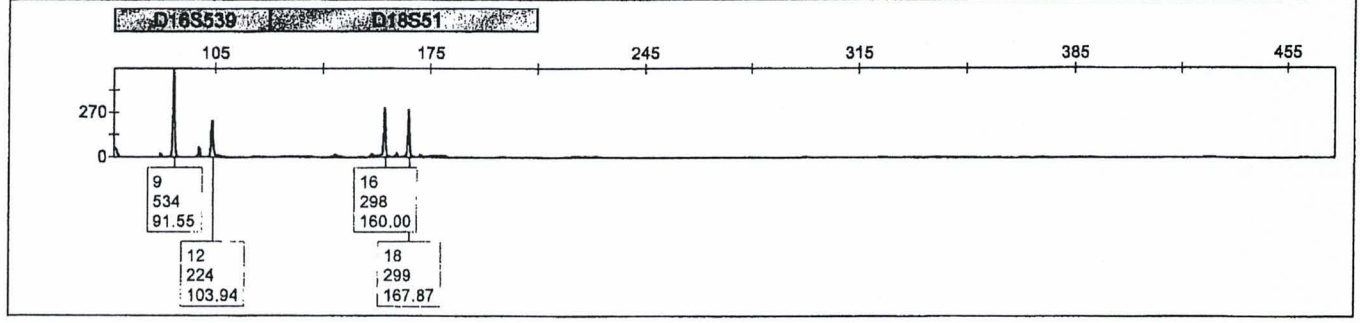


1_2S04-114-48b2.2_A01_012411-LAR1_01.fsa	MiniFiler_GS500_v1		

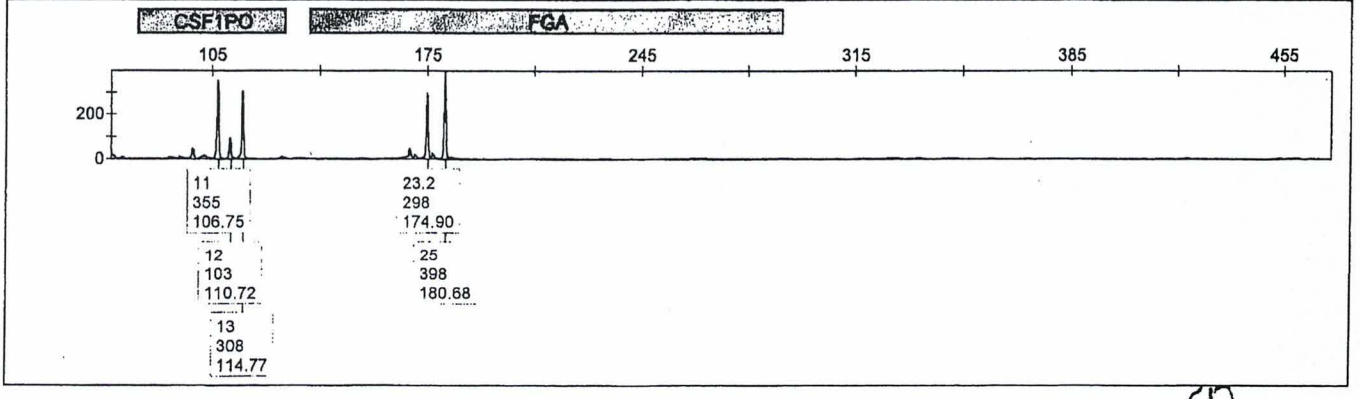


see 1 for balance CMH 01/25/11

1_2S04-114-48b2.2_A01_012411-LAR1_01.fsa	MiniFiler_GS500_v1		



1_2S04-114-48b2.2_A01_012411-LAR1_01.fsa	MiniFiler_GS500_v1		



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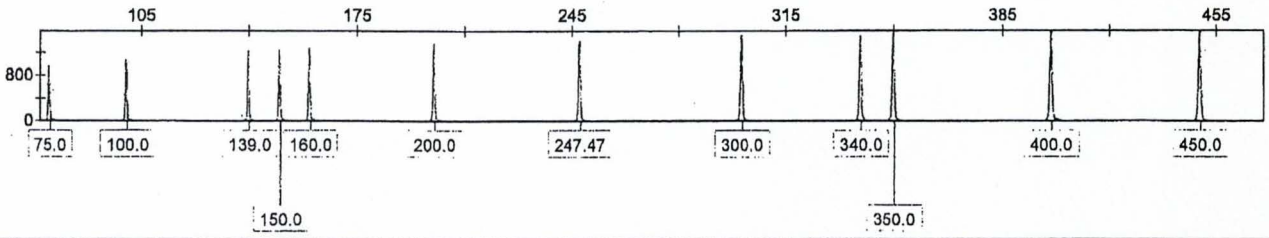
Sample File	Panel	SQO	SQ
1_2S04-114-48b2.2_A01_012411-LAR1_01.fsa	MiniFiler_GS500_v1		



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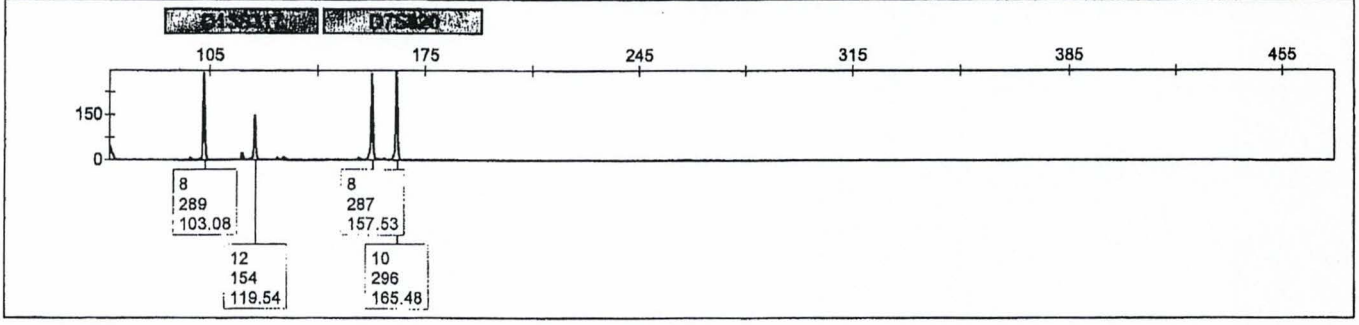
Applied Biosystems

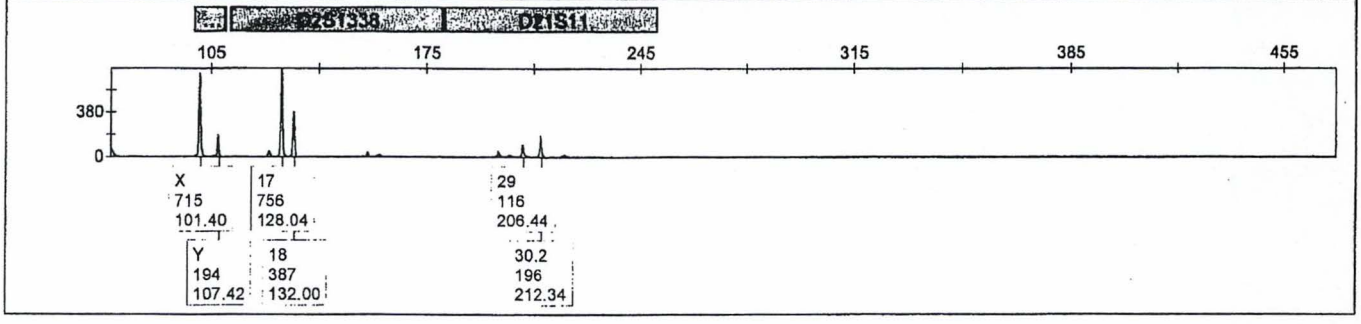
GeneMapper ID v3.2.1

GMID10_012411-LAR1_2S04-114_LAR_MF

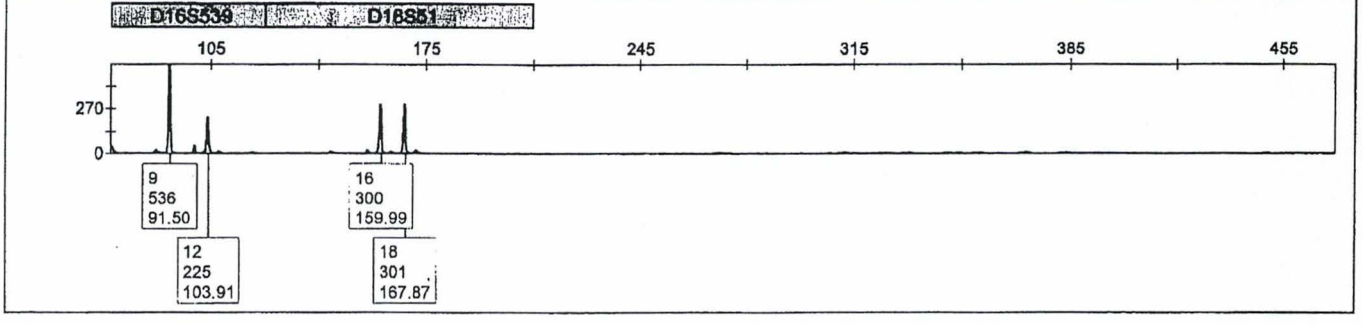
Sample File	Panel	SQO	SQ
1_2S04-114-48b2.2_B01_012411-LAR1_03.fsa	MiniFiler_GS500_v1		



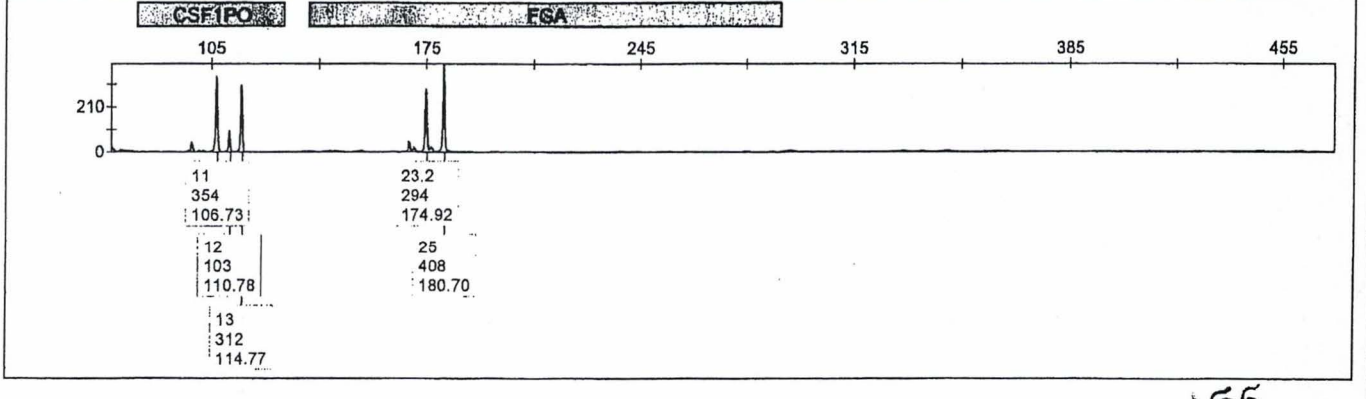
1_2S04-114-48b2.2_B01_012411-LAR1_03.fsa	MiniFiler_GS500_v1		



1_2S04-114-48b2.2_B01_012411-LAR1_03.fsa	MiniFiler_GS500_v1		



1_2S04-114-48b2.2_B01_012411-LAR1_03.fsa	MiniFiler_GS500_v1		



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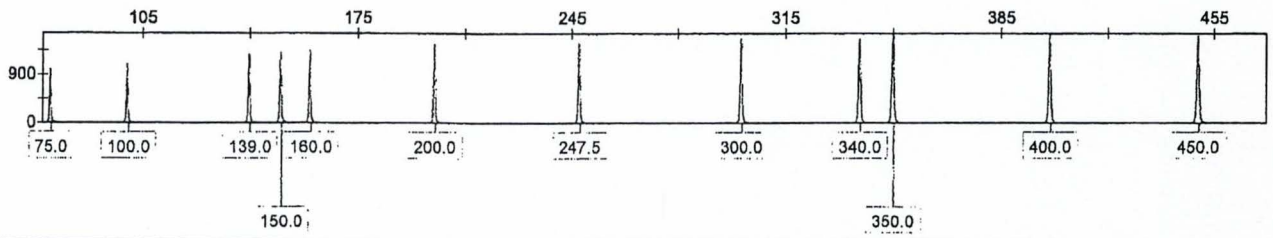
01/24/11

Sample File	Panel	SQO	SQ
1_2S04-114-48b2.2_B01_012411-LAR1_03.fsa	MiniFiler_GS500_v1		



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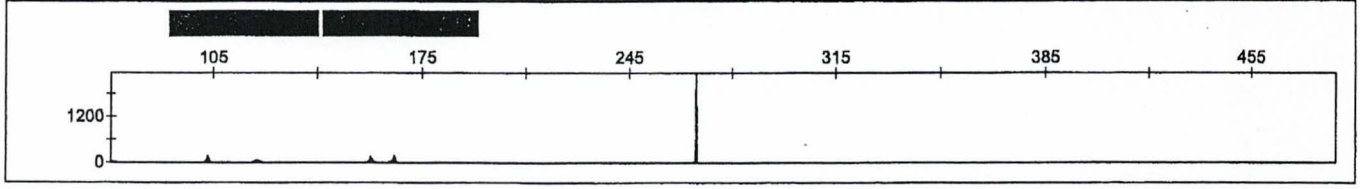
Applied Biosystems

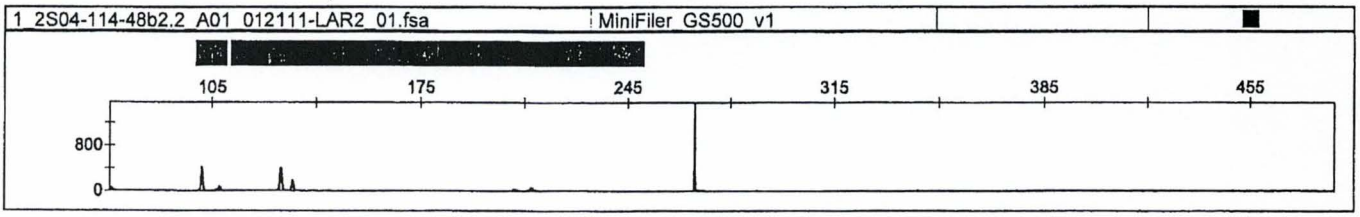
GeneMapper ID v3.2.1

GMID14_012111-LAR2_2S04-114_LAR_MF

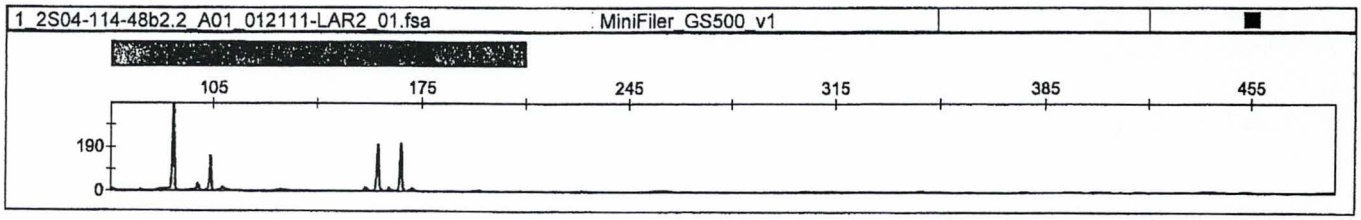
Sample File	Panel	SQO	SQ
1_2S04-114-48b2.2_A01_012111-LAR2_01.fsa	MiniFiler_GS500_v1		



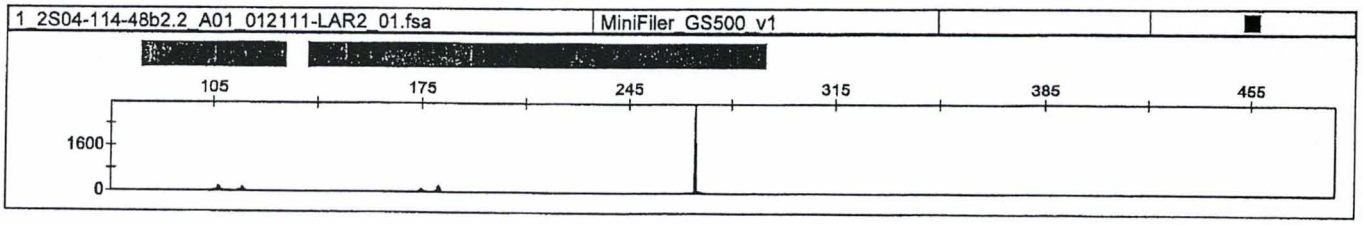
Sample File	Panel	SQO	SQ
1_2S04-114-48b2.2_A01_012111-LAR2_01.fsa	MiniFiler_GS500_v1		



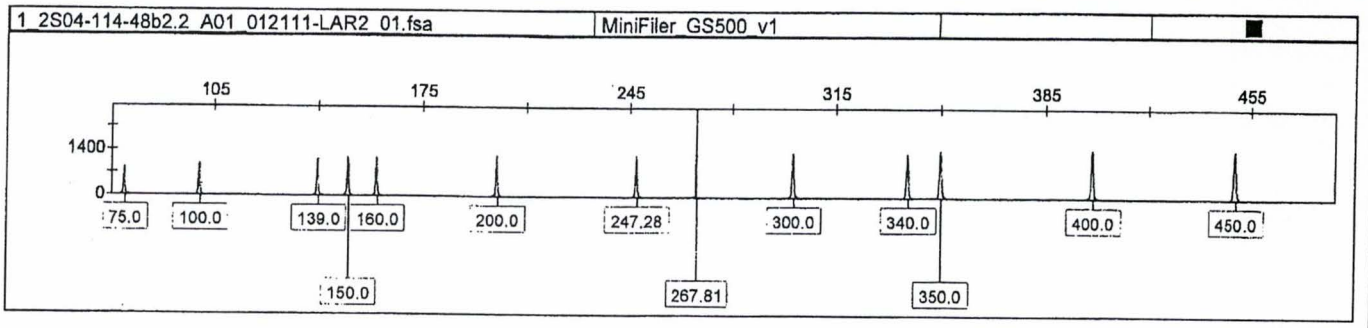
Sample File	Panel	SQO	SQ
1_2S04-114-48b2.2_A01_012111-LAR2_01.fsa	MiniFiler_GS500_v1		



Sample File	Panel	SQO	SQ
1_2S04-114-48b2.2_A01_012111-LAR2_01.fsa	MiniFiler_GS500_v1		



Sample File	Panel	SQO	SQ
1_2S04-114-48b2.2_A01_012111-LAR2_01.fsa	MiniFiler_GS500_v1		



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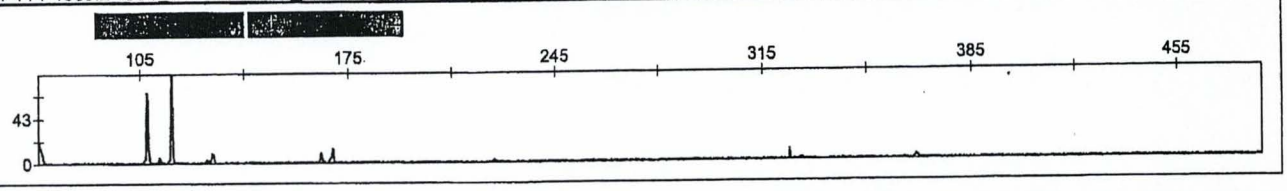
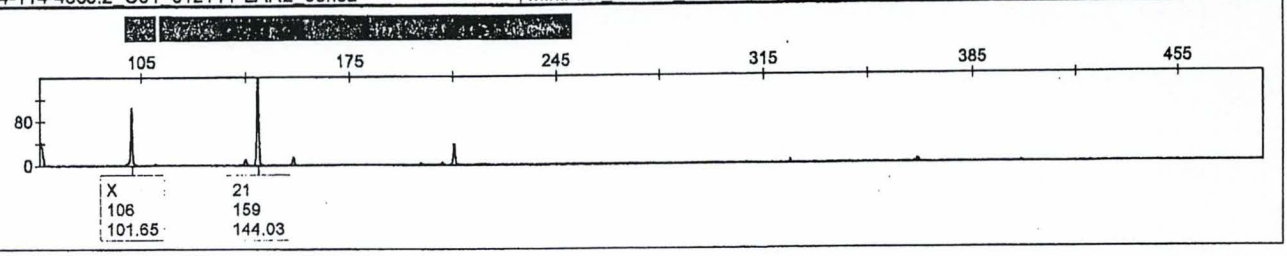
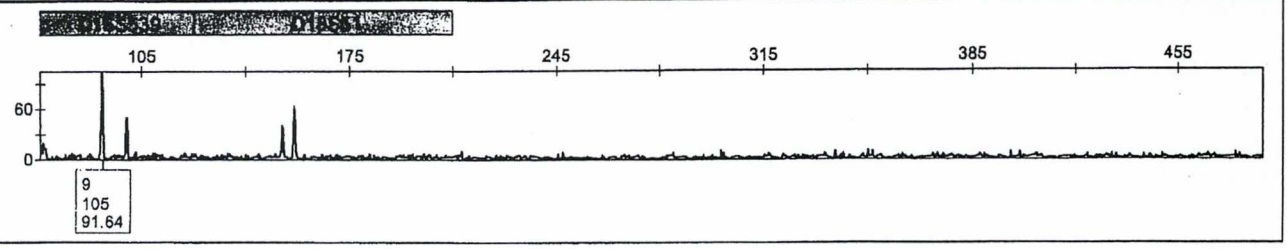
Sample File	Panel	SQO	SQ
1_2S04-114-48c3.2_C01_012111-LAR2_05.fsa	MiniFiler_GS500_v1		



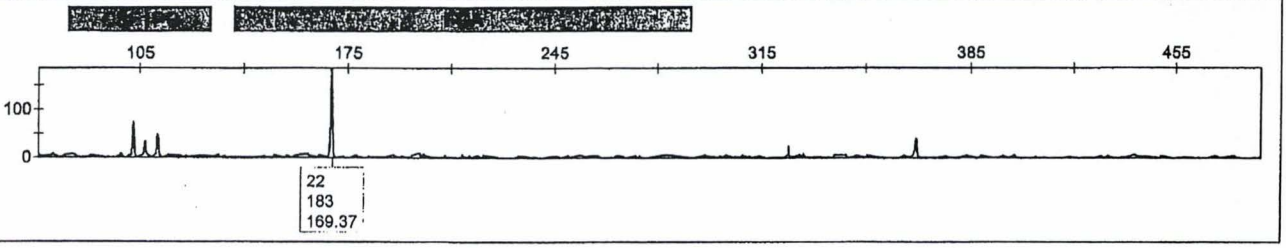
1_2S04-114-48c3.2_C01_012111-LAR2_05.fsa MiniFiler_GS500_v1



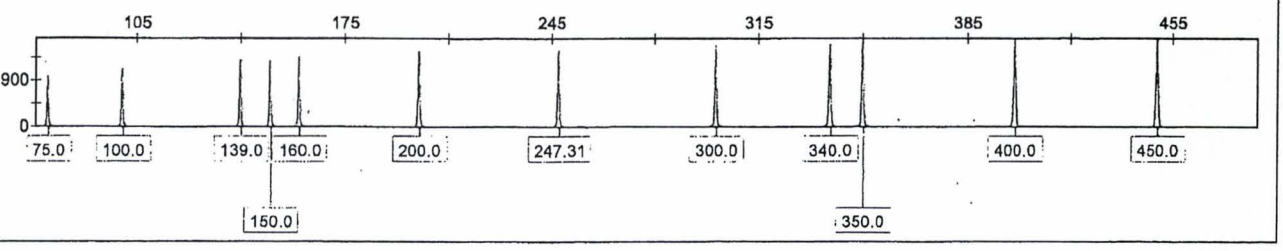
1_2S04-114-48c3.2_C01_012111-LAR2_05.fsa MiniFiler_GS500_v1



1_2S04-114-48c3.2_C01_012111-LAR2_05.fsa MiniFiler_GS500_v1



1_2S04-114-48c3.2_C01_012111-LAR2_05.fsa MiniFiler_GS500_v1



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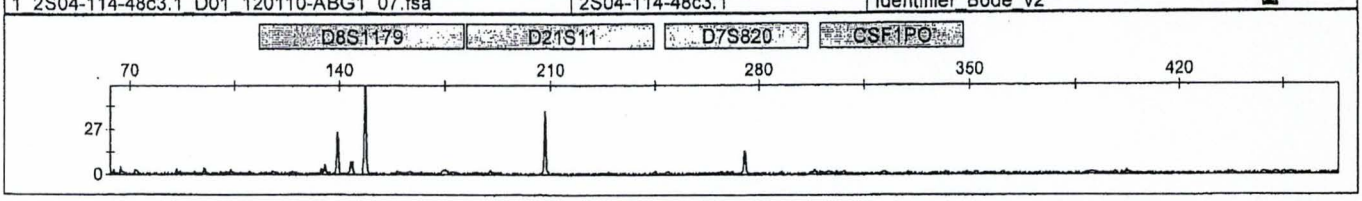
Applied Biosystems

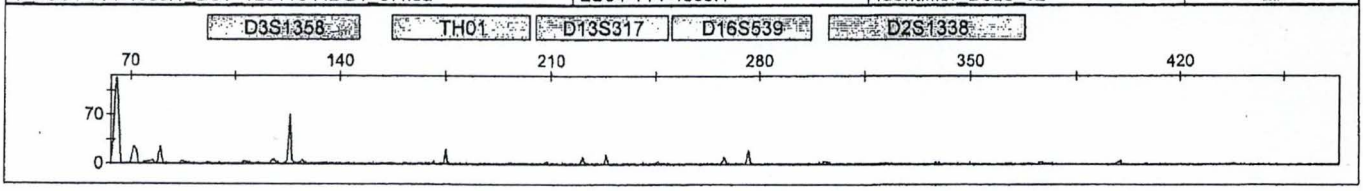
GeneMapper ID v3.2.1

[redacted] GMID14_120110-ABG1_2S04-114_ABG_ID [redacted]

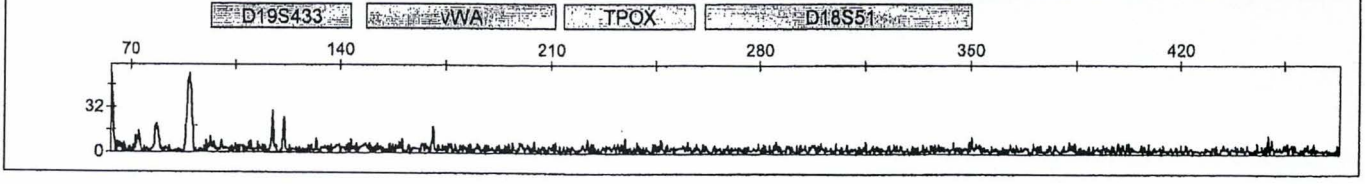
Sample File	Sample Name	Panel	SQ
1_2S04-114-48c3.1_D01_120110-ABG1_07.fsa	2S04-114-48c3.1	Identifiler_Bode_v2	



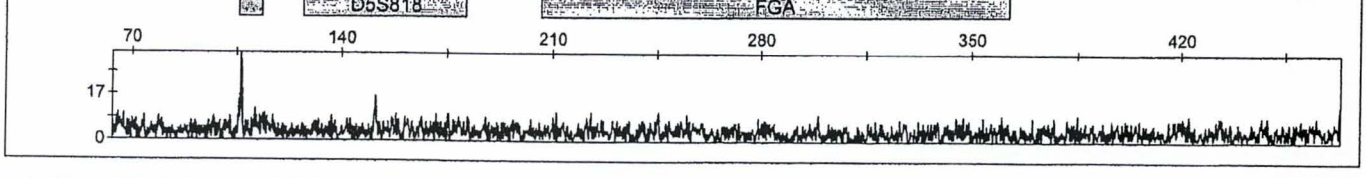
1_2S04-114-48c3.1_D01_120110-ABG1_07.fsa	2S04-114-48c3.1	Identifiler_Bode_v2	



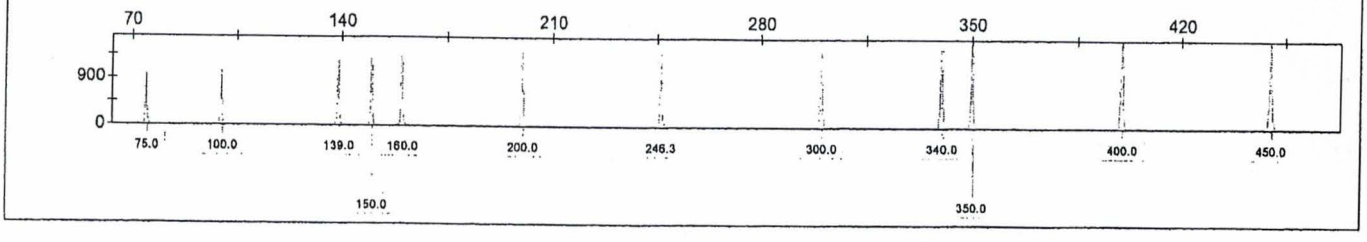
1_2S04-114-48c3.1_D01_120110-ABG1_07.fsa	2S04-114-48c3.1	Identifiler_Bode_v2	



1_2S04-114-48c3.1_D01_120110-ABG1_07.fsa	2S04-114-48c3.1	Identifiler_Bode_v2	



1_2S04-114-48c3.1_D01_120110-ABG1_07.fsa	2S04-114-48c3.1	Identifiler_Bode_v2	



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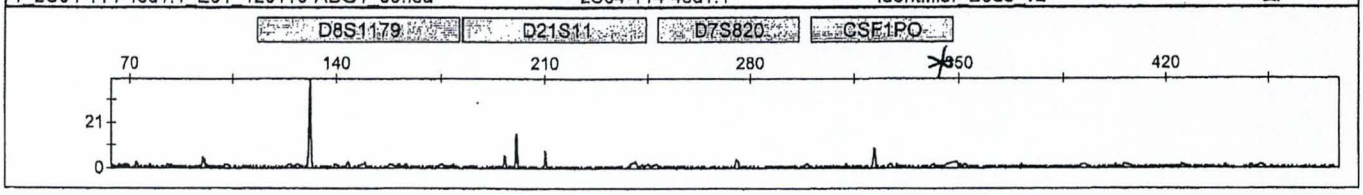
Applied Biosystems

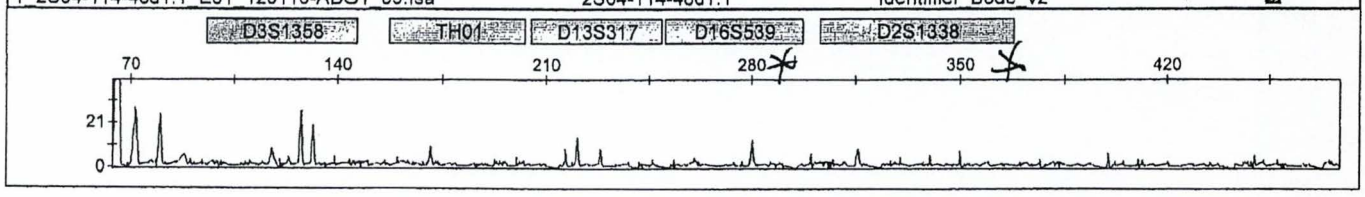
GeneMapper ID v3.2.1

GMID14_120110-ABG1_2S04-114_ABG_ID

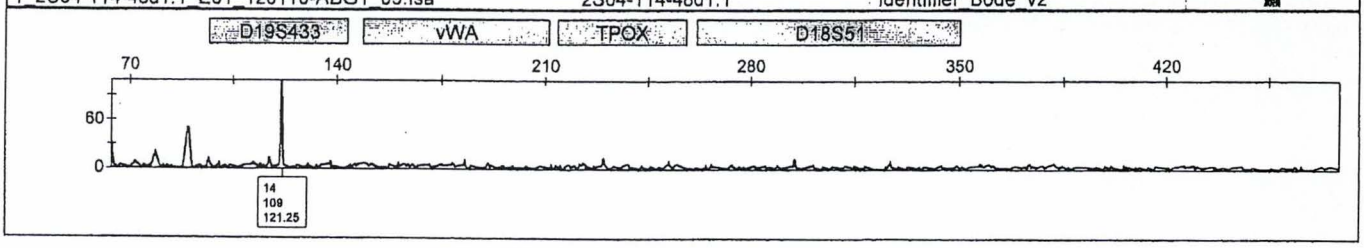
Sample File	Sample Name	Panel	SQ
1_2S04-114-48d1.1_E01_120110-ABG1_09.fsa	2S04-114-48d1.1	Identifiler_Bode_v2	



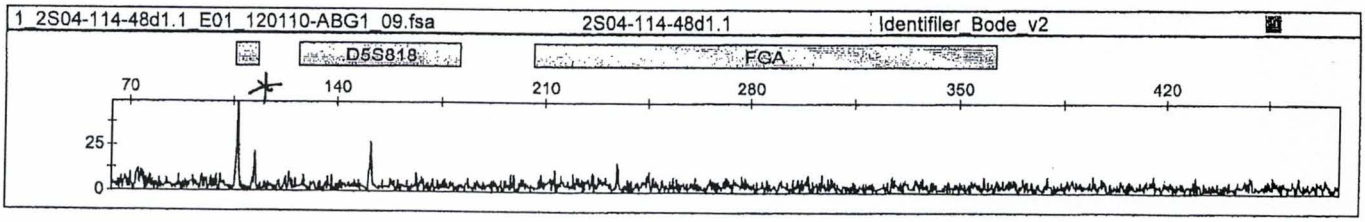
1_2S04-114-48d1.1_E01_120110-ABG1_09.fsa	2S04-114-48d1.1	Identifiler_Bode_v2



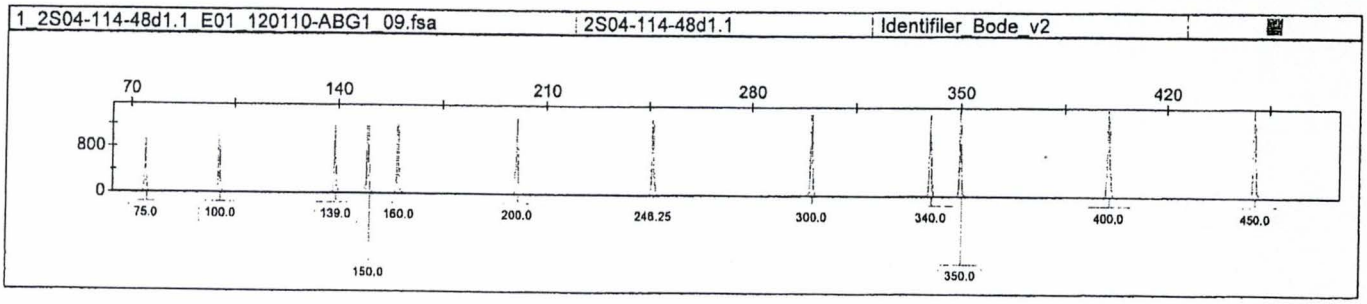
1_2S04-114-48d1.1_E01_120110-ABG1_09.fsa	2S04-114-48d1.1	Identifiler_Bode_v2



1_2S04-114-48d1.1_E01_120110-ABG1_09.fsa	2S04-114-48d1.1	Identifiler_Bode_v2



1_2S04-114-48d1.1_E01_120110-ABG1_09.fsa	2S04-114-48d1.1	Identifiler_Bode_v2



* see .2 for additional alleles @ CSF, D16, D2 & Amelogenin. cm 012511

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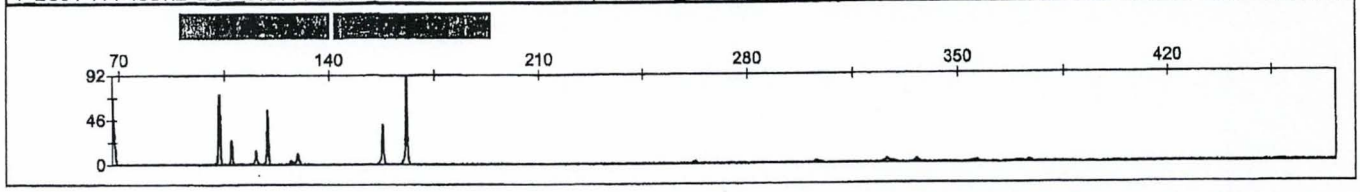
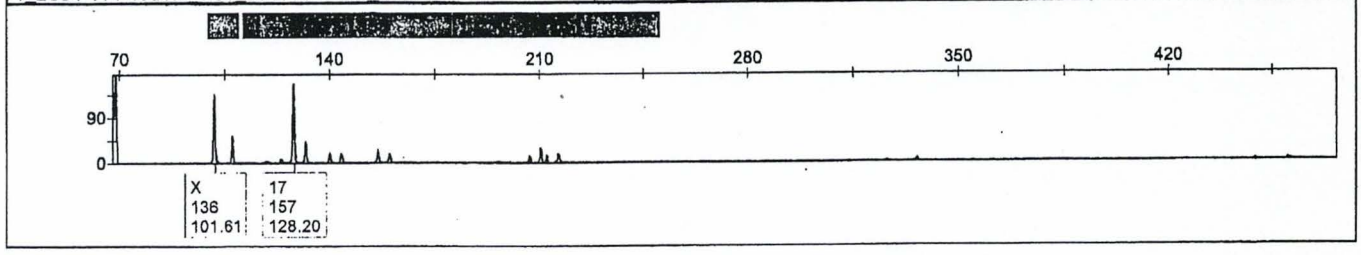
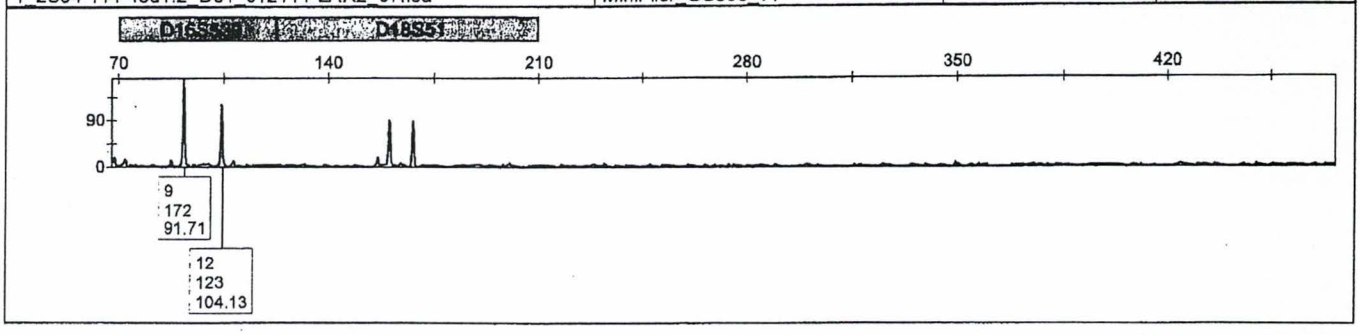
Sample File	Panel	SQO	SQ
1_2S04-114-48d1.2_D01_012111-LAR2_07.fsa	MiniFiler_GS500_v1		



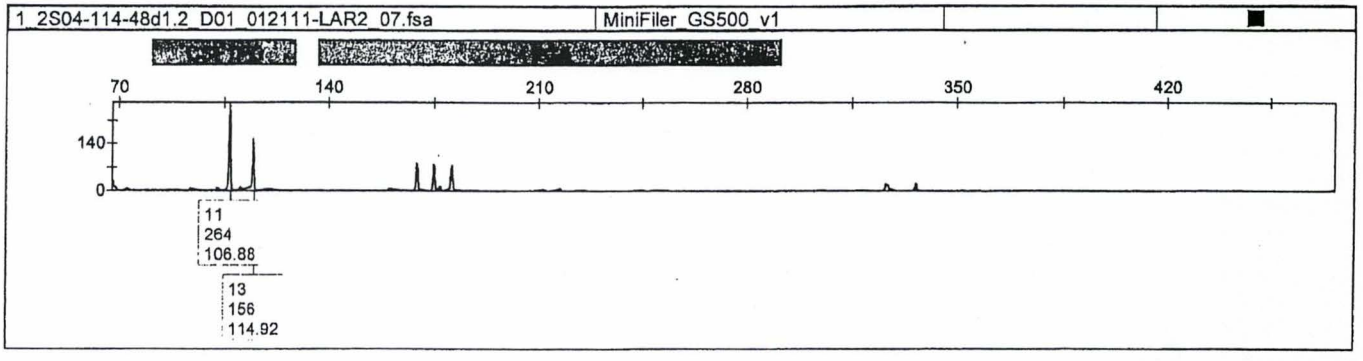
1_2S04-114-48d1.2_D01_012111-LAR2_07.fsa | MiniFiler_GS500_v1



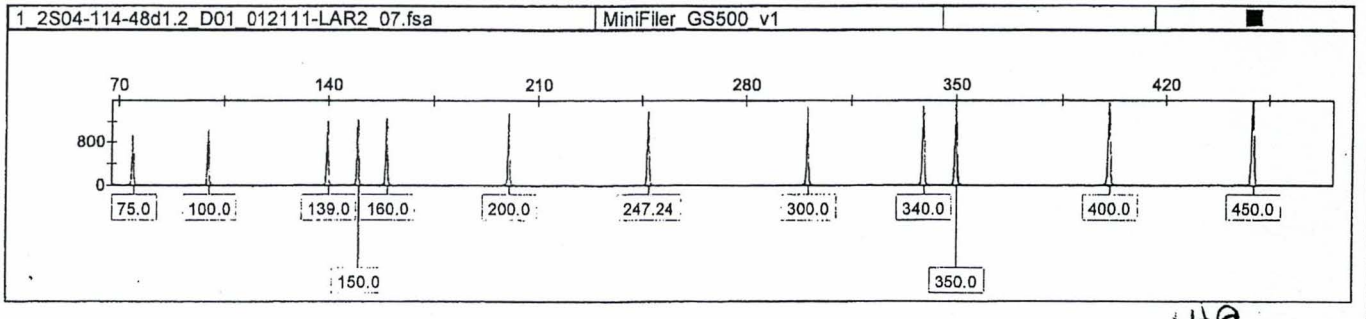
1_2S04-114-48d1.2_D01_012111-LAR2_07.fsa | MiniFiler_GS500_v1



1_2S04-114-48d1.2_D01_012111-LAR2_07.fsa | MiniFiler_GS500_v1



1_2S04-114-48d1.2_D01_012111-LAR2_07.fsa | MiniFiler_GS500_v1



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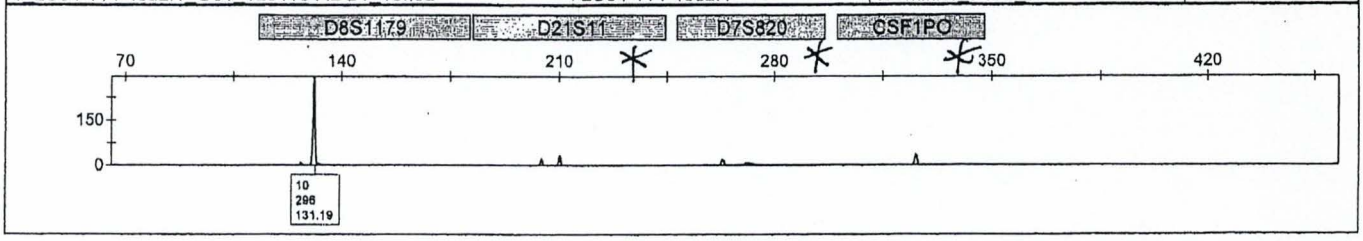
Applied Biosystems

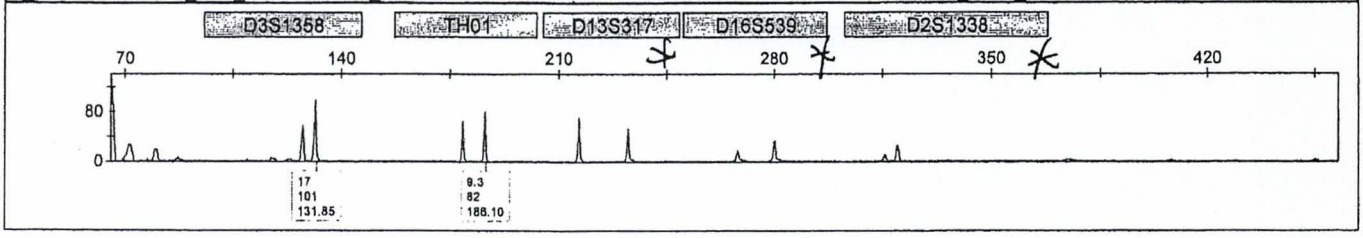
GeneMapper ID v3.2.1

[redacted] GMID14_120110-ABG1_2S04-114_ABG_ID [redacted]

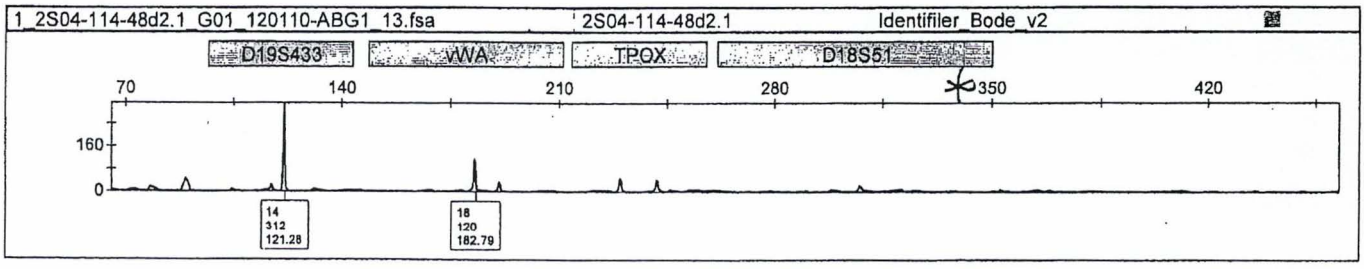
Sample File	Sample Name	Panel	SQ
1_2S04-114-48d2.1_G01_120110-ABG1_13.fsa	2S04-114-48d2.1	Identifiler_Bode_v2	



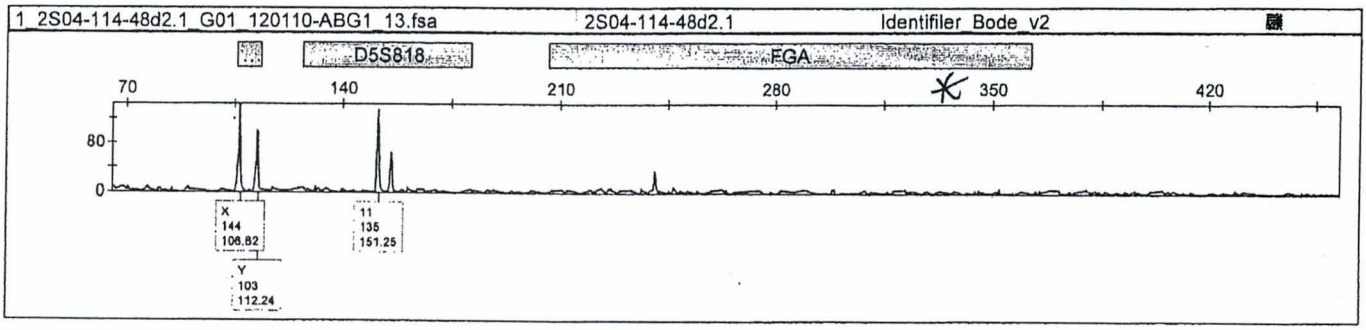
1_2S04-114-48d2.1_G01_120110-ABG1_13.fsa	2S04-114-48d2.1	Identifiler_Bode_v2	



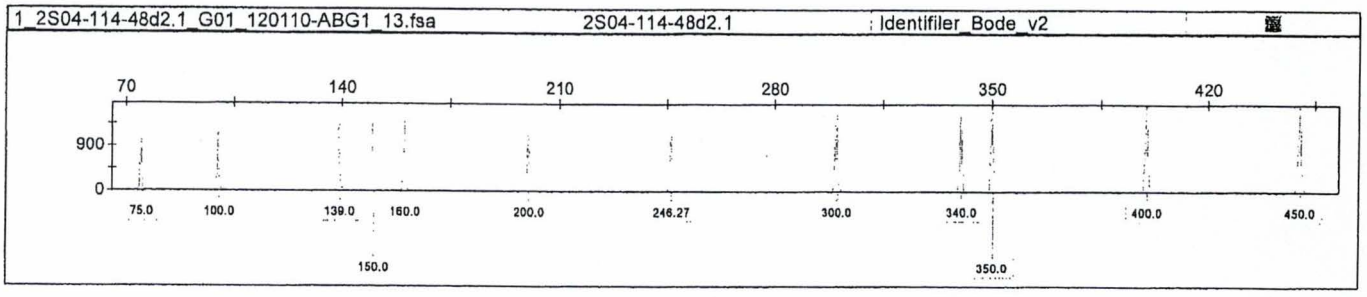
1_2S04-114-48d2.1_G01_120110-ABG1_13.fsa	2S04-114-48d2.1	Identifiler_Bode_v2	



1_2S04-114-48d2.1_G01_120110-ABG1_13.fsa	2S04-114-48d2.1	Identifiler_Bode_v2	



1_2S04-114-48d2.1_G01_120110-ABG1_13.fsa	2S04-114-48d2.1	Identifiler_Bode_v2	



* See. 2 for additional alleles @ D21, D7, CSF, D13, D16, D2, D18 & FGA. um 012511

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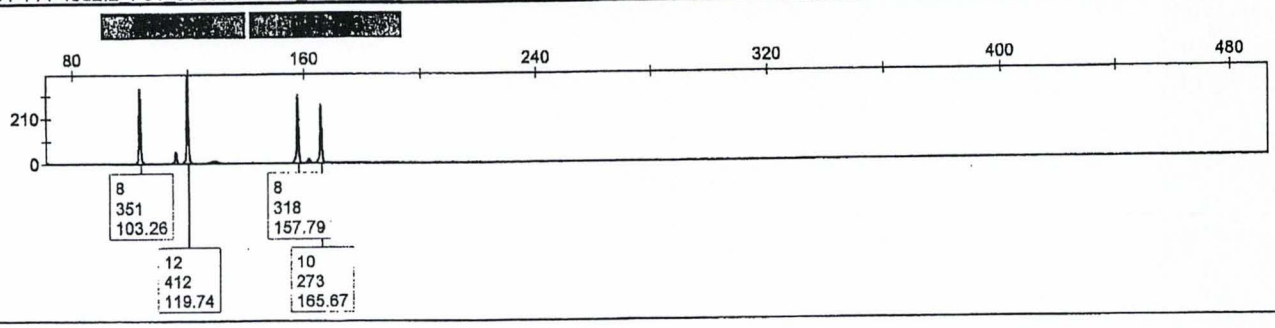
Applied Biosystems

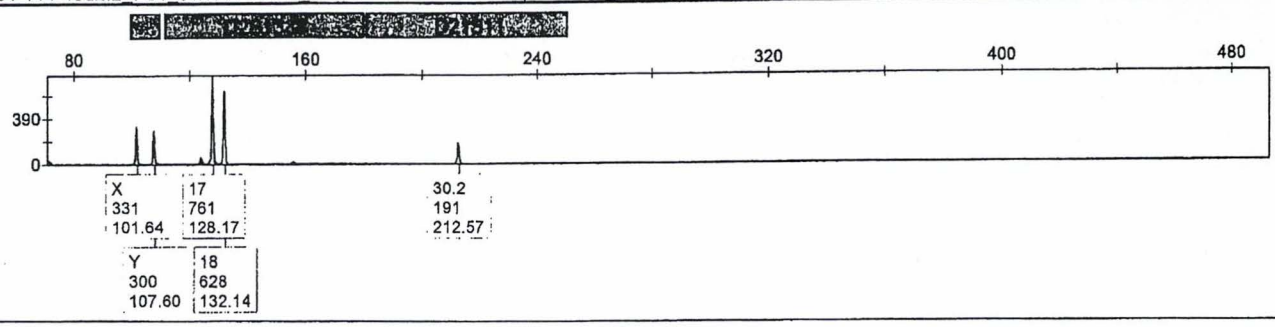
GeneMapper ID v3.2.1

GMID14_012111-LAR2_2S04-114_LAR_MF

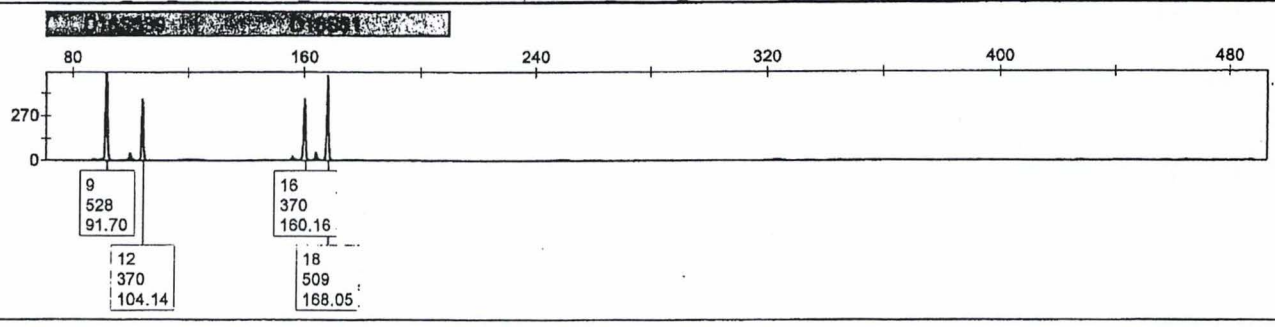
Sample File	Panel	SQO	SQ
1_2S04-114-48d2.2_F01_012111-LAR2_11.fsa	MiniFiler_GS500_v1		



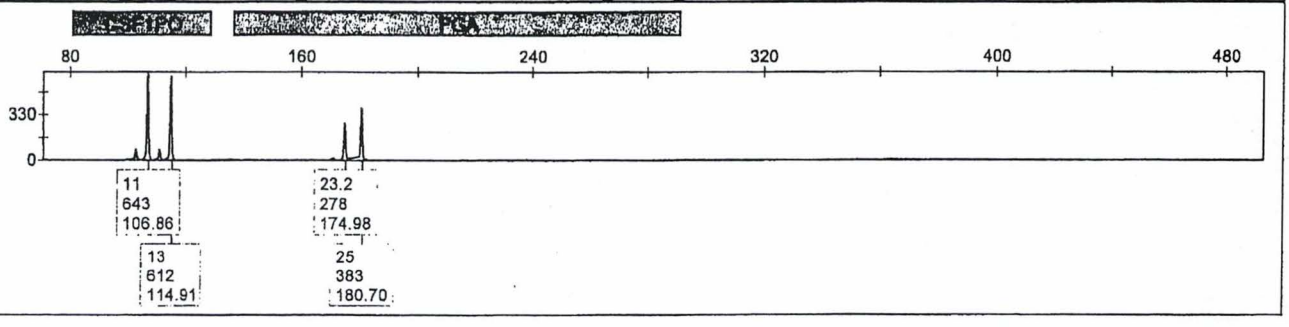
1_2S04-114-48d2.2_F01_012111-LAR2_11.fsa	MiniFiler_GS500_v1		



1_2S04-114-48d2.2_F01_012111-LAR2_11.fsa	MiniFiler_GS500_v1		



1_2S04-114-48d2.2_F01_012111-LAR2_11.fsa	MiniFiler_GS500_v1		



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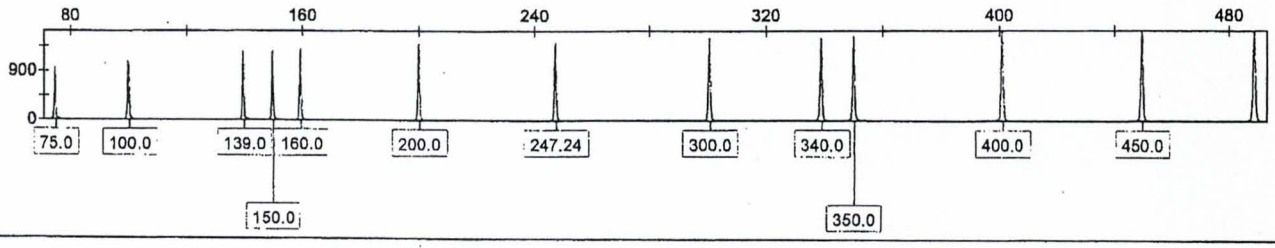
0124/1

Sample File	Panel	SQO	SQ
1_2S04-114-48d2.2_F01_012111-LAR2_11.fsa	MiniFiler_GS500_v1		



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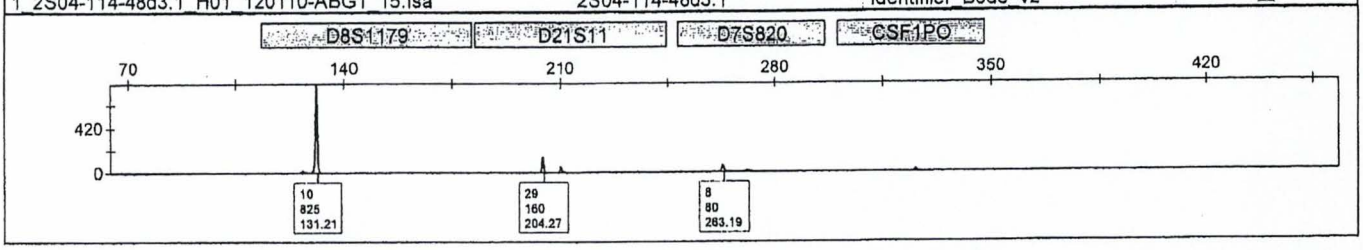
Applied Biosystems

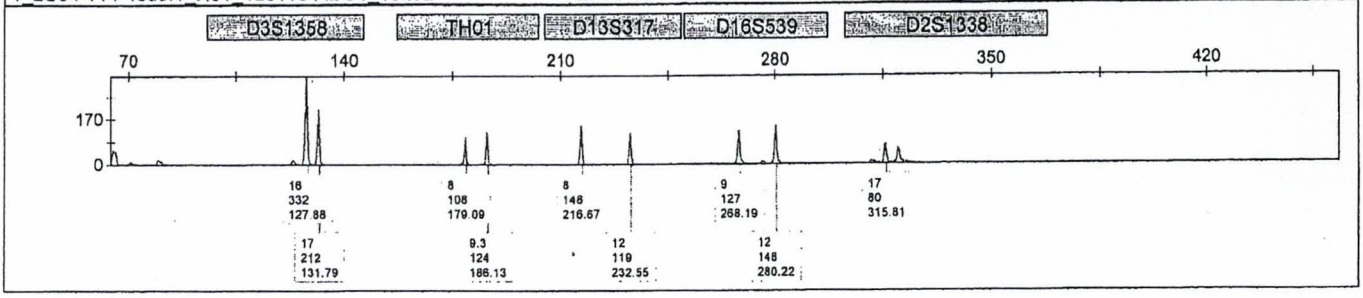
GeneMapper ID v3.2.1

GMID14_120110-ABG1_2S04-114_ABG_ID

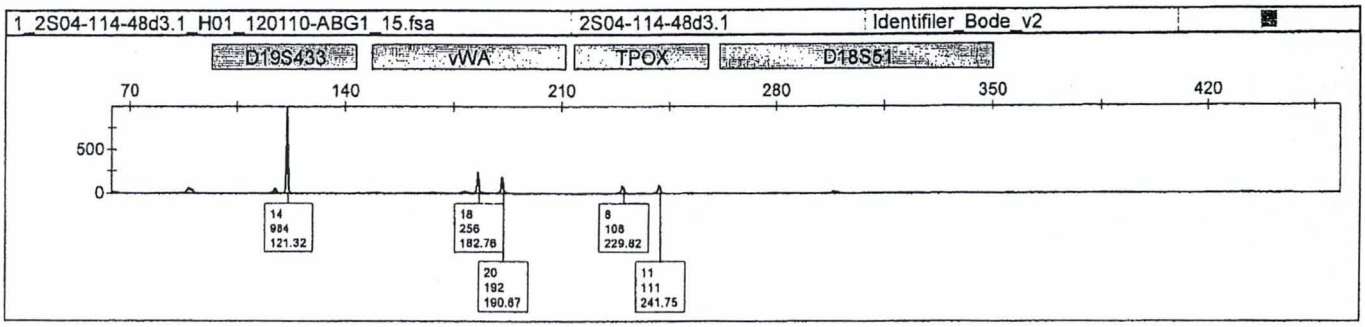
Sample File	Sample Name	Panel	SQ
1_2S04-114-48d3.1_H01_120110-ABG1_15.fsa	2S04-114-48d3.1	Identifiler_Bode_v2	



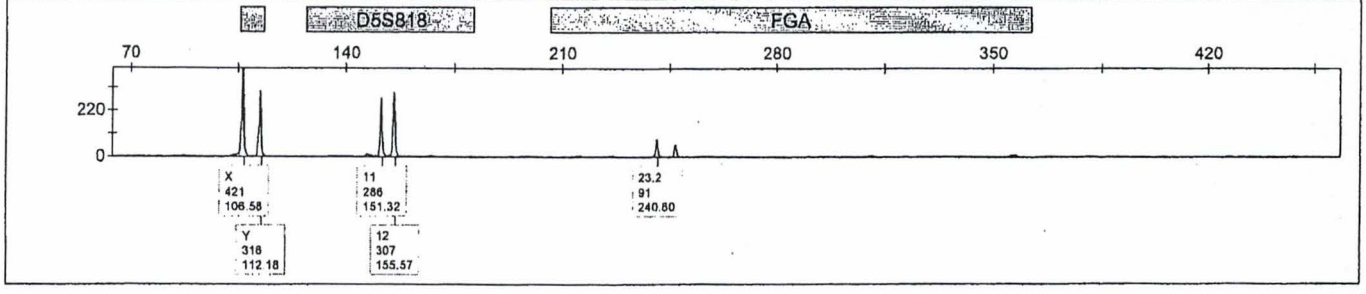
1_2S04-114-48d3.1_H01_120110-ABG1_15.fsa	2S04-114-48d3.1	Identifiler_Bode_v2	



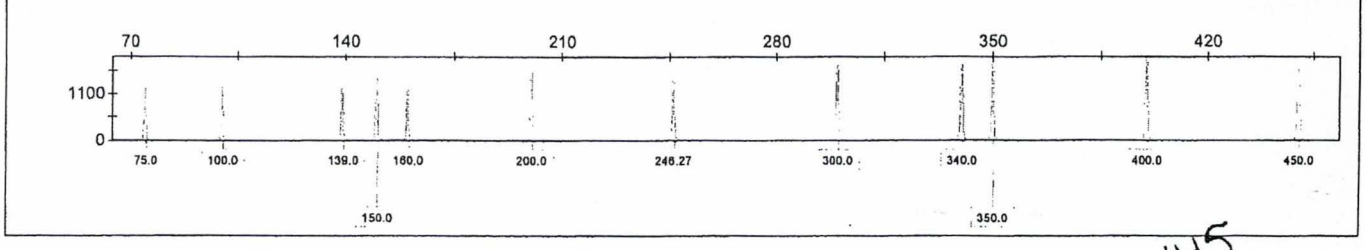
1_2S04-114-48d3.1_H01_120110-ABG1_15.fsa	2S04-114-48d3.1	Identifiler_Bode_v2	



1_2S04-114-48d3.1_H01_120110-ABG1_15.fsa	2S04-114-48d3.1	Identifiler_Bode_v2	



1_2S04-114-48d3.1_H01_120110-ABG1_15.fsa	2S04-114-48d3.1	Identifiler_Bode_v2	



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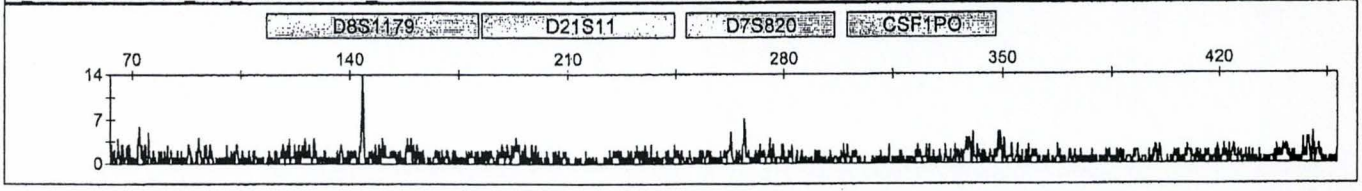
Applied Biosystems

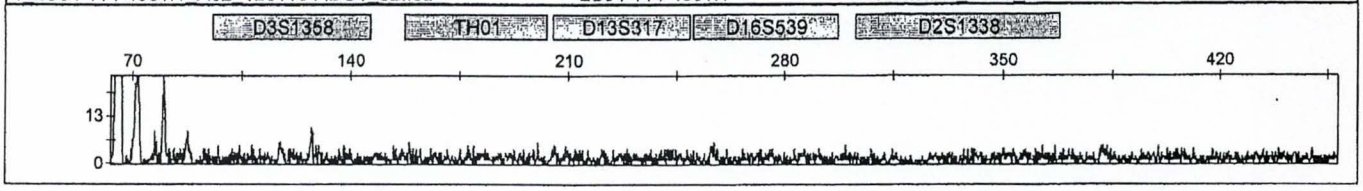
GeneMapper ID v3.2.1

GMID14_120110-ABG1_2S04-114_ABG_ID

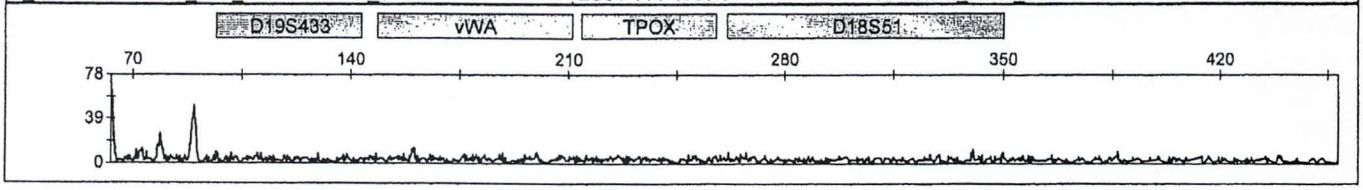
Sample File	Sample Name	Panel	SQ
1_2S04-114-48e1.1_A02_120110-ABG1_02.fsa	2S04-114-48e1.1	Identifiler_Bode_v2	



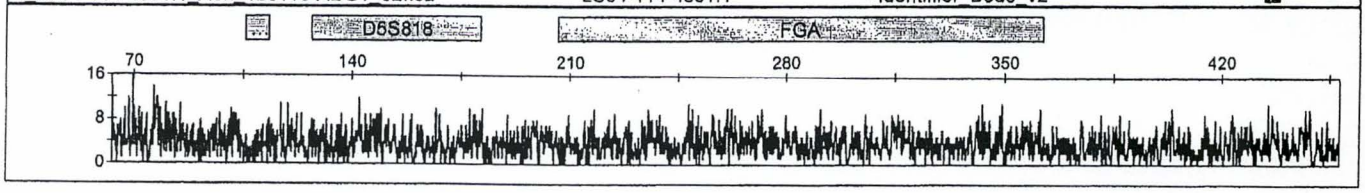
1_2S04-114-48e1.1_A02_120110-ABG1_02.fsa	2S04-114-48e1.1	Identifiler_Bode_v2



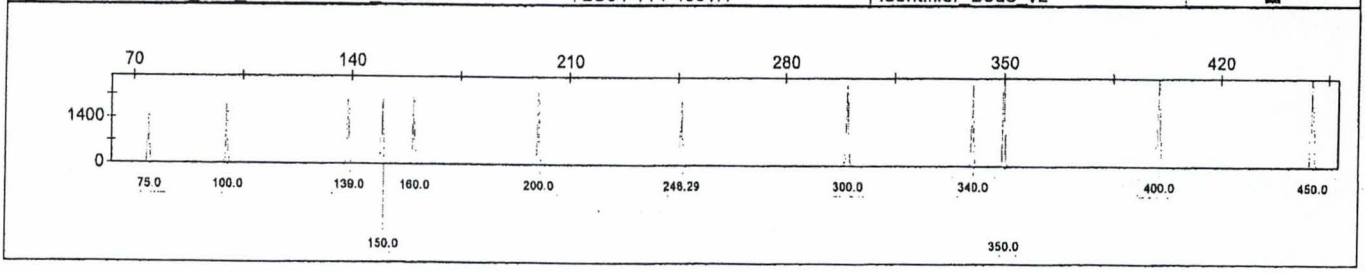
1_2S04-114-48e1.1_A02_120110-ABG1_02.fsa	2S04-114-48e1.1	Identifiler_Bode_v2



1_2S04-114-48e1.1_A02_120110-ABG1_02.fsa	2S04-114-48e1.1	Identifiler_Bode_v2



1_2S04-114-48e1.1_A02_120110-ABG1_02.fsa	2S04-114-48e1.1	Identifiler_Bode_v2



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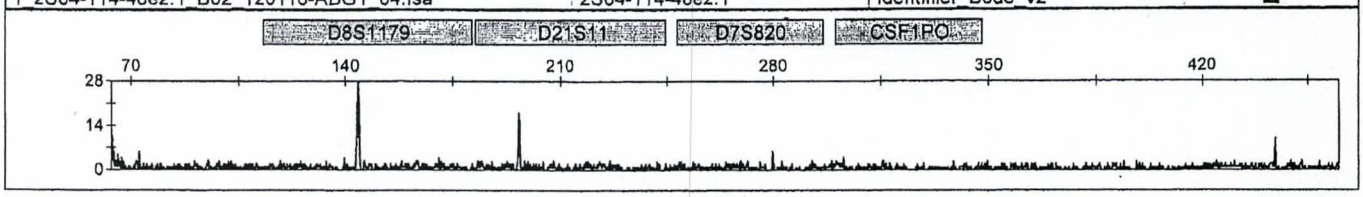
Applied Biosystems

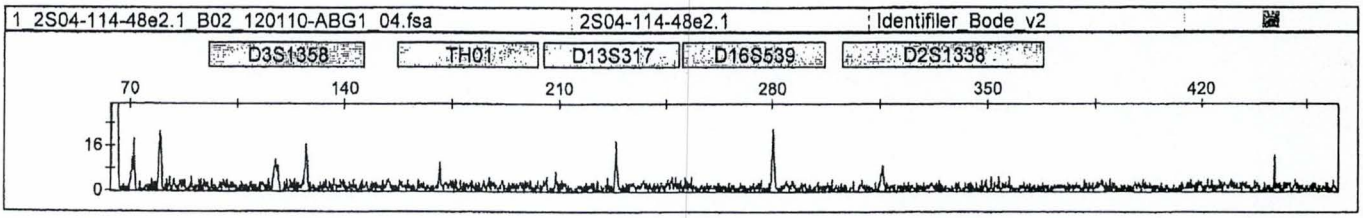
GeneMapper ID v3.2.1

[redacted] GMID14_120110-ABG1_2S04-114_ABG_ID [redacted]

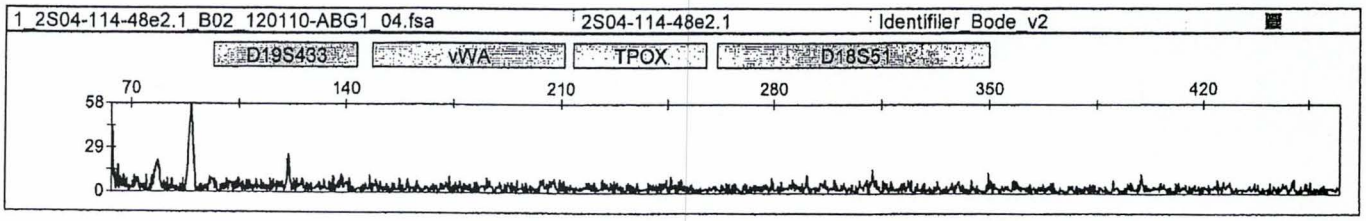
Sample File	Sample Name	Panel	SQ
1_2S04-114-48e2.1_B02_120110-ABG1_04.fsa	2S04-114-48e2.1	Identifiler_Bode_v2	



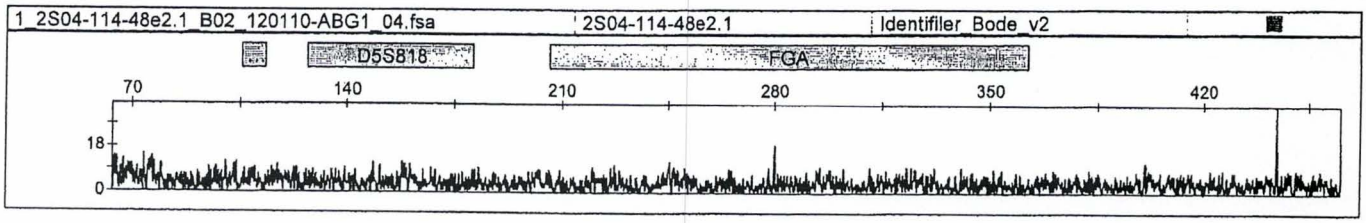
1_2S04-114-48e2.1_B02_120110-ABG1_04.fsa	2S04-114-48e2.1	Identifiler_Bode_v2	



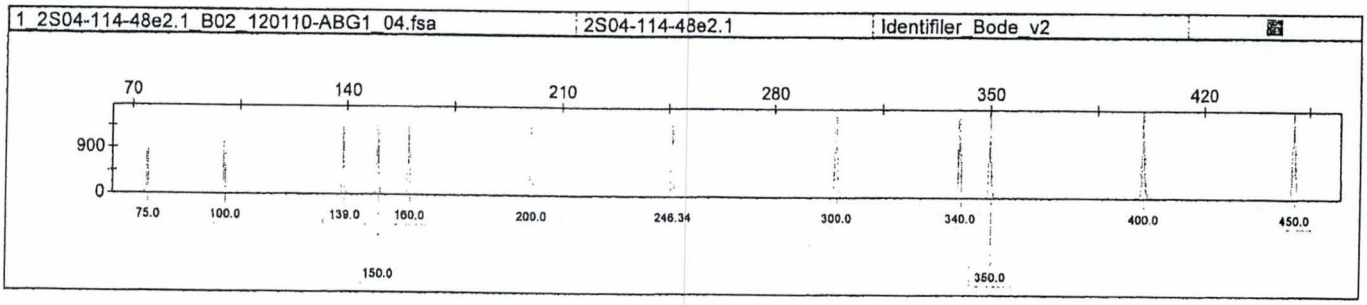
1_2S04-114-48e2.1_B02_120110-ABG1_04.fsa	2S04-114-48e2.1	Identifiler_Bode_v2	



1_2S04-114-48e2.1_B02_120110-ABG1_04.fsa	2S04-114-48e2.1	Identifiler_Bode_v2	



1_2S04-114-48e2.1_B02_120110-ABG1_04.fsa	2S04-114-48e2.1	Identifiler_Bode_v2	



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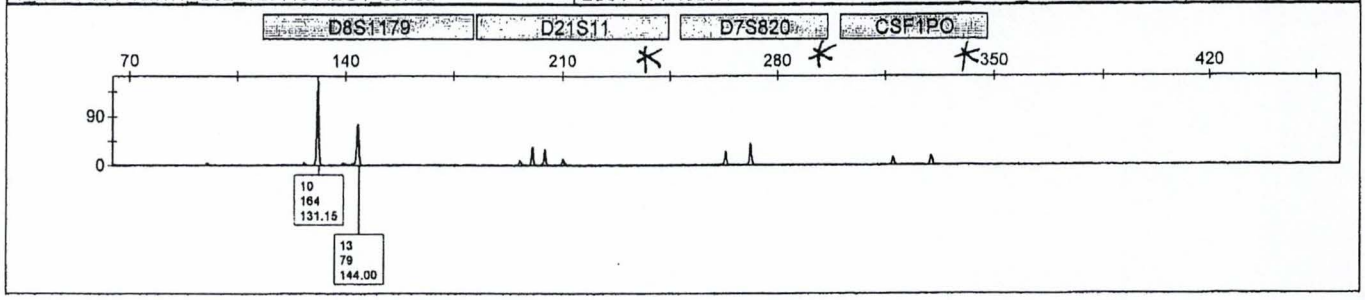
Applied Biosystems

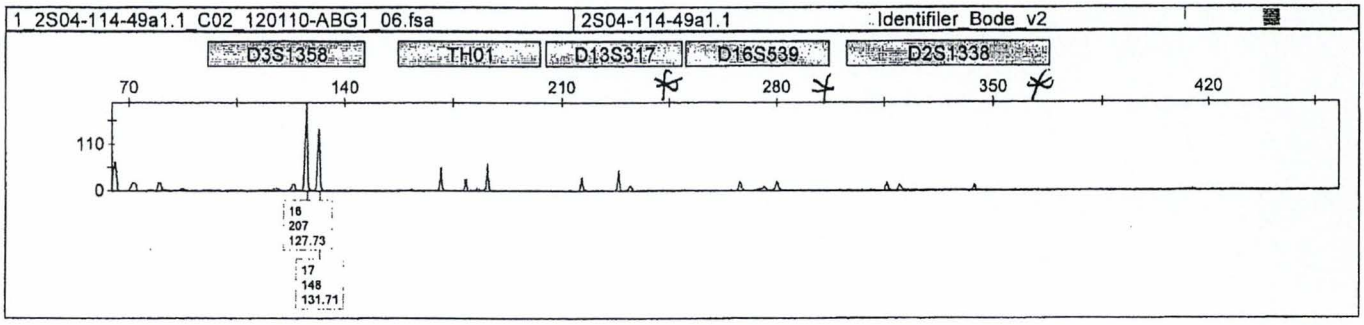
GeneMapper ID v3.2.1

[redacted] GMID14_120110-ABG1_2S04-114_ABG_ID [redacted]

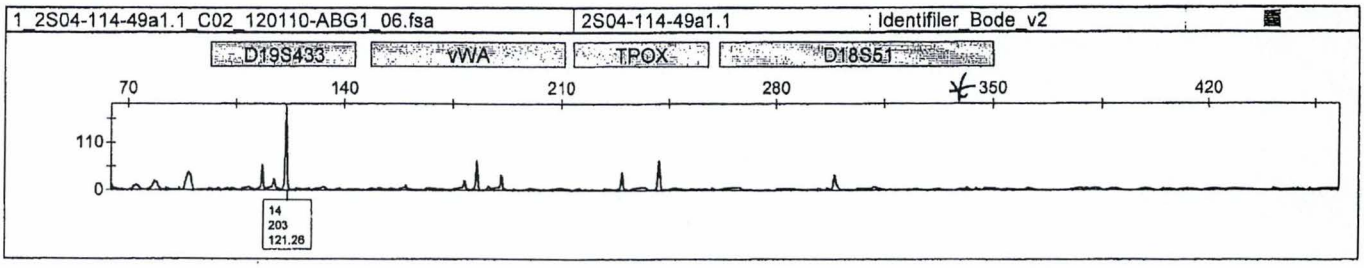
Sample File	Sample Name	Panel	SQ
1_2S04-114-49a1.1_C02_120110-ABG1_06.fsa	2S04-114-49a1.1	Identifiler_Bode_v2	



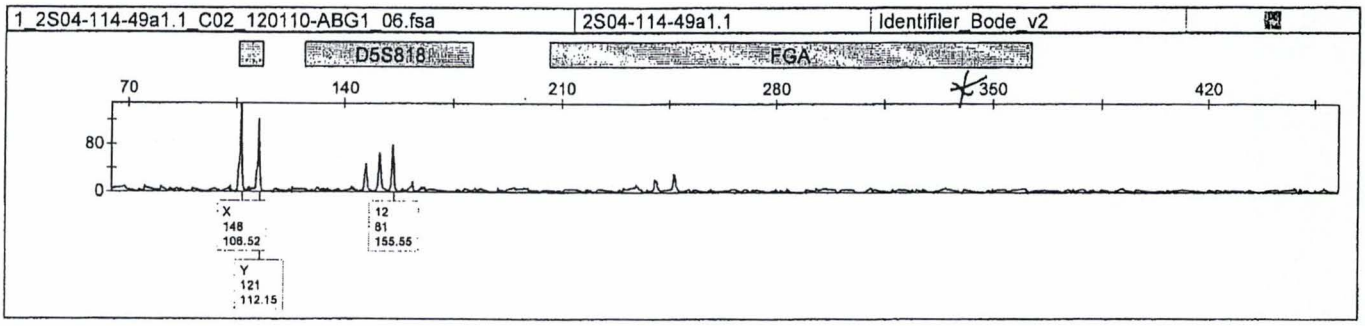
1_2S04-114-49a1.1_C02_120110-ABG1_06.fsa	2S04-114-49a1.1	Identifiler_Bode_v2	



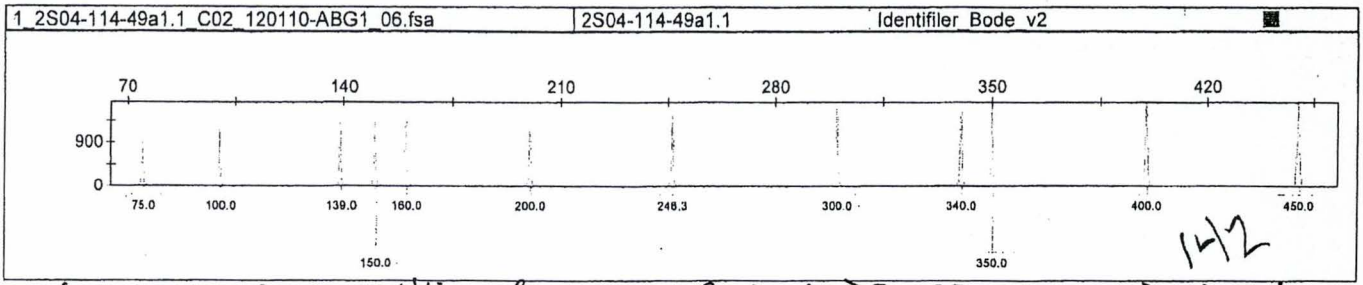
1_2S04-114-49a1.1_C02_120110-ABG1_06.fsa	2S04-114-49a1.1	Identifiler_Bode_v2	



1_2S04-114-49a1.1_C02_120110-ABG1_06.fsa	2S04-114-49a1.1	Identifiler_Bode_v2	



1_2S04-114-49a1.1_C02_120110-ABG1_06.fsa	2S04-114-49a1.1	Identifiler_Bode_v2	



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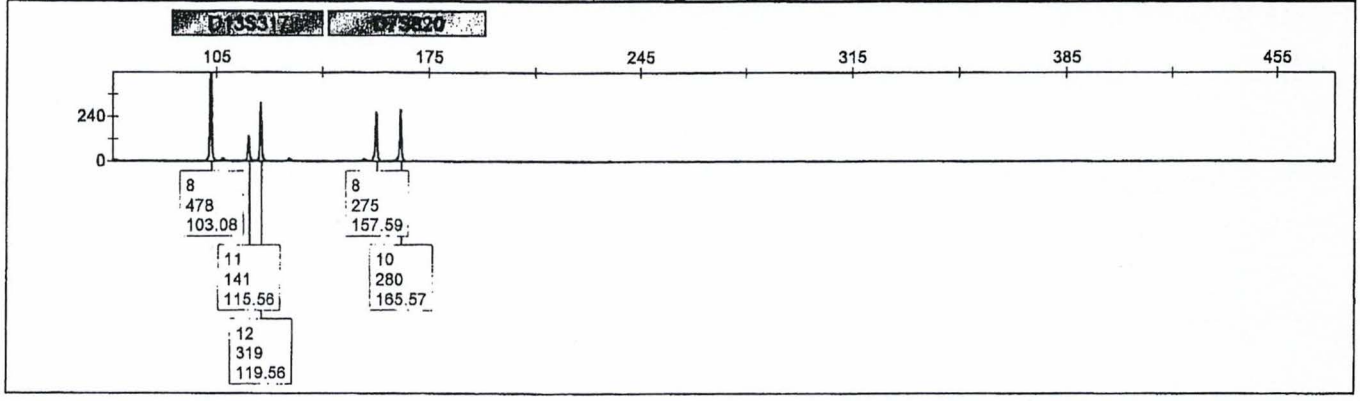
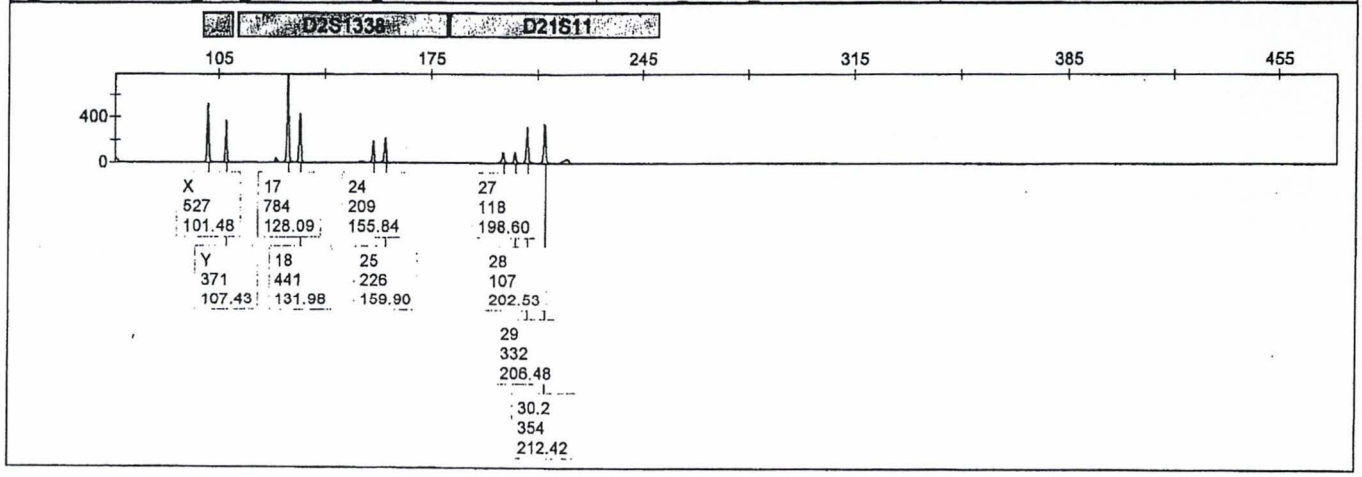
* See. 2 for additional alleles @ D21, D7, CSF, D13, D16, D2, D18 & FGA.

VM 012611

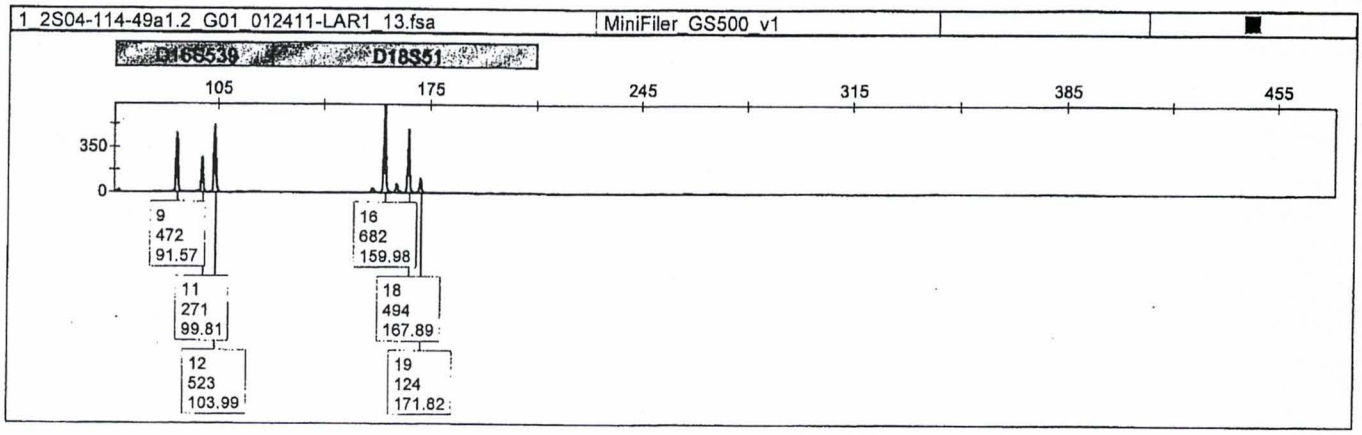
Sample File	Panel	SQO	SQ
1_2S04-114-49a1.2_G01_012411-LAR1_13.fsa	MiniFiler_GS500_v1		



1_2S04-114-49a1.2_G01_012411-LAR1_13.fsa | MiniFiler_GS500_v1



1_2S04-114-49a1.2_G01_012411-LAR1_13.fsa | MiniFiler_GS500_v1



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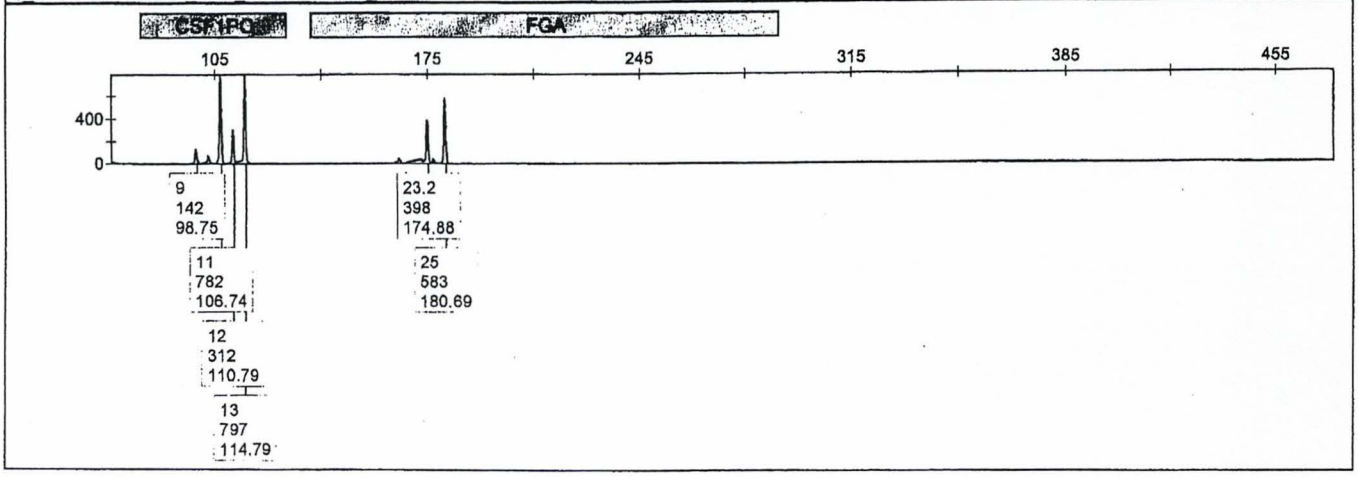
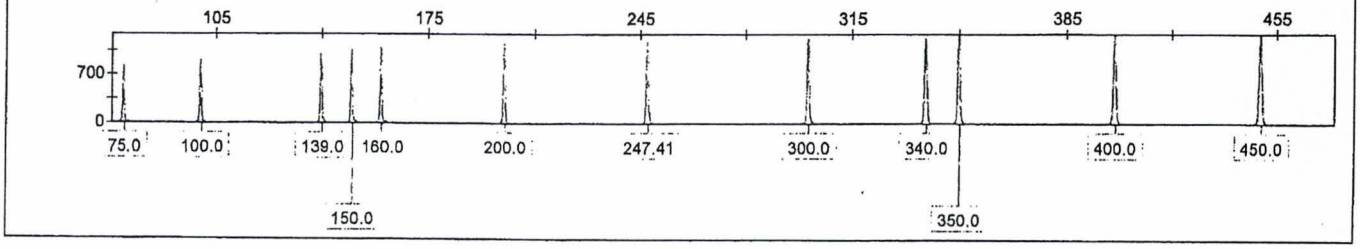
Sample File	Panel	SQO	SQ
1_2S04-114-49a1.2_G01_012411-LAR1_13.fsa	MiniFiler_GS500_v1		



1_2S04-114-49a1.2_G01_012411-LAR1_13.fsa	MiniFiler_GS500_v1		



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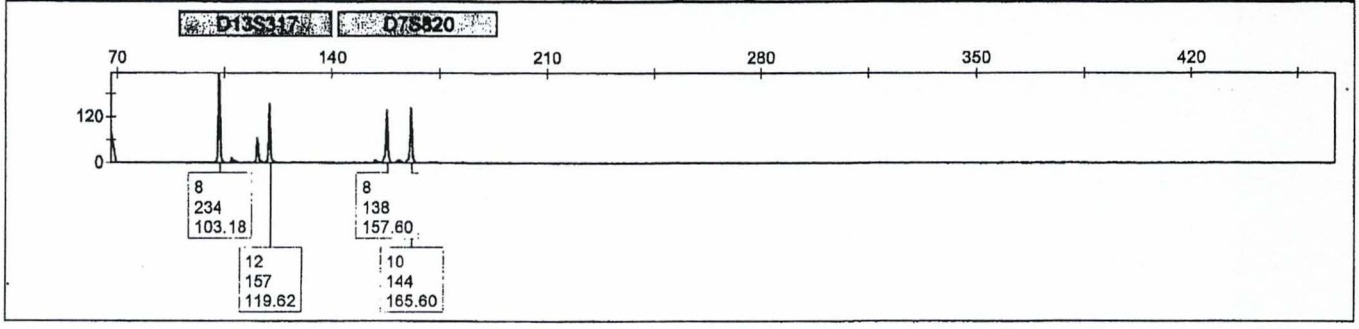
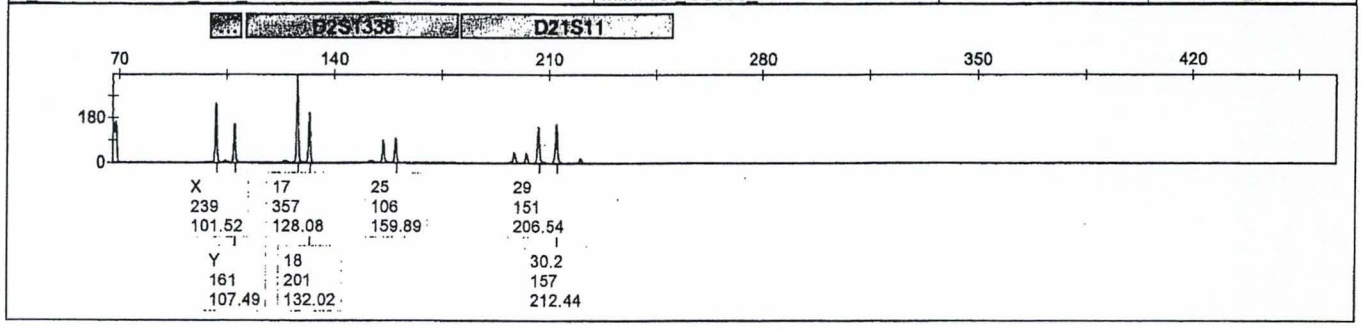
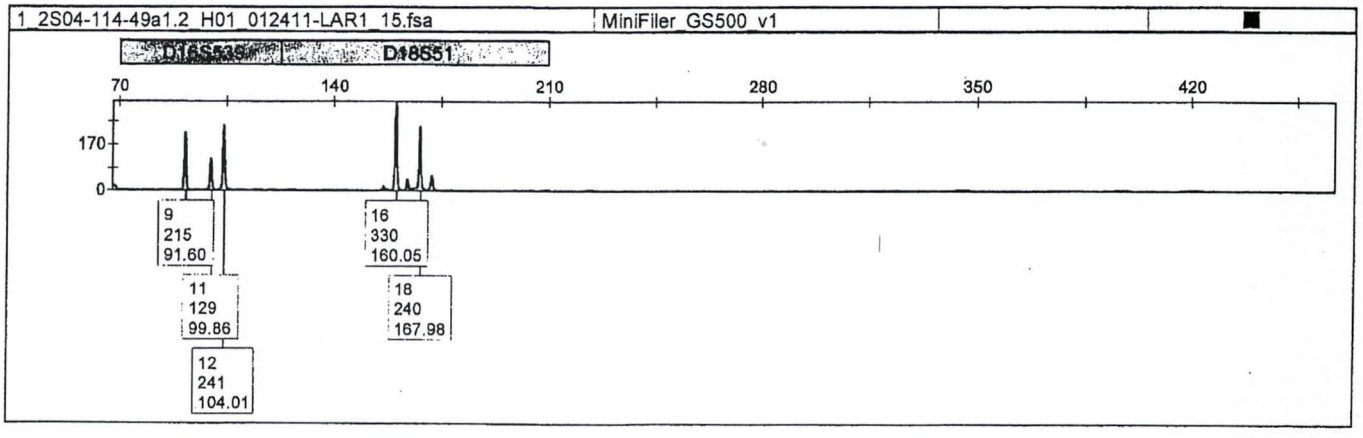
Sample File	Panel	SQO	SQ
1_2S04-114-49a1.2_H01_012411-LAR1_15.fsa	MiniFiler_GS500_v1		



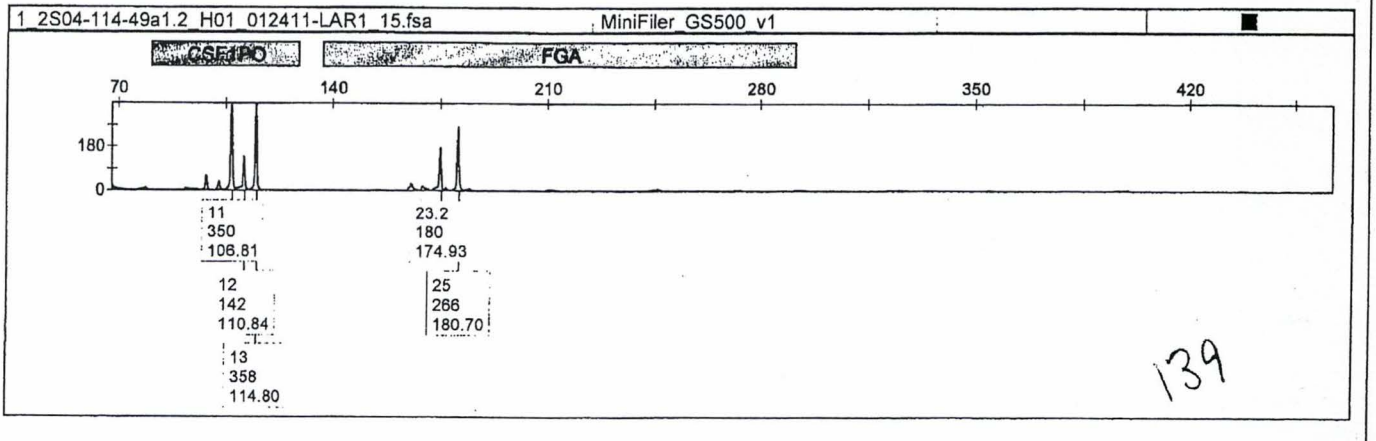
1_2S04-114-49a1.2_H01_012411-LAR1_15.fsa | MiniFiler_GS500_v1



1_2S04-114-49a1.2_H01_012411-LAR1_15.fsa | MiniFiler_GS500_v1



1_2S04-114-49a1.2_H01_012411-LAR1_15.fsa | MiniFiler_GS500_v1



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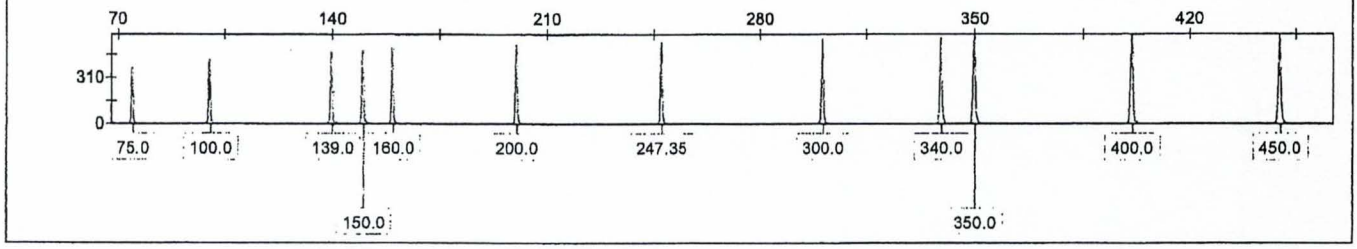
Sample File	Panel	SQO	SQ
1_2S04-114-49a1.2_H01_012411-LAR1_15.fsa	MiniFiler_GS500_v1		



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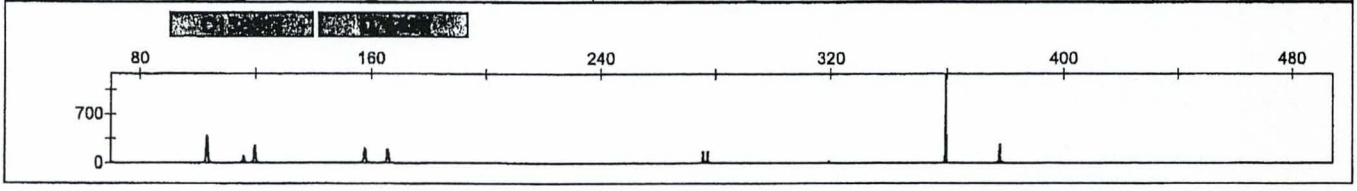
Applied Biosystems

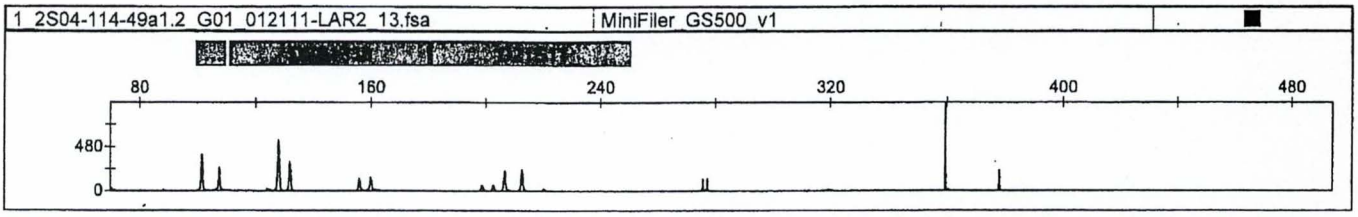
GeneMapper ID v3.2.1

GMID14_012111-LAR2_2S04-114_LAR_MF

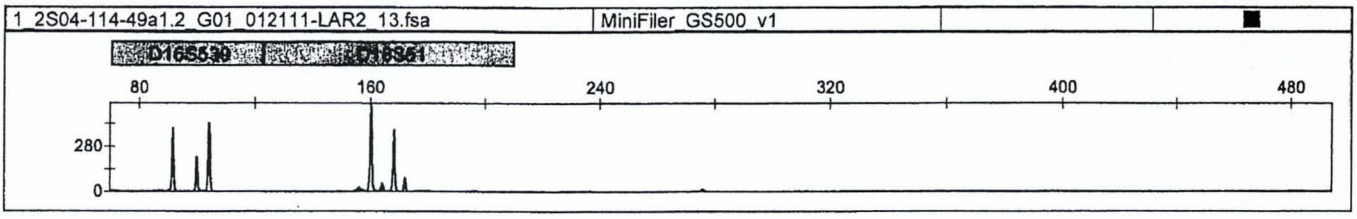
Sample File	Panel	SQO	SQ
1_2S04-114-49a1.2_G01_012111-LAR2_13.fsa	MiniFiler_GS500_v1		



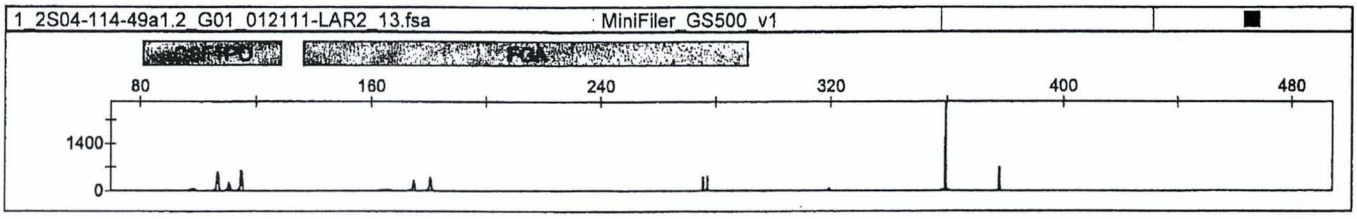
1_2S04-114-49a1.2_G01_012111-LAR2_13.fsa | MiniFiler_GS500_v1



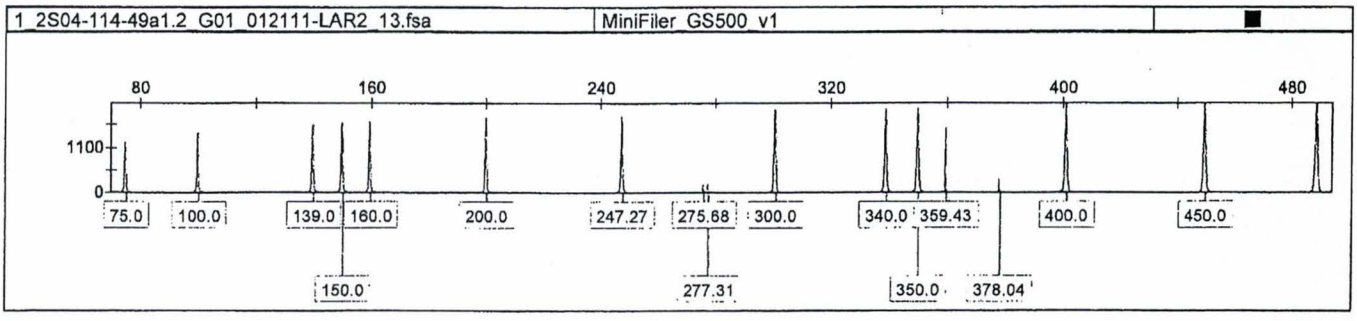
1_2S04-114-49a1.2_G01_012111-LAR2_13.fsa | MiniFiler_GS500_v1



1_2S04-114-49a1.2_G01_012111-LAR2_13.fsa | MiniFiler_GS500_v1



1_2S04-114-49a1.2_G01_012111-LAR2_13.fsa | MiniFiler_GS500_v1



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Mon Jan 24,2011 09:45AM, EST

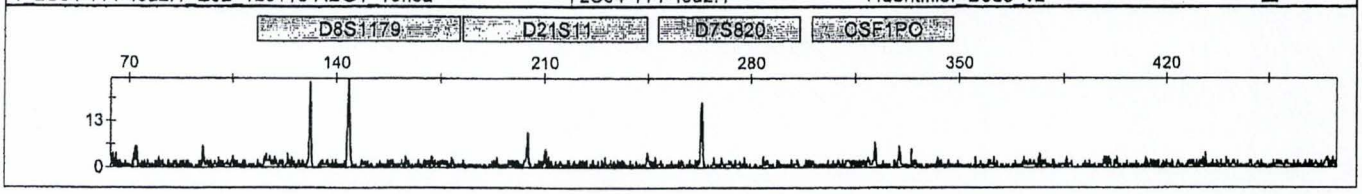
Printed by: gmid

01/2011

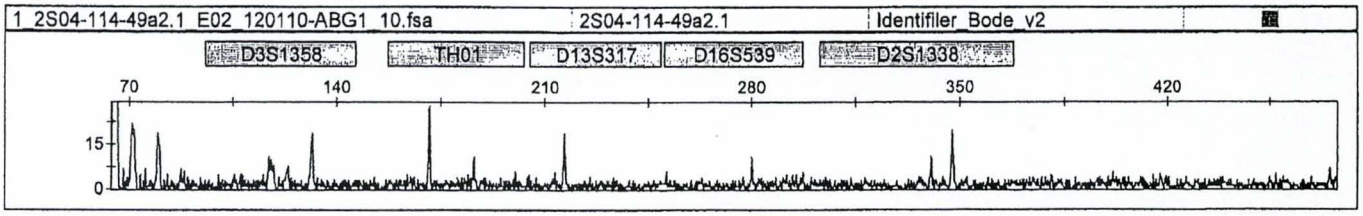
Applied Biosystems
GeneMapper ID v3.2.1

GMID14_120110-ABG1_2S04-114_ABG_ID

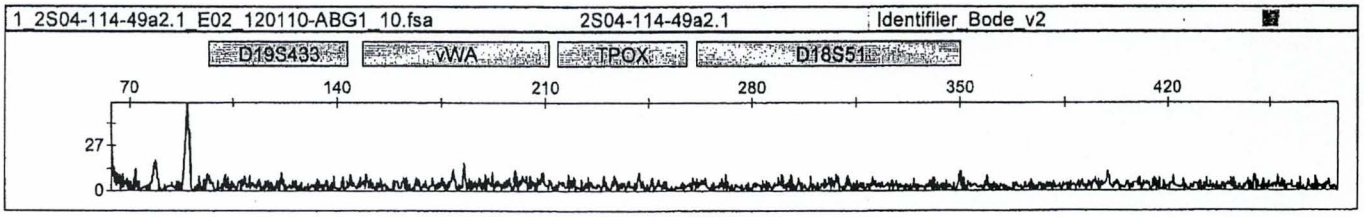
Sample File	Sample Name	Panel	SQ
1_2S04-114-49a2.1_E02_120110-ABG1_10.fsa	2S04-114-49a2.1	Identifiler_Bode_v2	



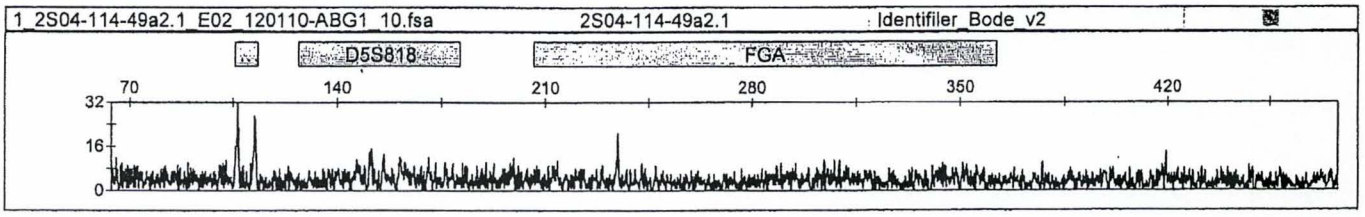
1_2S04-114-49a2.1_E02_120110-ABG1_10.fsa | 2S04-114-49a2.1 | Identifiler_Bode_v2



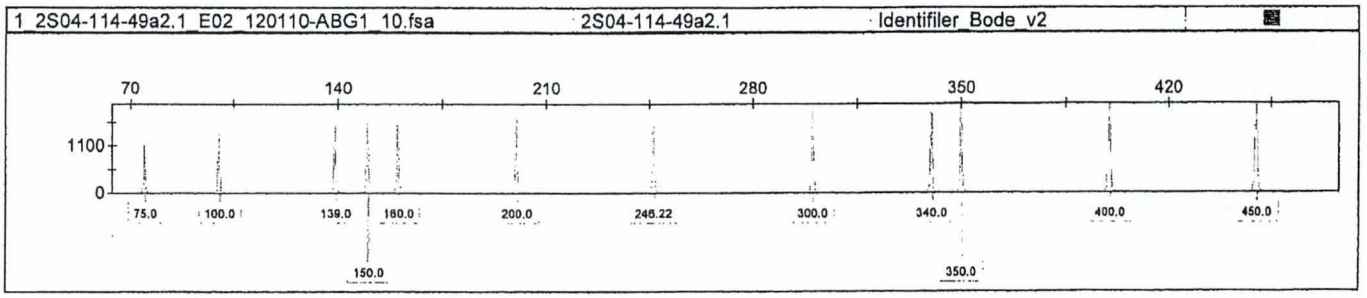
1_2S04-114-49a2.1_E02_120110-ABG1_10.fsa | 2S04-114-49a2.1 | Identifiler_Bode_v2



1_2S04-114-49a2.1_E02_120110-ABG1_10.fsa | 2S04-114-49a2.1 | Identifiler_Bode_v2



1_2S04-114-49a2.1_E02_120110-ABG1_10.fsa | 2S04-114-49a2.1 | Identifiler_Bode_v2



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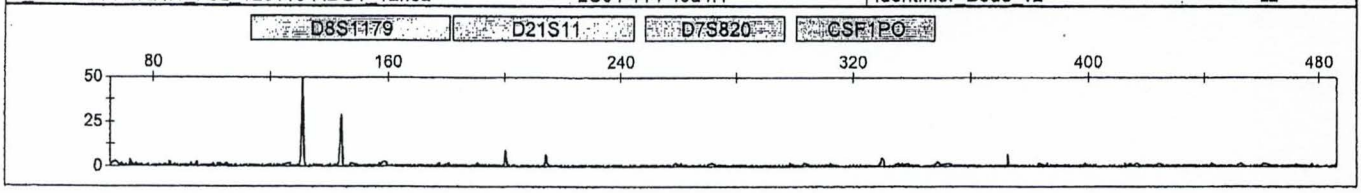
Applied Biosystems

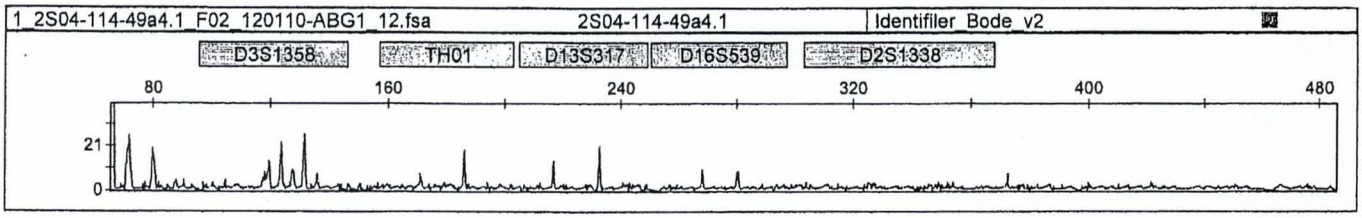
GeneMapper ID v3.2.1

GMID14_120110-ABG1_2S04-114_ABG_ID

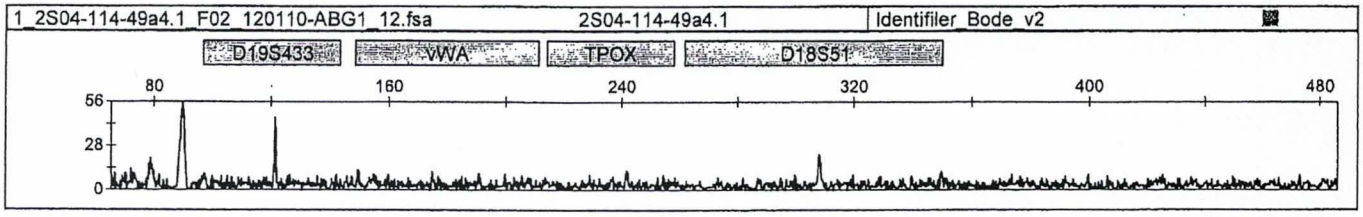
Sample File	Sample Name	Panel	SQ
1_2S04-114-49a4.1_F02_120110-ABG1_12.fsa	2S04-114-49a4.1	Identifiler_Bode_v2	



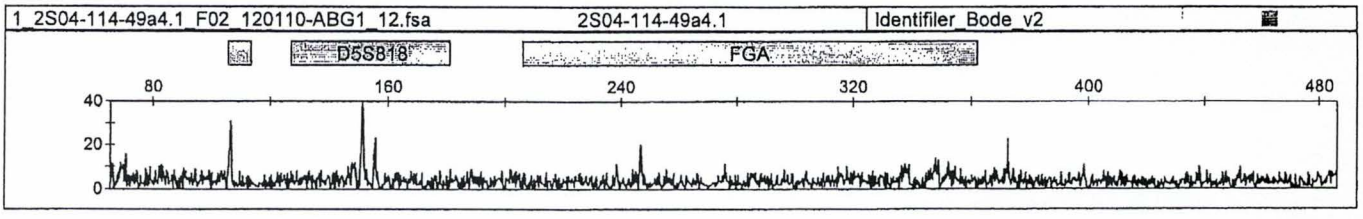
1_2S04-114-49a4.1_F02_120110-ABG1_12.fsa	2S04-114-49a4.1	Identifiler_Bode_v2



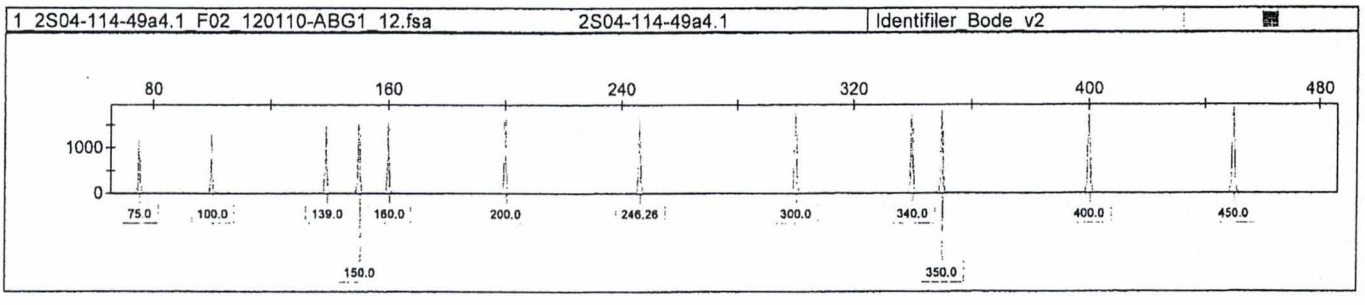
1_2S04-114-49a4.1_F02_120110-ABG1_12.fsa	2S04-114-49a4.1	Identifiler_Bode_v2



1_2S04-114-49a4.1_F02_120110-ABG1_12.fsa	2S04-114-49a4.1	Identifiler_Bode_v2



1_2S04-114-49a4.1_F02_120110-ABG1_12.fsa	2S04-114-49a4.1	Identifiler_Bode_v2



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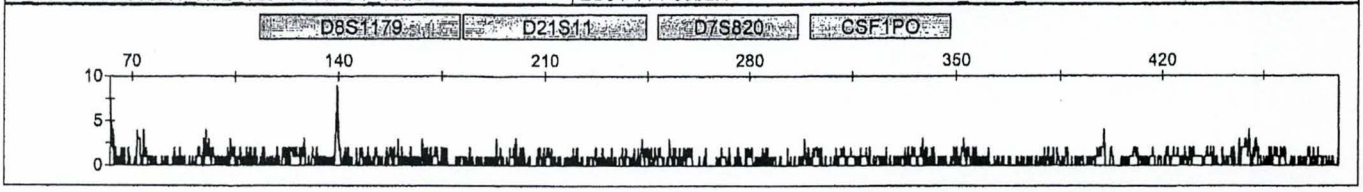
Applied Biosystems

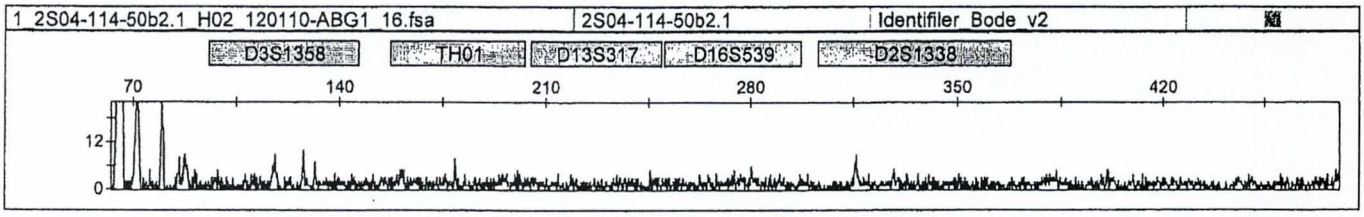
GeneMapper ID v3.2.1

GMID14_120110-ABG1_2S04-114_ABG_ID

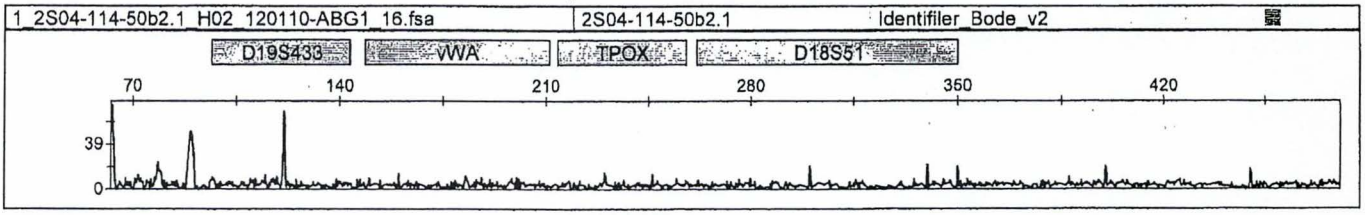
Sample File	Sample Name	Panel	SQ
1_2S04-114-50b2.1_H02_120110-ABG1_16.fsa	2S04-114-50b2.1	Identifiler_Bode_v2	



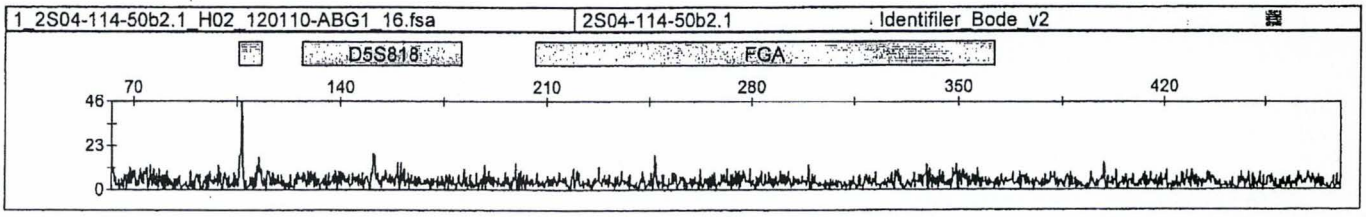
1_2S04-114-50b2.1_H02_120110-ABG1_16.fsa	2S04-114-50b2.1	Identifiler_Bode_v2	



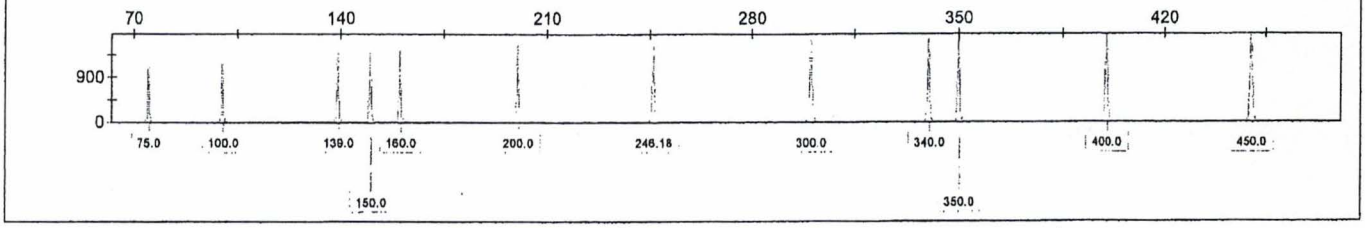
1_2S04-114-50b2.1_H02_120110-ABG1_16.fsa	2S04-114-50b2.1	Identifiler_Bode_v2	



1_2S04-114-50b2.1_H02_120110-ABG1_16.fsa	2S04-114-50b2.1	Identifiler_Bode_v2	



1_2S04-114-50b2.1_H02_120110-ABG1_16.fsa	2S04-114-50b2.1	Identifiler_Bode_v2	



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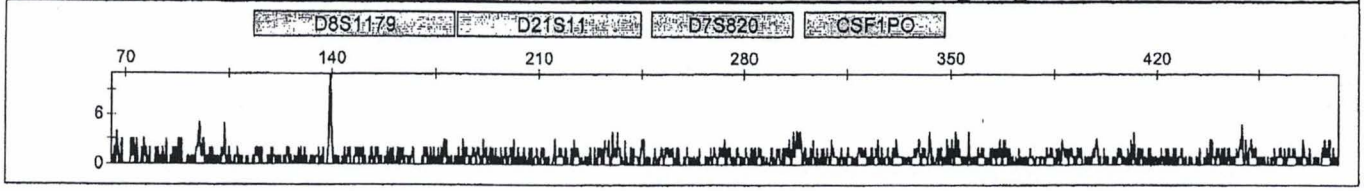
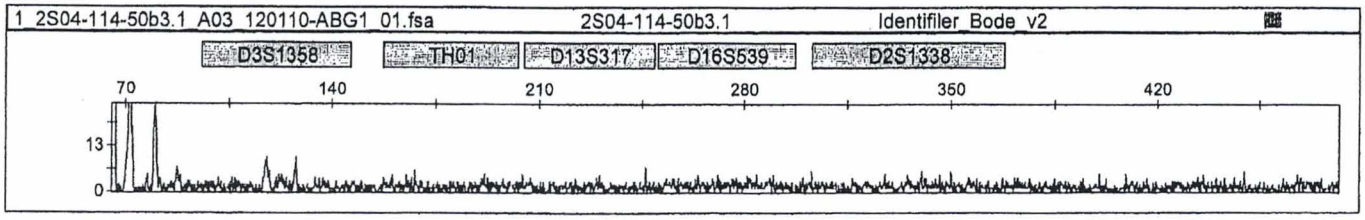
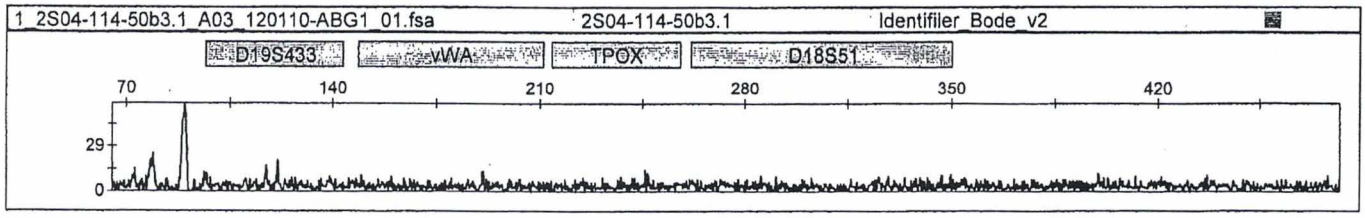
Sample File	Sample Name	Panel	SQ
1_2S04-114-50b3.1_A03_120110-ABG1_01.fsa	2S04-114-50b3.1	Identifiler_Bode_v2	



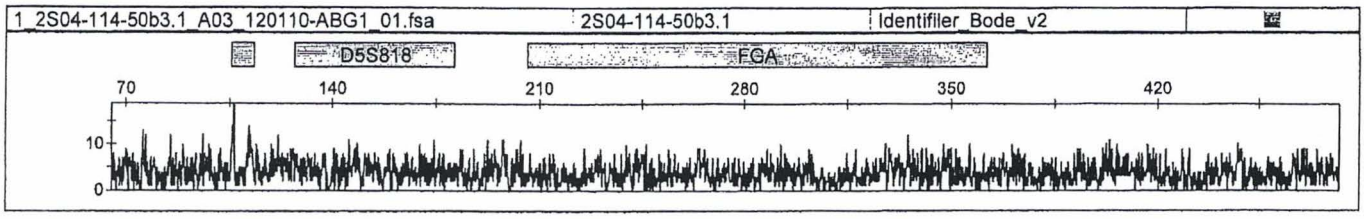
1_2S04-114-50b3.1_A03_120110-ABG1_01.fsa | 2S04-114-50b3.1 | Identifiler_Bode_v2



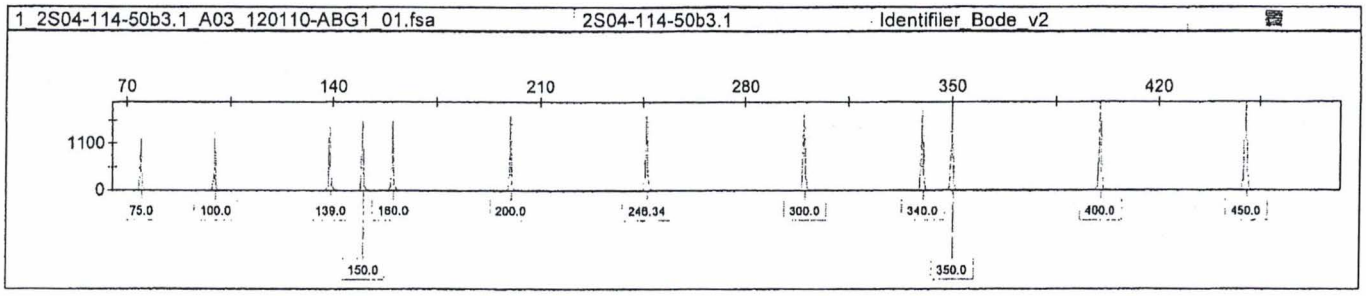
1_2S04-114-50b3.1_A03_120110-ABG1_01.fsa | 2S04-114-50b3.1 | Identifiler_Bode_v2



1_2S04-114-50b3.1_A03_120110-ABG1_01.fsa | 2S04-114-50b3.1 | Identifiler_Bode_v2



1_2S04-114-50b3.1_A03_120110-ABG1_01.fsa | 2S04-114-50b3.1 | Identifiler_Bode_v2



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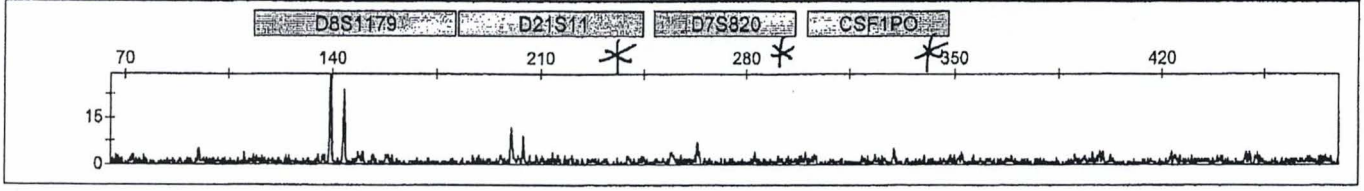
Applied Biosystems

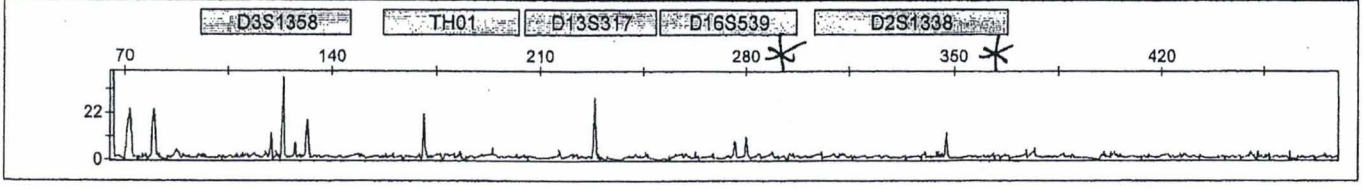
GeneMapper ID v3.2.1

GMID14_120110-ABG1_2S04-114_ABG_ID

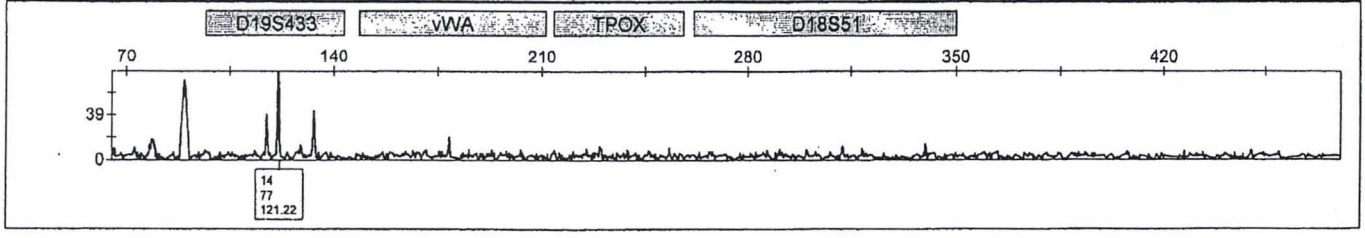
Sample File	Sample Name	Panel	SQ
1_2S04-114-51a1.1_B03_120110-ABG1_03.fsa	2S04-114-51a1.1	Identifiler_Bode_v2	



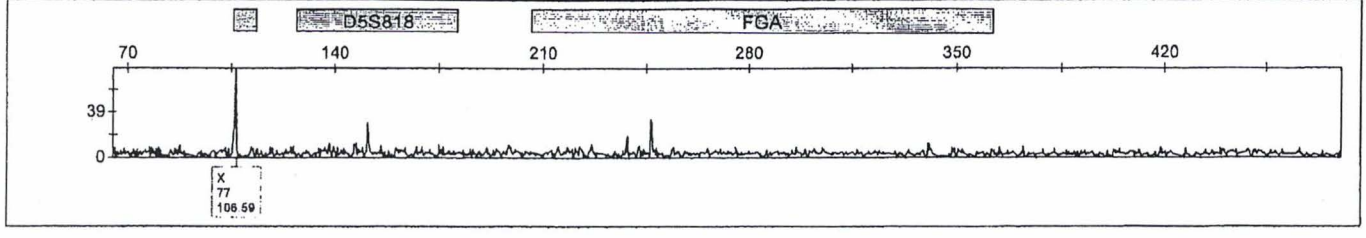
1_2S04-114-51a1.1_B03_120110-ABG1_03.fsa	2S04-114-51a1.1	Identifiler_Bode_v2	



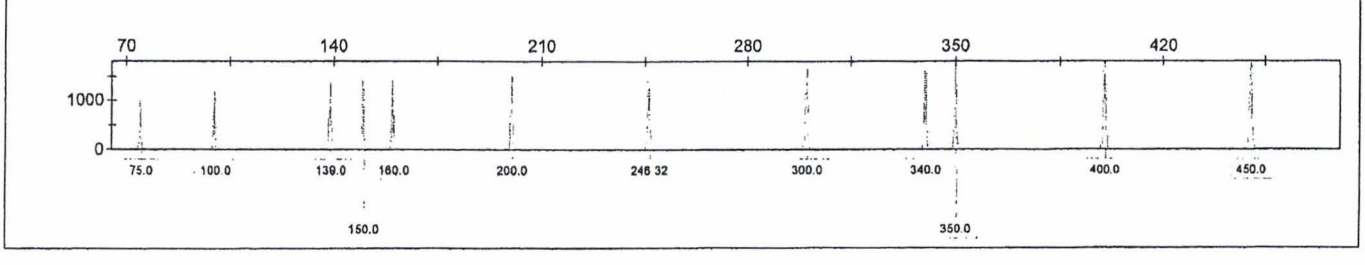
1_2S04-114-51a1.1_B03_120110-ABG1_03.fsa	2S04-114-51a1.1	Identifiler_Bode_v2	



1_2S04-114-51a1.1_B03_120110-ABG1_03.fsa	2S04-114-51a1.1	Identifiler_Bode_v2	



1_2S04-114-51a1.1_B03_120110-ABG1_03.fsa	2S04-114-51a1.1	Identifiler_Bode_v2	



* See .2 for additional alleles @ D21, D7, CSF, D16 & D2. um 012511

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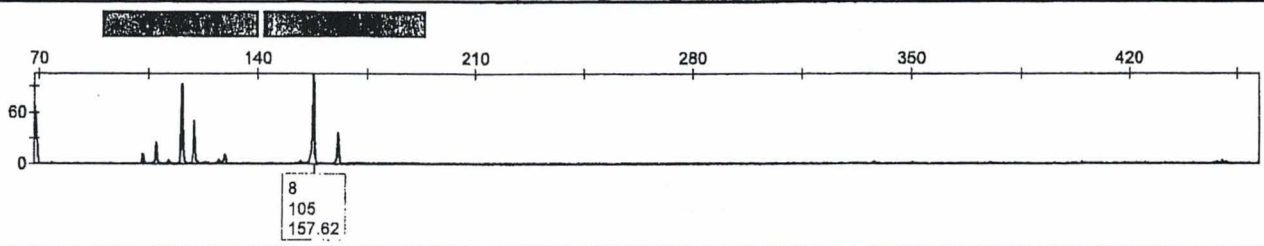
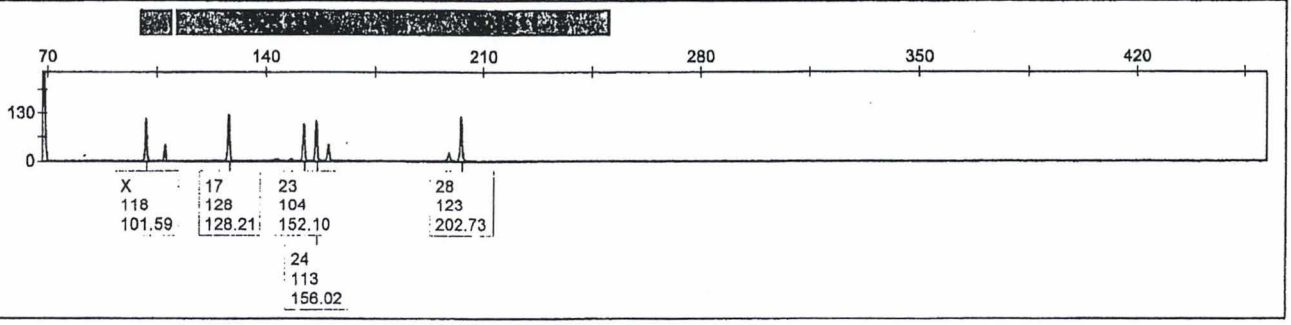
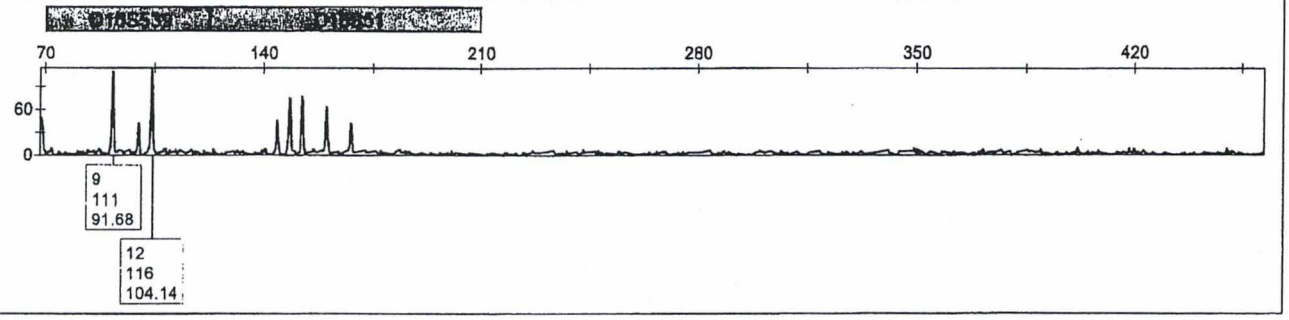
Sample File	Panel	SQO	SQ
1_2S04-114-51a1.2_A02_012111-LAR2_02.fsa	MiniFiler_GS500_v1		



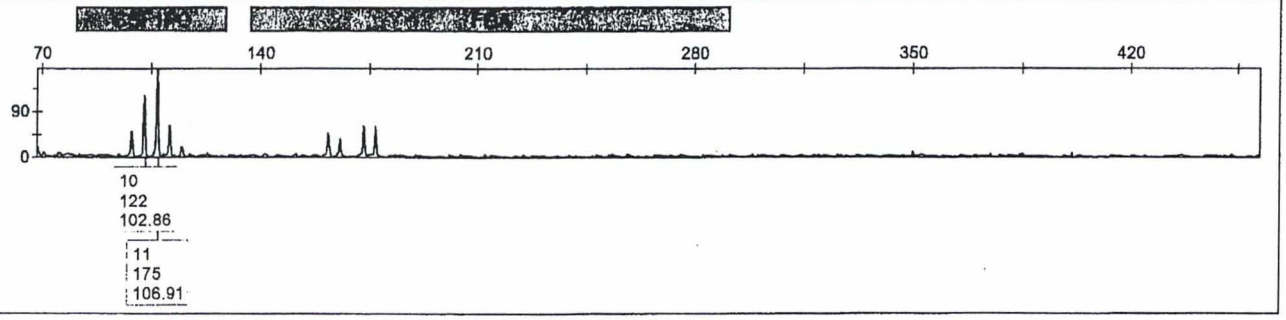
1_2S04-114-51a1.2_A02_012111-LAR2_02.fsa MiniFiler_GS500_v1



1_2S04-114-51a1.2_A02_012111-LAR2_02.fsa MiniFiler_GS500_v1



1_2S04-114-51a1.2_A02_012111-LAR2_02.fsa MiniFiler_GS500_v1



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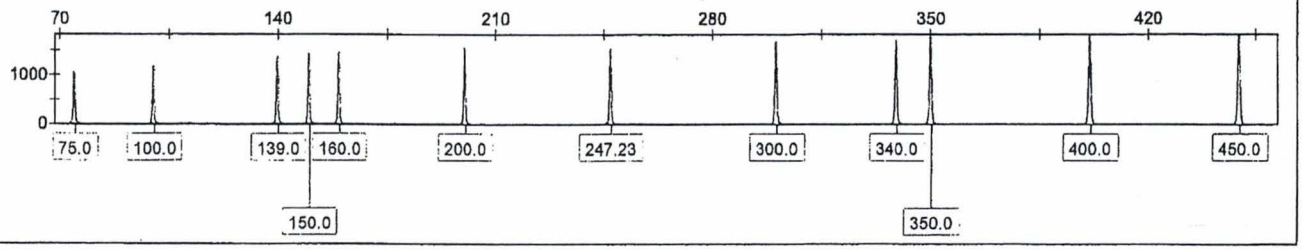
Sample File	Panel	SQO	SQ
1_2S04-114-51a1.2_A02_012111-LAR2_02.fsa	MiniFiler_GS500_v1		



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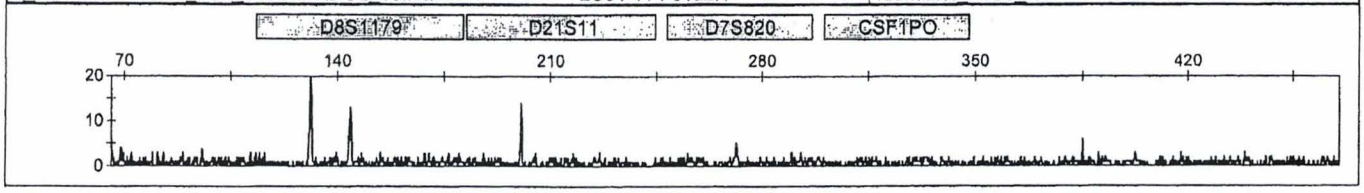
Applied Biosystems

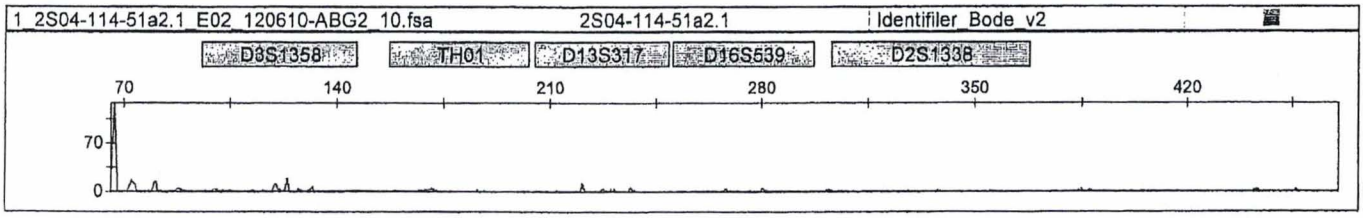
GeneMapper ID v3.2.1

GMID14_120610-ABG2_2S04-114_ABG_ID

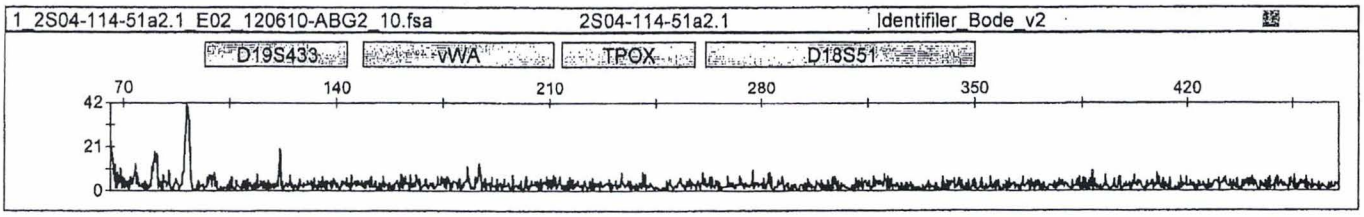
Sample File	Sample Name	Panel	SQ
1_2S04-114-51a2.1_E02_120610-ABG2_10.fsa	2S04-114-51a2.1	Identifiler_Bode_v2	



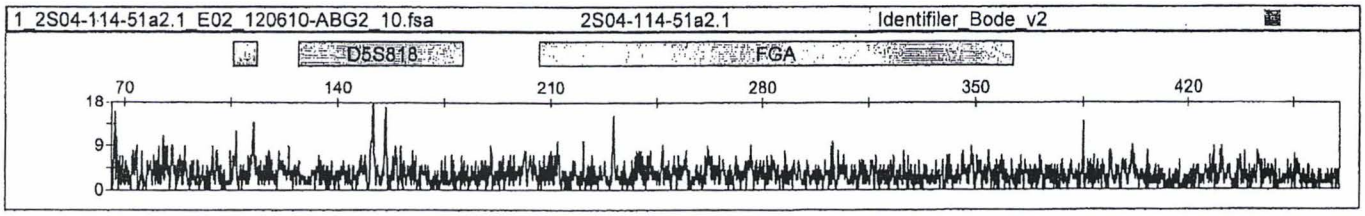
1_2S04-114-51a2.1_E02_120610-ABG2_10.fsa	2S04-114-51a2.1	Identifiler_Bode_v2	



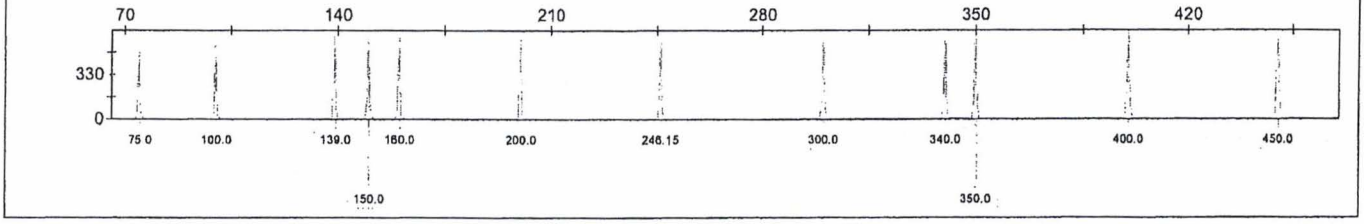
1_2S04-114-51a2.1_E02_120610-ABG2_10.fsa	2S04-114-51a2.1	Identifiler_Bode_v2	



1_2S04-114-51a2.1_E02_120610-ABG2_10.fsa	2S04-114-51a2.1	Identifiler_Bode_v2	



1_2S04-114-51a2.1_E02_120610-ABG2_10.fsa	2S04-114-51a2.1	Identifiler_Bode_v2	



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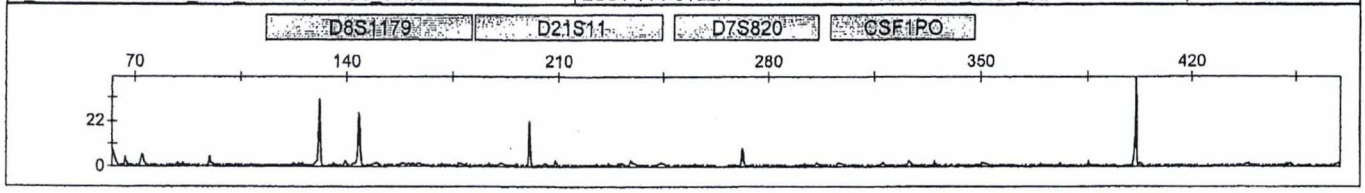
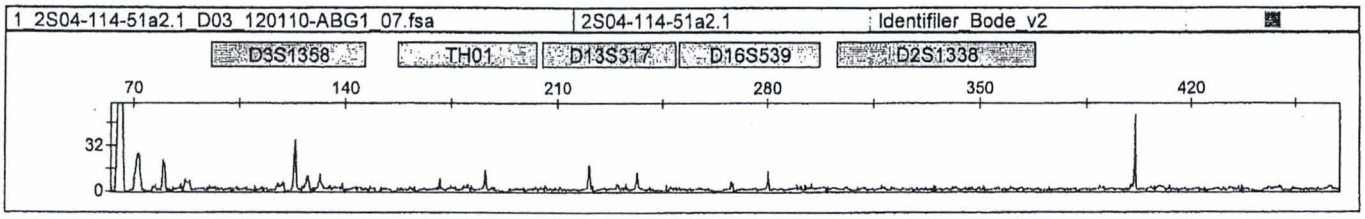
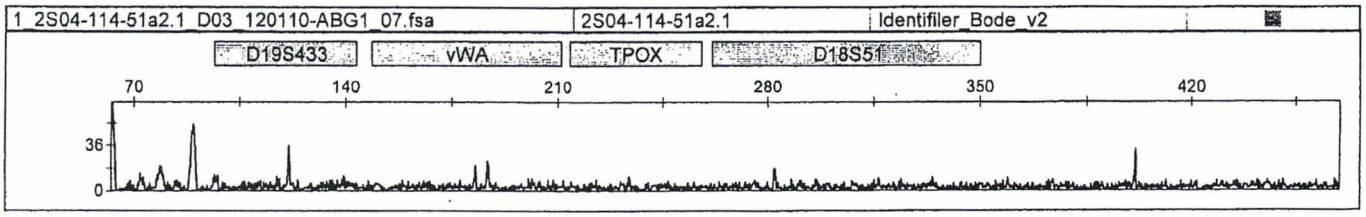
Sample File	Sample Name	Panel	SQ
1_2S04-114-51a2.1_D03_120110-ABG1_07.fsa	2S04-114-51a2.1	Identifiler_Bode_v2	



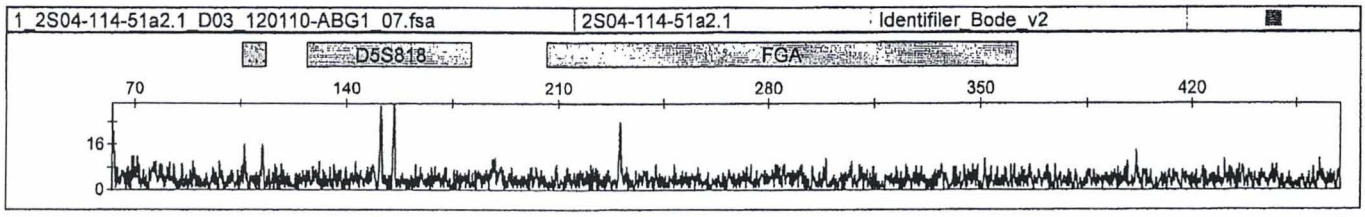
1_2S04-114-51a2.1_D03_120110-ABG1_07.fsa | 2S04-114-51a2.1 | Identifiler_Bode_v2



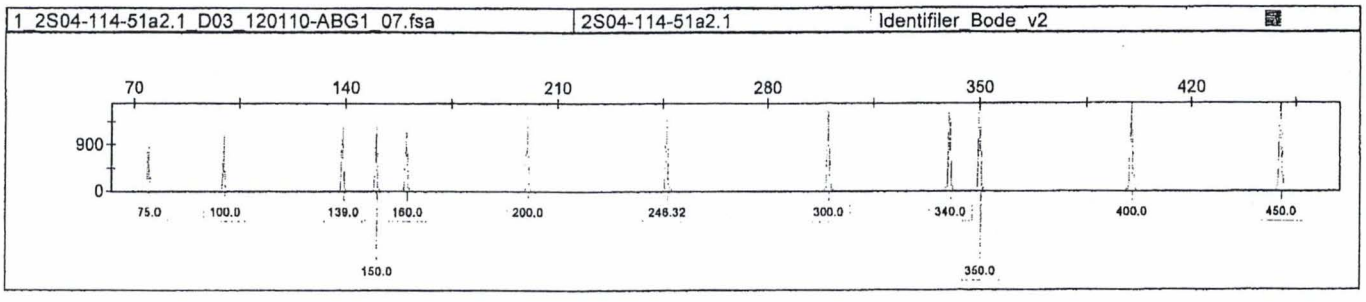
1_2S04-114-51a2.1_D03_120110-ABG1_07.fsa | 2S04-114-51a2.1 | Identifiler_Bode_v2



1_2S04-114-51a2.1_D03_120110-ABG1_07.fsa | 2S04-114-51a2.1 | Identifiler_Bode_v2



1_2S04-114-51a2.1_D03_120110-ABG1_07.fsa | 2S04-114-51a2.1 | Identifiler_Bode_v2



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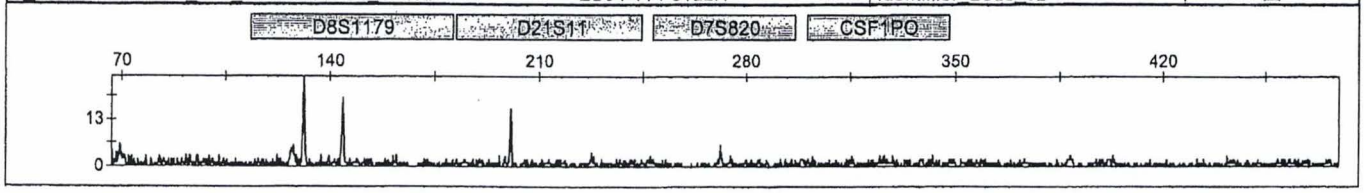
Applied Biosystems

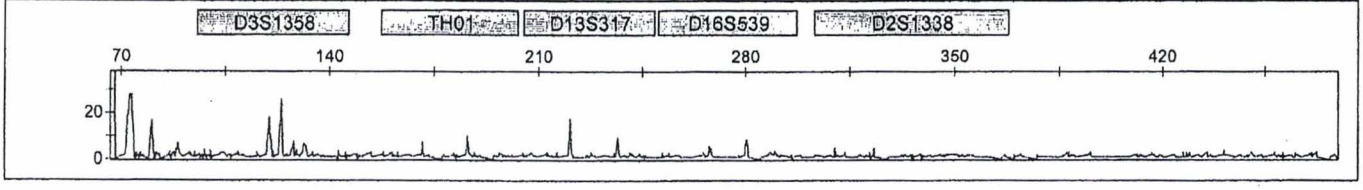
GeneMapper ID v3.2.1

GMID14_120610-ABG2_2S04-114_ABG_ID

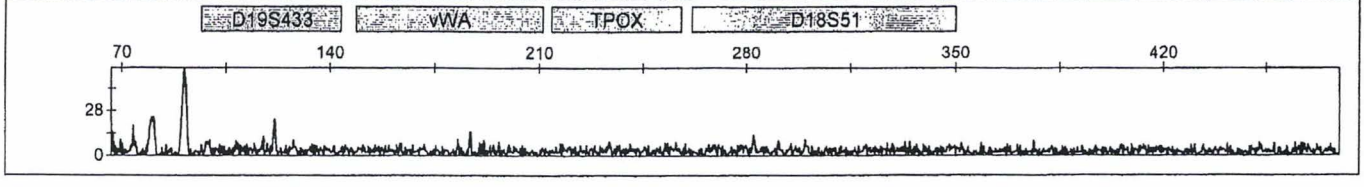
Sample File	Sample Name	Panel	SQ
1_2S04-114-51a2.1_F02_120610-ABG2_12.fsa	2S04-114-51a2.1	Identifiler_Bode_v2	



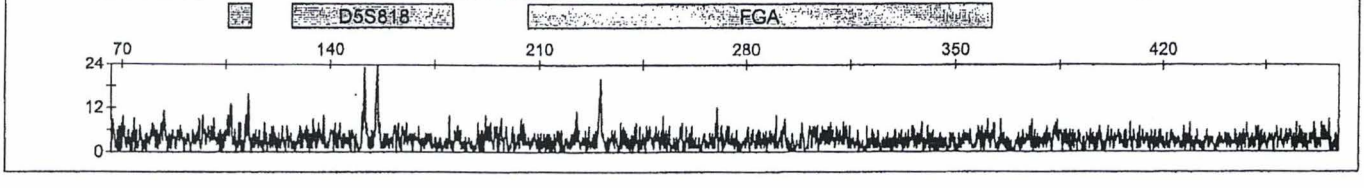
1_2S04-114-51a2.1_F02_120610-ABG2_12.fsa	2S04-114-51a2.1	Identifiler_Bode_v2	



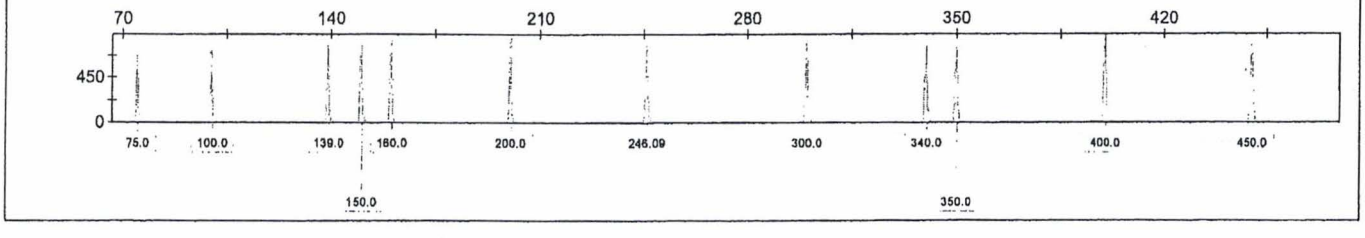
1_2S04-114-51a2.1_F02_120610-ABG2_12.fsa	2S04-114-51a2.1	Identifiler_Bode_v2	



1_2S04-114-51a2.1_F02_120610-ABG2_12.fsa	2S04-114-51a2.1	Identifiler_Bode_v2	



1_2S04-114-51a2.1_F02_120610-ABG2_12.fsa	2S04-114-51a2.1	Identifiler_Bode_v2	



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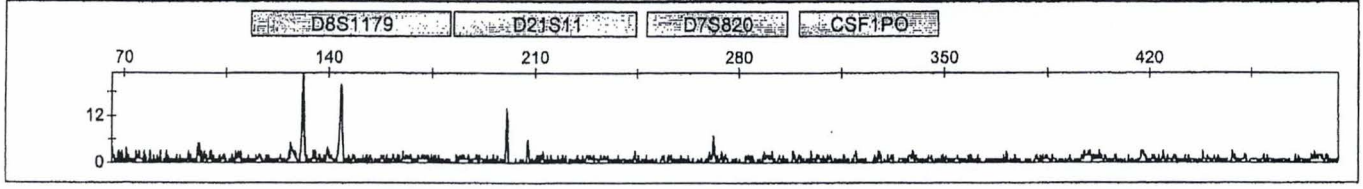
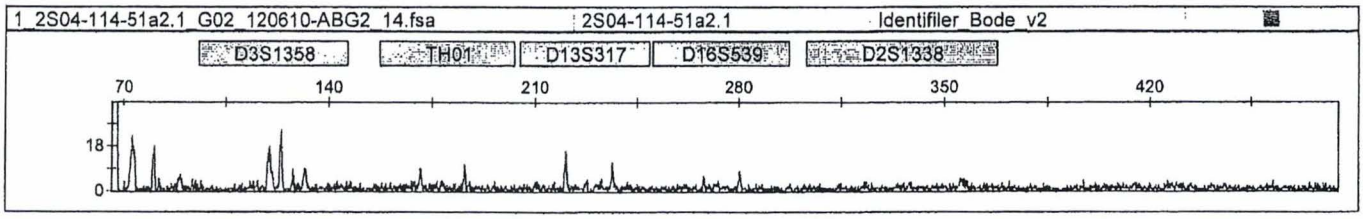
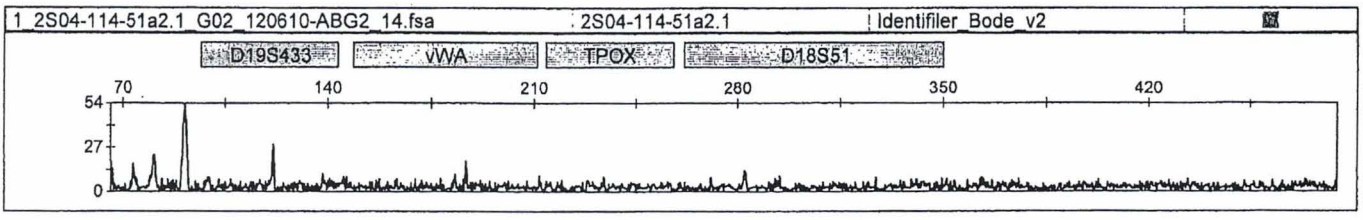
Sample File	Sample Name	Panel	SQ
1_2S04-114-51a2.1_G02_120610-ABG2_14.fsa	2S04-114-51a2.1	Identifiler_Bode_v2	



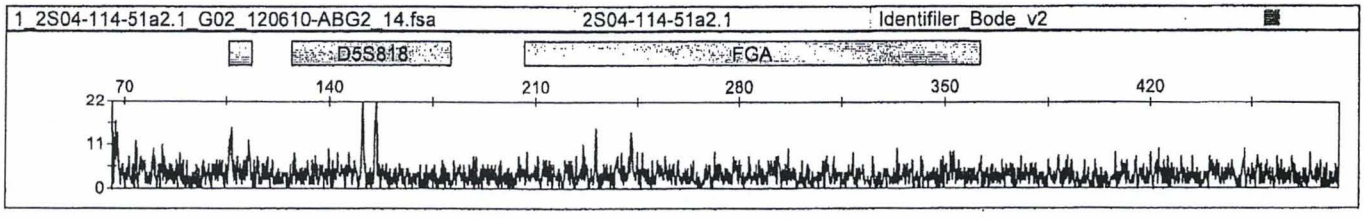
1_2S04-114-51a2.1_G02_120610-ABG2_14.fsa | 2S04-114-51a2.1 | Identifiler_Bode_v2



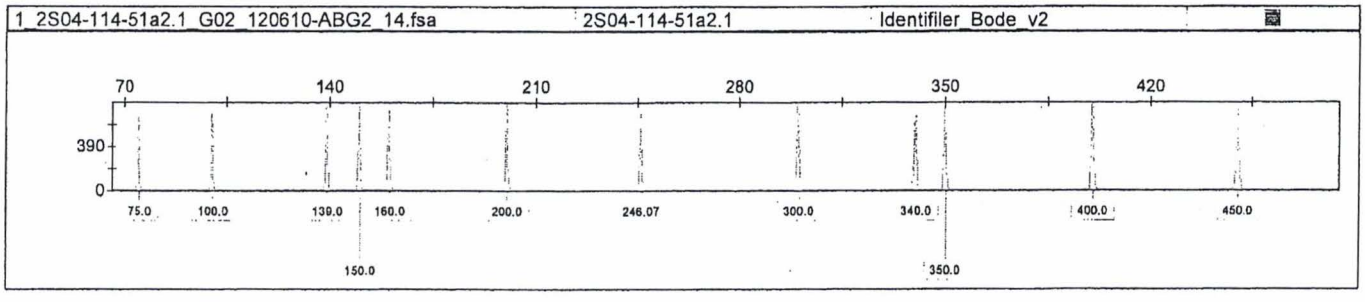
1_2S04-114-51a2.1_G02_120610-ABG2_14.fsa | 2S04-114-51a2.1 | Identifiler_Bode_v2



1_2S04-114-51a2.1_G02_120610-ABG2_14.fsa | 2S04-114-51a2.1 | Identifiler_Bode_v2



1_2S04-114-51a2.1_G02_120610-ABG2_14.fsa | 2S04-114-51a2.1 | Identifiler_Bode_v2



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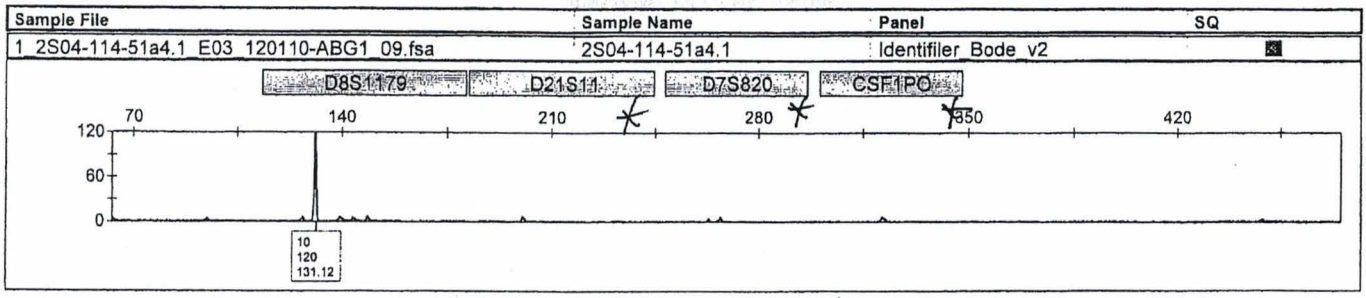
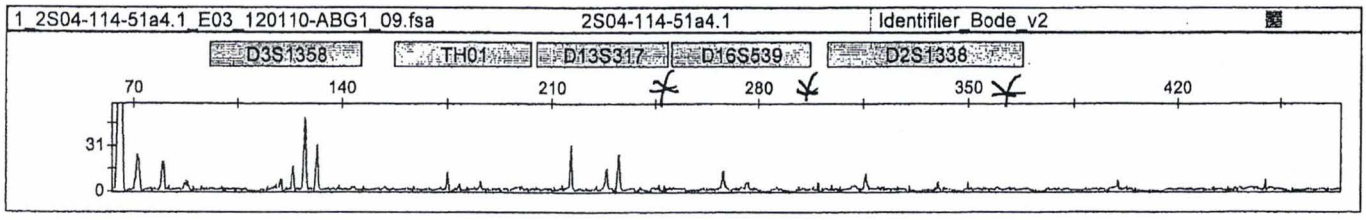
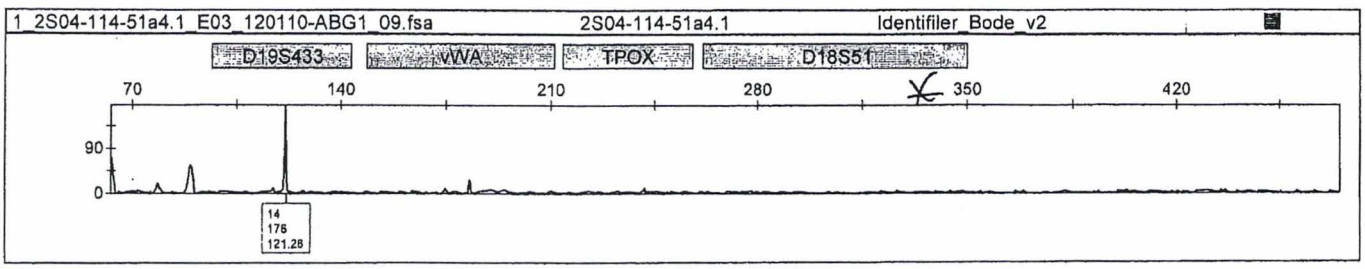
Applied Biosystems

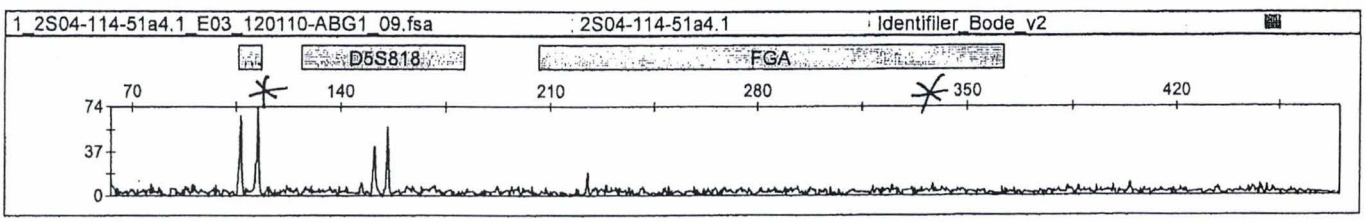
GeneMapper ID v3.2.1

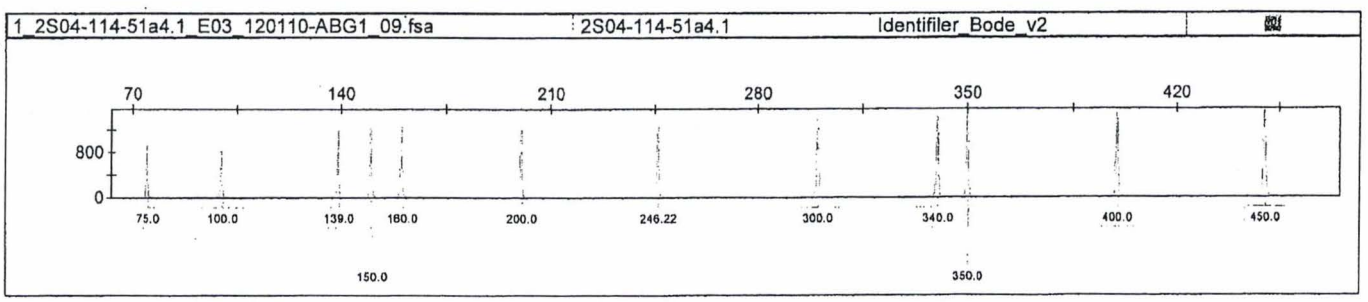
GMID14_120110-ABG1_2S04-114_ABG_ID











* See .2 for additional alleles @ D21, D7, CSF, D13, D16, D2, D18, FGA & Amelogenin. MR 012511

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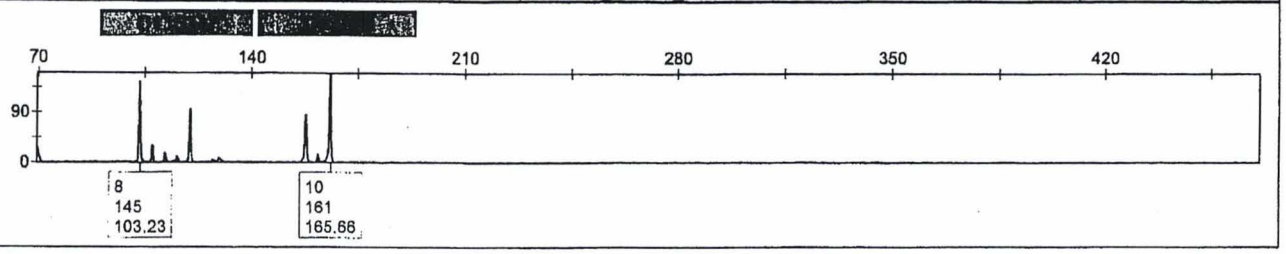
Applied Biosystems

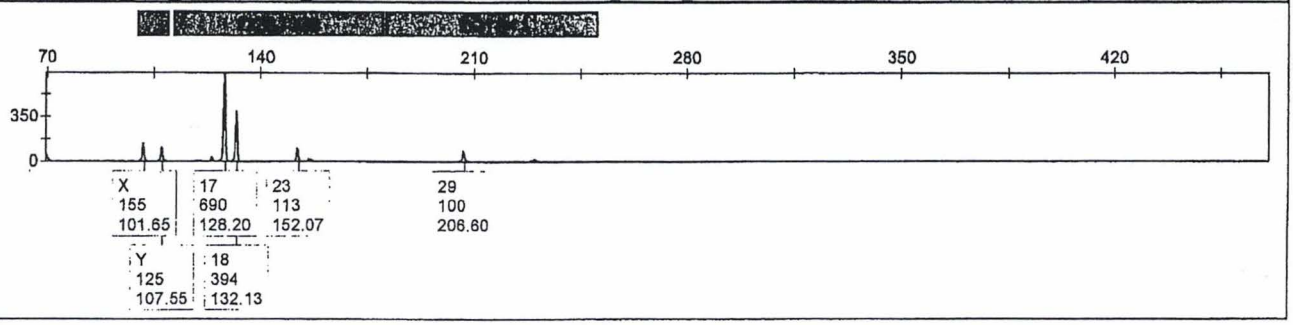
GeneMapper ID v3.2.1

GMID14_012111-LAR2_2S04-114_LAR_MF

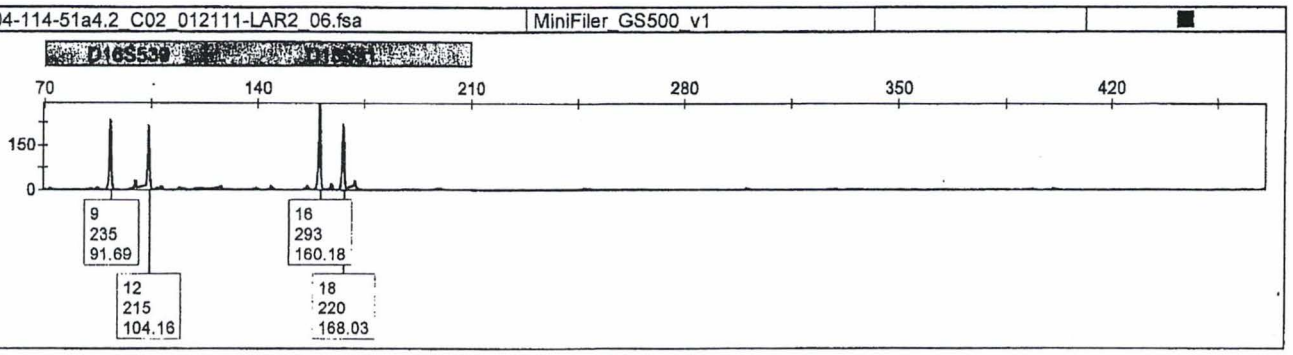
Sample File	Panel	SQO	SQ
1_2S04-114-51a4.2_C02_012111-LAR2_06.fsa	MiniFiler_GS500_v1		



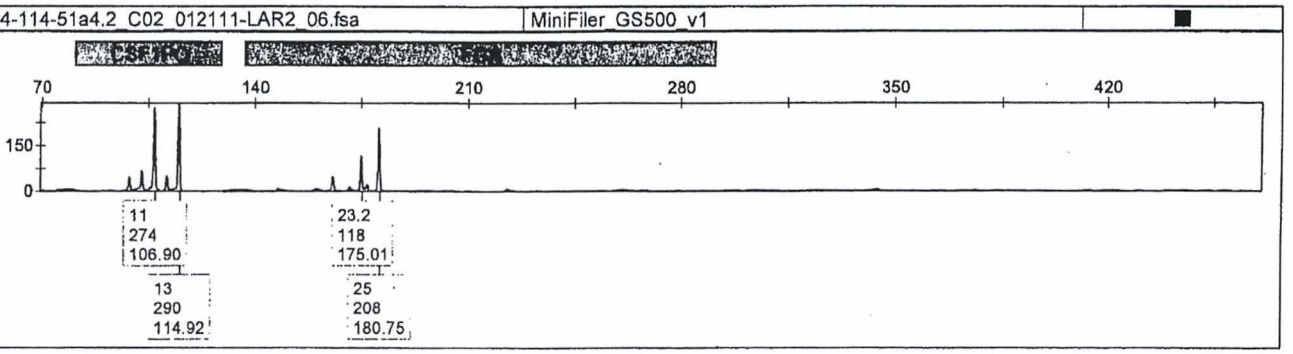
1_2S04-114-51a4.2_C02_012111-LAR2_06.fsa	MiniFiler_GS500_v1		



1_2S04-114-51a4.2_C02_012111-LAR2_06.fsa	MiniFiler_GS500_v1		



1_2S04-114-51a4.2_C02_012111-LAR2_06.fsa	MiniFiler_GS500_v1		



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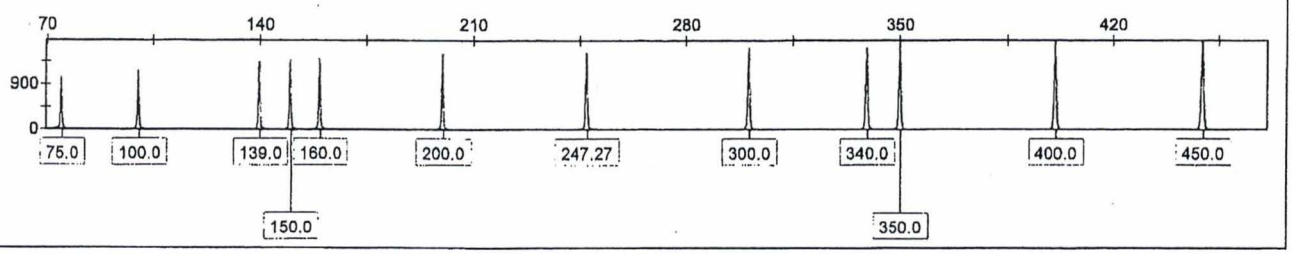
Sample File	Panel	SQO	SQ
1_2S04-114-51a4.2_C02_012111-LAR2_06.fsa	MiniFiler_GS500_v1		



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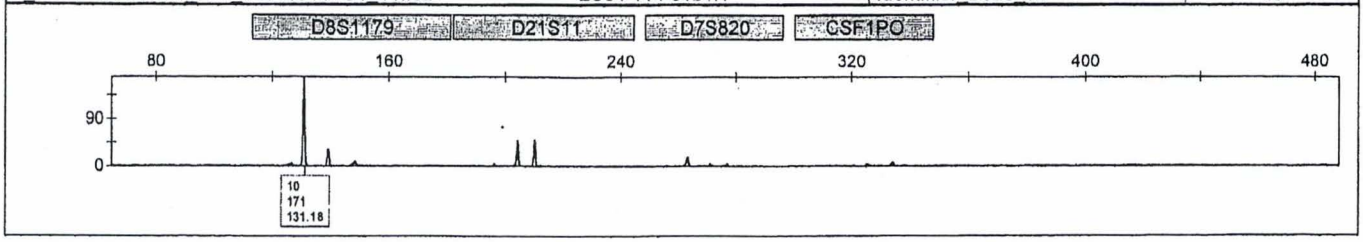
Applied Biosystems

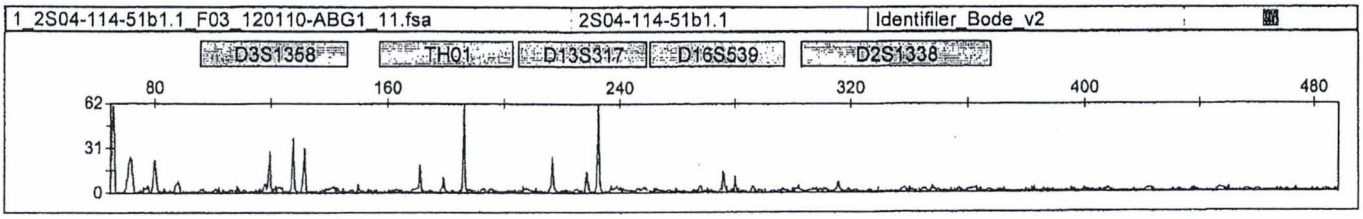
GeneMapper ID v3.2.1

GMID14_120110-ABG1_2S04-114_ABG_ID

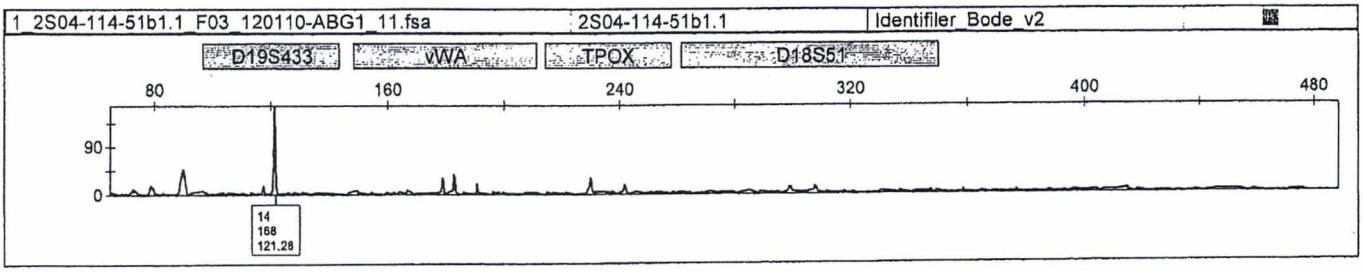
Sample File	Sample Name	Panel	SQ
1_2S04-114-51b1.1_F03_120110-ABG1_11.fsa	2S04-114-51b1.1	Identifiler_Bode_v2	



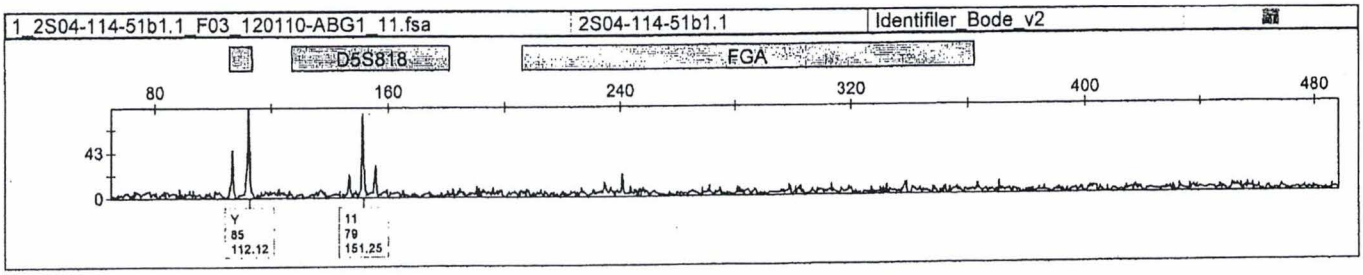
1_2S04-114-51b1.1_F03_120110-ABG1_11.fsa	2S04-114-51b1.1	Identifiler_Bode_v2	



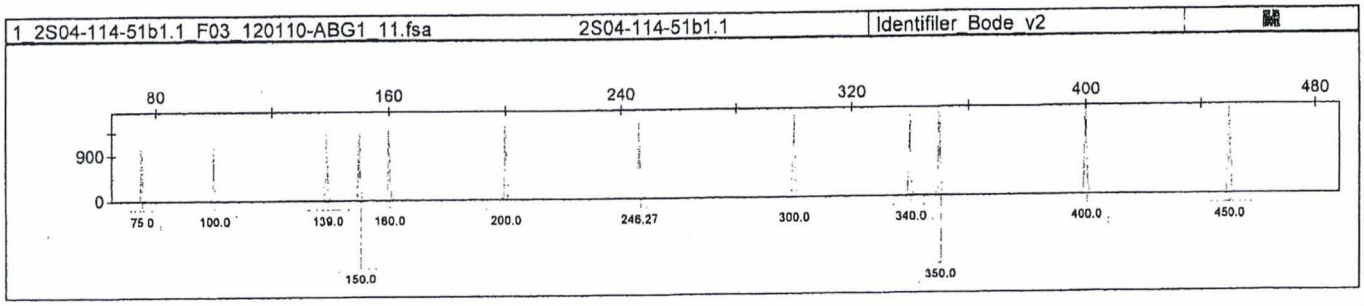
1_2S04-114-51b1.1_F03_120110-ABG1_11.fsa	2S04-114-51b1.1	Identifiler_Bode_v2	



1_2S04-114-51b1.1_F03_120110-ABG1_11.fsa	2S04-114-51b1.1	Identifiler_Bode_v2	

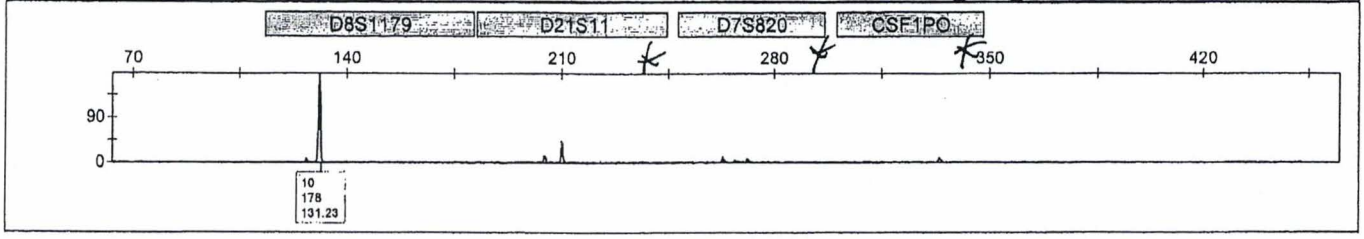


1_2S04-114-51b1.1_F03_120110-ABG1_11.fsa	2S04-114-51b1.1	Identifiler_Bode_v2	

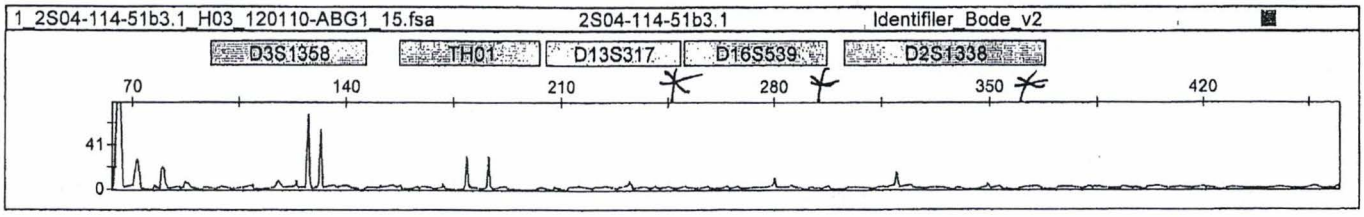


12-2

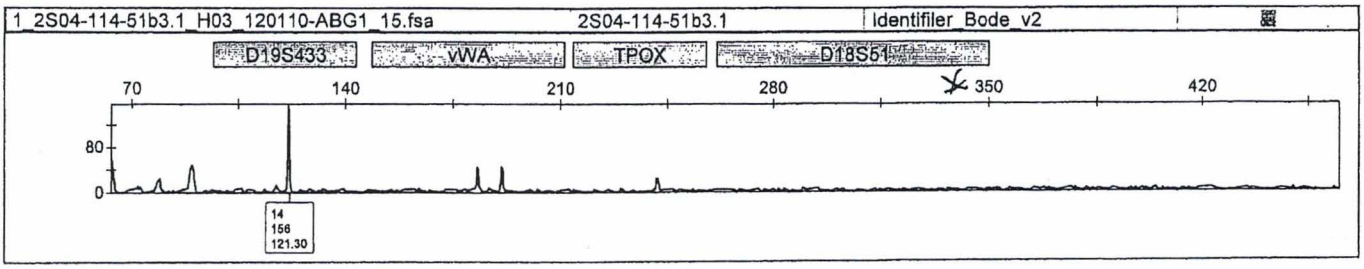
Sample File	Sample Name	Panel	SQ
1_2S04-114-51b3.1_H03_120110-ABG1_15.fsa	2S04-114-51b3.1	Identifiler_Bode_v2	



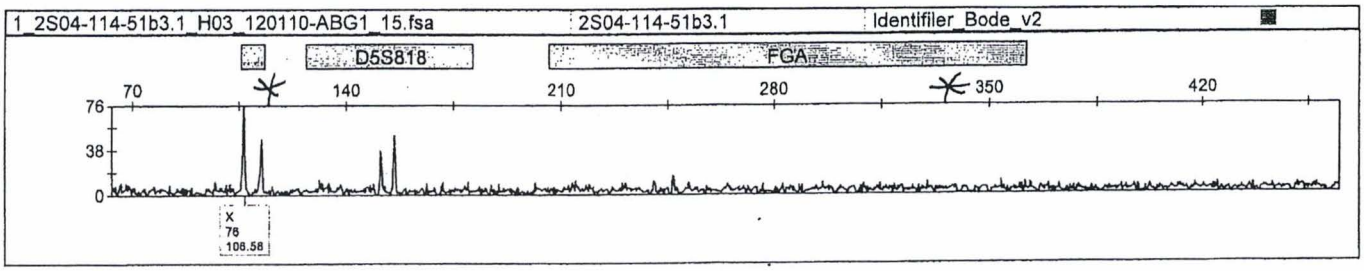
1_2S04-114-51b3.1_H03_120110-ABG1_15.fsa | 2S04-114-51b3.1 | Identifiler_Bode_v2



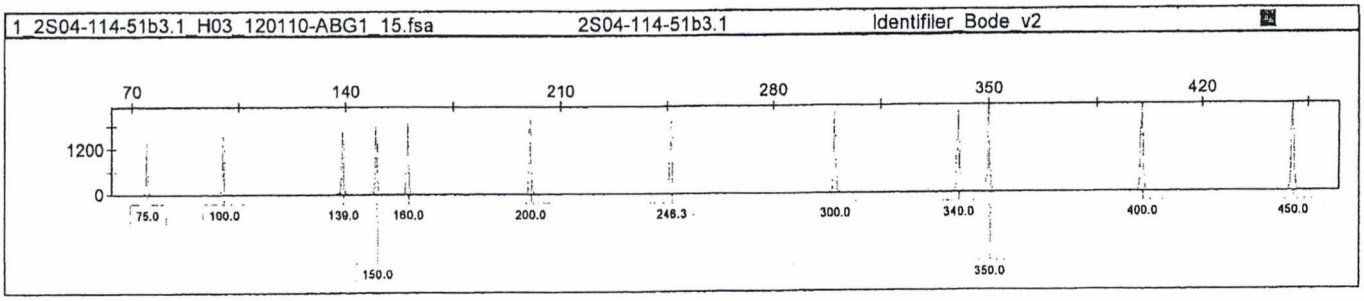
1_2S04-114-51b3.1_H03_120110-ABG1_15.fsa | 2S04-114-51b3.1 | Identifiler_Bode_v2



1_2S04-114-51b3.1_H03_120110-ABG1_15.fsa | 2S04-114-51b3.1 | Identifiler_Bode_v2



1_2S04-114-51b3.1_H03_120110-ABG1_15.fsa | 2S04-114-51b3.1 | Identifiler_Bode_v2



* See 2 for additional alleles @ D21, D7, CSF, D13, D16, D2, D18, FGA & Amelogenin. use 012511

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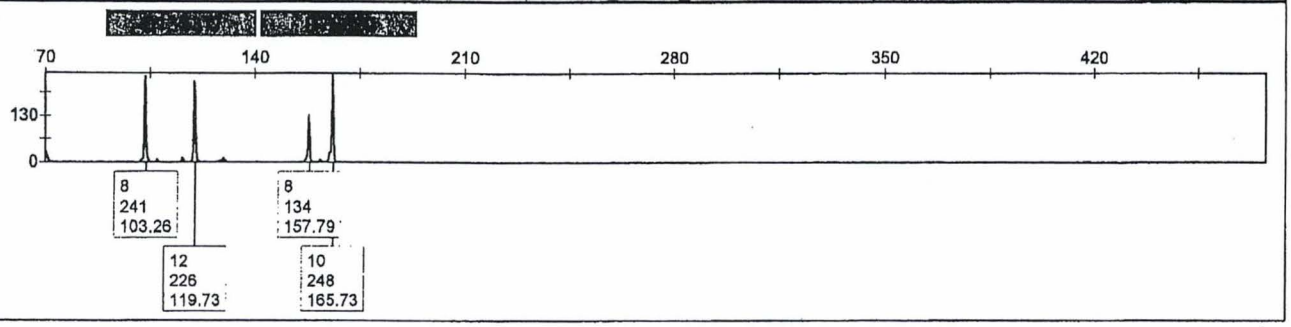
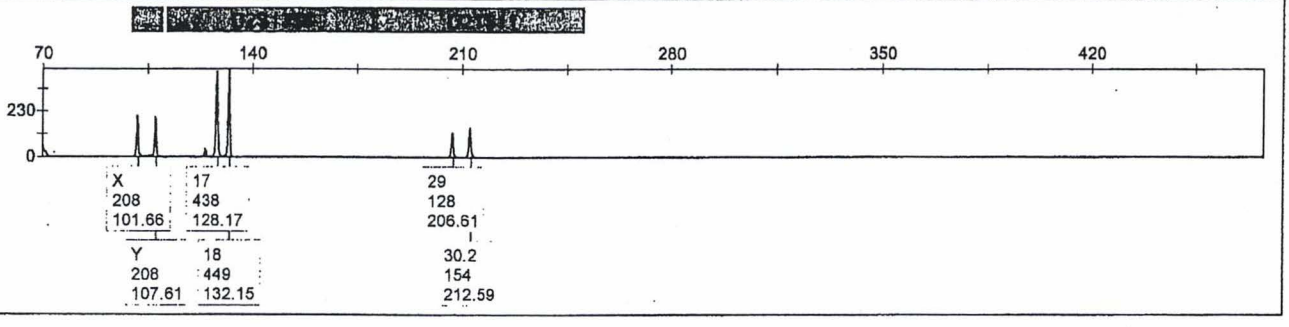
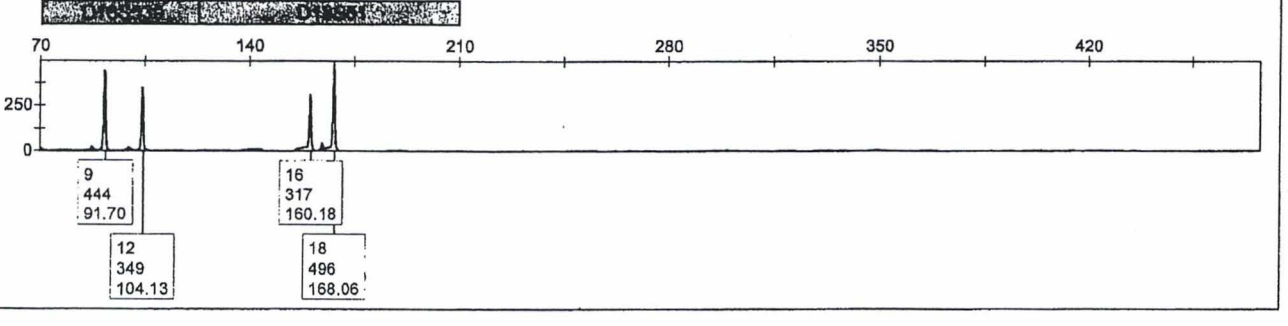
Sample File	Panel	SQO	SQ
1_2S04-114-51b3.2_E02_012111-LAR2_10.fsa	MiniFiler_GS500_v1		



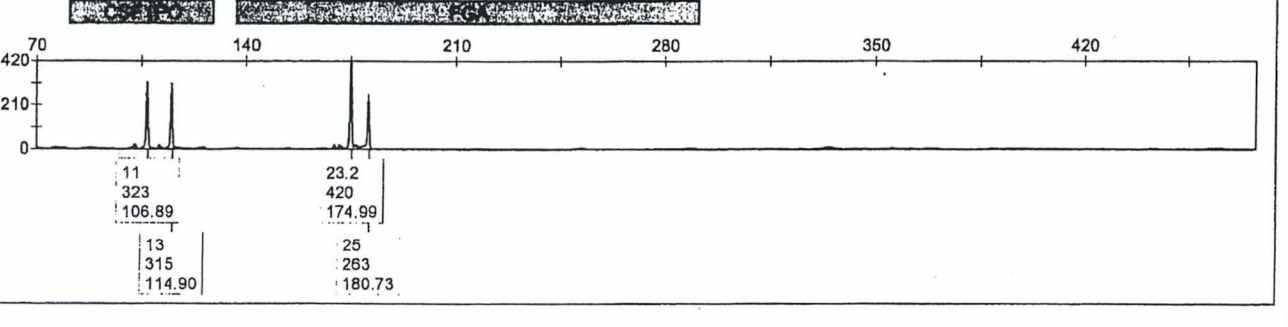
1_2S04-114-51b3.2_E02_012111-LAR2_10.fsa MiniFiler_GS500_v1



1_2S04-114-51b3.2_E02_012111-LAR2_10.fsa MiniFiler_GS500_v1



1_2S04-114-51b3.2_E02_012111-LAR2_10.fsa MiniFiler_GS500_v1



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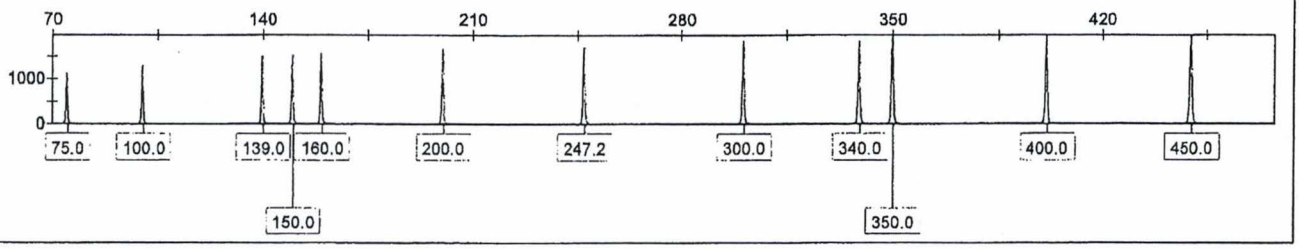
Sample File	Panel	SQO	SQ
1_2S04-114-51b3.2_E02_012111-LAR2_10.fsa	MiniFiler_GS500_v1		



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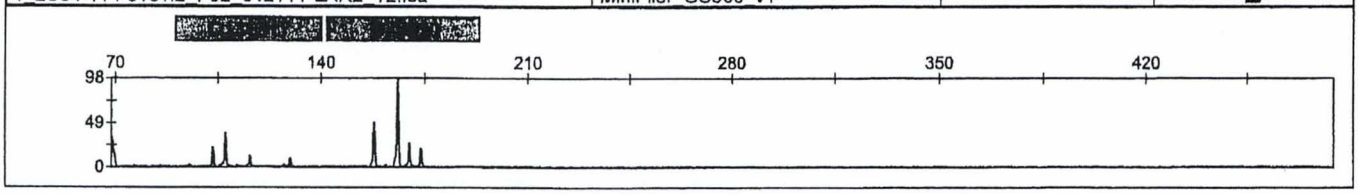
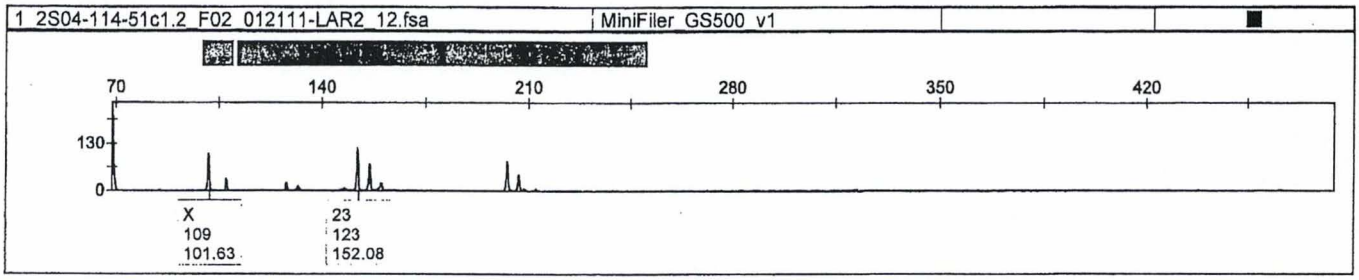
Applied Biosystems
GeneMapper ID v3.2.1

GMID14_012111-LAR2_2S04-114_LAR_MF

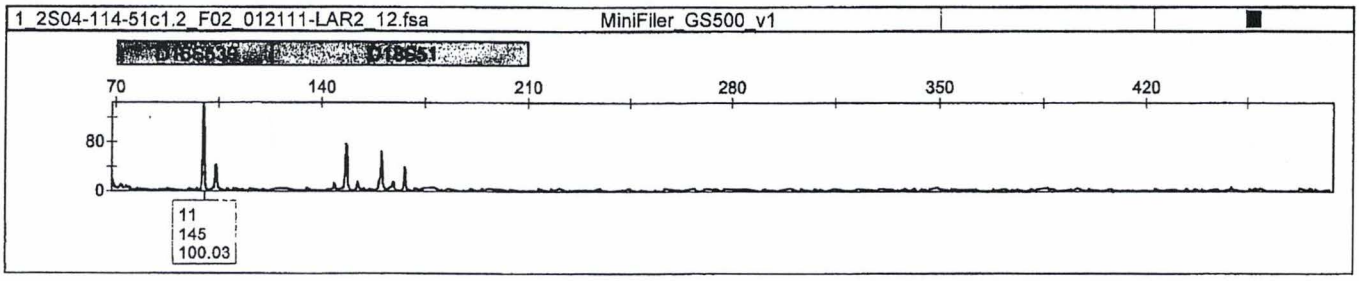
Sample File	Panel	SQO	SQ
1_2S04-114-51c1.2_F02_012111-LAR2_12.fsa	MiniFiler_GS500_v1		



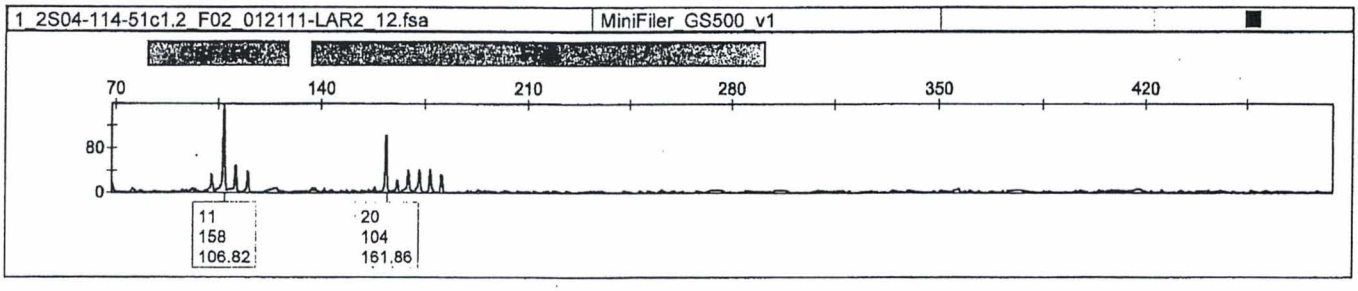
1_2S04-114-51c1.2_F02_012111-LAR2_12.fsa | MiniFiler_GS500_v1



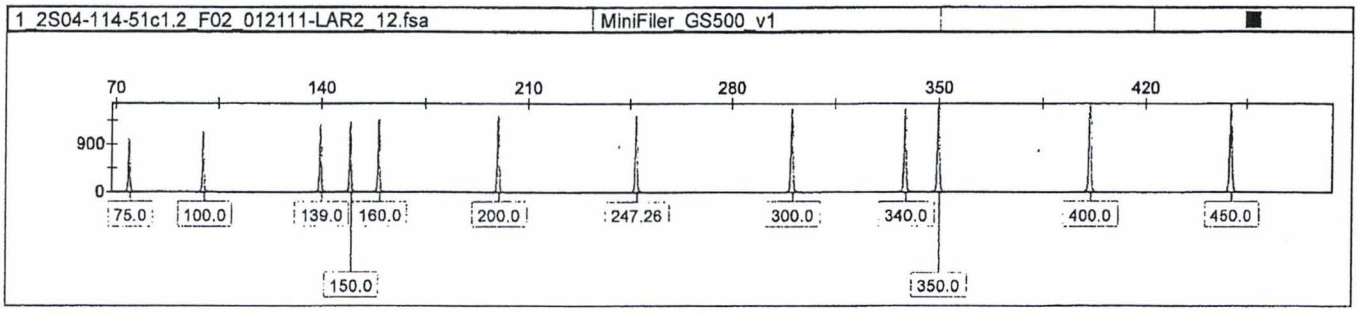
1_2S04-114-51c1.2_F02_012111-LAR2_12.fsa | MiniFiler_GS500_v1



1_2S04-114-51c1.2_F02_012111-LAR2_12.fsa | MiniFiler_GS500_v1



1_2S04-114-51c1.2_F02_012111-LAR2_12.fsa | MiniFiler_GS500_v1



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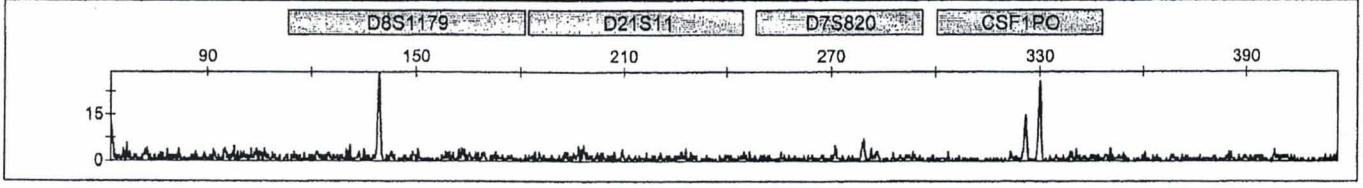
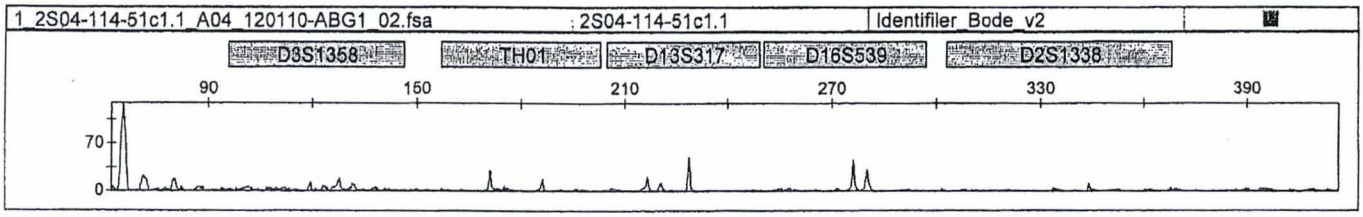
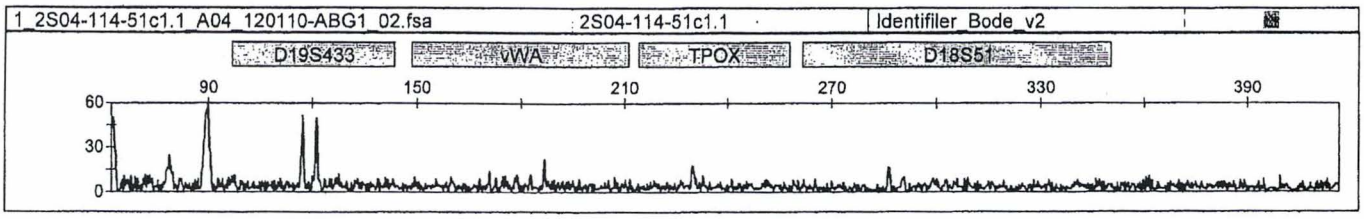
Sample File	Sample Name	Panel	SQ
1_2S04-114-51c1.1_A04_120110-ABG1_02.fsa	2S04-114-51c1.1	Identifiler_Bode_v2	



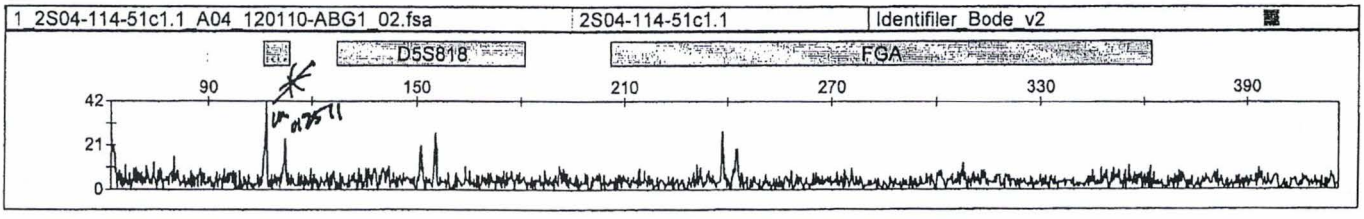
1_2S04-114-51c1.1_A04_120110-ABG1_02.fsa | 2S04-114-51c1.1 | Identifiler_Bode_v2



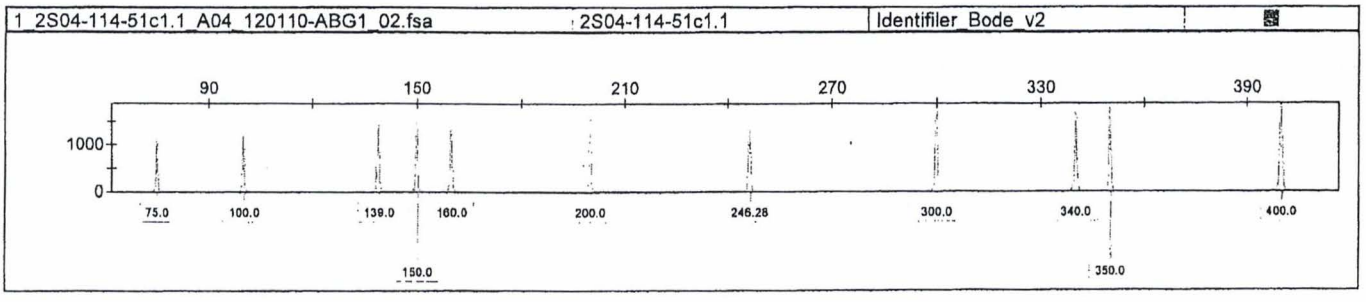
1_2S04-114-51c1.1_A04_120110-ABG1_02.fsa | 2S04-114-51c1.1 | Identifiler_Bode_v2



1_2S04-114-51c1.1_A04_120110-ABG1_02.fsa | 2S04-114-51c1.1 | Identifiler_Bode_v2



1_2S04-114-51c1.1_A04_120110-ABG1_02.fsa | 2S04-114-51c1.1 | Identifiler_Bode_v2



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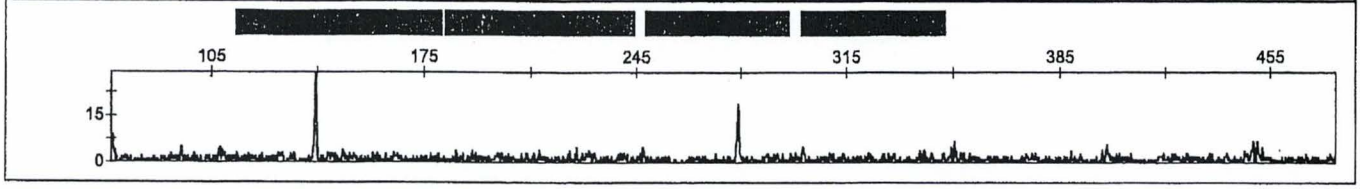
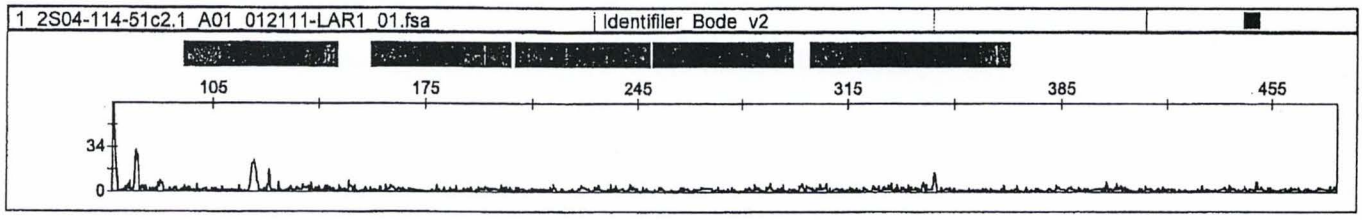
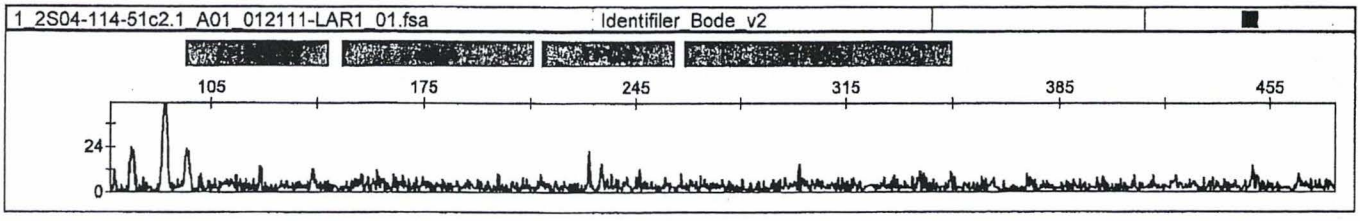
Sample File	Panel	SQO	SQ
1_2S04-114-51c2.1_A01_012111-LAR1_01.fsa	Identifiler_Bode_v2		



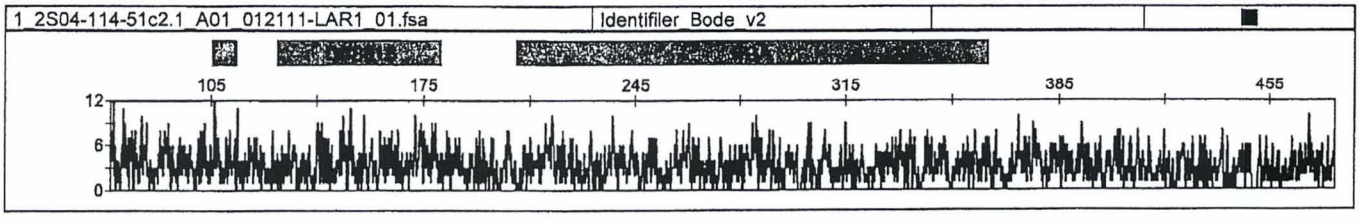
1_2S04-114-51c2.1_A01_012111-LAR1_01.fsa Identifiler_Bode_v2



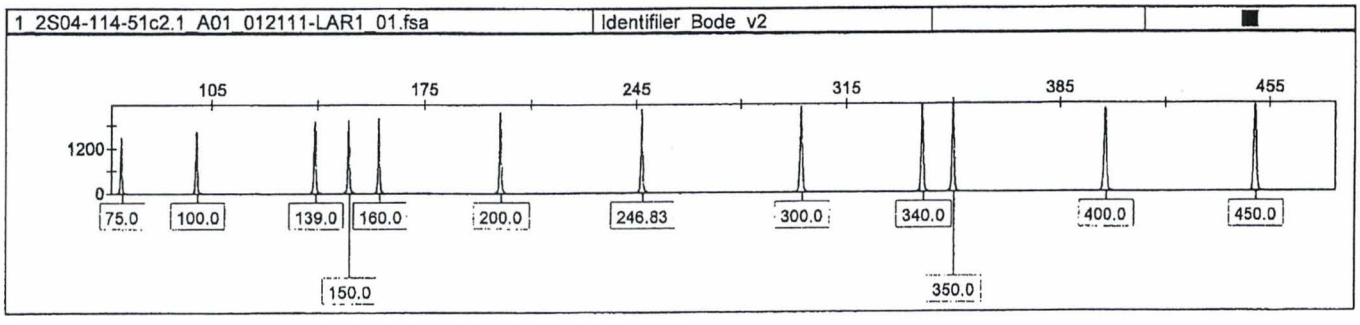
1_2S04-114-51c2.1_A01_012111-LAR1_01.fsa Identifiler_Bode_v2



1_2S04-114-51c2.1_A01_012111-LAR1_01.fsa Identifiler_Bode_v2



1_2S04-114-51c2.1_A01_012111-LAR1_01.fsa Identifiler_Bode_v2



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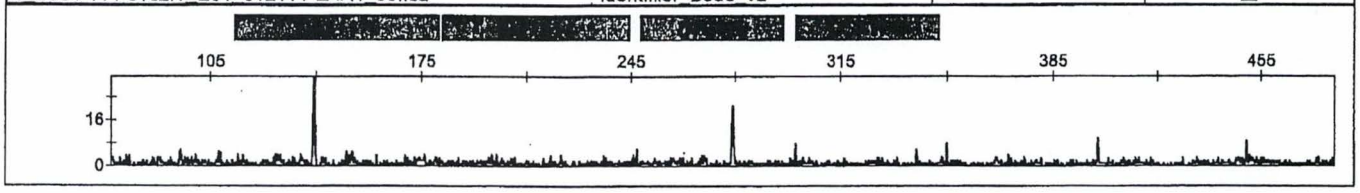
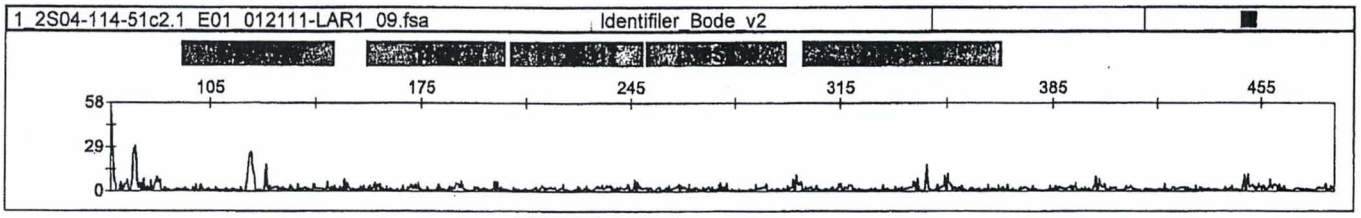
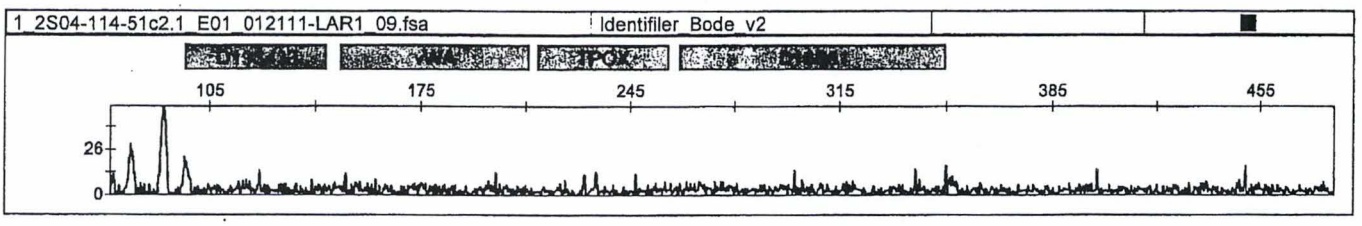
Sample File	Panel	SQO	SQ
1_2S04-114-51c2.1_E01_012111-LAR1_09.fsa	Identifiler_Bode_v2		



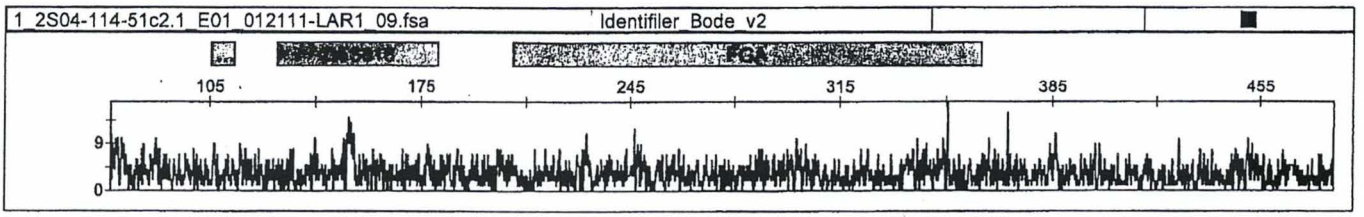
1_2S04-114-51c2.1_E01_012111-LAR1_09.fsa Identifiler_Bode_v2



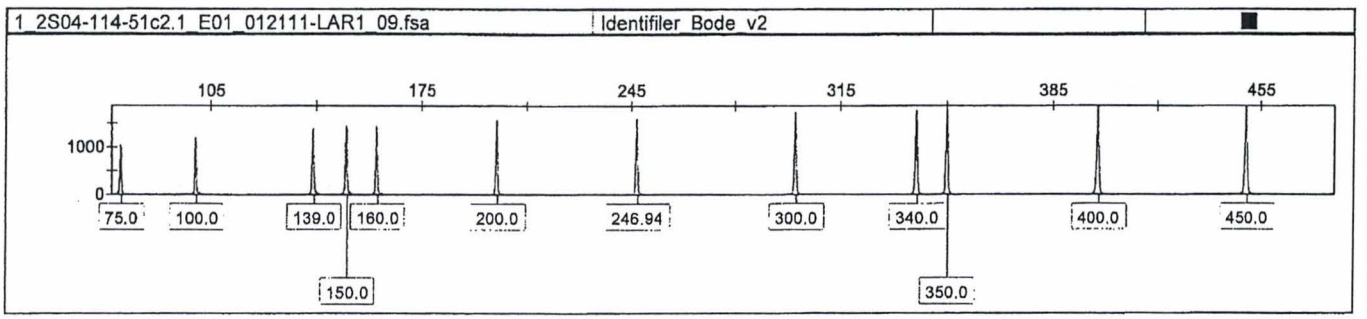
1_2S04-114-51c2.1_E01_012111-LAR1_09.fsa Identifiler_Bode_v2



1_2S04-114-51c2.1_E01_012111-LAR1_09.fsa Identifiler_Bode_v2



1_2S04-114-51c2.1_E01_012111-LAR1_09.fsa Identifiler_Bode_v2



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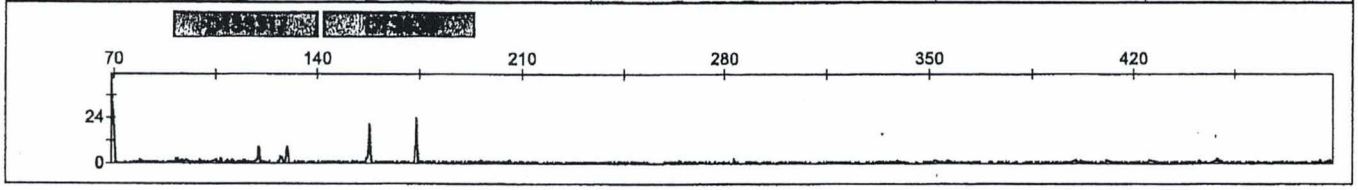
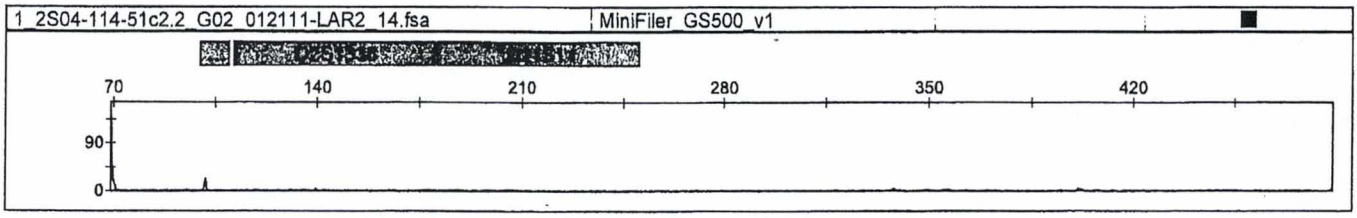
Applied Biosystems
GeneMapper ID v3.2.1

GMID14_012111-LAR2_2S04-114_LAR_MF

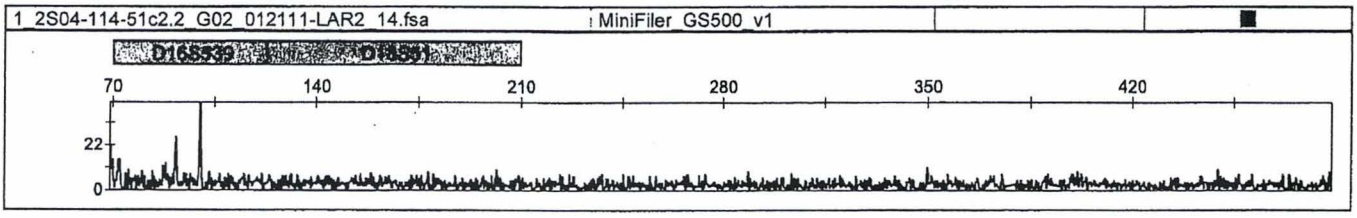
Sample File	Panel	SQO	SQ
1_2S04-114-51c2.2_G02_012111-LAR2_14.fsa	MiniFiler_GS500_v1		



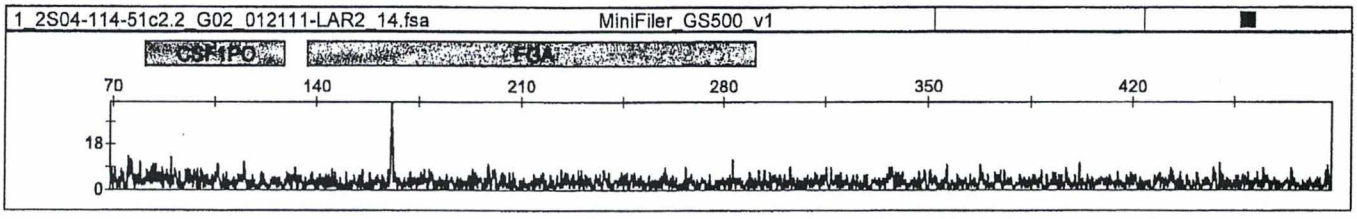
1_2S04-114-51c2.2_G02_012111-LAR2_14.fsa MiniFiler_GS500_v1



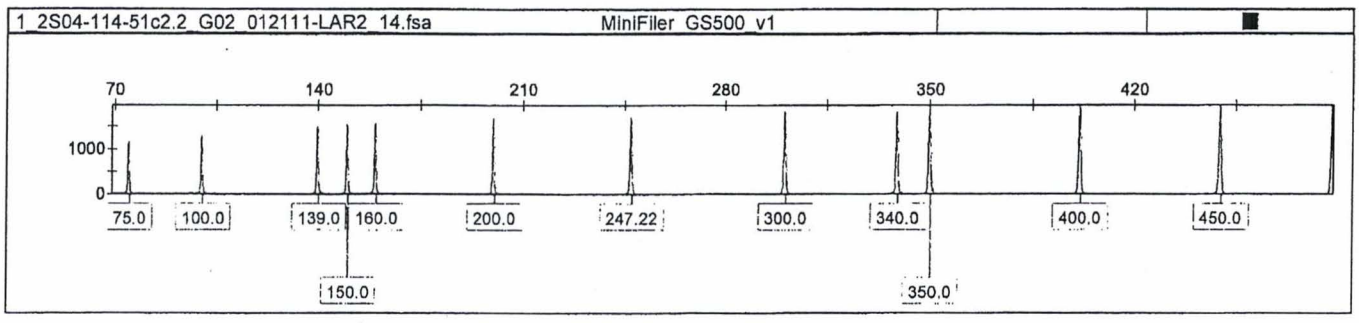
1_2S04-114-51c2.2_G02_012111-LAR2_14.fsa MiniFiler_GS500_v1



1_2S04-114-51c2.2_G02_012111-LAR2_14.fsa MiniFiler_GS500_v1



1_2S04-114-51c2.2_G02_012111-LAR2_14.fsa MiniFiler_GS500_v1



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CE Set-up Sheet

TRAY ID: 012411-LAR1 **Amp. Tray:** 2S04-114 Reloads **Analyst:** LAR **Date:** 01/24/11

	1	2	3	4	5	6	7	8	9	10	11	12
A	2S04-114-48b2.2	2S04-114-RB30.2	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
B	2S04-114-48b2.2	2S04-114-RB30.2	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
C	2S04-114-RB25.2	2S04-114-VC1.2	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
D	2S04-114-RB25.2	2S04-114-VC1.2	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
E	2S04-114-RB26.2	2S04-114-POS41	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
F	2S04-114-RB26.2	2S04-114-POS41	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
G	2S04-114-49a1.2	LADDER_MF	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
H	2S04-114-49a1.2	LADDER_MF	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank

	Vol.(ul)/Well		No. of Rxns		Vol. Total (ul)
Formamide Lot# 10110 12	10.0 ul	x	100	=	1000
GS-500LIZ Lot# 100620	0.12 ul	x	100	=	12

Master Mix 10.0 ul

\+

Amp. Product 0.7ul

PIPETTORS LOT #S:	
Formamide:	P-118
ILS:	P-055
Formamide & ILS Mix:	P-116
Ladders:	P-055
Amp Product (3100 tray):	P-055
Amp Product (if diluted):	---
Diluent (for dilutions):	---

Machine:	10
Run #'s:	51
System:	Minifiler
Ladder Lot#:	090907
Run Module:	Active_Run_Module_G5
Analysis Module:	100minrfu.gsp

Injected by: NV

Date of Injection: 012411

Primer Peak Verification	
Primer peaks verified for all negative samples.	
Read 1 Analyst: LAR	**Date:** 01/24/11

113 LAR 01/24/11

CE GMID Editing Sheet – MiniFiler

Tray ID: 012411-UNC1
Analyst: UNR
GMID Panel: MiniFiler_GS500_v1

Shipment or Case #: 2504-114
Date: 01/24/11

Well	Edit: Locus, Base pair size - reason
E02	CSF 101.55 - PU
F02	PU: LOR/artifacts

Editing Key

20%: 20% filter applied (after confirming no mixtures)

-A: -A/Split peaks

AUT: single allele below minimum threshold

Artifact (non-specific)

D/I: Degraded and/or Inhibited

Dye artifact

Elevated BL: Labels placed on elevated basline(s)

FC: Failed capillary

ILS<MIN: ILS below minimum rfu threshold

IA: Imbalanced Alleles

LOR: Loss of resolution

Matrix Issue

OL: Off ladder allele

Other: provide explanation in text box (currently using this for FDLE alleles btw. 75-99 rfu)

PU: Pullup

RFU<MIN: sample rfu below minimum threshold

RFU>MAX: sample rfu above maximum threshold

Shoulder: Shoulder peak

Sizing: incorrect sizing (eg: migration issue)

Spikes

Stutter (n-4 if other record)

9947 Positive Control
Well Numbers Checked Against Known: E02

D13S317: 11,11	D7S820: 10,11				
AMEL: X,X	D2S1338: 19,23	D21S11: 30,30			
D16S539: 11,12	D18S51: 15,19				
CSF1PO: 10,12	FGA: 23,24				

1/2
UNR
012411

CE GMID Editing Sheet – MiniFiler

Tray ID: 012411-LAR1
Analyst: RB
GMID Panel: MiniFiler_GS500_v1

Shipment or Case #: 2804-114
Date: 1-24-11

Well	Edit: Locus, Base pair size - reason
E2	CSF - 101, 55 - PU
F2	BL - Art @ D21

Editing Key

20%: 20% filter applied (after confirming no mixtures)

-A: -A/Split peaks

AUT: single allele below minimum threshold

Artifact (non-specific)

D/I: Degraded and/or Inhibited

Dye artifact

Elevated BL: Labels placed on elevated baseline(s)

FC: Failed capillary

ILS<MIN: ILS below minimum rfu threshold

IA: Imbalanced Alleles

LOR: Loss of resolution

Matrix Issue

OL: Off ladder allele

Other: provide explanation in text box (currently using this for FDLE alleles btw. 75-99 rfu)

PU: Pullup

RFU<MIN: sample rfu below minimum threshold

RFU>MAX: sample rfu above maximum threshold

Shoulder: Shoulder peak

Sizing: incorrect sizing (eg: migration issue)

Spikes

Stutter (n-4 if other record)

9947 Positive Control Well Numbers Checked Against Known: E2					
D13S317: 11, 11	D7S820: 10, 11				
AMEL: X, X	D2S1338: 19, 23	D21S11: 30, 30			
D16S539: 11, 12	D18S51: 15, 19				
CSF1PO: 10, 12	FGA: 23, 24				

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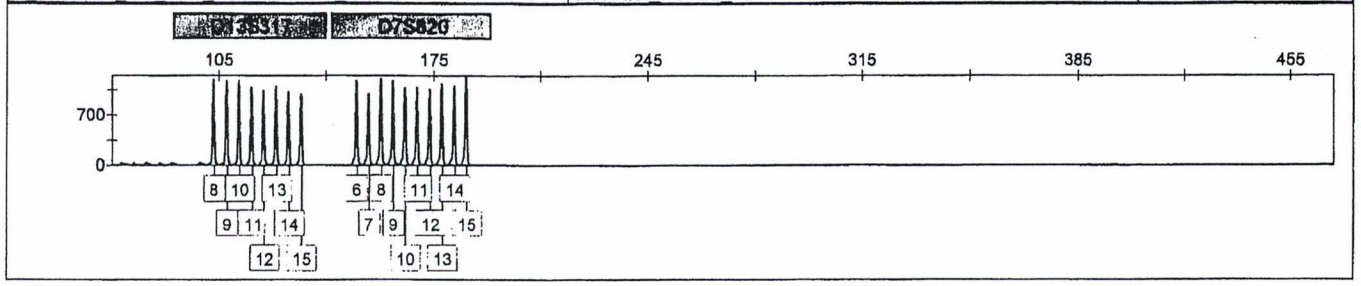
RB 1.24.11

Applied Biosystems

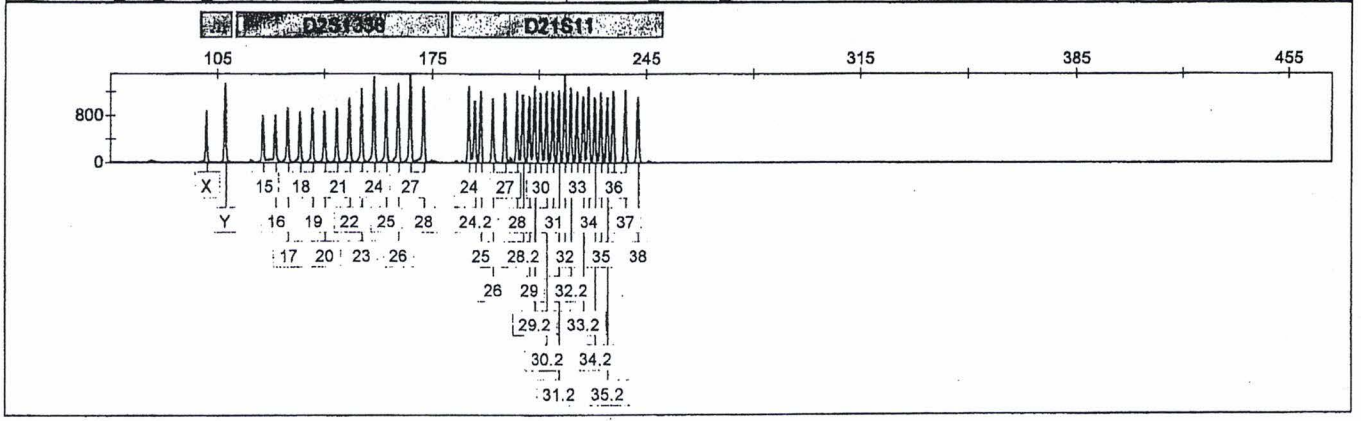
GeneMapper ID v3.2.1

GMID10_012411-LAR1_2S04-114_LAR_MF

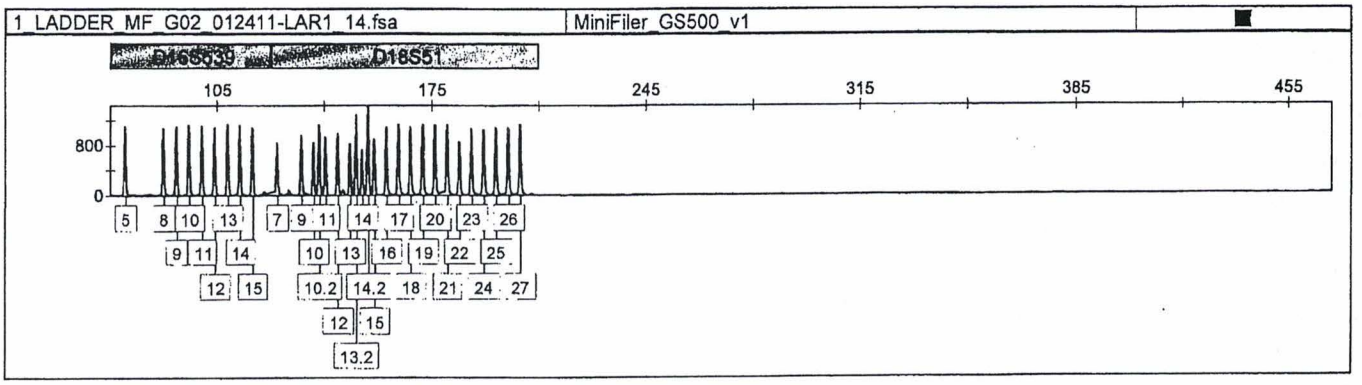
Sample File	Panel	SQO	SQ
1_LADDER_MF_G02_012411-LAR1_14.fsa	MiniFiler_GS500_v1		



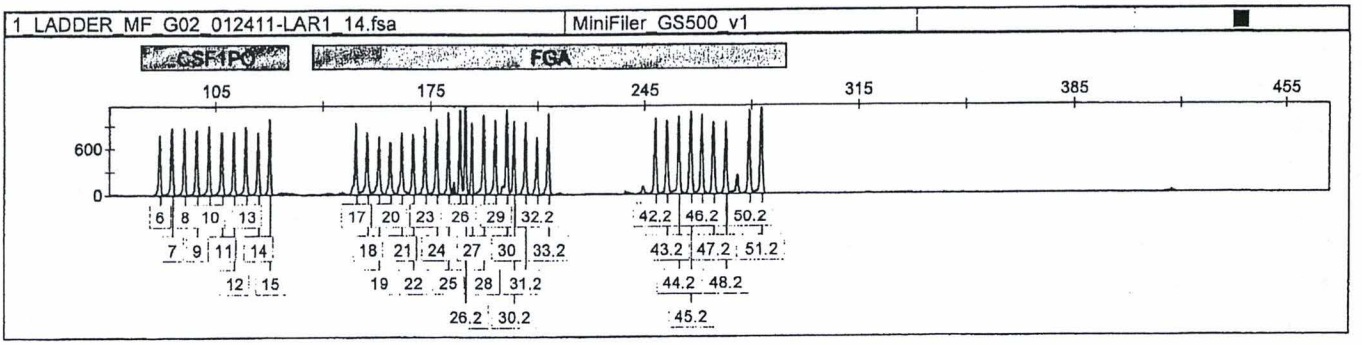
1_LADDER_MF_G02_012411-LAR1_14.fsa	MiniFiler_GS500_v1



1_LADDER_MF_G02_012411-LAR1_14.fsa	MiniFiler_GS500_v1



1_LADDER_MF_G02_012411-LAR1_14.fsa	MiniFiler_GS500_v1



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Sample File	Panel	SQO	SQ
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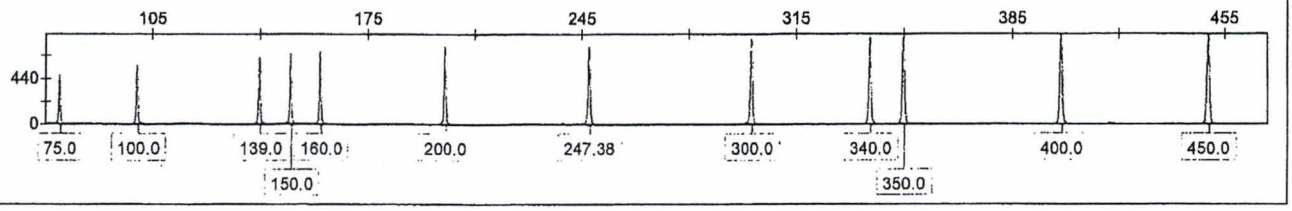

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Sample File	Panel	SQO	SQ
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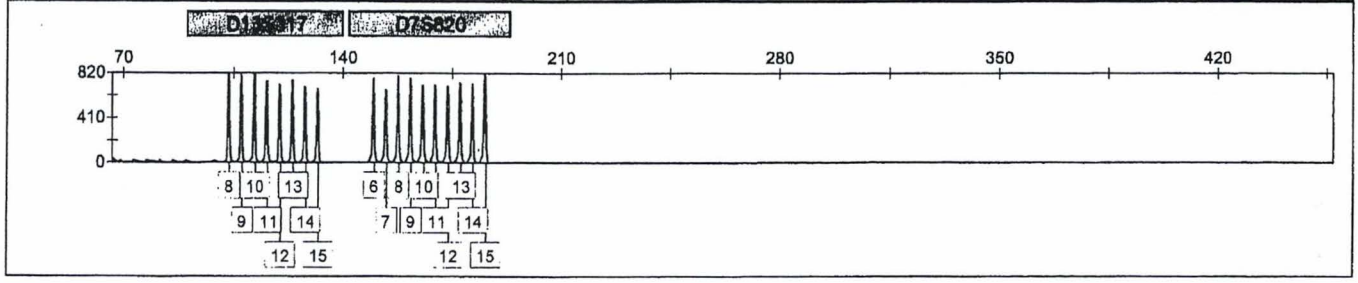
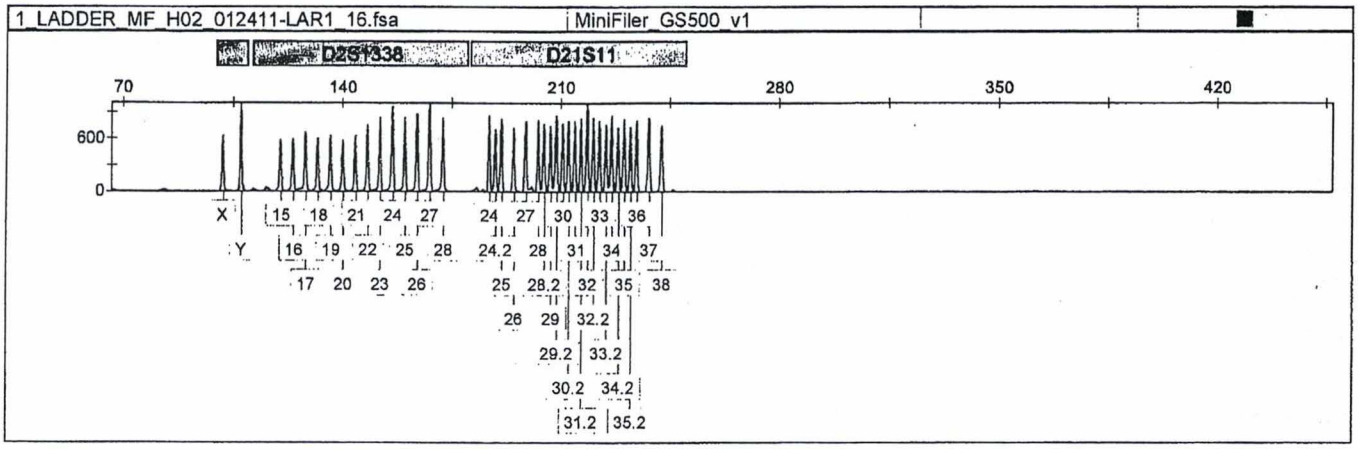
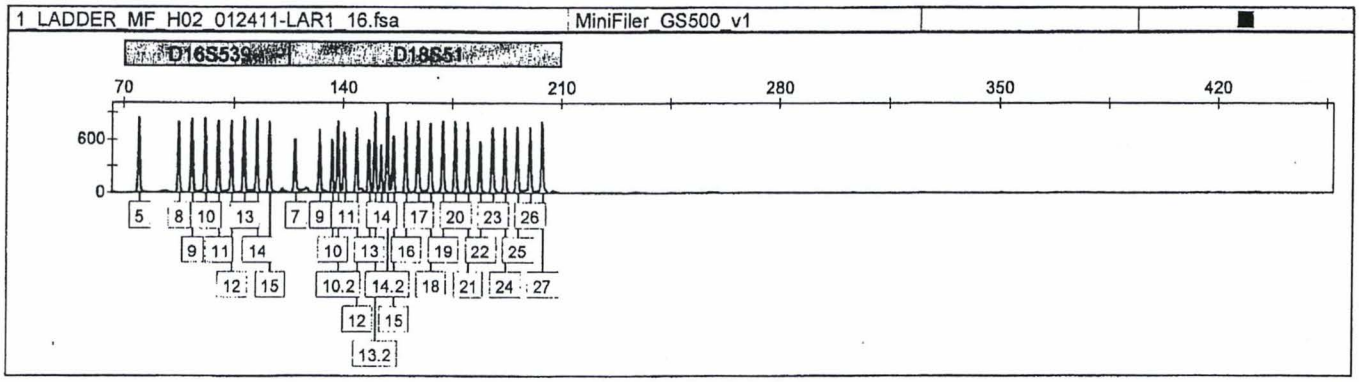


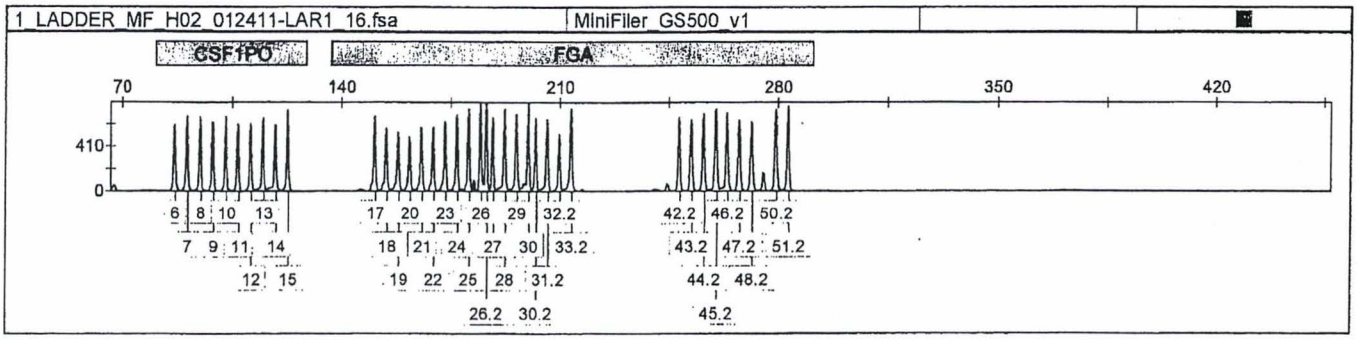
1_LADDER_MF_H02_012411-LAR1_16.fsa | MiniFiler_GS500_v1



1_LADDER_MF_H02_012411-LAR1_16.fsa | MiniFiler_GS500_v1

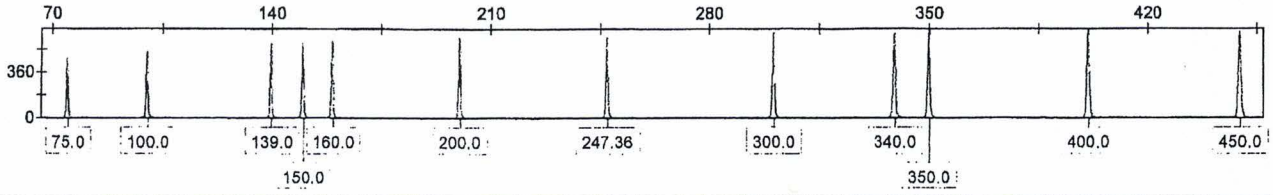


1_LADDER_MF_H02_012411-LAR1_16.fsa | MiniFiler_GS500_v1



108

Sample File	Panel	SQO	SQ
1_LADDER_MF_H02_012411-LAR1_16.fsa	MiniFiler_GS500_v1		



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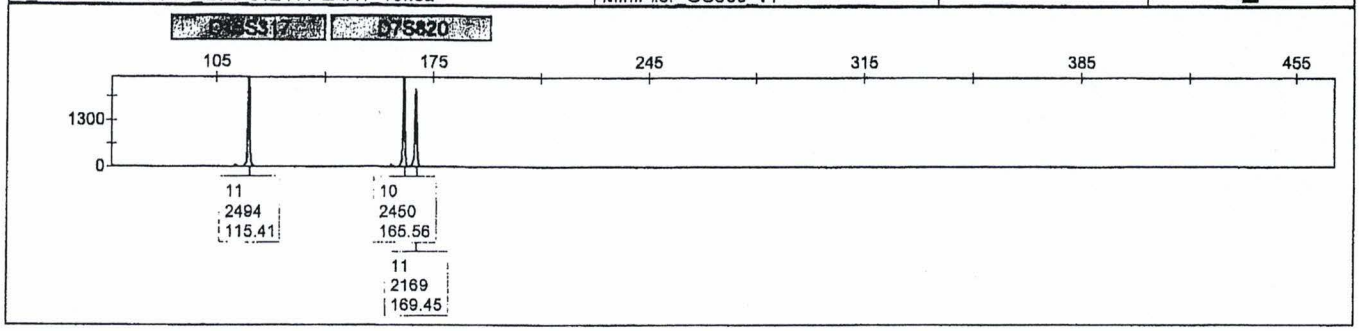
01/24/11

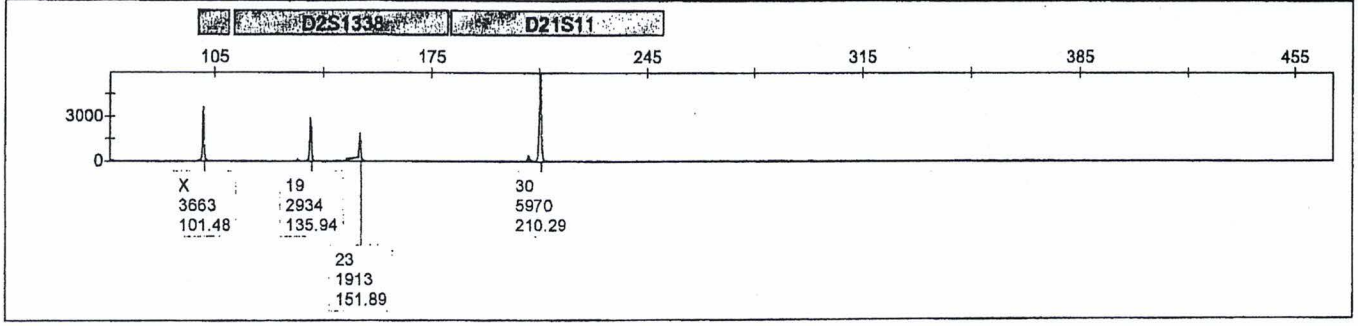
Applied Biosystems
GeneMapper ID v3.2.1

GMID10_012411-LAR1_2S04-114_LAR_MF

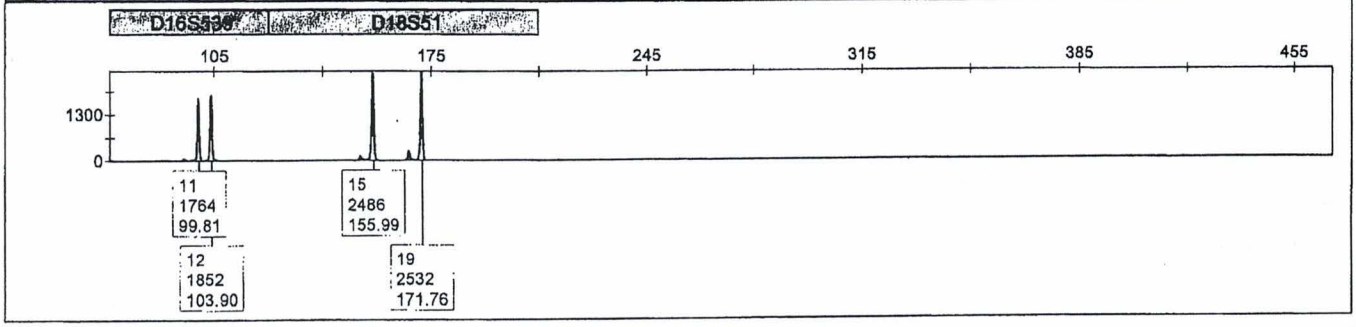
Sample File	Panel	SQO	SQ
1_2S04-114-POS41_E02_012411-LAR1_10.fsa	MiniFiler_GS500_v1		



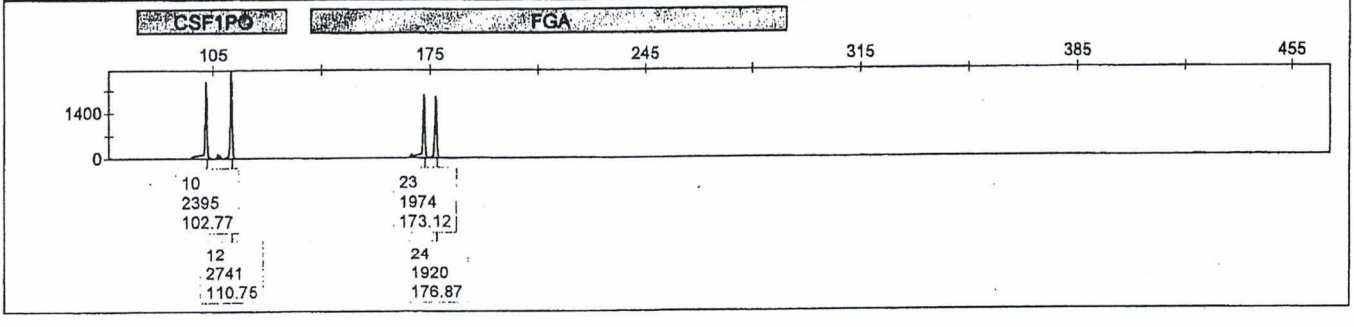
1_2S04-114-POS41_E02_012411-LAR1_10.fsa | MiniFiler_GS500_v1



1_2S04-114-POS41_E02_012411-LAR1_10.fsa | MiniFiler_GS500_v1



1_2S04-114-POS41_E02_012411-LAR1_10.fsa | MiniFiler_GS500_v1



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Sample File	Panel	SQO	SQ
1_2S04-114-POS41_E02_012411-LAR1_10.fsa	MiniFiler_GS500_v1		



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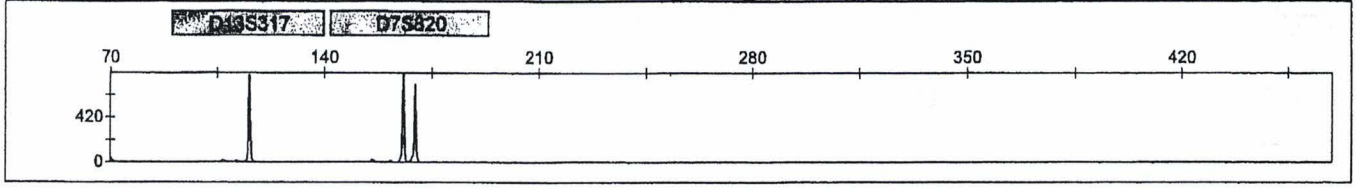
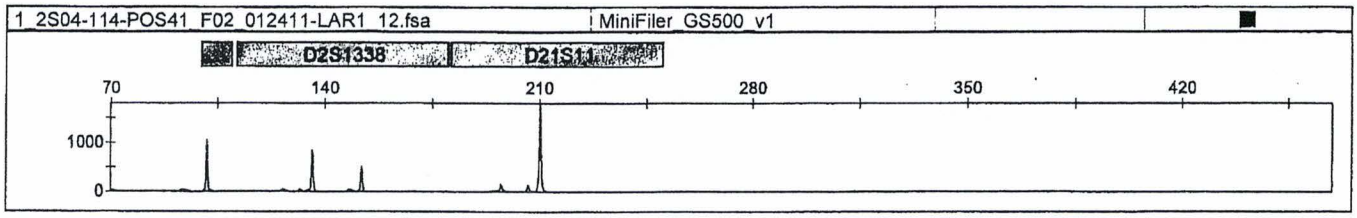
Applied Biosystems
GeneMapper ID v3.2.1

GMID10_012411-LAR1_2S04-114_LAR_MF

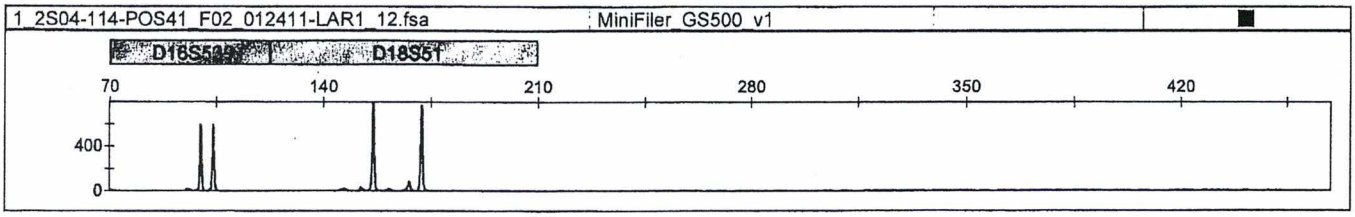
Sample File	Panel	SQO	SQ
1_2S04-114-POS41_F02_012411-LAR1_12.fsa	MiniFiler_GS500_v1		



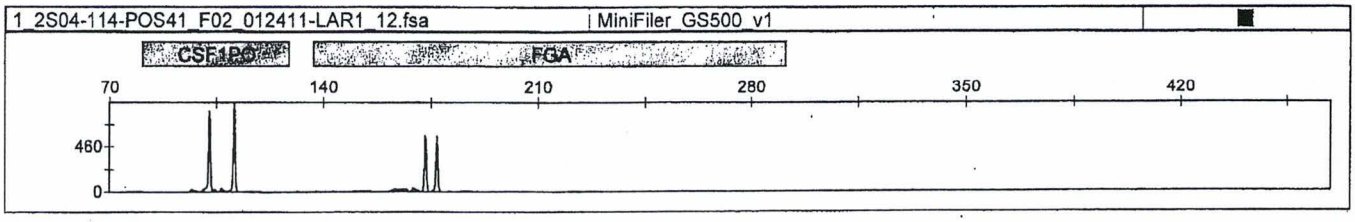
1_2S04-114-POS41_F02_012411-LAR1_12.fsa	MiniFiler_GS500_v1		



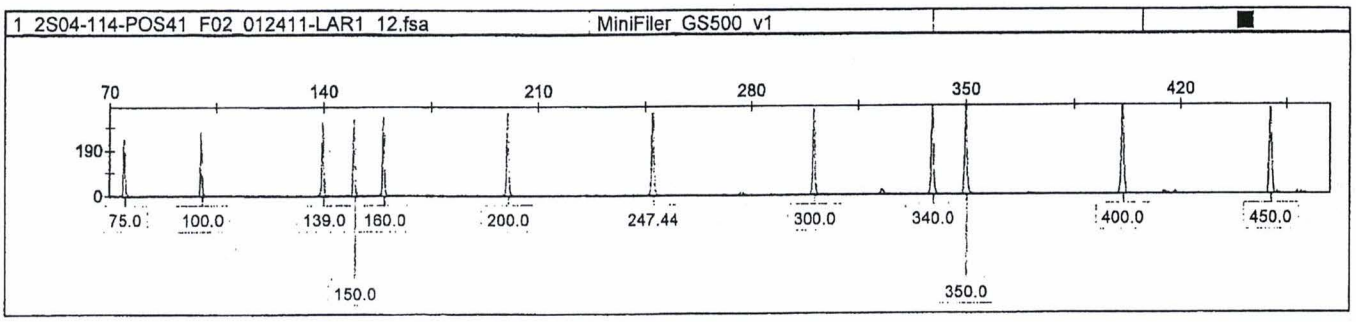
1_2S04-114-POS41_F02_012411-LAR1_12.fsa	MiniFiler_GS500_v1		



1_2S04-114-POS41_F02_012411-LAR1_12.fsa	MiniFiler_GS500_v1		



1_2S04-114-POS41_F02_012411-LAR1_12.fsa	MiniFiler_GS500_v1		



* Positive control 2S04-114-POS41 was also loaded in well E02 on tray 012411-LAR1.

LAR 01/24/11

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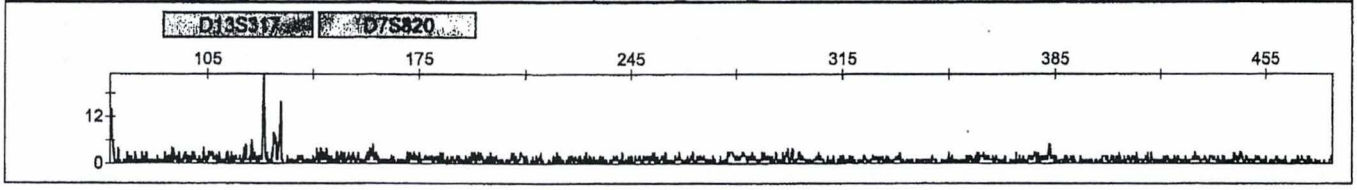
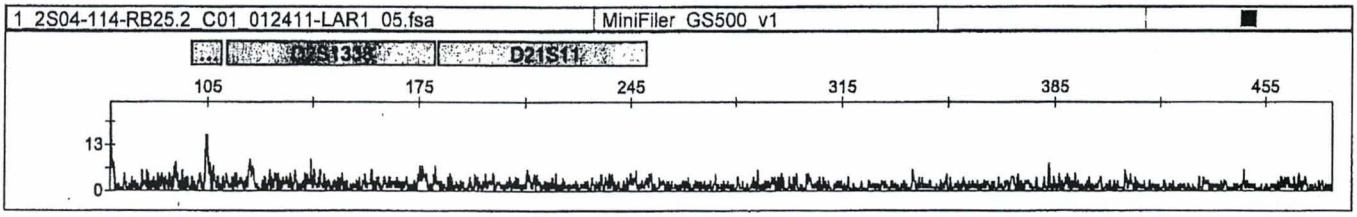
LAR 01/24/11

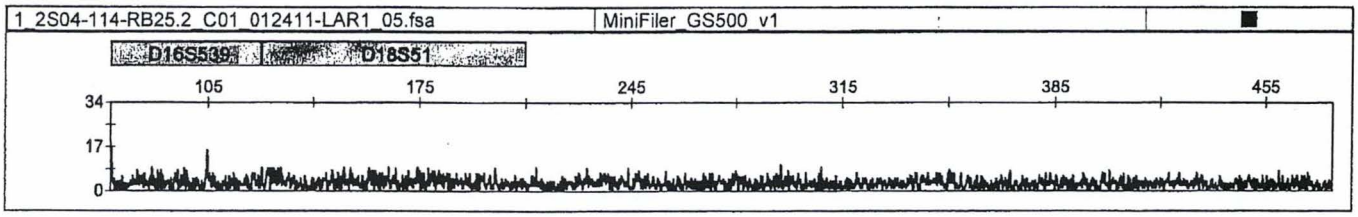
Sample File	Panel	SQO	SQ
1_2S04-114-RB25.2_C01_012411-LAR1_05.fsa	MiniFiler_GS500_v1		



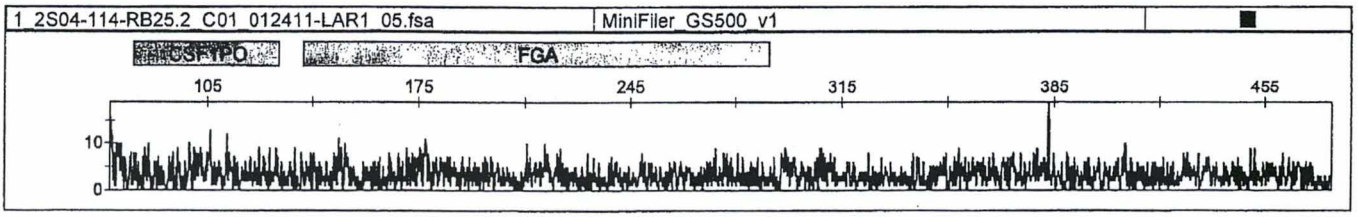
1_2S04-114-RB25.2_C01_012411-LAR1_05.fsa | MiniFiler_GS500_v1



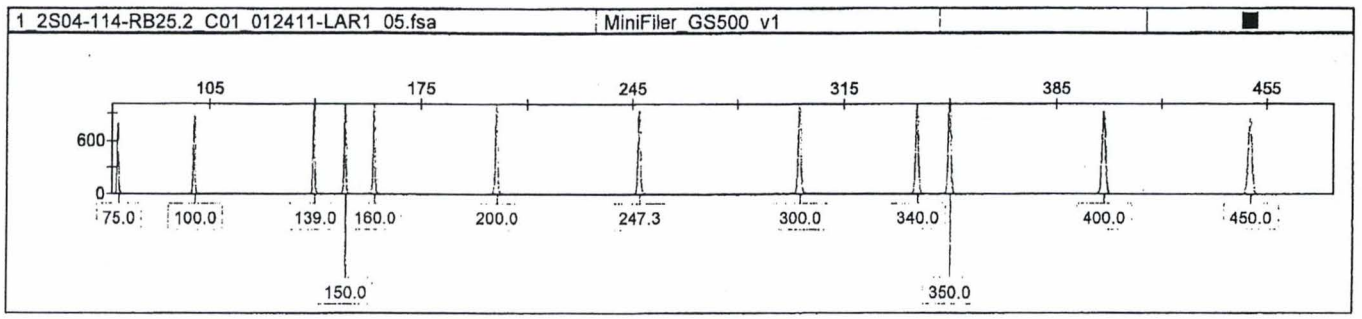
1_2S04-114-RB25.2_C01_012411-LAR1_05.fsa | MiniFiler_GS500_v1



1_2S04-114-RB25.2_C01_012411-LAR1_05.fsa | MiniFiler_GS500_v1



1_2S04-114-RB25.2_C01_012411-LAR1_05.fsa | MiniFiler_GS500_v1



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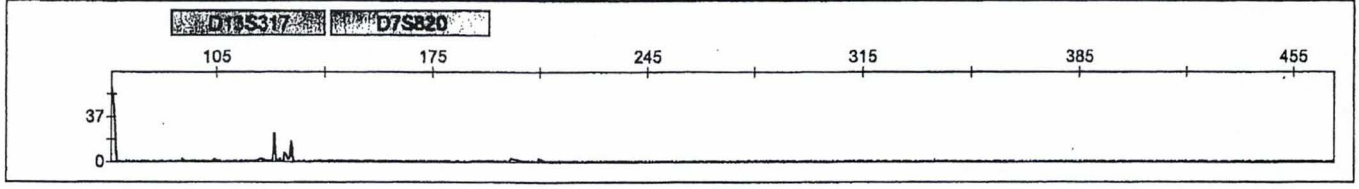
Applied Biosystems

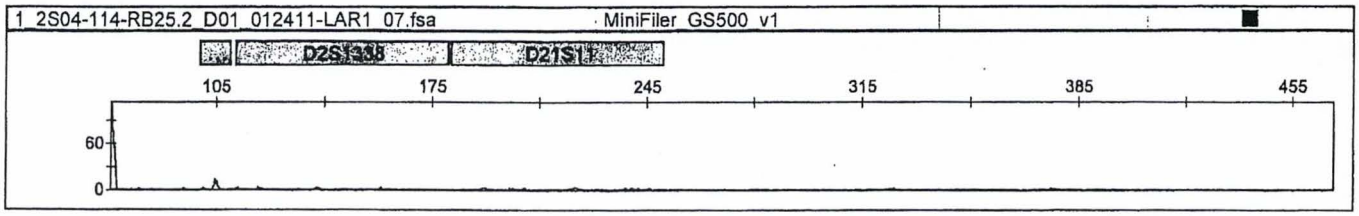
GeneMapper ID v3.2.1

GMID10_012411-LAR1_2S04-114_LAR_MF

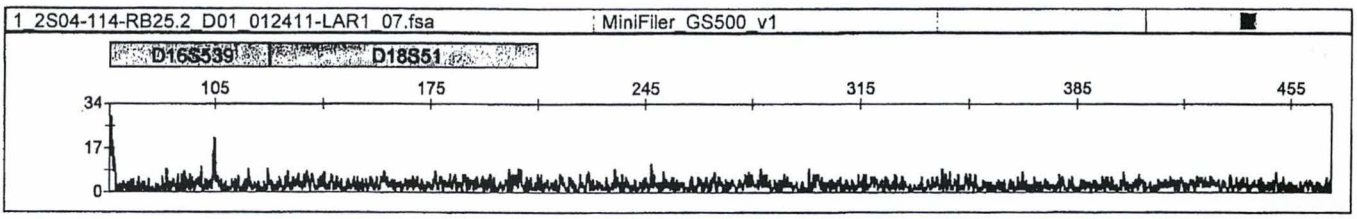
Sample File	Panel	SQO	SQ
1_2S04-114-RB25.2_D01_012411-LAR1_07.fsa	MiniFiler_GS500_v1		



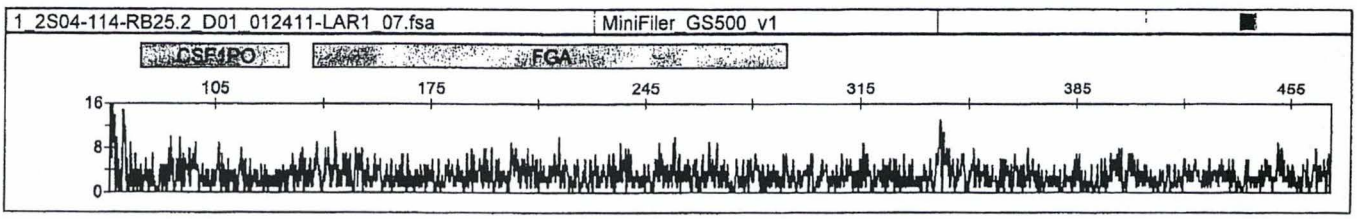
1_2S04-114-RB25.2_D01_012411-LAR1_07.fsa MiniFiler_GS500_v1



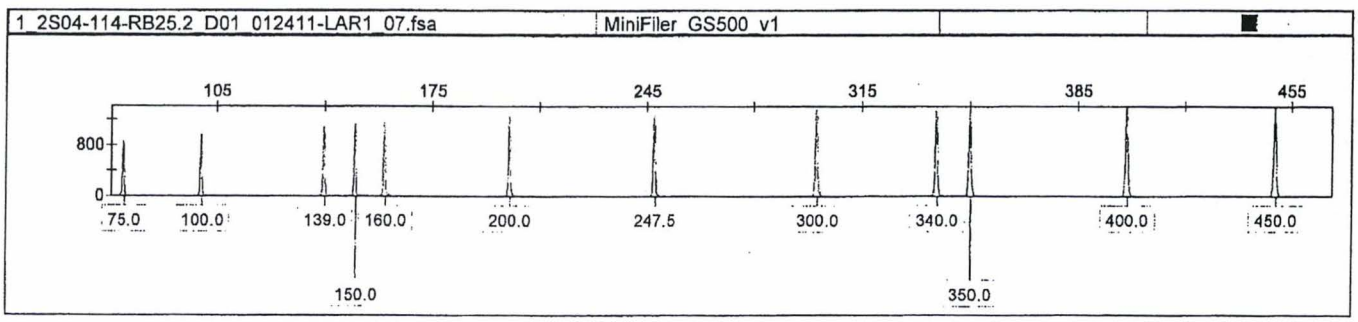
1_2S04-114-RB25.2_D01_012411-LAR1_07.fsa MiniFiler_GS500_v1



1_2S04-114-RB25.2_D01_012411-LAR1_07.fsa MiniFiler_GS500_v1



1_2S04-114-RB25.2_D01_012411-LAR1_07.fsa MiniFiler_GS500_v1



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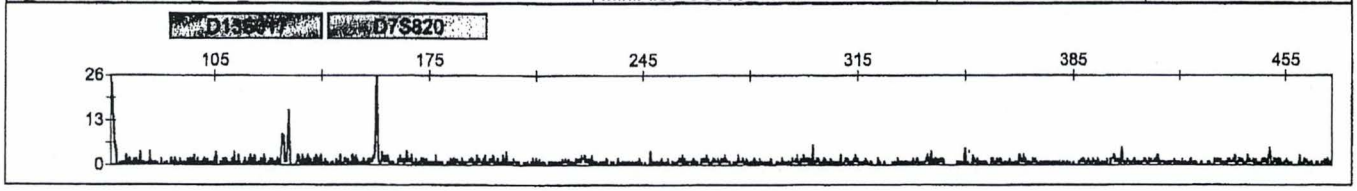
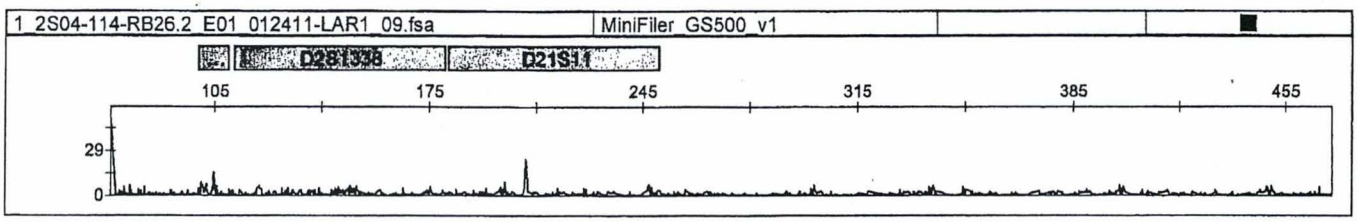
Applied Biosystems
GeneMapper ID v3.2.1

GMID10_012411-LAR1_2S04-114_LAR_MF

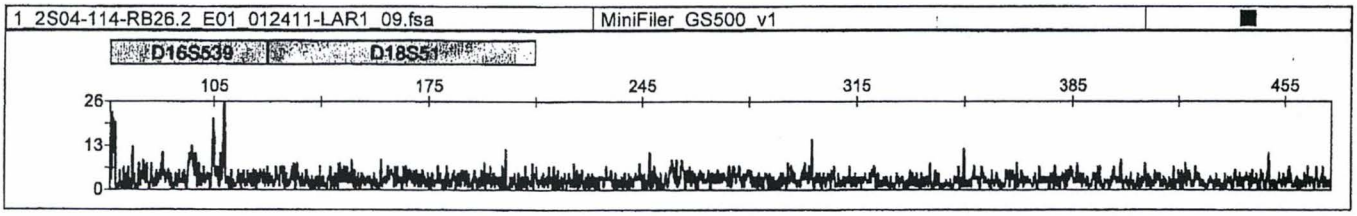
Sample File	Panel	SQO	SQ
1_2S04-114-RB26.2_E01_012411-LAR1_09.fsa	MiniFiler_GS500_v1		



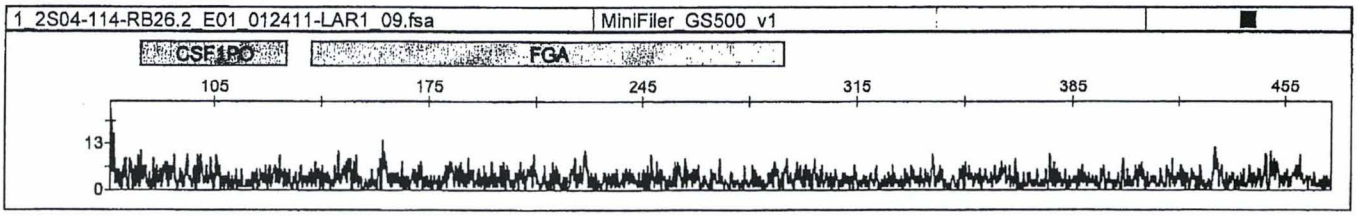
1_2S04-114-RB26.2_E01_012411-LAR1_09.fsa | MiniFiler_GS500_v1



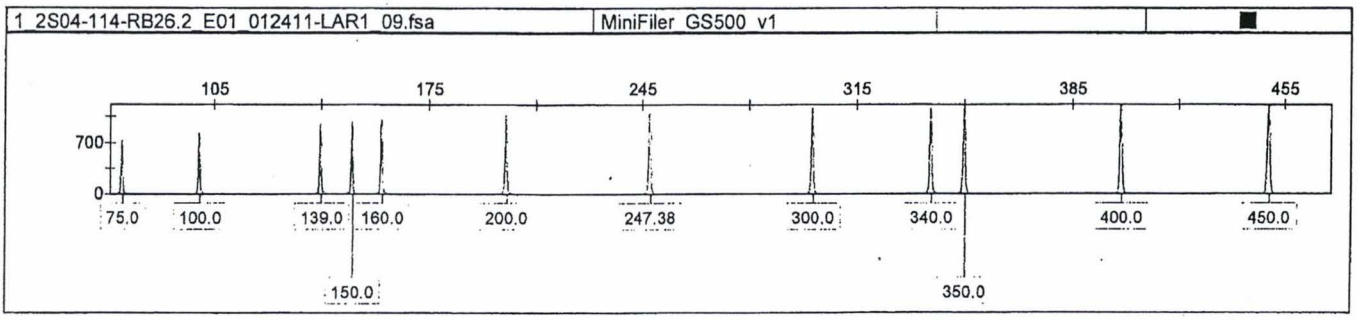
1_2S04-114-RB26.2_E01_012411-LAR1_09.fsa | MiniFiler_GS500_v1



1_2S04-114-RB26.2_E01_012411-LAR1_09.fsa | MiniFiler_GS500_v1



1_2S04-114-RB26.2_E01_012411-LAR1_09.fsa | MiniFiler_GS500_v1



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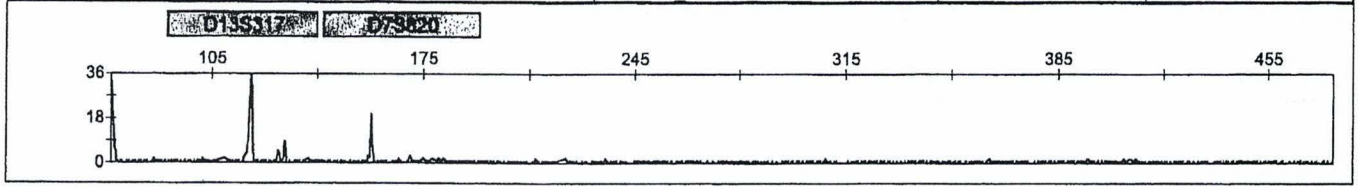
Applied Biosystems

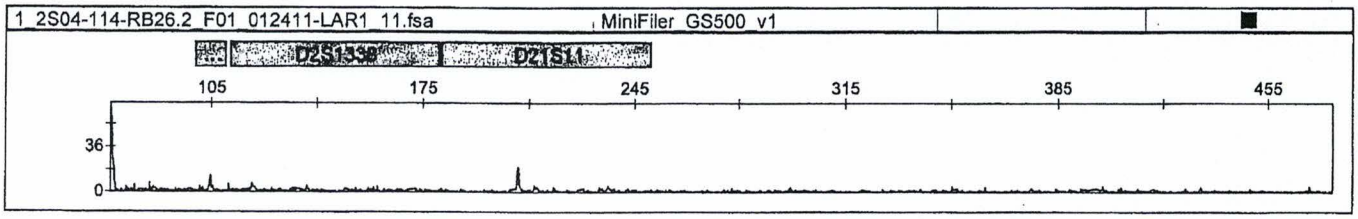
GeneMapper ID v3.2.1

GMID10_012411-LAR1_2S04-114_LAR_MF

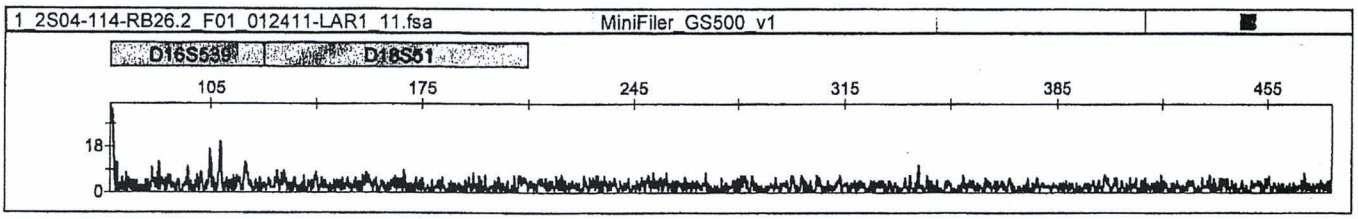
Sample File	Panel	SQO	SQ
1_2S04-114-RB26.2_F01_012411-LAR1_11.fsa	MiniFiler_GS500_v1		



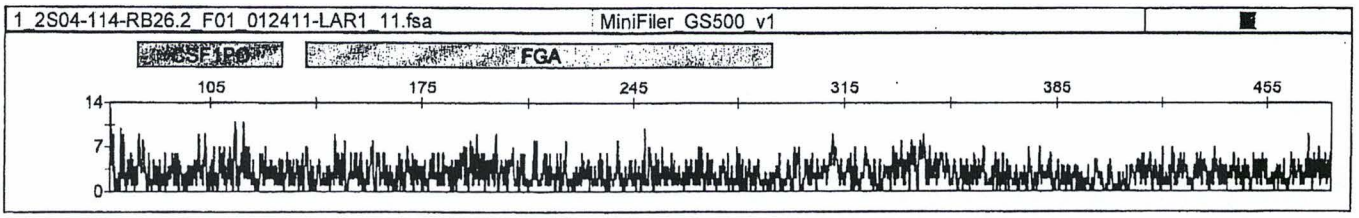
1_2S04-114-RB26.2_F01_012411-LAR1_11.fsa MiniFiler_GS500_v1



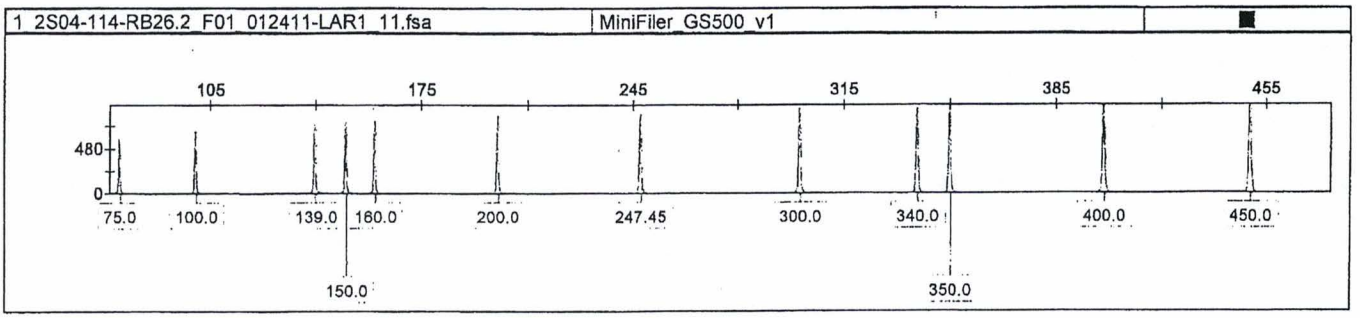
1_2S04-114-RB26.2_F01_012411-LAR1_11.fsa MiniFiler_GS500_v1



1_2S04-114-RB26.2_F01_012411-LAR1_11.fsa MiniFiler_GS500_v1



1_2S04-114-RB26.2_F01_012411-LAR1_11.fsa MiniFiler_GS500_v1



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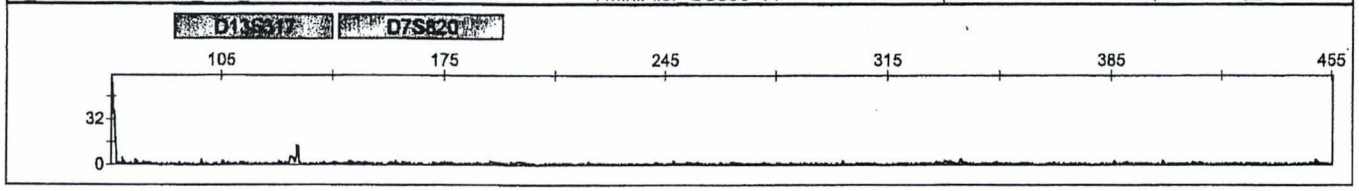
Applied Biosystems

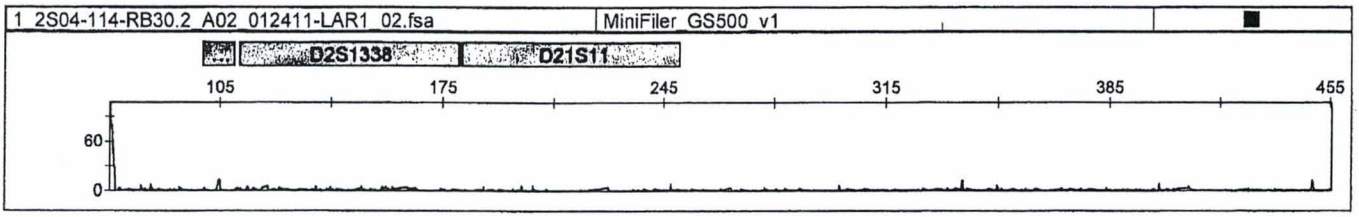
GeneMapper ID v3.2.1

GMID10_012411-LAR1_2S04-114_LAR_MF

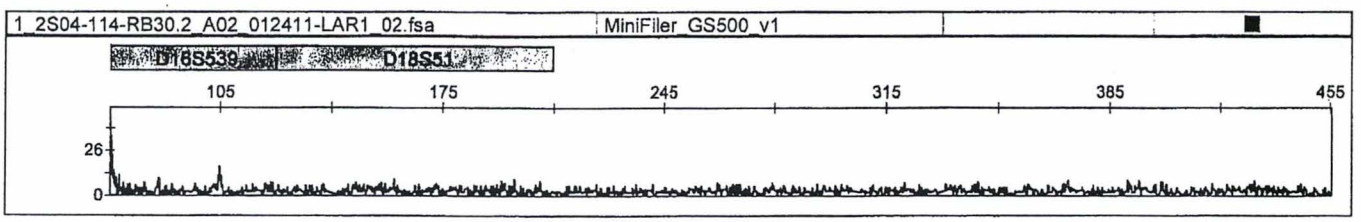
Sample File	Panel	SQO	SQ
1_2S04-114-RB30.2_A02_012411-LAR1_02.fsa	MiniFiler_GS500_v1		



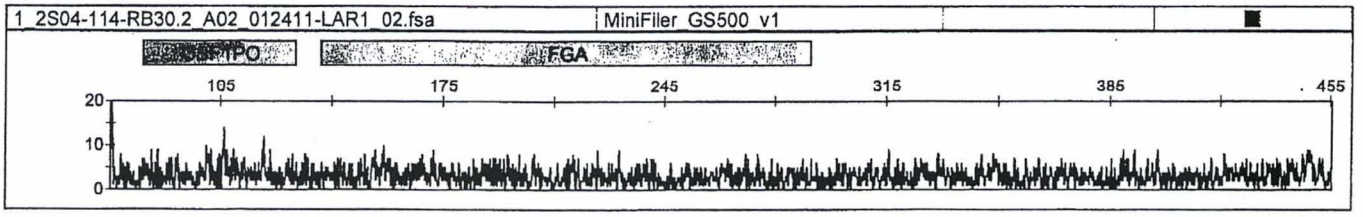
1_2S04-114-RB30.2_A02_012411-LAR1_02.fsa | MiniFiler_GS500_v1



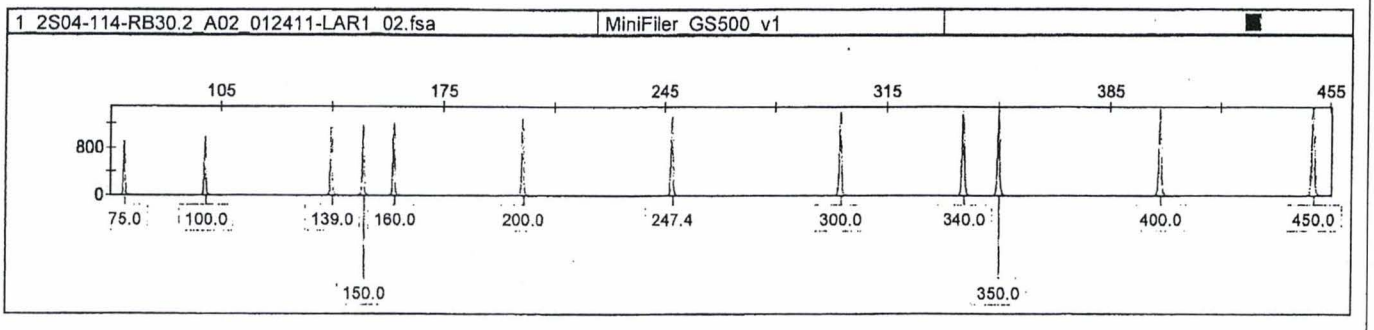
1_2S04-114-RB30.2_A02_012411-LAR1_02.fsa | MiniFiler_GS500_v1



1_2S04-114-RB30.2_A02_012411-LAR1_02.fsa | MiniFiler_GS500_v1



1_2S04-114-RB30.2_A02_012411-LAR1_02.fsa | MiniFiler_GS500_v1



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Sample File	Panel	SQO	SQ
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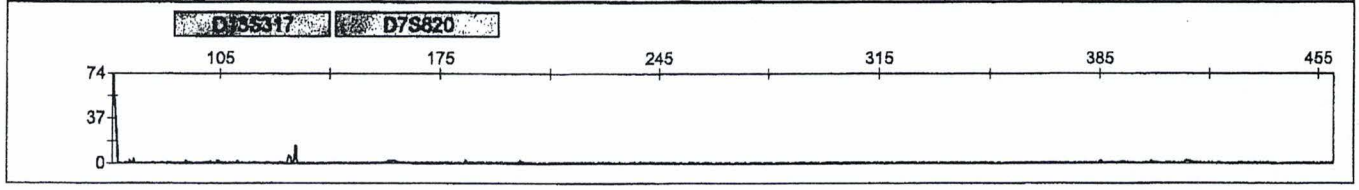
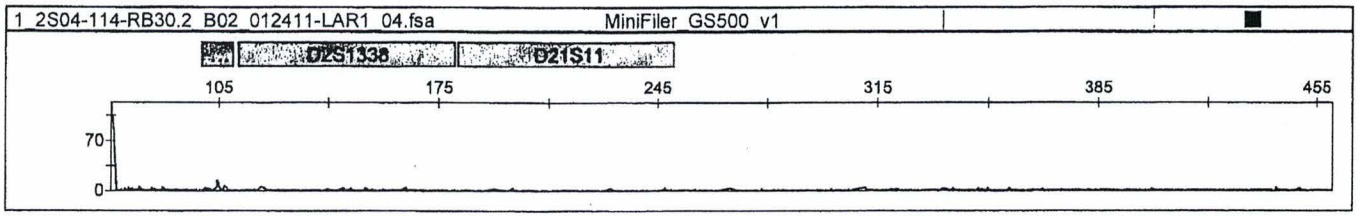


1_2S04-114-RB30.2_B02_012411-LAR1_04.fsa MiniFiler_GS500_v1



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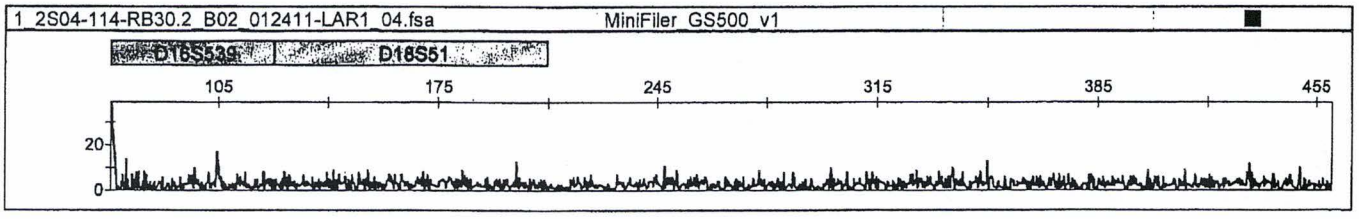
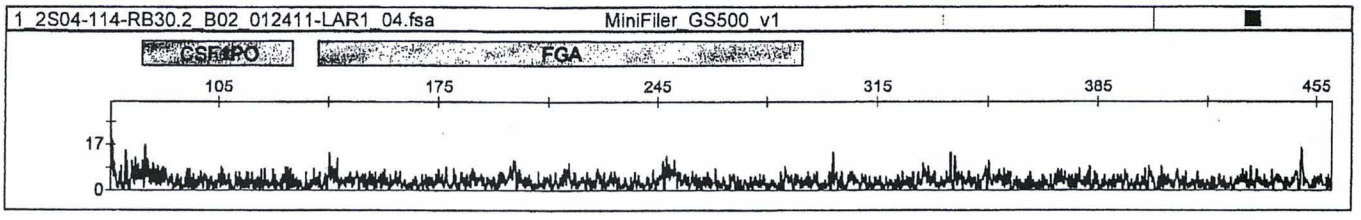


1_2S04-114-RB30.2_B02_012411-LAR1_04.fsa MiniFiler_GS500_v1



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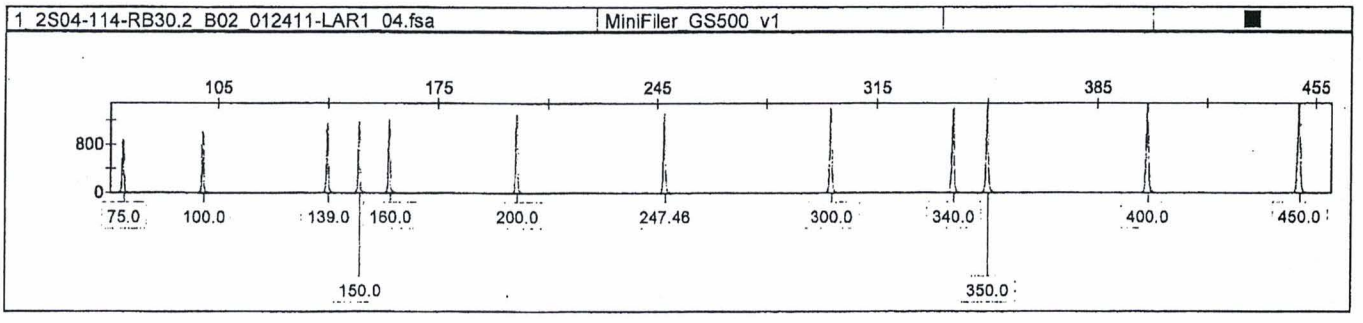

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Applied Biosystems

GeneMapper ID v3.2.1

GMID10_012411-LAR1_2S04-114_LAR_MF

Sample File	Panel	SQO	SQ
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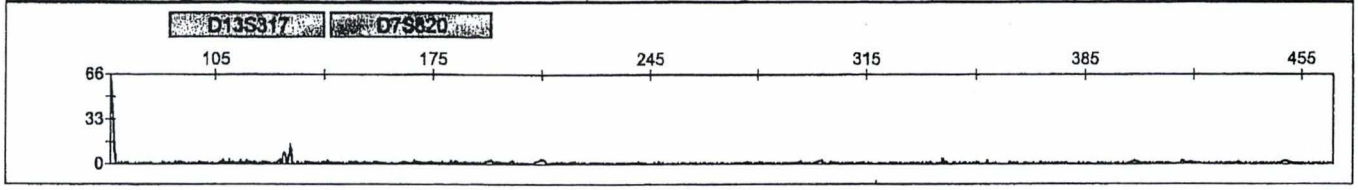
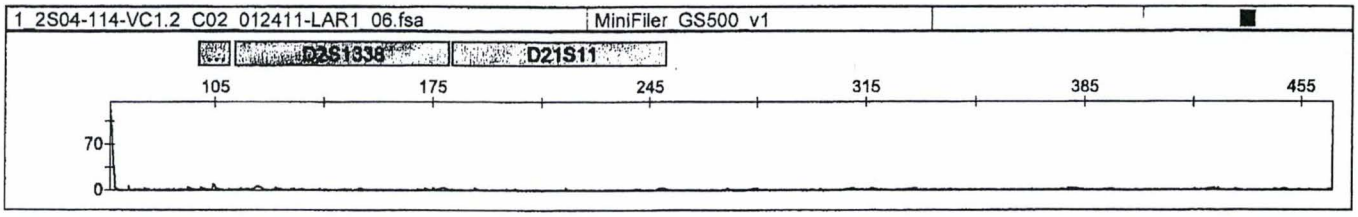


1_2S04-114-VC1.2_C02_012411-LAR1_06.fsa | MiniFiler_GS500_v1



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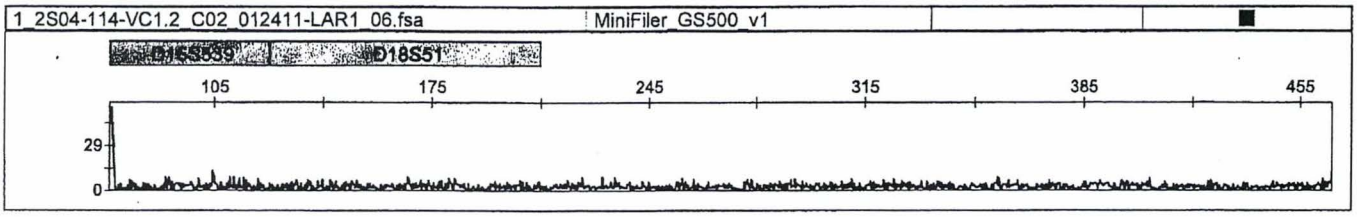
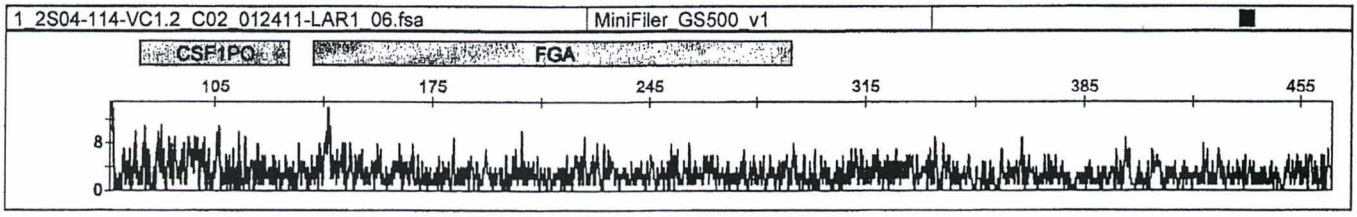


1_2S04-114-VC1.2_C02_012411-LAR1_06.fsa | MiniFiler_GS500_v1



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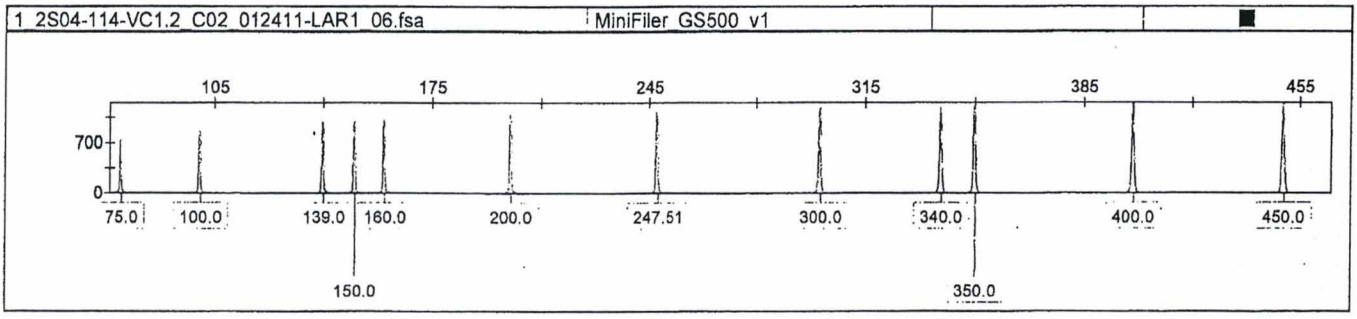

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MC 012411

Applied Biosystems
GeneMapper ID v3.2.1

GMID10_012411-LAR1_2S04-114_LAR_MF

Sample File	Panel	SQO	SQ
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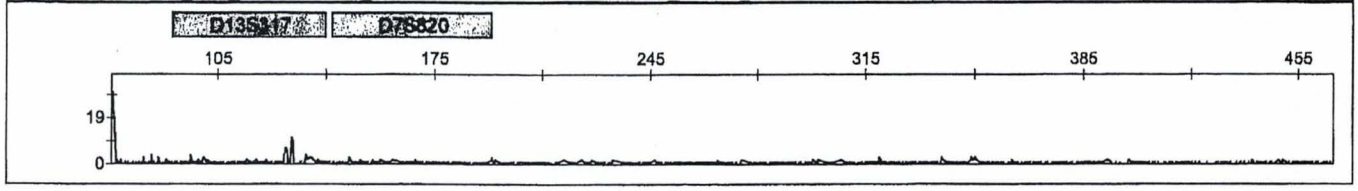
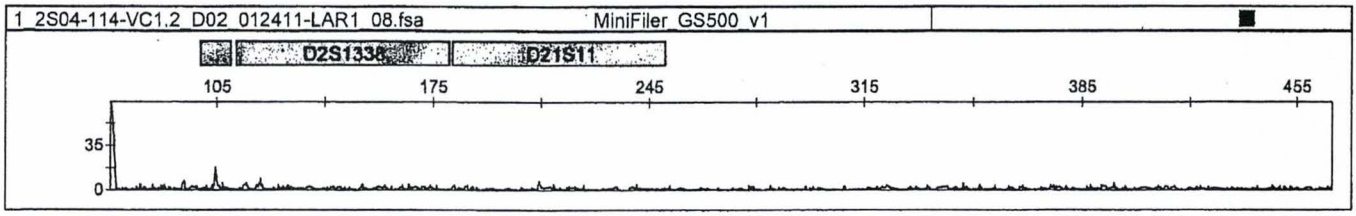
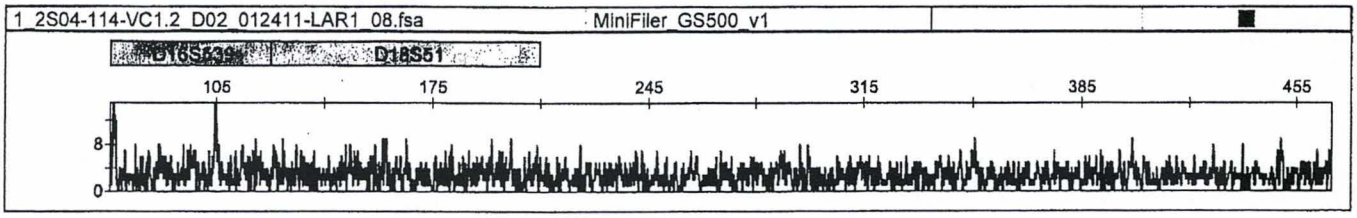


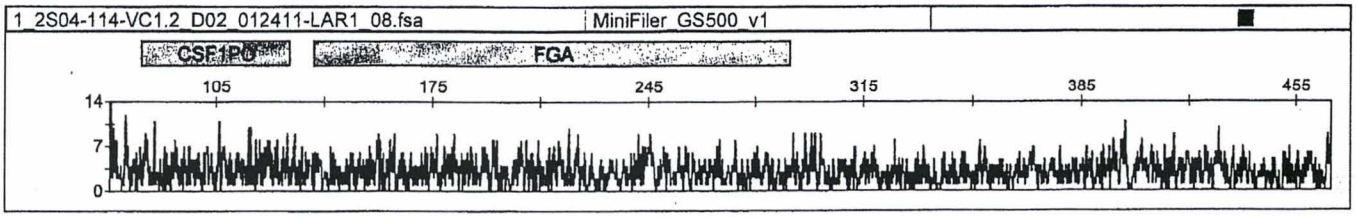
1_2S04-114-VC1.2_D02_012411-LAR1_08.fsa	MiniFiler_GS500_v1		



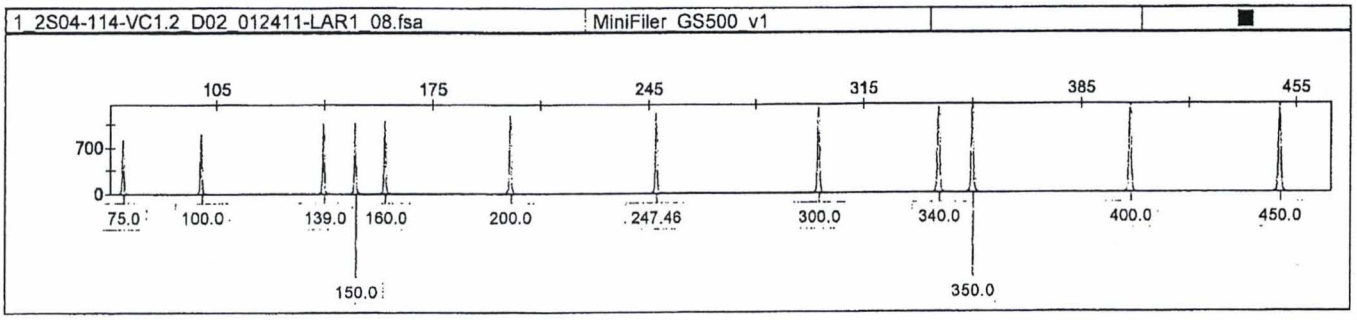
1_2S04-114-VC1.2_D02_012411-LAR1_08.fsa	MiniFiler_GS500_v1		



1_2S04-114-VC1.2_D02_012411-LAR1_08.fsa	MiniFiler_GS500_v1		



1_2S04-114-VC1.2_D02_012411-LAR1_08.fsa	MiniFiler_GS500_v1		



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01/24/11

CE Set-up Sheet

TRAY ID: 012111-LAR2 **Amp. Tray:** 2S04-114-AMP41 **Analyst:** LAR **Date:** 01/21/11

	1	2	3	4	5	6	7	8	9	10	11	12
A	2S04-114-48b2.2	2S04-114-51a1.2	2S04-114-RB31.2	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
B	2S04-114-RB25.2	2S04-114-RB29.2	2S04-114-POS41	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
C	2S04-114-48c3.2	2S04-114-51a4.2	2S04-114-NEG41	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
D	2S04-114-48d1.2	2S04-114-RB30.2	2S04-114-POS41	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
E	2S04-114-RB26.2	2S04-114-51b3.2	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
F	2S04-114-48d2.2	2S04-114-51c1.2	LADDER_MF	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
G	2S04-114-49a1.2	2S04-114-51c2.2	LADDER_MF	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
H	2S04-114-RB27.2	2S04-114-VC1.2	LADDER_MF	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank

	Vol.(ul)/Well		No. of Rxns		Vol. Total (ul)
Formamide Lot# 01611012	10.0 ul	x	100	=	1000
GS-500LIZ Lot# 10|0124	0.12 ul	x	100	=	12

Master Mix 10.0 ul
\+
Amp. Product 0.7ul

PIPETTORS LOT #S:	
Formamide:	P-118
ILS:	P-055
Formamide & ILS Mix:	P-114
Ladders:	P-055
Amp Product (3100 tray):	P-036 + P-055
Amp Product (if diluted):	—
Diluent (for dilutions):	—

Machine:	14
Run #'s:	32-33
System:	Minifiler
Ladder Lot#:	0909007
Run Module:	Active_Run_Module_G5
Analysis Module:	100minrfu.gsp

Injected by: NL
Date of Injection: 01/21/11

Primer Peak Verification	
Primer peaks verified for all negative samples.	
Read 1 Analyst:	**Date:** 01/24/11

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01/21/11

CE GMID Editing Sheet – MiniFiler

Tray ID: 012111-UAR2
Analyst: UAR
GMID Panel: MiniFiler_GS500_v1

Shipment or Case #: 2504-114
Date: 01/24/11

Well	Edit: Locus, Base pair size - reason
G03	RL: spikes
D03	RL: spikes
D02	RL: spikes
A01	RL: spikes
G01	RL: spikes

Editing Key

20%: 20% filter applied (after confirming no mixtures)

-A: -A/Split peaks

AUT: single allele below minimum threshold

Artifact (non-specific)

D/I: Degraded and/or Inhibited

Dye artifact

Elevated BL: Labels placed on elevated baseline(s)

FC: Failed capillary

ILS<MIN: ILS below minimum rfu threshold

IA: Imbalanced Alleles

LOR: Loss of resolution

Matrix Issue

OL: Off ladder allele

Other: provide explanation in text box (currently using this for FDLE alleles btw. 75-99 rfu)

PU: Pullup

RFU<MIN: sample rfu below minimum threshold

RFU>MAX: sample rfu above maximum threshold

Shoulder: Shoulder peak

Sizing: Incorrect sizing (eg: migration issue)

Spikes

Stutter (n-4 if other record)

9947 Positive Control Well Numbers Checked Against Known: B03					
D13S317: 11,11	D7S820: 10,11				
AMEL: X,X	D2S1338: 19,23	D21S11: 30,30			
D16S539: 11,12	D18S51: 15,19				
CSF1PO: 10,12	FGA: 23,24				

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UAR 01/24/11

CE GMID Editing Sheet – MiniFiler

Tray ID: 01211-LAR2
Analyst: BB
GMID Panel: MiniFiler_GS500_v1

Shipment or Case #: 2504-114
Date: 1-24-11

Well	Edit: Locus, Base pair size - reason
D3	BL- spikes
G3	BL- Spikes
A1	BL- Spikes
G1	BL - Spikes
D2	BL - Spikes

Editing Key

20%: 20% filter applied (after confirming no mixtures)

-A: -A/Split peaks

AUT: single allele below minimum threshold

Artifact (non-specific)

D/I: Degraded and/or Inhibited

Dye artifact

Elevated BL: Labels placed on elevated baseline(s)

FC: Failed capillary

ILS<MIN: ILS below minimum rfu threshold

IA: Imbalanced Alleles

LOR: Loss of resolution

Matrix Issue

OL: Off ladder allele

Other: provide explanation in text box (currently using this for FDLE alleles btw. 75-99 rfu)

PU: Pullup

RFU<MIN: sample rfu below minimum threshold

RFU>MAX: sample rfu above maximum threshold

Shoulder: Shoulder peak

Sizing: Incorrect sizing (eg: migration issue)

Spikes

Stutter (n-4 if other record)

9947 Positive Control Well Numbers Checked Against Known: B3, D3 ~~BB~~ 1.24.11					
D13S317: 11, 11	D7S820: 10, 11				
AMEL: X, X	D2S1338: 19, 23	D21S11: 30, 30			
D16S539: 11, 12	D18S51: 15, 19				
CSF1PO: 10, 12	FGA: 23, 24				

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BB 1.24.11

Sample File	Panel	SQO	SQ
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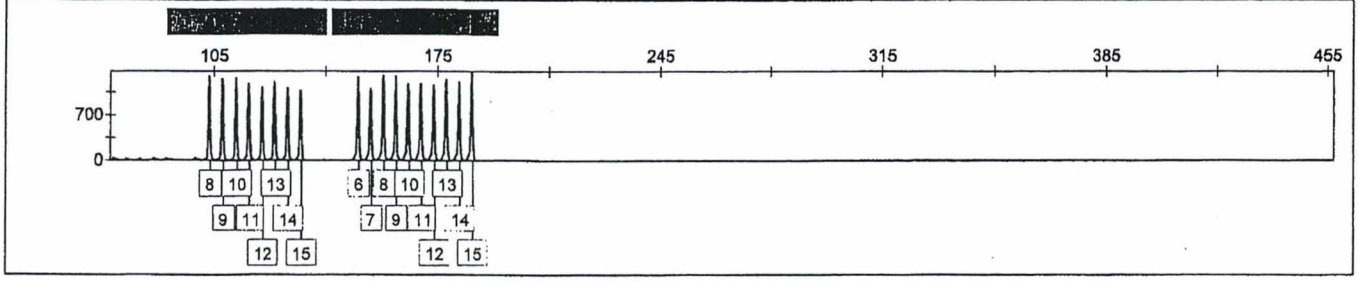

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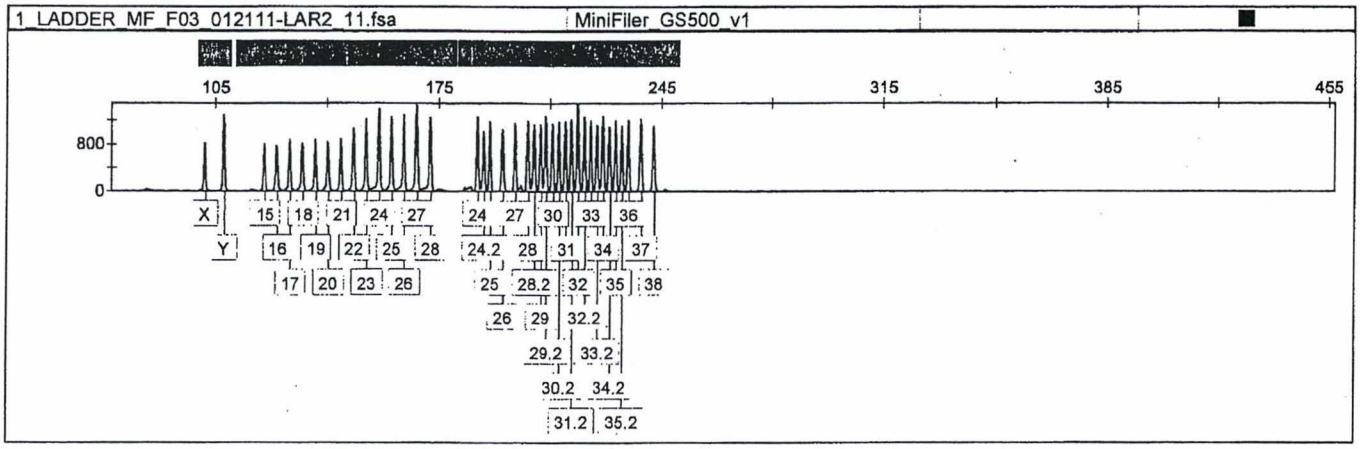

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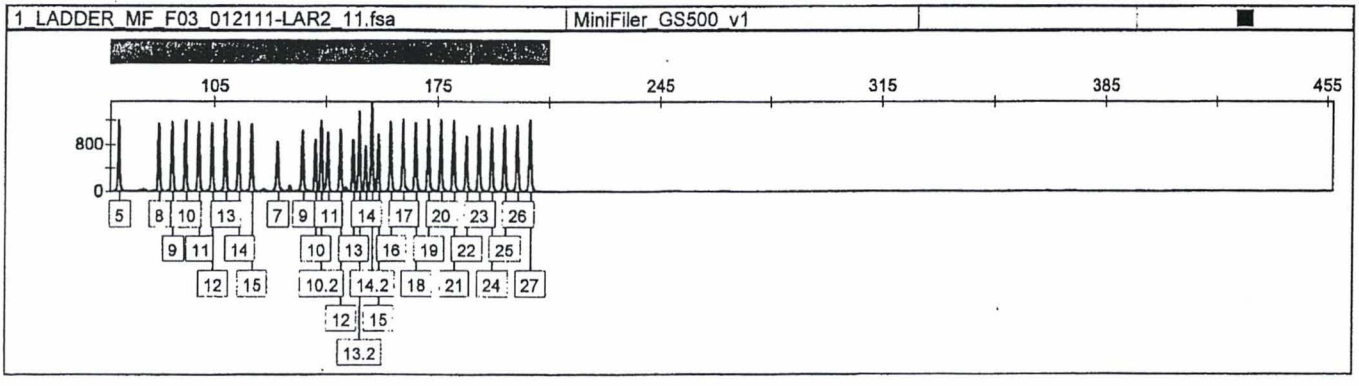
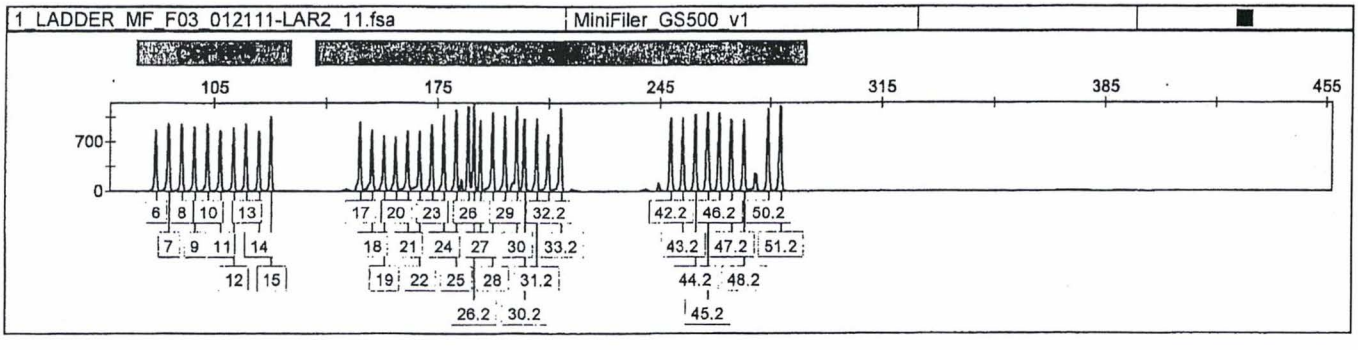


1_LADDER_MF_F03_012111-LAR2_11.fsa MiniFiler_GS500_v1



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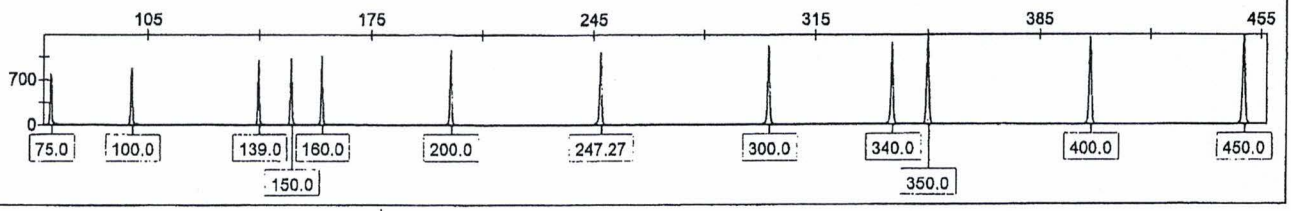
Sample File	Panel	SQO	SQ
1_LADDER_MF_F03_012111-LAR2_11.fsa	MiniFiler_GS500_v1		



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Sample File	Panel	SQO	SQ
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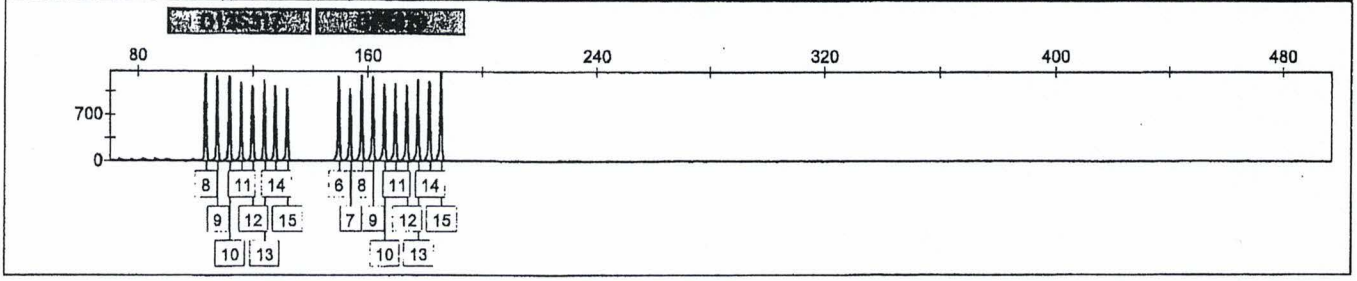
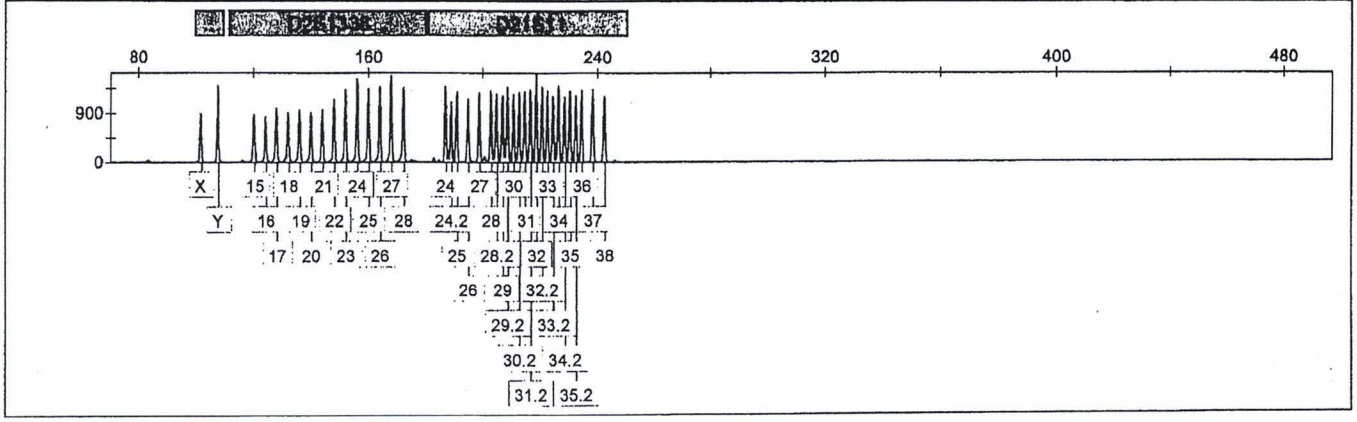
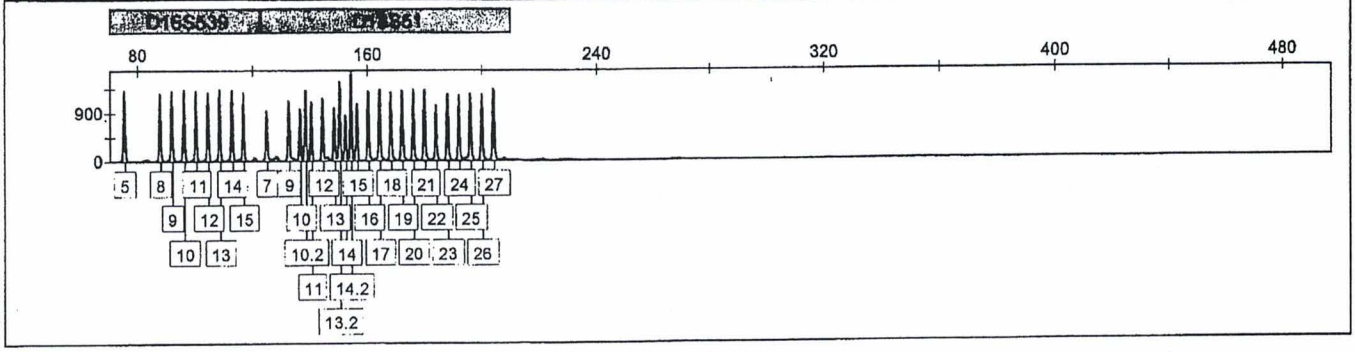


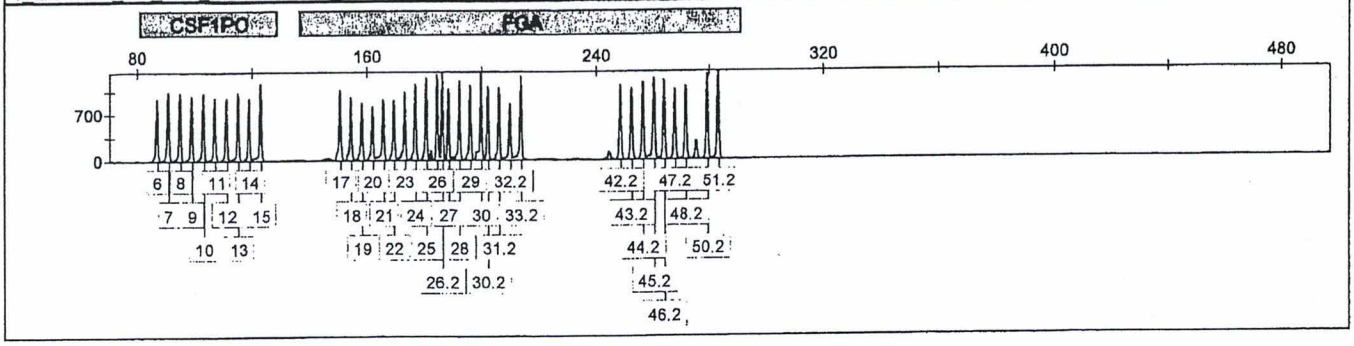
1_LADDER_MF_H03_012111-LAR2_15.fsa MiniFiler_GS500_v1



1_LADDER_MF_H03_012111-LAR2_15.fsa MiniFiler_GS500_v1



1_LADDER_MF_H03_012111-LAR2_15.fsa MiniFiler_GS500_v1



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Sample File	Panel	SQO	SQ
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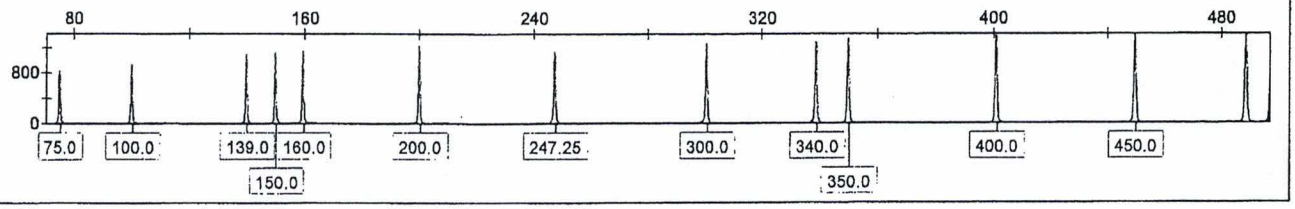

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Applied Biosystems
GeneMapper ID v3.2.1

GMID14_012111-LAR2_2S04-114_LAR_MF

Sample File	Panel	SQO	SQ
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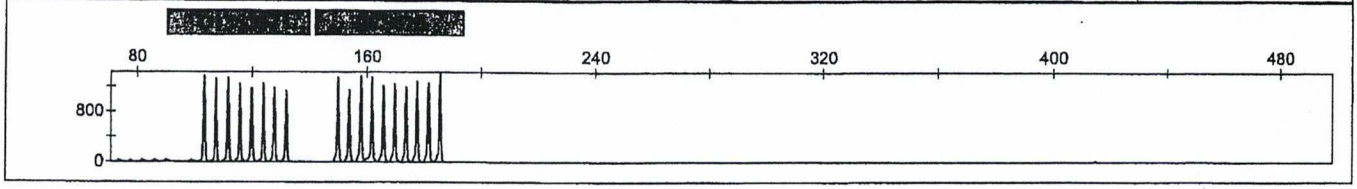

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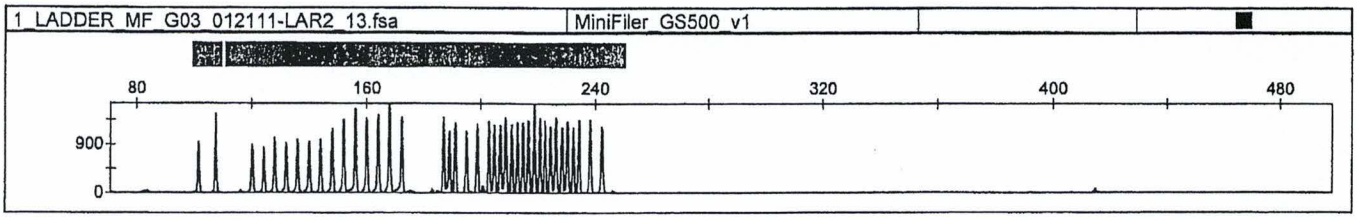

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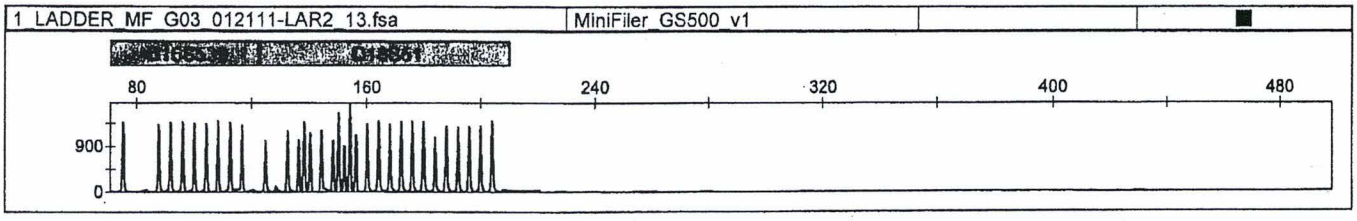
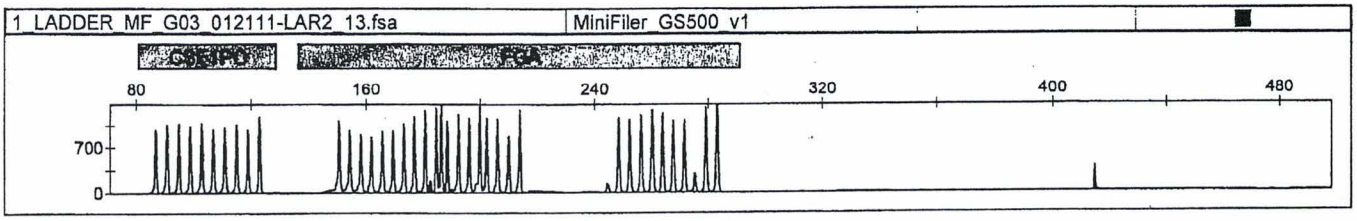
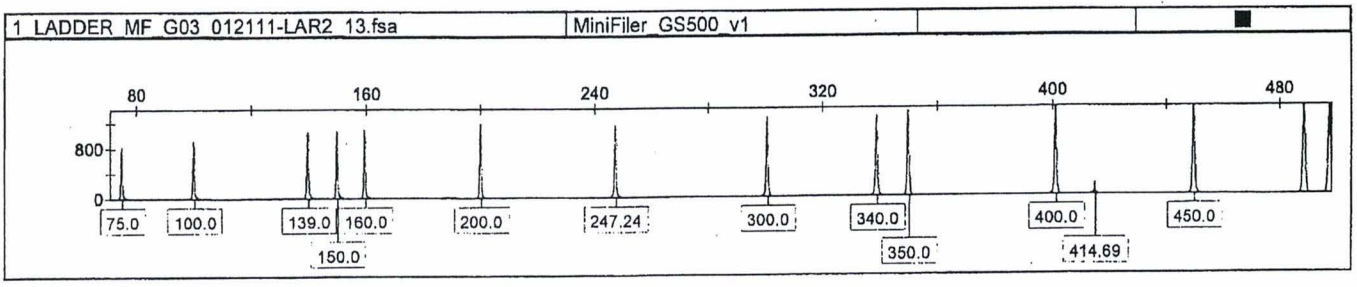


1_LADDER_MF_G03_012111-LAR2_13.fsa | MiniFiler_GS500_v1



1_LADDER_MF_G03_012111-LAR2_13.fsa | MiniFiler_GS500_v1



* MiniFiler ladder also loaded in wells F03 & H03 on tray 012111-LAR2. LAR 012411

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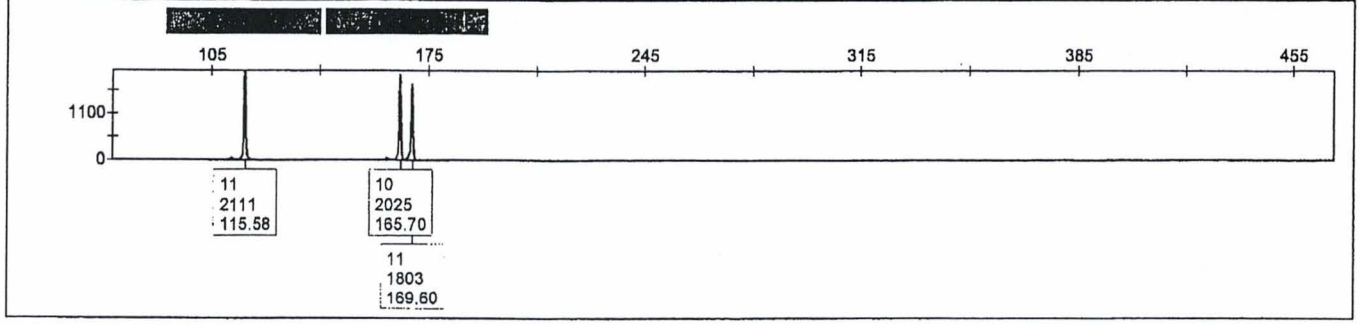
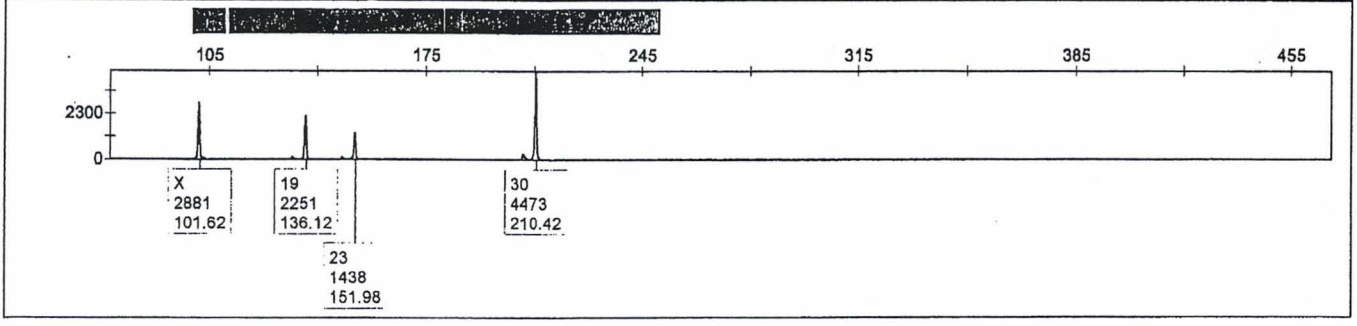
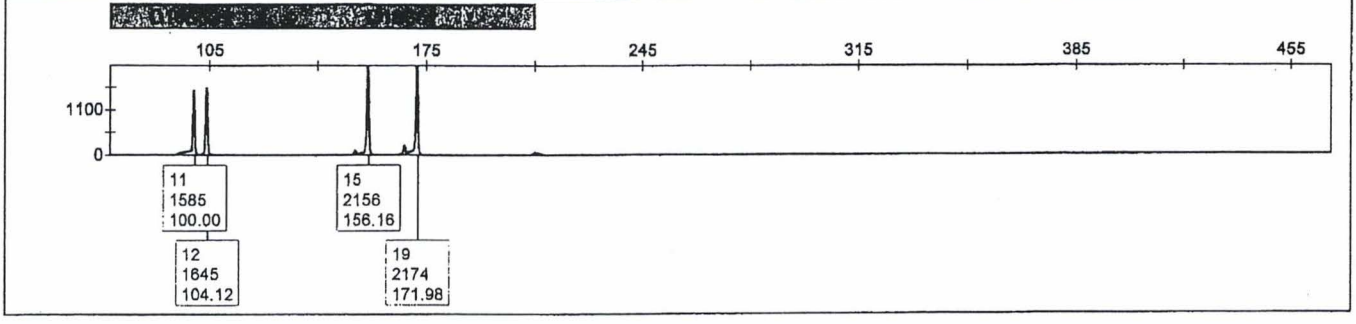
Sample File	Panel	SQO	SQ
1_2S04-114-POS41_B03_012111-LAR2_03.fsa	MiniFiler_GS500_v1		



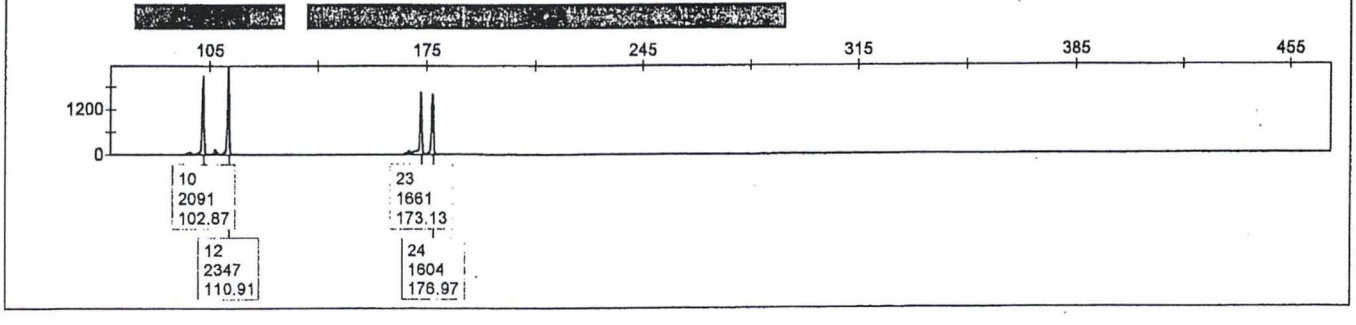
1_2S04-114-POS41_B03_012111-LAR2_03.fsa | MiniFiler_GS500_v1



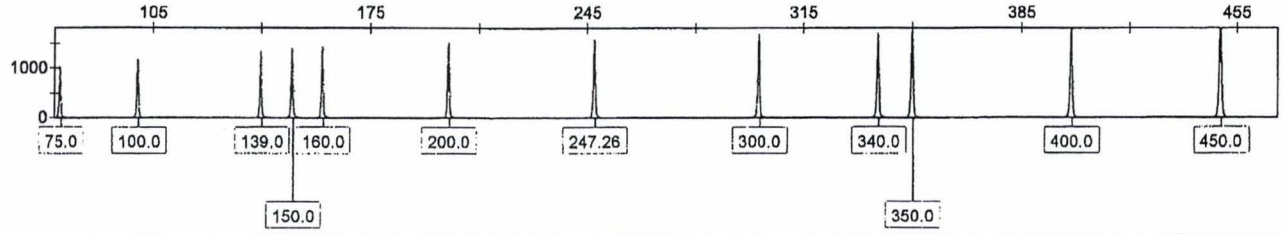
1_2S04-114-POS41_B03_012111-LAR2_03.fsa | MiniFiler_GS500_v1



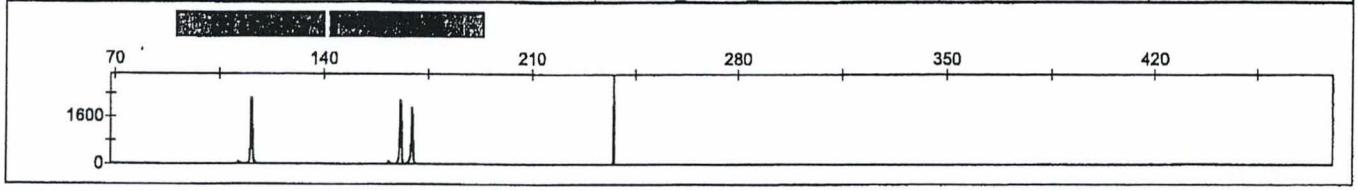
1_2S04-114-POS41_B03_012111-LAR2_03.fsa | MiniFiler_GS500_v1



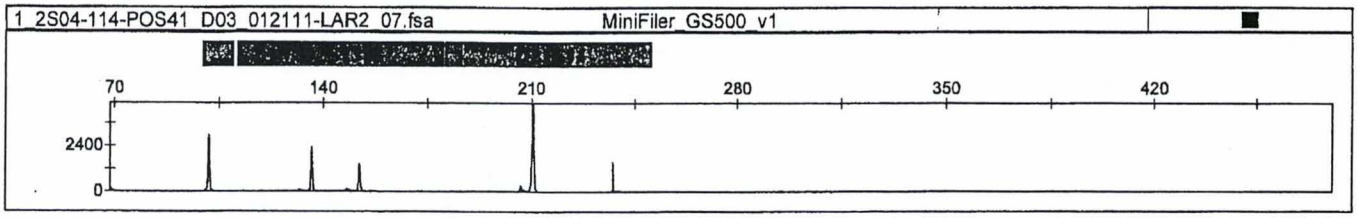
Sample File	Panel	SQO	SQ
1_2S04-114-POS41_B03_012111-LAR2_03.fsa	MiniFiler_GS500_v1		



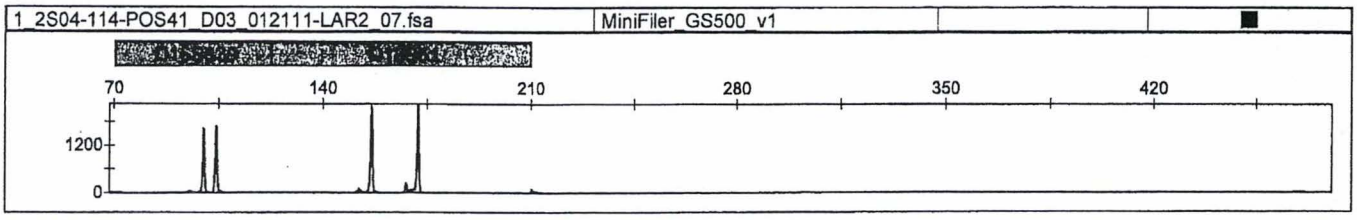
Sample File	Panel	SQO	SQ
1_2S04-114-POS41_D03_012111-LAR2_07.fsa	MiniFiler_GS500_v1		



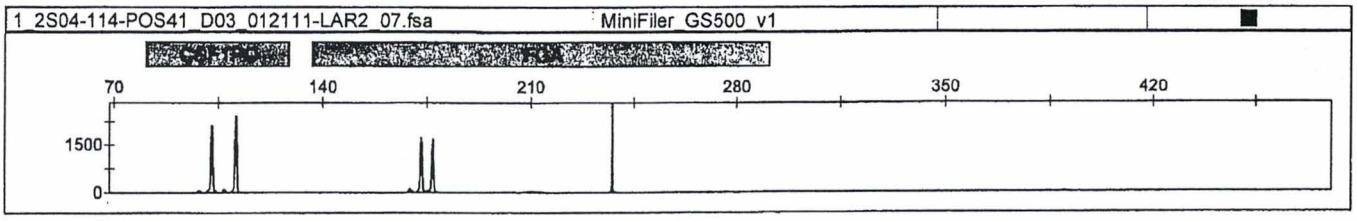
1_2S04-114-POS41_D03_012111-LAR2_07.fsa MiniFiler_GS500_v1



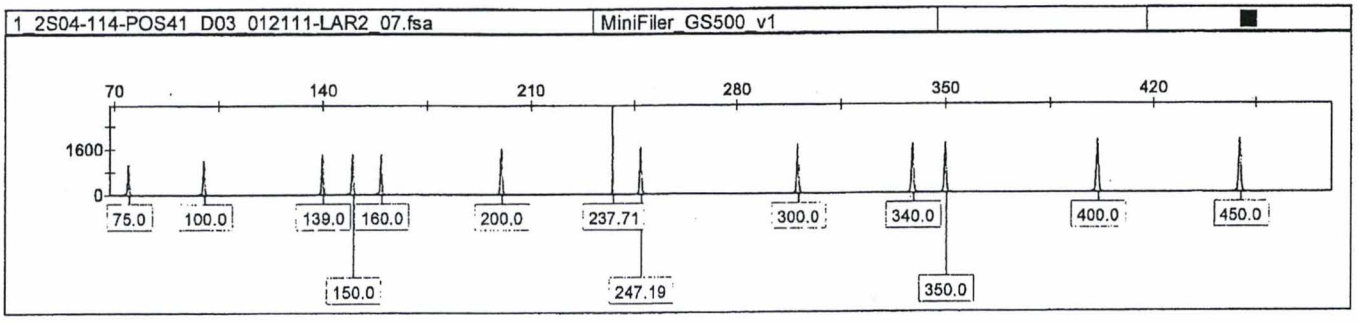
1_2S04-114-POS41_D03_012111-LAR2_07.fsa MiniFiler_GS500_v1



1_2S04-114-POS41_D03_012111-LAR2_07.fsa MiniFiler_GS500_v1



1_2S04-114-POS41_D03_012111-LAR2_07.fsa MiniFiler_GS500_v1



+ Positive control 2S04-114-POS41 also loaded in well B03 on tray 012111-LAR2. LM 012411

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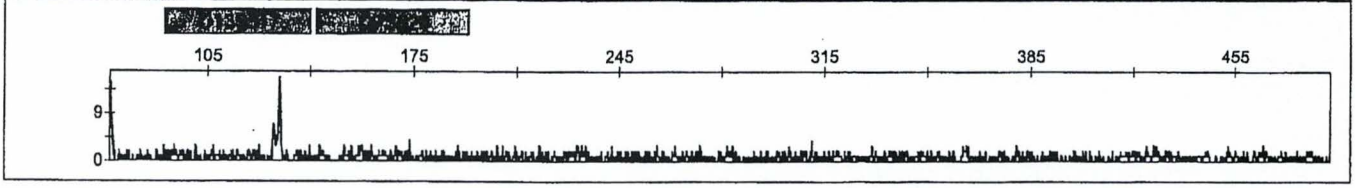
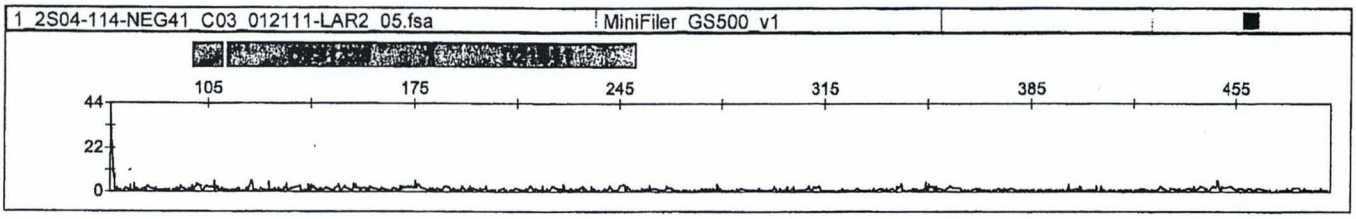
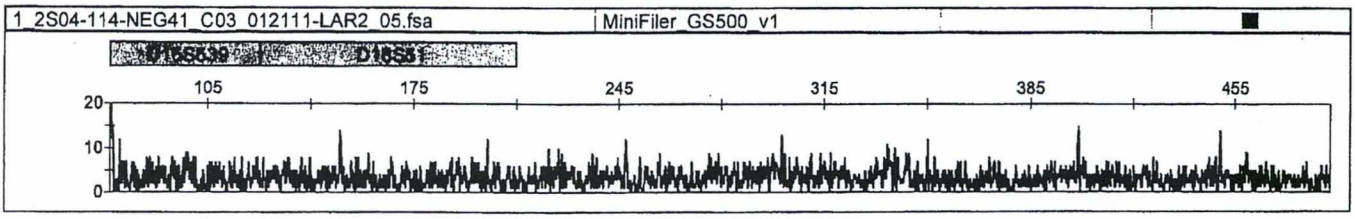
Sample File	Panel	SQO	SQ
1_2S04-114-NEG41_C03_012111-LAR2_05.fsa	MiniFiler_GS500_v1		



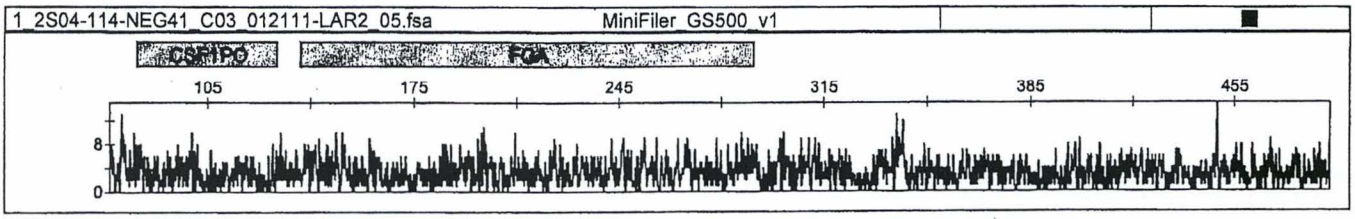
1_2S04-114-NEG41_C03_012111-LAR2_05.fsa MiniFiler_GS500_v1



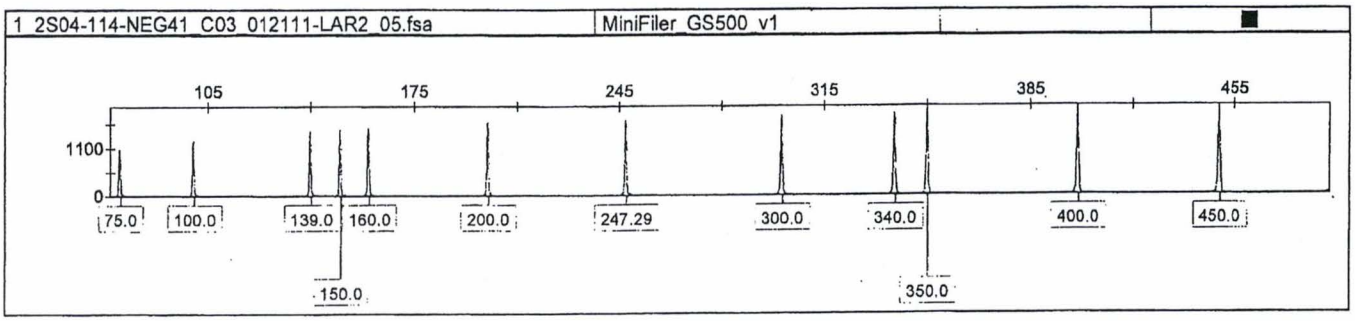
1_2S04-114-NEG41_C03_012111-LAR2_05.fsa MiniFiler_GS500_v1



1_2S04-114-NEG41_C03_012111-LAR2_05.fsa MiniFiler_GS500_v1



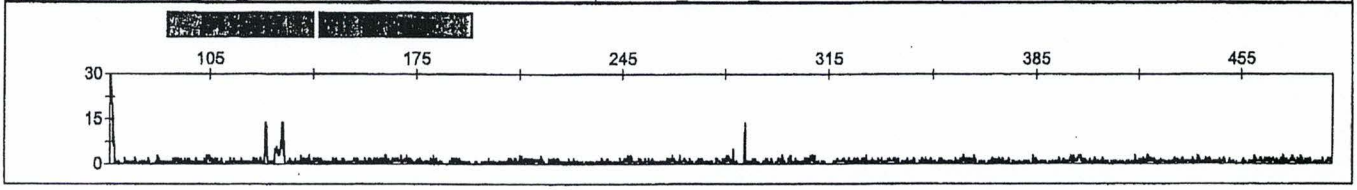
1_2S04-114-NEG41_C03_012111-LAR2_05.fsa MiniFiler_GS500_v1



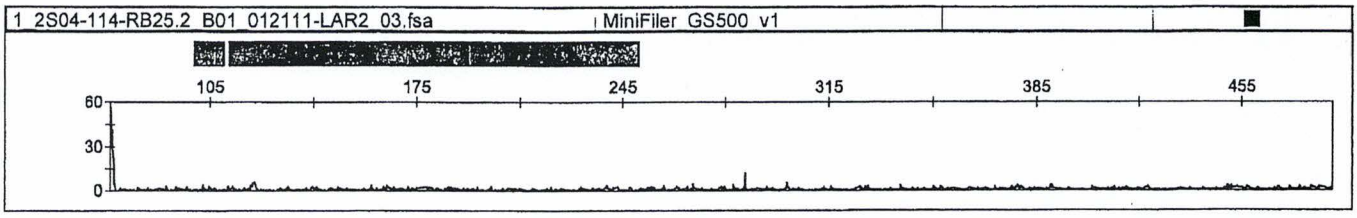
Applied Biosystems
GeneMapper ID v3.2.1

GMID14_012111-LAR2_2S04-114_LAR_MF

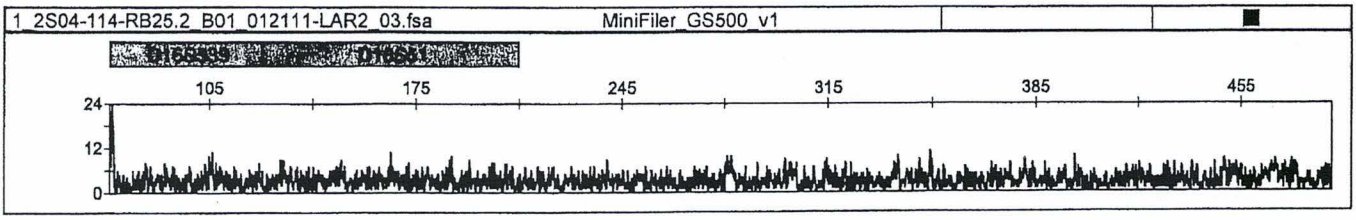
Sample File	Panel	SQO	SQ
1_2S04-114-RB25.2_B01_012111-LAR2_03.fsa	MiniFiler_GS500_v1		



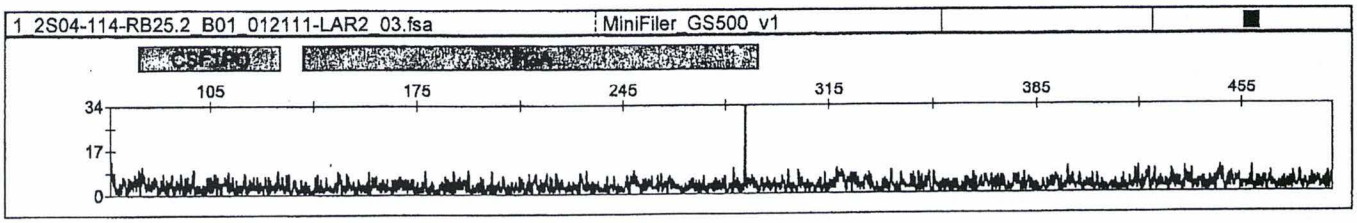
1_2S04-114-RB25.2_B01_012111-LAR2_03.fsa MiniFiler_GS500_v1



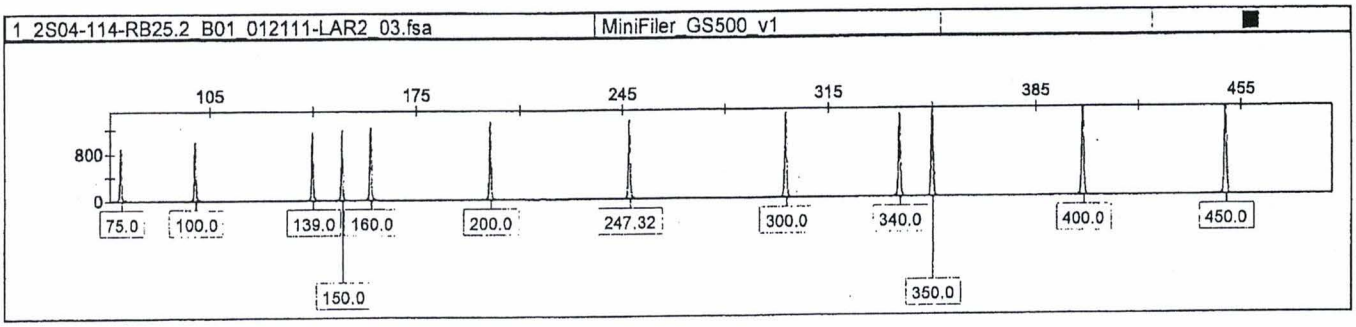
1_2S04-114-RB25.2_B01_012111-LAR2_03.fsa MiniFiler_GS500_v1



1_2S04-114-RB25.2_B01_012111-LAR2_03.fsa MiniFiler_GS500_v1



1_2S04-114-RB25.2_B01_012111-LAR2_03.fsa MiniFiler_GS500_v1



* Reagent blank 2S04-114-RB25.2 was reloaded in wells C01 & D01 on tray 012411-LAR1. MM 012411

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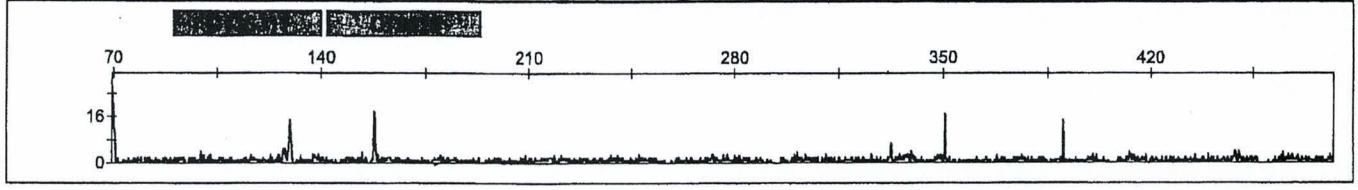
MM 012411

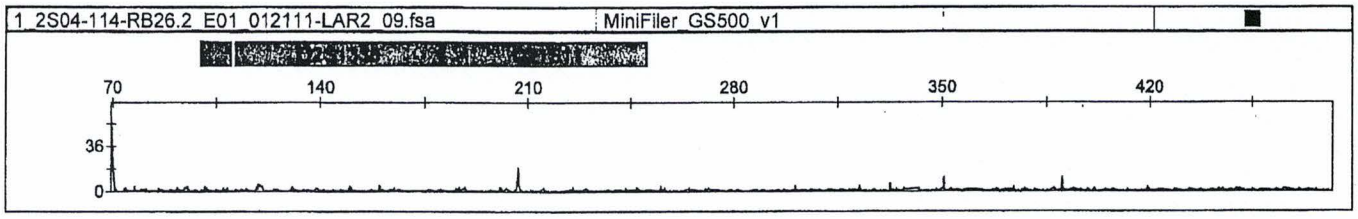
Applied Biosystems
GeneMapper ID v3.2.1

GMID14_012111-LAR2_2S04-114_LAR_MF

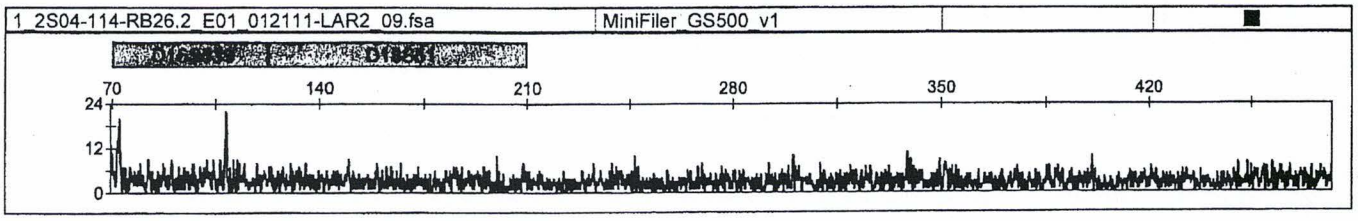
Sample File	Panel	SQO	SQ
1_2S04-114-RB26.2_E01_012111-LAR2_09.fsa	MiniFiler_GS500_v1		



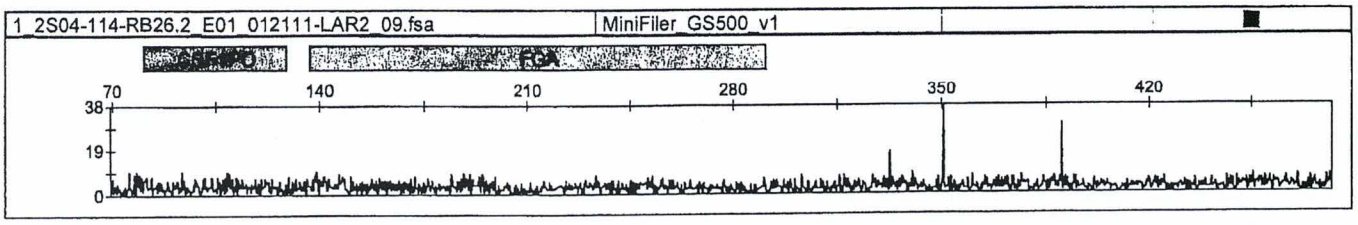
1_2S04-114-RB26.2_E01_012111-LAR2_09.fsa MiniFiler_GS500_v1



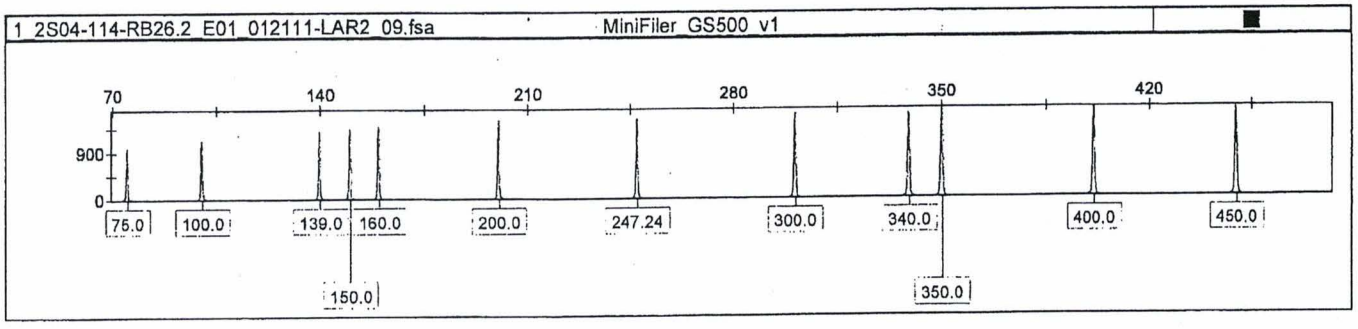
1_2S04-114-RB26.2_E01_012111-LAR2_09.fsa MiniFiler_GS500_v1



1_2S04-114-RB26.2_E01_012111-LAR2_09.fsa MiniFiler_GS500_v1



1_2S04-114-RB26.2_E01_012111-LAR2_09.fsa MiniFiler_GS500_v1



* Reagent blank 2S04-114-RB26.2 was reloaded in wells E01 & F01 on tray 012411-LAR1. LMC 012411

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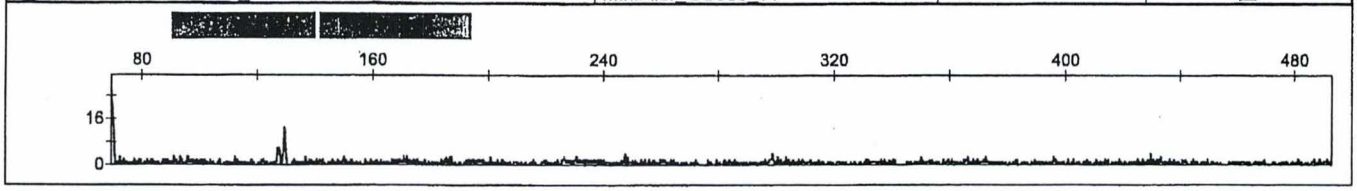
LMC 0/24/11

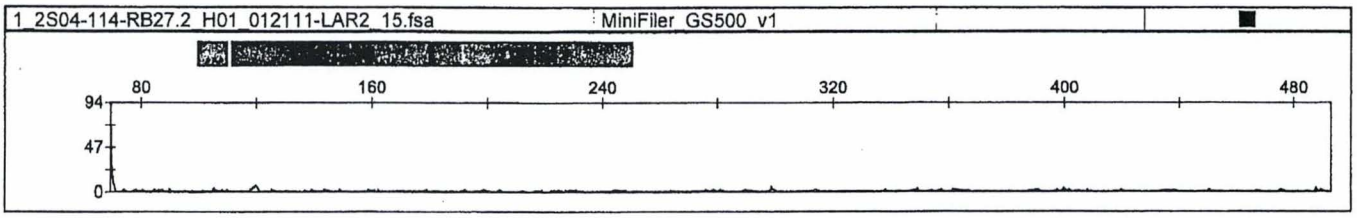
Applied Biosystems
GeneMapper ID v3.2.1

GMID14_012111-LAR2_2S04-114_LAR_MF

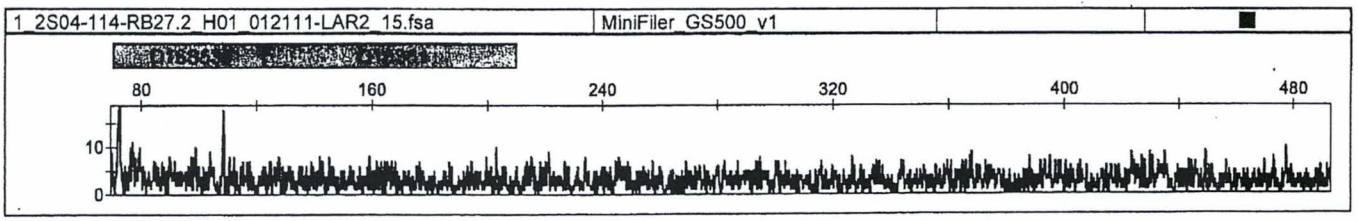
Sample File	Panel	SQO	SQ
1_2S04-114-RB27.2_H01_012111-LAR2_15.fsa	MiniFiler_GS500_v1		



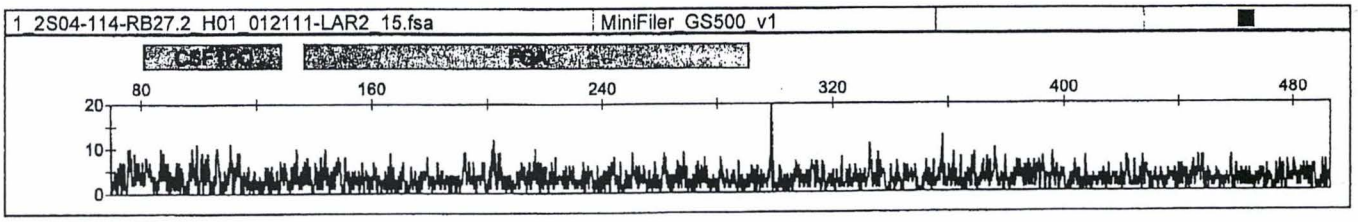
1_2S04-114-RB27.2_H01_012111-LAR2_15.fsa MiniFiler_GS500_v1



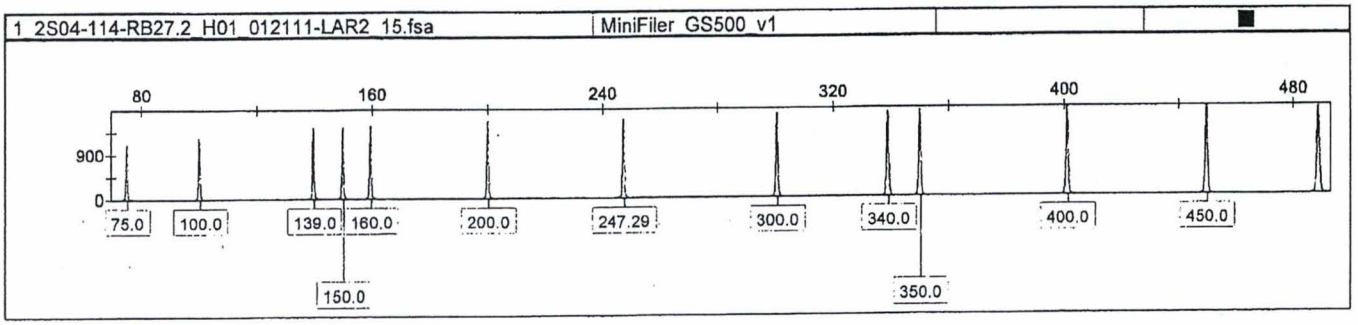
1_2S04-114-RB27.2_H01_012111-LAR2_15.fsa MiniFiler_GS500_v1



1_2S04-114-RB27.2_H01_012111-LAR2_15.fsa MiniFiler_GS500_v1



1_2S04-114-RB27.2_H01_012111-LAR2_15.fsa MiniFiler_GS500_v1



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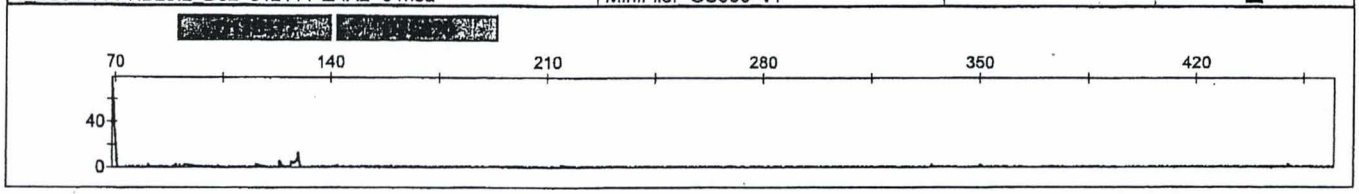
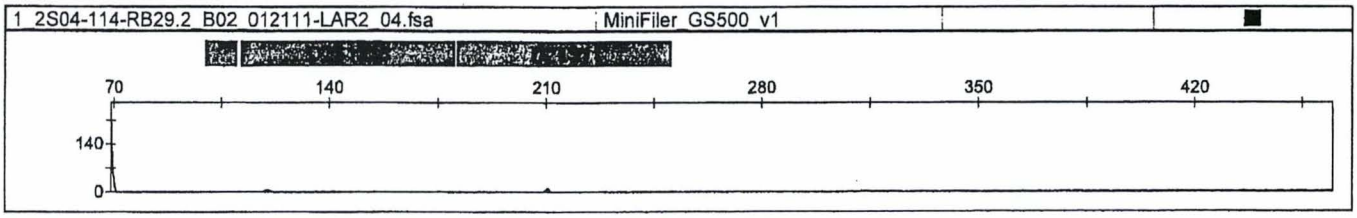
Applied Biosystems
GeneMapper ID v3.2.1

GMID14_012111-LAR2_2S04-114_LAR_MF

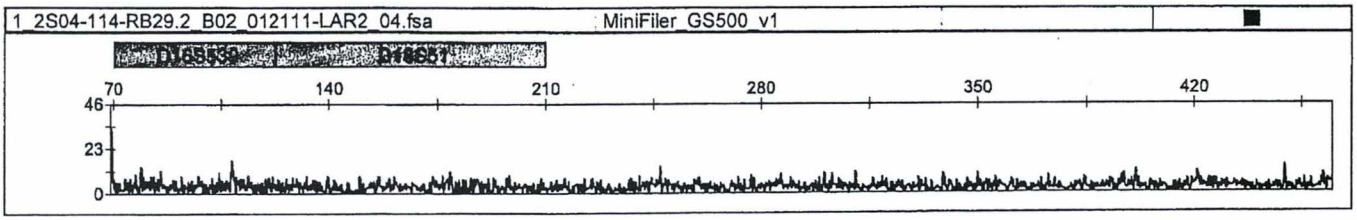
Sample File	Panel	SQO	SQ
1_2S04-114-RB29.2_B02_012111-LAR2_04.fsa	MiniFiler_GS500_v1		



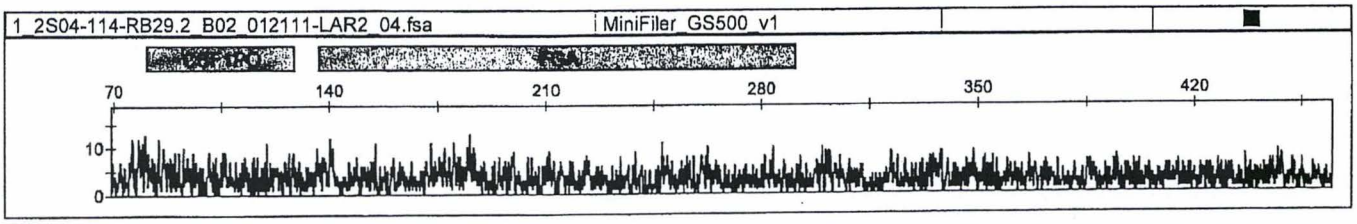
1_2S04-114-RB29.2_B02_012111-LAR2_04.fsa MiniFiler_GS500_v1



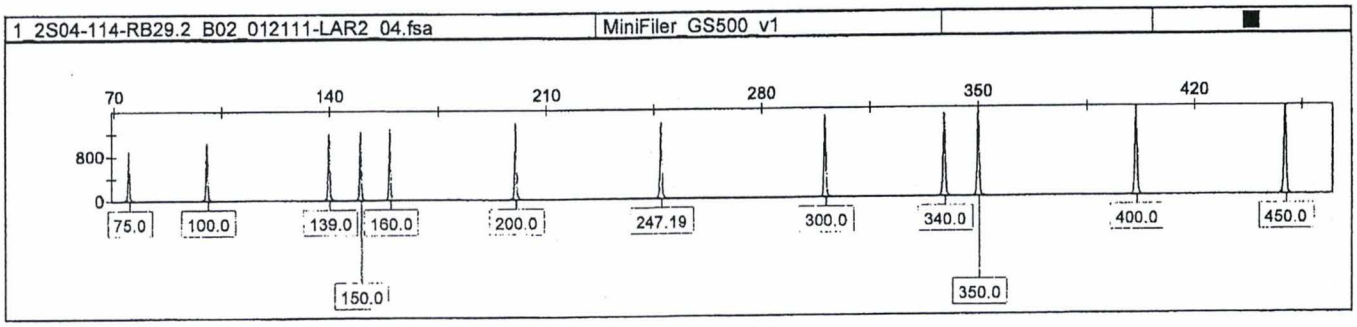
1_2S04-114-RB29.2_B02_012111-LAR2_04.fsa MiniFiler_GS500_v1



1_2S04-114-RB29.2_B02_012111-LAR2_04.fsa MiniFiler_GS500_v1



1_2S04-114-RB29.2_B02_012111-LAR2_04.fsa MiniFiler_GS500_v1



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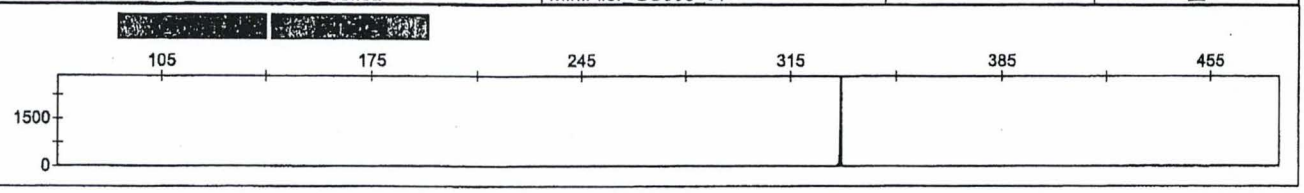
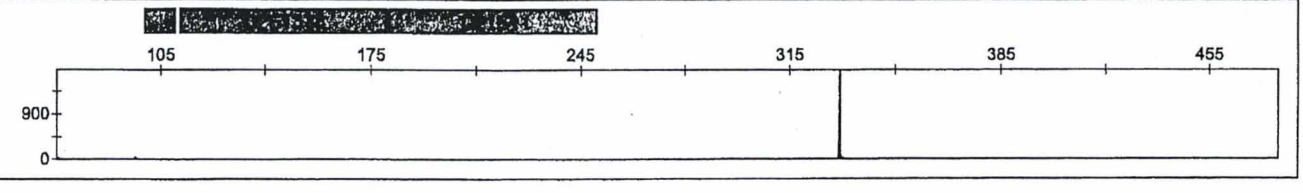
Applied Biosystems
GeneMapper ID v3.2.1

GMID14_012111-LAR2_2S04-114_LAR_MF

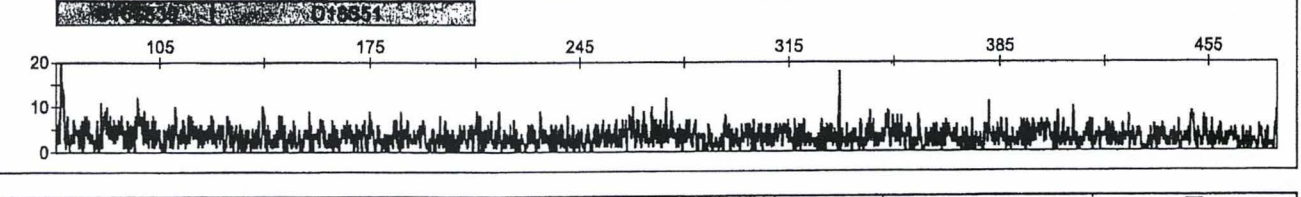
Sample File	Panel	SQO	SQ
1_2S04-114-RB30.2_D02_012111-LAR2_08.fsa	MiniFiler_GS500_v1		



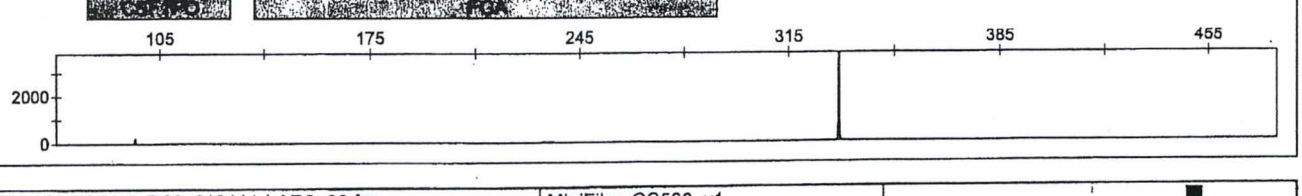
Sample File	Panel	SQO	SQ
1_2S04-114-RB30.2_D02_012111-LAR2_08.fsa	MiniFiler_GS500_v1		



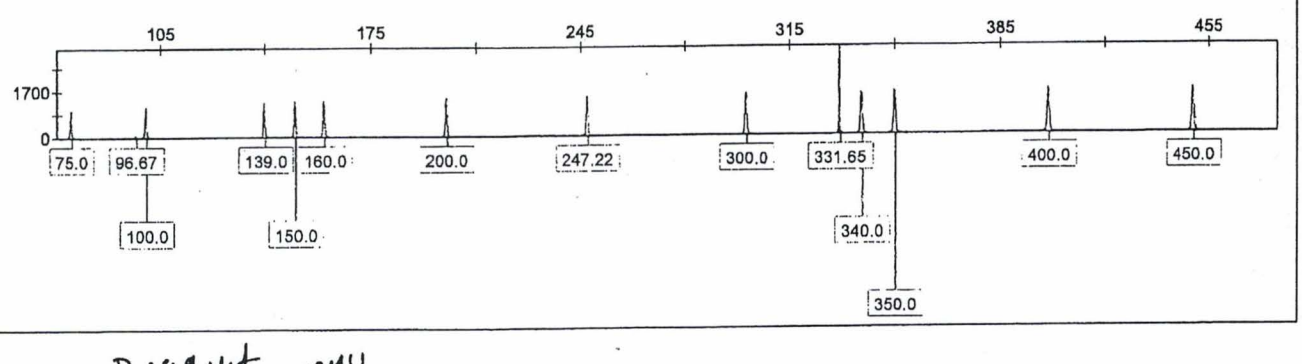
Sample File	Panel	SQO	SQ
1_2S04-114-RB30.2_D02_012111-LAR2_08.fsa	MiniFiler_GS500_v1		



Sample File	Panel	SQO	SQ
1_2S04-114-RB30.2_D02_012111-LAR2_08.fsa	MiniFiler_GS500_v1		



Sample File	Panel	SQO	SQ
1_2S04-114-RB30.2_D02_012111-LAR2_08.fsa	MiniFiler_GS500_v1		



* Reagent blank 2S04-114-RB30.2 was reloaded in wells A02 & B02 on tray 012111-LAR1.

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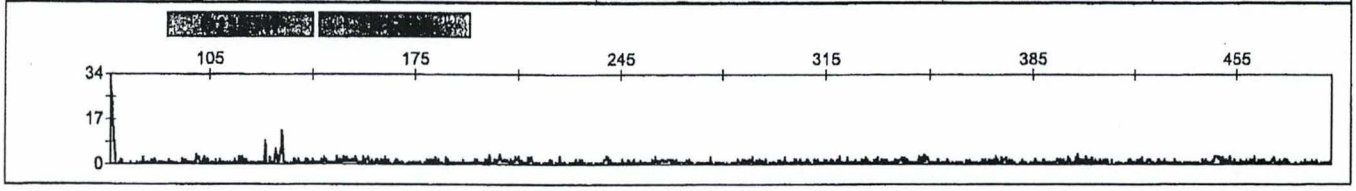
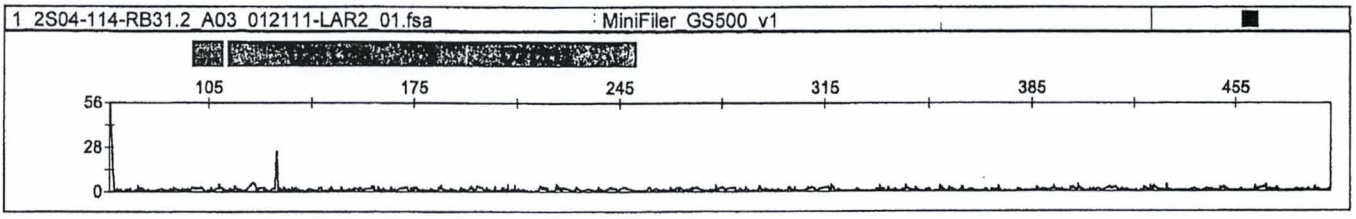
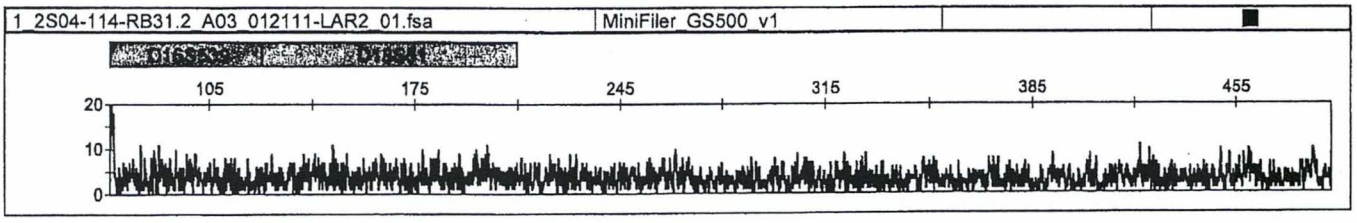
Sample File	Panel	SQO	SQ
1_2S04-114-RB31.2_A03_012111-LAR2_01.fsa	MiniFiler_GS500_v1		



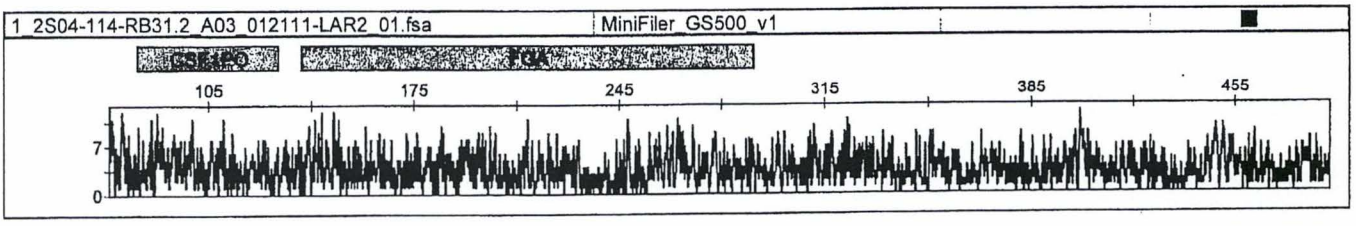
1_2S04-114-RB31.2_A03_012111-LAR2_01.fsa MiniFiler_GS500_v1



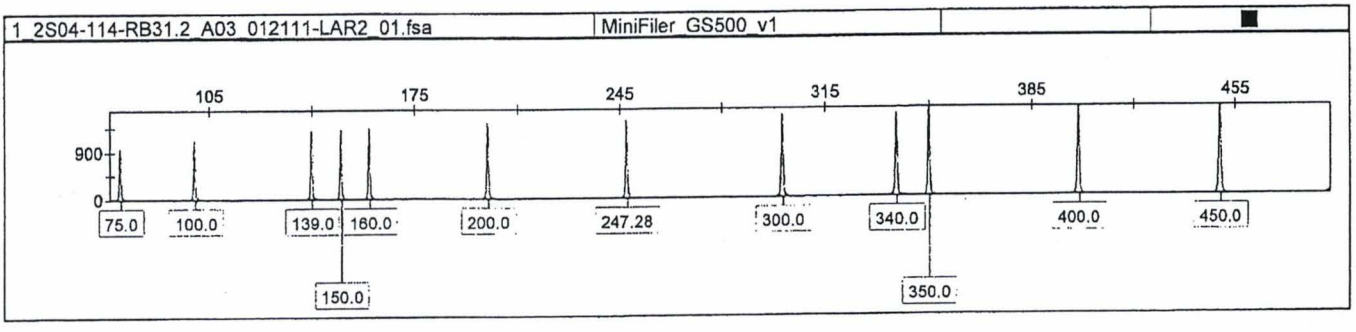
1_2S04-114-RB31.2_A03_012111-LAR2_01.fsa MiniFiler_GS500_v1



1_2S04-114-RB31.2_A03_012111-LAR2_01.fsa MiniFiler_GS500_v1



1_2S04-114-RB31.2_A03_012111-LAR2_01.fsa MiniFiler_GS500_v1



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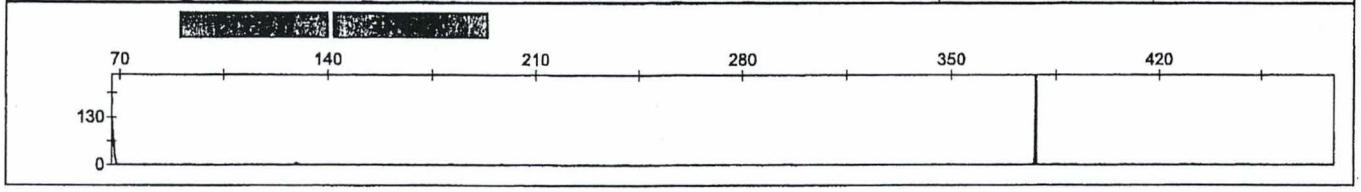
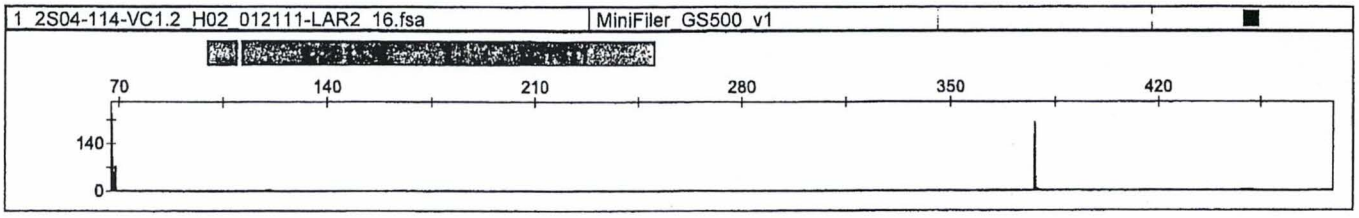
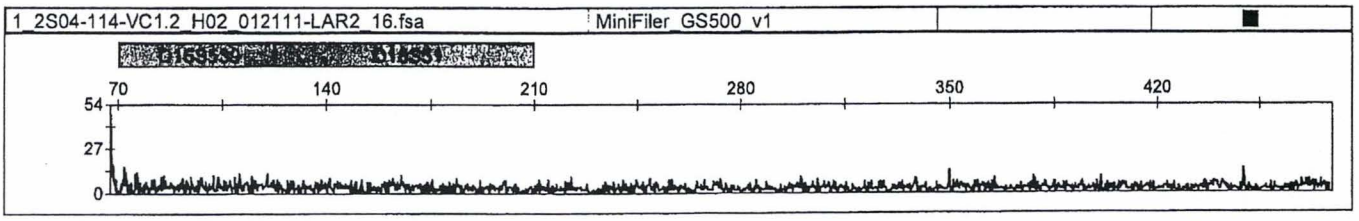
Sample File	Panel	SQO	SQ
1_2S04-114-VC1.2_H02_012111-LAR2_16.fsa	MiniFiler_GS500_v1		



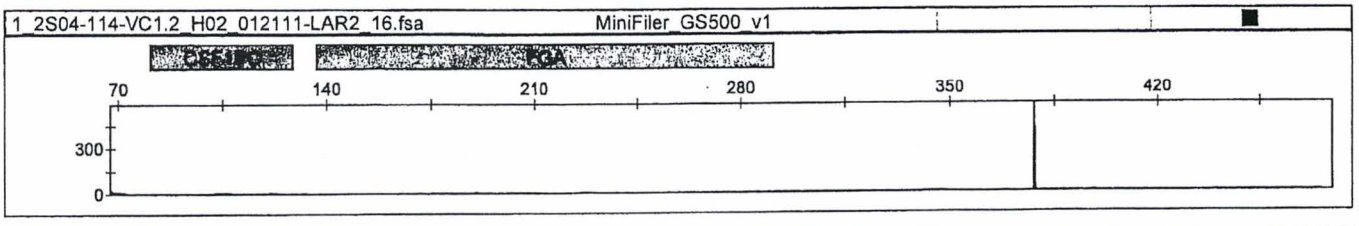
1_2S04-114-VC1.2_H02_012111-LAR2_16.fsa MiniFiler_GS500_v1



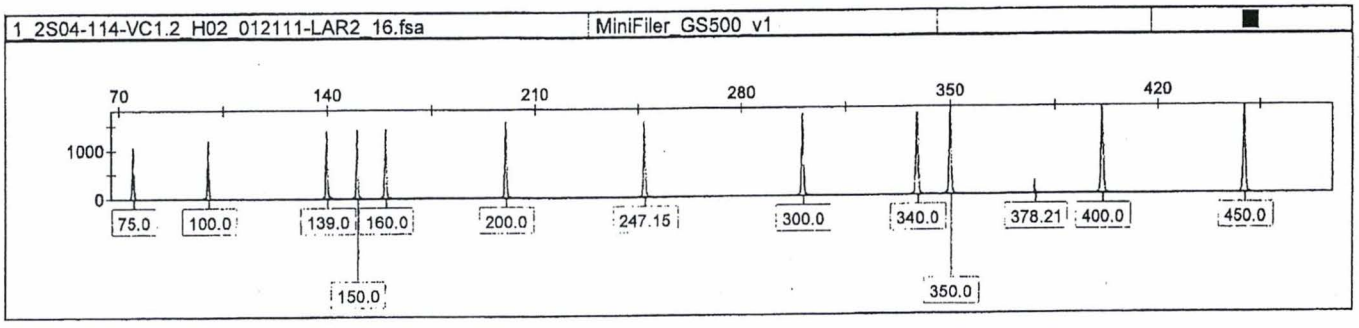
1_2S04-114-VC1.2_H02_012111-LAR2_16.fsa MiniFiler_GS500_v1



1_2S04-114-VC1.2_H02_012111-LAR2_16.fsa MiniFiler_GS500_v1



1_2S04-114-VC1.2_H02_012111-LAR2_16.fsa MiniFiler_GS500_v1



* Viracor negative control 2S04-114-VC1.2 was reloaded in wells C02+D02 on tray 012411-LAR1. LMR 01/24/11

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CE Set-up Sheet

TRAY ID: 012111-LAR1 **Amp. Tray:** 2S04-114-AMP40 **Analyst:** LAR **Date:** 01/21/11

	1	2	3	4	5	6	7	8	9	10	11	12
A	2S04-114-51c2.1	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
B	2S04-114-VC1.1	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
C	2S04-114-POS40	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
D	2S04-114-NEG40	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
E	2S04-114-51c2.1	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
F	2S04-114-VC1.1	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
G	2S04-114-POS40	LADDER_ID	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
H	2S04-114-NEG40	LADDER_ID	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank

	Vol.(ul)/Well		No. of Rxns		Vol. Total (ul)
Formamide Lot# 01011012	10.0 ul	x	100	=	1000
GS-500LIZ Lot# 10161241	0.12 ul	x	100	=	12

Master Mix 10.0 ul

\+

Amp. Product 0.7ul

PIPETTORS LOT #S:	
Formamide:	P-118
ILS:	P-055
Formamide & ILS Mix:	P-116
Ladders:	P-055
Amp Product (3100 tray):	P-036
Amp Product (if diluted):	---
Diluent (for dilutions):	---

Machine:	10
Run #'s:	32
System:	Identifiler
Ladder Lot#:	0907017
Run Module:	Active_Run_Module_G5
Analysis Module:	75minrfu.gsp

Injected by: ML

Date of Injection: 012111

Primer Peak Verification	
Primer peaks verified for all negative samples.	
Read 1 Analyst: LAR	Date: 012411
Integrity Report Evaluation	
Integrity Report Evaluation Date* :	
Analyst:	

LAR 012111

*If possible contamination is detected, provide case note with details for affected cases

CE GMID Editing Sheet – ID

Tray ID: [illegible]
Analyst: [illegible]
GMID Panel: Identifiler_Bode_v2

Shipment or Case #: [illegible]
Date: [illegible]

Well	Edit: Locus, Base pair size - reason
G1	20%

Editing Key

20%: 20% filter applied (after confirming no mixtures)

-A: -A/Split peaks

AUT: single allele below minimum threshold

Artifact (non-specific)

D/I: Degraded and/or Inhibited

Dye artifact

Elevated BL: Labels placed on elevated basline(s)

FC: Failed capillary

ILS<MIN: ILS below minimum rfu threshold

IA: Imbalanced Alleles

LOR: Loss of resolution

Matrix Issue

OL: Off ladder allele

Other: provide explanation in text box (currently using this for FDLE alleles btw. 75-99 rfu)

PU: Pullup

RFU<MIN: sample rfu below minimum threshold

RFU>MAX: sample rfu above maximum threshold

Shoulder: Shoulder peak

Sizing: incorrect sizing (eg: migration issue)

Spikes

Stutter (n-4 if other record)

9947 Positive Control					
Well Numbers Checked Against Known: [illegible]					
D8S1179: [illegible]	D21S11: [illegible]	D7S820: [illegible]	CSF1PO: [illegible]		
D3S1358: [illegible]	TH01: [illegible]	D13S317: [illegible]	D16S539: [illegible]	D2S1338: [illegible]	
D19S433: [illegible]	vWA: [illegible]	TPOX: [illegible]	D18S51: [illegible]		
AMEL: [illegible]	D5S818: [illegible]	FGA: [illegible]			

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CE GMID Editing Sheet – ID

Tray ID: 01211-UAR1
Analyst: UAR
GMID Panel: Identifiler_Bode_v2

Shipment or Case #: 2504-114
Date: 01/24/11

Well	Edit: Locus, Base pair size - reason
G01	20%

Editing Key

20%: 20% filter applied (after confirming no mixtures)

-A: -A/Split peaks

AUT: single allele below minimum threshold

Artifact (non-specific)

D/I: Degraded and/or Inhibited

Dye artifact

Elevated BL: Labels placed on elevated basline(s)

FC: Failed capillary

ILS<MIN: ILS below minimum rfu threshold

IA: Imbalanced Alleles

LOR: Loss of resolution

Matrix Issue

OL: Off ladder allele

Other: provide explanation in text box (currently using this for FDLE alleles btw. 75-99 rfu)

PU: Pullup

RFU<MIN: sample rfu below minimum threshold

RFU>MAX: sample rfu above maximum threshold

Shoulder: Shoulder peak

Sizing: incorrect sizing (eg: migration issue)

Spikes

Stutter (n-4 if other record)

9947 Positive Control
Well Numbers Checked Against Known: C01 G01

D8S1179: 13,13	D21S11: 30,30	D7S820: 10,11	CSF1PO: 10,12		
D3S1358: 14,15	TH01: 8,9.3	D13S317: 11,11	D16S539: 11,12	D2S1338: 19,23	
D19S433: 14,15	vWA: 17,18	TPOX: 8,8	D18S51: 15,19		
AMEL: X,X	D5S818: 11,11	FGA: 23,24			

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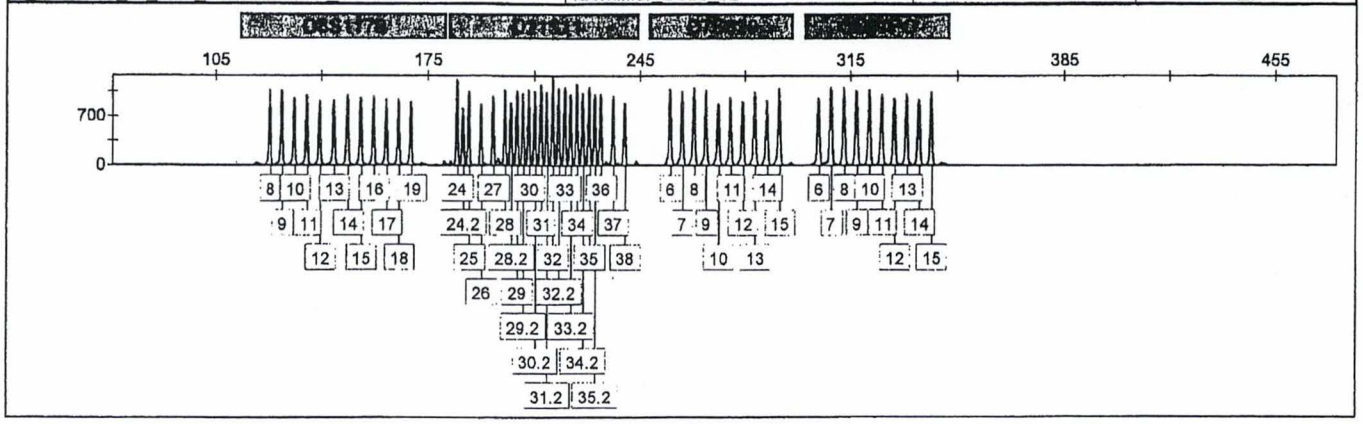
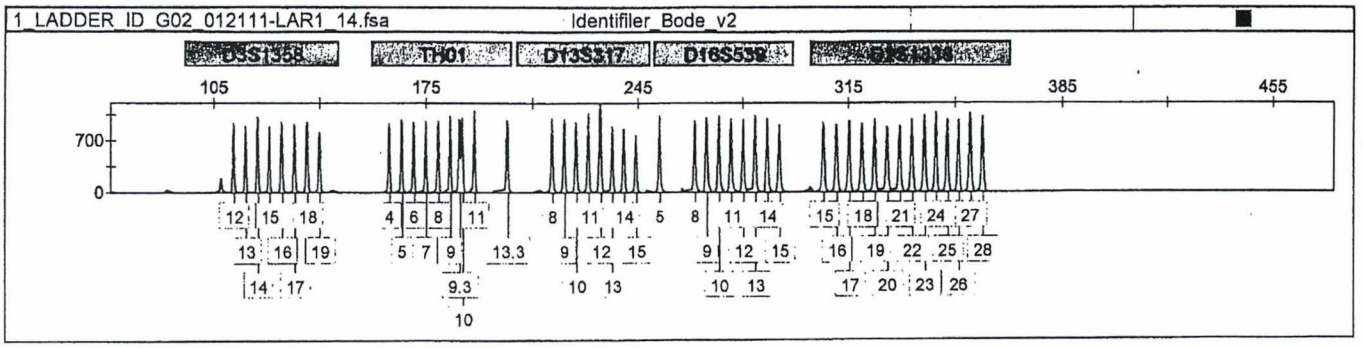
UAR 012411

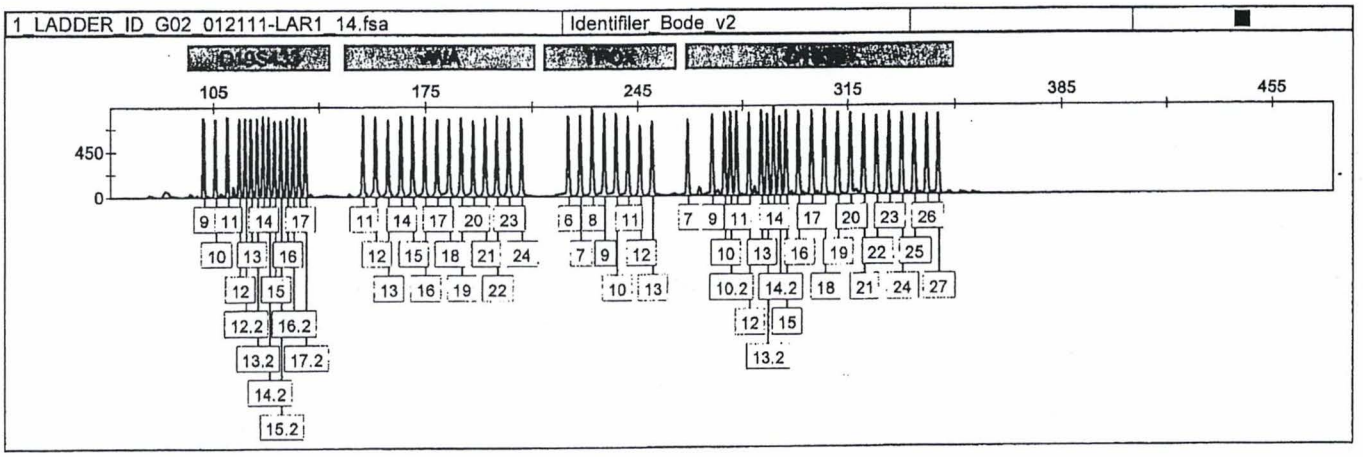
Sample File	Panel	SQO	SQ
1_LADDER_ID_G02_012111-LAR1_14.fsa	Identifiler_Bode_v2		



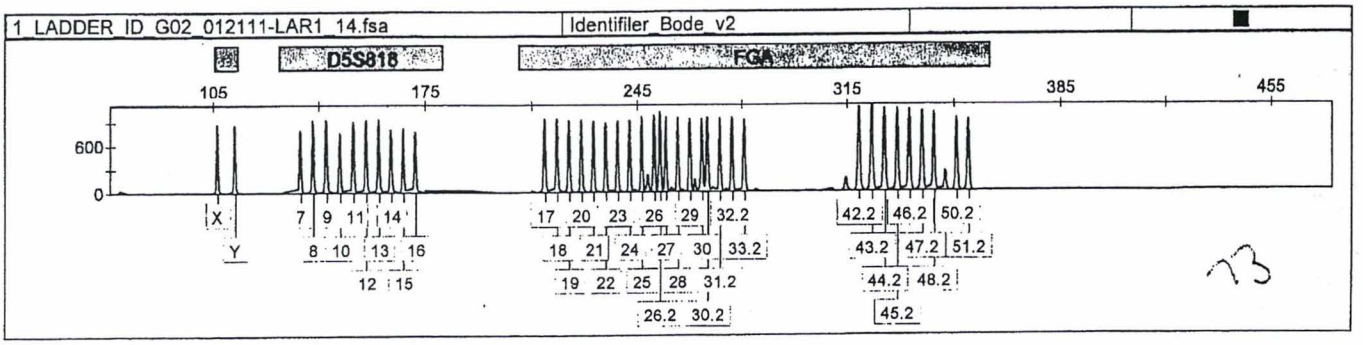
1_LADDER_ID_G02_012111-LAR1_14.fsa Identifiler_Bode_v2



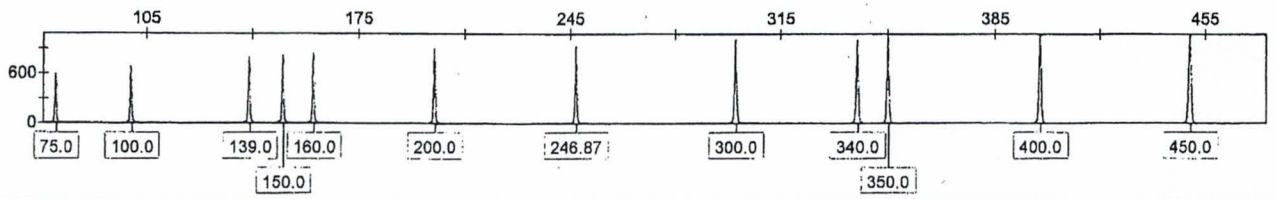
1_LADDER_ID_G02_012111-LAR1_14.fsa Identifiler_Bode_v2



1_LADDER_ID_G02_012111-LAR1_14.fsa Identifiler_Bode_v2



Sample File	Panel	SQO	SQ
1_LADDER_ID_G02_012111-LAR1_14.fsa	Identifiler_Bode_v2		



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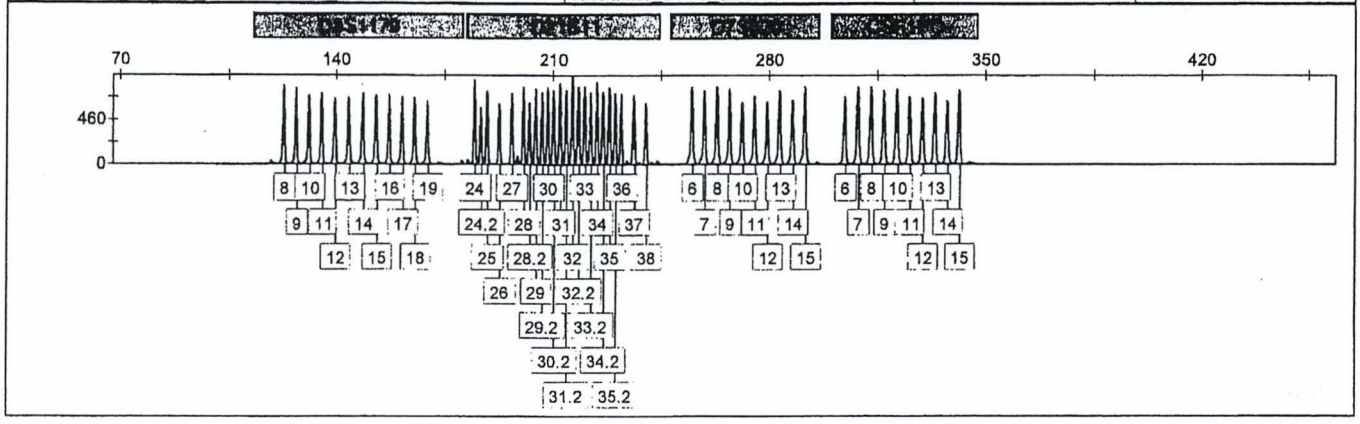
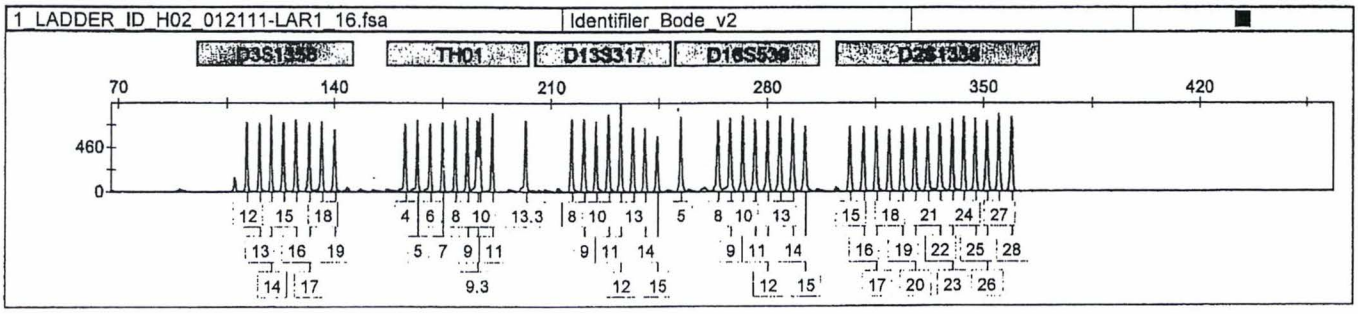
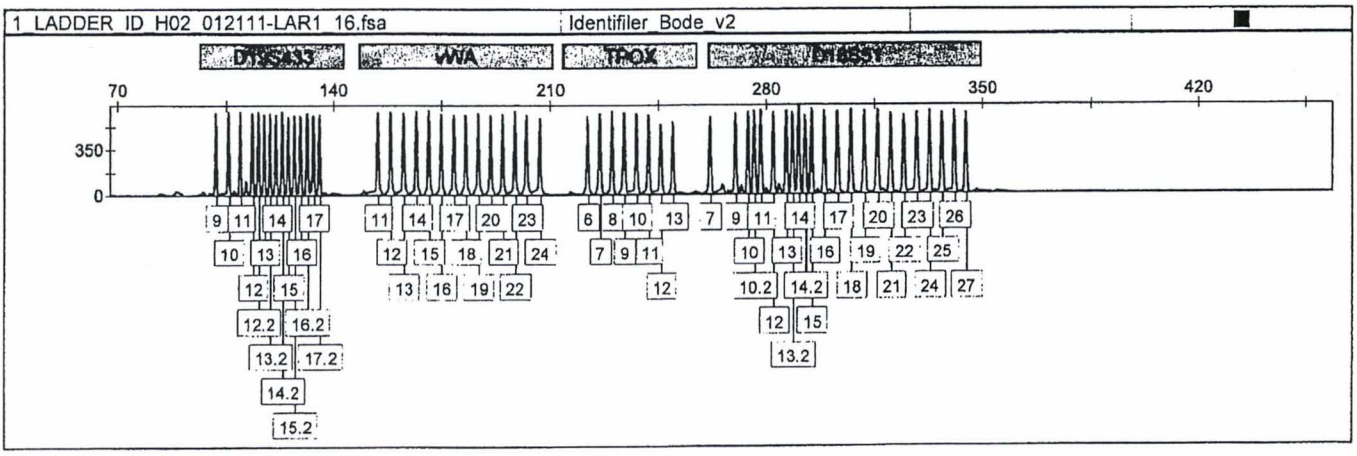
Sample File	Panel	SQO	SQ
1_LADDER_ID_H02_012111-LAR1_16.fsa	Identifiler_Bode_v2		



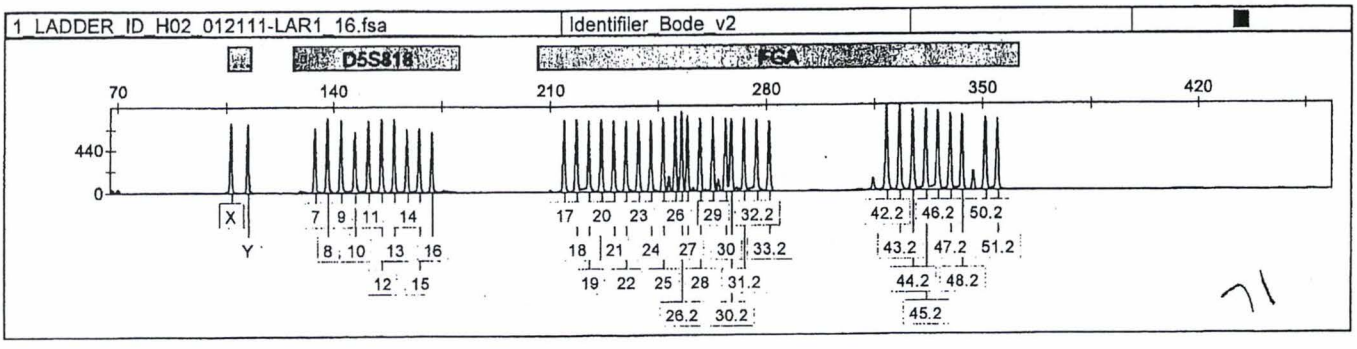
1_LADDER_ID_H02_012111-LAR1_16.fsa | Identifiler_Bode_v2



1_LADDER_ID_H02_012111-LAR1_16.fsa | Identifiler_Bode_v2



1_LADDER_ID_H02_012111-LAR1_16.fsa | Identifiler_Bode_v2



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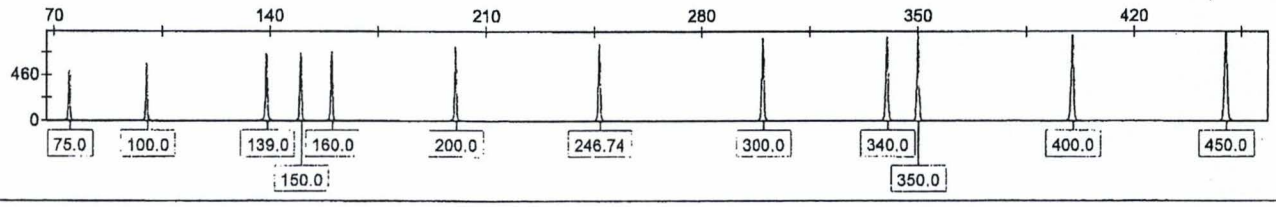
Sample File	Panel	SQO	SQ
1_LADDER_ID_H02_012111-LAR1_16.fsa	Identifiler_Bode_v2		



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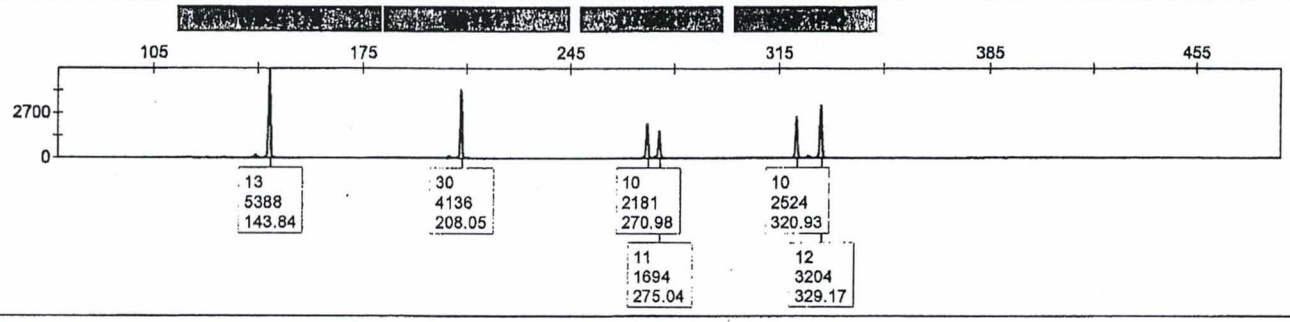
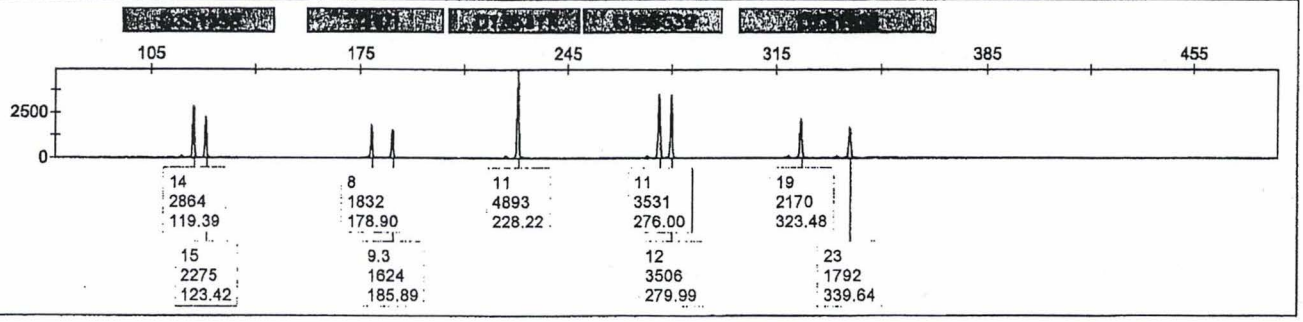
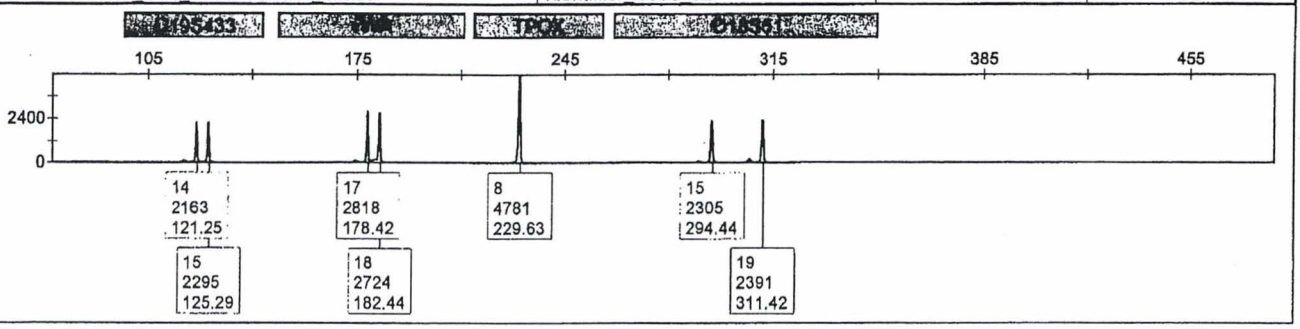
Sample File	Panel	SQO	SQ
1_2S04-114-POS40_C01_012111-LAR1_05.fsa	Identifiler_Bode_v2		



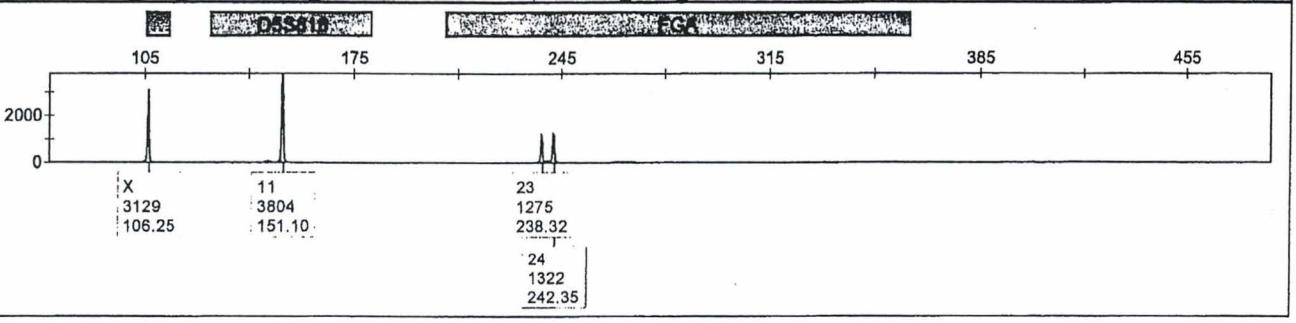
1_2S04-114-POS40_C01_012111-LAR1_05.fsa | Identifiler_Bode_v2



1_2S04-114-POS40_C01_012111-LAR1_05.fsa | Identifiler_Bode_v2



1_2S04-114-POS40_C01_012111-LAR1_05.fsa | Identifiler_Bode_v2



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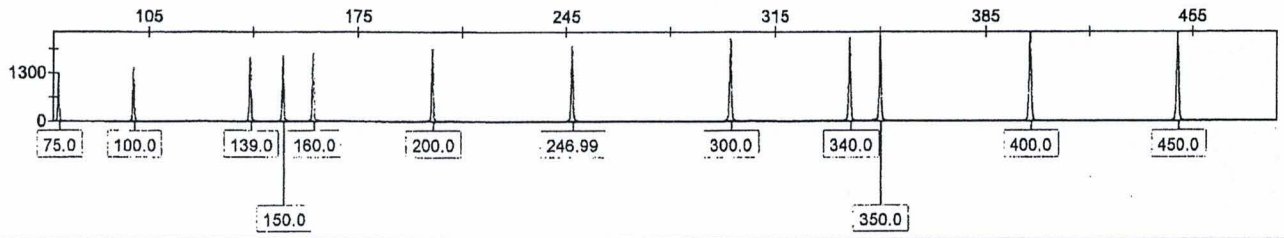
Sample File	Panel	SQO	SQ
1_2S04-114-POS40_C01_012111-LAR1_05.fsa	Identifiler_Bode_v2		



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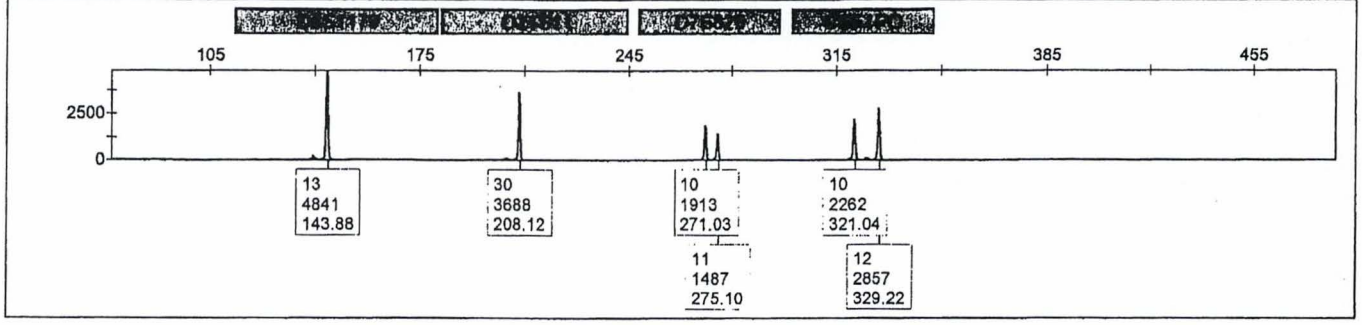
Applied Biosystems

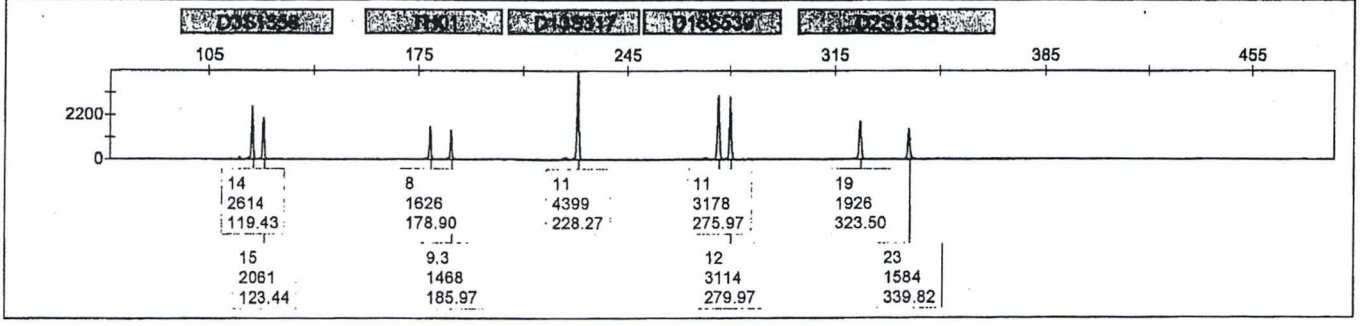
GeneMapper ID v3.2.1

GMID10_012111-LAR1_2S04-114_LAR_ID

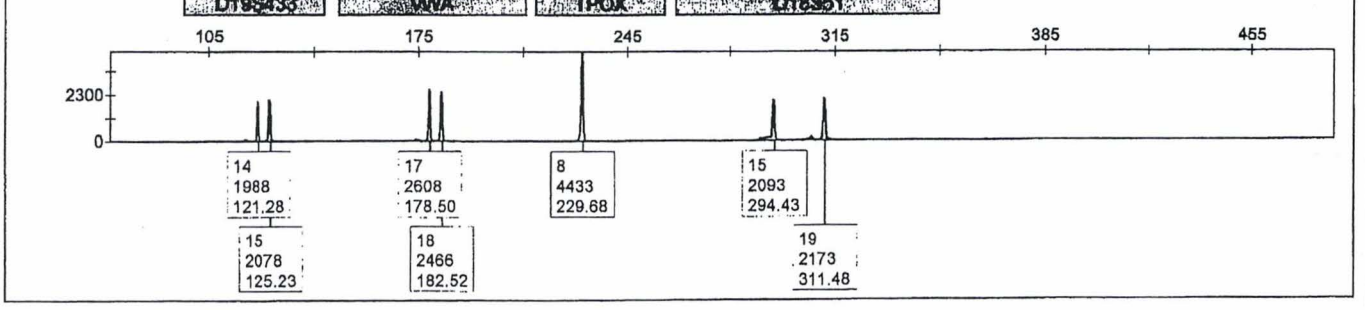
Sample File	Panel	SQO	SQ
1_2S04-114-POS40_G01_012111-LAR1_13.fsa	Identifiler_Bode_v2		



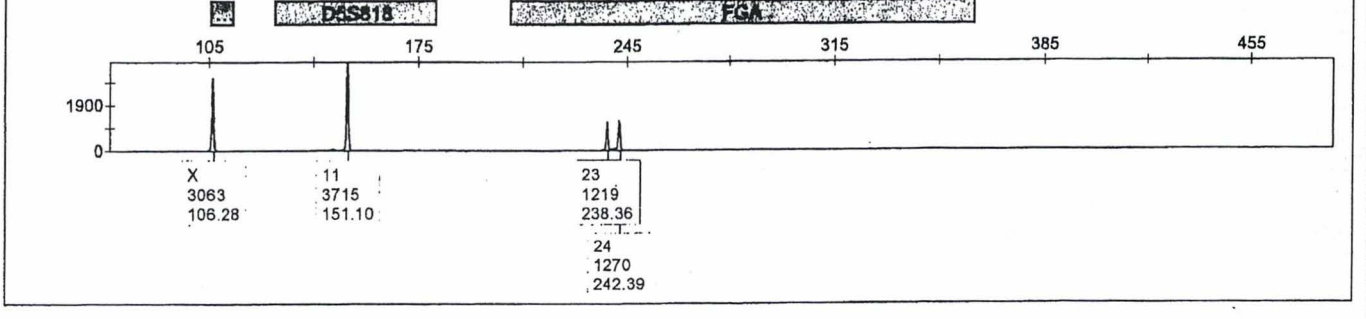
1_2S04-114-POS40_G01_012111-LAR1_13.fsa | Identifiler_Bode_v2



1_2S04-114-POS40_G01_012111-LAR1_13.fsa | Identifiler_Bode_v2



1_2S04-114-POS40_G01_012111-LAR1_13.fsa | Identifiler_Bode_v2



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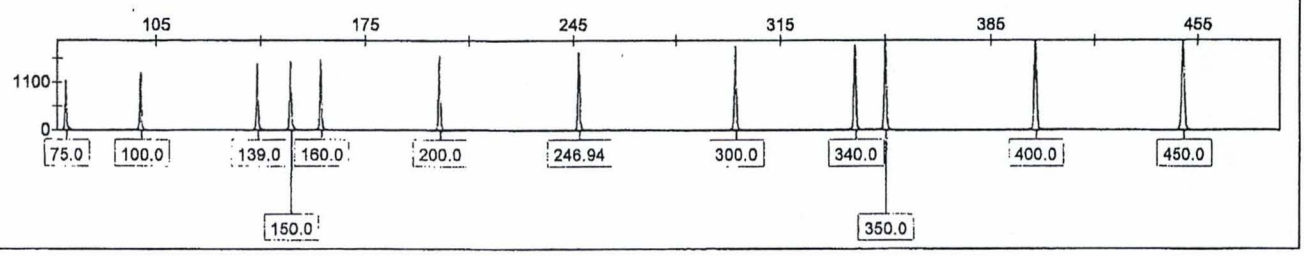
Mon Jan 24,2011 09:21AM, EST

Printed by: gmid

UM 01/24/11

Sample File	Panel	SQO	SQ
1_2S04-114-POS40_G01_012111-LAR1_13.fsa	Identifiler_Bode_v2		



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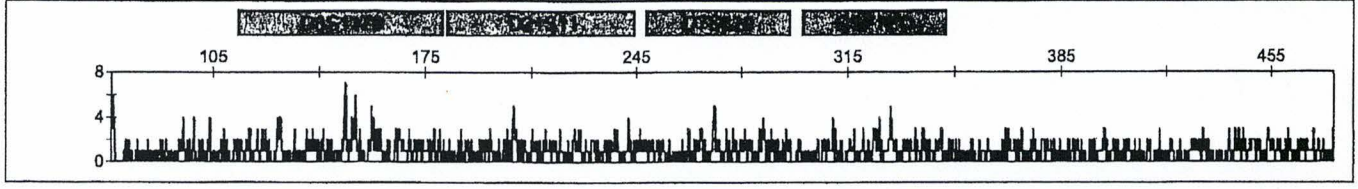
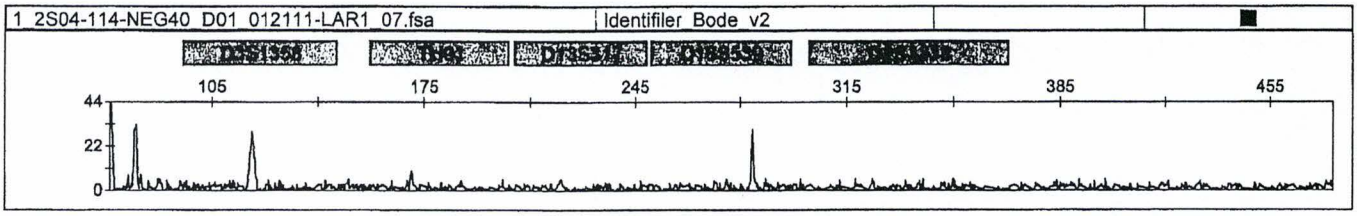
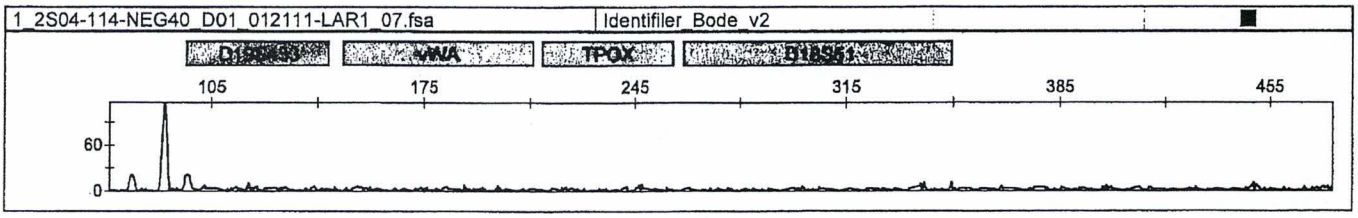
Sample File	Panel	SQO	SQ
1_2S04-114-NEG40_D01_012111-LAR1_07.fsa	Identifiler_Bode_v2		



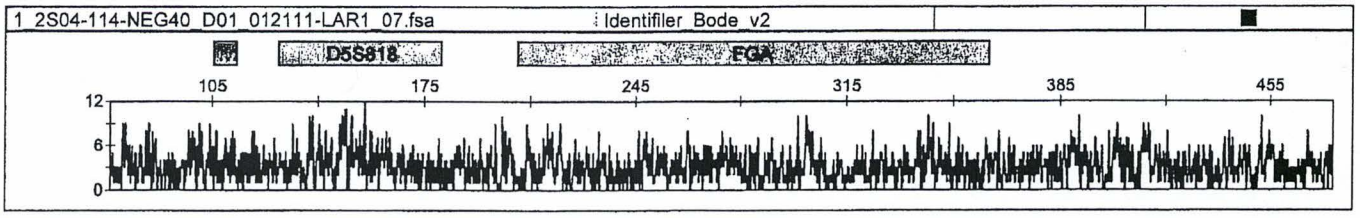
1_2S04-114-NEG40_D01_012111-LAR1_07.fsa | Identifiler_Bode_v2



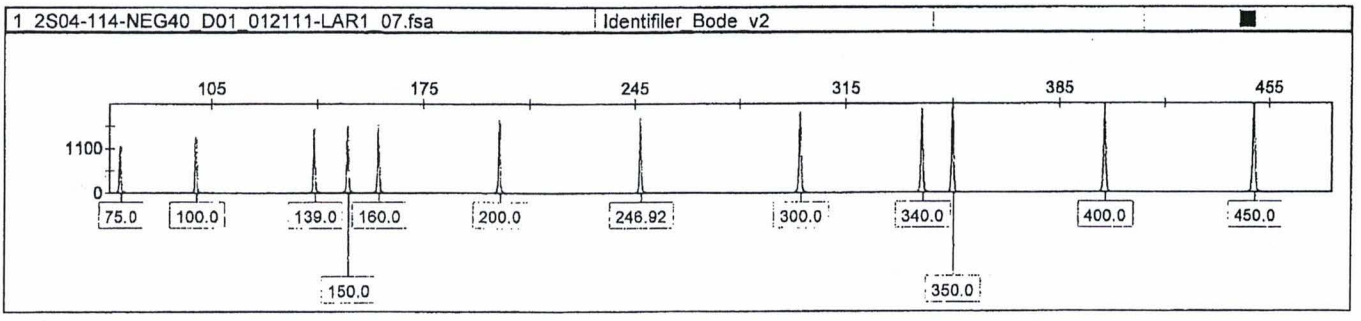
1_2S04-114-NEG40_D01_012111-LAR1_07.fsa | Identifiler_Bode_v2



1_2S04-114-NEG40_D01_012111-LAR1_07.fsa | Identifiler_Bode_v2



1_2S04-114-NEG40_D01_012111-LAR1_07.fsa | Identifiler_Bode_v2



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Sample File	Panel	SQO	SQ
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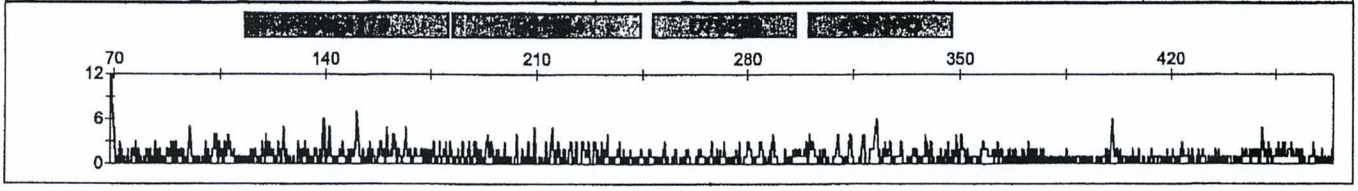
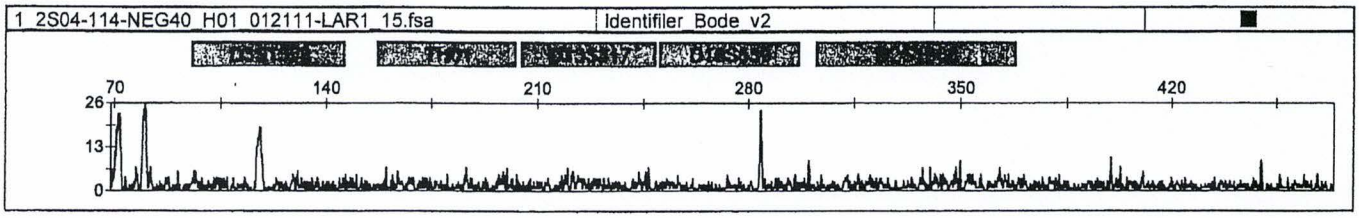
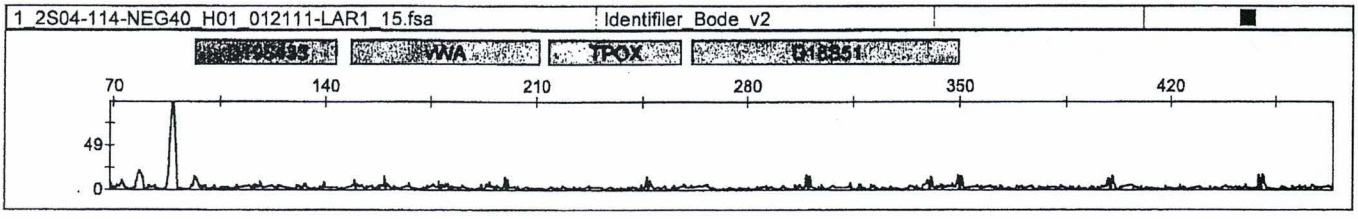


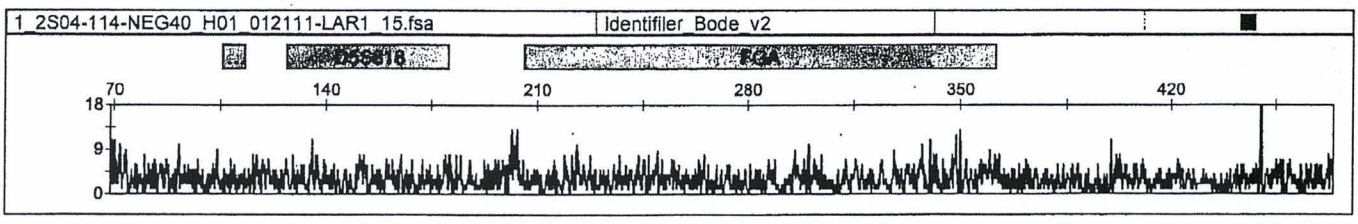
1_2S04-114-NEG40_H01_012111-LAR1_15.fsa | Identifiler_Bode_v2



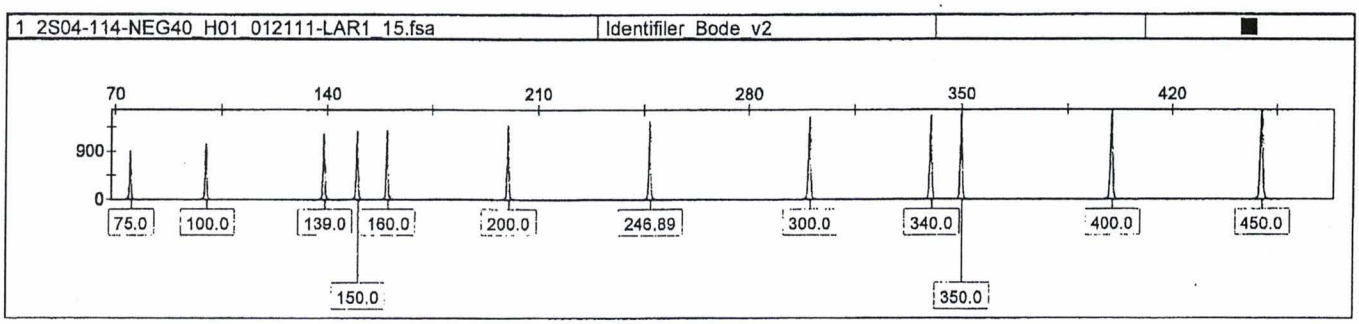
1_2S04-114-NEG40_H01_012111-LAR1_15.fsa | Identifiler_Bode_v2



1_2S04-114-NEG40_H01_012111-LAR1_15.fsa | Identifiler_Bode_v2



1_2S04-114-NEG40_H01_012111-LAR1_15.fsa | Identifiler_Bode_v2



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Applied Biosystems

GeneMapper ID v3.2.1

GMID10_012111-LAR1_2S04-114_LAR_ID

Sample File	Panel	SQO	SQ
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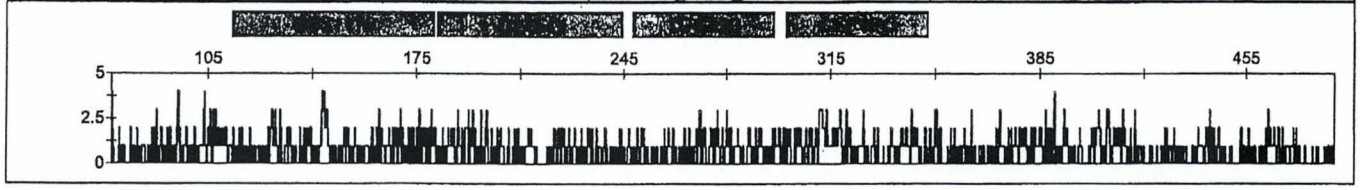
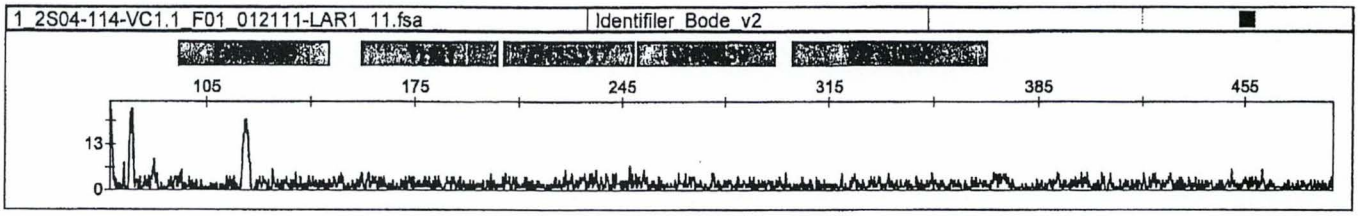
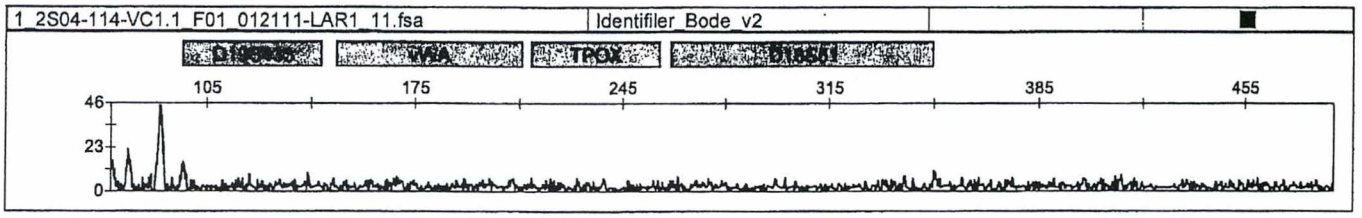


1_2S04-114-VC1.1_F01_012111-LAR1_11.fsa | Identifiler_Bode_v2



1_2S04-114-VC1.1_F01_012111-LAR1_11.fsa | Identifiler_Bode_v2



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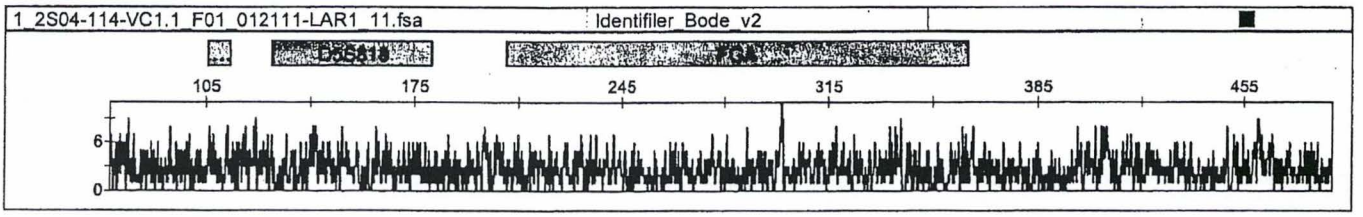
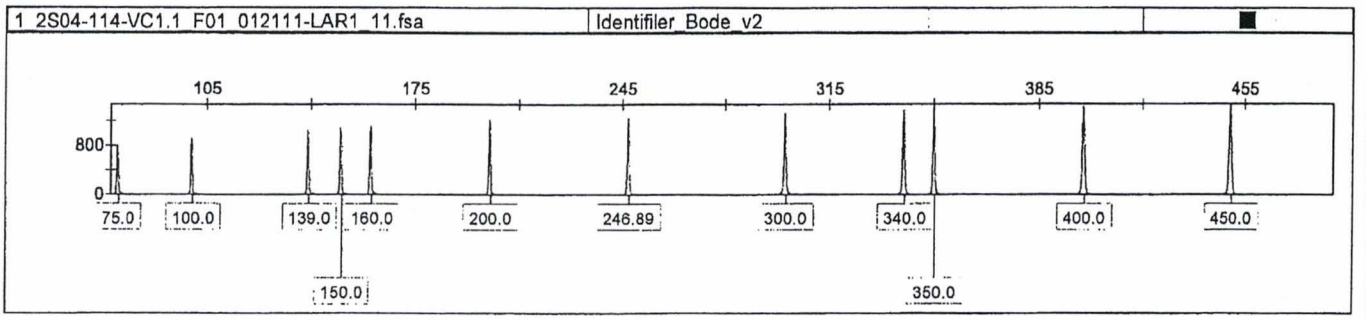


1_2S04-114-VC1.1_F01_012111-LAR1_11.fsa | Identifiler_Bode_v2



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Mon Jan 24,2011 09:22AM, EST

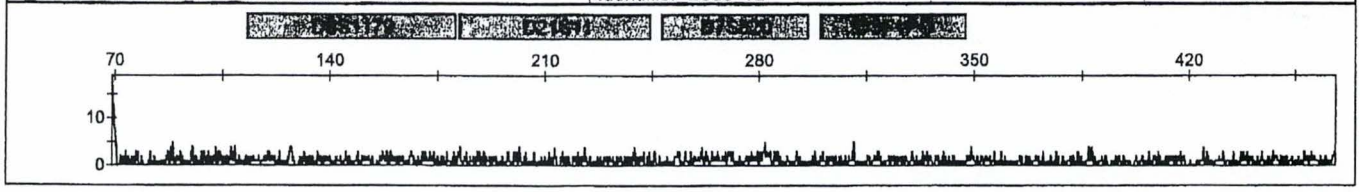
Printed by: gmid

MM 01/24/11

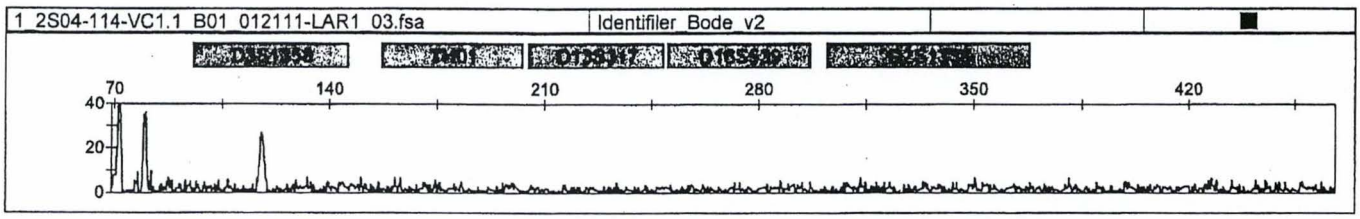
Applied Biosystems
GeneMapper ID v3.2.1

GMID10_012111-LAR1_2S04-114_LAR_ID

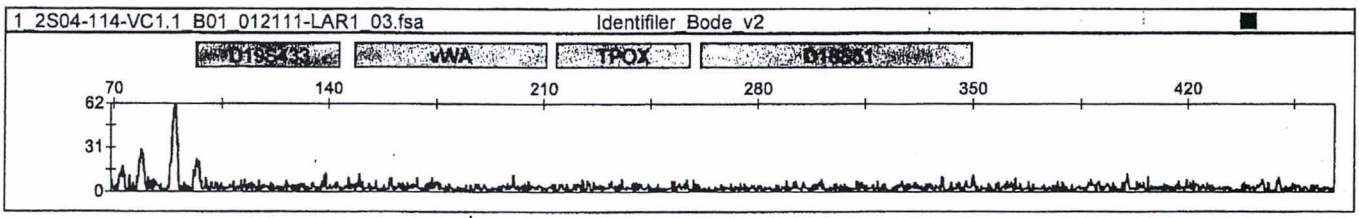
Sample File	Panel	SQO	SQ
1_2S04-114-VC1.1_B01_012111-LAR1_03.fsa	Identifiler_Bode_v2		



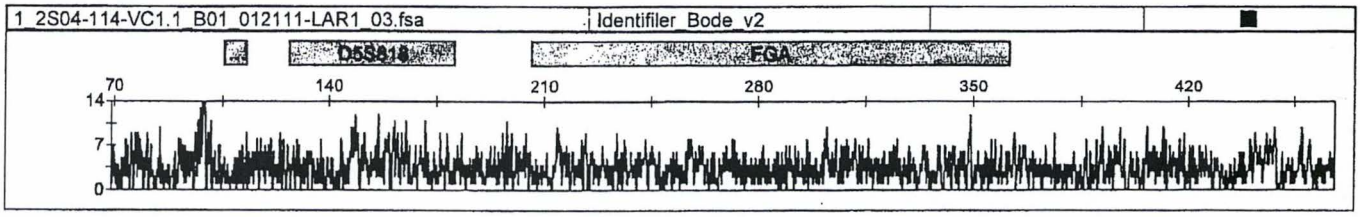
1_2S04-114-VC1.1_B01_012111-LAR1_03.fsa Identifiler_Bode_v2



1_2S04-114-VC1.1_B01_012111-LAR1_03.fsa Identifiler_Bode_v2



1_2S04-114-VC1.1_B01_012111-LAR1_03.fsa Identifiler_Bode_v2



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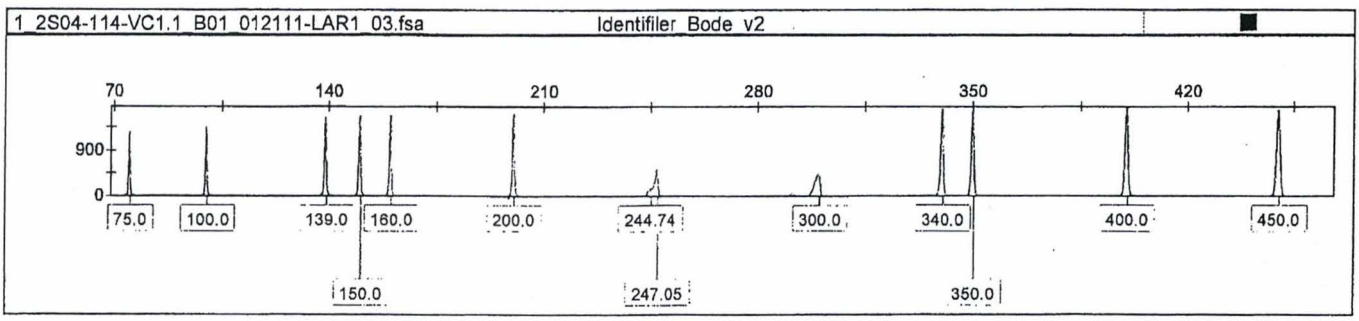

* Vivacon negative 2S04-114-VC1.1 was also loaded in well F01 on tray 012111-LAR1.

MM 01/24/11

MM

Mon Jan 24,2011 09:21AM, EST Printed by: gmid MM 01/24/11 Page 1 of 1

CE Set-up Sheet

TRAY ID: 120810-ABG1 Amp. Tray: 2S04-114-AMP39 Analyst: ABG Date: 12/8/10

	1	2	3	4	5	6	7	8	9	10	11	12
A	2S04-114-47a1.1	LADDER_ID	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
B	2S04-114-RB32.1	LADDER_ID	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
C	2S04-114-POS39	LADDER_ID	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
D	2S04-114-NEG39	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
E	2S04-114-47a1.1_1	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
F	2S04-114-RB32.1_1	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
G	2S04-114-POS39_1	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
H	2S04-114-NEG39_1	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank

	Vol.(ul)/Well		No. of Rxns		Vol. Total (ul)
Formamide Lot# 1008983	10.0 ul	x	100	=	1000
GS-500LIZ Lot# 1007121	0.12 ul	x	100	=	12

Master Mix 10.0 ul

\+

Amp. Product 0.7ul

PIPETTORS LOT #S:	
Formamide:	P-063
ILS:	P-068
Formamide & ILS Mix:	P-068
Ladders:	P-053
Amp Product (3100 tray):	P-040
Amp Product (if diluted):	N/A
Diluent (for dilutions):	N/A

Machine:	3
Run #'s:	40
System:	Identifiler
Ladder Lot#:	0907017
Run Module:	Active_Run_Module_G5
Analysis Module:	75minrfu.gsp

Injected by: NL

Date of Injection: 12/8/2010

Primer Peak Verification	
Primer peaks verified for all negative samples.	
Read 1 Analyst:	Date:
Integrity Report Evaluation	
Integrity Report Evaluation Date* :	
Analyst:	

*If possible contamination is detected, provide case note with details for affected cases

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CE GMID Editing Sheet – ID

Tray ID: 120810 [illegible]
Analyst: [illegible]
GMID Panel: Identifiler_Bode_v2

Shipment or Case #: [illegible]
Date: [illegible]

Well	Edit: Locus, Base pair size - reason
	[illegible]

Editing Key

20%: 20% filter applied (after confirming no mixtures)

-A: -A/Split peaks

AUT: single allele below minimum threshold

Artifact (non-specific)

D/I: Degraded and/or Inhibited

Dye artifact

Elevated BL: Labels placed on elevated basline(s)

FC: Failed capillary

ILS<MIN: ILS below minimum rfu threshold

IA: Imbalanced Alleles

LOR: Loss of resolution

Matrix Issue

OL: Off ladder allele

Other: provide explanation in text box (currently using this for FDLE alleles btw. 75-99 rfu)

PU: Pullup

RFU<MIN: sample rfu below minimum threshold

RFU>MAX: sample rfu above maximum threshold

Shoulder: Shoulder peak

Sizing: incorrect sizing (eg: migration issue)

Spikes

Stutter (n-4 if other record)

9947 Positive Control					
Well Numbers Checked Against Known: [illegible]					
D8S1179: [illegible]	D21S11: [illegible]	D7S820: [illegible]	CSF1PO: [illegible]		
D3S1358: [illegible]	TH01: [illegible]	D13S317: [illegible]	D16S539: [illegible]	D2S1338: [illegible]	
D19S433: [illegible]	vWA: [illegible]	TPOX: [illegible]	D18S51: [illegible]		
AMEL: [illegible]	D5S818: [illegible]	FGA: [illegible]			

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CE GMID Editing Sheet – ID

Tray ID: 120810-ABG1
Analyst: UAL
GMID Panel: Identifiler_Bode_v2

Shipment or Case #: 2804-114
Date: 01/24/11

Well	Edit: Locus, Base pair size - reason
	NO EDITS UAL 01/24/11

Editing Key

20%: 20% filter applied (after confirming no mixtures)

-A: -A/Split peaks

AUT: single allele below minimum threshold

Artifact (non-specific)

D/I: Degraded and/or Inhibited

Dye artifact

Elevated BL: Labels placed on elevated baseline(s)

FC: Failed capillary

ILS<MIN: ILS below minimum rfu threshold

IA: Imbalanced Alleles

LOR: Loss of resolution

Matrix Issue

OL: Off ladder allele

Other: provide explanation in text box (currently using this for FDLE alleles btw. 75-99 rfu)

PU: Pullup

RFU<MIN: sample rfu below minimum threshold

RFU>MAX: sample rfu above maximum threshold

Shoulder: Shoulder peak

Sizing: incorrect sizing (eg: migration issue)

Spikes

Stutter (n-4 if other record)

9947 Positive Control
Well Numbers Checked Against Known: G01 C01

D8S1179: 13,13	D21S11: 30,30	D7S820: 10,11	CSF1PO: 10,12		
D3S1358: 14,15	TH01: 9,9.3	D13S317: 11,11	D16S539: 11,12	D2S1338: 19,23	
D19S433: 14,15	vWA: 17,18	TPOX: 8,8	D18S51: 15,19		
AMEL: X,X	D5S818: 11,11	FGA: 23,24			

UAL 01/24/11

Sample File	Sample Name	Panel	SQ
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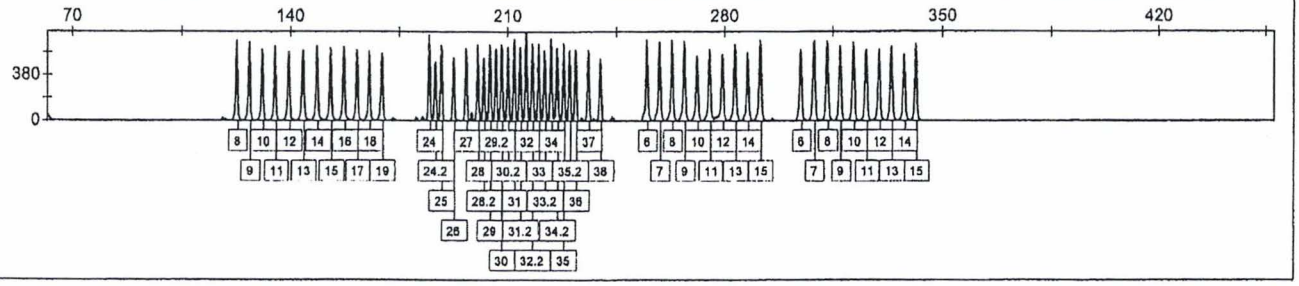

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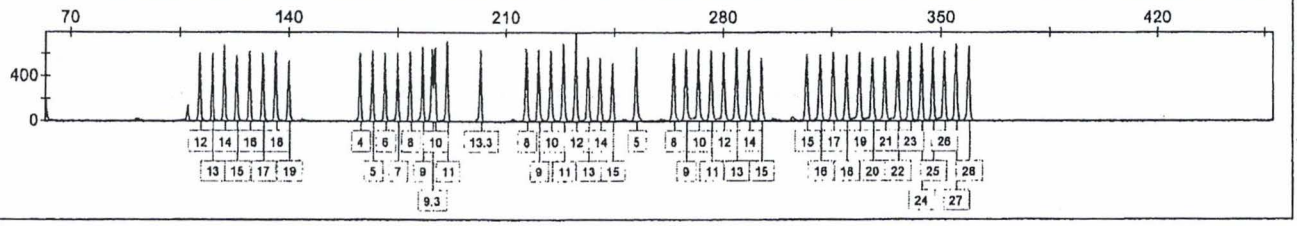
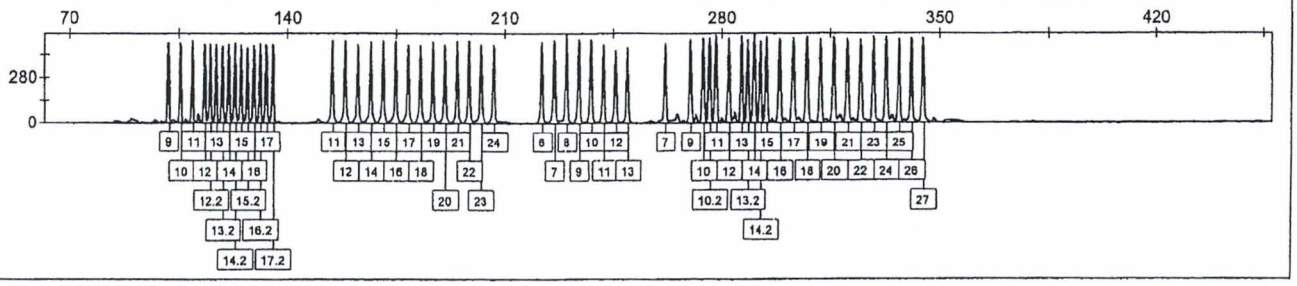


1_LADDER_ID_A02_120810-ABG1_02.fsa	LADDER_ID	Identifiler_Bode_v2	



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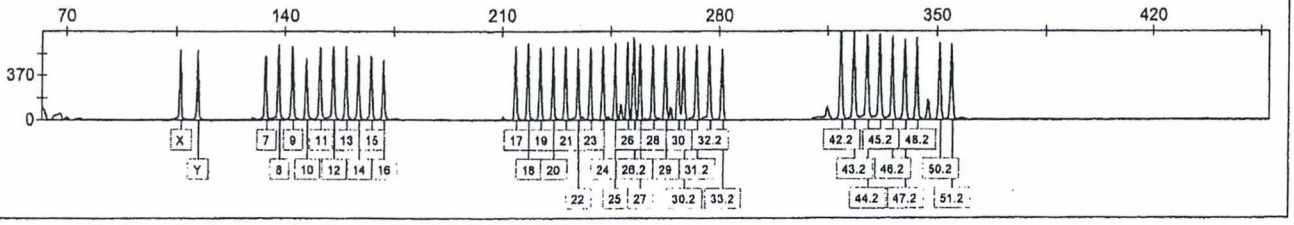
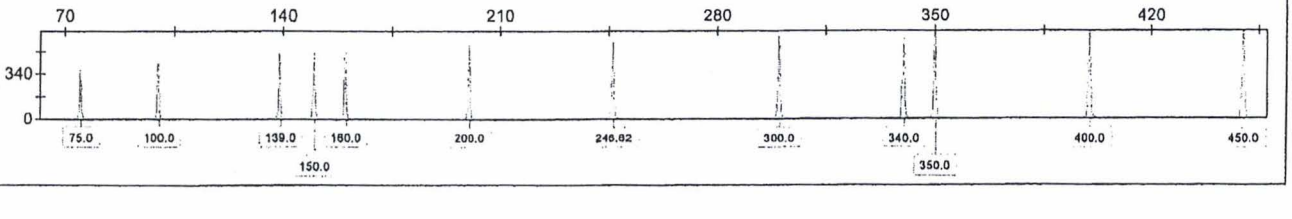


1_LADDER_ID_A02_120810-ABG1_02.fsa	LADDER_ID	Identifiler_Bode_v2	



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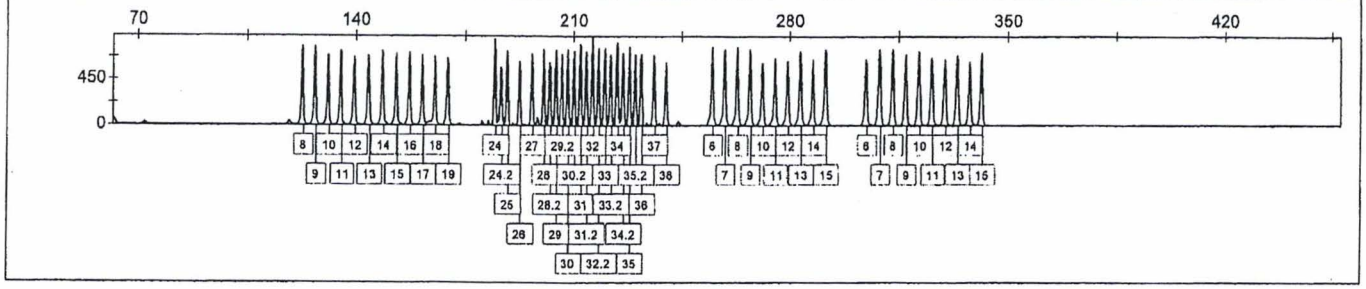
Sample File	Sample Name	Panel	SQ
1_LADDER_ID_B02_120810-ABG1_04.fsa	LADDER_ID	Identifiler_Bode_v2	



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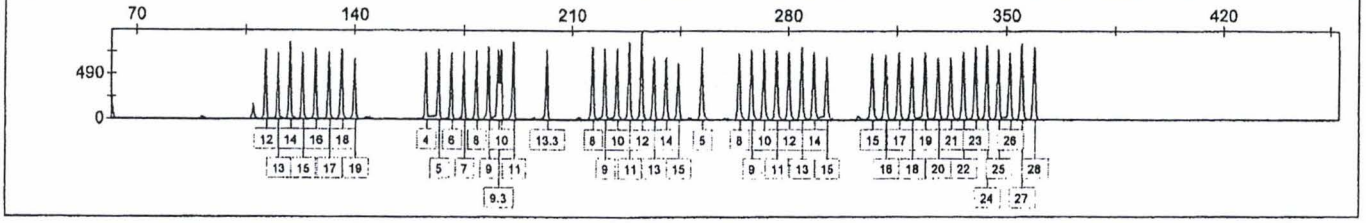

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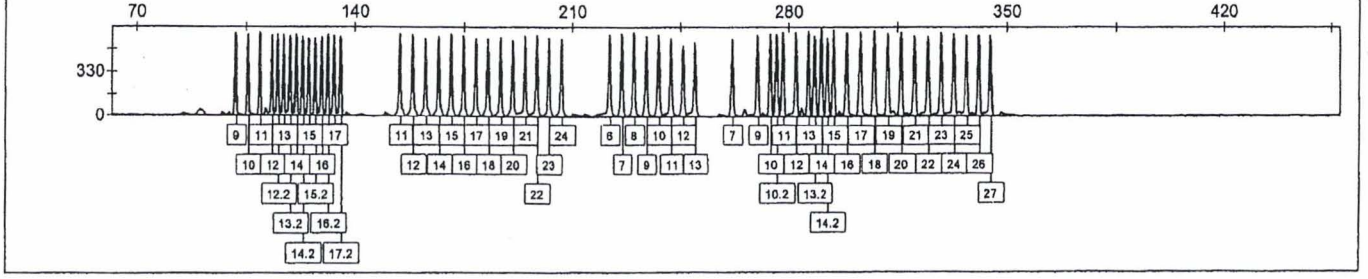
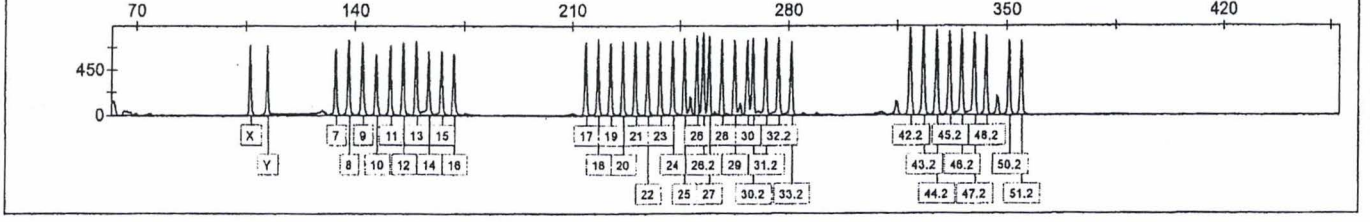


1_LADDER_ID_B02_120810-ABG1_04.fsa	LADDER_ID	Identifiler_Bode_v2	



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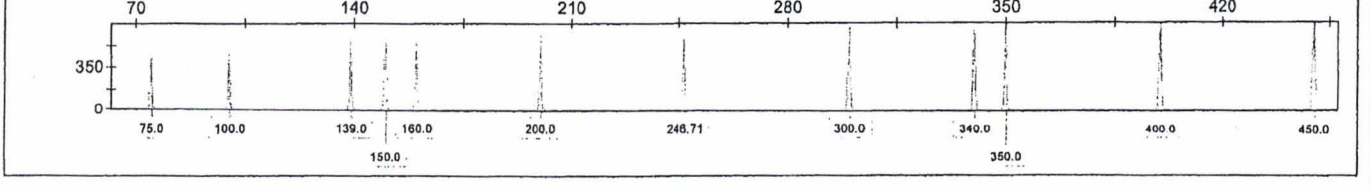

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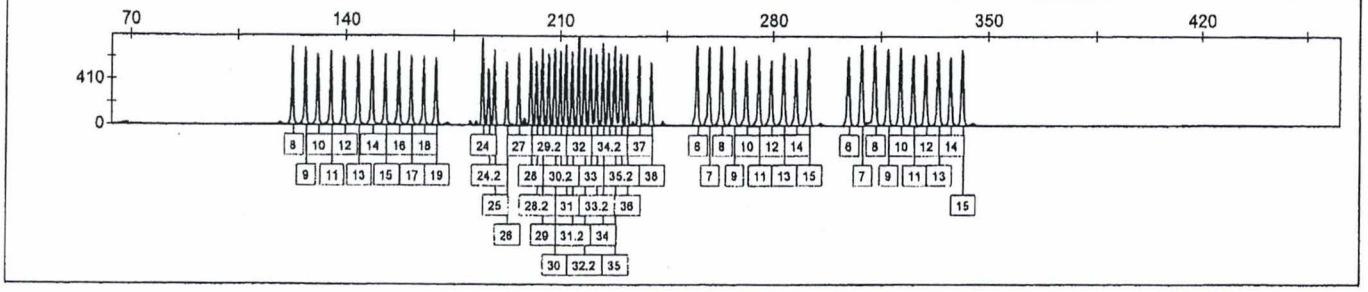
Sample File	Sample Name	Panel	SQ
1_LADDER_ID_C02_120810-ABG1_06.fsa	LADDER_ID	Identifiler_Bode_v2	



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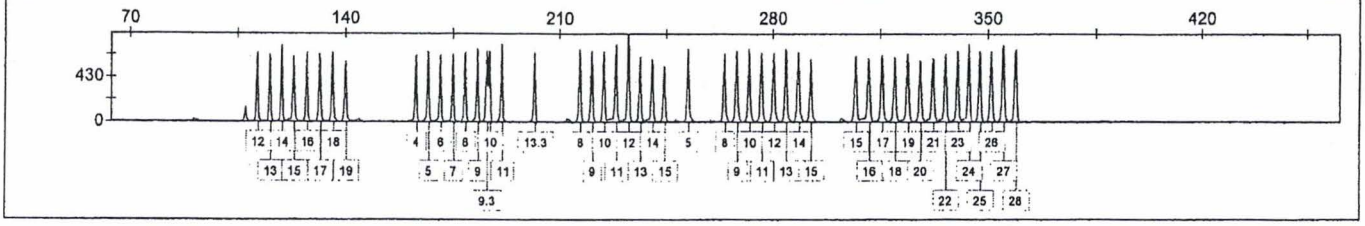

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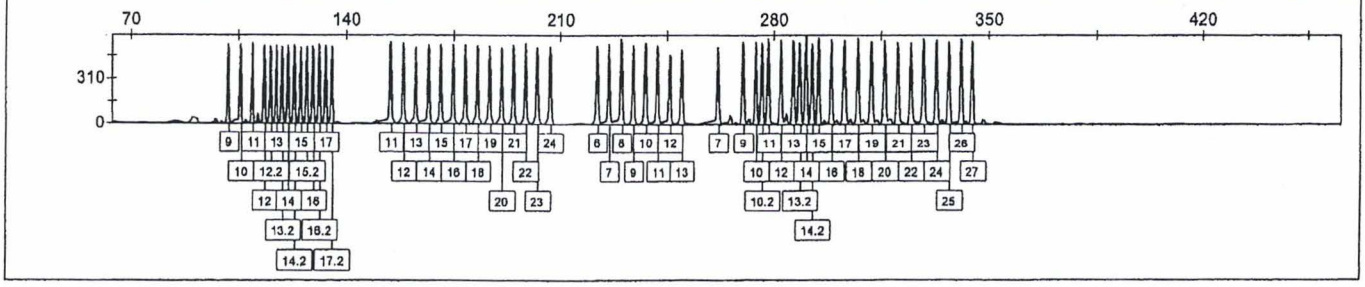

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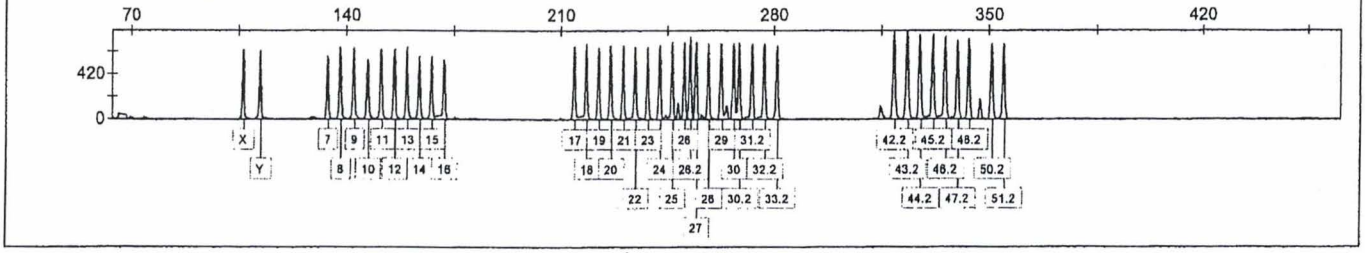

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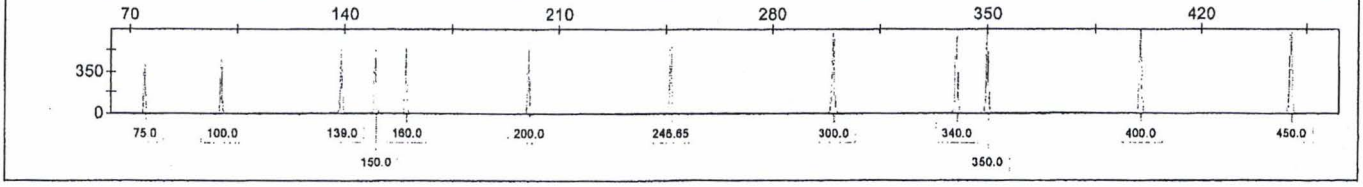
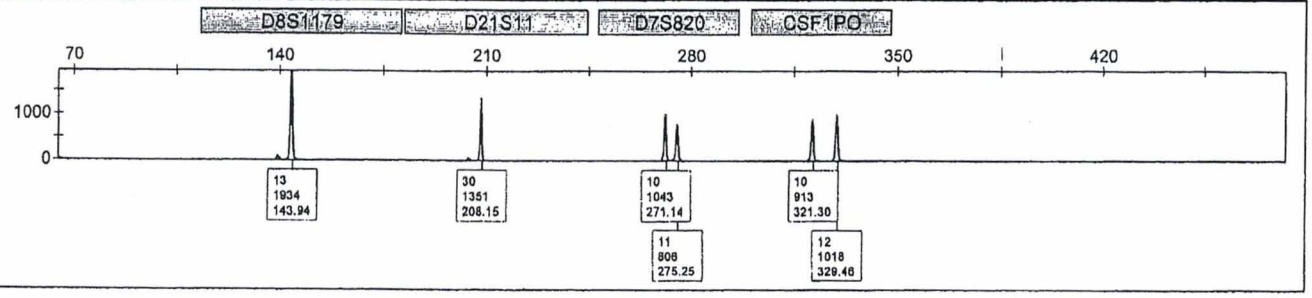


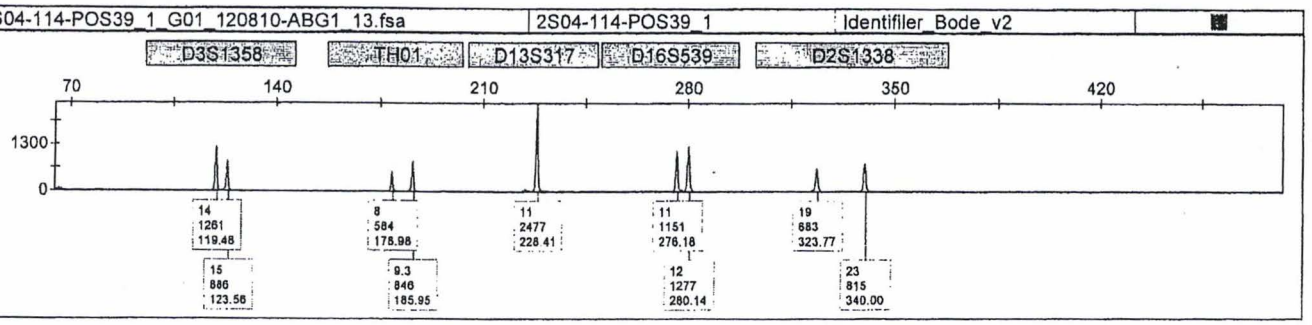
Applied Biosystems
GeneMapper ID v3.2.1

GMID3_120810-ABG1_2S04-114_ABG_ID

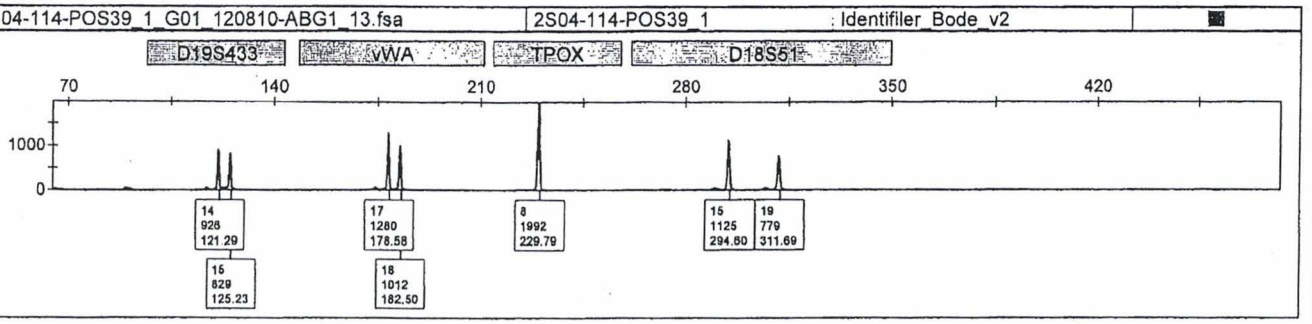
Sample File	Sample Name	Panel	SQ
1_2S04-114-POS39_1_G01_120810-ABG1_13.fsa	2S04-114-POS39_1	Identifiler_Bode_v2	



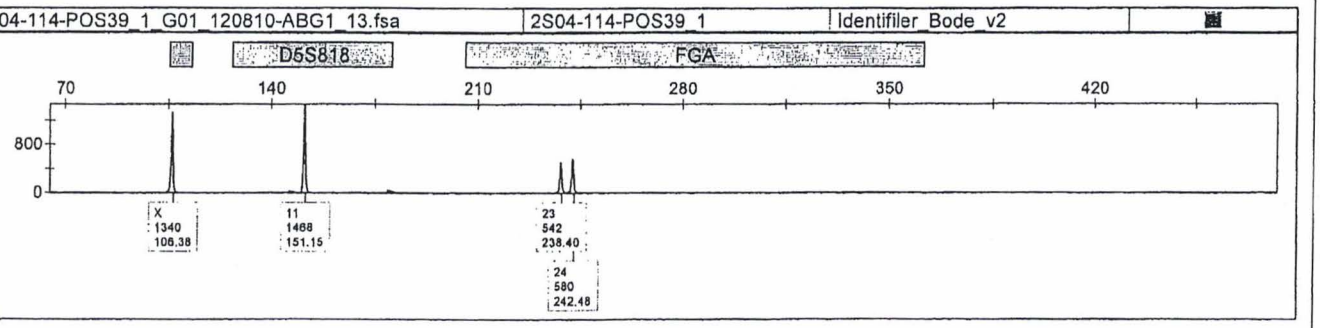
1_2S04-114-POS39_1_G01_120810-ABG1_13.fsa	2S04-114-POS39_1	Identifiler_Bode_v2	



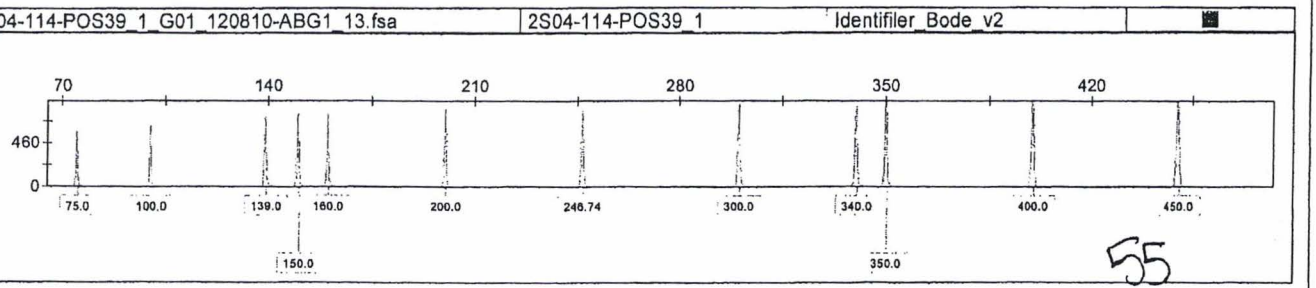
1_2S04-114-POS39_1_G01_120810-ABG1_13.fsa	2S04-114-POS39_1	Identifiler_Bode_v2	



1_2S04-114-POS39_1_G01_120810-ABG1_13.fsa	2S04-114-POS39_1	Identifiler_Bode_v2	



1_2S04-114-POS39_1_G01_120810-ABG1_13.fsa	2S04-114-POS39_1	Identifiler_Bode_v2	



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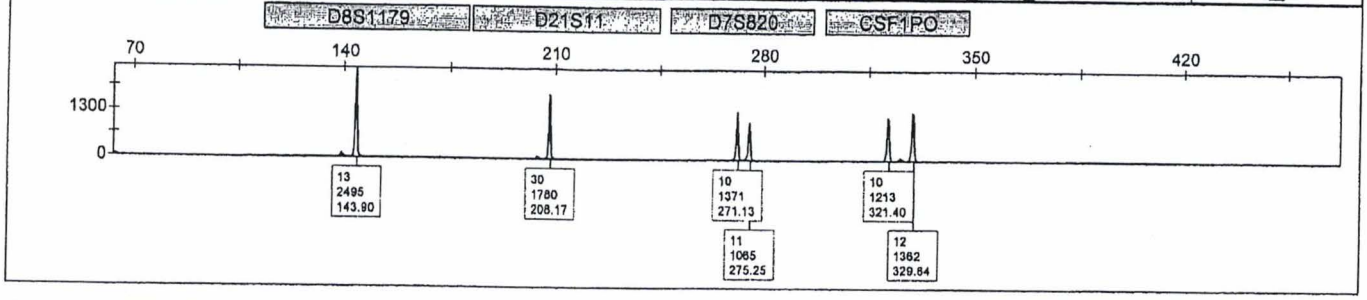
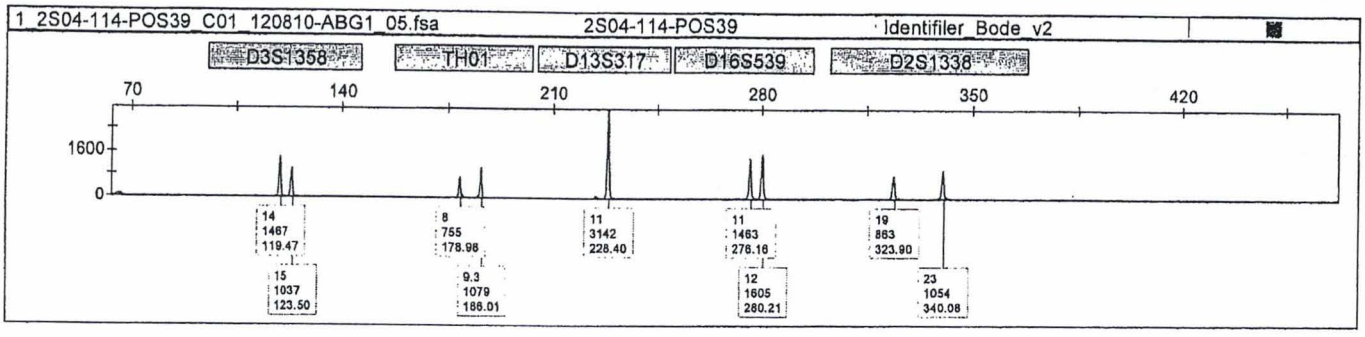
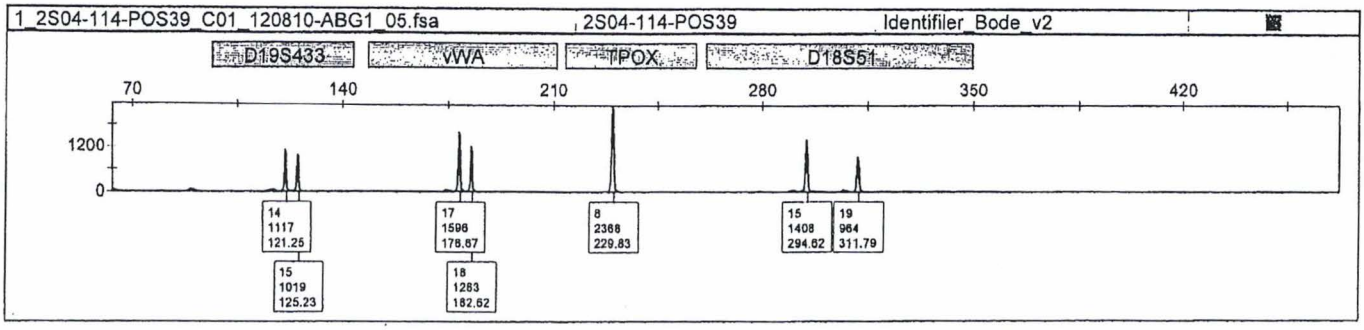
Sample File	Sample Name	Panel	SQ
1_2S04-114-POS39_C01_120810-ABG1_05.fsa	2S04-114-POS39	Identifiler_Bode_v2	



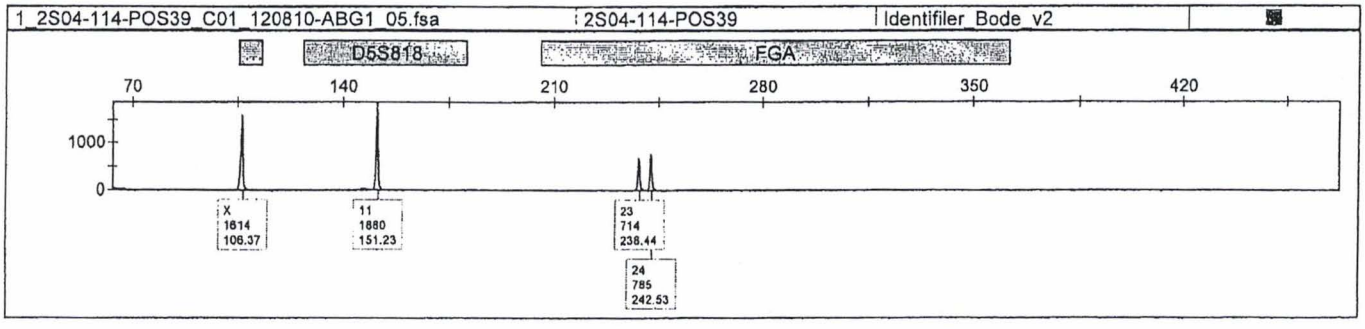
1_2S04-114-POS39_C01_120810-ABG1_05.fsa | 2S04-114-POS39 | Identifiler_Bode_v2



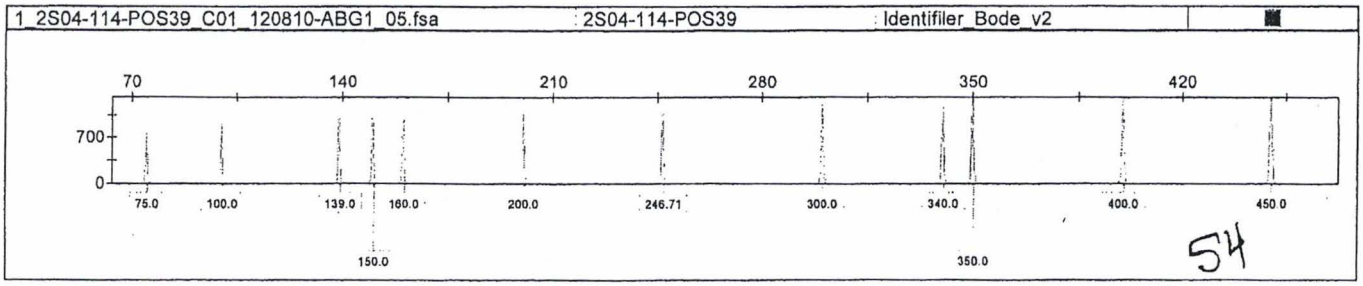
1_2S04-114-POS39_C01_120810-ABG1_05.fsa | 2S04-114-POS39 | Identifiler_Bode_v2



1_2S04-114-POS39_C01_120810-ABG1_05.fsa | 2S04-114-POS39 | Identifiler_Bode_v2



1_2S04-114-POS39_C01_120810-ABG1_05.fsa | 2S04-114-POS39 | Identifiler_Bode_v2



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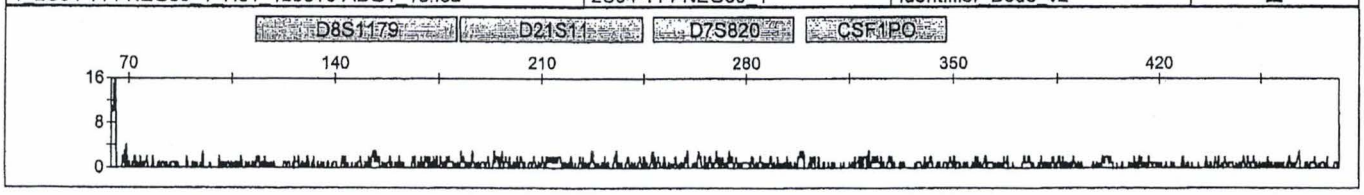
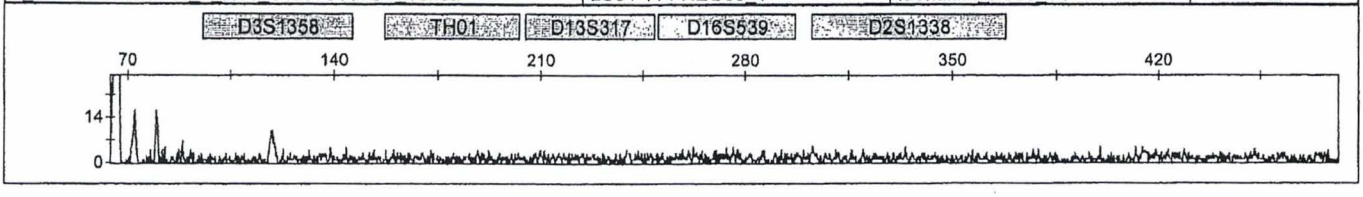
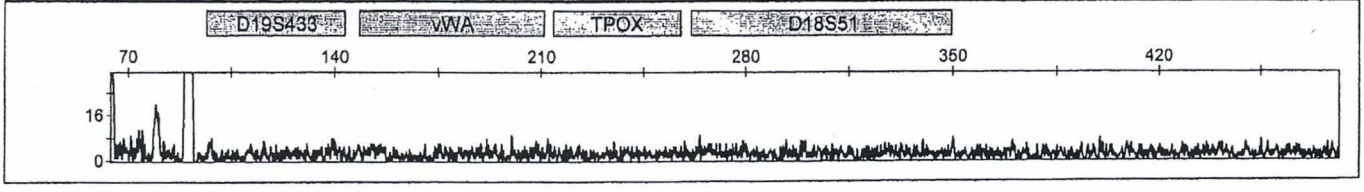
Sample File	Sample Name	Panel	SQ
1_2S04-114-NEG39_1_H01_120810-ABG1_15.fsa	2S04-114-NEG39_1	Identifiler_Bode_v2	



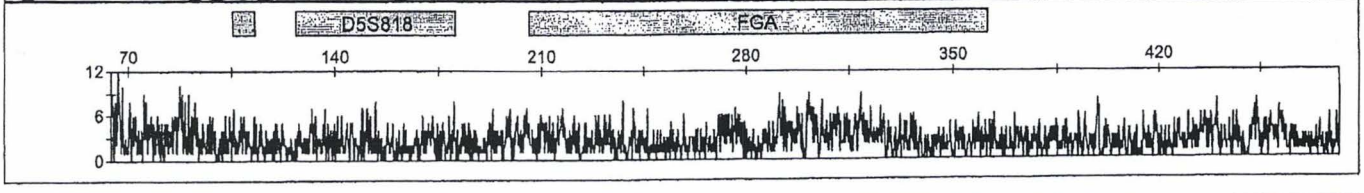
1_2S04-114-NEG39_1_H01_120810-ABG1_15.fsa	2S04-114-NEG39_1	Identifiler_Bode_v2	



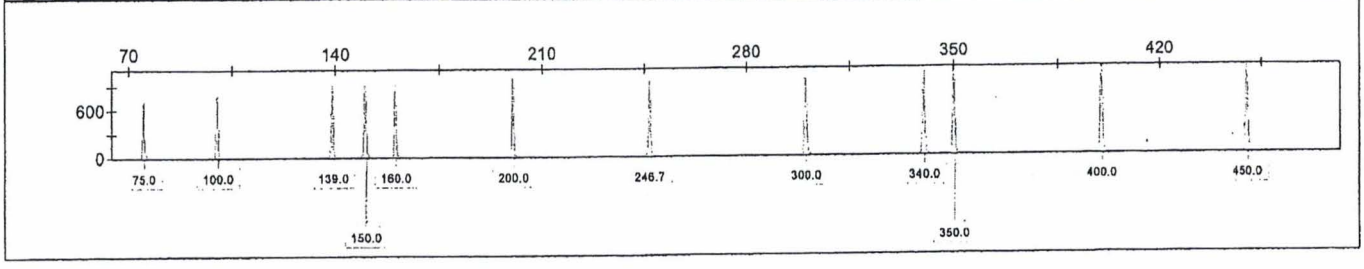
1_2S04-114-NEG39_1_H01_120810-ABG1_15.fsa	2S04-114-NEG39_1	Identifiler_Bode_v2	



1_2S04-114-NEG39_1_H01_120810-ABG1_15.fsa	2S04-114-NEG39_1	Identifiler_Bode_v2	



1_2S04-114-NEG39_1_H01_120810-ABG1_15.fsa	2S04-114-NEG39_1	Identifiler_Bode_v2	



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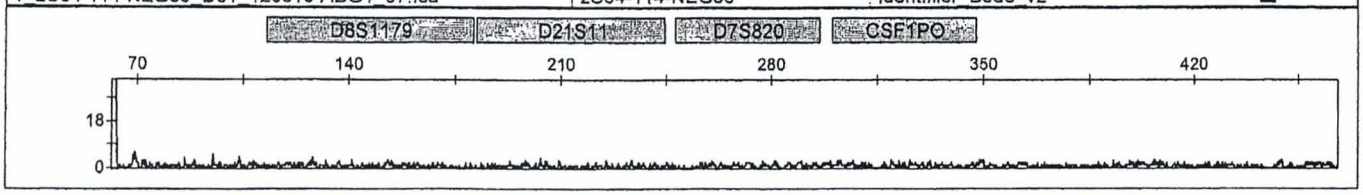
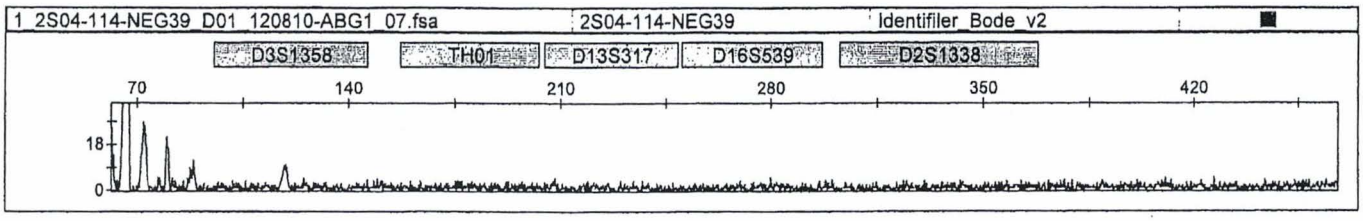
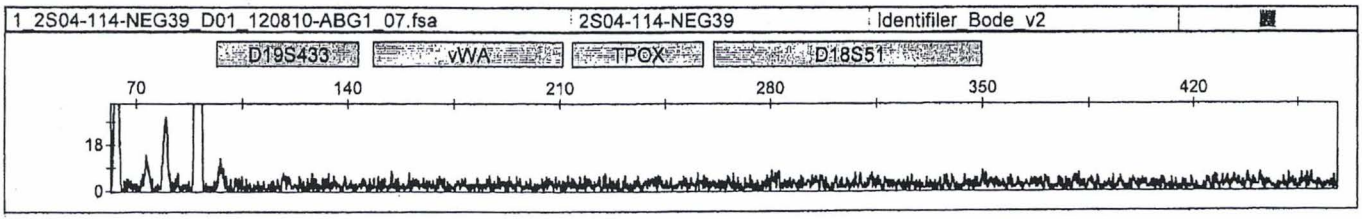
Sample File	Sample Name	Panel	SQ
1_2S04-114-NEG39_D01_120810-ABG1_07.fsa	2S04-114-NEG39	Identifiler_Bode_v2	



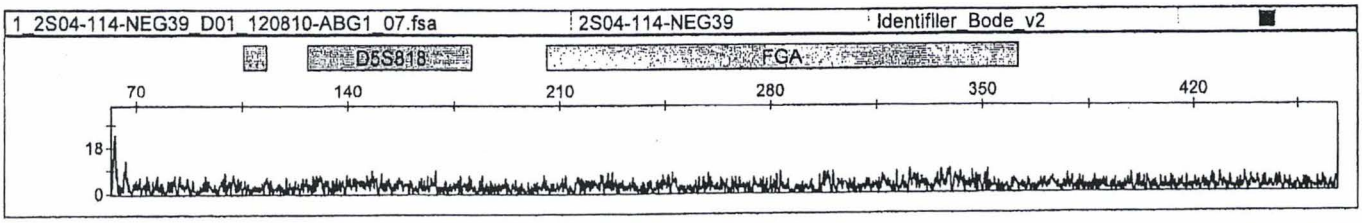
1_2S04-114-NEG39_D01_120810-ABG1_07.fsa | 2S04-114-NEG39 | Identifiler_Bode_v2



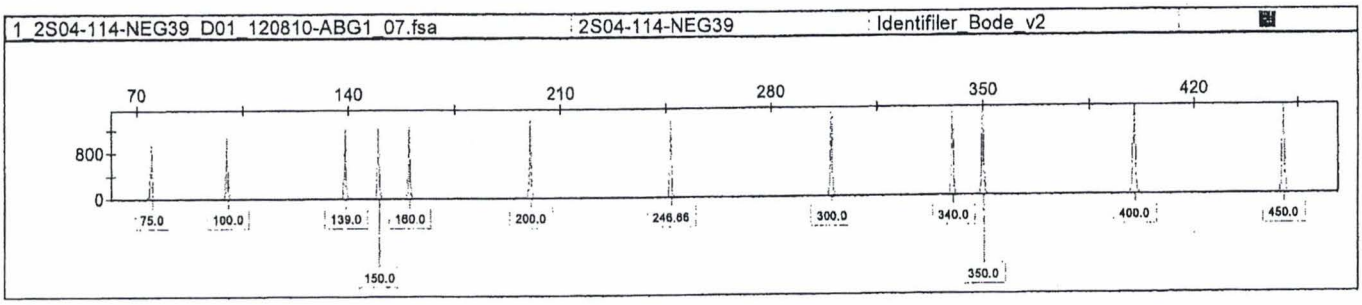
1_2S04-114-NEG39_D01_120810-ABG1_07.fsa | 2S04-114-NEG39 | Identifiler_Bode_v2



1_2S04-114-NEG39_D01_120810-ABG1_07.fsa | 2S04-114-NEG39 | Identifiler_Bode_v2



1_2S04-114-NEG39_D01_120810-ABG1_07.fsa | 2S04-114-NEG39 | Identifiler_Bode_v2



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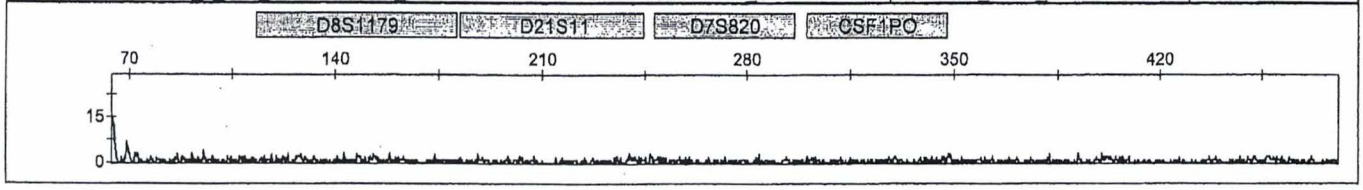
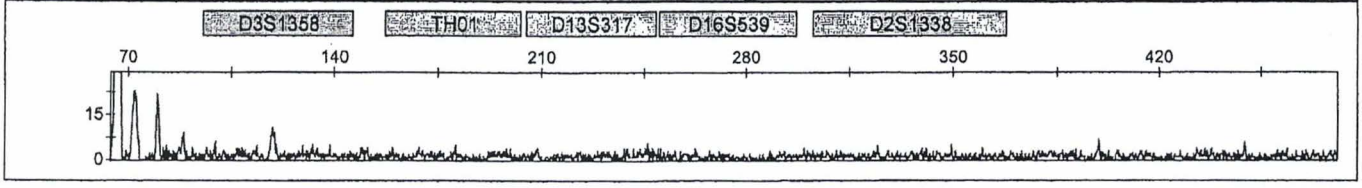
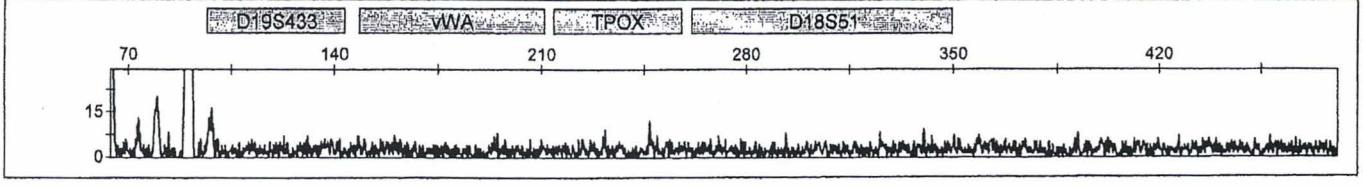
Sample File	Sample Name	Panel	SQ
1_2S04-114-RB32.1_1_F01_120810-ABG1_11.fsa	2S04-114-RB32.1_1	Identifiler_Bode_v2	



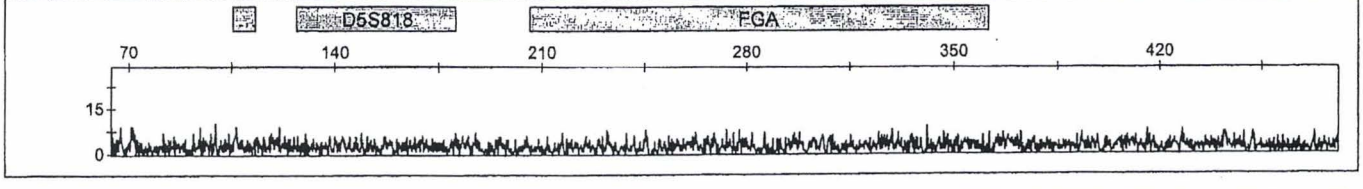
1_2S04-114-RB32.1_1_F01_120810-ABG1_11.fsa	2S04-114-RB32.1_1	Identifiler_Bode_v2	



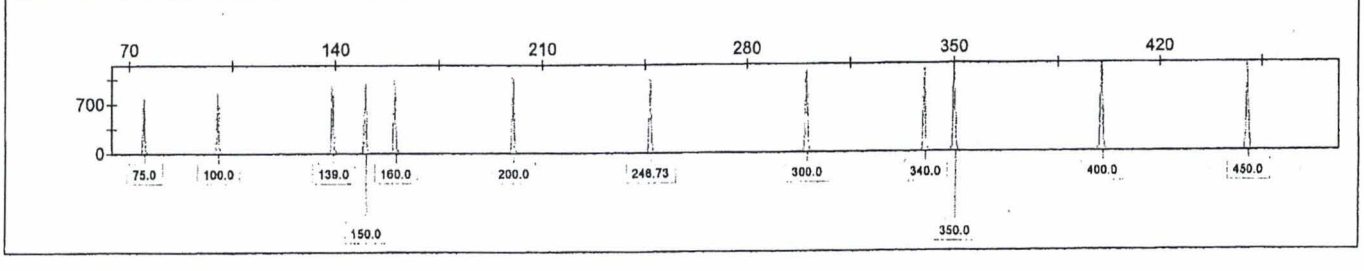
1_2S04-114-RB32.1_1_F01_120810-ABG1_11.fsa	2S04-114-RB32.1_1	Identifiler_Bode_v2	



1_2S04-114-RB32.1_1_F01_120810-ABG1_11.fsa	2S04-114-RB32.1_1	Identifiler_Bode_v2	



1_2S04-114-RB32.1_1_F01_120810-ABG1_11.fsa	2S04-114-RB32.1_1	Identifiler_Bode_v2	



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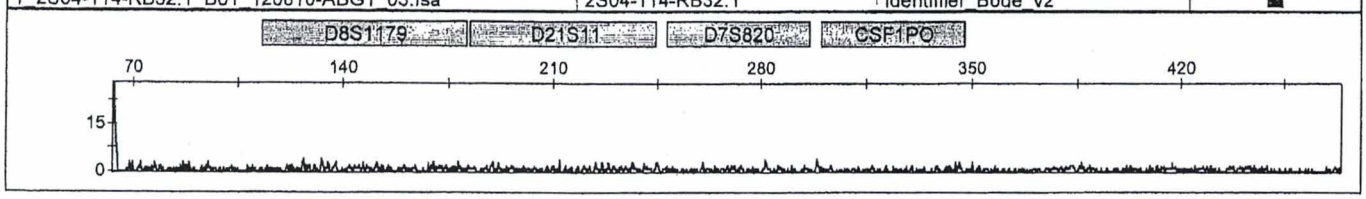
Applied Biosystems

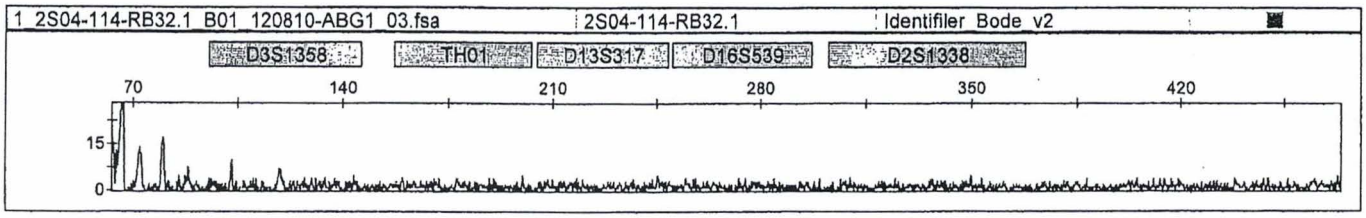
GeneMapper ID v3.2.1

GMID3_120810-ABG1_2S04-114_ABG_ID

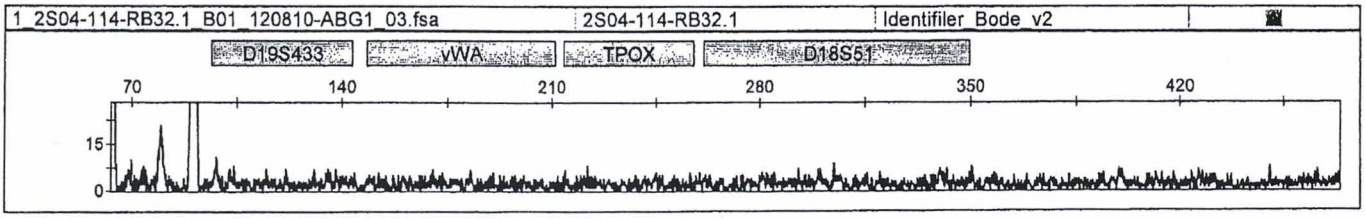
Sample File	Sample Name	Panel	SQ
1_2S04-114-RB32.1_B01_120810-ABG1_03.fsa	2S04-114-RB32.1	Identifiler_Bode_v2	



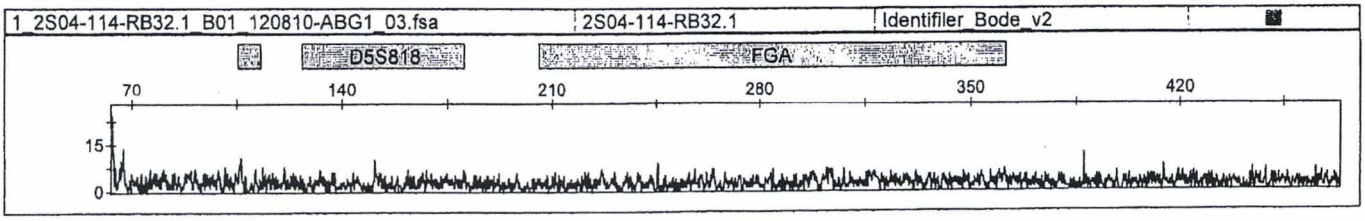
1_2S04-114-RB32.1_B01_120810-ABG1_03.fsa | 2S04-114-RB32.1 | Identifiler_Bode_v2



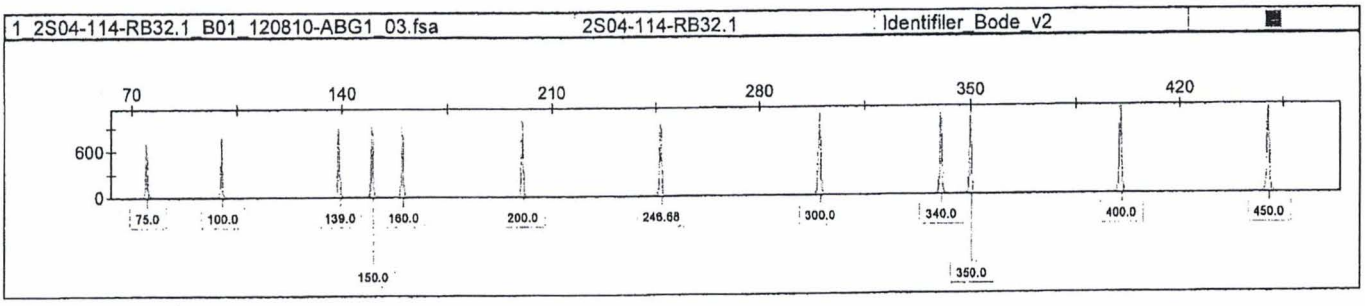
1_2S04-114-RB32.1_B01_120810-ABG1_03.fsa | 2S04-114-RB32.1 | Identifiler_Bode_v2



1_2S04-114-RB32.1_B01_120810-ABG1_03.fsa | 2S04-114-RB32.1 | Identifiler_Bode_v2



1_2S04-114-RB32.1_B01_120810-ABG1_03.fsa | 2S04-114-RB32.1 | Identifiler_Bode_v2



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CE Set-up Sheet

TRAY ID: 120610-ABG2 **Amp. Tray:** CCA1080-AMP1, CCB1030-AMP3, CCB1036-AMP1, 2S04-114 (reloads) **Analyst:** ABG **Date:** 12/6/10

	1	2	3	4	5	6	7	8	9	10	11	12
A	CCA1080-0112-E07b1.1	CCB1030-0163-E01b1.1	CCB1036-0180-E01a1.1	LADDER_ID	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
B	CCA1080-RB8.1	CCB1030-RB3.1	CCB1036-RB1.1	LADDER_ID	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
C	CCA1080-POS1	CCB1030-POS3	CCB1036-POS1	2S04-114-POS38	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
D	CCA1080-NEG1	CCB1030-NEG3	CCB1036-NEG1	2S04-114-POS38	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
E	CCA1080-0112-E07b1.1_1	2S04-114-51a2.1	CCB1030-0163-E01b1.1_1	CCB1036-0180-E01a1.1_1	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
F	CCA1080-RB8.1_1	2S04-114-51a2.1	CCB1030-RB3.1_1	CCB1036-RB1.1_1	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
G	CCA1080-POS1_1	2S04-114-51a2.1	CCB1030-POS3_1	CCB1036-POS1_1	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
H	CCA1080-NEG1_1	LADDER_ID	CCB1030-NEG3_1	CCB1036-NEG1_1	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank

	Vol.(ul)/Well		No. of Rxns		Vol. Total (ul)
Formamide Lot# 1008983	10.0 ul	x	40	=	400
GS-500LIZ Lot# 1007121	0.12 ul	x	40	=	4.8
Master Mix	10.0 ul				
	+				
Amp. Product	0.7ul				

PIPETTORS LOT #S:	
Formamide:	P-048
ILS:	P-055
Formamide & ILS Mix:	P-036
Ladders:	P-067
Amp Product (3100 tray):	P-036, P-067
Amp Product (if diluted):	N/A
Diluent (for dilutions):	N/A

Machine:	14
Run #'s:	19-20
System:	Identifiler
Ladder Lot#:	0806012
Run Module:	Active_Run_Module_G5
Analysis Module:	75minrfu.gsp

Injected by: NL
Date of Injection: 12/6/2010

Primer Peak Verification	
Primer peaks verified for all negative samples.	
Read 1 Analyst:	Date:
Integrity Report Evaluation	
Integrity Report Evaluation Date*:	
Analyst:	

*If possible contamination is detected, provide case note with details for affected cases

CE GMID Editing Sheet – ID

Tray ID: [illegible]
Analyst: [illegible]
GMID Panel: Identifiler_Bode_v2

Shipment or Case #: 2S09-114
Date: 12-4-10

Well	Edit: Locus, Base pair size - reason
C4	Spike

Editing Key

20%: 20% filter applied (after confirming no mixtures)

-A: -A/Split peaks

AUT: single allele below minimum threshold

Artifact (non-specific)

D/I: Degraded and/or Inhibited

Dye artifact

Elevated BL: Labels placed on elevated basline(s)

FC: Failed capillary

ILS<MIN: ILS below minimum rfu threshold

IA: Imbalanced Alleles

LOR: Loss of resolution

Matrix Issue

OL: Off ladder allele

Other: provide explanation in text box (currently using this for FDLE alleles btw. 75-99 rfu)

PU: Pullup

RFU<MIN: sample rfu below minimum threshold

RFU>MAX: sample rfu above maximum threshold

Shoulder: Shoulder peak

Sizing: incorrect sizing (eg: migration issue)

Spikes

Stutter (n-4 if other record)

9947 Positive Control					
Well Numbers Checked Against Known: D4					
D8S1179: 13,13	D21S11: 30,32.2	D7S820: 8,11	CSF1PO: 10,12		
D3S1358: 14,15	TH01: 8,9.3	D13S317: 11,11	D16S539: 9,12	D2S1338: 17,23	
D19S433: 14,15	vWA: 17,18	TPOX: 8,8	D18S51: 15,16		
AMEL: X,Y	D5S818: 11,11	FGA: 23,24			

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B2-1-24-11

CE GMID Editing Sheet – ID

Tray ID: 120610 - AMG12 Shipment or Case #: 2804-114
Analyst: UM Date: 01/24/11
GMID Panel: Identifiler_Bode_v2

Well	Edit: Locus, Base pair size - reason
C04	PU - Spikes

Editing Key

20%: 20% filter applied (after confirming no mixtures)

-A: -A/Split peaks

AUT: single allele below minimum threshold

Artifact (non-specific)

D/I: Degraded and/or Inhibited

Dye artifact

Elevated BL: Labels placed on elevated basline(s)

FC: Failed capillary

ILS<MIN: ILS below minimum rfu threshold

IA: Imbalanced Alleles

LOR: Loss of resolution

Matrix Issue

OL: Off ladder allele

Other: provide explanation in text box (currently using this for FDLE alleles btw. 75-99 rfu)

PU: Pullup

RFU<MIN: sample rfu below minimum threshold

RFU>MAX: sample rfu above maximum threshold

Shoulder: Shoulder peak

Sizing: incorrect sizing (eg: migration issue)

Spikes

Stutter (n-4 if other record)

9947 Positive Control Well Numbers Checked Against Known: D04					
D8S1179: 13,13	D21S11: 30,30	D7S820: 10,11	CSF1PO: 10,12		
D3S1358: 14,15	TH01: 8,9.3	D13S317: 11,11	D16S539: 11,12	D2S1338: 19,23	
D19S433: 14,15	vWA: 17,18	TPOX: 8,8	D18S51: 15,19		
AMEL: X,X	D5S818: 11,11	FGA: 23,24			

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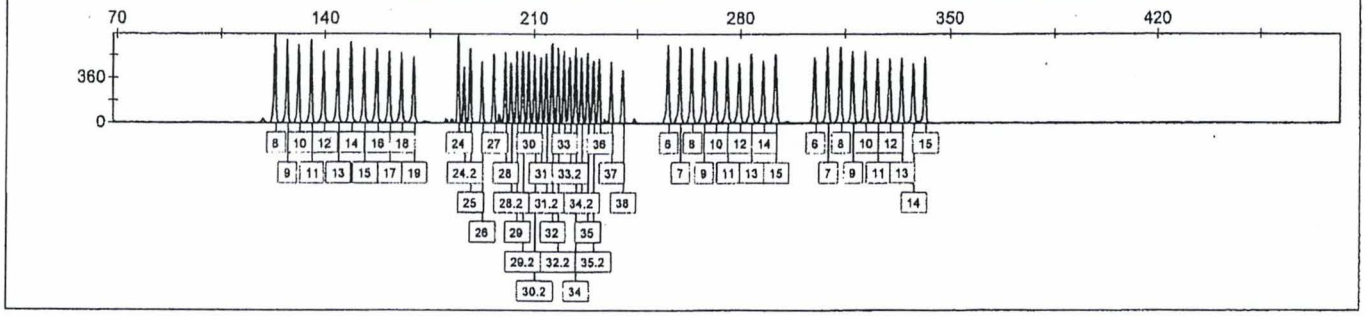
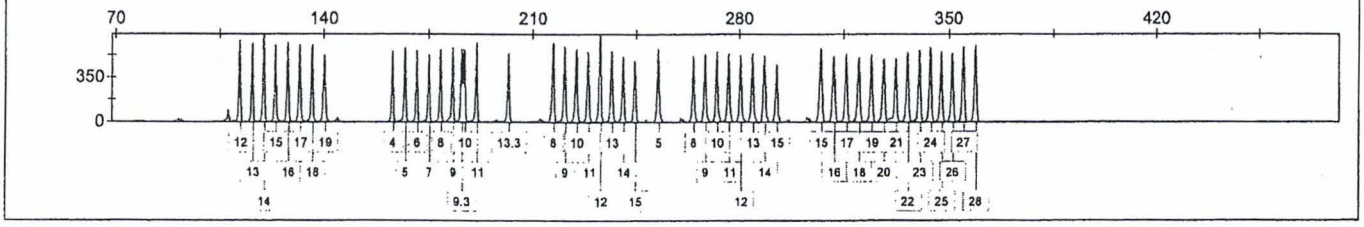
UM 01/24/11

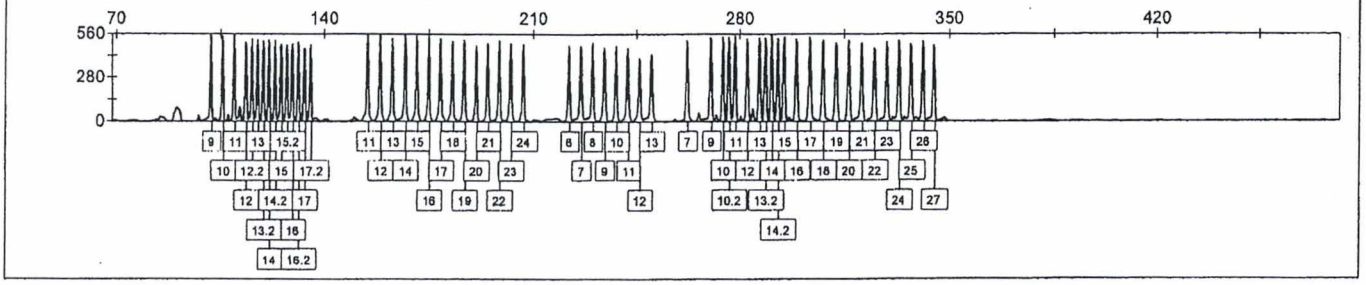
Sample File	Sample Name	Panel	SQ
1_LADDER_ID_A04_120610-ABG2_02.fsa	LADDER_ID	Identifiler_Bode_v2	



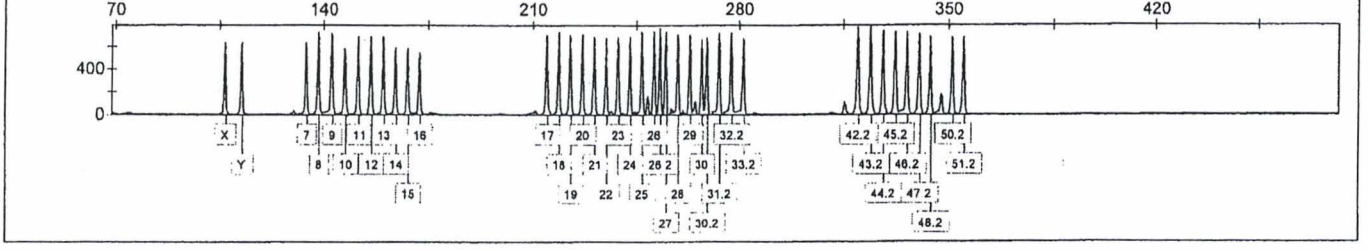
1_LADDER_ID_A04_120610-ABG2_02.fsa	LADDER_ID	Identifiler_Bode_v2



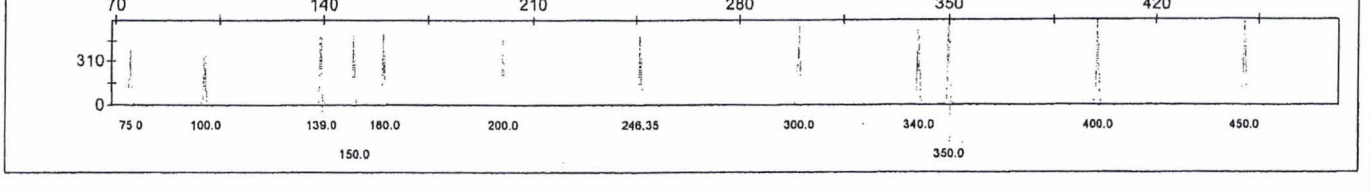
1_LADDER_ID_A04_120610-ABG2_02.fsa	LADDER_ID	Identifiler_Bode_v2



1_LADDER_ID_A04_120610-ABG2_02.fsa	LADDER_ID	Identifiler_Bode_v2

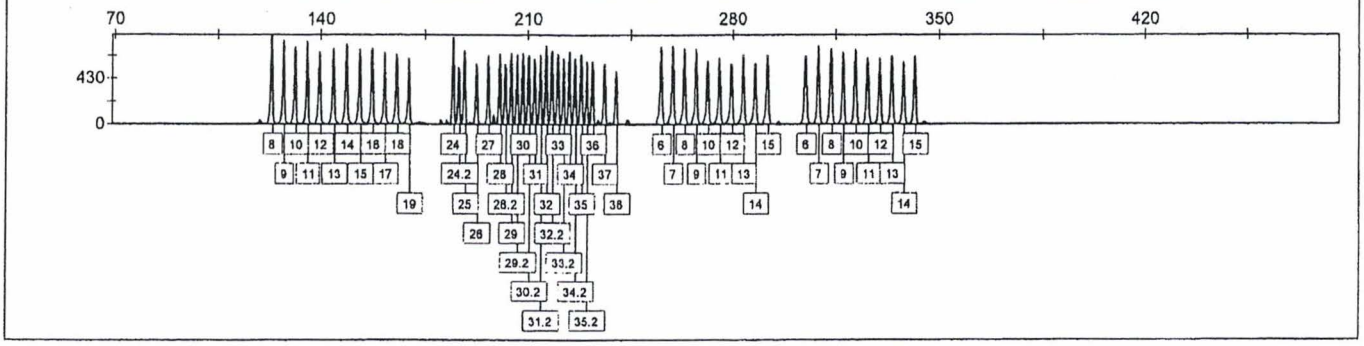


1_LADDER_ID_A04_120610-ABG2_02.fsa	LADDER_ID	Identifiler_Bode_v2

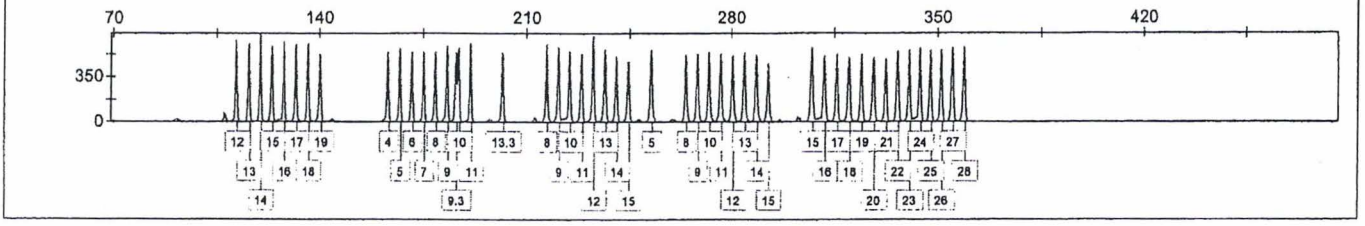


46

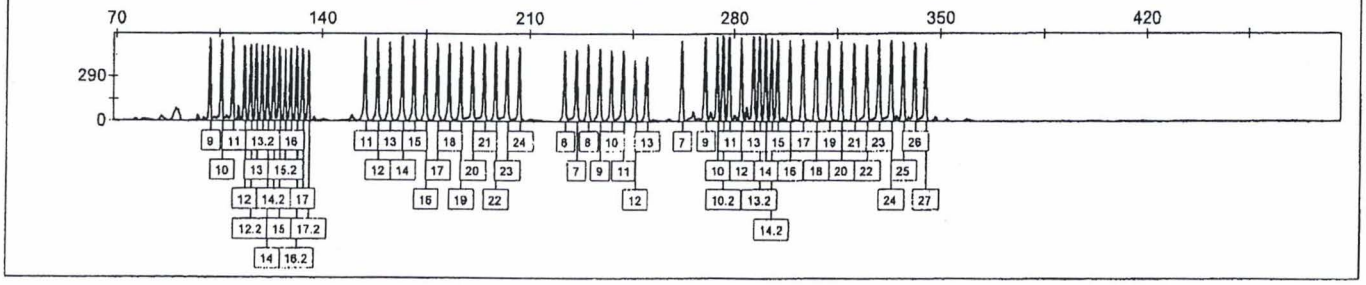
Sample File	Sample Name	Panel	SQ
1_LADDER_ID_B04_120610-ABG2_04.fsa	LADDER_ID	Identifiler_Bode_v2	



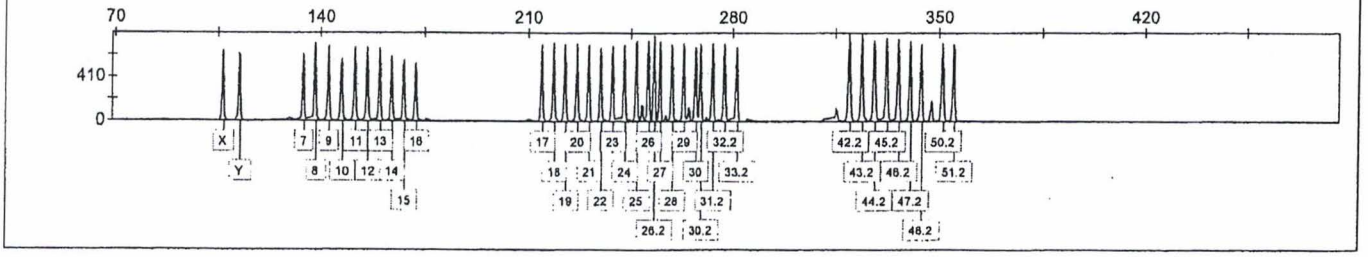
1_LADDER_ID_B04_120610-ABG2_04.fsa | LADDER_ID | Identifiler_Bode_v2



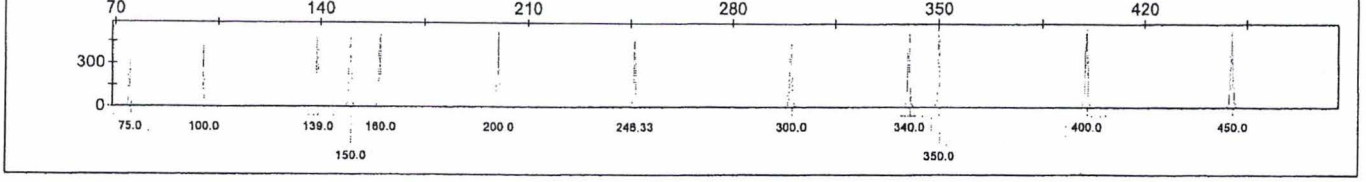
1_LADDER_ID_B04_120610-ABG2_04.fsa | LADDER_ID | Identifiler_Bode_v2



1_LADDER_ID_B04_120610-ABG2_04.fsa | LADDER_ID | Identifiler_Bode_v2



1_LADDER_ID_B04_120610-ABG2_04.fsa | LADDER_ID | Identifiler_Bode_v2



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Sample File	Sample Name	Panel	SQ
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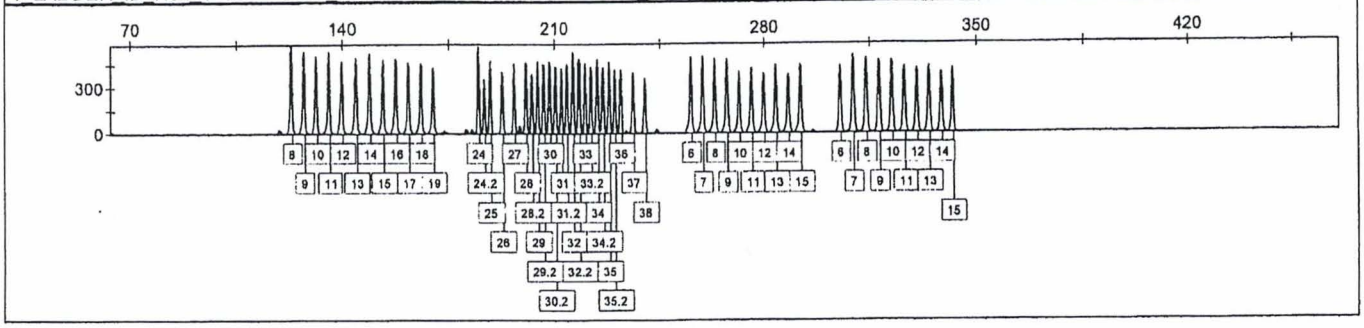
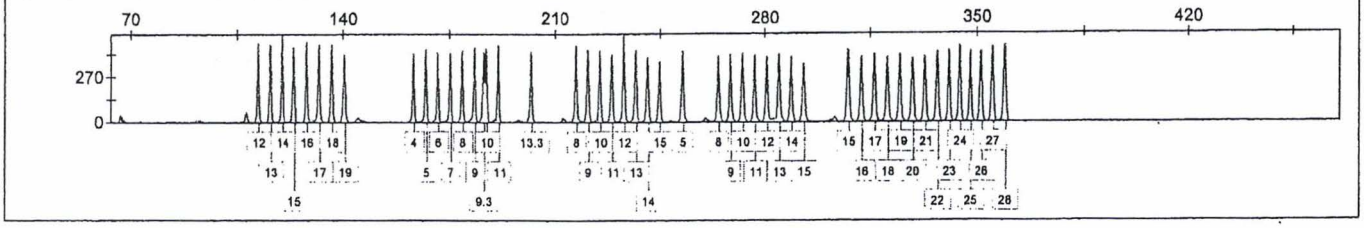


1_LADDER_ID_H02_120610-ABG2_16.fsa | LADDER_ID | Identifiler_Bode_v2



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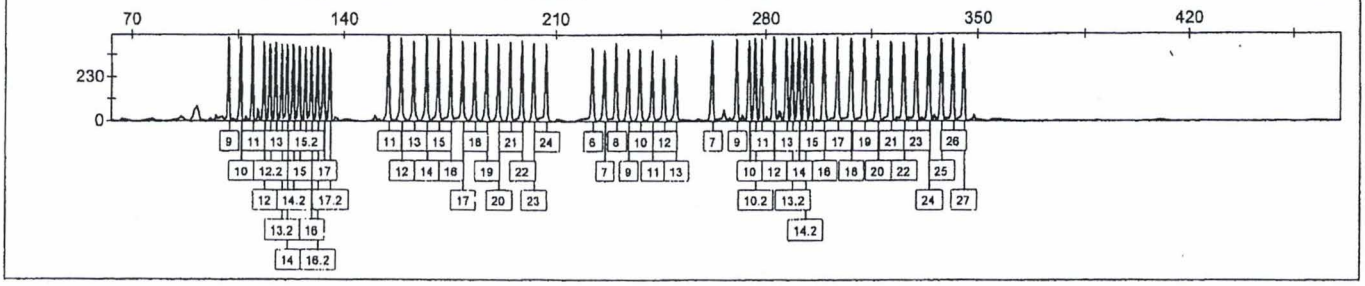
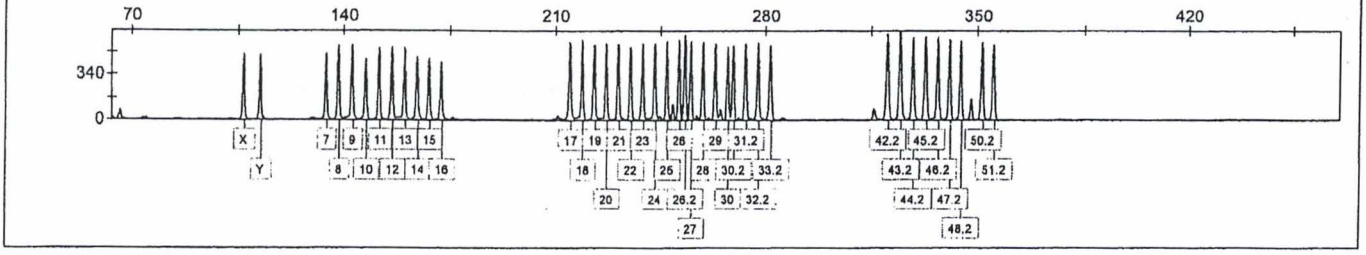
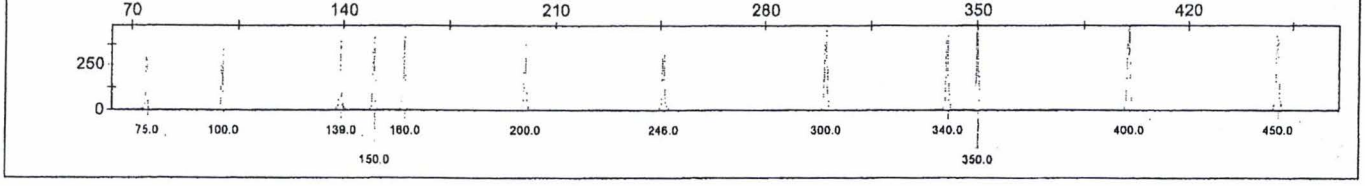


1_LADDER_ID_H02_120610-ABG2_16.fsa | LADDER_ID | Identifiler_Bode_v2



1_LADDER_ID_H02_120610-ABG2_16.fsa | LADDER_ID | Identifiler_Bode_v2



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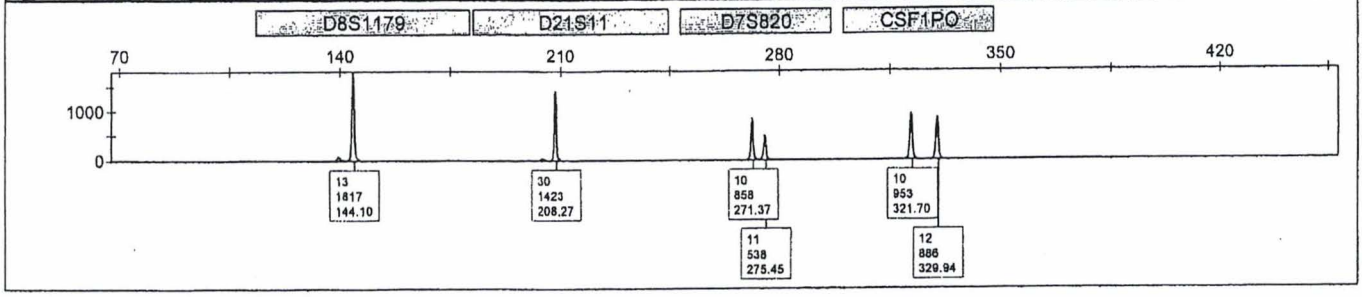
Applied Biosystems

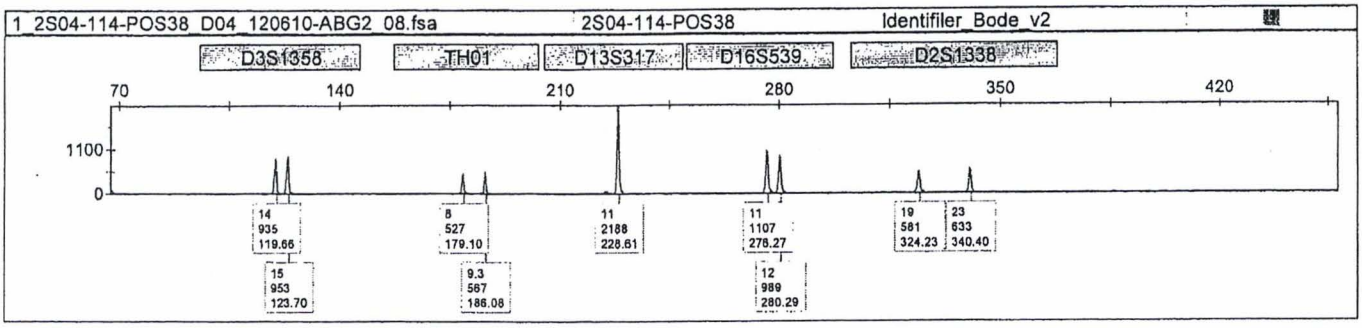
GeneMapper ID v3.2.1

GMID14_120610-ABG2_2S04-114_ABG_ID

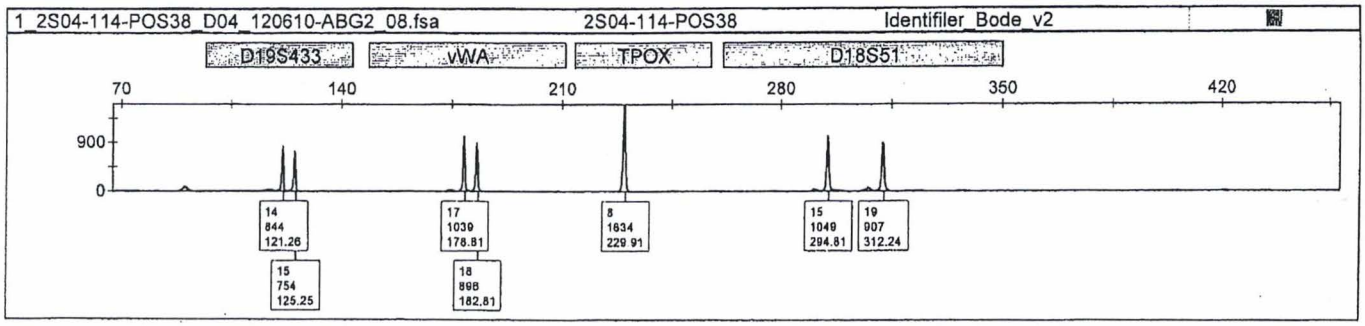
Sample File	Sample Name	Panel	SQ
1_2S04-114-POS38_D04_120610-ABG2_08.fsa	2S04-114-POS38	Identifiler_Bode_v2	



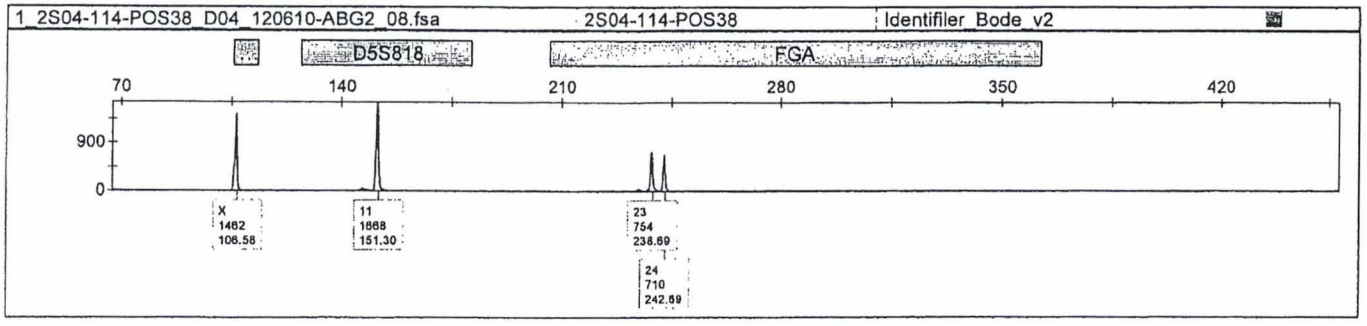
1_2S04-114-POS38_D04_120610-ABG2_08.fsa	2S04-114-POS38	Identifiler_Bode_v2	



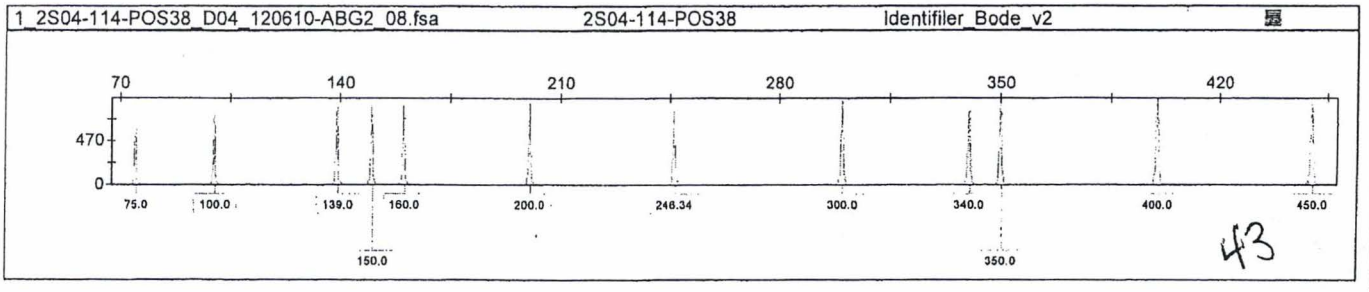
1_2S04-114-POS38_D04_120610-ABG2_08.fsa	2S04-114-POS38	Identifiler_Bode_v2	



1_2S04-114-POS38_D04_120610-ABG2_08.fsa	2S04-114-POS38	Identifiler_Bode_v2	



1_2S04-114-POS38_D04_120610-ABG2_08.fsa	2S04-114-POS38	Identifiler_Bode_v2	



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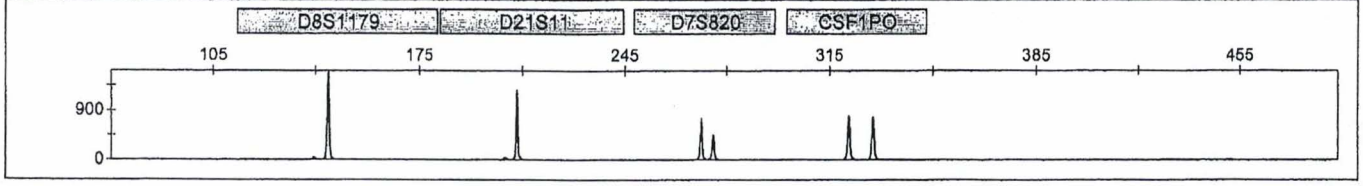
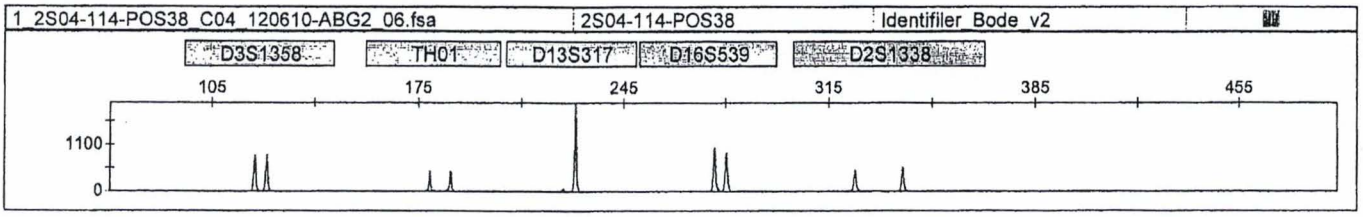
Applied Biosystems
GeneMapper ID v3.2.1

GMID14_120610-ABG2_2S04-114_ABG_ID

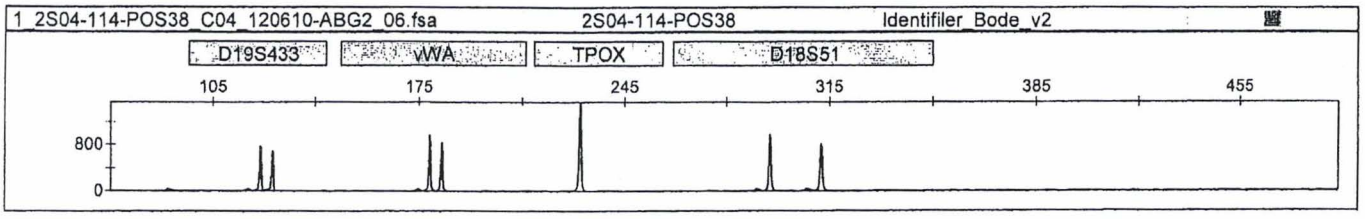
Sample File	Sample Name	Panel	SQ
1_2S04-114-POS38_C04_120610-ABG2_06.fsa	2S04-114-POS38	Identifiler_Bode_v2	



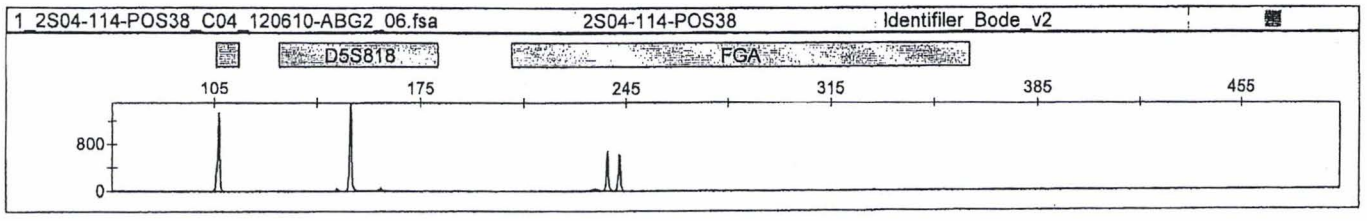
1_2S04-114-POS38_C04_120610-ABG2_06.fsa	2S04-114-POS38	Identifiler_Bode_v2	



1_2S04-114-POS38_C04_120610-ABG2_06.fsa	2S04-114-POS38	Identifiler_Bode_v2	



1_2S04-114-POS38_C04_120610-ABG2_06.fsa	2S04-114-POS38	Identifiler_Bode_v2	



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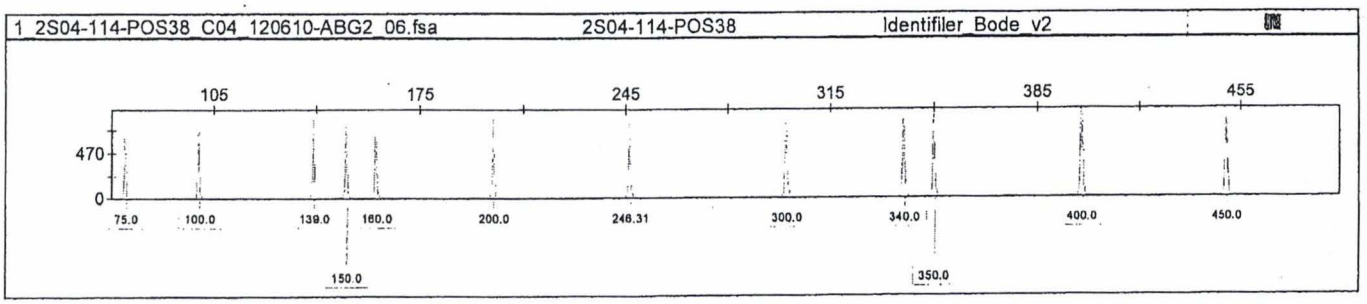

Tue Dec 07,2010 11:28AM, EST

Printed by: gmid

CE Set-up Sheet

TRAY ID: 120110-ABG1 **Amp. Tray:** 2S04-114-AMP38 **Analyst:** ABG **Date:** 12/1/10

	1	2	3	4	5	6	7	8	9	10	11	12
A	2S04-114-48a2.1	2S04-114-48e1.1	2S04-114-50b3.1	2S04-114-51c1.1	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
B	2S04-114-48b2.1	2S04-114-48e2.1	2S04-114-51a1.1	2S04-114-RB31.1	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
C	2S04-114-RB25.1	2S04-114-49a1.1	2S04-114-RB29.1	2S04-114-POS38	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
D	2S04-114-48c3.1	2S04-114-RB27.1	2S04-114-51a2.1	2S04-114-NEG38	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
E	2S04-114-48d1.1	2S04-114-49a2.1	2S04-114-51a4.1	2S04-114-POS38	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
F	2S04-114-RB26.1	2S04-114-49a4.1	2S04-114-51b1.1	2S04-114-NEG38	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
G	2S04-114-48d2.1	2S04-114-RB28.1	2S04-114-RB30.1	LADDER_ID	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
H	2S04-114-48d3.1	2S04-114-50b2.1	2S04-114-51b3.1	LADDER_ID	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank

	Vol.(ul)/Well		No. of Rxns		Vol. Total (ul)
Formamide Lot# 1008981	10.0 ul	x	40	=	400
GS-500LIZ Lot# 1007121	0.12 ul	x	40	=	4.8

Master Mix 10.0 ul

\+

Amp. Product 0.7ul

PIPETTORS LOT #S:	
Formamide:	P-085
ILS:	P-055
Formamide & ILS Mix:	P-116
Ladders:	P-067
Amp Product (3100 tray):	P-036, P-067
Amp Product (if diluted):	N/A
Diluent (for dilutions):	N/A

Machine:	14
Run #'s:	58-59
System:	Identifiler
Ladder Lot#:	0806012
Run Module:	Active_Run_Module_G5
Analysis Module:	75minrfu.gsp

Injected by: PDH

Date of Injection: 12/1/2010

Primer Peak Verification	
Primer peaks verified for all negative samples.	
Read 1 Analyst:	**Date:**
Integrity Report Evaluation	
Integrity Report Evaluation Date*:	N/A
Analyst:	N/A

*If possible contamination is detected, provide case note with details for affected cases

CE GMID Editing Sheet – ID

Tray ID: [illegible]
Analyst: [illegible]
GMID Panel: Identifiler_Bode_v2

Shipment or Case #: [illegible]
Date: [illegible]

Well	Edit: Locus, Base pair size - reason
[illegible]	[illegible]

Editing Key

20%: 20% filter applied (after confirming no mixtures)

-A: -A/Split peaks

AUT: single allele below minimum threshold

Artifact (non-specific)

D/I: Degraded and/or Inhibited

Dye artifact

Elevated BL: Labels placed on elevated basline(s)

FC: Failed capillary

ILS<MIN: ILS below minimum rfu threshold

IA: Imbalanced Alleles

LOR: Loss of resolution

Matrix Issue

OL: Off ladder allele

Other: provide explanation in text box (currently using this for FDLE alleles btw. 75-99 rfu)

PU: Pullup

RFU<MIN: sample rfu below minimum threshold

RFU>MAX: sample rfu above maximum threshold

Shoulder: Shoulder peak

Sizing: incorrect sizing (eg: migration issue)

Spikes

Stutter (n-4 if other record)

9947 Positive Control Well Numbers Checked Against Known: [illegible]					
D8S1179: [illegible]	D21S11: [illegible]	D7S820: [illegible]	CSF1PO: [illegible]		
D3S1358: [illegible]	TH01: [illegible]	D13S317: [illegible]	D16S539: [illegible]	D2S1338: [illegible]	
D19S433: [illegible]	vWA: [illegible]	TPOX: [illegible]	D18S51: [illegible]		
AMEL: [illegible]	D5S818: [illegible]	FGA: [illegible]			

CE GMID Editing Sheet – ID

Tray ID: 120110-AEG1
Analyst: LMC
GMID Panel: Identifiler_Bode_v2

Shipment or Case #: 2804-114
Date: 012411

Well	Edit: Locus, Base pair size - reason
	NO EDITS lm 012411

Editing Key

20%: 20% filter applied (after confirming no mixtures)

-A: -A/Split peaks

AUT: single allele below minimum threshold

Artifact (non-specific)

D/I: Degraded and/or Inhibited

Dye artifact

Elevated BL: Labels placed on elevated basline(s)

FC: Failed capillary

ILS<MIN: ILS below minimum rfu threshold

IA: Imbalanced Alleles

LOR: Loss of resolution

Matrix Issue

OL: Off ladder allele

Other: provide explanation in text box (currently using this for FDLE alleles btw. 75-99 rfu)

PU: Pullup

RFU<MIN: sample rfu below minimum threshold

RFU>MAX: sample rfu above maximum threshold

Shoulder: Shoulder peak

Sizing: incorrect sizing (eg: migration issue)

Spikes

Stutter (n-4 if other record)

9947 Positive Control Well Numbers Checked Against Known: COY, EOY					
D8S1179: 13,13	D21S11: 30,30	D7S820: 10,11	CSF1PO: 10,12		
D3S1358: 14,15	TH01: 9.3,9.3	D13S317: 11,11	D16S539: 11,12	D2S1338: 19,23	
D19S433: 14,15	vWA: 17,18	TPOX: 8,8	D18S51: 15,19		
AMEL: X,X	D5S818: 11,11	FGA: 23,24			

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lm
012411

Sample File	Sample Name	Panel	SQ
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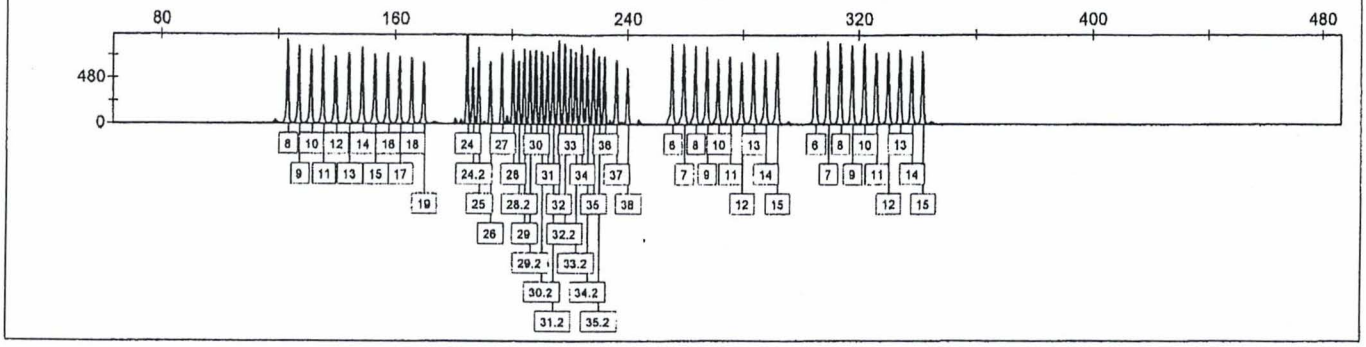

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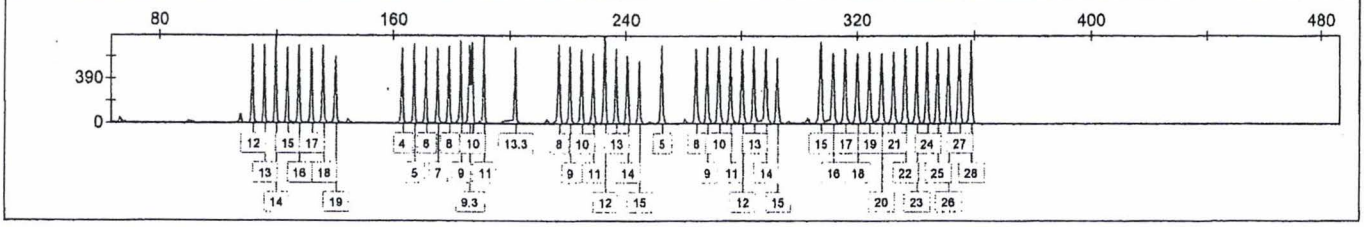

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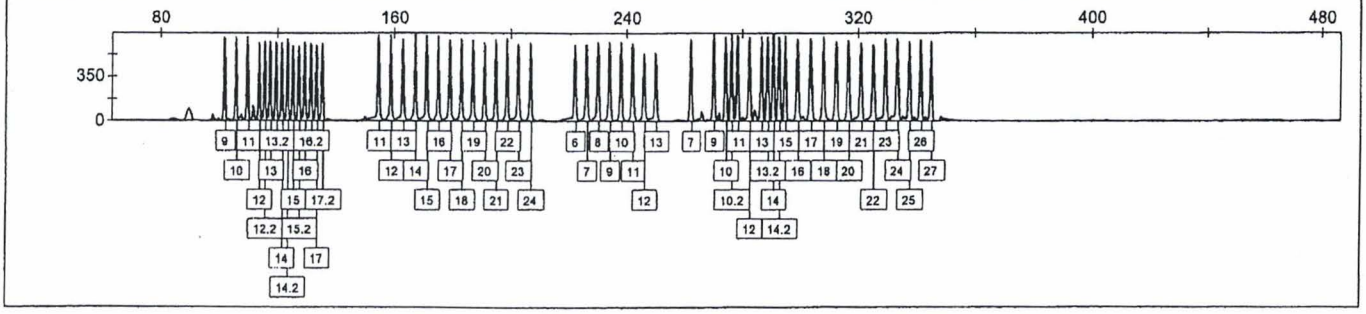
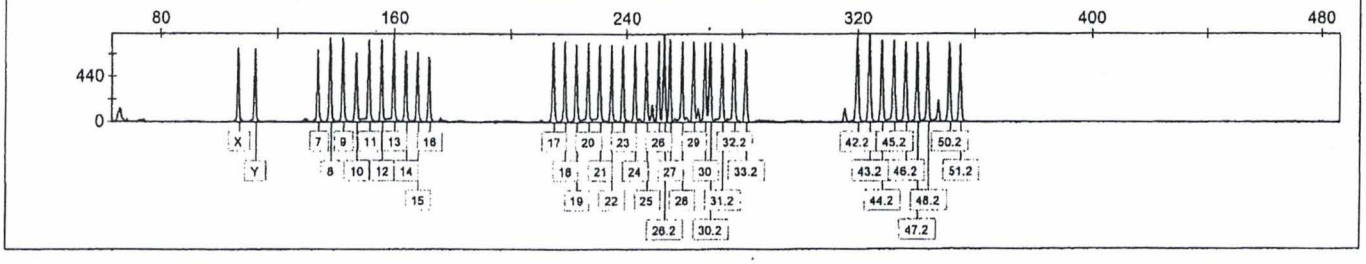
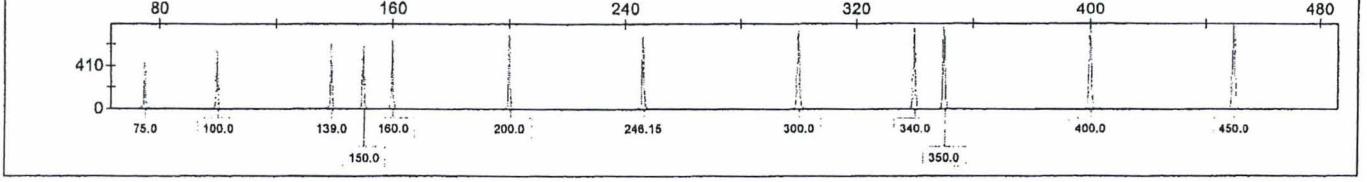


1_LADDER_ID_G04_120110-ABG1_14.fsa | LADDER_ID | Identifiler_Bode_v2



1_LADDER_ID_G04_120110-ABG1_14.fsa | LADDER_ID | Identifiler_Bode_v2



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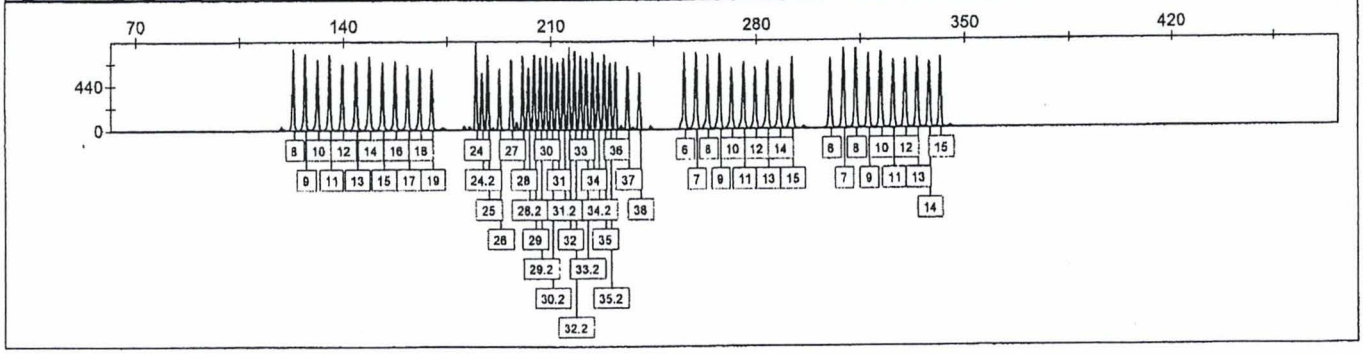
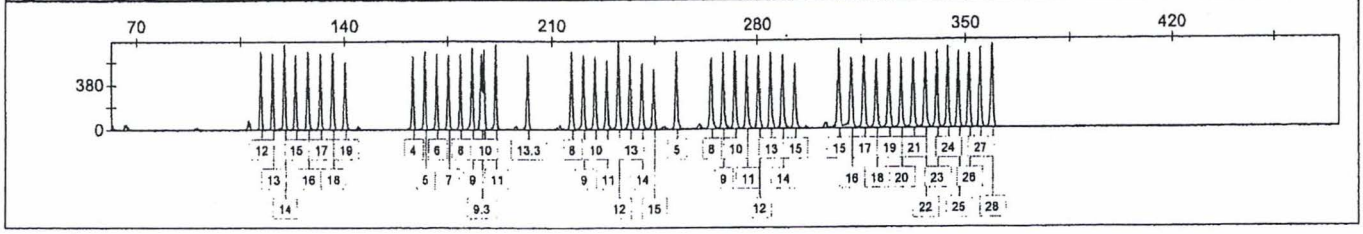
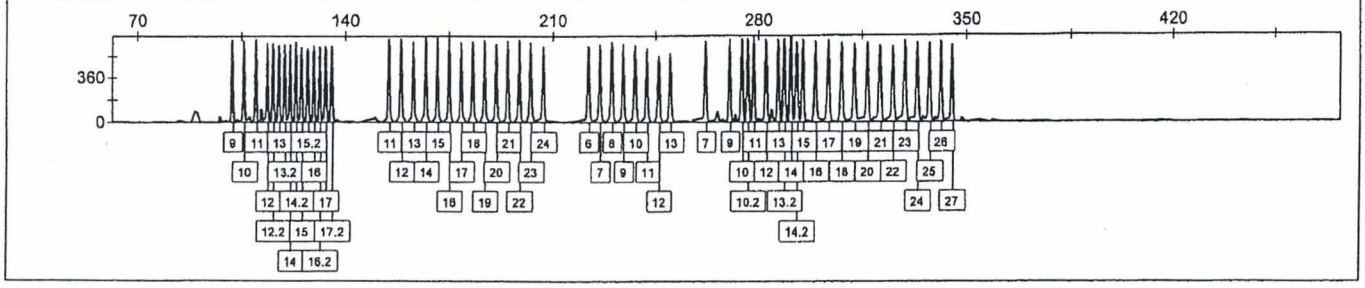
Sample File	Sample Name	Panel	SQ
1_LADDER_ID_H04_120110-ABG1_16.fsa	LADDER_ID	Identifiler_Bode_v2	



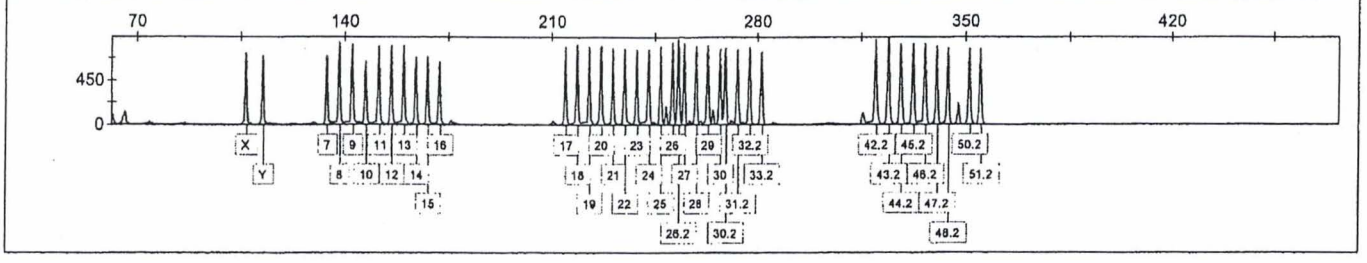
1_LADDER_ID_H04_120110-ABG1_16.fsa | LADDER_ID | Identifiler_Bode_v2



1_LADDER_ID_H04_120110-ABG1_16.fsa | LADDER_ID | Identifiler_Bode_v2



1_LADDER_ID_H04_120110-ABG1_16.fsa | LADDER_ID | Identifiler_Bode_v2



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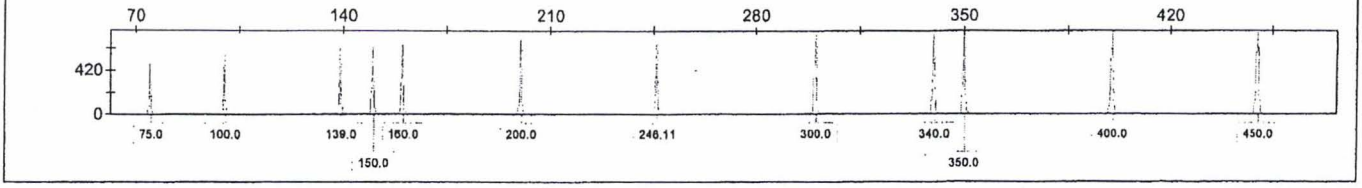

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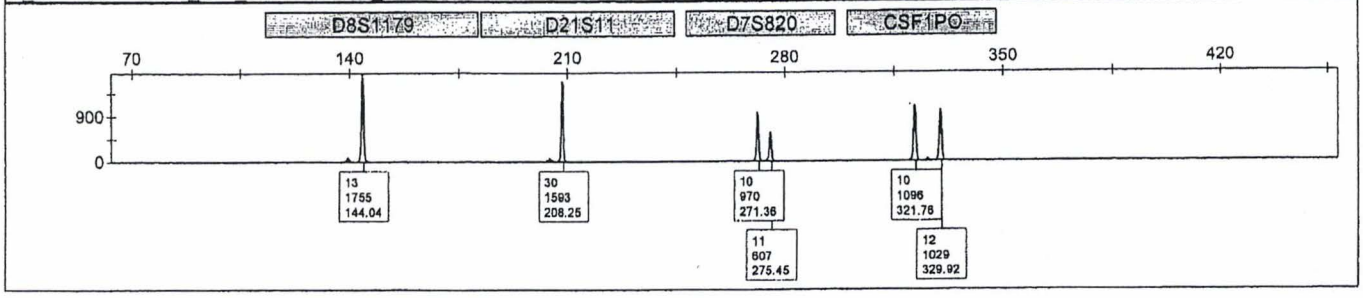
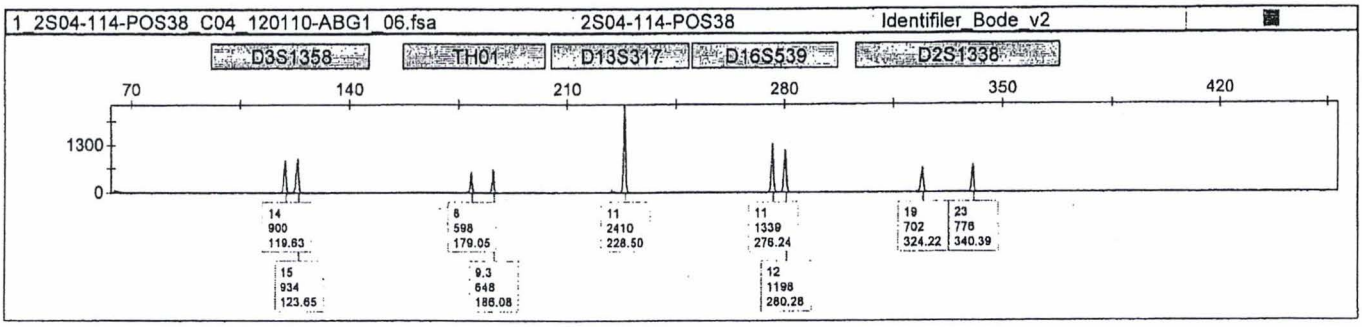
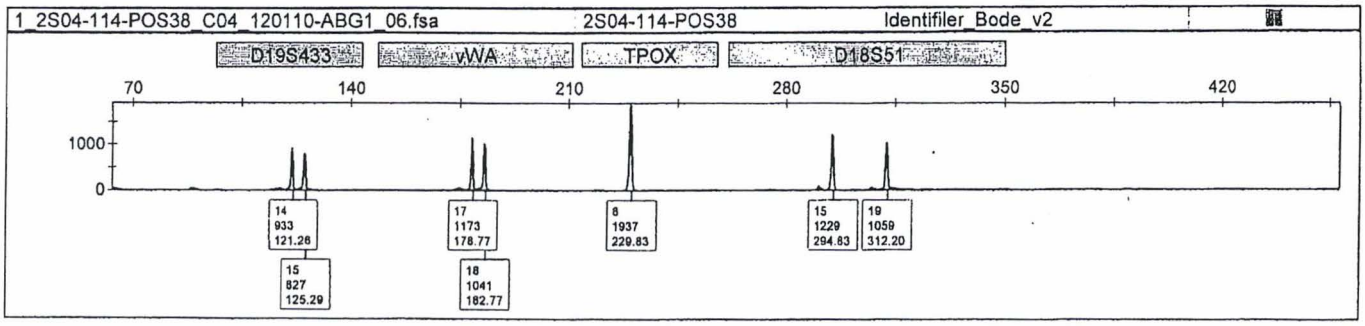
Sample File	Sample Name	Panel	SQ
1_2S04-114-POS38_C04_120110-ABG1_06.fsa	2S04-114-POS38	Identifiler_Bode_v2	



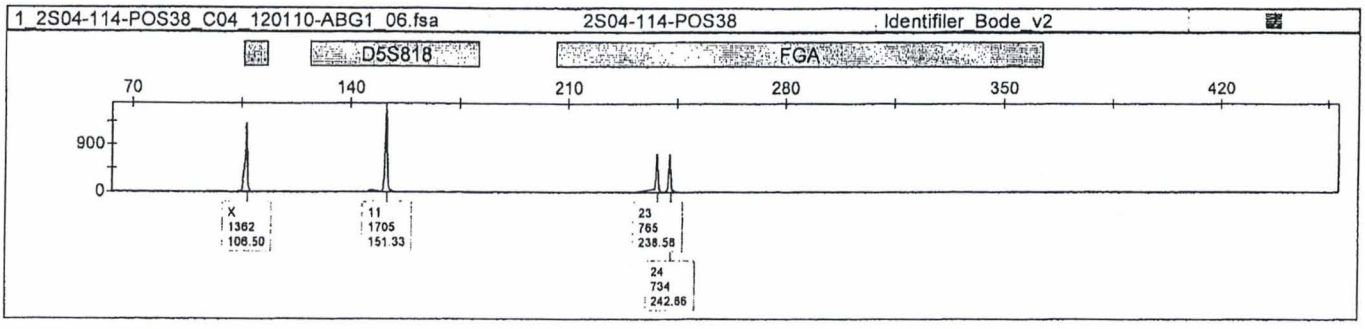
1_2S04-114-POS38_C04_120110-ABG1_06.fsa	2S04-114-POS38	Identifiler_Bode_v2



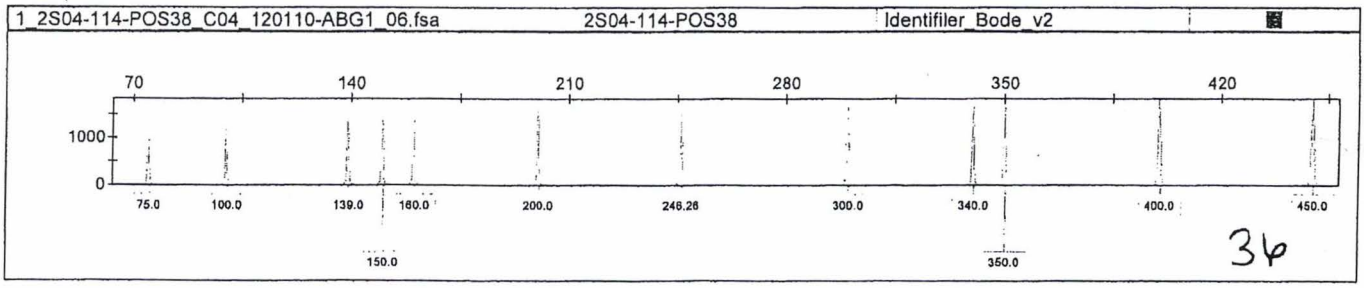
1_2S04-114-POS38_C04_120110-ABG1_06.fsa	2S04-114-POS38	Identifiler_Bode_v2



1_2S04-114-POS38_C04_120110-ABG1_06.fsa	2S04-114-POS38	Identifiler_Bode_v2



1_2S04-114-POS38_C04_120110-ABG1_06.fsa	2S04-114-POS38	Identifiler_Bode_v2



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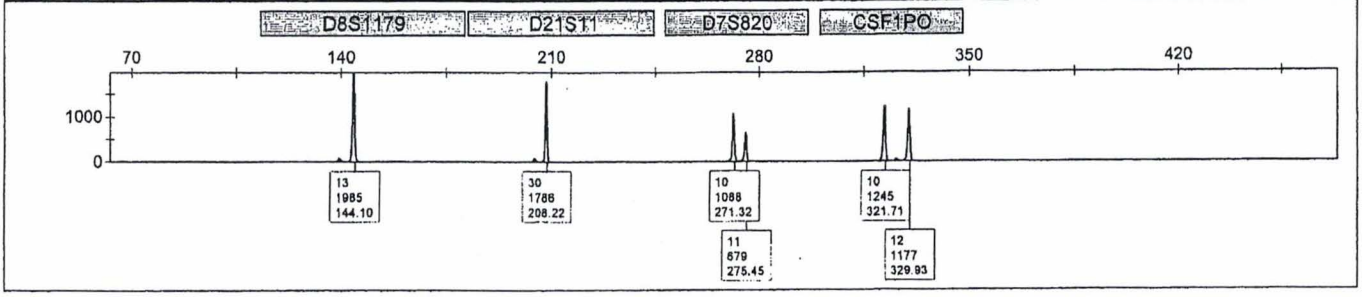
Applied Biosystems

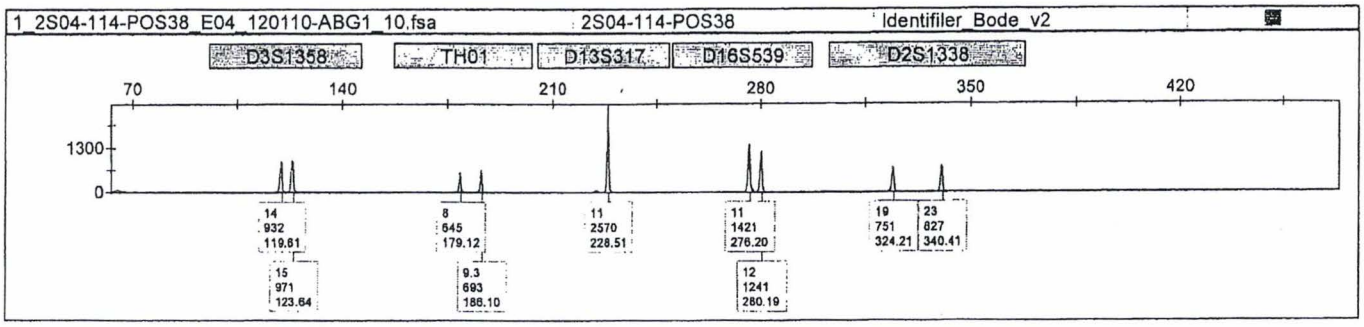
GeneMapper ID v3.2.1

GMID14_120110-ABG1_2S04-114_ABG_ID

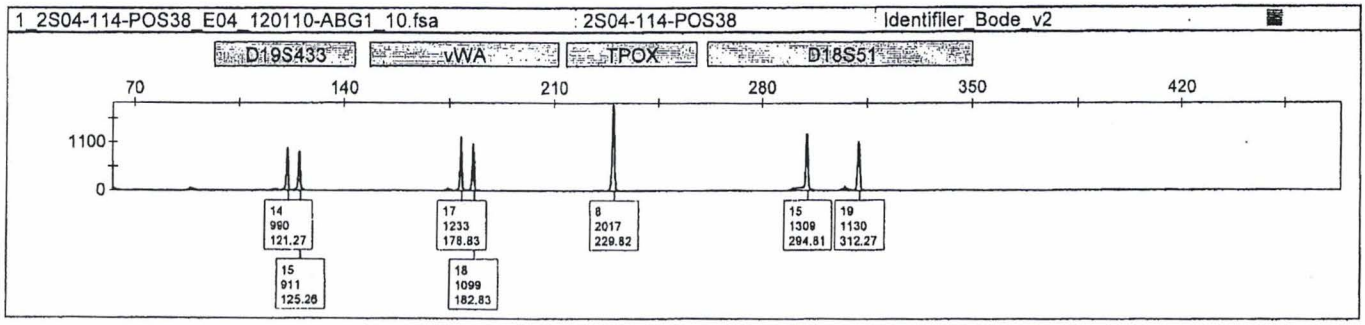
Sample File	Sample Name	Panel	SQ
1_2S04-114-POS38_E04_120110-ABG1_10.fsa	2S04-114-POS38	Identifiler_Bode_v2	



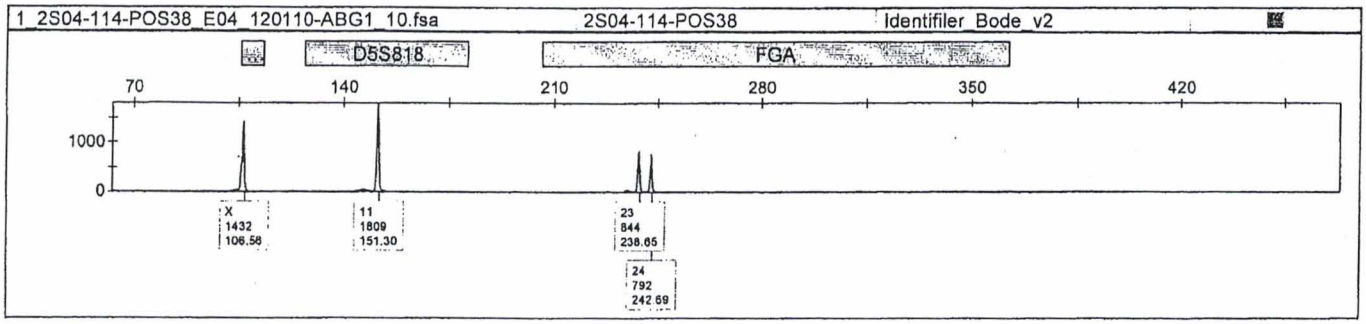
1_2S04-114-POS38_E04_120110-ABG1_10.fsa	2S04-114-POS38	Identifiler_Bode_v2	



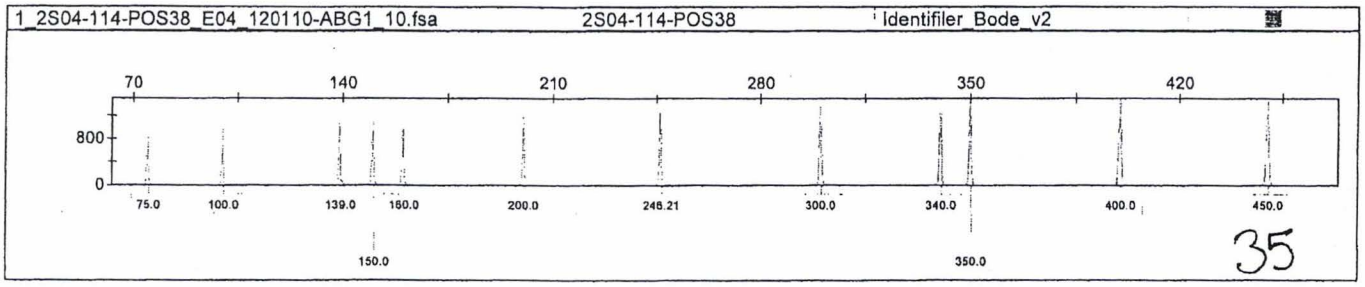
1_2S04-114-POS38_E04_120110-ABG1_10.fsa	2S04-114-POS38	Identifiler_Bode_v2	



1_2S04-114-POS38_E04_120110-ABG1_10.fsa	2S04-114-POS38	Identifiler_Bode_v2	



1_2S04-114-POS38_E04_120110-ABG1_10.fsa	2S04-114-POS38	Identifiler_Bode_v2	



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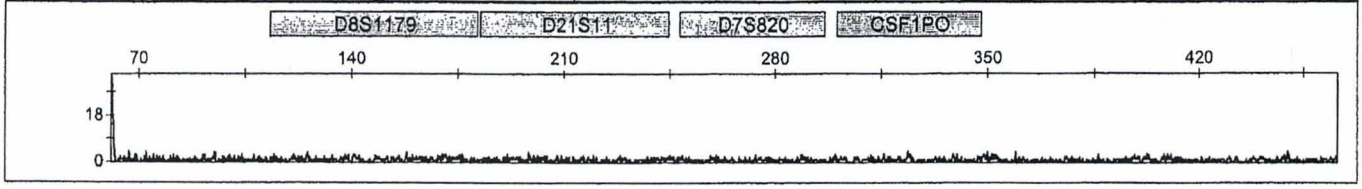
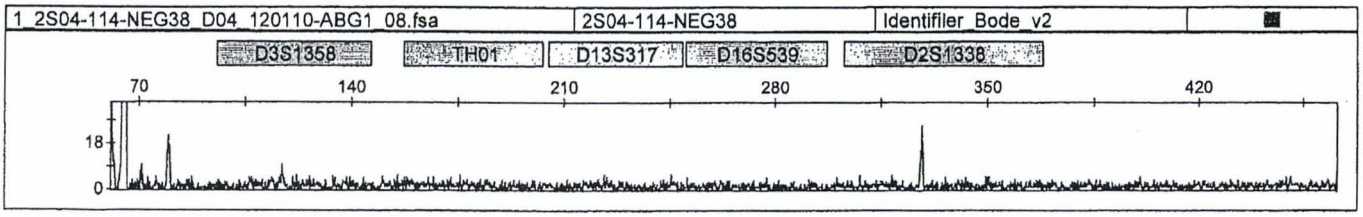
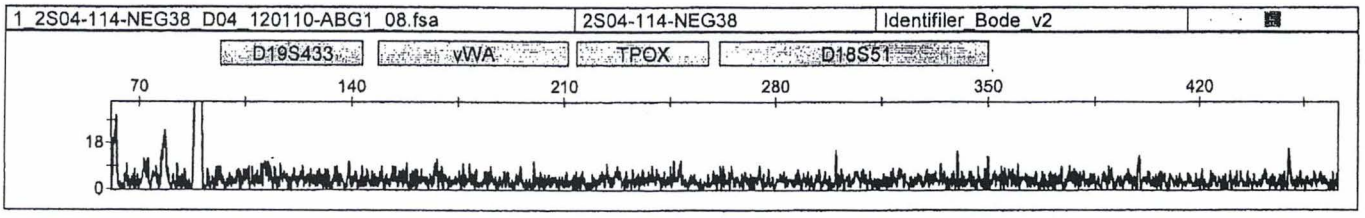
Sample File	Sample Name	Panel	SQ
1_2S04-114-NEG38_D04_120110-ABG1_08.fsa	2S04-114-NEG38	Identifiler_Bode_v2	



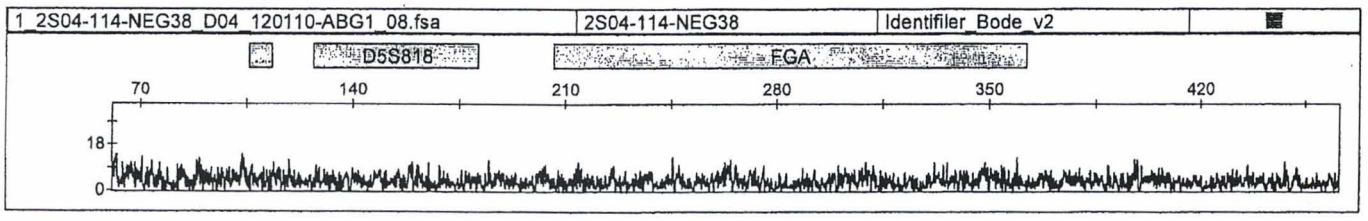
1_2S04-114-NEG38_D04_120110-ABG1_08.fsa | 2S04-114-NEG38 | Identifiler_Bode_v2



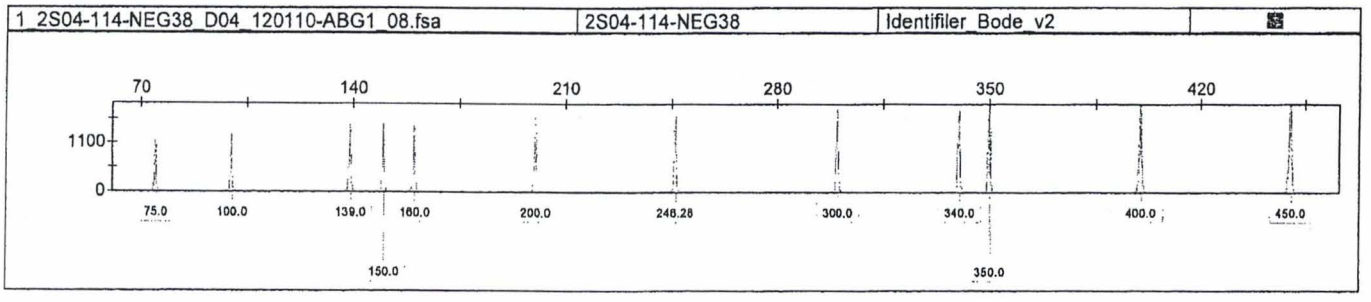
1_2S04-114-NEG38_D04_120110-ABG1_08.fsa | 2S04-114-NEG38 | Identifiler_Bode_v2



1_2S04-114-NEG38_D04_120110-ABG1_08.fsa | 2S04-114-NEG38 | Identifiler_Bode_v2



1_2S04-114-NEG38_D04_120110-ABG1_08.fsa | 2S04-114-NEG38 | Identifiler_Bode_v2



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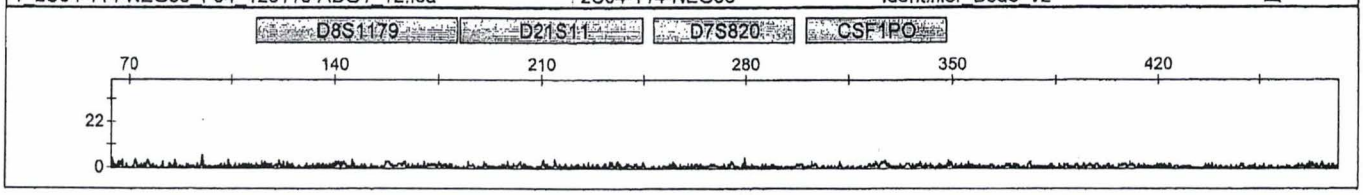
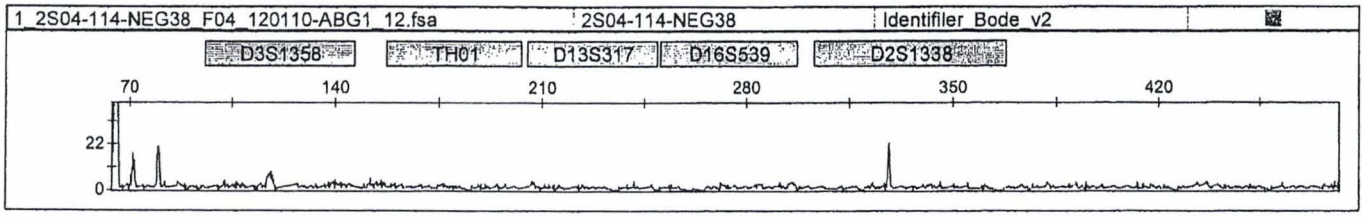
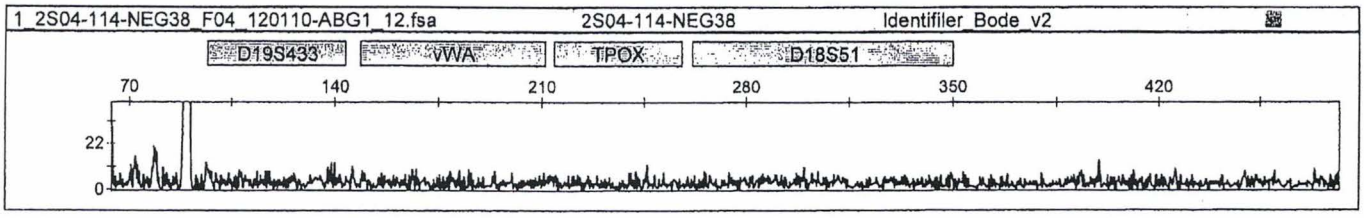
Sample File	Sample Name	Panel	SQ
1_2S04-114-NEG38_F04_120110-ABG1_12.fsa	2S04-114-NEG38	Identifiler_Bode_v2	



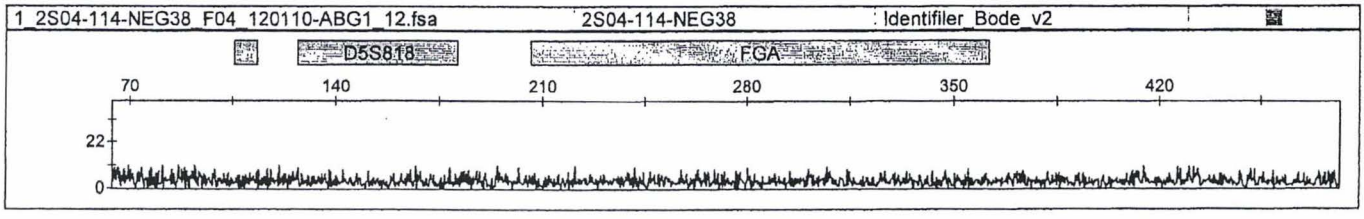
1_2S04-114-NEG38_F04_120110-ABG1_12.fsa | 2S04-114-NEG38 | Identifiler_Bode_v2



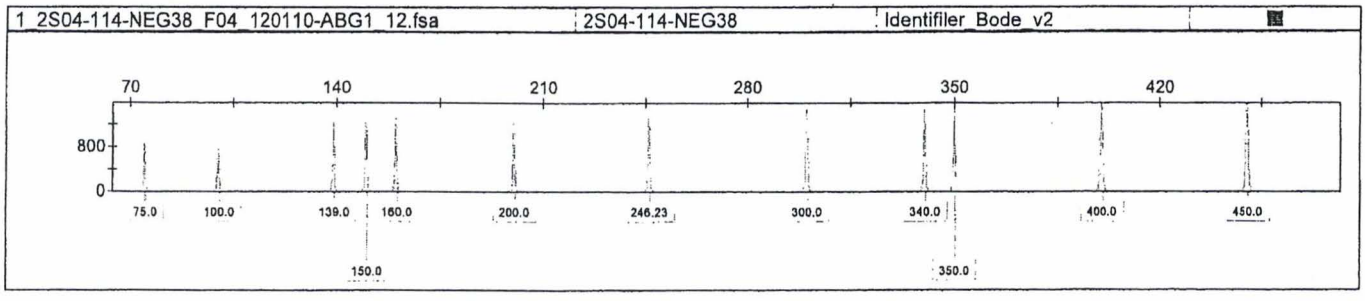
1_2S04-114-NEG38_F04_120110-ABG1_12.fsa | 2S04-114-NEG38 | Identifiler_Bode_v2



1_2S04-114-NEG38_F04_120110-ABG1_12.fsa | 2S04-114-NEG38 | Identifiler_Bode_v2



1_2S04-114-NEG38_F04_120110-ABG1_12.fsa | 2S04-114-NEG38 | Identifiler_Bode_v2



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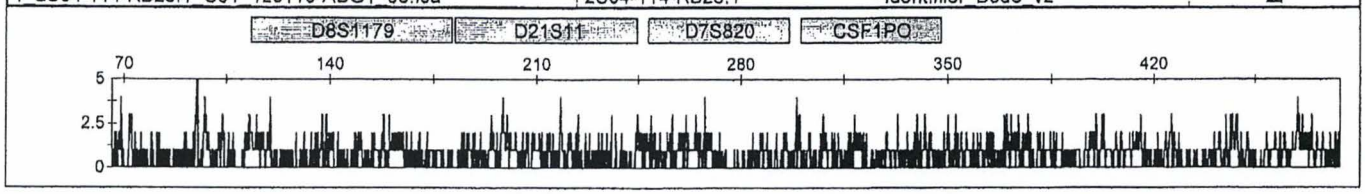
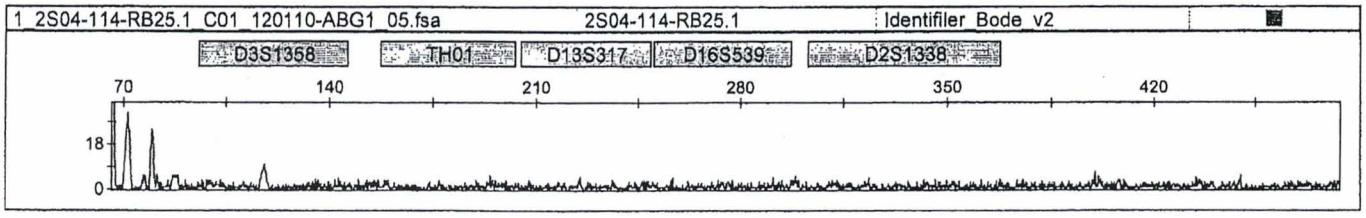
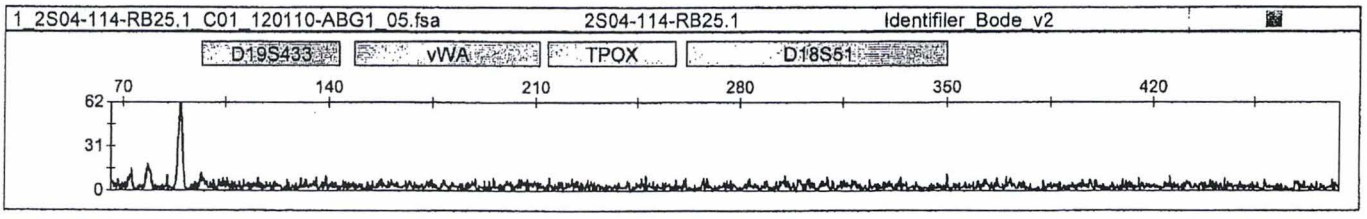
Sample File	Sample Name	Panel	SQ
1_2S04-114-RB25.1_C01_120110-ABG1_05.fsa	2S04-114-RB25.1	Identifiler_Bode_v2	



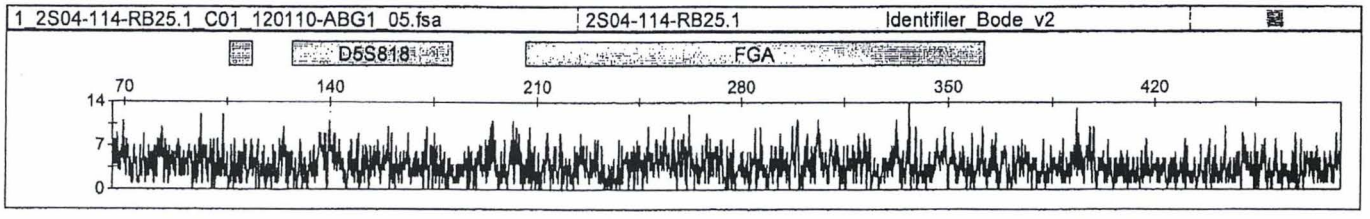
1_2S04-114-RB25.1_C01_120110-ABG1_05.fsa | 2S04-114-RB25.1 | Identifiler_Bode_v2



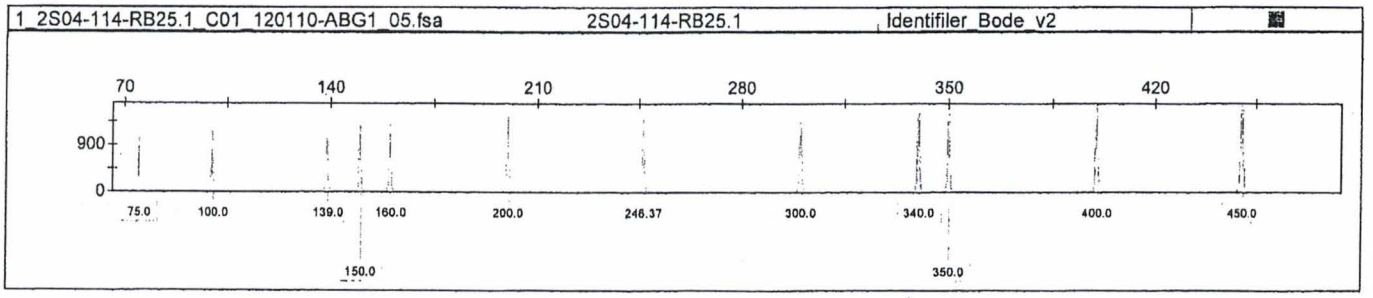
1_2S04-114-RB25.1_C01_120110-ABG1_05.fsa | 2S04-114-RB25.1 | Identifiler_Bode_v2



1_2S04-114-RB25.1_C01_120110-ABG1_05.fsa | 2S04-114-RB25.1 | Identifiler_Bode_v2



1_2S04-114-RB25.1_C01_120110-ABG1_05.fsa | 2S04-114-RB25.1 | Identifiler_Bode_v2



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Sample File	Sample Name	Panel	SQ
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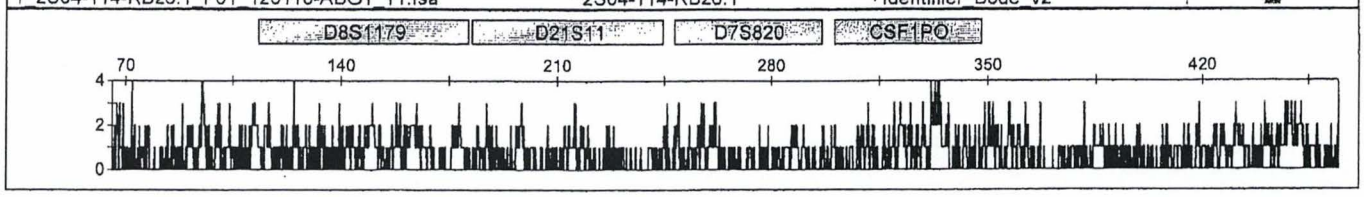
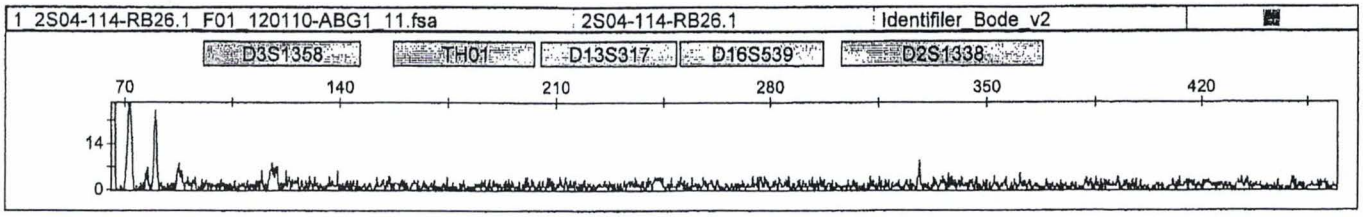
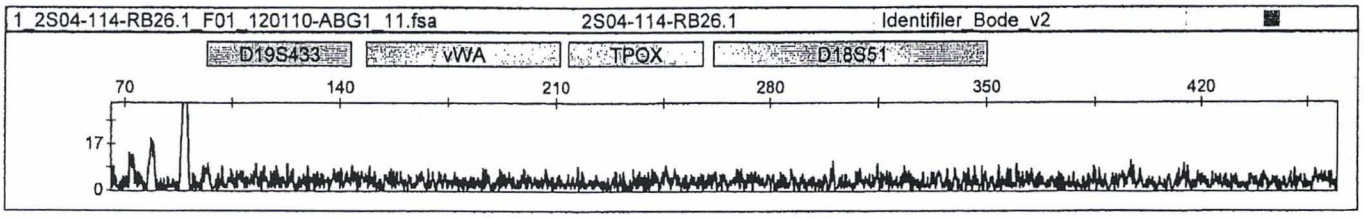


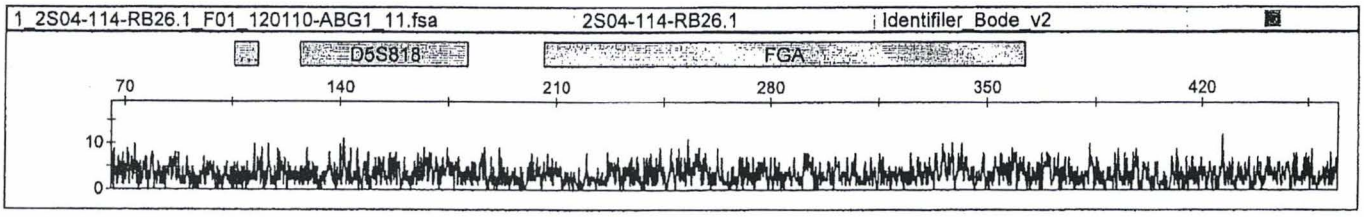
1_2S04-114-RB26.1_F01_120110-ABG1_11.fsa | 2S04-114-RB26.1 | Identifiler_Bode_v2



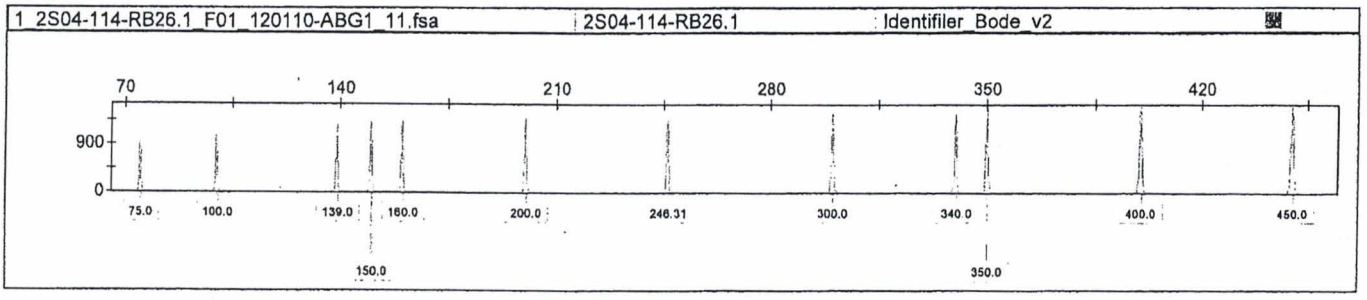
1_2S04-114-RB26.1_F01_120110-ABG1_11.fsa | 2S04-114-RB26.1 | Identifiler_Bode_v2



1_2S04-114-RB26.1_F01_120110-ABG1_11.fsa | 2S04-114-RB26.1 | Identifiler_Bode_v2



1_2S04-114-RB26.1_F01_120110-ABG1_11.fsa | 2S04-114-RB26.1 | Identifiler_Bode_v2



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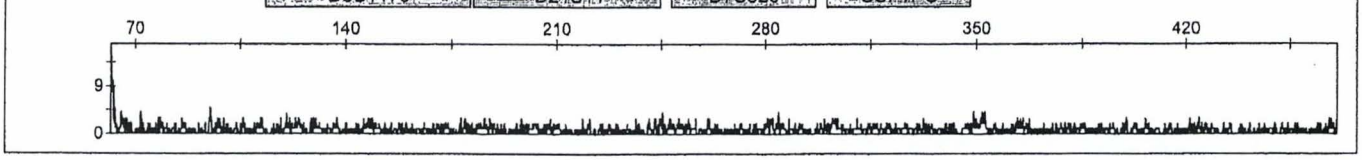
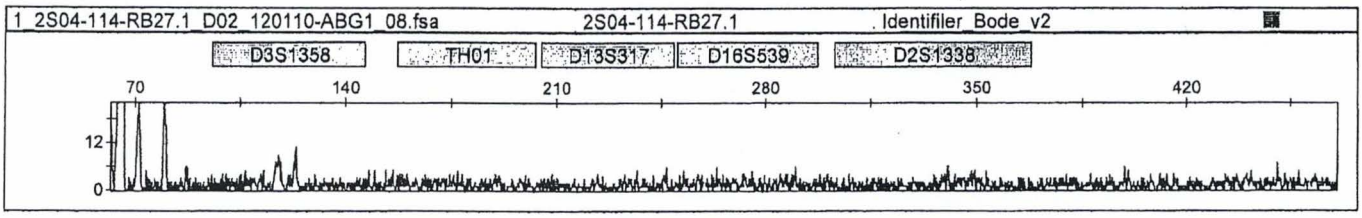
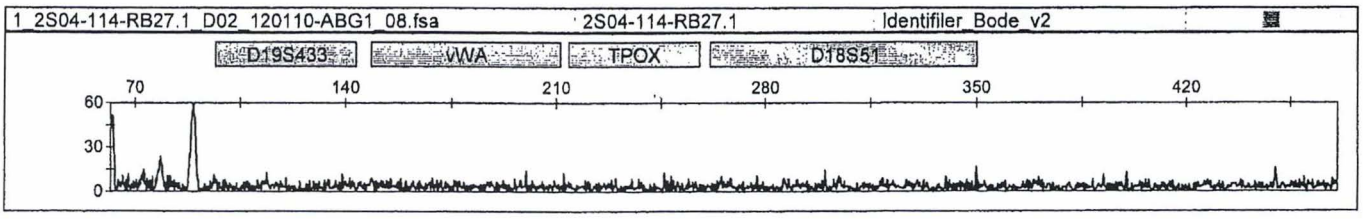
Sample File	Sample Name	Panel	SQ
1_2S04-114-RB27.1_D02_120110-ABG1_08.fsa	2S04-114-RB27.1	Identifiler_Bode_v2	



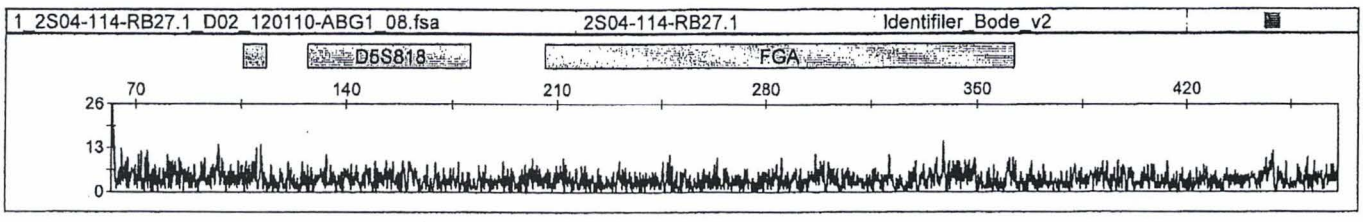
1_2S04-114-RB27.1_D02_120110-ABG1_08.fsa | 2S04-114-RB27.1 | Identifiler_Bode_v2



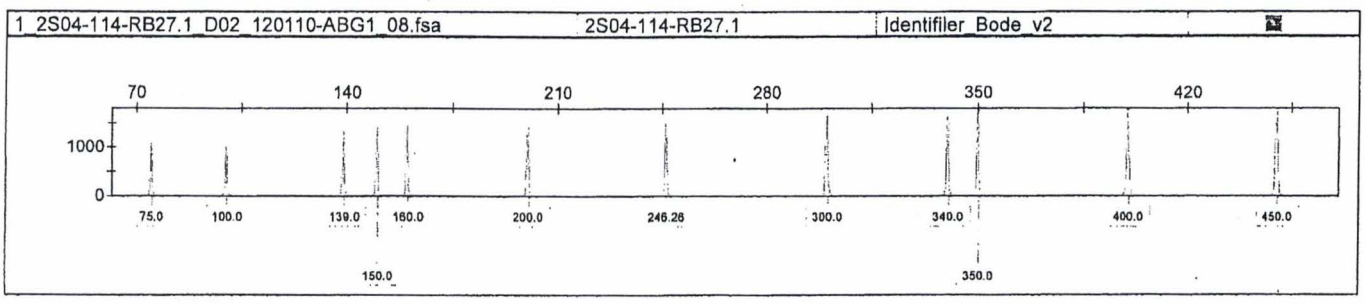
1_2S04-114-RB27.1_D02_120110-ABG1_08.fsa | 2S04-114-RB27.1 | Identifiler_Bode_v2



1_2S04-114-RB27.1_D02_120110-ABG1_08.fsa | 2S04-114-RB27.1 | Identifiler_Bode_v2



1_2S04-114-RB27.1_D02_120110-ABG1_08.fsa | 2S04-114-RB27.1 | Identifiler_Bode_v2



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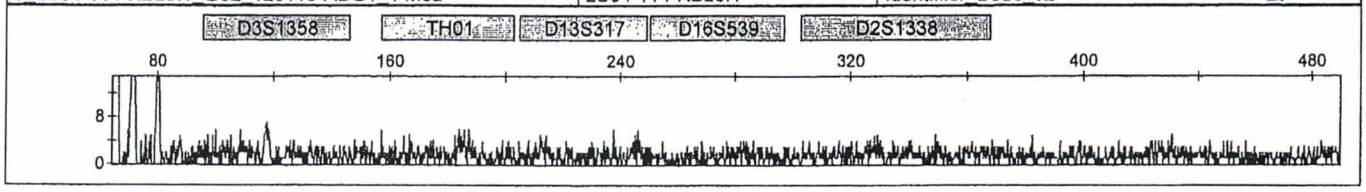
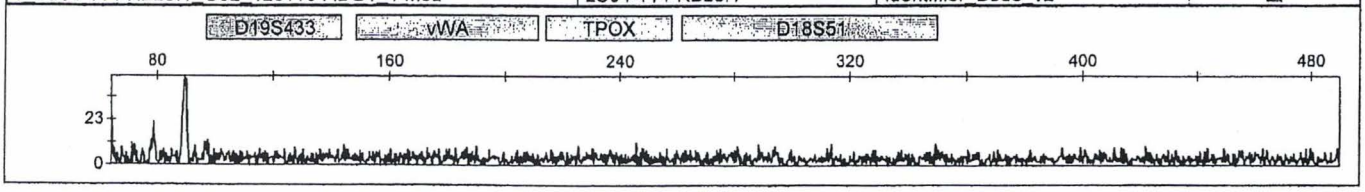
Sample File	Sample Name	Panel	SQ
1_2S04-114-RB28.1_G02_120110-ABG1_14.fsa	2S04-114-RB28.1	Identifiler_Bode_v2	



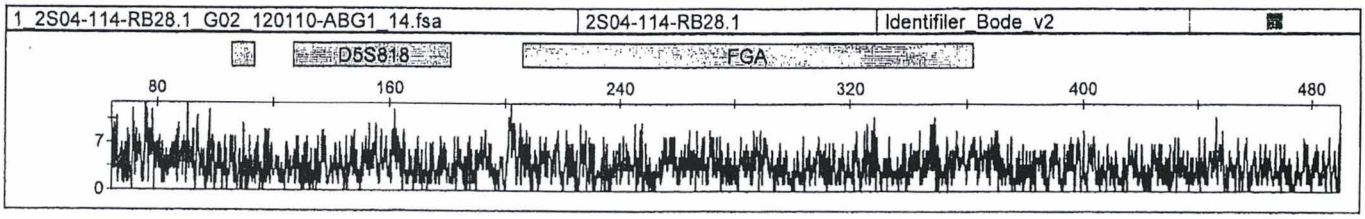
1_2S04-114-RB28.1_G02_120110-ABG1_14.fsa | 2S04-114-RB28.1 | Identifiler_Bode_v2



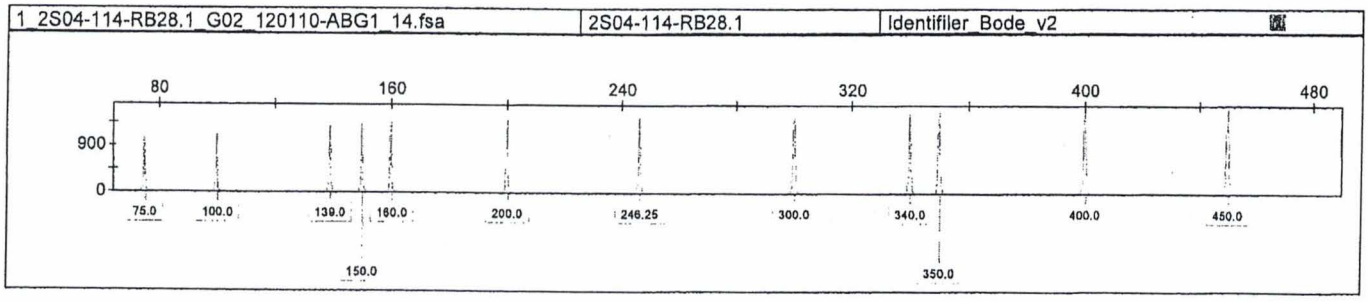
1_2S04-114-RB28.1_G02_120110-ABG1_14.fsa | 2S04-114-RB28.1 | Identifiler_Bode_v2



1_2S04-114-RB28.1_G02_120110-ABG1_14.fsa | 2S04-114-RB28.1 | Identifiler_Bode_v2



1_2S04-114-RB28.1_G02_120110-ABG1_14.fsa | 2S04-114-RB28.1 | Identifiler_Bode_v2



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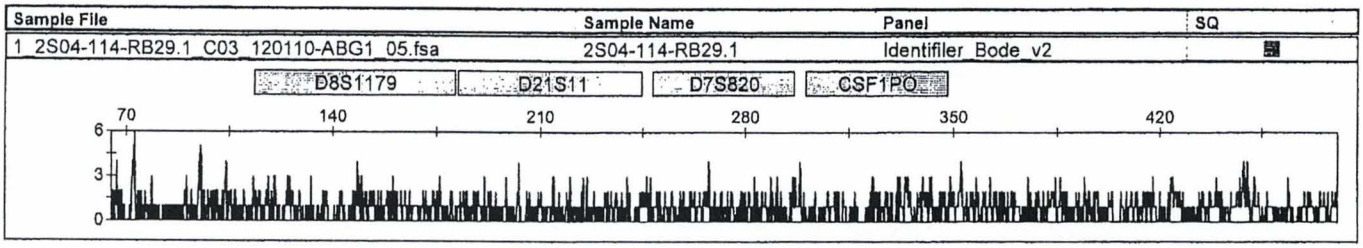
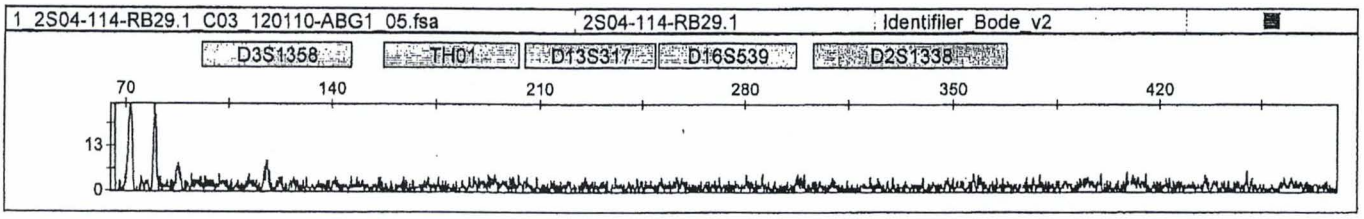
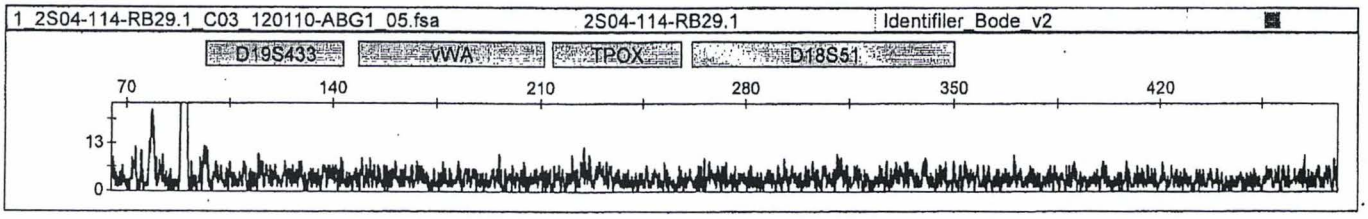
Sample File	Sample Name	Panel	SQ
1_2S04-114-RB29.1_C03_120110-ABG1_05.fsa	2S04-114-RB29.1	Identifiler_Bode_v2	



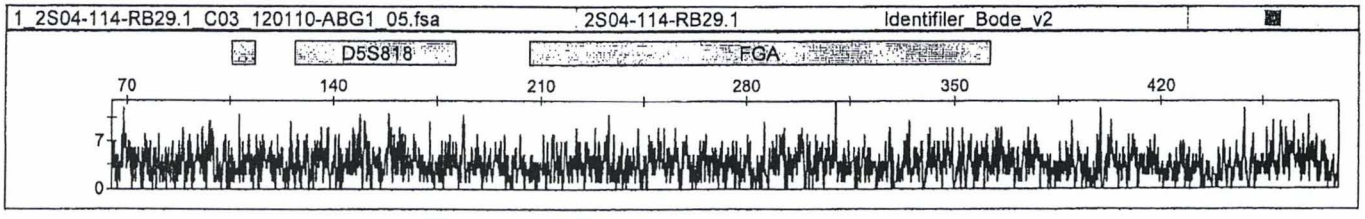
1_2S04-114-RB29.1_C03_120110-ABG1_05.fsa | 2S04-114-RB29.1 | Identifiler_Bode_v2



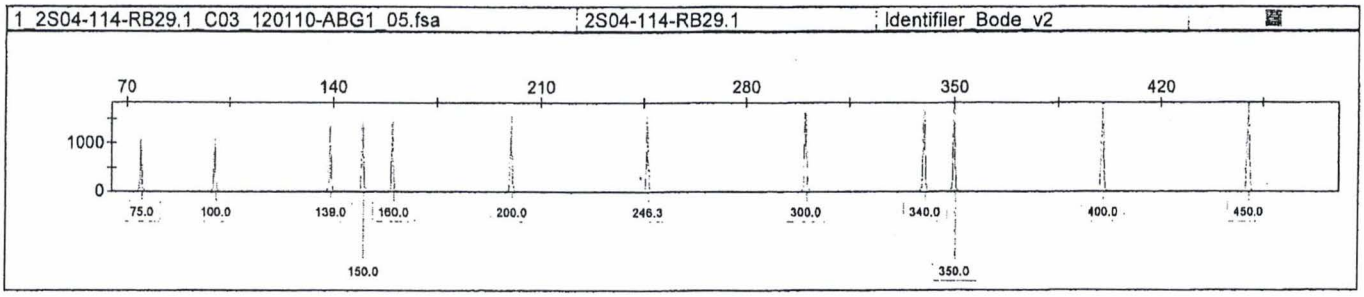
1_2S04-114-RB29.1_C03_120110-ABG1_05.fsa | 2S04-114-RB29.1 | Identifiler_Bode_v2



1_2S04-114-RB29.1_C03_120110-ABG1_05.fsa | 2S04-114-RB29.1 | Identifiler_Bode_v2

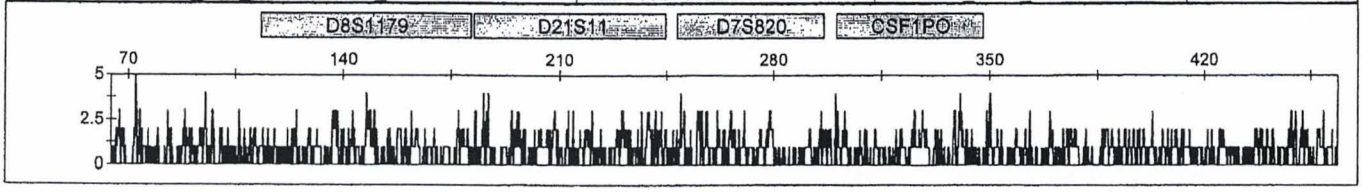


1_2S04-114-RB29.1_C03_120110-ABG1_05.fsa | 2S04-114-RB29.1 | Identifiler_Bode_v2

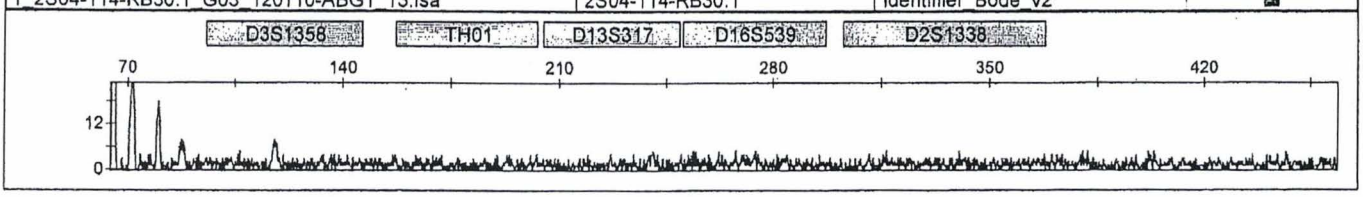


28

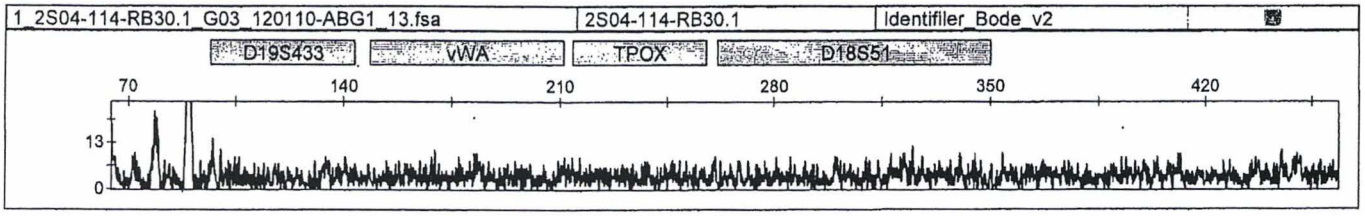
Sample File	Sample Name	Panel	SQ
1_2S04-114-RB30.1_G03_120110-ABG1_13.fsa	2S04-114-RB30.1	Identifiler_Bode_v2	



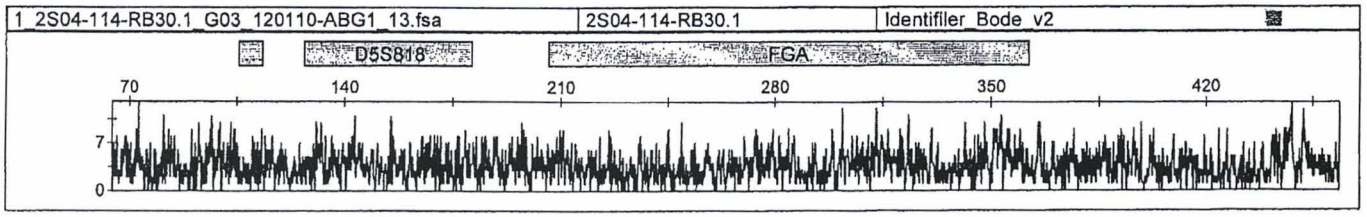
1_2S04-114-RB30.1_G03_120110-ABG1_13.fsa	2S04-114-RB30.1	Identifiler_Bode_v2	



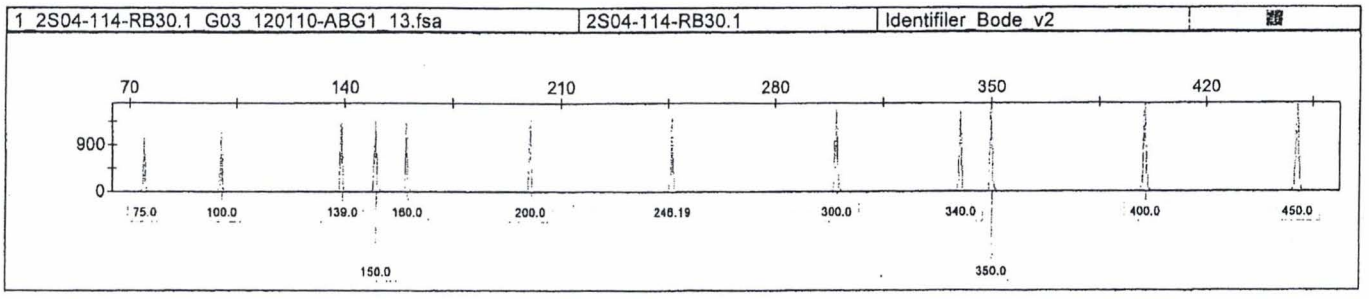
1_2S04-114-RB30.1_G03_120110-ABG1_13.fsa	2S04-114-RB30.1	Identifiler_Bode_v2	



1_2S04-114-RB30.1_G03_120110-ABG1_13.fsa	2S04-114-RB30.1	Identifiler_Bode_v2	



1_2S04-114-RB30.1_G03_120110-ABG1_13.fsa	2S04-114-RB30.1	Identifiler_Bode_v2	



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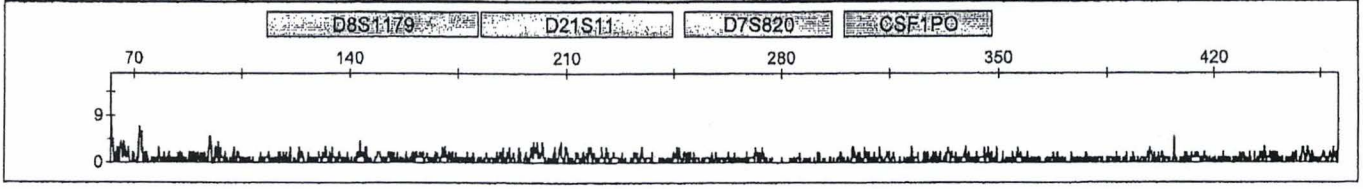
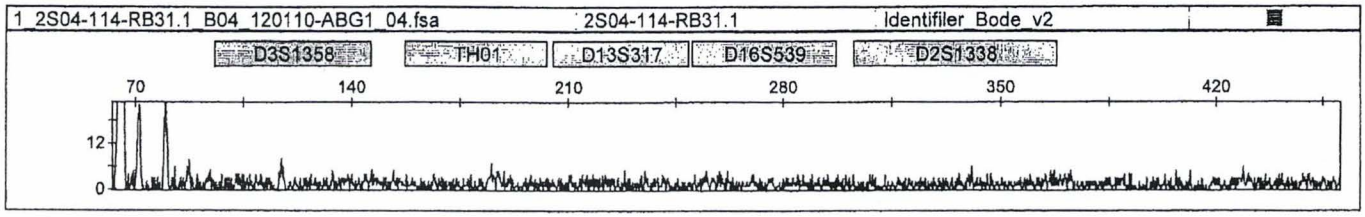
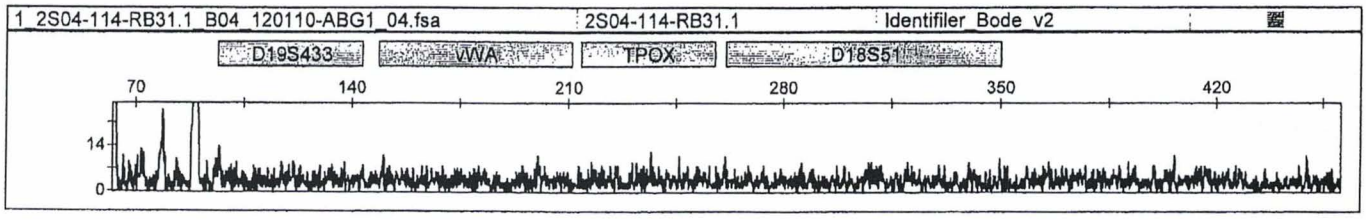
Sample File	Sample Name	Panel	SQ
1_2S04-114-RB31.1_B04_120110-ABG1_04.fsa	2S04-114-RB31.1	Identifiler_Bode_v2	



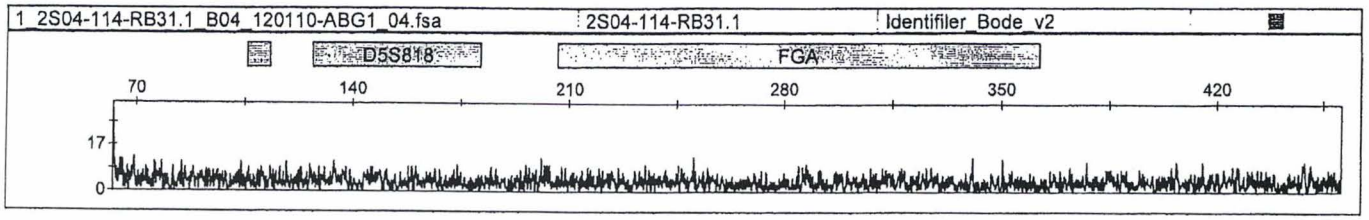
1_2S04-114-RB31.1_B04_120110-ABG1_04.fsa | 2S04-114-RB31.1 | Identifiler_Bode_v2



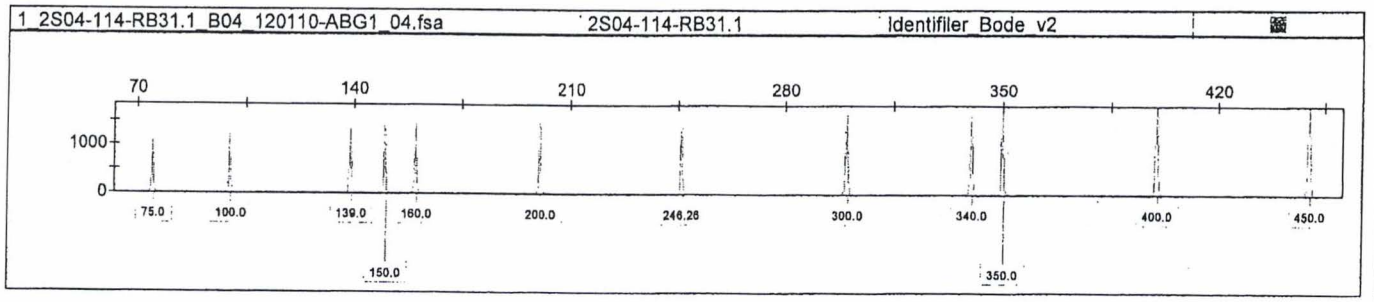
1_2S04-114-RB31.1_B04_120110-ABG1_04.fsa | 2S04-114-RB31.1 | Identifiler_Bode_v2



1_2S04-114-RB31.1_B04_120110-ABG1_04.fsa | 2S04-114-RB31.1 | Identifiler_Bode_v2



1_2S04-114-RB31.1_B04_120110-ABG1_04.fsa | 2S04-114-RB31.1 | Identifiler_Bode_v2



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AmpF*l* STR MiniFiler

Amplification Worksheet (25µl Volume Reaction)

See amplification notes for reagents, lot numbers, and pipettor numbers

Tray Coordinate (well)	Sample	Dilution	Master Mix (µl)	DNA/dH2O (µl/µl)	Total (µl)
A1.41	2S04-114-48b2.2	---	15	10/0	25
B1.41	2S04-114-RB25.2	---	15	10/0	25
C1.41	2S04-114-48c3.2	---	15	10/0	25
D1.41	2S04-114-48d1.2	---	15	10/0	25
E1.41	2S04-114-RB26.2	---	15	10/0	25
F1.41	2S04-114-48d2.2	---	15	10/0	25
G1.41	2S04-114-49a1.2	---	15	10/0	25
H1.41	2S04-114-RB27.2	---	15	10/0	25
A2.41	2S04-114-51a1.2	---	15	10/0	25
B2.41	2S04-114-RB29.2	---	15	10/0	25
C2.41	2S04-114-51a4.2	---	15	10/0	25
D2.41	2S04-114-RB30.2	---	15	10/0	25
E2.41	2S04-114-51b3.2	---	15	10/0	25
F2.41	2S04-114-51c1.2	---	15	10/0	25
G2.41	2S04-114-51c2.2	---	15	10/0	25
H2.41	2S04-114-VC1.2	---	15	10/0	25
A3.41	2S04-114-RB31.2	---	15	10/0	25
B3.41	2S04-114-POS41	---	15	0.8/9.2	25
C3.41	2S04-114-NEG41	---	15	0/10	25

TC#: 29 Program#: MiniFiler_29 2S04-114-AMP41

Analyst: LAR Date: 01/21/11

Tube Witness: AV. Date: 01-21-11

AMPLIFICATION NOTES:

Reagent	Source	Lot #	Sample Volume (µl)	Number of Reactions	Final Volume (µl)
Water	Fisher	097050			
MiniFiler Master Mix	ABI	1001013	10	22	220
MiniFiler Primer Set	ABI	1007018	5	22	110
POS 9947	BODE	012111LAR2			

Pipettes Used:	
For all volumes <2 uL	A-066
For all volumes between 2 and 10 uL	A-107
For all volumes between 11 and 100 uL	A-109
For all volumes between 101 and 1000 uL	A-120
For master mix	A-109
For water	A-107

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LAR 012111

AmpF*l* STR Identifiler

Amplification Worksheet (25µl Volume Reaction)

See amplification notes for reagents, lot numbers, and pipettor numbers					
Tray Coordinate (well)	Sample	Dilution	Master Mix (µl)	DNA/dH2O (µl/µl)	Total (µl)
A1.40	2S04-114-51c2.1	---	15	10/0	25
B1.40	2S04-114-VC1.1	---	15	10/0	25
C1.40	2S04-114-POS40	---	15	1.5/8.5	25
D1.40	2S04-114-NEG40	---	15	0/10	25

TC#: 28 Program#: ID 28CYCL 2S04-114-AMP40

Analyst: LAR Date: 01/21/11

Tube Witness: JCB Date: 1/21/11

AMPLIFICATION NOTES:

Reagent	Source	Lot #	Sample Volume (µl)	Number of Reactions	Final Volume (µl)
Water	Fisher	[illegible]			
PCR Reaction Mix	ABI	[illegible]	10.5	5	52.5
Identifiler Primer Set	ABI	[illegible]	5.5	5	27.5
AmpliTaq Gold	ABI	[illegible]	0.5	5	2.5
POS 9947	BODE	[illegible]			
TE	BODE	N/A			

Pipettes Used:

For all volumes <2 uL	A-107
For all volumes between 2 and 10 uL	A-102
For all volumes between 11 and 100 uL	A-109
For all volumes between 101 and 1000 uL	—
For master mix	A-109
For water	A-107

Document: BT00429 - Identifiler Amp (CCW WS)

Revision: 3

Effective: Friday, March 05, 2010 12:27:07 PM

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LAR 012111

Vivacon Purification/Concentration of DNA Extracts

012111ABG-VC1

Item	Source	Lot #
Vivacon 500-30K	Sartorius	10VN50003
cRNA	BODE	081910JJ
dH_2O	Fisher	N/A
TE-4 Buffer	BODE	081910JJ

Tube #	Sample	Approximate Volume Recovered (ul)	Approximate Final Volume (ul)	Comments
1	2S04-114-51c2	9.5	22	
2	2S04-114-VC1	10.5	22	

Analyst: ABG **Date:** 1/21/11

Case Number: 2S04-114

Pipettes Used:

Volumes <2 uL	A-154
Volumes 2-10 uL	A-154
Volumes 11-100 uL	A-036
Volumes 101-1000 uL	A-037

Document: BTF00222 - Vivacon 500-30K (WS)
Revision: 1
Effective: 11/15/2010 11:14:54 AM

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AmpF/STR Identifiler

Amplification Worksheet (25µl Volume Reaction)

See amplification notes for reagents, lot numbers, and pipettor numbers					
Tray Coordinate (well)	Sample	Dilution	Master Mix (µl)	DNA/dH2O (µl/µl)	Total (µl)
A1.39	2S04-114-47a1.1	---	15	10/0	25
B1.39	2S04-114-RB32.1	---	15	10/0	25
C1.39	2S04-114-POS39	---	15	1.5/8.5	25
D1.39	2S04-114-NEG39	---	15	0/10	25

TC#: 24 Program#: ID 28CYCL **2S04-114-AMP39**

Analyst: ASC Date: 12-7-10

Tube Witness: ~~SAT~~ Date: 120710

AMPLIFICATION NOTES:

2S04-114-AMP39

			Sample Volume (µl)	Number of Reactions	Final Volume (µl)
Reagent	Source	Lot #			
Water	Fisher	097050			
PCR Reaction Mix	ABI	1005164	10.5	5	52.5
Identifiler Primer Set	ABI	0912072	5.5	5	27.5
AmpliTaq Gold	ABI	N07900	0.5	5	2.5
POS 9947	BODE	120710ASC			
TE	BODE	N/A			

Pipettes Used:

For all volumes <2 uL	A176
For all volumes between 2 and 10 uL	A-044
For all volumes between 11 and 100 uL	A069
For all volumes between 101 and 1000 uL	N/A
For master mix	A-069
For water	A-044

Document: BT00429 - Identifiler Amp (CCW WS)
Revision: 3
Effective: Friday, March 05, 2010 12:27:07 PM

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AD- 12711

QUANTIFILER DUO QUANT

CCB1035, CCA1080, CCB1030, CCB1032, CCB1033, CCB1036,
Shipment: 2S04-114, MDD1003 **Analyst:** ABG
Tray ID: 120310ABG-QT1 **Date:** 12/03/10

Yellow: Concentration = Zero; Below limit of detection of assay.

IPC is outside of the expected range - Inhibitors may be present OR DNA yield is greater than 50ng/µl OR both. Dilute prior to amplification.

			Human Target		Male Target				
	Sample Name	Sample Type	CT	Quantity (ng/ul)	CT	Quantity (ng/ul)	IPC Ct	Male Quantity/ Human Quantity	Status
	STD 50	Standard	22.09	50	22.51	50.000	29.85	100.00%	
	STD 16.67	Standard	24.3	16.67	24.87	16.670	29.66	100.00%	
	STD 5.56	Standard	26.05	5.56	26.54	5.560	29.48	100.00%	
	STD 1.85	Standard	26.44	1.85	27.04	1.850	29.53	100.00%	
	STD 0.617	Standard	29.35	0.617	30.04	0.617	29.67	100.00%	
	STD 0.206	Standard	31.18	0.206	32.01	0.206	29.44	100.00%	
	STD 0.069	Standard	32.05	0.069	33.55	0.069	29.59	100.00%	
	STD 0.023	Standard	34.29	0.023	35.56	0.023	29.53	100.00%	
	NTC	Unknown	Undetermined	<0.023	Undetermined	<0.023	29.69	--	
						Average IPC Ct	29.57		
A1	CCB1035-0179-E02b1	Unknown	37.65	0.00239	Undetermined	<0.001	29.48	--	NR
B1	CCB1035-RB3	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.47	--	NR
C1	CCA1080-0112-E07b1	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.74	--	NR
D1	CCA1080-RB8	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.66	--	NR
E1	CCB1030-0163-E01b1	Unknown	37.59	0.00248	Undetermined	<0.001	29.92	--	NR
F1	CCB1030-RB3	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.56	--	NR
G1	CCB1032-0176-E01b1	Unknown	Undetermined	<0.001	36.57	0.0117	29.46	--	INC
H1	CCB1032-RB2	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.63	--	NR
A2	CCB1033-0177-E01a1	Unknown	34.59	0.0173	39.56	0.00195	29.52	11.27%	INC
B2	CCB1033-RB1	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.61	--	NR
C2	CCB1036-0180-E01a1	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.6	--	NR
D2	CCB1036-RB1	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.72	--	NR
E2	2S04-114-47a1	Unknown	31.84	0.103	31.88	0.193	29.8	100%	POS
F2	2S04-114-RB32	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.59	--	NR
A3	MDD1003-0225-E06b1-SF	Unknown	34.48	0.0185	36.11	0.0154	29.69	83.24%	INC
F3	MDD1003-RB11-SF	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.65	--	NR
G3	MDD1003-0225-E06b1	Unknown	25.17	7.73	28.12	1.83	29.97	23.67%	POS
H3	MDD1003-RB11-EF	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.63	--	NR

Shipment: CCB1035, CCA1080, CCB1030, CCB1032, CCB1033, CCB1036, 2S04-114, MDD1003
Tray ID: 120310ABG-QT1 Document: BTF00242 - (3) Quantifiler Duo results (WS)
Analyst: ABG Revision: 6
Date: 12/03/10 Effective: Thursday May 27, 2010 11:17:22 AM

POS	Male >0.023 ng/ul
INC	Male 0.001 -> 0.023 ng/ul
NEG	Male <0.001 ng/ul, Human >0.023 ng/ul
NR	Male <0.001 ng/ul, Human <0.023 ng/ul

Note: CT values of 0.00 should be interpreted as "greater than 40 cycles."

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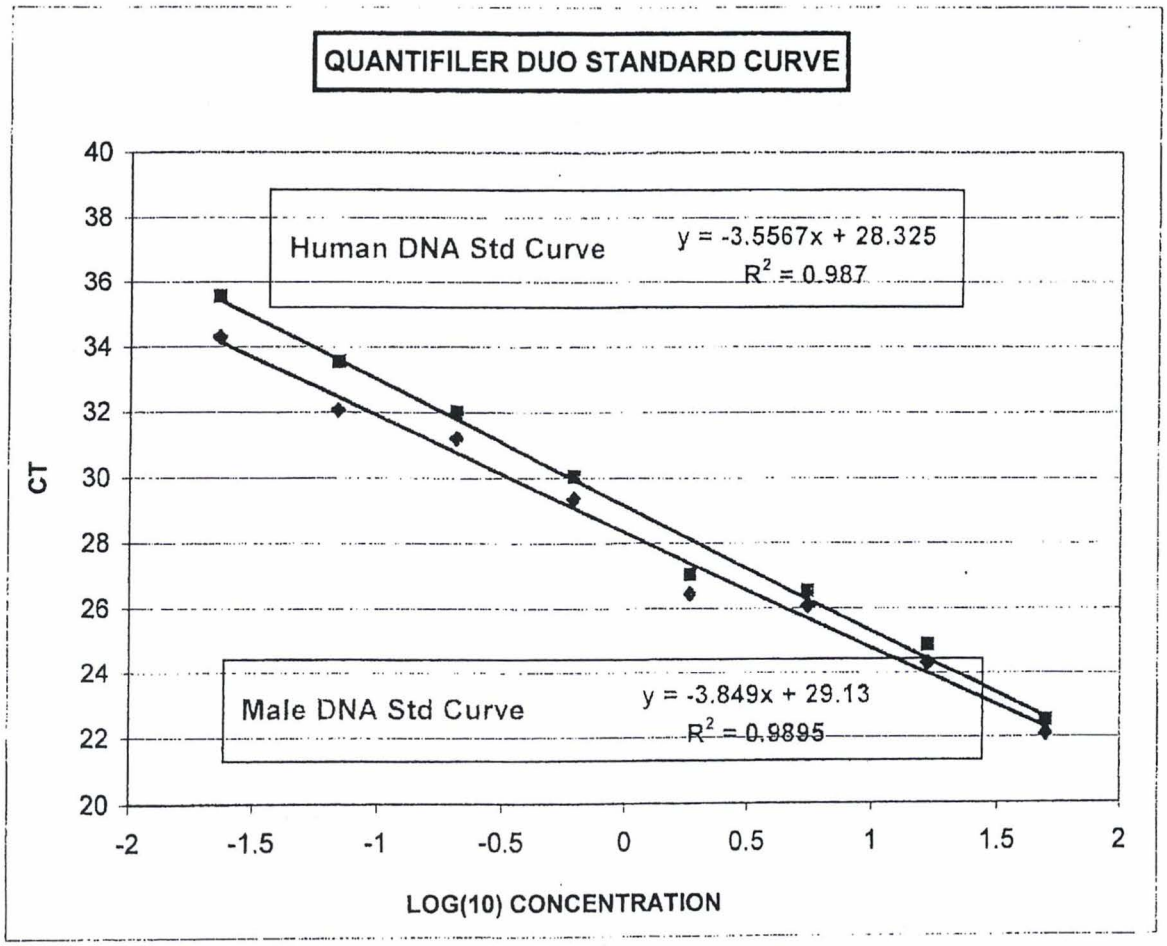
ABG 12-3TD
12/3/2010

QUANTIFILER DUO QUANT

Shipment:	CCB1035, CCA1080, CCB1030, CCB1032, CCB1033, CCB1036, 2S04-114, MDD1003	**Analyst:**	ABG
Tray ID:	120310ABG-QT1	**Date:**	12/03/10



Document: BTF00242 - (3) Quantifiler Duo results (WS)
Revision: 6
Effective: Thursday, May 27, 2010 11:17:22 AM

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12/3/2010
ABG 12-3-10

Quantifiler Duo Sample Sheet & Plate Set-up

Analyst: ABG Date: 12/3/2010

TRAY ID: 120310ABG-QT1

	1	2	3	4	5	6	7	8	9	10	11	12
A	CCB1035-0179-E02b1	CCB1033-0177-E01a1	MDD1003-0225-E06b1-SF	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 50
B	CCB1035-RB3	CCB1033-RB1	MDD1003-RB11-SF	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 16.67
C	CCA1080-0112-E07b1	CCB1036-0180-E01a1	MDD1003-0225-E06b1	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 5.56
D	CCA1080-RB8	CCB1036-RB1	MDD1003-RB11-EF	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 1.85
E	CCB1030-0163-E01b1	2S04-114-47a1	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 0.617
F	CCB1030-RB3	2S04-114-RB32	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 0.206
G	CCB1032-0176-E01b1	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 0.069
H	CCB1032-RB2	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	NTC	STD 0.023

2S04-114 11/2/10 [illegible]

Quantifiler Duo PCR Reaction Mix (ABI): 1008017
Primer Mix - *Duo* (ABI): 1005014
Human DNA Standard (ABI): 1004015
DNA Dilution Buffer Lot # (ABI): 0903006
7500 Machine #: 1

# of Wells + 10% Extra: *31*

	1	31	*Split in 2*
Quantifiler Duo PCR RxN Mix	*6.25*	**193.8**	**96.9**
Primer Mix	*5.25*	**162.8**	**81.4**
Master Mix	***11.5***		
DNA or DNA Dilution Buffer	***2***		
Total Volume	***13.5***		

Pipettes Used:

Volumes <2 uL	N/A
Volumes 2-10 uL	A-067
Volumes 11-100 uL	A-023
Volumes 101-1000 uL	A-121
Master mix	A-023
p10 multichannel	N/A

ABG 12-3-10

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Document: BTF00242 - (1) Quantifiler Duo samplesheet (WS)
Revision: 4
Effective: Thursday, July 30, 2009 3:53:54 PM

QIAGEN EZ1 DNA Investigator (Individual Samples)

Extraction Worksheet

120210ABG-EXT1

ITEM	SOURCE	LOT NUMBER
G2	QIAGEN	136241912
dH_2O	FISHER	103106
Proteinase K (20mg/ml)	BODE	111710JJ
MTL (for 500uL & 1500uL lysis only)	QIAGEN	136247249
Carrier RNA (1.00 ug/uL)	BODE	081910JJ
EZ1 Reagent Cartridge	QIAGEN	136243752

Tube #	Sample	EZ1 Robot #	*Tube Witness/Date
1	CCA1080-0112-E07b1	EZ01	DR 12/3/10
2	CCA1080-RB8	EZ01	DR 12/3/10
3	CCB1030-0163-E01b1	EZ01	DR 12/3/10
4	CCB1030-RB3	EZ01	DR 12/3/10
5	CCB1032-0176-E01b1	EZ01	DR 12/3/10
6	CCB1032-RB2	EZ01	DR 12/3/10
7	CCB1033-0177-E01a1	EZ02	DR 12/3/10
8	CCB1033-RB1	EZ02	DR 12/3/10
9	CCB1036-0180-E01a1	EZ02	DR 12/3/10
10	CCB1036-RB1	EZ02	DR 12/3/10
11	2S04-114-47a1	EZ02	DR 12/3/10
12	2S04-114-RB32	EZ02	DR 12/3/10

*see protocol for witness requirements.

Analyst: ABG
Cryobox Name: LS04114M

EZ1 Protocol: 1.5 mL
Protocol complete verified: ABG

Date: 12/2/10 to 12/3/10
Case Number: CCA1080, CCB1030, CCB1032, CCB1033, CCB1036, 2S04-114
Lysis Volume: 1500 uL
Elution Volume: 50 uL

Notes: Samples stored at 4C overnight according to NOTE following step 4.3.3 in protocol. Extraction resumed on 12/3/10.

Pipettes Used:

Volumes <2 uL	N/A
Volumes 2-10 uL	N/A
Volumes 11-100 uL	A-070
Volumes 101-1000 uL	A-087, A-052
Volumes 1001-2000 uL	A-065

Transfer of Evidence Cuttings

Shipment or Case #: 2S04-114

Tube #	Sample Name	Sample Type
1	2S04-114-47a1	Touch

All evidence cuttings listed above were transferred:

From Analyst: Shannon Weitz
(print)
Shannon Weitz
(sign)

Date: 12/2/2010

Time: 1:25pm

Transfer Method (check one): ____Hand to Hand __X__Temporary Evidence Storage
____Secure Refrigerator/Freezer (add location)

To Analyst: Andrea Borchardt-Gardner
(print)
(sign)

Date: 12-2-10

Time: 442 pm

Document: BT00059 - Transfer of Evidence Cuttings (WS)
Revision: 3
Effective: 10/29/2010 9:03:53 AM

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Inventory Case Notes

Bode Technology, Inc.

Case Number: 2S04-114 Date: 12/2/10 Analyst: SMW

OUTER PACKAGING: Brown paper bag, sealed with tape and Bode evidence tape, labeled "...2S04-114-47...".
CONTAINS:

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	QUANTITY CONSUMED
2S04-114-47	1	• One Ziploc bag labeled "...8-14-03..." containing an apparent denture with 7 teeth and metal parts throughout item. • Wet/dry swabbed using 2 swabs the entire surface area of denture. Consumed swabs for DNA testing. Sample processed as 2S04-114-47a1.	~100% of surface area sampled

NOTES:

Sterile water (103106/Fisher) used for wet swabbing.

See photodocumentation for additional details on description of evidence

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11/12/10 SMW

Document: BTF00245 - Inventory Notes w/out Serology (CCW WS)
Revision: 2
Effective: Wednesday, January 30, 2008 2:06:20 PM

AmpF*l* STR Identifiler

Amplification Worksheet (25µl Volume Reaction)

See amplification notes for reagents, lot numbers, and pipettor numbers

Tray Coordinate (well)	Sample	Dilution	Master Mix (µl)	DNA/dH2O (µl/µl)	Total (µl)
A1.38	2S04-114-48a2.1	---	15	10/0	25
B1.38	2S04-114-48b2.1	---	15	10/0	25
C1.38	2S04-114-RB25.1	---	15	10/0	25
D1.38	2S04-114-48c3.1	---	15	10/0	25
E1.38	2S04-114-48d1.1	---	15	10/0	25
F1.38	2S04-114-RB26.1	---	15	10/0	25
G1.38	2S04-114-48d2.1	---	15	10/0	25
H1.38	2S04-114-48d3.1	---	15	10/0	25
A2.38	2S04-114-48e1.1	---	15	10/0	25
B2.38	2S04-114-48e2.1	---	15	10/0	25
C2.38	2S04-114-49a1.1	---	15	10/0	25
D2.38	2S04-114-RB27.1	---	15	10/0	25
E2.38	2S04-114-49a2.1	---	15	10/0	25
F2.38	2S04-114-49a4.1	---	15	10/0	25
G2.38	2S04-114-RB28.1	---	15	10/0	25
H2.38	2S04-114-50b2.1	---	15	10/0	25
A3.38	2S04-114-50b3.1	---	15	10/0	25
B3.38	2S04-114-51a1.1	---	15	10/0	25
C3.38	2S04-114-RB29.1	---	15	10/0	25
D3.38	2S04-114-51a2.1	---	15	10/0	25
E3.38	2S04-114-51a4.1	---	15	10/0	25
F3.38	2S04-114-51b1.1	---	15	10/0	25
G3.38	2S04-114-RB30.1	---	15	10/0	25
H3.38	2S04-114-51b3.1	---	15	10/0	25
A4.38	2S04-114-51c1.1	---	15	10/0	25
B4.38	2S04-114-RB31.1	---	15	10/0	25
C4.38	2S04-114-POS38	---	15	1.5/8.5	25
D4.38	2S04-114-NEG38	---	15	0/10	25

TC#: 28 **Program#:** ID_28CYCL **2S04-114-AMP38**
Analyst: ABG **Date:** 12/1/10
Tube Witness: WK **Date:** 12/01/10

Document: BT00429 - Identifiler Amp (CCW WS)
Revision: 3
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AmpF*l* STR Identifiler

Amplification Worksheet (25µl Volume Reaction)

AMPLIFICATION NOTES:
2S04-114-AMP38

Reagent	Source	Lot #	Sample Volume (µl)	Number of Reactions	Final Volume (µl)
Water	Fisher	097050			
PCR Reaction Mix	ABI	1005165	10.5	29	304.5
Identifiler Primer Set	ABI	09120772	5.5	29	159.5
AmpliTaq Gold	ABI	N07900	0.5	29	14.5
POS 9947	BODE	120110ABG			
TE	BODE	N/A			

Analyst: ABG
Date: 12/1/10

Pipettes Used:

For all volumes <2 uL	A-176
For all volumes between 2 and 10 uL	A-154
For all volumes between 11 and 100 uL	A-069
For all volumes between 101 and 1000 uL	A-118
For master mix	A-069
For water	A-154

Document: BT00429 - Identifiler Amp (CCW WS)
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Vivacon Purification/Concentration of DNA Extracts

120110ABG-MC1

Item	Source	Lot #
Vivacon 500-30K	Sartorius	10VN50003
cRNA	BODE	081910JJ
dH_2O	Fisher	N/A
TE-4 Buffer	BODE	010610AB

Tube #	Sample	Approximate Volume Recovered (ul)	Approximate Final Volume (ul)	Comments
2 1	2S04-114-48a2	8	22	
5 2	2S04-114-48b2	9		
6 3	2S04-114-RB25	9		
9 4	2S04-114-48c3	10.5		
11 5	2S04-114-48d1	9		
12 6	2S04-114-RB26	9		
13 7	2S04-114-48d2	9.5		
15 8	2S04-114-48e1	8.5		
16 9	2S04-114-48e2	9		
17 10	2S04-114-49a1	9		
18 11	2S04-114-RB27	9.5		
19 12	2S04-114-49a2	9		
21 13	2S04-114-49a4	9.5		
24 14	2S04-114-RB28	9.5		
26 15	2S04-114-50b2	9.5		
27 16	2S04-114-50b3	9.5		
29 17	2S04-114-51a1	9.5		
30 18	2S04-114-RB29	9.5		
31 19	2S04-114-51a2	9.5		
33 20	2S04-114-51a4	9.5		
34 21	2S04-114-51b1	9.5		
36 22	2S04-114-RB30	9.5		
37 23	2S04-114-51b3	9.5		
39 24	2S04-114-51c1	6.5		
41 25	2S04-114-RB31	9		

Analyst: ABG

Date: 12/1/10

Case Number: 2S04-114

Pipettes Used:

Volumes <2 uL	N/A
Volumes 2-10 uL	A-039
Volumes 11-100 uL	A-117
Volumes 101-1000 uL	A-009

BODEQUANT LCN QUANT

Tray ID: 121009LNM_LCN1
Analyst: LNM
Date: 12.11.09

CASE NO: CCA0906; 2S04-114

Yellow: Concentration = Zero; Below limit of detection of assay.

Blue: IPC is outside of the expected range - Inhibitors may be present OR DNA yield is greater than 5ng/µl OR both. Dilute prior to amplification.

	Sample Name	Sample Type	CT	Quantity (ng/ul)	Quantity (pg/ul)	IPC Ct
	STD 50	Standard	12.73	50	50000	21.81
	STD 5	Standard	16.20	5	5000	19.64
	STD 0.5	Standard	20.38	0.5	500	20.15
	STD 0.05	Standard	23.89	0.05	50	20.48
	STD 0.005	Standard	27.67	0.005	5	20.59
	STD 0.0005	Standard	31.40	0.0005	0.5	20.72
	NTC	NTC	35.85	*<0.005*	*<5*	20.71
					Avg IPC Ct for Stds:	**20.38**
A1	2S04-114-48a1	Unknown	31.62	<0.005	<5	20.45
B1	2S04-114-48a2	Unknown	25.95	0.0144	14.4	20.67
C1	2S04-114-48a3	Unknown	31.57	<0.005	<5	20.63
D1	2S04-114-48b1	Unknown	28.85	<0.005	<5	20.91
E1	2S04-114-48b2	Unknown	25.54	0.0185	18.5	20.84
F1	2S04-114-RB25	Unknown	33.97	<0.005	<5	20.85
G1	2S04-114-48c1	Unknown	34.27	<0.005	<5	20.89
H1	2S04-114-48c2	Unknown	29.70	<0.005	<5	20.87
A2	2S04-114-48c3	Unknown	27.05	0.00732	7.32	20.60
B2	2S04-114-48c4	Unknown	28.60	<0.005	<5	20.74
C2	2S04-114-48d1	Unknown	25.52	0.0187	18.7	20.75
D2	2S04-114-RB26	Unknown	28.32	<0.005	<5	20.70
E2	2S04-114-48d2	Unknown	24.98	0.0261	26.1	20.68
F2	2S04-114-48d3	Unknown	22.01	0.162	162	20.63
G2	2S04-114-48e1	Unknown	30.29	<0.005	<5	20.78
H2	2S04-114-48e2	Unknown	29.99	<0.005	<5	20.79
A3	2S04-114-49a1	Unknown	23.84	0.0523	52.3	20.57
B3	2S04-114-RB27	Unknown	35.25	<0.005	<5	20.79
C3	2S04-114-49a2	Unknown	27.58	0.00528	5.28	20.72
D3	2S04-114-49a3	Unknown	29.92	<0.005	<5	20.76
E3	2S04-114-49a4	Unknown	26.46	0.0105	10.5	20.78
F3	2S04-114-50a1	Unknown	29.15	<0.005	<5	20.73
G3	2S04-114-50a2	Unknown	32.28	<0.005	<5	20.82
H3	2S04-114-RB28	Unknown	34.74	<0.005	<5	20.87
A4	2S04-114-50b1	Unknown	27.78	<0.005	<5	20.66
B4	2S04-114-50b2	Unknown	27.61	0.00517	5.17	20.64
C4	2S04-114-50b3	Unknown	25.08	0.0245	24.5	20.66
D4	2S04-114-50b4	Unknown	34.41	<0.005	<5	20.66
E4	2S04-114-51a1	Unknown	25.11	0.0241	24.1	20.61
F4	2S04-114-RB29	Unknown	34.42	<0.005	<5	20.69
G4	2S04-114-51a2	Unknown	27.65	0.00506	5.06	20.75
H4	2S04-114-51a3	Unknown	29.60	<0.005	<5	20.83
A5	2S04-114-51a4	Unknown	24.94	0.0266	26.6	20.51
B5	2S04-114-51b1	Unknown	24.65	0.032	32	20.66
C5	2S04-114-51b2	Unknown	28.97	<0.005	<5	20.65
D5	2S04-114-RB30	Unknown	34.24	<0.005	<5	20.67
E5	2S04-114-51b3	Unknown	24.97	0.0262	26.2	20.61
F5	2S04-114-51b4	Unknown	29.28	<0.005	<5	20.69
G5	2S04-114-51c1	Unknown	25.95	0.0143	14.3	21.00
H5	2S04-114-51c2	Unknown	29.84	<0.005	<5	20.97
A6	2S04-114-RB31	Unknown	33.69	<0.005	<5	20.58

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12/1/2010

Note: CT values of 0.00 should be interpreted as "greater than 40 cycles."

Jmo12611

BODEQUANT LCN QUANT

	Sample Name	Sample Type	CT	Quantity (ng/ul)	Quantity (pg/ul)	IPC Ct
A7	CCA0906-0068-E12a1	UnknownUndetermined	0.00	<0.005	<5	21.15
B7	CCA0906-0068-E13a1	UnknownUndetermined	0.00	<0.005	<5	0.00
C7	CCA0906-0068-E13b1	UnknownUndetermined	0.00	<0.005	<5	0.00
D7	CCA0906-0068-E14a1	UnknownUndetermined	0.00	<0.005	<5	0.00
E7	CCA0906-0068-E15a1	UnknownUndetermined	0.00	<0.005	<5	0.00
F7	CCA0906-RB9	Unknown	34.01	<0.005	<5	20.67
G7	CCA0906-0068-E15b1	UnknownUndetermined	0.00	<0.005	<5	0.00
H7	CCA0906-0068-E15c1	Unknown	38.22	<0.005	<5	20.73
A8	CCA0906-0068-E15d1	Unknown	34.04	<0.005	<5	20.35
B8	CCA0906-0068-E16a1	UnknownUndetermined	0.00	<0.005	<5	0.00
C8	CCA0906-0068-E17a1	UnknownUndetermined	0.00	<0.005	<5	0.00
D8	CCA0906-RB10	Unknown	33.95	<0.005	<5	20.63

Document: BTF00241 - (3) BodeQuant LCN RESULTS Analysis (WS)
Revision: 3
Effective: Wednesday, March 05, 2008 2:08:23 PM

2504-114 01/27/11

Note: CT values of 0.00 should be interpreted as "greater than 40 cycles."

01/26/11 01/27/11 01/28/11 12/1/2010

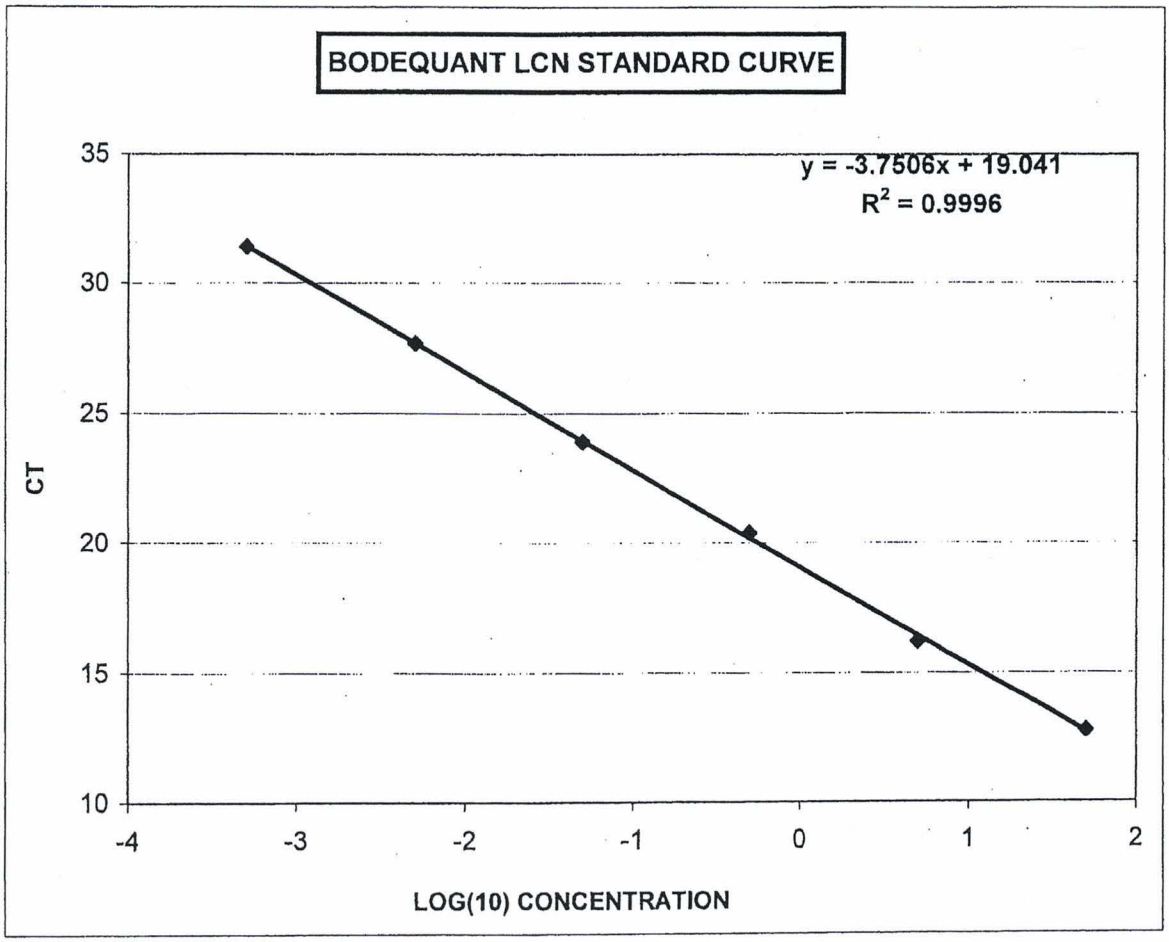
BODEQUANT LCN QUANT

TRAY ID: 121009LNM_LCN1

Analyst: LNM

Date: 12.11.09

CASE NO: CCA0906; 2S04-114



Document: BTF00241 - (3) BodeQuant LCN RESULTS Analysis (WS)
Revision: 3
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12/11/2009

BodeQuant LCN Sample Sheet & Plate Set-up

Analyst: LNM Date: 12.10.09

CASE #: CCA0906; 2S04-114
TRAY ID: 121009LNM_LCN

	1	2	3	4	5	6	7	8	9	10	11	12
A	2S04-114-48a1	2S04-114-48c3	2S04-114-49a1	2S04-114-50b1	2S04-114-51a4	2S04-114-RB31	CCA0906-0068-E12a1	CCA0906-0068-E15d1	BLANK	BLANK	BLANK	STD 50
B	2S04-114-48a2	2S04-114-48c4	2S04-114-RB27	2S04-114-50b2	2S04-114-51b1	BLANK	CCA0906-0068-E13a1	CCA0906-0068-E16a1	BLANK	BLANK	BLANK	STD 5
C	2S04-114-48a3	2S04-114-48d1	2S04-114-49a2	2S04-114-50b3	2S04-114-51b2	BLANK	CCA0906-0068-E13b1	CCA0906-0068-E17a1	BLANK	BLANK	BLANK	STD 0.5
D	2S04-114-48b1	2S04-114-RB26	2S04-114-49a3	2S04-114-50b4	2S04-114-RB30	BLANK	CCA0906-0068-E14a1	CCA0906-RB10	BLANK	BLANK	BLANK	STD 0.05
E	2S04-114-48b2	2S04-114-48d2	2S04-114-49a4	2S04-114-51a1	2S04-114-51b3	BLANK	CCA0906-0068-E15a1	BLANK	BLANK	BLANK	BLANK	STD 0.005
F	2S04-114-RB25	2S04-114-48d3	2S04-114-50a1	2S04-114-RB29	2S04-114-51b4	BLANK	CCA0906-RB9	BLANK	BLANK	BLANK	BLANK	STD 0.0005
G	2S04-114-48c1	2S04-114-48e1	2S04-114-50a2	2S04-114-51a2	2S04-114-51c1	BLANK	CCA0906-0068-E15b1	BLANK	BLANK	BLANK	BLANK	NTC
H	2S04-114-48c2	2S04-114-48e2	2S04-114-RB28	2S04-114-51a3	2S04-114-51c2	BLANK	CCA0906-0068-E15c1	BLANK	BLANK	BLANK	BLANK	BLANK

# of Wells + 10% Extra: *67*

	1	67	*Split in 2*
2X QPCR mix	*10*	670.0	335.0
Primer/Probe Blend	*0.87*	58.3	29.1
IPC Template (10^{-5})	*2*	134.0	67.0
Water	*5.13*	343.7	171.9
DNA or TE	***2***		
Total Volume	***20***		

QPCR Mix Lot # (AB Gene):	1712/15
Primer/Probe Blend Lot # (BODE):	092509AB1
IPC Template Lot # (BODE):	081809AB
dH2O Lot # (Fisher):	090968
9947 Standards Lot # (Coriell):	C3-102506-1
TE^{-4} Lot # (BODE):	060309AB
7000 Machine #:	7003

Pipettes Used:

For all volumes <2 uL	A-066
For all volumes between 2 and 10 uL	A-107, A-091
For all volumes between 11 and 100 uL	A-109
For all volumes between 101 and 1000 uL	A-121
For master mix	A-084

Document: BTF00241 (1) BQLCN Samplesheet (WS)
Revision: 2
Effective: Tuesday, March 04, 2008 8:36:46 AM

Apr 2011

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QIAGEN EZ1 DNA Investigator (Individual Samples)

Extraction Worksheet

ITEM	SOURCE	LOT NUMBER
G2	QIAGEN	133208555
dH_2O	FISHER	090968
Proteinase K (20mg/ml)	QIAGEN	133209374
MTL (for 500uL & 1500uL lysis only)	QIAGEN	133216824
Carrier RNA (1.00 ug/uL)	BODE	081209AB
EZ1 Reagent Cartridge	QIAGEN	133217429

Tube #	Sample	EZ1 Robot #	*Tube Witness/Date
1	2S04-114-48a1	EZ01	ml 12/9/09
2	2S04-114-48a2		
3	2S04-114-48a3		
4	2S04-114-48b1		
5	2S04-114-48b2		
6	2S04-114-RB25		
7	2S04-114-48c1	EZ02	
8	2S04-114-48c2		
9	2S04-114-48c3		
10	2S04-114-48c4		
11	2S04-114-48d1	EZ02	
12	2S04-114-RB26	EZ02	
13	2S04-114-48d2	EZ03	JLS 12/9/09
14	2S04-114-48d3		
15	2S04-114-48e1		
16	2S04-114-48e2		
17	2S04-114-49a1		
18	2S04-114-RB27		
19	2S04-114-49a2	EZ04	
20	2S04-114-49a3		
21	2S04-114-49a4		
22	2S04-114-50a1		
23	2S04-114-50a2		
24	2S04-114-RB28		

*Witness verifies correct labeling and placement of tubes prior to robotic processing.

Analyst: LNM
Cryobox Name: 2S04-114

Date: 12.09.09
Case Number: 2S04-114

EZ1 Protocol: Lg. Vol.

Lysis Volume: 500uL
Elution Volume: 50uL

Notes:

Pipettes Used:

Volumes <2 uL	NA
Volumes 2-10 uL	NA
Volumes 11-100 uL	A-069
Volumes 101-1000 uL	A-069, A-035
Volumes 1001-2000 uL	NA

ym120909

QIAGEN EZ1 DNA Investigator (Individual Samples)

Extraction Worksheet

Tube #	Sample	EZ1 Robot #	*Tube Witness/Date
25	2S04-114-50b1	EZ01	JLS 12/2/09
26	2S04-114-50b2		
27	2S04-114-50b3		
28	2S04-114-50b4		
29	2S04-114-51a1		
30	2S04-114-RB29		
31	2S04-114-51a2	EZ02	
32	2S04-114-51a3		
33	2S04-114-51a4		
34	2S04-114-51b1		
35	2S04-114-51b2		
36	2S04-114-RB30		
37	2S04-114-51b3	EZ03	
38	2S04-114-51b4		
39	2S04-114-51c1		
40	2S04-114-51c2		
41	2S04-114-RB31		

Analyst: LNM
Samples in Cryobox: 2S04-114

Date: 12.09.09
Case Number: 2S04-114

Document: BTF00253 - EZ1 Individual Samples (CW WS)
Revision: 3
Effective: Wednesday, April 29, 2009 8:18:43 AM

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TM120909

Inventory Case Notes
Bode Technology, Inc.

Case Number: 2S04-114; items 48-51 Date: 12.07.09/12.08.09 Analyst: LNM
Evidence helper: ABG/ALW

OUTER PACKAGING: 1x white box sealed with evidence tape
REMOVED: 2S04-114-48: 1x brown paper bag
CONTAINS: 1x rolled up paper towel
CONTAINS: 5x knives with blade end covered – see photodocumentation
Each knife rewrapped in a kimwipe before repackaged

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	QUANTITY CONSUMED
2S04-114-48a	1	• Plastic bag labeled in part '...Bag #2 Item-48A...'. Contains two bags. • One bag labeled 'Bag #2 Item-48A...'. Contains one gold plated knife with gold plated sheath. Wet/dry swabbed handle of knife, consumed swabs and processed as 2S04-114-48a1; Wet/dry swabbed blade of knife, consumed swabs, and processed as 2S04-114-48a2. Wet/dry swabbed inside sheath, consumed swabs and processed as 2S04-114-48a3. • Other bag labeled 'Bag #2 Item-48A...' contains apparent kimwipe. Not processed at this time. • Two slide boxes labeled in part '...48A...'. Not examined at this time.	100% of swabs.
2S04-114-48b	1	• Plastic bag labeled in part '...Bag #2 Item-48B...'. Contains two bags. • One bag labeled 'Wrapping from Bag #2 Item-48B' Containing apparent kimwipe. Not processed at this time. • Other bag labeled 'Bag #2 Item-48B'. Containing one folding knife with silver colored handle with floral design. Center part of handle is cream colored. Wet/dry swabbed entire handle of knife, consumed swabs and processed as 2S04-114-48b1; Wet/dry swabbed blade of knife, consumed swabs, and processed as 2S04-114-48b2. • Two slide boxes labeled in part '...48B...'. Not examined at this time.	100% of swabs

Document: BTF00245 - Inventory Notes w/out Serology (CCW WS)
Revision: 2
Effective: Wednesday, January 30, 2008 2:06:20 PM

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1/12/11

Inventory Case Notes
Bode Technology, Inc.
(continued)

Case Number: 2S04-114; items 48-51 Date: 12.07.09/12.08.09 Analyst: LNM
Evidence helper: ABG/ALW

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	QUANTITY CONSUMED
2S04-114-48c	1	• Plastic bag labeled in part 'Bag #2 Item-48C...'. Contains two bags and one envelope. • One bag labeled 'Wrapping from Bag #2 Item-48C' Containing apparent kimwipe. Not processed at this time. • Envelope labeled in part '...Bag #2 Item-48C...Debris...' Not processed at this time. • Other bag labeled 'Bag #2 Item-48C' Containing one folding knife with handle beige-brown in color on one side, other side of handle silver in color. Silver side of handle appears to have a piece missing. Wet/dry swabbed entire handle of knife, consumed swabs and processed as 2S04-114-48c1. • Knife contains three folded ~~knives~~ blades JM 01-26-11. Left side with two folded knives. Smaller knife processed with wet/dry swab from same swab. Swab consumed and processed as 2S04-114-48c2. • Larger knife processed with wet/dry swab from same swab. Swab consumed and processed as 2S04-114-48c3. • Right side of knife blade with one folded knife. Processed with wet/dry swab from same swab. Swab consumed and processed as 2S04-114-48c4. • Three slide boxes labeled in part '...48C...'. Not examined at this time.	100%of swabs
2S04-114-48d	1	• Plastic bag labeled in part '...Bag #2 Item-48D...'. Containing two bags and one envelope. • One bag labeled 'Wrapping from Bag #2 Item-48D...' Containing apparent kimwipe. Not processed at this time. • Envelope labeled in part 'Debris from Bag #2 Item - 48D'. Not processed at this time. • Other bag labeled 'Bag 2 Item-48D'. Containing one folding knife with apparent wooden handle. Apparent red color in center of handle. Grooves along handle. Wet/dry swabbed entire handle of knife, consumed swabs and processed as 2S04-114-48d1. • Knife handle contains two folded knives. Knife one labeled in part '...Eagle brand cutlery...' processed with wet/dry swab from same swab. Swab consumed and processed as 2S04-114-48d2. Knife two processed with wet/dry swab from same swab. Swab consumed and processed as 2S04-114-48d3. • Four slide boxes labeled in part '...48D...'. Not examined at this time.	100%of swabs

Document: BTF00245 - Inventory Notes w/out Serology (CCW WS)
Revision: 2
Effective: Wednesday, January 30, 2008 2:06:20 PM

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JM 012611

Case Number: 2S04-114; items 48-51 Date: 12.07.09/12.08.09 Analyst: LNM
Evidence helper: ABG/ALW

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	QUANTITY CONSUMED
2S04-114-48e	1	• Plastic bag labeled 'Bag #2 item-48E'. Containing two bags and one envelope. • One bag labeled '...Bag #2 Item-48'. Containing apparent kimwipe. Not processed at this time. • Envelope labeled 'Debris from Bag #2 Item 48E'. Not processed at this time. • Other bag labeled 'Bag #2 Item-48E'. Containing one folding knife with apparent wooden handle with brass colored ends. Handle also red-brown in color, possible rust staining. Wet/dry swabbed entire handle of knife consumed swabs and processed as 2S04-114-48e1. Portion of swabs saved and repackaged with evidence. • Blade of knife red-brown in color, (possible rust staining). Wet/dry swabbed blade of knife, consumed swabs, and processed as 2S04-114-48e2. • Five slide boxes labeled in part '...48E...'. Not examined at this time.	100%of swabs

2S04-114-49: 1x brown paper bag
CONTAINS: Plastic bag (not labeled) containing one piece of folded paper labeled in part "Bag #3...Debris". Not processed.
CONTAINS:

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	QUANTITY CONSUMED
2S04-114-49	1	• 1x knife with blade end in leather sheath and wrapped in a paper towel. Knife has wooden handle with brass on the end and a brass hilt. • Wet/dry swabbed entire handle of knife consumed swabs and processed as 2S04-114-49a1. • Blade of knife containing possible rust staining. Wet/dry swabbed blade of knife, consumed swabs, and processed as 2S04-114-49a2. • Wet/dry swabbed hilt of knife with one swab, consumed swab and processed as 2S04-114-49a3. • Wet/dry swabbed inside of leather sheath, consumed swabs and processed as 2S04-114-49a4. • Three slide boxes labeled in part '...49...'. Not examined at this time.	100%of swabs

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Revision: 2
Effective: Wednesday, January 30, 2008 2:06:20 PM

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Inventory Case Notes
Bode Technology, Inc.
(continued)

Case Number: 2S04-114; items 48-51 Date: 12.07.09/12.08.09 Analyst: LNM
Evidence helper: ABG/ALW

2S04-114-50: 1 Plastic bag (sealed with evidence tape)
CONTAINS:
1x brown paper bag, 1x rolled up paper towel in plastic bag labeled in part "Extra piece of paper towel". Not processed. Apparent original bag used for packaging labeled in part "#4"

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	QUANTITY CONSUMED
2S04-114-50a	1	• 1 plastic bag labeled in part "Bag #4 Item 50A...". Contains one piece of folded paper labeled in part "Debris from Bag #4...". Not processed. • Contains one plastic bag labeled "Wrapping from Bag 4 Item 50A". Contains one kimwipe. Not processed. • Contains plastic bag labeled in part "Bag 4 Item 50A" containing 1x knife sealed in leather pouch • Fold up knife with wooden like material. Wet/dry swabbed handle, consumed swabs, and processed as 2S04-114-50a1. • Wet/dry swabbed blade, consumed swabs and processed as 2S04-114-50a2. • Two slide boxes labeled in part '...50A...'. Not examined at this time.	100% of swabs.
2S04-114-50b	1	• 1 plastic bag labeled in part "BAG #4 ITEM 50B...". Contains one piece of folded paper labeled in part "Debris from Bag #4 Item 50B". Not processed. • Contains one plastic bag labeled in part "Wrapping from Bag 4 Item 50B". Contains one kimwipe. Not processed. • Contains plastic bag labeled in part "Bag 4 Item 50B". Contains 1x knife with wooden handle and brass end. Blade covered with leather sheath. • Wet/dry swabbed handle, consumed swabs, and processed as 2S04-114-50b1. • Wet/dry swabbed blade, consumed swabs and processed as 2S04-114-50b2. • Wet/dry swabbed with one swab brass hilt, consumed swab, and processed as 2S04-114-50b3. • Wet/dry swabbed inside of leather sheath, consumed swabs and processed as 2S04-114-50b4. • One slide box labeled in part '...50B...'. Not examined at this time.	100% of swabs

Document: BTF00245 - Inventory Notes w/out Serology (CCW WS)
Revision: 2
Effective: Wednesday, January 30, 2008 2:06:20 PM

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Jm 012611

Inventory Case Notes
Bode Technology, Inc.
(continued)

Case Number: 2S04-114; items 48-51 Date: 12.07.09/12.08.09 Analyst: LNM
Evidence helper: ABG/ALW

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	QUANTITY CONSUMED
2S04-114-50c	1	• 1 plastic bag labeled in part "Bag #4 Item 50C...". . Not processed. • Contains one plastic bag labeled in part "Wrapping from Bag 4 Item 50C" containing one kimwipe. Not processed. • Contains 1 apparent file in plastic bag labeled in part "Bag #4 Item 50C". Not processed. • Four slide boxes labeled in part '...50C...'. Not examined at this time.	100% of swabs.

2S04-114-51: 1 Plastic bag (sealed with evidence tape)
CONTAINS: 1x Apparent original bag used for packaging labeled in part "#5"

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	QUANTITY CONSUMED
2S04-114-51a	1	• 1 plastic bag rolled up and sealed with evidence tape labeled in part "Item A-51A...". • Contains 1x knife with wooden handle inside leather sheath • Wet/dry swabbed handle, consumed swabs, and processed as 2S04-114-51a1. • Wet/dry swabbed blade, consumed swabs and processed as 2S04-114-51a2. • Wet/dry swabbed with one swab hilt, consumed swab, and processed as 2S04-114-51a3. • Wet/dry swabbed inside of leather sheath, consumed swabs and processed as 2S04-114-51a4 • One slide box labeled in part '...Item A...'. Not examined at this time.	100% of swabs.

Document: BTF00245 - Inventory Notes w/out Serology (CCW WS)
Revision: 2
Effective: Wednesday, January 30, 2008 2:06:20 PM

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Inventory Case Notes
Bode Technology, Inc.
(continued)

Case Number: 2S04-114; items 48-51 Date: 12.07.09/12.08.09 Analyst: LNM
Evidence helper: ABG/ALW

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	QUANTITY CONSUMED
2S04-114-51b	1	• 1 plastic bag rolled up and sealed with evidence tape labeled in part "Item B-51B...". • Contains 1x orange box with picture of a knife on outside. Inside contains a decorative knife made of metal/brass with tassles. • Wet/dry swabbed handle, consumed swabs, and processed as 2S04-114-51b1. • Wet/dry swabbed blade, consumed swabs and processed as 2S04-114-51b2. • Wet/dry swabbed with one swab hilt, consumed swab, and processed as 2S04-114-51b3. • Wet/dry swabbed inside of metal/brass sheath, consumed swabs and processed as 2S04-114-51b4. • Two slide boxes labeled in part '...51B...' and "...Item B"... Not examined at this time.	100% of swabs
2S04-114-51c	1	• 1 plastic bag (sealed with evidence tape) labeled in part "Item C-51C...". • Contains one piece of folded paper labeled in part "Debris from Item C". Not processed. • Contains one knife with black handle wrapped inside plastic baggie and paper towel (not sealed). Knife contains light brown staining. • Wet/dry swabbed handle, consumed swabs, and processed as 2S04-114-51c1. • Wet/dry swabbed blade, consumed swabs and processed as 2S04-114-51c2. • Two slide boxes labeled in part '...51C...' and "...Item C"... Not examined at this time..	100% of swabs.

NOTES:

Water lot #090968 for wet/dry swabbing on 12/7/09 and 12/8/09

See photodocumentation for additional details on description of evidence

Document: BTF00245 - Inventory Notes w/out Serology (CCW WS)
Revision: 2
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Am 01-26-11

Bode Technology

10430 Furnace Road, Suite 107
Lorton, VA 22079
Phone: 703-646-9740

Forensic Case Report
March 25, 2011

To:
Stephen L. Braga
Ropes & Gray LLP
700 12th Street, NW Suite 900
Washington, DC 20005

Bode Case #: 2S04-114
Agency Case #: Ropes & Gray LLP

List of evidence received on March 15, 2011 for possible DNA analysis:

Bode Sample Name	Agency Sample ID	Agency Description
2S04-114-52	Not Listed	Labeled as "Biological material in vacuum cleaner bag"

Forensic Biology Results:

1. No blood was detected in the following sample:

   2S04-114-52

Notes:

1. Any reference to body fluids in evidence descriptions are based on the written descriptions of the samples by the submitting agency.
2. The submitted evidence will be retained temporarily by Bode until review of the data is completed by Ropes & Gray LLP, at which time the evidence will be returned to Ropes & Gray LLP.

Report submitted by,

Emily Herren

Emily Herren, MFS
Forensic Biology Analyst/DNA Analyst I

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Bode Technology

Review Form: Case File

Shipment or Case #: 2S04-114

Case File Documentation	Data and Report
Technical Review	
- Case submission form or submitted manifest complete - Client paperwork complete - Client communication documented* - Chain of custody (COC) completed and correct - Project guidelines followed* - Inventory sheet accurate and consistent with COC - Photodocumentation of all evidence complete* - Permission to consume documented* - Case notes complete and accurate - All pages have case or shipment #, date, initials	- Electropherograms documented properly - Internal lane standard verified - Two independent analyses performed and edits consistent - Index accurate* - Allele table included and accurate* - Results accurate - Conclusions accurate* - Statistics provided* - Statistic calculations correct*
Administrative Review	
- COC accurate - Case notes accurate*	- Report editorially accurate and includes: case identifier, evidence examined, methodology, loci or kit, results and/or conclusions, interpretative statement, date issued, disposition of evidence, signature of person accepting responsibility

**if applicable*

Frank D. Basile Forensic Biology/DNA Analyst III — Serology/Admin. 3/28/11
Name and Title ☒ Date –Type of review

Name and Title ☐ Date –Type of review

Name and Title ☐ Date –Type of review

Name and Title ☐ Date- Bode Search including Staff DNA Search*

Self Review: CBN 3/25/11

Emily Herren

From: TrackingUpdates@fedex.com
Sent: Thursday, March 31, 2011 9:15 AM
To: Emily Herren
Subject: FedEx Shipment 794587502542 Delivered

This tracking update has been requested by:

Company Name:	Bode Technology
Name:	Bode Technology
E-mail:	angela.williamson@bodetech.com

Our records indicate that the following shipment has been delivered:

Reference:	2S04-114
Ship (P/U) date:	Mar 30, 2011
Delivery date:	Mar 31, 2011 9:11 AM
Sign for by:	C.HICKS
Delivery location:	WASHINGTON, DC
Delivered to:	Mailroom
Service type:	FedEx Standard Overnight
Packaging type:	FedEx Envelope
Number of pieces:	1
Weight:	0.50 lb.
Special handling/Services:	Deliver Weekday
Tracking number:	794587502542

Shipper Information	Recipient Information
Bode Technology	Stephen L. Braga
Bode Technology	Ropes & Gray LLP
10430 Furnace Road	700 12TH ST NW STE 900
Suite 107	ONE METRO CENTER
Lorton	WASHINGTON
VA	DC
US	US
22079	20005

Please do not respond to this message. This email was sent from an unattended mailbox. This report was generated at approximately 8:15 AM CDT on 03/31/2011.

To learn more about FedEx Express, please visit our website at fedex.com.

All weights are estimated.

To track the latest status of your shipment, click on the tracking number above, or visit us at fedex.com.

This tracking update has been sent to you by FedEx on the behalf of the Requestor noted above. FedEx does not validate the authenticity of the requestor and does not validate, guarantee or warrant the authenticity of the request, the requestor's message, or the accuracy of this tracking update. For tracking results and fedex.com's terms of use, go to fedex.com.

Thank you for your business.

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3/31/2011

3/31/11

Bode Technology™
Part of GlobalOptions Group

INVOICE

Client:
Ropes and Gray LLP
Attn: Stephen L.Braga
One Metro Center, 700 12th St.
NW Suite 900
Washington, DC 20005

Invoice Date: **3/29/2011**

Invoice #: **Sales857**
Net Terms: **30 Days**

PO Number:

Invoice Grand Total: **$ 400.00**

Requester: Stephen Braga
Phone: 202-508-4655
Fax:
email:

Bode Project #.: **2S04-114**

Agency Case No.:

Line Item Number	Quantity	Item / Part Number	Description	Unit Price	Sales Amount
0001	1	Pre	Pre Screening: Specialized or Large item	$ 400.00	$ 400.00

TOTAL AMOUNT DUE **$ 400.00**

Remit To:

The Bode Technology Group, Inc.
c/o GlobalOptions, Inc
Dept. AT 952056
Atlanta, GA 31192

Bode TIN: 54-1750293

Bank Information:

Silicon Valley Bank
Santa Clara, CA 95054
ABA# 121140399
Credit to: GlobalOptions, Inc.
Account # 3300418500

Emily Herren

From: Braga, Stephen [Stephen.Braga@ropesgray.com]
Sent: Friday, March 25, 2011 10:15 AM
To: Emily Herren
Subject: RE: Bode case 2S04-114

You can report. Nothing additional on this assignment. Thanks

Stephen L. Braga
ROPES & GRAY LLP
T +1 202 508 4655 | F +1 202 383 9821
One Metro Center, 700 12th Street, NW, Suite 900
Washington, DC 20005-3948
Stephen.Braga@ropesgray.com
www.ropesgray.com

From: Emily Herren [mailto:Emily.Herren@bodetech.com]
Sent: Friday, March 25, 2011 10:14 AM
To: Braga, Stephen
Cc: Angela Williamson
Subject: RE: Bode case 2S04-114

Would you like for us to report out the screening results for the vacuum and items that we tested or are we waiting for additional evidence?

From: Braga, Stephen [mailto:Stephen.Braga@ropesgray.com]
Sent: Friday, March 25, 2011 8:41 AM
To: Emily Herren
Cc: Angela Williamson
Subject: Re: Bode case 2S04-114

Thanks for the quick report Emily. I will get back to you if I have any questions.

Stephen L. Braga
ROPES & GRAY LLP
T +1 202 508 4655 | F +1 202 383 9821
One Metro Center, 700 12th Street, NW, Suite 900
Washington, DC 20005-3948
Stephen.Braga@ropesgray.com
www.ropesgray.com

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This message (including attachments) is privileged and confidential. If you are not the intended recipient, please delete it without further distribution and reply to the sender that you have received the message in error.

From: Emily Herren <Emily.Herren@bodetech.com>
To: Braga, Stephen

2S04-114 EBH 3/25/11

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Cc: Angela Williamson <Angela.Williamson@bodetech.com>
Sent: Fri Mar 25 07:32:41 2011
Subject: Bode case 2S04-114

Hello Mr. Braga,

My name is Emily Herren and I worked with Angela this week to examine the latest item submitted for case 2S04-114 ("Biological material in vacuum cleaner bag"). We took photographs of the items submitted to show you the condition that they were in. We were able to identify and test a few areas for the presence of blood on a couple of the items (all of which came up negative), but for the most part, everything that was in the box was completely covered in dirt and debris and was unsuitable for testing for biological material. The vacuum specifically was opened to examine the contents, but when it was opened there was nothing inside (picture included of that as well). I have attached the pictures in a PDF format for you to look through. Let us know if you have any questions.

Thanks,

Emily Herren
Forensic Biology Analyst/DNA Analyst
Bode Technology
10430 Furnace Rd, Suite 107
Lorton, VA 22079

Emily.Herren@bodetech.com
Phone (703)646-9801

2S04-114 EBN 3/25/11

Angela Williamson

From: Braga, Stephen [Stephen.Braga@ropesgray.com]
Sent: Thursday, March 10, 2011 4:19 PM
To: Angela Williamson
Cc: Andrea Borchardt
Subject: RE: Additional Testing
Follow Up Flag: Follow up
Flag Status: Completed

Correct. It is possible that the boys were assaulted in the home where the vacuum cleaner was used, and we believe that the rugs etc were vacuumed relatively soon after the murders. So we are trying to determine whether there is any biological material in the vacuum cleaner trash bag that can be linked to the victims and if so what form it is in – such as hair, saliva or blood. Of course, one of the victims – Stevie Branch – lived in the house so one would expect to find some of his DNA in certain forms there.

We are not interested in exterior Touch DNA from the person who used the vacuum, or even who changed the vacuum trash bag last. We are interested in testing any biological material within or on the contents of that vacuum cleaner bag.

Stephen L. Braga
ROPES & GRAY LLP
T +1 202 508 4655 | F +1 202 383 9821
One Metro Center, 700 12th Street, NW, Suite 900
Washington, DC 20005-3948
Stephen.Braga@ropesgray.com
www.ropesgray.com

From: Angela Williamson [mailto:Angela.Williamson@bodetech.com]
Sent: Thursday, March 10, 2011 4:11 PM
To: Braga, Stephen
Cc: Andrea Borchardt
Subject: RE: Additional Testing

Hi Steve,

Am I correct in assuming that you're trying to find victim DNA on these items and not so much Touch DNA from the person who may have handled the items?

Can you share any other background information with us? Knowing a few more details may help us develop a better examination strategy.

Many thanks

Angela

From: Braga, Stephen [mailto:Stephen.Braga@ropesgray.com]

2504-114 EBN 3/25/11

Sent: Thursday, March 10, 2011 4:05 PM
To: Angela Williamson
Cc: Andrea Borchardt
Subject: Additional Testing

Angela,

Per our e-mail exchange earlier this week, attached is the Case Submission Form for the vacuum cleaner that is being shipped to you for specified testing in connection with the Echols case.

If you have any questions, now or after you receive it, just let me know.

Thanks,

Steve

Stephen L. Braga
ROPES & GRAY LLP
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One Metro Center, 700 12th Street, NW, Suite 900
Washington, DC 20005-3948
Stephen.Braga@ropesgray.com
www.ropesgray.com

Circular 230 Disclosure (R&G): To ensure compliance with Treasury Department regulations, we inform you that any U.S. tax advice contained in this communication (including any attachments) was not intended or written to be used, and cannot be used, for the purpose of avoiding U.S. tax-related penalties or promoting, marketing or recommending to another party any tax-related matters addressed herein.

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From: PWA9-DIGI-LIB-1@ropesgray.com [mailto:PWA9-DIGI-LIB-1@ropesgray.com]
Sent: Thursday, March 10, 2011 3:59 PM
To: Braga, Stephen
Subject: Attached Image

2504 -114 EBN 3/25/11

CHAIN OF CUSTODY

The Bode Technology Group, Inc.

Case Number: 2S04-114-52 **Agency ID Number:**

Submitting Agency Information

Name Ropes & Gray LLP
Address 700 12th Street, NW
Suite 900
Washington, DC 20005
Contact/Attorney Stephen L. Braga
Additional Authorized Contacts

Victim
Suspect

Phone Number (202) 508-4655
Fax Number (202) 398-9821
stephen.braga@ropesgray.com

Custody Record

Method of Delivery to Bode Fed Ex
Date Delivered 3/15/2011 Time: 10:19 AM
Delivered By Fed Ex
Delivered To Carmen Pozo

Condition Good (Sealed)
Signature TRK# 8726 8806 8550
Signature

Date	Item No.	Released by (print) / (sign)	Received by (print) / (sign)	Purpose of change:
3/15/2011 Time 10:22 AM	52	Carmen Pozo	Maggie Redmond, for EMS / M. Redmond	Accessioning/Storage
Date 3/21/11 Time 10:40am	52	Maggie Redmond, for EMS / M. Redmond	Emily Herren / Emily Herren	analysis
Date 3/21/11 Time 12:25pm	52	Emily Herren / Emily Herren	Maggie Redmond, for EMS / M. Redmond	Storage
Date Time				
Date Time		Released by (print) / (sign)	Sent via: / Tracking No.	FINAL DISPOSITION

Evidence Inventory

Bode Case #	Agency Item ID	Agency Description
2S04-114-52		Labeled as "Biological material in vacuum cleaner bag"

Storage of Evidence: Secure evidence room

2S04-114 EBH 3/25/11

Print page | Close

Fed

Detailed Results

Tracking no.: 872688068550 Select time format: **12H**

Delivered

Delivered
Signed for by: A.POSA

Shipment Dates

Ship date Mar 14, 2011
Delivery date Mar 15, 2011 10:19 AM

Destination

Signature Proof of Delivery

Shipment Options

Hold at FedEx Location
Hold at FedEx Location service is not available for this shipment.

Shipment Facts

Service type	Priority Overnight - Direct Signature Required	Delivered to	Shipping/Receiving
Weight	62.0 lbs/28.1 kg		

Shipment Travel History

Select time zone: Local Scan Time

All shipment travel activity is displayed in local time for the location

Date/Time	Activity	Location	Details
Mar 15, 2011 10:19 AM	**Delivered**		
Mar 15, 2011 8:20 AM	On FedEx vehicle for delivery	ALEXANDRIA, VA	
Mar 15, 2011 8:13 AM	At local FedEx facility	ALEXANDRIA, VA	
Mar 15, 2011 6:42 AM	At dest sort facility	DULLES, VA	
Mar 15, 2011 4:00 AM	Departed FedEx location	MEMPHIS, TN	
Mar 15, 2011 12:50 AM	Arrived at FedEx location	MEMPHIS, TN	
Mar 15, 2011 12:25 AM	Left FedEx origin facility	CORDOVA, TN	
Mar 14, 2011 5:16 PM	Picked up	CORDOVA, TN	

2S04-114 EBH 3/25/11

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Case Submission Form

Bode Technology
Part of GlobalOptions Group

Bode Case No (To be filled out by Bode): S MR 3/16/11 2504-114

In order to process your DNA casework efficiently, this form must be filled out and sent along with the evidence. Prior to submitting a case, please call Customer Services 866-BODE-4-ID (866-263-3443).

The Bode Technology Group
10430 Furnace Rd. Suite 107
Lorton, VA 22079
Phone: 703-646-9740
Fax: 703-646-9742
www.bodetech.com

Submitting Agency: Ropes & Gray LLP Date: 3/11/11

Name: Stephen L. Braga Phone Number: 202 508-4655

Select the type of Submission:

☐ Initial Evidence Submission ☒ Additional Evidence Submission (Please fill in Bode Case number at the top of the page)

Select the type of Service:

☒ Standard Service - Our standard service provides complete analysis of your samples when rush services are not required.

☐ Rush Service - This is the fastest service offered. Please contact Customer Service for turnaround time (Additional charge per sample).

☐ 5 business days ☐ 10 business days ☐ 15 business days

Promotion Code:

Authorized Point(s) of Contact:

Name:	Stephen L. Braga	Name:	
Agency:	Ropes & Gray LLP	Agency:	
Title:	Attorney	Title:	
Phone Number:	202 -508-4655	Phone Number:	
Fax Number:	202-398-9821	Fax Number:	
Cell Phone/Pager:	617-304-7124	Cell Phone/Pager:	
Email Address:	stephen.braga@ropesgray.com	Email Address:	

Mailing Address (Where The Report Should be Sent):

Name:	Stephen L. Braga
Agency:	Ropes & Gray LLP
Address:	700 12th Street, NW, Suite 900
City/State/Zip:	Washington, DC 20005
Phone Number:	202-508-4655
Fax Number:	202-383-9821
Email Address:	stephen.braga@ropesgray.com

Billing Address:

Name:	Same as Mailing Address
Agency:	
Address:	
City/State/Zip:	
Phone Number:	
Fax Number:	
Email Address:	
Purchase Order #	

Evidence Return Address:

Name:	Same as Mailing Address
Agency:	
Address:	
City/State/Zip:	
Phone Number:	
Email Address:	

Select type of Evidence Return:

☐ Evidence should be returned following delivery of the case report.

☒ Evidence should be returned upon request from the Authorized Point of Contact(s).

2504-114 EBH 3/25/11

~~2507~~ EBH 3/25/11 ~~2508~~ EBH 3/25/11

5

Case Submission Form

Bode Technology
Part of GlobalOptions Group

Bode Case No (To be filled out by Bode): S MR 3/16/11 2504-114

In order to process your DNA casework efficiently, this form must be filled out and sent along with the evidence. Prior to submitting a case, please call Customer Services 866-BODE-4-ID (866-263-3443).

The Bode Technology Group
10430 Furnace Rd. Suite 107
Lorton, VA 22079
Phone: 703-646-9740
Fax: 703-646-9742
www.bodetech.com

Submitting Agency Reference/Case No: Ropes & Gray LLP

Case Background:
This is continuing work on the Damien Echols case. Bode will receive a crate containing a vacuum cleaner, among other things. We would like the contents of the vacuum cleaner trash bag examined for biological material. If any exists, it should then be tested as indicated below.

Specify platform (AB/Hitachi), kit (Co/Pro+, ID, PP16, PP16BIO, PPY, YFiler, miniFiler), and software (GS/GT, GMID) preferences. If no preference, check box for Analyst Discretion

☒ Analyst Discretion

List Evidence Items* (If needed, use Page 3 to include additional items or case information) Note: Descriptions may be reflected in Chain of Custody and Report	Please check the appropriate boxes for Pre-Screening and DNA Testing Requested	Permission to Consume (If necessary)
Biological material in vacuum cleaner bag	Pre-Screen: ☒ Blood ☐ Semen ☒ Saliva ☒ Hair DNA Testing: ☒ STR ☒ miniSTR ☐ Y-STR ☒ mtDNA	☒ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No

☐ Check if additional evidence items or testing instructions are listed on Page 3

* When submitting extracts, the reagent blanks must also be included. Please be sure to include the following information: Total Human Quant, Total Y Quant, Volume Remaining, and Extraction Control Names associated with samples.

If STR data is obtained, will CODIS entry or search be requested? ☐ Yes ☒ No

(NOTE: Private Forensic DNA laboratories do not have access to enter or search samples in CODIS. If "yes" is marked, Bode will contact the appropriate CODIS laboratory Technical Leader prior to initiation of this case. Please be aware that this may increase the turnaround time.

I hereby certify that the information provided on this Case Submission Form is accurate to the best of my knowledge. I understand that I will be charged for services according to the fee schedule that I have received.

Print Name Stephen L. Braga Signature

Please submit this completed form with the evidence. All evidence items must be shipped using a traceable carrier (i.e. FedEx, UPS, DHL, Priority Mail). Overnight shipping is recommended. The evidence should be shipped to:

ATTN: EVIDENCE DEPARTMENT
Bode Technology
10430 Furnace Rd. Suite 107
Lorton, VA 22079

4

2504-114 EBN 3/25/11

EVIDENCE COLLECTION INVENTORY

Agency Case No: Ropes & Gray LLP

Date: 3/21/11

Envelope Sealed: Closed, not sealed

BODE Case No: 2S04-114

Analyst/Assistant: ALW, AMB, EBH, ABG

SEALED	BODE SAMPLE NAME	DESCRIPTION	QUANTITY SUBMITTED	QUANTITY CONSUMED	COMMENTS
No	2S04-114-52	• One brown cardboard box contains one black plastic bag (introduced by Evidence to contain item). Bag contains one large plastic tub sealed with duct tape. Tub with hole on bottom from which apparent dirt was leaking. Tub contained three black plastic bags. • Bag 1 (as designated by analyst) contains one green and red plaid apparent placemat, one 'Spell Checker', one rusted metal container, one shoe sole insert, one tent stake (yellow in color,) one 'Laffy Taffy' wrapper, one piece of Astro Turf ~ 15cm by ~5cm, one thimble, one blue plastic hair clip, one plastic block-like object (~5cm by ~9cm), remnants of a Styrofoam cup, one top of a squirt bottle, one plastic wrapper, one plastic string (~50cm in length), one Teddy bear with apparent cut in stomach (one area of apparent reddish staining, PH(-)), one corner of a seat cover (with area of red-brown staining, PH(-)), and one apparent cloth/carpet remnant (one area of red-brown staining (PH(-)). All items heavily covered in brown dirt/debris. Difficult to determine the presence of apparent hairs/fibers.	3 bags	Consumed <5% of staining from each of the areas PH tested.	Evidence deemed unsuitable for saliva testing.

AMB 3/29/11

EBH 3/28/11

ALW 03/28/11

ABG 3-28-11

Document: BTF00245 – Inventory No Agency ID (WS)
Revision: 2
Effective: Wednesday, January 30, 2008 2:05:21 PM

3

EVIDENCE COLLECTION INVENTORY (Continued)

Agency Case No: Ropes & Gray LLP

BODE Case No: 2S04-114

Date: 3/21/11

Analyst/Assistant: ALW, AMB, EBH, ABG

Envelope Sealed: Closed, not sealed

SEALED	BODE SAMPLE NAME	DESCRIPTION	QUANTITY SUBMITTED	QUANTITY CONSUMED	COMMENTS
No	2S04-114-52	• Bag 2 (as designated by analyst) contains one very large plastic sheet with Disney/Mickey Mouse design on one side (two locations with red staining PH(-)), one rusted metal fragment, one plastic toy boat, one hair conditioner bottle, one single flip-flop, eight plastic rods of various sizes, one plastic sheet remnant, three rusted metal rods – two with ropes attached and one with no rope, one electrical cord, one piece of rope with apparent nylon straps, one rounded edge spatula with one serrated side, two remnants of an apparent blanket (two red-brown stains on edge (PH(-)), one blue tarp fragment, two small blue cloth fragments, one plastic bag containing four apparent Styrofoam plates. All items heavily covered in brown dirt/debris. Difficult to determine the presence of apparent hairs/fibers. • Bag 3 (as designated by analyst) contains one black plastic rod, one paint roller, one plastic apparent lawn ornament, one plastic child's book, one lamp base with attached electrical cord and piece of orange lamp, one rusted vacuum cleaner Electrolux brand, cleaner pried open and area where bag would have been contains apparent bag remnants. All items heavily covered in brown dirt/debris. Difficult to determine the presence of apparent hairs/fibers.	3 bags	Consumed <5% of staining from each of the areas PH tested.	Evidence deemed unsuitable for saliva testing.

AMB 3/29/11
EBH 3/28/11
PDF 3-28-11
ALW 03/28/11

2

EVIDENCE COLLECTION INVENTORY (Continued)

Agency Case No: Ropes & Gray LLP

BODE Case No: 2S04-114

Date: 3/21/11

Analyst/Assistant: ALW, AMB, EBH, ABG

Envelope Sealed: Closed, not sealed

NOTES:

Notes dictated by ALW and AMB and recorded by ABG. PH testing performed by EBH.

Phenolphthalein (PH) 3/21/11: Phenolphthalein Kit (012611-C/Evident), Sterile Water (103106/Fisher), Blood Positive Control (+), Blood Negative Control (-).

AMB 3/28/11 ABG 3/28/11 ALW 03/28/11

Bode Technology™

10430 Furnace Road, Suite 107
Lorton, VA 22079
Phone: 703-646-9740

Supplemental Forensic Case Report
May 11, 2011

To:
Stephen L. Braga
Ropes and Gray LLP
700 12th Street, NW Suite 900
Washington, DC 20005

Bode Case # 2S04-114

List of evidence received on May 4, 2011 for possible DNA analysis:

Bode #	Agency Item ID	Description
2S04-114-53	Item # 1	Labeled as "Sealed brown paper bag containing a portion of linoleum from kitchen near curtain"
2S04-114-54	Item # 2	Labeled as "Sealed brown paper bag containing a portion of backing of linoleum in kitchen near curtain"
2S04-114-55	Item # 3	Labeled as "Sealed manila envelope containing two swabs collected from the bottom layer of linoleum in kitchen near curtain"
2S04-114-56	Item # 4	Labeled as "Sealed manila envelope containing two swabs from bottom of removed linoleum from near kitchen sink"
2S04-114-57	Item # 5	Labeled as "Sealed manila envelope containing two swabs from side of washer near sink in kitchen"
2S04-114-58	Item # 6	Labeled as "Sealed brown paper bag containing the curtain from between kitchen and "playroom""
2S04-114-59	Item # 7	Labeled as "Sealed brown paper bag containing a portion of linoleum from in front of kitchen sink"

List of evidence received on May 5, 2011 for possible DNA analysis:

Bode #	Agency Item ID	Description
2S04-114-60	Item # 8	Labeled as "Sealed manila envelope containing hair collected from the driver's side inside handle"
2S04-114-61	Item # 9	Labeled as "Sealed brown paper bag containing tape lift from bottom cushion of bench seat driver's side under steering wheel"
2S04-114-62	Item # 10	Labeled as "Sealed brown paper bag containing tape lift from bottom bench seat driver's side toward back of seat"
2S04-114-63	Item # 11	Labeled as "Sealed brown paper bag containing tape lift from middle bottom bench seat front"
2S04-114-64	Item # 12	Labeled as "Sealed brown paper bag containing tape lift from bottom bench seat middle towards back"
2S04-114-65	Item # 13	Labeled as "Sealed brown paper bag containing tape lift from passenger side bottom bench seat toward front"
2S04-114-66	Item # 14	Labeled as "Sealed brown paper bag containing tape lift from passenger side bottom bench seat towards back"
2S04-114-67	Item # 15	Labeled as "Sealed brown paper bag containing tape lift from back of bench seat, bottom half driver's side"
2S04-114-68	Item # 16	Labeled as "Sealed brown paper bag containing tape lift from back of bench seat, top half driver's side"

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List of evidence received on May 5, 2011 for possible DNA analysis (Continued):

Bode #	Agency Item ID	Description
2S04-114-69	Item # 17	Labeled as "Sealed brown paper bag containing tape lift from back of bench seat, bottom half, middle"
2S04-114-70	Item # 18	Labeled as "Sealed brown paper bag containing tape lift from back of bench seat, passenger side bottom half"
2S04-114-71	Item # 19	Labeled as "Sealed brown paper bag containing tape lift from back of bench seat, top half, middle"
2S04-114-72	Item # 20	Labeled as "Sealed brown paper bag containing tape lift from back of bench seat, top half, passenger side"
2S04-114-73	Item # 21	Labeled as "Sealed brown paper bag containing one brown left hand glove found in truck with hair packaged in separate sealed envelope"
2S04-114-74	Item # 22	Labeled as "Sealed brown paper bag containing one brown right hand glove found in truck with hair packaged in separate sealed envelope"
2S04-114-75	Item # 23	Labeled as "Sealed brown paper bag containing a portion of vinyl seat back of driver's side of truck with a swab of the area packaged in a separate cardboard box"
2S04-114-75a		*Portion of vinyl seat back*
2S04-114-75b		*Swab of the area*

Partial list of evidence received on April 5, 2007 for DNA analysis:

Bode #	Agency Item ID	Description
2S04-114-41	93-05716/ME-329-93	Labeled as "Dried Bld Sample James M. Moore"
2S04-114-43	93-05717/ME-330-93	Labeled as "Dried Blood Sample Steve Branch"
2S04-114-45	93-05718/ME-331-93	Labeled as "Dried Blood Sample Christopher Byers"

Forensic Biology Results:

1. Blood was indicated in the following samples:

   2S04-114-55
   2S04-114-57
   2S04-114-75

2. No blood was detected in the following samples:

   2S04-114-53
   2S04-114-54
   2S04-114-56
   2S04-114-58
   2S04-114-59
   2S04-114-74

3. Sample 2S04-114-54 contained one apparent human hair that is not suitable for nuclear DNA analysis but may be suitable for mitochondrial DNA analysis.

4. Sample 2S04-114-59 contained six apparent human hairs that are not suitable for nuclear DNA analysis but may be suitable for mitochondrial DNA analysis.

5. No apparent human hairs were recovered from sample 2S04-114-60.

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Forensic Biology Results (continued):

6. Sample 2S04-114-61 contained one apparent human hair that is not suitable for nuclear DNA analysis but may be suitable for mitochondrial DNA analysis.

7. Sample 2S04-114-62 contained three apparent human hairs that are not suitable for nuclear DNA analysis but may be suitable for mitochondrial DNA analysis.

8. Sample 2S04-114-63 contained two apparent human hairs that are not suitable for nuclear DNA analysis but may be suitable for mitochondrial DNA analysis.

9. Sample 2S04-114-64 contained six apparent human hairs that are not suitable for nuclear DNA analysis but may be suitable for mitochondrial DNA analysis.

10. Sample 2S04-114-65 contained two apparent human hairs that are not suitable for nuclear DNA analysis but may be suitable for mitochondrial DNA analysis.

11. Sample 2S04-114-66 contained two apparent human hairs that are not suitable for nuclear DNA analysis but may be suitable for mitochondrial DNA analysis.

12. Sample 2S04-114-67 contained one apparent human hair that is not suitable for nuclear DNA analysis but may be suitable for mitochondrial DNA analysis.

13. Sample 2S04-114-68 contained three apparent human hairs that are not suitable for nuclear DNA analysis but may be suitable for mitochondrial DNA analysis.

14. No apparent human hairs were recovered from samples 2S04-114-69, 2S04-114-70, and 2S04-114-71.

15. Sample 2S04-114-72 contained one apparent human hair that is not suitable for nuclear DNA analysis but may be suitable for mitochondrial DNA analysis.

16. Sample 2S04-114-73 contained two apparent human hairs that are not suitable for nuclear DNA analysis but may be suitable for mitochondrial DNA analysis.

17. Sample 2S04-114-74 contained five apparent human hairs that are not suitable for nuclear DNA analysis but may be suitable for mitochondrial DNA analysis.

DNA Processing, Results, and Conclusions:

The evidence was processed for DNA typing by analysis of the 13 CODIS Short Tandem Repeat loci, the D2S1338 locus, the D19S433 locus, and the Amelogenin locus using the Applied Biosystems AmpFISTR Identifiler kit. Appropriate positive and negative controls were used concurrently throughout the analysis. The DNA profiles reported in this case were determined by procedures that have been validated according to standards established by the Scientific Working Group on DNA Analysis Methods (SWGDAM) and adopted as Federal Standards.

1. DNA profiles were previously obtained from samples 2S04-114-41(James M. Moore), 2S04-114-43 (Steve Branch), and 2S04-114-45 (Christopher Byers).

2. An allele was obtained from sample 2S04-114-55 at the Amelogenin locus. Due to the limited data obtained, no conclusions can be made on the allele present in sample 2S04-114-55.

3. The DNA profile obtained from sample 2S04-114-57 is consistent with a mixture of at least two individuals including at least one male contributor.

   The individuals associated with samples 2S04-114-41 (James M. Moore), 2S04-114-43 (Steve Branch), and 2S04-114-45 (Christopher Byers) are excluded as possible contributors to the mixture profile obtained from sample 2S04-114-57.

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DNA Processing, Results, and Conclusions (Continued):

4. The DNA profile obtained from sample 2S04-114-74 is consistent with a mixture of two individuals including a major male contributor.

   The individuals associated with samples 2S04-114-41 (James M. Moore), 2S04-114-43 (Steve Branch), and 2S04-114-45 (Christopher Byers) are excluded as possible contributors to the mixture profile obtained from sample 2S04-114-74.

5. No DNA profile was obtained from the following samples: 2S04-114-61 through 2S04-114-73, 2S04-114-75a, and 2S04-114-75b.

Notes:

1. Any references to body fluids in evidence descriptions are based on the written descriptions of the samples by the submitting agency.
2. The presence of red-brown staining was not observed in the following samples therefore no further serological testing for the presence of blood was performed: 2S04-114-61 through 2S04-114-73.
3. Additional apparent non-human hairs/fibers were recovered from items 2S04-114-59 through 2S04-114-74. See inventory notes for additional information.
4. Item 2S04-114-67 contained one item that upon microscopic examination could not be distinguished as a hair or a fiber. This item was not processed further.
5. A supplemental STR case report was issued due to request for additional testing. Please refer to reports dated: March 25, 2011, January 25, 2011, June 4, 2008, April 10, 2008, March 7, 2008, September 27, 2007, January 2, 2007, and December 30, 2005 for complete lists of items received/tested for STRs.
6. The evidence and extracts will be returned to Ropes and Gray LLP.

Report is submitted by:

Emily Herren

Emily Herren, MFS
Forensic Biology/DNA Analyst I

Table One: Analysis of Short Tandem Repeat Loci

Locus	2S04-114-55a1	2S04-114-57a1	2S04-114-61a1	2S04-114-62a1	2S04-114-63a1	2S04-114-64a1	2S04-114-65a1
D8S1179	NO RESULTS	11,(12),(13),(14),15	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS
D21S11	NO RESULTS	(28),29,(32.2),(35)	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS
D7S820	NO RESULTS	(9),10	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS
CSF1PO	NO RESULTS	7,(10),11,(12)	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS
D3S1358	NO RESULTS	15,16,(17),18	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS
TH01	NO RESULTS	6,7,(8),(9.3)	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS
D13S317	NO RESULTS	11,12	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS
D16S539	NO RESULTS	10,(11),(12)	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS
D2S1338	NO RESULTS	21,(22),(23),(25)	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS
D19S433	NO RESULTS	(11),(13),13.2,(14)	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS
vWA	NO RESULTS	(16),17,(18)	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS
TPOX	NO RESULTS	(6),8,(9),10	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS
D18S51	NO RESULTS	13,(17),18	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS
Amel.	X, ---	X,(Y)	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS
D5S818	NO RESULTS	12,(13)	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS
FGA	NO RESULTS	21,---	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS

Key: () = minor allele
--- = possible additional alleles

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Table One: Analysis of Short Tandem Repeat Loci (Continued)

Locus	2S04-114-66a1	2S04-114-67a1	2S04-114-68a1	2S04-114-69a1	2S04-114-70a1	2S04-114-71a1	2S04-114-72a1
D8S1179	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS
D21S11	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS
D7S820	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS
CSF1PO	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS
D3S1358	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS
TH01	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS
D13S317	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS
D16S539	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS
D2S1338	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS
D19S433	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS
vWA	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS
TPOX	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS
D18S51	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS
Amel.	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS
D5S818	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS
FGA	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS	NO RESULTS

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Table One: Analysis of Short Tandem Repeat Loci (Continued)

Locus	2S04-114-73a1	2S04-114-74a1	2S04-114-75a1	2S04-114-75b1	2S04-114-41A (MOORE)	2S04-114-43A (BRANCH)	2S04-114-45A (BYERS)
D8S1179	NO RESULTS	10,(12),13,(15)	NO RESULTS	NO RESULTS	12,14	12,13	12,14
D21S11	NO RESULTS	29,31,(31.2)	NO RESULTS	NO RESULTS	29,32.2	29,29	30,32.2
D7S820	NO RESULTS	(8),11	NO RESULTS	NO RESULTS	8,9	8,10	9,12
CSF1PO	NO RESULTS	(11),12,14	NO RESULTS	NO RESULTS	10,10	12,12	10,13
D3S1358	NO RESULTS	15,16	NO RESULTS	NO RESULTS	14,18	14,17	14,16
TH01	NO RESULTS	8,(9),(9.3)	NO RESULTS	NO RESULTS	8,9.3	6,9.3	9.3,9.3
D13S317	NO RESULTS	9,11,(13)	NO RESULTS	NO RESULTS	11,12	8,11	8,12
D16S539	NO RESULTS	12,13	NO RESULTS	NO RESULTS	9,13	9,12	9,11
D2S1338	NO RESULTS	23,(24),25	NO RESULTS	NO RESULTS	17,23	23,24	18,24
D19S433	NO RESULTS	(15),(15.2),16	NO RESULTS	NO RESULTS	14,14	14,17	14,15
vWA	NO RESULTS	(15),16,19	NO RESULTS	NO RESULTS	18,19	18,19	17,19
TPOX	NO RESULTS	8,11,(12)	NO RESULTS	NO RESULTS	8,8	8,11	8,8
D18S51	NO RESULTS	12,(13),17	NO RESULTS	NO RESULTS	14,16	12,15	12,17
Amel.	NO RESULTS	X,Y	NO RESULTS	NO RESULTS	X,Y	X,Y	X,Y
D5S818	NO RESULTS	(10),11,12	NO RESULTS	NO RESULTS	9,13	10,12	11,12
FGA	NO RESULTS	(20),21,(22),23	NO RESULTS	NO RESULTS	22,23	21,24	22,25

Key: () = minor allele

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Bode Technology™

Review Form: Complete Case File

Shipment or Case #: 2S04-114-53 through -75

Case File Documentation	Core Forms and Controls	Data and Report
Technical Review		
- Case submission form or submitted manifest complete - Client paperwork complete - Client communication documented* - Chain of custody (COC) completed and correct - Project guidelines followed* - Inventory sheet accurate and consistent with COC - Photodocumentation of all evidence complete* - Permission to consume documented* - Case notes complete and accurate - All pages have case or shipment #, date, initials	- Lab worksheets complete - Sample numbering correct throughout - Controls gave appropriate results : Allelic ladders Positive control(s) Negative controls(s) - Electropherograms documented properly - Internal lane standard verified - Two independent analyses performed and edits consistent - Index accurate* - Correct core forms and controls included for case+	- Electropherograms documented properly - Internal lane standard verified - Two independent analyses performed and edits consistent - Index accurate* - Allele table included and accurate* - Results accurate - Conclusions accurate* - Statistics provided* - Statistic calculations correct*
Administrative Review		
- COC accurate - Core forms and controls review form included+	- Case notes accurate* - Positive control correct	- Report editorially accurate and includes: case identifier, evidence examined, methodology, loci or kit, results and/or conclusions, interpretative statement, date issued, disposition of evidence, signature of person accepting responsibility

**if applicable, + For case files supplemented with controls and core forms*

Frank D. Baird, Forensic Biology/DNA Analyst III — 5/12/11 Serology
Name and Title — ☒ Date-Type of review

Amy Jewett Technical Leader — 05/21/11 DNA tech, admin
Name and Title — ☑ Date- Type of review

Natalie Magar, Director — 6/2/11 DNA admin (report only)
Name and Title — ☒ Date- Type of review

Andrea Boehnke-Gaches DNA Analyst III — 5-12-11
Name and Title — ☑ Date- Bode Search including Staff DNA Search*

Self Review: EBH 5/11/11

Document: BT00067 - Review Form: Entire file including: case, controls, core forms
Revision: 3
Effective: Tuesday, February 09, 2010 2:05:32 PM

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Emily Herren

From: TrackingUpdates@fedex.com
Sent: Monday, May 16, 2011 9:11 AM
To: Emily Herren
Subject: FedEx Shipment 797094149021 Delivered

This tracking update has been requested by:

Company Name:	Bode Technology
Name:	Bode Technology
E-mail:	emily.herren@bodetech.com

Our records indicate that the following shipment has been delivered:

Reference:	2S04-114
Ship (P/U) date:	May 13, 2011
Delivery date:	May 16, 2011 9:07 AM
Sign for by:	C.HICKS
Delivery location:	WASHINGTON, DC
Delivered to:	Mailroom
Service type:	FedEx Standard Overnight
Packaging type:	FedEx Envelope
Number of pieces:	1
Weight:	0.50 lb.
Special handling/Services:	Deliver Weekday
Tracking number:	797094149021

Shipper Information	Recipient Information
Bode Technology	Stephen L. Braga
Bode Technology	Ropes & Gray LLP
10430 Furnace Road	700 12TH ST NW STE 900
Suite 107	ONE METRO CENTER
Lorton	WASHINGTON
VA	DC
US	US
22079	20005

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Thank you for your business.

EBN 5/16/11
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5/16/2011

Bode Technology™

INVOICE

Client:
Ropes & Gray LLP
Attn: Stephen Braga
One Metro Center
700 12th Street, NW Suite 900
Washington, DC 20005

Invoice Date: **5/11/2011**

Invoice #: **Bill14762**
Net Terms: **30 Days**

PO Number:

Invoice Grand Total: **$ 51,710.00**

Requester: Stephen L. Braga
Phone:
Fax:
email:

Bode Project #.: **2S04-114**

Agency Case No.: **1993-WVS-05716/93-05-0666**

Line Item Number	Quantity	Item / Part Number	Description	Unit Price	Sales Amount
0001	22	Pre	Pre-Screening: Small item	$ 600.00	$ 13,200.00
0002	1	Pre	Pre-Screening: Specialized or Large Item	$ 800.00	$ 800.00
0003	18	STR	Analysis of Evidence Items (excluding skeletal remains)	$ 2,095.00	$ 37,710.00

One Week Rush

TOTAL AMOUNT DUE **$ 51,710.00**

Remit To:

The Bode Technology Group, Inc.
c/o GlobalOptions, Inc
Dept. AT 952056
Atlanta, GA 31192

Bode TIN: 54-1750293

Bank Information:

Silicon Valley Bank
Santa Clara, CA 95054
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Account # 3300418500

10430 Furnace Road, Suite 107
Lorton, VA 22079

1.866.BODE.4.ID
www.bodetech.com

tel. 703-646-9740
fax. 703-646-9741

EBH 5/13/11

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Case Notes

Case Number: 2S04-114 Date: 5/12/2011 Analyst: EBH

Notes: Evidence item 2S04-114-57 contains a PCR product close in size to that of the Amelogenin X allele. This allele is likely of animal origin (Buel et. al. Journal of Forensic Sciences, JFSCA, Vol. 40, No. 4, July 1995, pp. 641-644). Possible animal contributors include domestic dog, domestic cat, domestic horse, bovine and deer.

EBH 5/12/11

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Document: BT00070 - Case Notes
Revision: 3
Effective: 11/19/2010 4:29:59 PM

Emily Herren

From: Braga, Stephen [Stephen.Braga@ropesgray.com]
Sent: Thursday, May 12, 2011 4:44 PM
To: Emily Herren
Cc: Teresa Vreeland
Subject: RE: Report for Bode case 2S04-114

Thank you Emily, and Teresa.

As you suggest, please hold off on testing the additional items identified below until I send in Case Submission Forms for them.

You will be receiving additional case items for testing in the coming days from the Arkansas State Crime Laboratory and the West Memphis Police Department. I will be sending you case submission forms for those items tomorrow. As usual, please do not hesitate to contact me if you have any questions about those new forms or the testing requested.

Best,

Steve

Stephen L. Braga
ROPES & GRAY LLP
T +1 202 508 4655 | F +1 202 383 9821
One Metro Center, 700 12th Street, NW, Suite 900
Washington, DC 20005-3948
Stephen.Braga@ropesgray.com
www.ropesgray.com

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From: Emily Herren [mailto:Emily.Herren@bodetech.com]
Sent: Thursday, May 12, 2011 4:34 PM
To: Braga, Stephen
Cc: Teresa Vreeland
Subject: Report for Bode case 2S04-114

Mr. Braga,

Please find attached a copy of the cover letter, report, inventory notes, and invoice for the additional items sent last week. I will be sending you the originals via FedEx tomorrow. Please let me know if you have any questions.

Also, we have since received six additional items and we are still waiting for the case submission forms. We will hold off on testing these items until we receive the forms from you. Let me know if you need a blank copy of the form.

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The items still in need of case submission forms:

pair of gloves
pair of gloves
large Corona beer bottle
off brand root beer can
cup
plastic beverage container

Thanks,

Emily Herren
Forensic Biology Analyst/DNA Analyst
Bode Technology
10430 Furnace Rd, Suite 107
Lorton, VA 22079

Emily.Herren@bodetech.com
Phone (703)646-9801

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Emily Herren

From: Emily Herren
Sent: Tuesday, May 10, 2011 1:21 PM
To: Karen Berka
Subject: RE: KMB201101 Inventory Sheet from 5/4/11

Thanks,
I'll make note of that in our records as well.

From: Karen Berka [mailto:kmbforensic@yahoo.com]
Sent: Tue 5/10/2011 1:14 PM
To: Emily Herren
Subject: KMB201101 Inventory Sheet from 5/4/11

Emily,
As I was reviewing my notes to write my report for KMB201101, I noticed that Item 14 was taken from "passenger side bottom bench seat towards the back," not the "front" as was on the inventory sheet I sent.
Karen Bruewer

2504-114 EBN 5710111

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Emily Herren

From: Karen Berka [kmbforensic@yahoo.com]
Sent: Friday, May 06, 2011 1:30 PM
To: Emily Herren; StephenBraga
Subject: Re: Bode case 2S04-114

Hi Emily,
I am the serologist who collected the evidence from the house and truck. I'll give you more information on what I did, reference the tape lifts, gloves and seat:

I collected the tape lifts of the bench seat prior to any swabbing for body fluids so as to not lose any potential hair evidence. After I collected them, I swabbed the seat for possible blood and got all ph neg. But you might want to check the lifts for blood and do DNA on any hairs and the lifts themselves for touch DNA.

I screened the outside of the gloves only and they were ph neg. I collected the hairs from the outside of glove in item 21 and placed them in an envelope then placed it inside item 21. I did the same for the glove in item 22. If these hairs are human, they should be tested for DNA. Yes, check the gloves for wearer DNA.

As far as the piece of seat, that area had been covered up by upholstery so any testing at all for blood and touch DNA would be helpful.

Please let me know if I can be of any other assistance. I will be writing a summary report of my results and will forward it to you.

Thank you,
Karen Bruewer
419-771-0107

--- On **Fri, 5/6/11, Braga, Stephen <*Stephen.Braga@ropesgray.com*>** wrote:

> From: Braga, Stephen <Stephen.Braga@ropesgray.com>
> Subject: Re: Bode case 2S04-114
> To: "Emily.Herren@bodetech.com" <Emily.Herren@bodetech.com>
> Cc: "kmbforensic@yahoo.com" <kmbforensic@yahoo.com>
> Date: Friday, May 6, 2011, 12:35 PM
>
> Karen,
>
> Can you please answer Emily's questions below regarding certain samples, copying me?
>
> Thanks,
>
> Steve
>
> **Stephen L. Braga**
> **ROPES & GRAY LLP**

2S04-114 EBN 579111

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T +1 202 508 4655 | F +1 202 383 9821
One Metro Center, 700 12th Street, NW, Suite 900
Washington, DC 20005-3948
Stephen.Braga@ropesgray.com
www.ropesgray.com

From: Emily Herren [mailto:Emily.Herren@bodetech.com]
Sent: Friday, May 06, 2011 12:20 PM
To: Braga, Stephen
Subject: RE: Bode case 2S04-114

Hi

I wanted to clarify the screening for some of the items:

1. tape lifts: you want those screened for blood and hairs? Did you want the lifts themselves sampled for touch DNA if they are negative for blood?

2. gloves: did you want those sampled for wearer DNA if they are negative for blood?

3. Piece of seat: did you want that sampled for touch DNA if they are negative for blood?

Thanks,
Emily

From: Braga, Stephen [mailto:Stephen.Braga@ropesgray.com]
Sent: Fri 5/6/2011 10:38 AM
To: Emily Herren
Subject: Re: Bode case 2S04-114

Yes, to the extent necessary to conduct the testing.

Thanks

Steve

Stephen L. Braga
ROPES & GRAY LLP
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www.ropesgray.com

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received the message in error.

From: Emily Herren [mailto:Emily.Herren@bodetech.com]
Sent: Friday, May 06, 2011 10:02 AM
To: Braga, Stephen
Subject: Bode case 2S04-114

Hi Stephen,

My name is Emily Herren and I am one of the analysts working on the new submissions that we received yesterday. I have tested the first set of swabs and one of them was a weak PH(+). The other swab was negative. Because the test result was weak and the staining on the swab was light brown versus a red/brown color I would like to be safe and consume the entire PH(+) swab for DNA analysis. The case submission form did not indicate whether or not we had permission to consume. May we consume this swab and any other PH(+) areas we find on items 1 through 7?

Thanks,
Emily Herren

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Teresa Vreeland

From: Braga, Stephen [Stephen.Braga@ropesgray.com]
Sent: Thursday, May 05, 2011 2:40 PM
To: Teresa Vreeland
Subject: RE: Bode Case 2S04-114

Yes, I do expect more items. One will be there by Fed Exp tomorrow, but will require only standard processing. Not sure yet when, or how many, other items will be coming, but I don't expect those to be five-day rush either. Will keep you posted.

Why don't we keep the rush items separate, so the 5 business day turn around can start tomorrow for the items you received yesterday and today for which I have already provided the two Case Submission forms, and then let's do a combined report (as you suggest) on those two rush orders together for the end of next week.

Thanks

Stephen L. Braga
ROPES & GRAY LLP
T +1 202 508 4655 | F +1 202 383 9821
One Metro Center, 700 12th Street, NW, Suite 900
Washington, DC 20005-3948
Stephen.Braga@ropesgray.com
www.ropesgray.com

From: Teresa Vreeland [mailto:Teresa.Vreeland@bodetech.com]
Sent: Thursday, May 05, 2011 2:36 PM
To: Braga, Stephen
Subject: RE: Bode Case 2S04-114

Thank you Steve. We have received the new submission form. To be prepared, do you expect Bode to receive more items of evidence for this case? If so, do you have an approximate number? Since you are requesting such a quick turn around time, we would like to be fully prepared.

Lastly, if more items are coming in, would it be okay to begin the 5 business day turn around once the last pieces of evidence have arrived so that we can issue one report at the end of all testing?

Thank you,
Teresa

From: Braga, Stephen [mailto:Stephen.Braga@ropesgray.com]
Sent: Thu 5/5/2011 11:53 AM
To: Teresa Vreeland
Subject: RE: Bode Case 2S04-114

Thanks, Teresa. The presumptive blood test is fine, but please do not do that test of it means consuming the remaining sample size for any item to the point where there is not enough remaining to be tested.

I will be happy to fill out another case submission form. Can you identify the new items you have received? (I have requested things to be sent to Bode from multiple sources and am not always

2S04-114 EBH 579111

mmediately copied on who's sending what when).

Steve

Stephen L. Braga
ROPES & GRAY LLP
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One Metro Center, 700 12th Street, NW, Suite 900
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From: Teresa Vreeland [mailto:Teresa.Vreeland@bodetech.com]
Sent: Thursday, May 05, 2011 11:48 AM
To: Braga, Stephen
Subject: Bode Case 2S04-114

Hello Mr. Braga,
I am the Customized Casework supervisor and wanted to touch base with you regarding the new submissions of evidence that we have received for your case. I know you have been in contact with Andrea Borchardt regarding this case. I just wanted to confirm a few things:

-For the blood testing, Bode offers a presumptive test for blood and a confirmation test. The presumptive test will be able to indicate if blood was detected. This test can have false positives and can interact with blood from species other than humans. The confirmation test is able to confirm that the substance is blood and is from a human or higher primate (ie. chimpanzee). The presumptive test uses much less sample and has been found to be very accurate across the forensic science community. Generally we only perform the presumptive test, but will gladly perform the confirmation test also if you would prefer this testing. Please let me know if you have a preference as far as the blood testing is concerned.

-Bode has received an additional two items today. We do not have a Case Submission Form for these items. Could you please fill out one of these forms and send it to us? You can fax a copy (703-646-9741, attention to myself) or you can email a copy.

-Would you like for the additional items to be processed within 5 business days also?

Thank you very much and I look forward to hearing from you,

Teresa Vreeland
Customized Casework Supervisor
Bode Technology
703-646-9757
Teresa.vreeland@bodetech.com

2S04-114 EBH 5/9/11

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Phone Contact Form

Bode Technology

Case Number/Subject: 2S04-114 Date: 5/5/11

X Incoming call

___ Outgoing call

Person calling	Organization	Phone Number
Stephen L. Braga	Ropes & Gray LLP	(202) 508-4655

Receiver of call	Organization	Phone Number
Andrea Borchardt-Gardner	Bode	(703) 646-9746

Notes:

Steve left a message regarding the email I sent on 5/4. He indicated the following:

- He does want a 5 day rush. He understands the charges associated with this TAT.
- He does want us to conduct pre-testing for blood to confirm testing in the field.
- ~~We~~ He wants all items tested for DNA.
- If DNA obtained, he wants us to compare it to the victims.
- He does not need CODIS upload.

EBH 5/11/11

1/9
AOC 5/11/11

Andrea Borchardt

From: Andrea Borchardt
Sent: Wednesday, May 04, 2011 6:14 PM
To: 'Stephen.Braga@ropesgray.com'
Cc: Natalie Morgan; Teresa Vreeland
Subject: Bode Case 2S04-114

Hi Mr. Braga,

I wanted to let you know that we received the newly submitted items for your case today. I wanted to touch base before we begin processing to make sure we complete the test(s) you are expecting.

- On the submission form you indicate that you would like a 5 day rush service. Can you please confirm this is what you are expecting? Once we receive confirmation, we will begin testing right away. This service incurs a $1000/sample fee in addition to the regular fees ($1095/STR test or $1295/miniSTR test). If you would like a list of our standard prices and TAT's please let me know and I will be happy to send them to you.
- On the submission form you indicate you would like us to test the items for blood. There were notes included in the submission (from Karen Bruewer) and after reading through them, it appears as if the samples were already tested for blood. Can you please confirm you would like us to conduct blood testing as well? This is a $300/sample charge.
- Do you want us to test all the submitted items for DNA at this time?
- If DNA is obtained from any of the items, would you like the profiles compared to the DNA of the victims and defendants? Or would you like us to just report our findings and not complete any comparisons?
- You did not check a box regarding CODIS upload. Depending on what you are looking for (I presume victim or defendant DNA?), you may not need CODIS eligibility. If we do not secure a lab to accept the data/work *before* we start and a foreign profile is obtained from the items, this profile will not be CODIS eligible. Based on my understanding of this case, I do not believe you need CODIS eligibility, however, we need to have you confirm this.

I think those are all the questions I have at this time.

Please do not hesitate to contact me if you have any questions. I can be reached via phone (703-646-9746) or email.

Thank you and have a great evening.

-Andrea

Andrea Borchardt-Gardner
DNA Analyst III
Customized Casework
The Bode Technology Group
10430 Furnace Rd. Suite 107
Lorton, VA 22079
Andrea.Borchardt@bodetech.com
Phone (703) 646-9746
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CHAIN OF CUSTODY

The Bode Technology Group, Inc.

Case Number: 2S04-114-60 to 75 **Agency ID Number:**

Submitting Agency Information

Name Ropes & Gray LLP
Address 700 12th Street, NW
Suite 900
Washington, DC 20005
Contact/Attorney Stephen L. Braga
Additional Authorized Contacts

Victim
Suspect

Phone Number (202) 508-4655
Fax Number (202) 383-9821
stephen.braga@ropesgray.com

Custody Record

Method of Delivery to Bode Fed Ex
Condition Good (Sealed)
Date Delivered 5/5/2011 Time: 10:19 AM
Delivered By Fed Ex TRK # 8762 4022 4330
Delivered To Ben Bever Signature

Date	Item No.	Released by (print)	Received by (print)	Purpose of change:
5/5/2011 Time 10:22 AM	60 to 75	Ben Bever (sign)	Maggie Redmond, for EMS (sign) M. Redmond	Accessioning/Storage
Date 5/6/11 Time 8:25am	Item No. 60 to 75	Released by (print) Maggie Redmond, for EMS (sign) M. Redmond	Received by (print) Emily Herren (sign) Emily Herren	Purpose of change: Analysis
Date 5/11/11 Time 12:12pm	Item No. 60 to 75	Released by (print) Emily Herren (sign) Emily Herren	Received by (print) Maggie Redmond, for EMS (sign) M. Redmond	Purpose of change: Storage
Date Time	Item No.	Released by (print) (sign)	Received by (print) (sign)	Purpose of change:
Date Time	Item No.	Released by (print) (sign)	Sent via: Tracking No.	Purpose of change: FINAL DISPOSITION

Evidence Inventory

Bode Case #	Agency Item ID	Agency Description
2S04-114-60	Item #8	Labeled as "Sealed manila envelope containing hair collected from the driver's side inside handle"
2S04-114-61	Item #9	Labeled as "Sealed brown paper bag containing tape lift from bottom cushion of bench seat driver's side under steering wheel"
2S04-114-62	Item #10	Labeled as "Sealed brown paper bag containing tape lift from bottom bench seat driver's side toward back of seat"
2S04-114-63	Item #11	Labeled as "Sealed brown paper bag containing tape lift from middle bottom bench seat front"
2S04-114-64	Item #12	Labeled as "Sealed brown paper bag containing tape lift from bottom bench seat middle towards back"
2S04-114-65	Item #13	Labeled as "Sealed brown paper bag containing tape lift from passenger side bottom bench seat towards front"
2S04-114-66	Item #14	Labeled as "Sealed brown paper bag containing tape lift from passenger side bottom bench seat towards ~~front~~ back ME 5/10/11

Storage of Evidence: Secure evidence room

2S04-114 EBN 5/11/11

Evidence Inventory Continued

Bode Number	Agency Item ID	Agency Description
2S04-114-67	Item #15	Labeled as "Sealed brown paper bag containing tape lift from back of bench seat, bottom half driver's side"
2S04-114-68	Item #16	Labeled as "Sealed brown paper bag containing tape lift from back of bench seat, top half driver's side"
2S04-114-69	Item #17	Labeled as "Sealed brown paper bag containing tape lift from back of bench seat, bottom half, middle"
2S04-114-70	Item #18	Labeled as "Sealed brown paper bag containing tape lift from back of bench seat, passenger side bottom half"
2S04-114-71	Item #19	Labeled as "Sealed brown paper bag containing tape lift from back of bench seat, top half, middle"
2S04-114-72	Item #20	Labeled as "Sealed brown paper bag containing tape lift from back of bench seat, top half, passenger side"
2S04-114-73	Item #21	Labeled as "Sealed brown paper bag containing one brown left hand glove found in truck with hair packaged in separate sealed envelope"
2S04-114-74	Item #22	Labeled as "Sealed brown paper bag containing one brown right hand glove found in ~~truck~~ truck with hair packaged in separate sealed envelope"
2S04-114-75	Item #23	Labeled as "Sealed brown paper bag containing a portion of vinyl seat back of driver's side of truck with a swab of the area packaged in a separate cardboard box"

2S04-114 EBN 5/11/11

CHAIN OF CUSTODY

The Bode Technology Group, Inc.

Case Number: 2S04-114-53 to 59 **Agency ID Number:**

Submitting Agency Information

Name Ropes & Gray LLP
Address 700 12th Street, NW
Suite 900
Washington, DC 20005
Contact/Attorney Stephen L. Braga
Additional Authorized Contacts

Victim
Suspect

Phone Number (202) 508-4655
Fax Number (202) 383-9821
stephen.braga@ropesgray.com

Custody Record

Method of Delivery to Bode Fed Ex
Condition Good (Sealed)
Date Delivered 5/4/2011 Time: 10:29 AM
Delivered By Fed Ex
Signature TRK# 8757 0010 2461
Delivered To Brandon Jones
Signature

Date	Item No.	Released by (print)	Received by (print)	Purpose of change:
5/4/2011		Brandon Jones	Rachel Wortman, for EMS	
Time 10:32 AM	53 to 59	(sign)	(sign)	Accessioning/Storage
Date 5/6/11	Item No. 53 to	Released by (print) Maggie Redmond, for EMS	Received by (print) Emily Herren	Purpose of change:
Time 8:25am	59	(sign) M. Redmond	(sign) Emily Herren	Analysis
Date 5/11/11	Item No. 53 to	Released by (print) Emily Herren	Received by (print) Maggie Redmond, for EMS	Purpose of change:
Time 12:12pm	59	(sign) Emily Herren	(sign) M. Redmond	storage
Date	Item No.	Released by (print)	Received by (print)	Purpose of change:
Time		(sign)	(sign)	
Date	Item No.	Released by (print)	Sent via:	Purpose of change:
Time		(sign)	Tracking No.	FINAL DISPOSITION

Evidence Inventory

Bode Case #	Agency Item ID	Agency Description
2S04-114-53	Item #1	Labeled as "Sealed brown paper bag containing a portion of linoleum from kitchen near curtain"
2S04-114-54	Item #2	Labeled as "Sealed brown paper bag containing a portion of backing of linoleum in kitchen near curtain"
2S04-114-55	Item #3	Labeled as "Sealed manila envelope containing two swabs collected from the bottom layer of linoleum in kitchen near curtain" MR 5/11/11
2S04-114-56	Item #4	Labeled as "Sealed manila envelope containing two swabs from bottom of removed linoleum from near kitchen sink"
2S04-114-57	Item #5	Labeled as "Sealed manila envelope containing two swabs from side of washer near sink in kitchen"
2S04-114-58	Item #6	Labeled as "Sealed brown paper bag containing the curtain from between ~~the~~ kitchen and "playroom"" MR 5/11/11

Storage of Evidence: Secure evidence room

2S04-114 EBH 5/11/11

The Bode Technology Group, Inc.

Case Number: 2S04-114-53 to 59

Evidence Inventory Continued

Bode Number	Agency Item ID	Agency Description
2S04-114-59	Item #7	Labeled as "Sealed brown paper bag containing a portion of linoleum from in front of kitchen sink"

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2S04-114

IN-LAB CHAIN OF CUSTODY - ANALYST TRANSFERS

The Bode Technology Group, Inc.

Case Number: Agency ID Number:

Date / Time	Item No.	Released by (print) / (sign)	Received by (print) / (sign)	Purpose of change:
5/16/11 12:10pm	Items 60 to 64	Emily Herren Emily Herren	Teresa Vreeland	Analysis
5/16/11 1:40pm	Items 65-67	Emily Herren Emily Herren	Rachel Marksteiner Rachel Mark	Analysis
5/16/11 2:24pm	Items 60-64	Teresa Vreeland	Emily Herren Emily Herren	Analysis
5/16/11 3:47pm	Item 68	Emily Herren Emily Herren	Shannon Weitz Sha Weitz	Analysis
5/16/11 5:30pm	Item 68	Shannon Weitz Sha Weitz	Emily Herren Emily Herren	transfer of storage
~~5/16/11 5:~~	~~Item 67~~		~~Emily Herren Emily Herren~~	~~Analysis~~
5/19/11 8:42am	Item 71	Emily Herren Emily Herren	Shannon Weitz Sha Weitz	Analysis
5/9/11 9:30am	Items 65-67	Rachel Marksteiner Rachel Mark	Emily Herren Emily Herren	transfer of storage
5/19/11 9:42am	Item 71	Shannon Weitz Sha Weitz	Emily Herren Emily Herren	transfer of storage

EBH 5/9/11

2S04-114 EBH 5/9/11

FedEx

Detailed Results

Tracking no.: 876240224330 Select time format: **12H**

Delivered

Delivered
Signed for by: B.BEVER

Shipment Dates

Ship date May 4, 2011
Delivery date May 5, 2011 10:19 AM

Destination

Proof of Delivery

Shipment Options

Hold at FedEx Location
Hold at FedEx Location service is not available for this shipment.

Shipment Facts

Service type	Standard Box - Required	Direct Signature	Delivered to	Shipping/Receiving
Weight	3.0 lbs/1.4 kg			

Shipment Travel History

Select time zone: Local Scan Time

All shipment travel activity is displayed in local time for the location

Date/Time	Activity	Location	Details
May 5, 2011 10:19 AM	**Delivered**		
May 5, 2011 7:47 AM	On FedEx vehicle for delivery	ALEXANDRIA, VA	
May 5, 2011 6:52 AM	At local FedEx facility	ALEXANDRIA, VA	
May 5, 2011 5:22 AM	At dest sort facility	DULLES, VA	
May 5, 2011 2:49 AM	Departed FedEx location	MEMPHIS, TN	
May 5, 2011 12:09 AM	Arrived at FedEx location	MEMPHIS, TN	
May 4, 2011 11:59 PM	Left FedEx origin facility	MEMPHIS, TN	
May 4, 2011 5:48 PM	Picked up	MEMPHIS, TN	Tendered at FedEx Kinko's, now FedEx Office

2504-114 EBN 579111

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Print page | Close

FedEx

Detailed Results

Tracking no.: 875700102461 Select time format: 12H

Delivered

Delivered
Signed for by: B.JONES

Shipment Dates

Ship date May 3, 2011
Delivery date May 4, 2011 10:29 AM

Destination

Signature Proof of Delivery

Shipment Options

Hold at FedEx Location
Hold at FedEx Location service is not available for this shipment.

Shipment Facts

Service type	Standard Overnight - Direct Signature Required	Delivered to	Shipping/Receiving
Weight	5.0 lbs/2.3 kg		

Shipment Travel History

Select time zone: Local Scan Time

All shipment travel activity is displayed in local time for the location

Date/Time	Activity	Location	Details
May 4, 2011 10:29 AM	Delivered		
May 4, 2011 8:18 AM	On FedEx vehicle for delivery	ALEXANDRIA, VA	
May 4, 2011 7:02 AM	At local FedEx facility	ALEXANDRIA, VA	
May 4, 2011 5:16 AM	At dest sort facility	DULLES, VA	
May 4, 2011 2:45 AM	Departed FedEx location	MEMPHIS, TN	
May 4, 2011 12:53 AM	Arrived at FedEx location	MEMPHIS, TN	
May 4, 2011 12:30 AM	Left FedEx origin facility	CORDOVA, TN	
May 3, 2011 7:44 PM	Picked up	MEMPHIS, TN	Tendered at FedEx Kinko's, now FedEx Office

2504-114 EIBN 529111

\\\

Case # KMB201101

Item #	Description
1	Sealed brown paper bag containing a portion of linoleum from kitchen near curtain
2	Sealed brown paper bag containing a portion of backing of linoleum in kitchen near curtain
3	Sealed manila envelope containing two swabs collected from the bottom layer of linoleum in kitchen near curtain
4	Sealed manila envelope containing two swabs from bottom of removed linoleum from near kitchen sink
5	Sealed manila envelope containing two swabs from side of washer near sink in kitchen
6	Sealed brown paper bag containing the curtain from between kitchen and "playroom"
7	Sealed brown paper bag containing a portion of linoleum from in front of kitchen sink

All items collected from 1601 W. McAuley Drive, West Memphis, AR on May 3, 2011 between 1300-1600, packaged and sealed by Karen M. Bruewer

Sent to Angela Williamson at Bode Technology via Federal Express on May 3, 2011

Karen M. Bruewer 5-3-2011
1940

2504-114 EBH 529111

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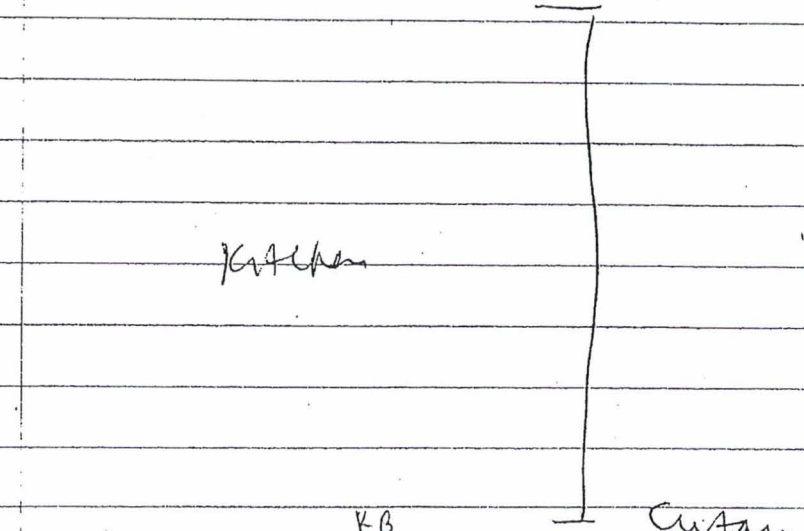
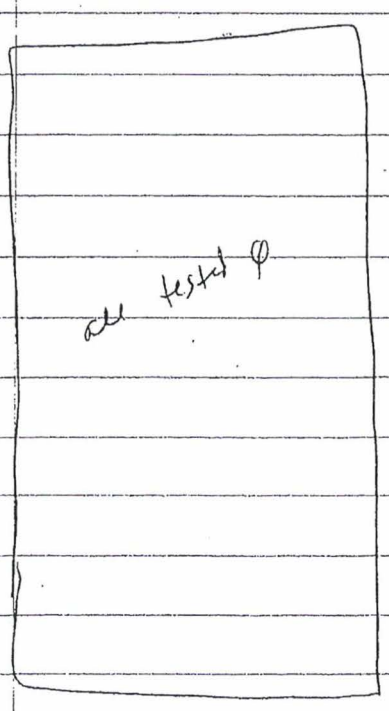
Case KMB 201101

Notes page 1 of 9

KMB
5-3-11

Entered house @ 1:00 pm 1601 S. McAuley Drive
W. Memphis, AR





Kitchen

other room
"playroom"

maroon lace side, ~~maroon~~ KB maroon satin Curtain Curtain

all tested ⌀

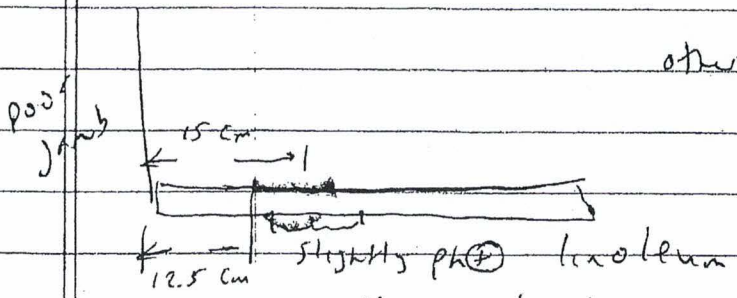
Kitchen side, other room side.
(playroom)

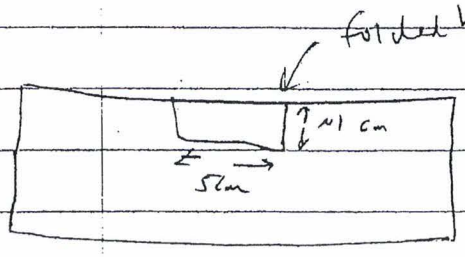
EBH 519111

2504-114 EBH 41 519111

Case KMB 201101 Kings

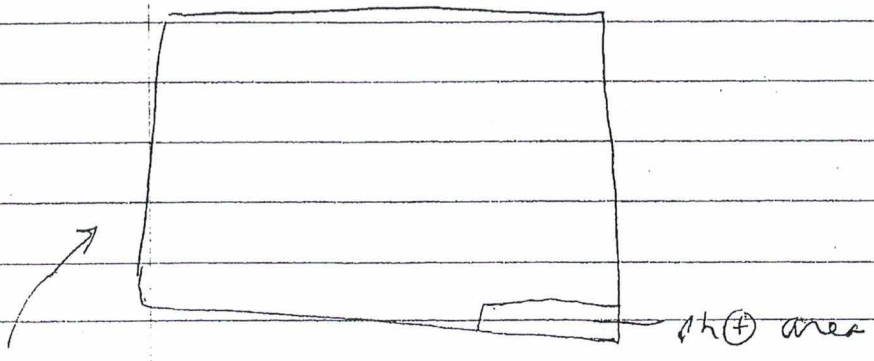
Notes page 2 of 9 5-3-11





photographs of linoleum - Jeff

Lonn. & Cuf portion out



12.5 cm / 17 cm cutters

Underside of linoleum Cut out

Saved as item 1, sealed

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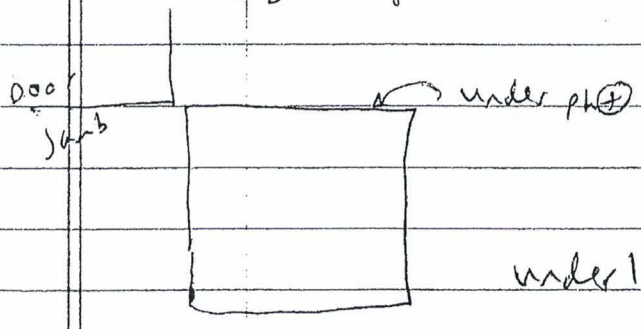
2504-114 EBH 579111

lcms 201101

Case ~~tcms 201101~~ lcms

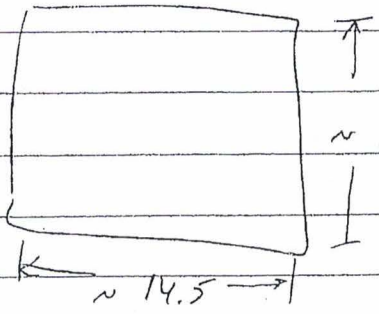
Notes page 3 of 9 5-3-11



underlinoleum layer
"under backing

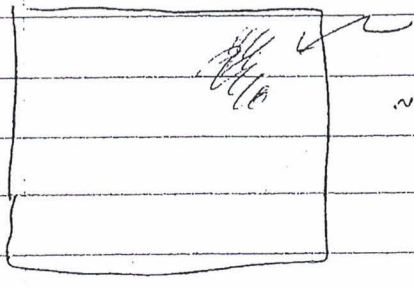
ph⊕ under this layer

photos - wide shot
close ups



Saved as item 2, sealed

Blue star



bottom layer
(old linoleum)

2504-114 EXH 5/9/11

Case Kmp201101 Kns

Notes page 4 of 9 5-3-11

Swabbed up area of blue star (+) onto swab
saved as item 3, sealed

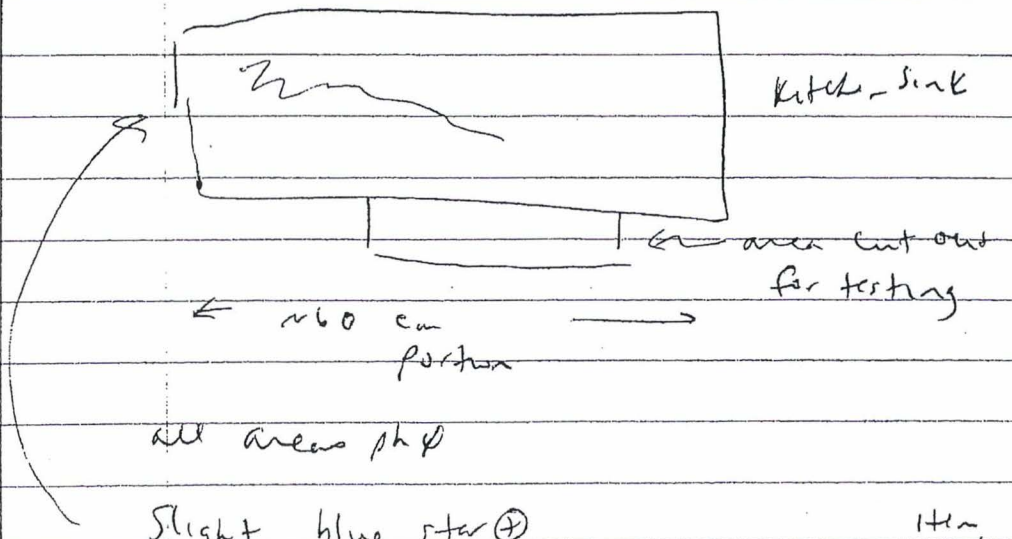
Blue star of maroon Curtain all ϕ

2S04-114 EBH 519111

Case # KMS20110101 KMS

Notes page 5 of 9 5-3-11

Under linoleum by Kitchen Sink



all areas ph Ø

Slight blue star ⊕ Item 4

Swabbed area, saved in envelope 4, sealed
Jeff photographing

no blue star Ø on bottom layer near sink

Saved piece of linoleum that was swabbed as Item 7.
sealed

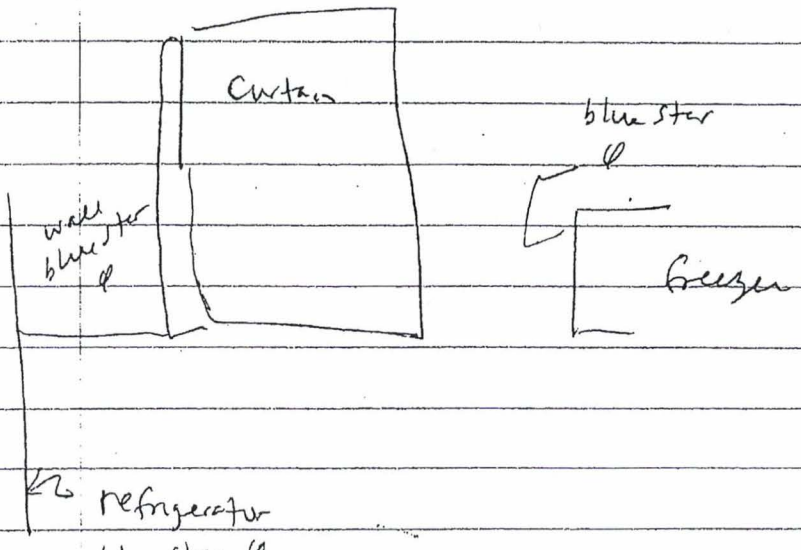
2504-114 EDN 57111

Case KMB201101 KMB

Notes page 6 of 9 5-3-11

Spray side of freezer near curtain with blue star φ

" - refrigerator, wall with blue star φ

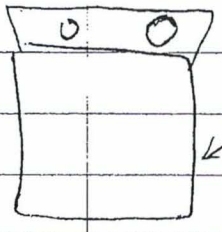


2504-114 EBN 5/9/11

Case KMS 201101 KMD

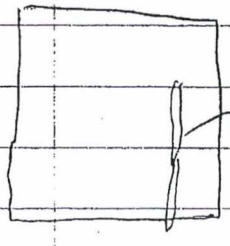
Note page 7 of 9 5-3-11

Washing machine



kit side near kitchen sink

blue star (F)
one streaky area



bs (F) ≈ 50 cm long

Side of washer towards kitchen
Saved onto swabs item 5

all other areas tested @ for blue star
top, front, other side, wall, floor

maroon curtain saved for further possible testing
as item 6, sealed

2504-114 EBN 579111

STAIN IDENTIFICATION WORK SHEET

Case Number KMB201101
Analyst KMB
Date 5-03-2011
Page 8 of 9

LOT NUMBERS

Phenolphthalein	# 3658 (Item #) no exp date
Heme-Stix	# 27708 exp 6-11-2012
Hexagon OBTI	# 11001 exp 07-2012
Blue Star	# 7718 exp 05-2013
Acid Phosphatase	# 10411 exp 04-2012
Other	NT

Positive Control	Kn. human Blood	Kn. Human Blood		Kn human Blood		
Result	+	+		+		
Negative Control	dH2O	dH2O		dH2O		
Result	∅	∅		∅		
Sample	Phenolophthalein	Heme-Stix	Hexagon OBTI	Blue Star	Acid Phosphatase	Other
Curtain lace front + back	all areas ∅			∅	NT	
Shag Curtain	all areas ∅			∅		
metal floor connector	∅			∅		
under linoleum	+		NT			NT
under backing top of old linoleum	+			+		
Kitchen Sink Cut out linoleum	all areas ∅			+		
Kitchen Freezer				∅		
Kitchen Fridge				∅		
Kitchen wall near curtain				∅		
Washer sink side				+		
all other areas				∅		

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ABBREVIATION PAGE

Ph	Phenolphthalein Presumptive Test for Blood
HS	Heme-Stix Presumptive Test for Blood
HX	Hexagon OBTI Confirmatory Test for Blood
BS	Blue Star Presumptive Test for Blood
AP	Acid Phosphatase
NT	Not Tested
NA	Not Applicable
STD	Standard
Kn	Known
+	Positive Result
0	Negative Result
Bg	Background
<	Less Than
>	More Than
~	Around

2504-114 EBH 5/9/11

Case # KMB201101

Item # Description

All items collected from Chevy Truck on May 4, 2011 between 1115-1630 at 15401 Goodman Road, Olive Branch, MS, packaged and sealed by Karen M. Bruewer

Item 8 Sealed manila envelope containing hair collected from the driver's side inside handle

Item 9 Sealed brown paper bag containing tape lift from bottom cushion of bench seat driver's side under steering wheel

Item 10 Sealed brown paper bag containing tape lift from bottom bench seat driver's side towards back of seat

Item 11 Sealed brown paper bag containing tape lift from middle bottom bench seat front

Item 12 Sealed brown paper bag containing tape lift from bottom bench seat middle towards back

Item 13 Sealed brown paper bag containing tape lift from passenger side bottom bench seat towards front

Item 14 Sealed brown paper bag containing tape lift from passenger side bottom bench seat towards ~~front~~ back

EBN 571011

Item 15 Sealed brown paper bag containing tape lift from back of bench seat, bottom half driver's side

Item 16 Sealed brown paper bag containing tape lift from back of bench seat, top half driver's side

Item 17 Sealed brown paper bag containing tape lift from back of bench seat, bottom half, middle

Item 18 Sealed brown paper bag containing tape lift from back of bench seat, passenger side bottom half

Item 19 Sealed brown paper bag containing tape lift from back of bench seat, top half, middle

Item 20 Sealed brown paper bag containing tape lift from back of bench seat, top half, passenger side

2504-114 EBN 579111 100

Item 21 Sealed brown paper bag containing one brown left hand glove found in truck with hair packaged in separate sealed envelope

Item 22 Sealed brown paper bag containing one brown right hand glove found in truck with hair packaged in separate sealed envelope

Item 23 Sealed brown paper bag containing a portion of vinyl seat back of driver's side of truck with a swab of the area packaged in a separate cardboard box

Sent to Angela Willamson at Bode Technology via Federal Express on May 4, 2011

Karen M. Brewer
1740 hours 5-4-11

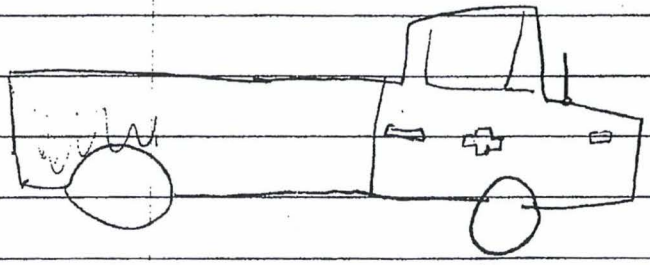
2504-114 EBN 519111

Case # KMB201101 5-4-11

Notes page 1 KmB

Chevrolet Truck Examination

Blue chevy truck - lots of rust on outside, flat tires, towed into exam area on flat bed truck



passenger side

11:15 start

Mixed blue star

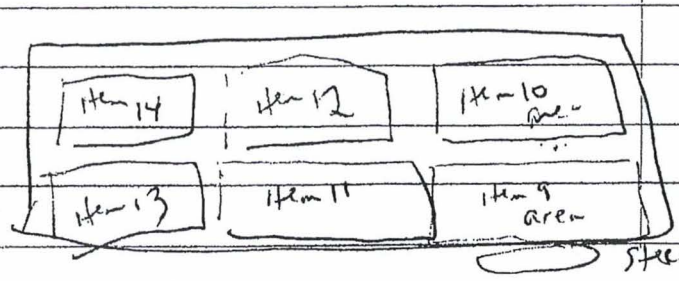
Inside door handle



Whitish hair like

collected into envelope 8, sealed

Tape lifts bottom cushion ~~on~~ KB of bench seat



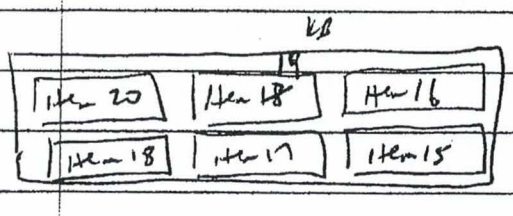
Steering wheel here

Driver's side

Case KmB201101 5-4-11

Notes page 2 KmB

Tape lifts of back cushion of bench seat



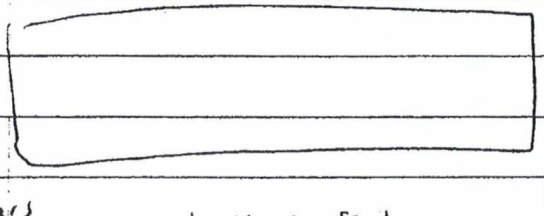
Passenger side

Driver's side

Items 15-20 tape lifts saved in separate paper bags, sealed

Seat 8 front + back bench all areas tested ph ∅

removed bench seat, testing back of seat



all ph ∅

Tested numerous areas on ceiling of truck, floor board after seat was removed Numerous brownish stains, rust-like areas all ph ∅ no hairs observed

Lots of debris - not collected

Removed cover of bench seat back and tested under cover: strong odor of mold-like aroma all areas ph ∅

Case KmB 201101 5-4-11

Notes page 3 KmB

Numerous brown cloth gloves observed in truck, I will do a search for stains on them

Glove - brown - ph Ø

Item 21 ~~S~~ Saved KB hair found on glove into envelope ~~Item 21A~~ KB Sealed and saved inside brown paper bag with glove, item sealed

Item 22 Glove - brown

hair observed - saved into envelope sealed and placed inside brown paper bag with glove, item sealed

Two additional gloves brown cloth examined - Both ph Ø and no hairs observed.

Two leather gloves examined, Both ph Ø, no hairs.

2S04-114 EBN 519111

Case KMØ201101 5-4-11

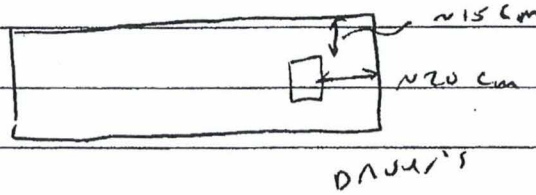
Notes page 4 KMØ

Blue Star examination ~3:30

Sprayed roof, sides, back, window, floorboards all BS Ø

moved seat to examine with BS

Driver side vinyl layer BS ⊕ area - swabbed and cut out area of interest. Saved as item 23 - swabs packed in ~~envelope~~ swab holder, sealed and placed inside bag with portion of seat., sealed KB



Under vinyl was a brownish stain on foam but it was phØ

STAIN IDENTIFICATION WORK SHEET

Case Number KmB201101
Analyst Kmf
Date 5-4-11
Page 5 of 6

LOT NUMBERS

Phenolphthalein	# 3658 (Item #) no exp date
Heme-Stix	# 27708 exp 6-11-2012
Hexagon OBTI	# 11001 exp 07-2012
Blue Star	# 7718 exp 05-2013
Acid Phosphatase	# 10411 exp 04-2012
Other	NT

Positive Control	Kn. human Blood	Kn. human Blood	Kn. human Blood	Kn. human Blood		
Result	+	NT	NT	+		
Negative Control	dH_2O	dH_2O	dH_2O	dH_2O		
Result	Ø	NT	NT	Ø		
Sample	Phenolophthalein	Heme-Stix	Hexagon OBTI	Blue Star	Acid Phosphatase	Other NT
inside truck – Bench seat front	all areas Ø			Ø		
Ceiling front	all areas Ø			Ø all areas		
floorboard	all areas Ø			Ø all areas	NT	
outside truck – Bench seat - back	all areas Ø			+ vinyl		
seat under upholstery	all areas Ø			Ø foam		
Brown gloves (4)	all areas Ø			NT		
leather gloves (2)	all areas Ø			NT		
black cover of bench seat	all areas Ø			Ø		
		NT	NT			

2504-114 EBH 5/9/11

Case Number KMB 201101
Analyst KMD
Page 6 of 6

ABBREVIATION PAGE

Ph	Phenolphthalein Presumptive Test for Blood
HS	Heme-Stix Presumptive Test for Blood
HX	Hexagon OBTI Confirmatory Test for Blood
BS	Blue Star Presumptive Tes for Blood
AP	Acid Phosphatase
NT	Not Tested
NA	Not Applicable
STD	Standard
Kn	Known
+	Positive Result
O	Negative Result
Bg	Background
<	Less Than
>	More Than
~	Around

2S04-114 EBN 519111

Case Submission Form

Bode Technology
Part of GlobalOptions Group

Bode Case No (To be filled out by Bode): 2504-114

In order to process your DNA casework efficiently, this form must be filled out and sent along with the evidence. Prior to submitting a case, please call Customer Services 866-BODE-4-ID (866-263-3443).

The Bode Technology Group
10430 Furnace Rd. Suite 107
Lorton, VA 22079
Phone: 703-646-9740
Fax: 703-646-9742
www.bodetech.com

Submitting Agency: Ropes + Gray LLP Date: 5/5/11

Name: Stephen L. Braga Phone Number: 202-508-4655

Select the type of Submission:

☐ Initial Evidence Submission ☒ Additional Evidence Submission (Please fill in Bode Case number at the top of the page)

Select the type of Service:

☐ Standard Service - Our standard service provides complete analysis of your samples when rush services are not required.

☒ Rush Service - This is the fastest service offered. Please contact Customer Service for turnaround time (Additional charge per sample).

Promotion Code: _____

☒ 5 business days ☐ 10 business days ☐ 15 business days

Authorized Point(s) of Contact:

Name:	STEPHEN L. BRAGA	Name:	
Agency:	ROPES + GRAY LLP	Agency:	
Title:	PARTNER	Title:	
Phone Number:	202-508-4655	Phone Number:	
Fax Number:	202-383-9821	Fax Number:	
Cell Phone/Pager:	617-304-7124	Cell Phone/Pager:	
Email Address:	stephen.braga@ropesgray.com	Email Address:	

Mailing Address (Where The Report Should be Sent):

Name:	Same as above
Agency:	
Address:	
City/State/Zip:	
Phone Number:	
Fax Number:	
Email Address:	

Billing Address:

Name:	Same as above
Agency:	
Address:	
City/State/Zip:	
Phone Number:	
Fax Number:	
Email Address:	
Purchase Order #	

Evidence Return Address:

Name:	
Agency:	
Address:	
City/State/Zip:	
Phone Number:	
Email Address:	

Select type of Evidence Return:

☐ Evidence should be returned following delivery of the case report.

☒ Evidence should be returned upon request from the Authorized Point of Contact(s).

2504-114 EBH 5/9/11

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Case Submission Form

Bode Technology
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Bode Case No (To be filled out by Bode): 2504 - 114

In order to process your DNA casework efficiently, this form must be filled out and sent along with the evidence. Prior to submitting a case, please call Customer Services 866-BODE-4-ID (866-263-3443).

Submitting Agency Reference/Case No: _____

The Bode Technology Group
10430 Furnace Rd. Suite 107
Lorton, VA 22079
Phone: 703-646-9740
Fax: 703-646-9742
www.bodetech.com

Case Background:

These twenty-three items of evidence are believed to contain blood, hair and/or other biological materials, which are to be DNA-tested to the highest capability possible and then compared for possible matches to the known victim profiles.

Specify platform (AB/Hitachi), kit (Co/Pro+, ID, PP16, PP16BIO, PPY, YFiler, miniFiler), and software (GS/GT, GMID) preferences. If no preference, check box for Analyst Discretion

☒ Analyst Discretion

List Evidence Items* (If needed, use Page 3 to include additional items or case information) Note: Descriptions may be reflected in Chain of Custody and Report	Please check the appropriate boxes for Pre-Screening and DNA Testing Requested	Permission to Consume (If necessary)
– 23 items listed on attached page (as applicable to the different items)	Pre-Screen: ☒ Blood ☐ Semen ☐ Saliva ☒ Hair DNA Testing: ☒ STR ☒ miniSTR ☒ Y-STR ☒ mtDNA	☒ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No

☐ Check if additional evidence items or testing instructions are listed on Page 3

* When submitting extracts, the reagent blanks must also be included. Please be sure to include the following information: Total Human Quant, Total Y Quant, Volume Remaining, and Extraction Control Names associated with samples.

If STR data is obtained, will CODIS entry or search be requested? ☐ Yes ☒ No

(NOTE: Private Forensic DNA laboratories do not have access to enter or search samples in CODIS. If "yes" is marked, Bode will contact the appropriate CODIS laboratory Technical Leader prior to initiation of this case. Please be aware that this may increase the turnaround time.

I hereby certify that the information provided on this Case Submission Form is accurate to the best of my knowledge. I understand that I will be charged for services according to the fee schedule that I have received.

Print Name STEPHEN L. BRAGA Signature _____

Please submit this completed form with the evidence. All evidence items must be shipped using a traceable carrier (i.e. FedEx, UPS, DHL, Priority Mail). Overnight shipping is recommended. The evidence should be shipped to:

ATTN: EVIDENCE DEPARTMENT
Bode Technology
10430 Furnace Rd. Suite 107
Lorton, VA 22079

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2504-114 EBN 5/9/11

Case Submission Form

Bode Technology
Part of GlobalOptions Group

Bode Case No (To be filled out by Bode): 2504-114

In order to process your DNA casework efficiently, this form must be filled out and sent along with the evidence. Prior to submitting a case, please call Customer Services 866-BODE-4-ID (866-263-3443).

The Bode Technology Group
10430 Furnace Rd. Suite 107
Lorton, VA 22079
Phone: 703-646-9740
Fax: 703-646-9742
www.bodetech.com

Submitting Agency: Ropes + Gray, LLP Date: 5/4/11

Name: Stephen L. Braga Phone Number: 202-508-4655

Select the type of Submission:

☐ Initial Evidence Submission ☒ Additional Evidence Submission (Please fill in Bode Case number at the top of the page)

Select the type of Service:

☐ Standard Service - Our standard service provides complete analysis of your samples when rush services are not required.

☒ Rush Service - This is the fastest service offered. Please contact Customer Service for turnaround time (Additional charge per sample).

Promotion Code: _____

☒ 5 business days ☐ 10 business days ☐ 15 business days

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Agency:	ROPES + GRAY LLP	Agency:	
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Fax Number:	202-383-9821	Fax Number:	
Cell Phone/Pager:	617-304-7124	Cell Phone/Pager:	
Email Address:	stephen.braga@ropesgray.com	Email Address:	

Mailing Address (Where The Report Should be Sent):

Name:	Same as above
Agency:	
Address:	
City/State/Zip:	
Phone Number:	
Fax Number:	
Email Address:	

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Evidence Return Address:

Name:	
Agency:	
Address:	
City/State/Zip:	
Phone Number:	
Email Address:	

Select type of Evidence Return:

☐ Evidence should be returned following delivery of the case report.

☒ Evidence should be returned upon request from the Authorized Point of Contact(s).

2504-114 EVH 5/9/11

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Case Submission Form

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Part of GlobalOptions Group

Bode Case No (To be filled out by Bode): 2504 - 114

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Submitting Agency Reference/Case No: _____

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10430 Furnace Rd. Suite 107
Lorton, VA 22079
Phone: 703-646-9740
Fax: 703-646-9742
www.bodetech.com

Case Background:

These seven items of evidence are believed to contain blood and/or other biological material, to be DNA-tested to the highest capability possible and then compared for possible matches to known profiles.

Specify platform (AB/Hitachi), kit (Co/Pro+, ID, PP16, PP16BIO, PPY, YFiler, miniFiler), and software (GS/GT, GMID) preferences. If no preference, check box for Analyst Discretion

☒ Analyst Discretion

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	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No

☐ Check if additional evidence items or testing instructions are listed on Page 3

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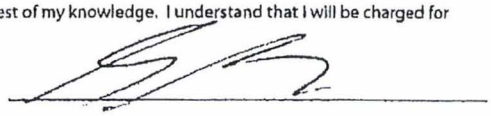
Print Name STEPHEN L. BRAGA Signature 

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ATTN: EVIDENCE DEPARTMENT
Bode Technology
10430 Furnace Rd. Suite 107
Lorton, VA 22079

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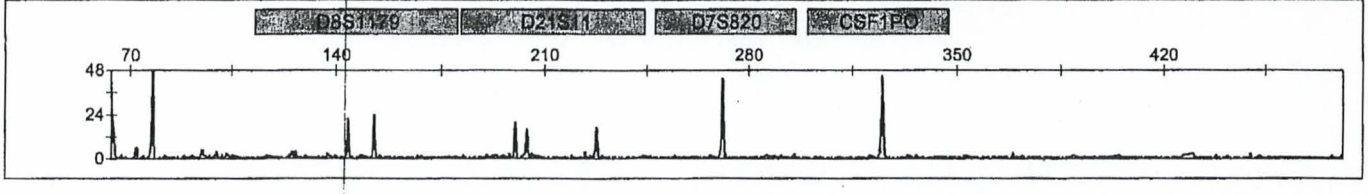
2504-114 EBN 519111

Applied Biosystems

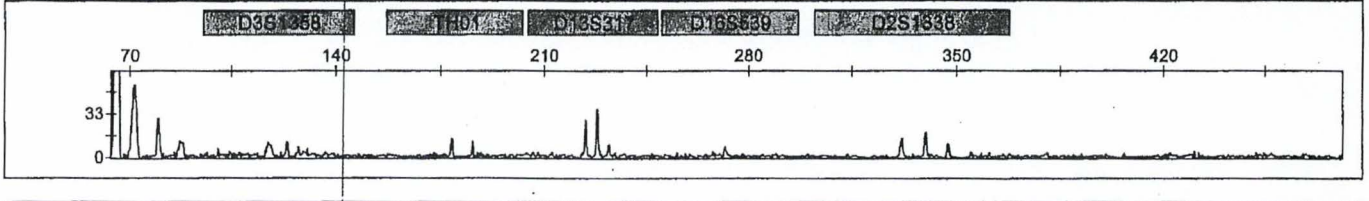
GeneMapper ID v3.2.1

GMID14_051011-AMB3_2S04-114_ABG_ID

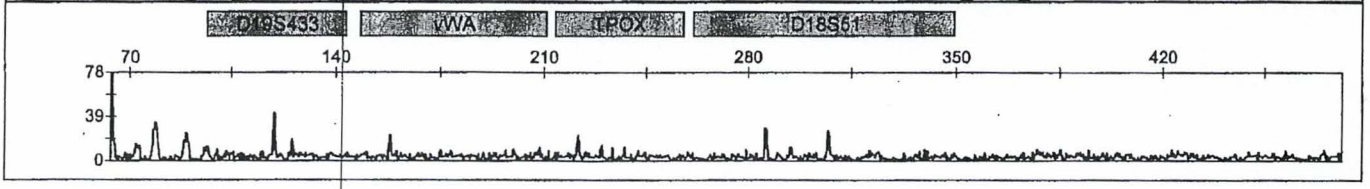
Sample File	Sample Name	Panel	SQ
1_2S04-114-55a1.1_D04_051011-AMB3_08.fsa	2S04-114-55a1.1	Identifiler_Bode_v2	



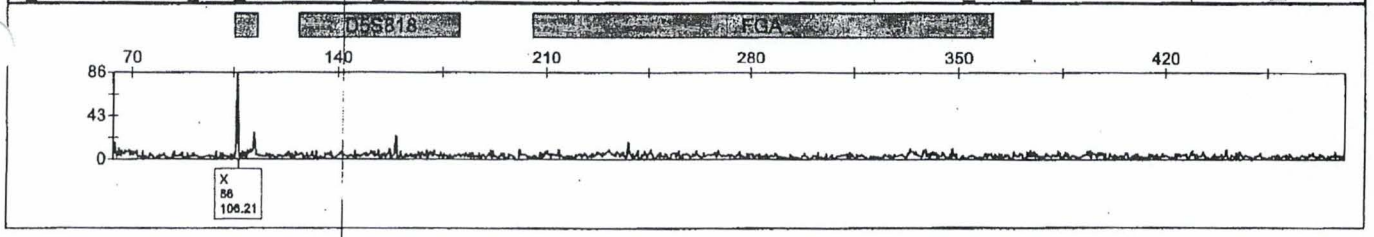
1_2S04-114-55a1.1_D04_051011-AMB3_08.fsa	2S04-114-55a1.1	Identifiler_Bode_v2	



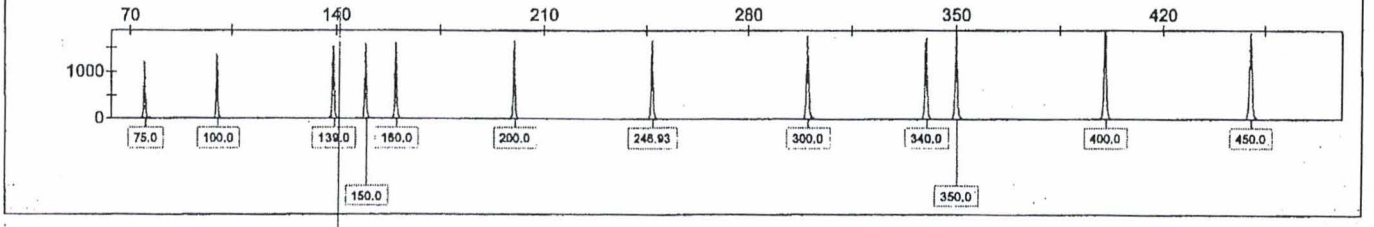
1_2S04-114-55a1.1_D04_051011-AMB3_08.fsa	2S04-114-55a1.1	Identifiler_Bode_v2	



1_2S04-114-55a1.1_D04_051011-AMB3_08.fsa	2S04-114-55a1.1	Identifiler_Bode_v2	



1_2S04-114-55a1.1_D04_051011-AMB3_08.fsa	2S04-114-55a1.1	Identifiler_Bode_v2	



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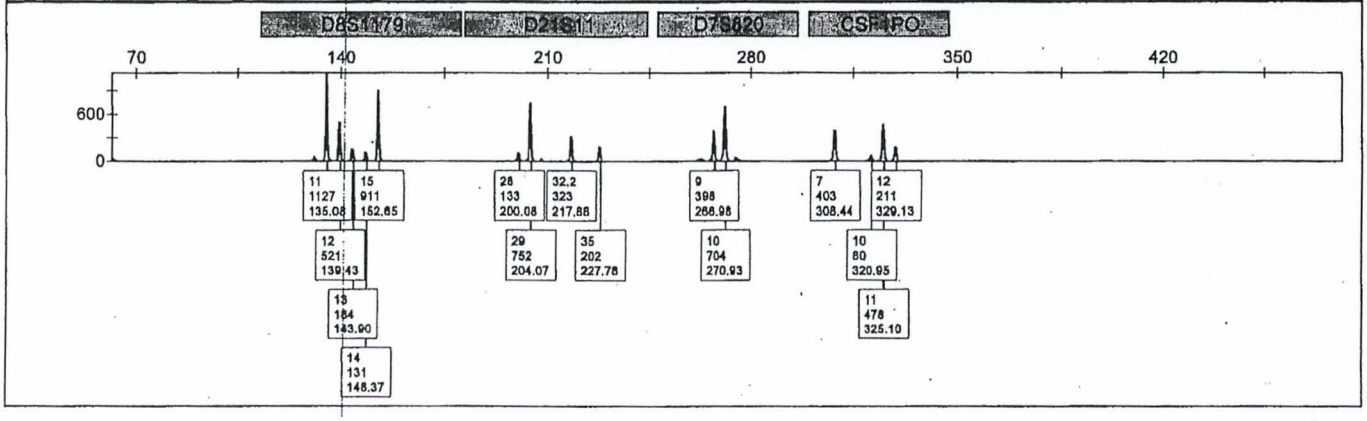
Applied Biosystems

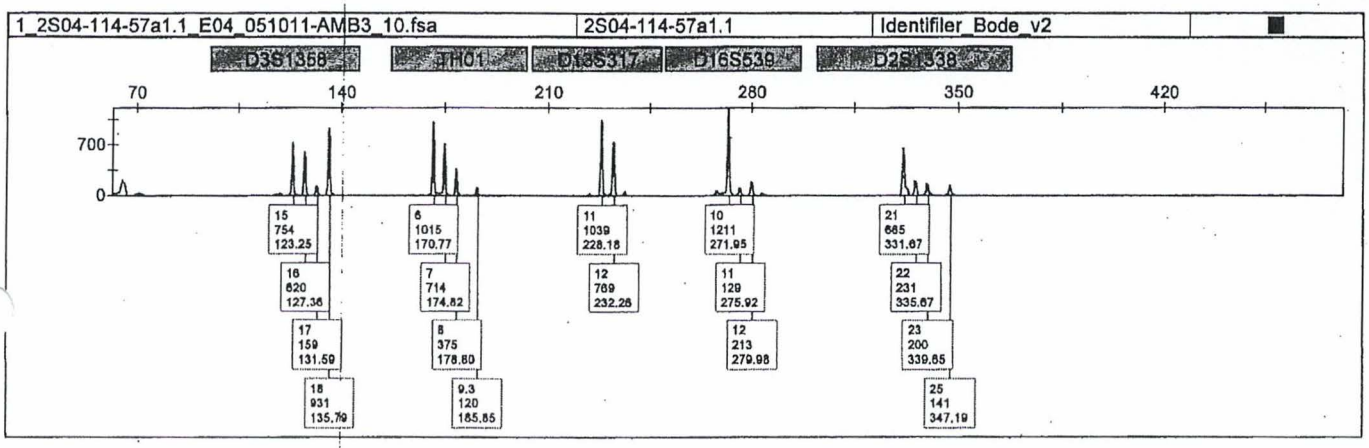
neMapper ID v3.2.1

GMID14_051011-AMB3_2S04-114_ABG_ID

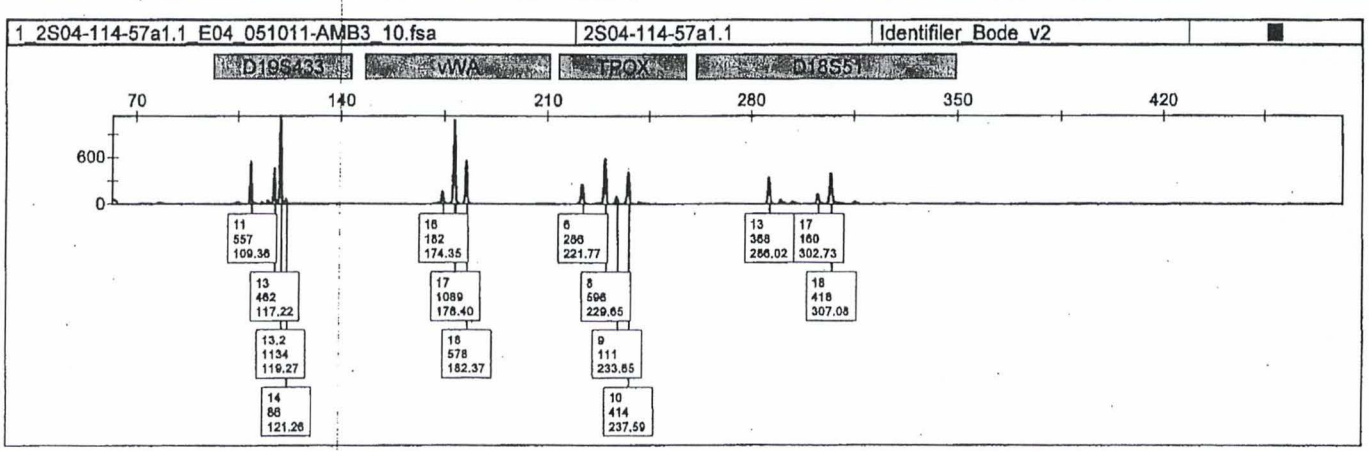
Sample File	Sample Name	Panel	SQ
1_2S04-114-57a1.1_E04_051011-AMB3_10.fsa	2S04-114-57a1.1	Identifiler_Bode_v2	



1_2S04-114-57a1.1_E04_051011-AMB3_10.fsa	2S04-114-57a1.1	Identifiler_Bode_v2	



1_2S04-114-57a1.1_E04_051011-AMB3_10.fsa	2S04-114-57a1.1	Identifiler_Bode_v2	



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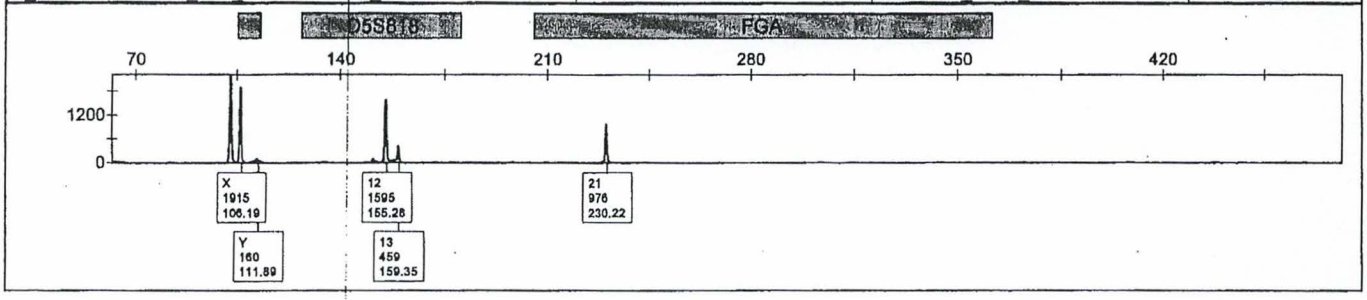
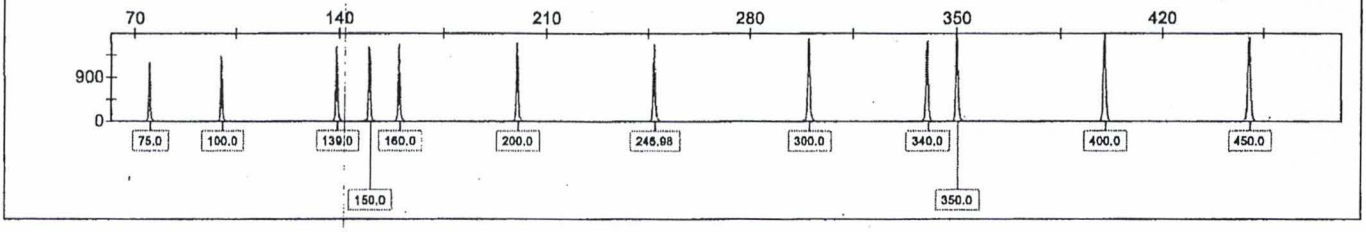
Sample File	Sample Name	Panel	SQ
1_2S04-114-57a1.1_E04_051011-AMB3_10.fsa	2S04-114-57a1.1	Identifiler_Bode_v2	



1_2S04-114-57a1.1_E04_051011-AMB3_10.fsa	2S04-114-57a1.1	Identifiler_Bode_v2	

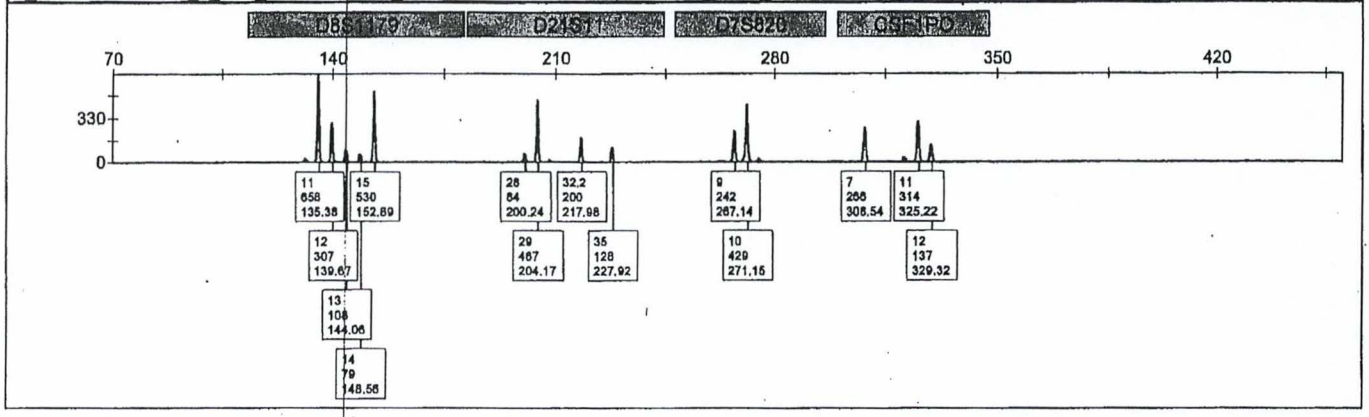


Applied Biosystems

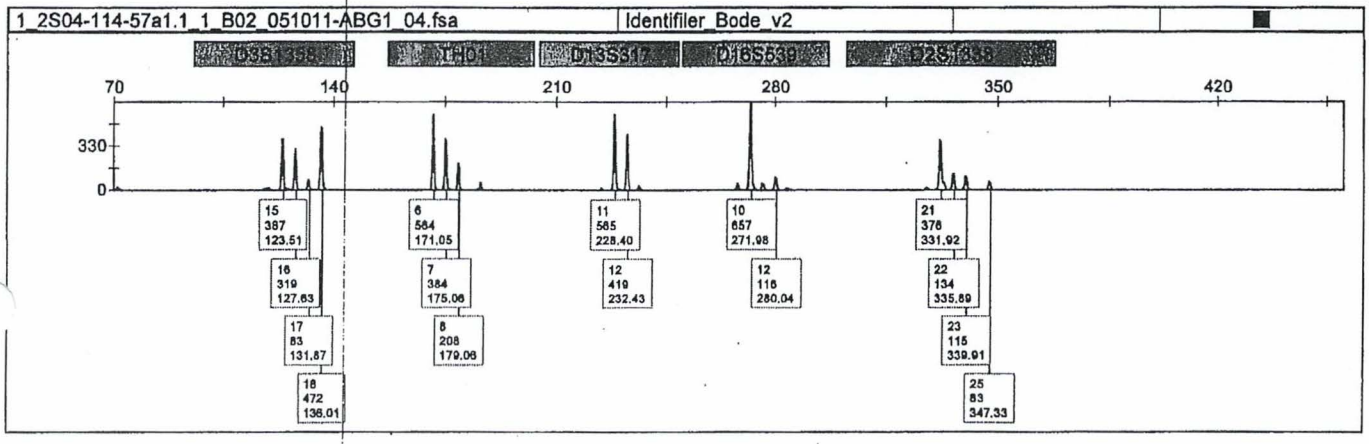
neMapper ID v3.2.1

GMID11_051011-ABG1_2S04-114_EBH_ID

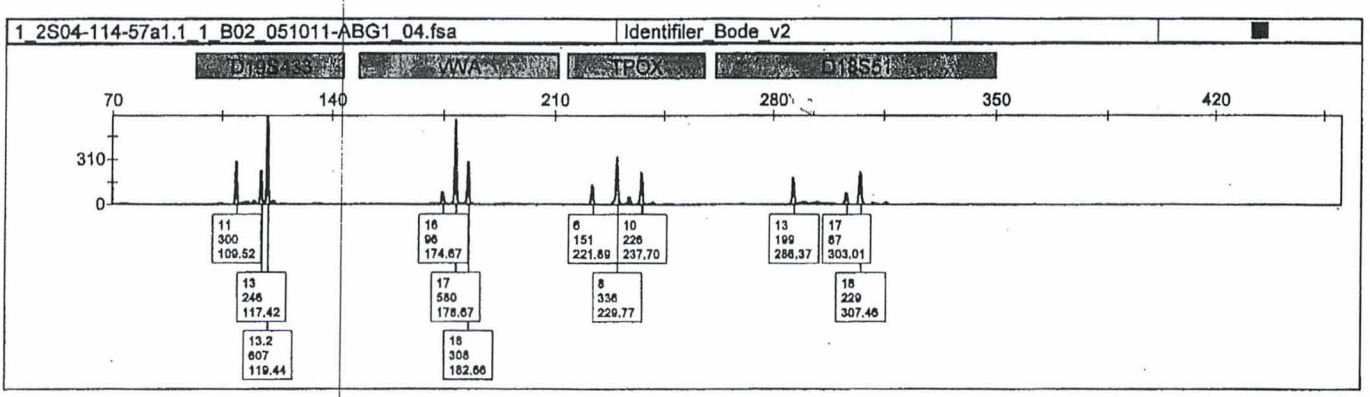
Sample File	Panel	SQO	SQ
1_2S04-114-57a1.1_1_B02_051011-ABG1_04.fsa	Identifiler_Bode_v2		



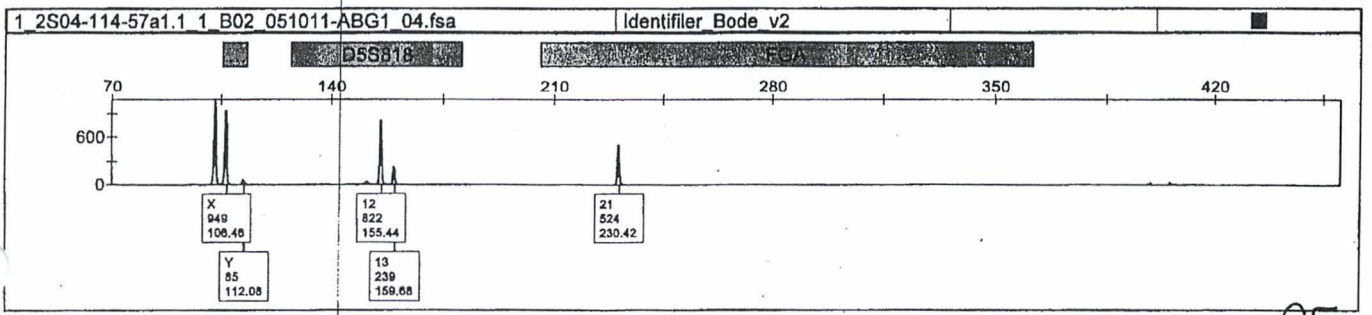
1_2S04-114-57a1.1_1_B02_051011-ABG1_04.fsa	Identifiler_Bode_v2		



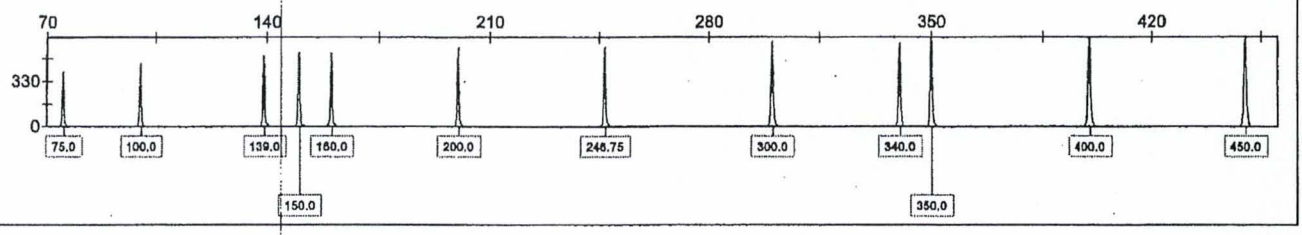
1_2S04-114-57a1.1_1_B02_051011-ABG1_04.fsa	Identifiler_Bode_v2		



1_2S04-114-57a1.1_1_B02_051011-ABG1_04.fsa	Identifiler_Bode_v2		



Sample File	Panel	SQO	SQ
1_2S04-114-57a1.1_1_B02_051011-ABG1_04.fsa	Identifiler_Bode_v2		



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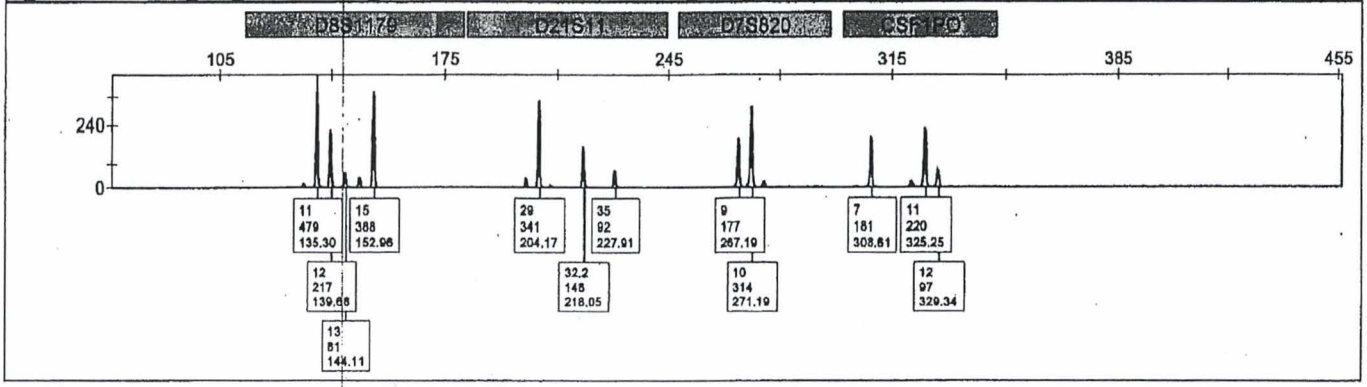
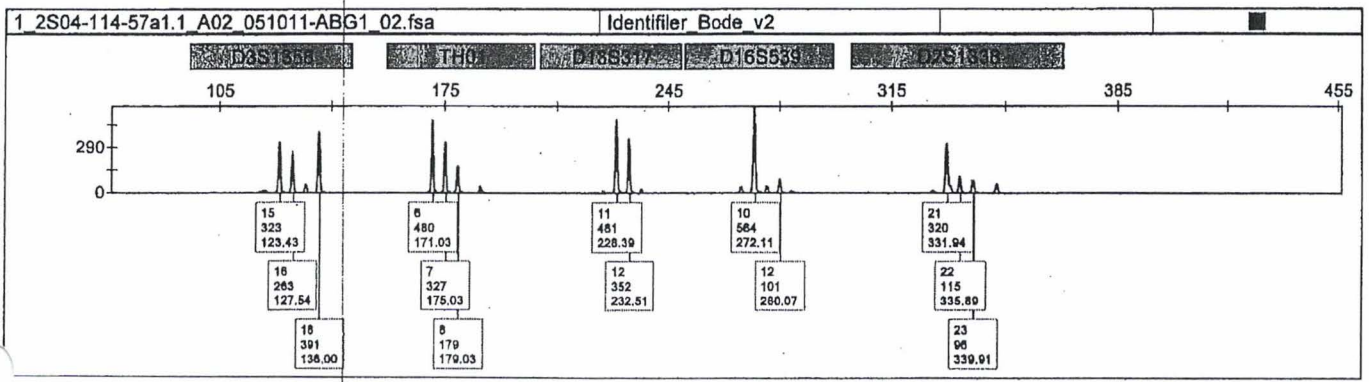
neMapper ID v3.2.1

GMID11_051011-ABG1_2S04-114_EBH_ID

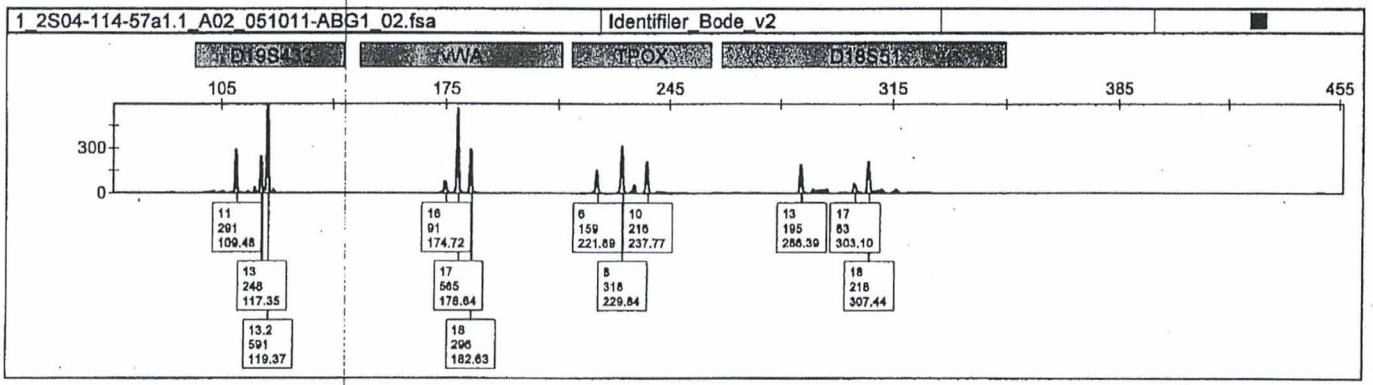
Sample File	Panel	SQO	SQ
1_2S04-114-57a1.1_A02_051011-ABG1_02.fsa	Identifiler_Bode_v2		



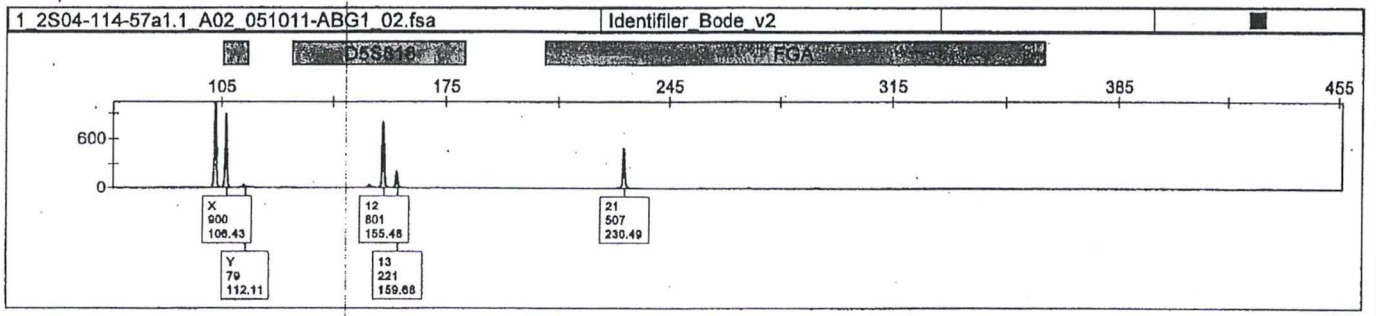
1_2S04-114-57a1.1_A02_051011-ABG1_02.fsa | Identifiler_Bode_v2



1_2S04-114-57a1.1_A02_051011-ABG1_02.fsa | Identifiler_Bode_v2



1_2S04-114-57a1.1_A02_051011-ABG1_02.fsa | Identifiler_Bode_v2



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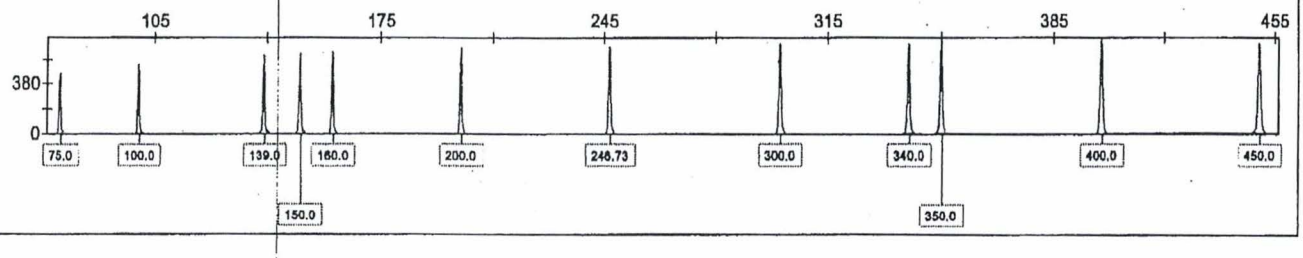
Sample File	Panel	SQO	SQ
1_2S04-114-57a1.1_A02_051011-ABG1_02.fsa	Identifiler_Bode_v2		



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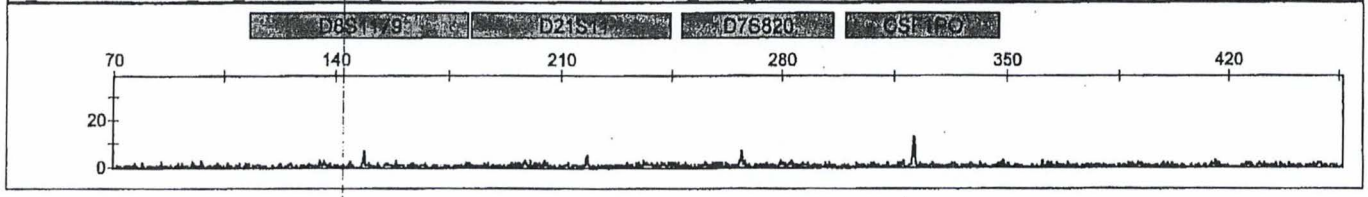
Applied Biosystems

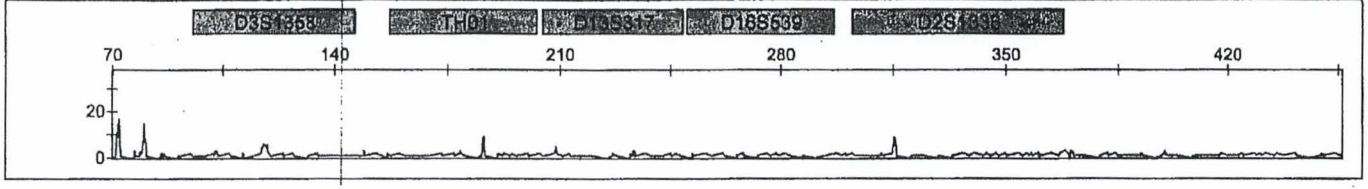
neMapper ID v3.2.1

GMID11_051011-ABG1_2S04-114_EBH_ID

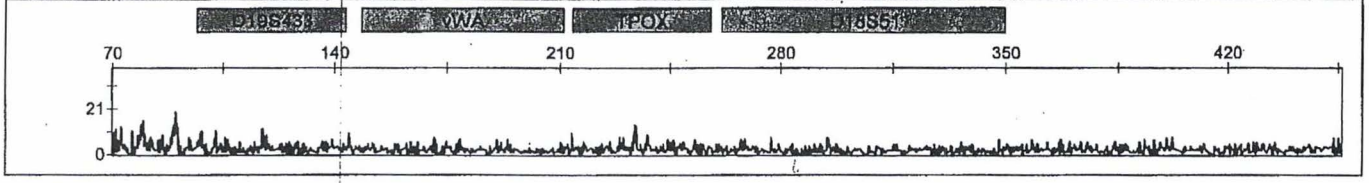
Sample File	Panel	SQO	SQ
1_2S04-114-61a1.1_A01_051011-ABG1_01.fsa	Identifiler_Bode_v2		



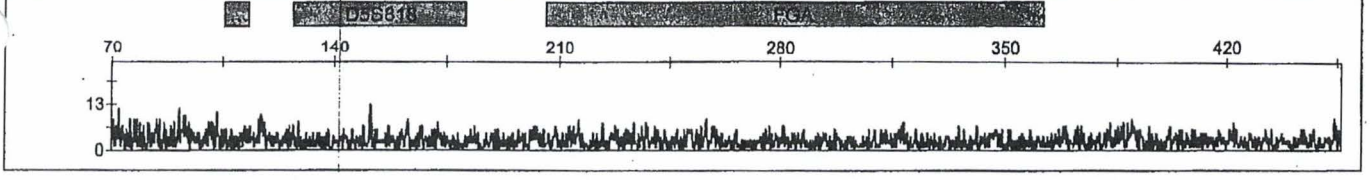
1_2S04-114-61a1.1_A01_051011-ABG1_01.fsa | Identifiler_Bode_v2



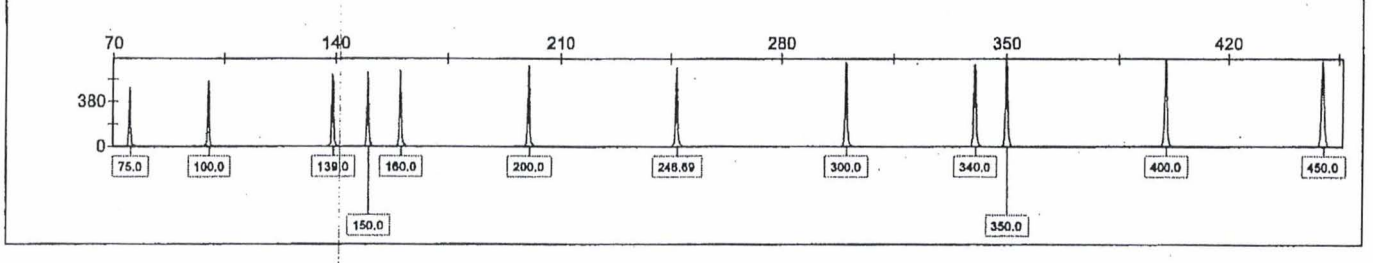
1_2S04-114-61a1.1_A01_051011-ABG1_01.fsa | Identifiler_Bode_v2



1_2S04-114-61a1.1_A01_051011-ABG1_01.fsa | Identifiler_Bode_v2



1_2S04-114-61a1.1_A01_051011-ABG1_01.fsa | Identifiler_Bode_v2



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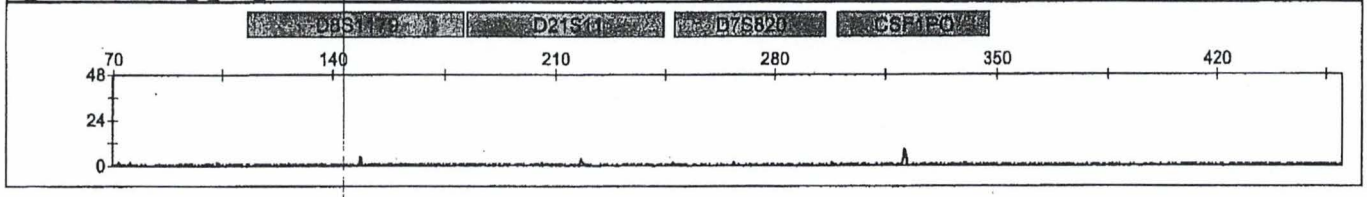
Applied Biosystems

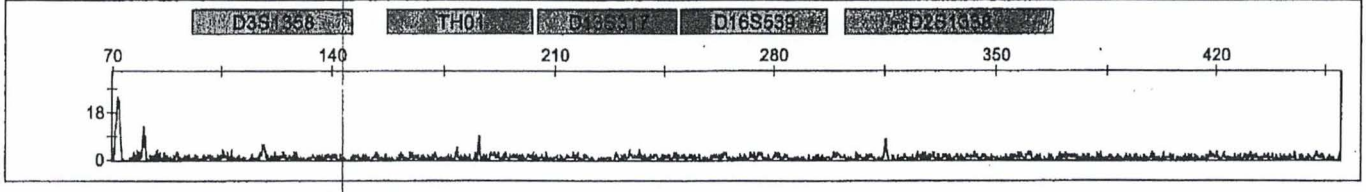
neMapper ID v3.2.1

GMID11_051011-ABG1_2S04-114_EBH_ID

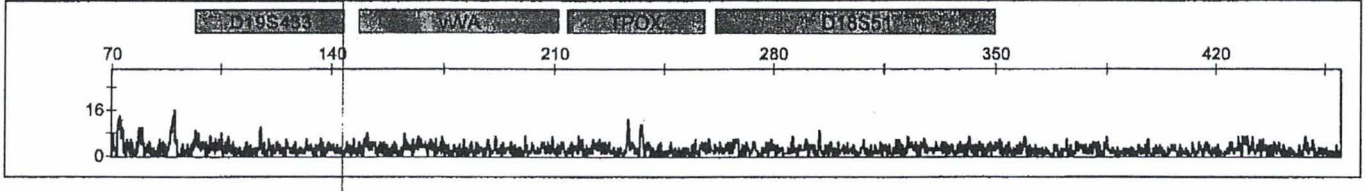
Sample File	Panel	SQO	SQ
1_2S04-114-61a1.1_1_B01_051011-ABG1_03.fsa	Identifiler_Bode_v2		



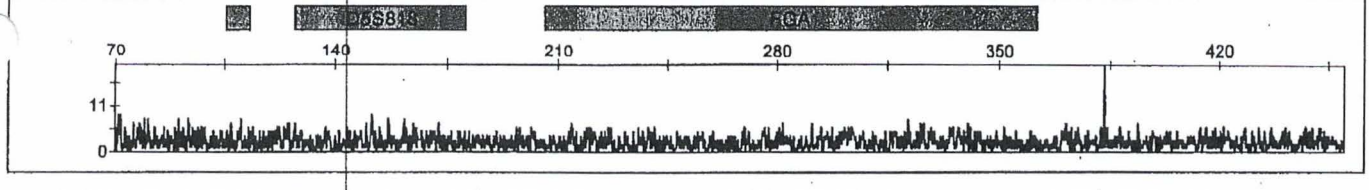
1_2S04-114-61a1.1_1_B01_051011-ABG1_03.fsa | Identifiler_Bode_v2



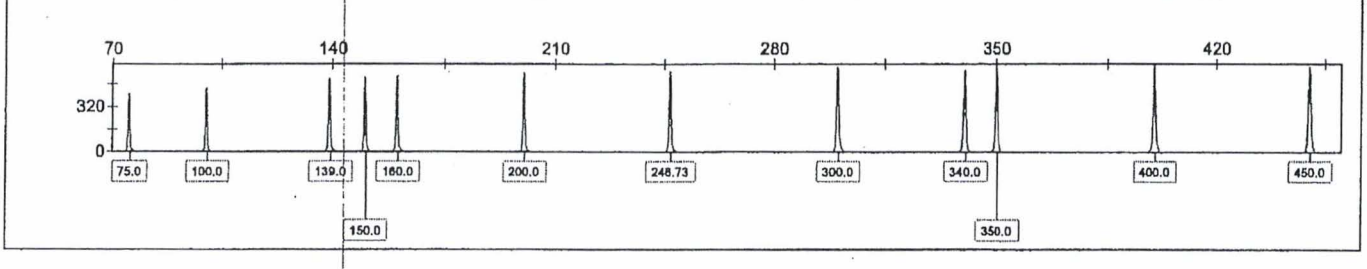
1_2S04-114-61a1.1_1_B01_051011-ABG1_03.fsa | Identifiler_Bode_v2



1_2S04-114-61a1.1_1_B01_051011-ABG1_03.fsa | Identifiler_Bode_v2



1_2S04-114-61a1.1_1_B01_051011-ABG1_03.fsa | Identifiler_Bode_v2



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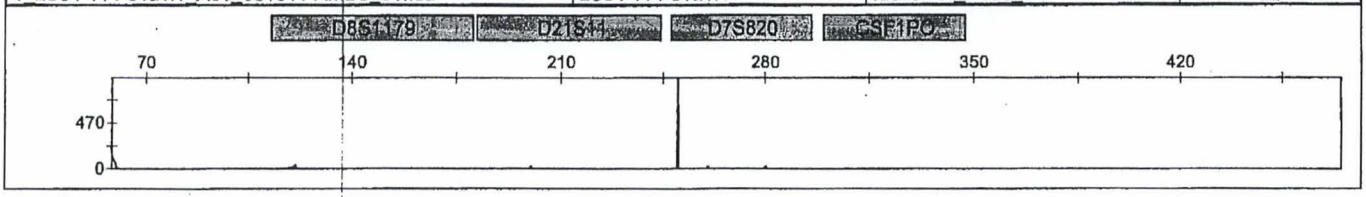
Applied Biosystems

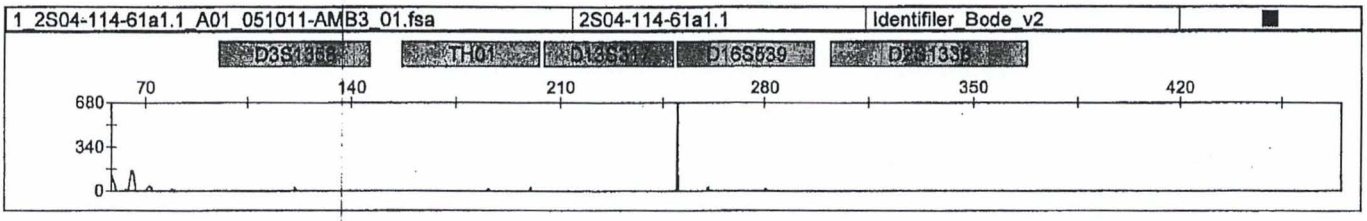
neMapper ID v3.2.1

GMID14_051011-AMB3_2S04-114_ABG_ID

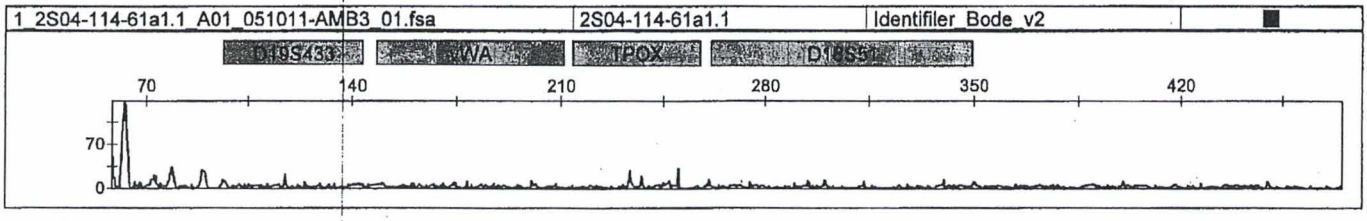
Sample File	Sample Name	Panel	SQ
1_2S04-114-61a1.1_A01_051011-AMB3_01.fsa	2S04-114-61a1.1	Identifiler_Bode_v2	



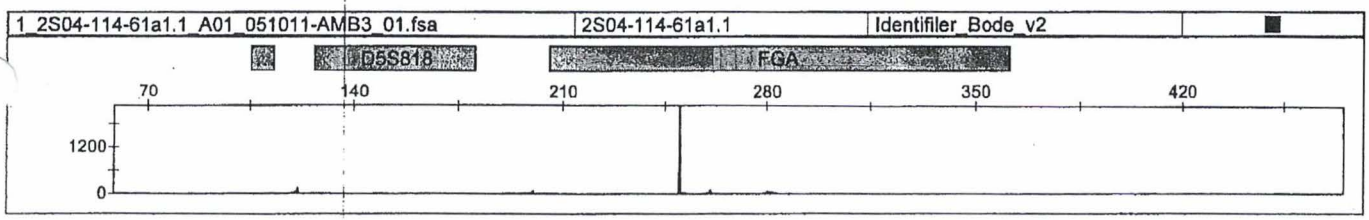
1_2S04-114-61a1.1_A01_051011-AMB3_01.fsa	2S04-114-61a1.1	Identifiler_Bode_v2	



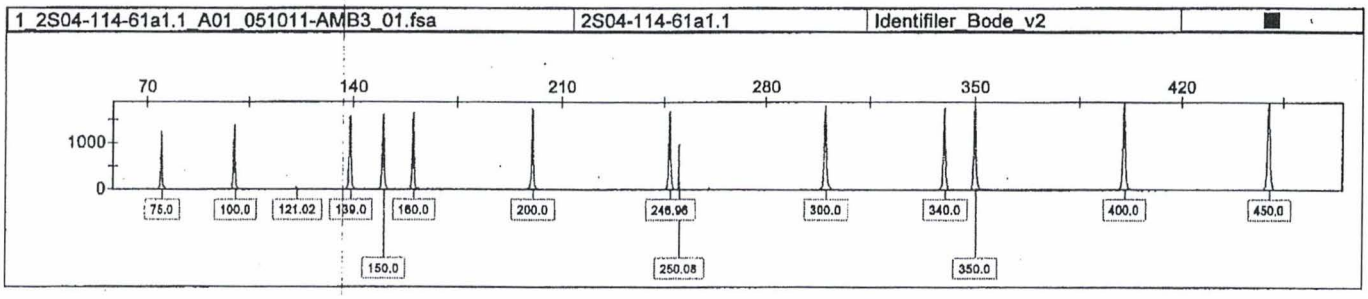
1_2S04-114-61a1.1_A01_051011-AMB3_01.fsa	2S04-114-61a1.1	Identifiler_Bode_v2	



1_2S04-114-61a1.1_A01_051011-AMB3_01.fsa	2S04-114-61a1.1	Identifiler_Bode_v2	



1_2S04-114-61a1.1_A01_051011-AMB3_01.fsa	2S04-114-61a1.1	Identifiler_Bode_v2	

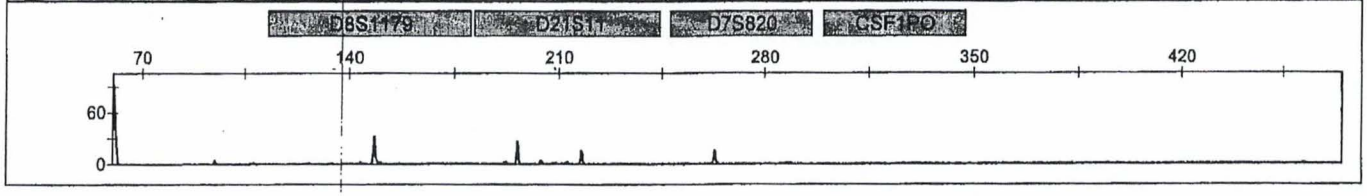


Applied Biosystems

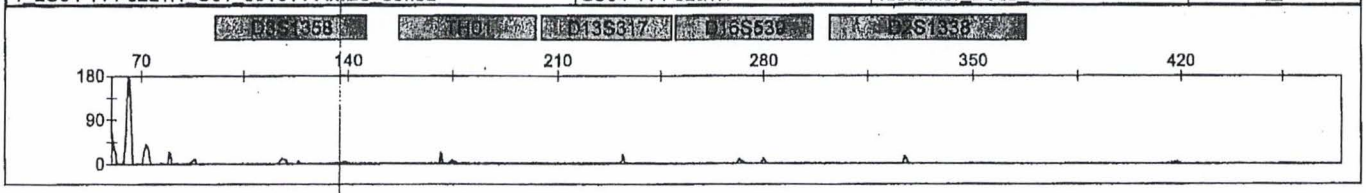
neMapper ID v3.2.1

GMID14_051011-AMB3_2S04-114_ABG_[illegible]

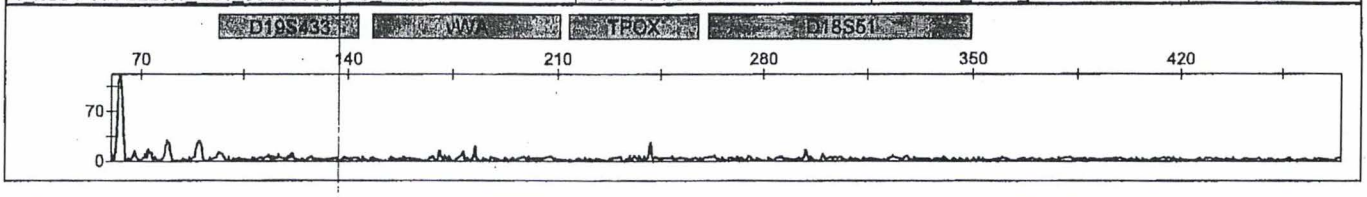
Sample File	Sample Name	Panel	SQ
1_2S04-114-62a1.1_C01_051011-AMB3_05.fsa	2S04-114-62a1.1	Identifiler_Bode_v2	



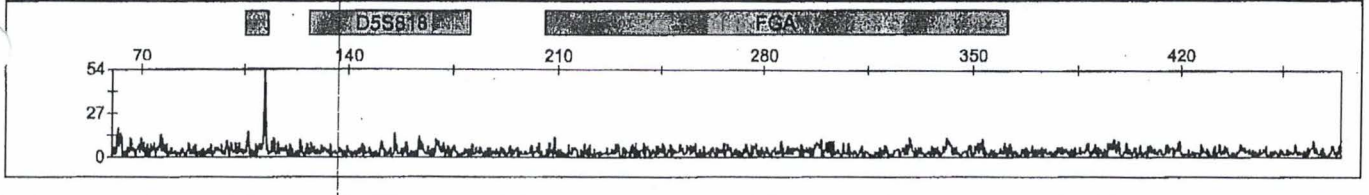
1_2S04-114-62a1.1_C01_051011-AMB3_05.fsa	2S04-114-62a1.1	Identifiler_Bode_v2	



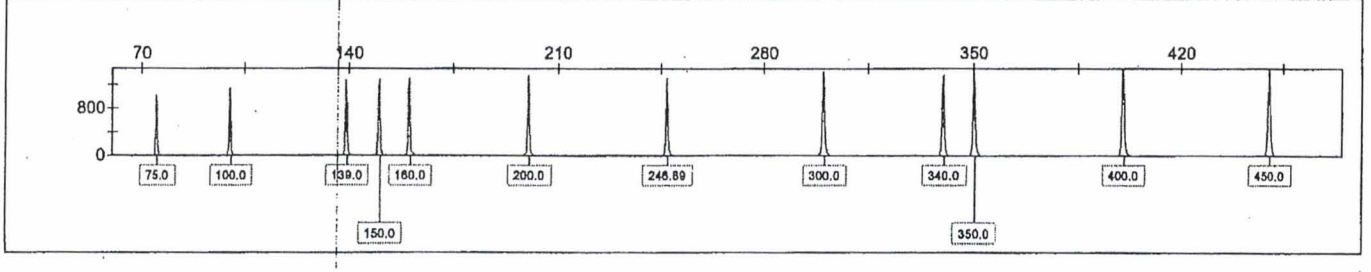
1_2S04-114-62a1.1_C01_051011-AMB3_05.fsa	2S04-114-62a1.1	Identifiler_Bode_v2	



1_2S04-114-62a1.1_C01_051011-AMB3_05.fsa	2S04-114-62a1.1	Identifiler_Bode_v2	



1_2S04-114-62a1.1_C01_051011-AMB3_05.fsa	2S04-114-62a1.1	Identifiler_Bode_v2	



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Tue May 10,2011 08:00PM, EDT

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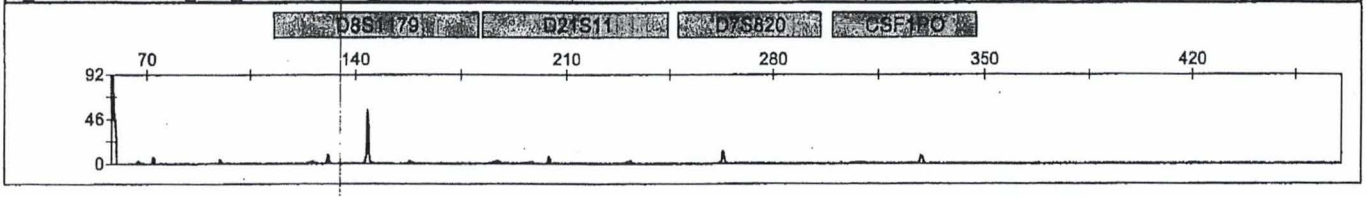
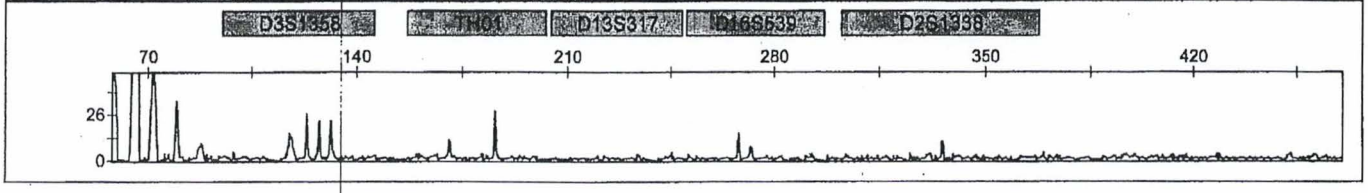
neMapper ID v3.2.1

GMID14_051011-AMB3_2S04-114_ABG_ID

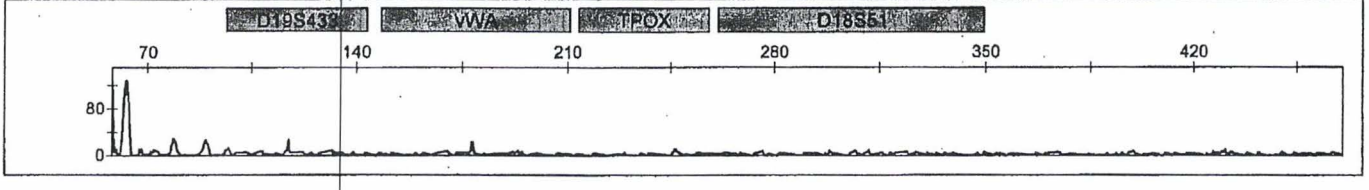
Sample File	Sample Name	Panel	SQ
1_2S04-114-63a1.1_E01_051011-AMB3_09.fsa	2S04-114-63a1.1	Identifiler_Bode_v2	



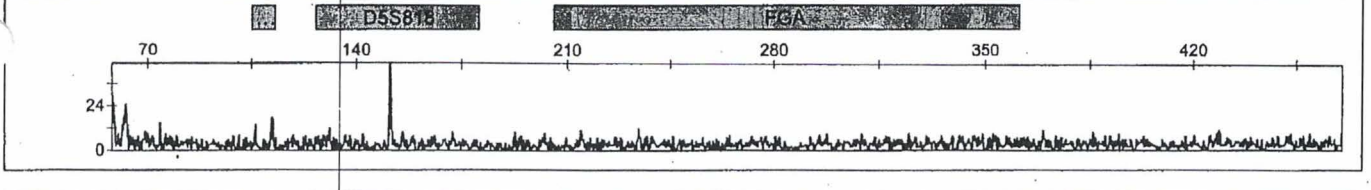
1_2S04-114-63a1.1_E01_051011-AMB3_09.fsa	2S04-114-63a1.1	Identifiler_Bode_v2	



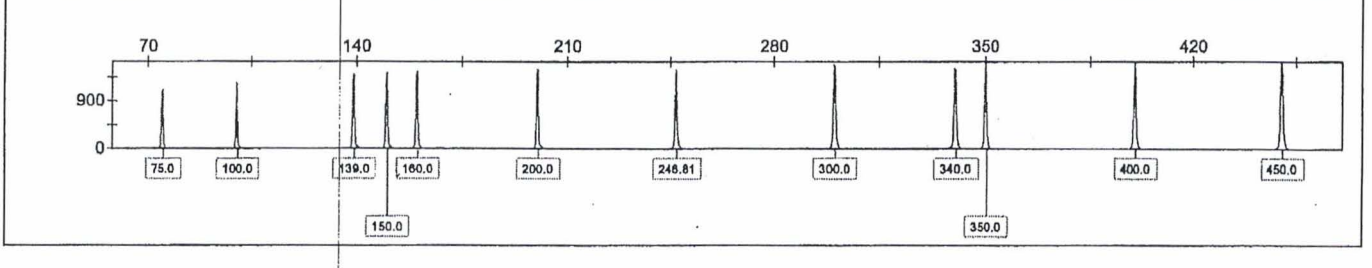
1_2S04-114-63a1.1_E01_051011-AMB3_09.fsa	2S04-114-63a1.1	Identifiler_Bode_v2	



1_2S04-114-63a1.1_E01_051011-AMB3_09.fsa	2S04-114-63a1.1	Identifiler_Bode_v2	



1_2S04-114-63a1.1_E01_051011-AMB3_09.fsa	2S04-114-63a1.1	Identifiler_Bode_v2	



Applied Biosystems

neMapper ID v3.2.1

GMID14_051011-AMB3_2S04-114_ABG_ID

Sample File	Sample Name	Panel	SQ
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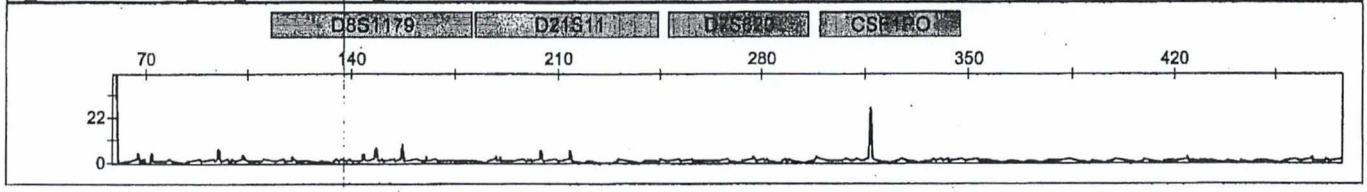
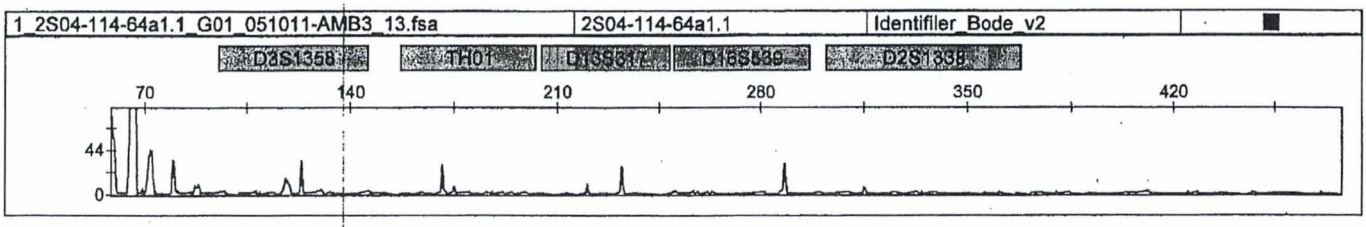
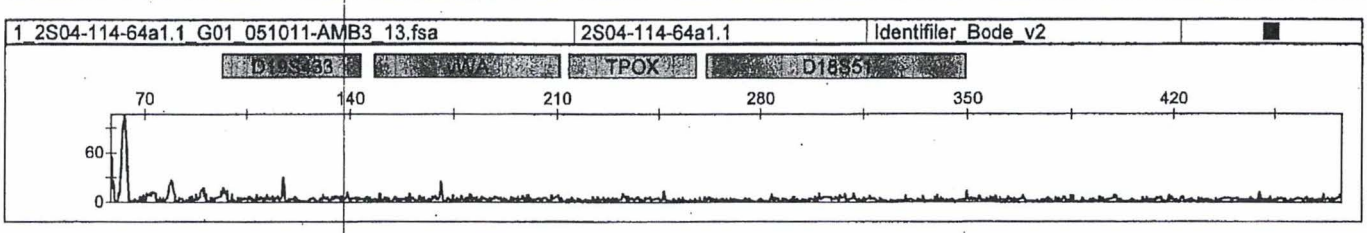


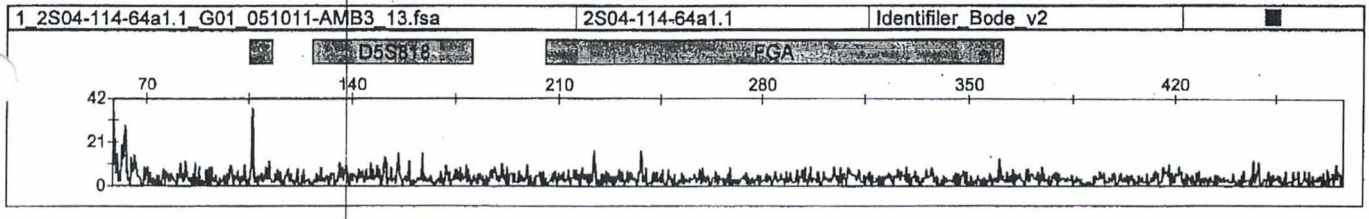
1_2S04-114-64a1.1_G01_051011-AMB3_13.fsa	2S04-114-64a1.1	Identifiler_Bode_v2	



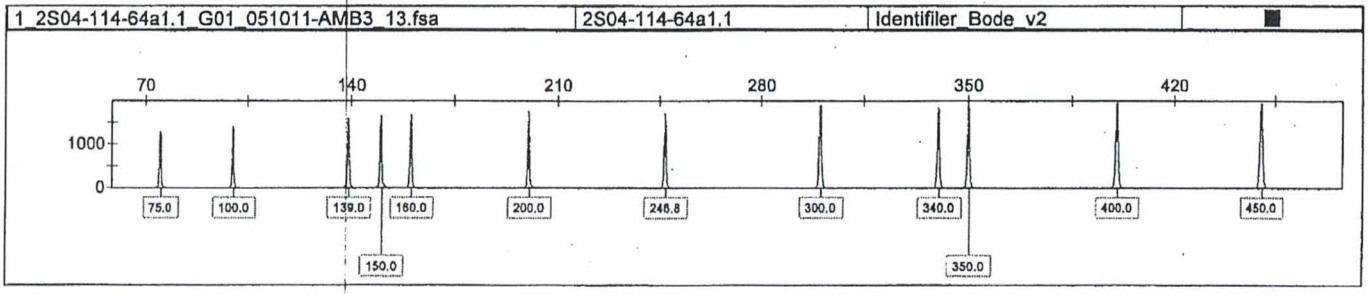
1_2S04-114-64a1.1_G01_051011-AMB3_13.fsa	2S04-114-64a1.1	Identifiler_Bode_v2	



1_2S04-114-64a1.1_G01_051011-AMB3_13.fsa	2S04-114-64a1.1	Identifiler_Bode_v2	



1_2S04-114-64a1.1_G01_051011-AMB3_13.fsa	2S04-114-64a1.1	Identifiler_Bode_v2	

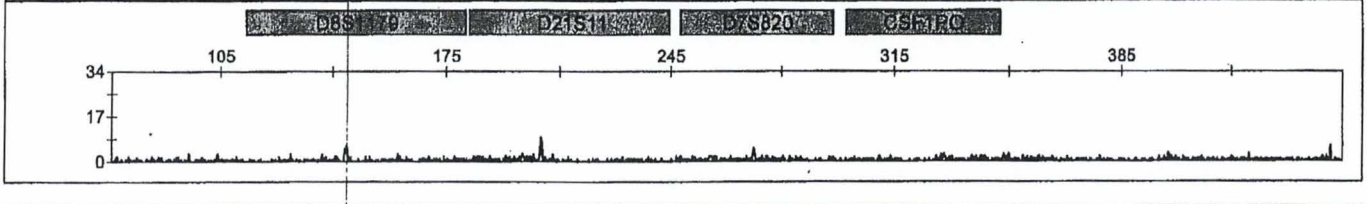


Applied Biosystems

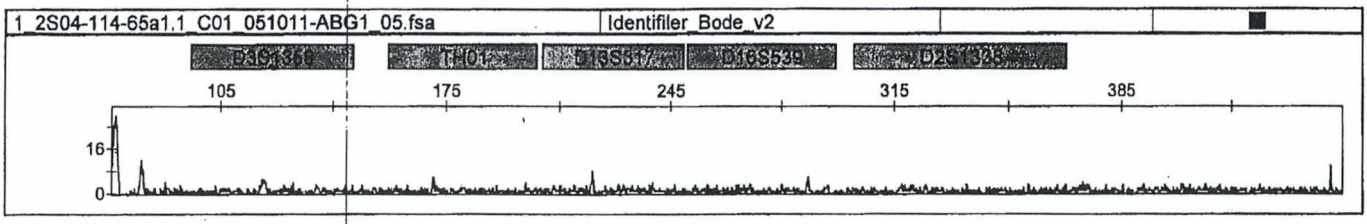
GMID11_051011-ABG1_2S04-114_EBH_ID

eMapper ID v3.2.1

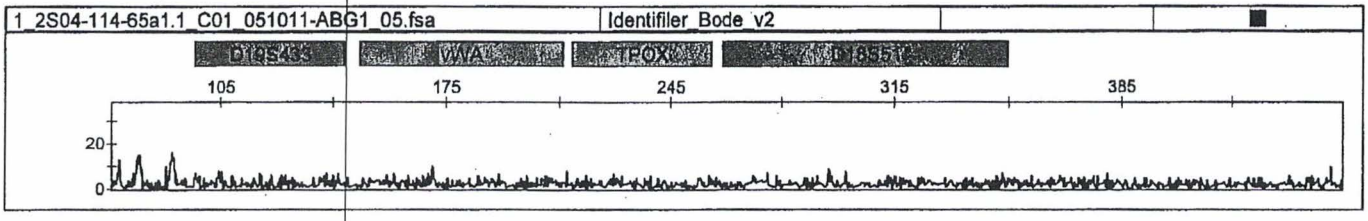
Sample File	Panel	SQO	SQ
1_2S04-114-65a1.1_C01_051011-ABG1_05.fsa	Identifiler_Bode_v2		



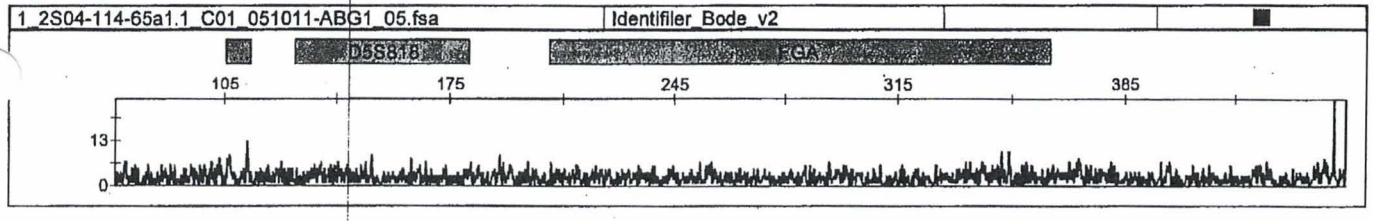
1_2S04-114-65a1.1_C01_051011-ABG1_05.fsa | Identifiler_Bode_v2



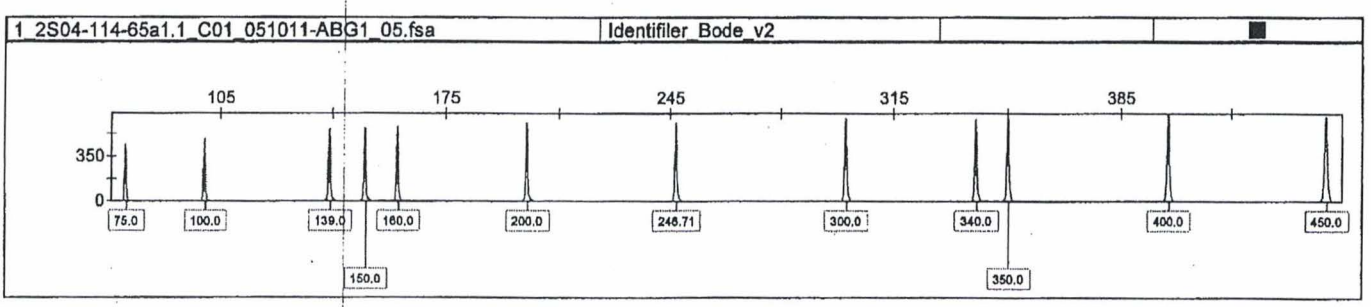
1_2S04-114-65a1.1_C01_051011-ABG1_05.fsa | Identifiler_Bode_v2



1_2S04-114-65a1.1_C01_051011-ABG1_05.fsa | Identifiler_Bode_v2



1_2S04-114-65a1.1_C01_051011-ABG1_05.fsa | Identifiler_Bode_v2



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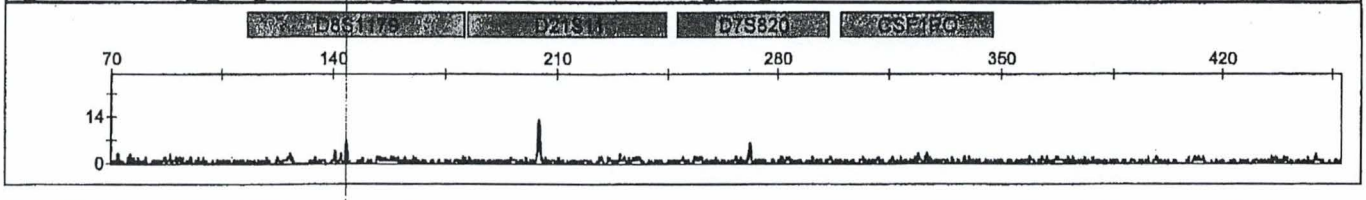
Applied Biosystems

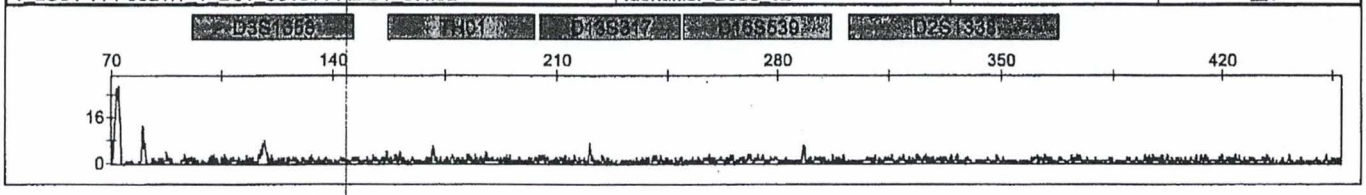
neMapper ID v3.2.1

GMID11_051011-ABG1_2S04-114_EBH_ID

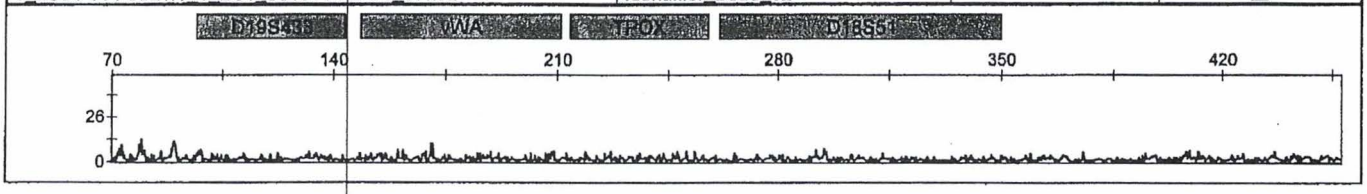
Sample File	Panel	SQO	SQ
1_2S04-114-65a1.1_1_D01_051011-ABG1_07.fsa	Identifiler_Bode_v2		



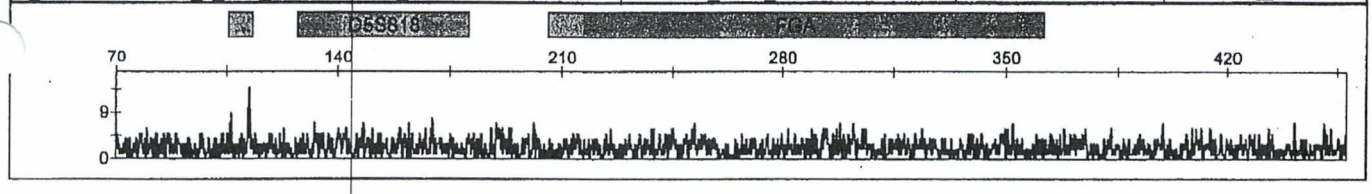
1_2S04-114-65a1.1_1_D01_051011-ABG1_07.fsa Identifiler_Bode_v2



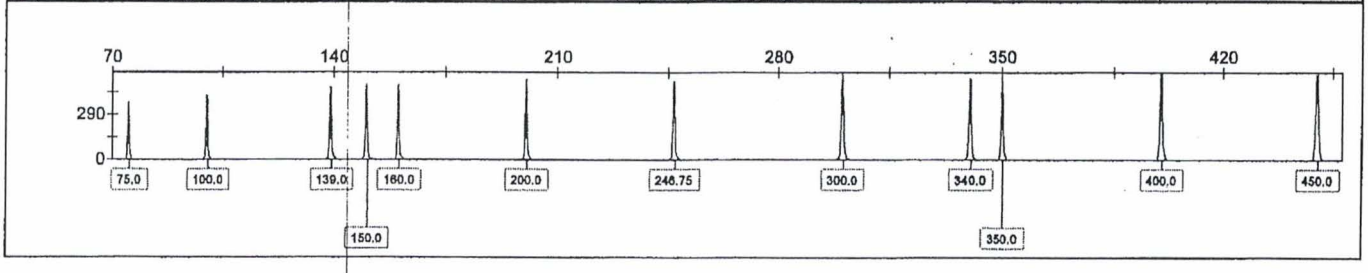
1_2S04-114-65a1.1_1_D01_051011-ABG1_07.fsa Identifiler_Bode_v2



1_2S04-114-65a1.1_1_D01_051011-ABG1_07.fsa Identifiler_Bode_v2



1_2S04-114-65a1.1_1_D01_051011-ABG1_07.fsa Identifiler_Bode_v2



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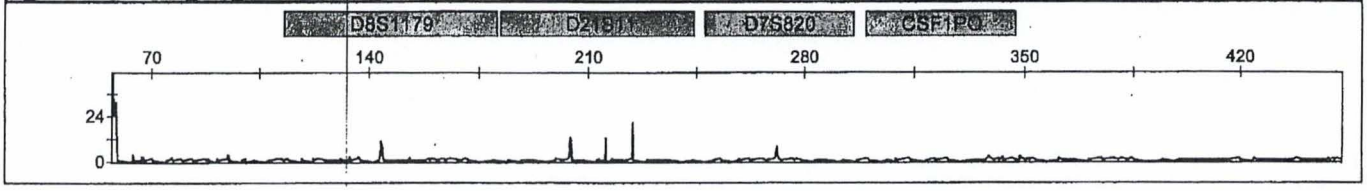
Applied Biosystems

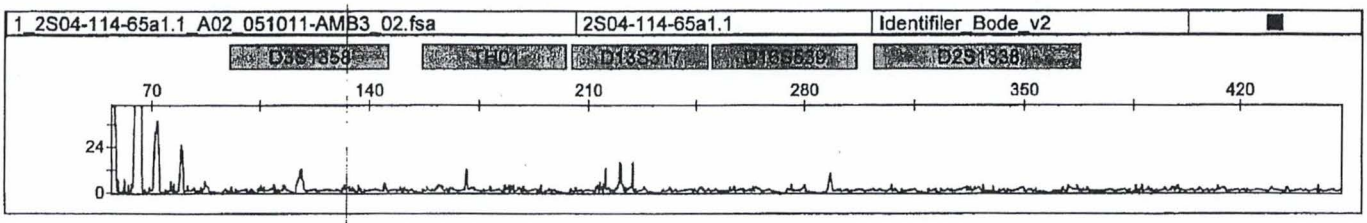
neMapper ID v3.2.1

GMID14_051011-AMB3_2S04-114_ABG_ID

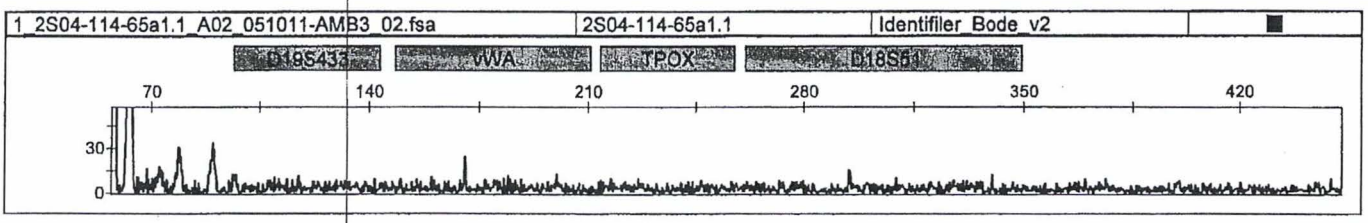
Sample File	Sample Name	Panel	SQ
1_2S04-114-65a1.1_A02_051011-AMB3_02.fsa	2S04-114-65a1.1	Identifiler_Bode_v2	



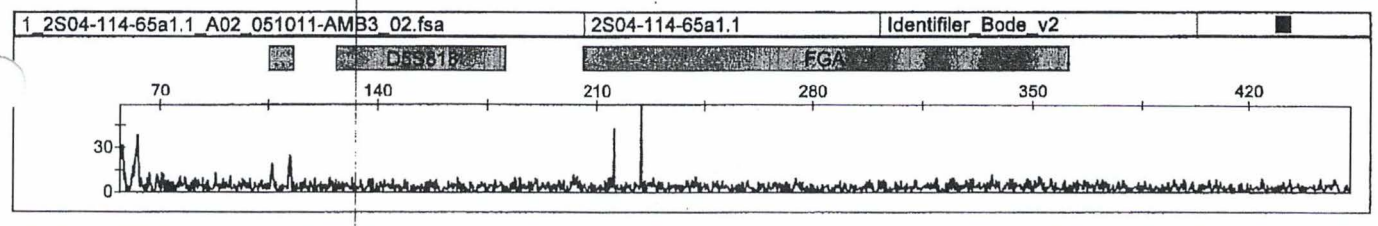
1_2S04-114-65a1.1_A02_051011-AMB3_02.fsa	2S04-114-65a1.1	Identifiler_Bode_v2	



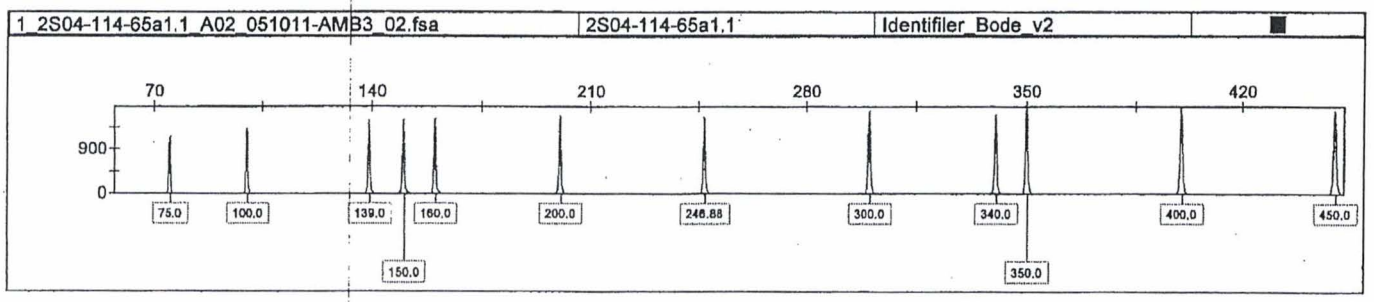
1_2S04-114-65a1.1_A02_051011-AMB3_02.fsa	2S04-114-65a1.1	Identifiler_Bode_v2	



1_2S04-114-65a1.1_A02_051011-AMB3_02.fsa	2S04-114-65a1.1	Identifiler_Bode_v2	



1_2S04-114-65a1.1_A02_051011-AMB3_02.fsa	2S04-114-65a1.1	Identifiler_Bode_v2	



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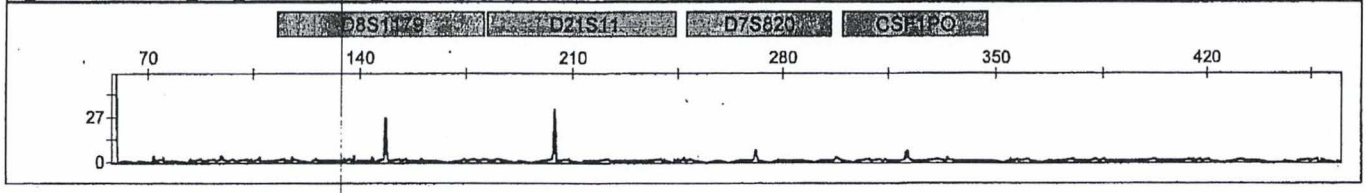
Applied Biosystems

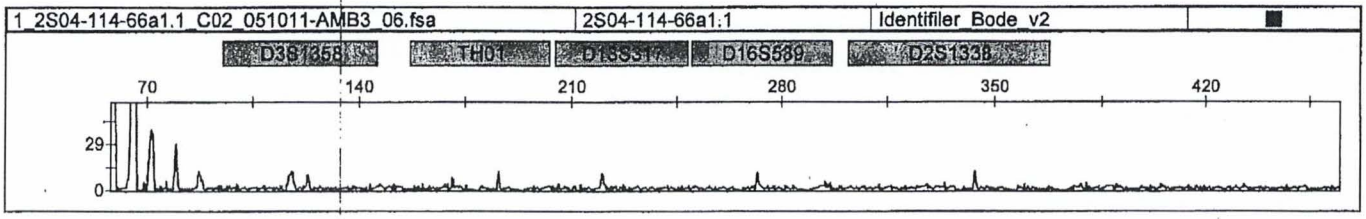
neMapper ID v3.2.1

GMID14_051011-AMB3_2S04-114_ABG_ID

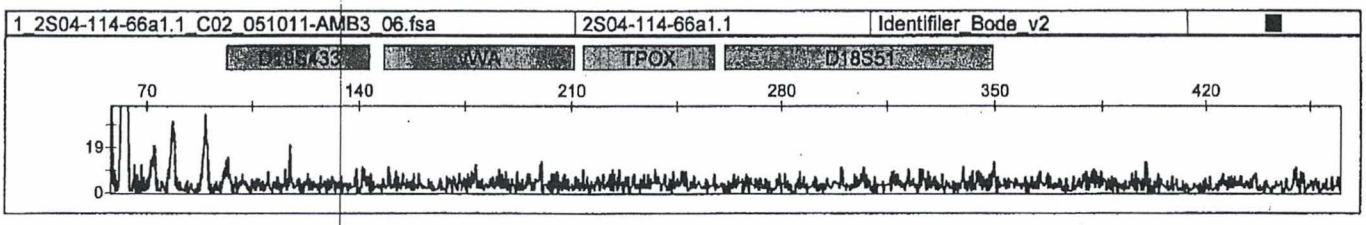
Sample File	Sample Name	Panel	SQ
1_2S04-114-66a1.1_C02_051011-AMB3_06.fsa	2S04-114-66a1.1	Identifiler_Bode_v2	



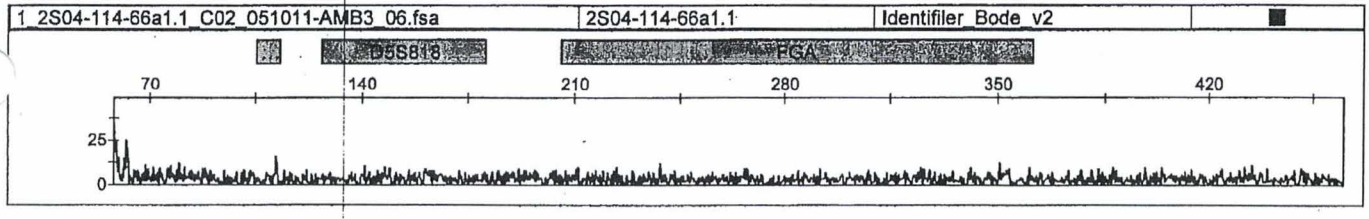
1_2S04-114-66a1.1_C02_051011-AMB3_06.fsa	2S04-114-66a1.1	Identifiler_Bode_v2	



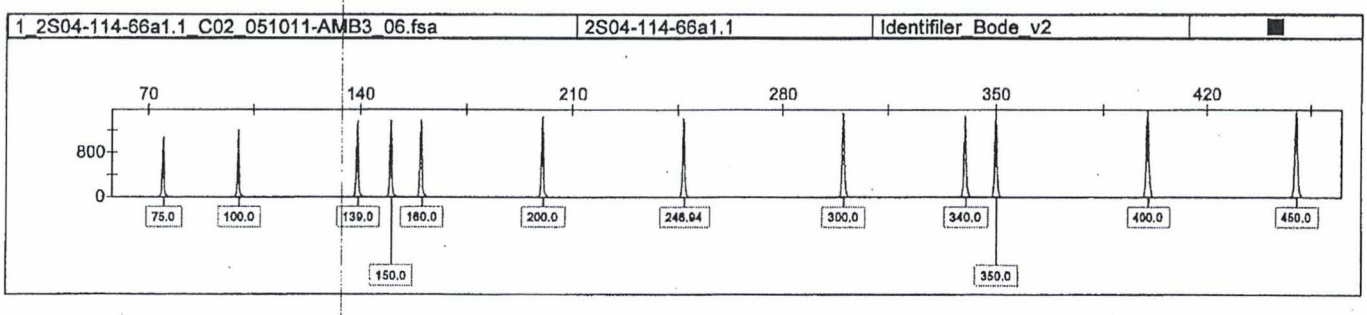
1_2S04-114-66a1.1_C02_051011-AMB3_06.fsa	2S04-114-66a1.1	Identifiler_Bode_v2	



1_2S04-114-66a1.1_C02_051011-AMB3_06.fsa	2S04-114-66a1.1	Identifiler_Bode_v2	



1_2S04-114-66a1.1_C02_051011-AMB3_06.fsa	2S04-114-66a1.1	Identifiler_Bode_v2	

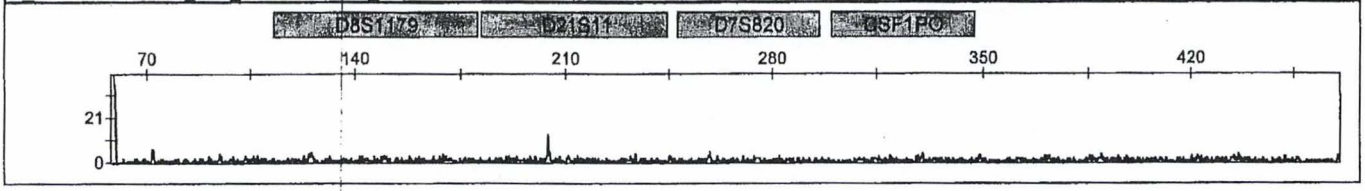


Applied Biosystems

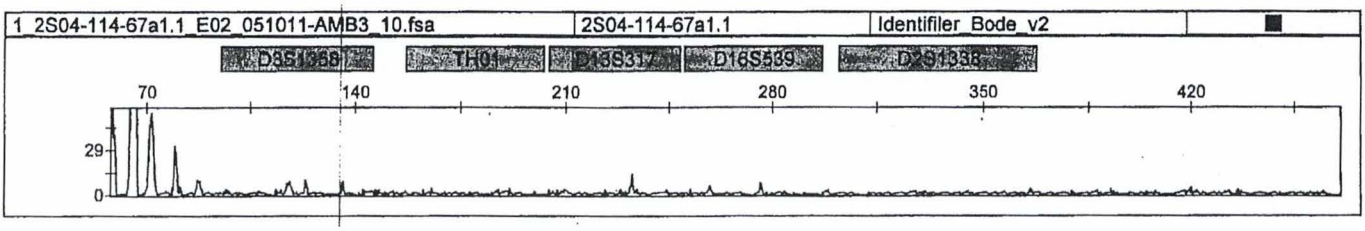
eMapper ID v3.2.1

GMID14_051011-AMB3_2S04-114_ABG_ID

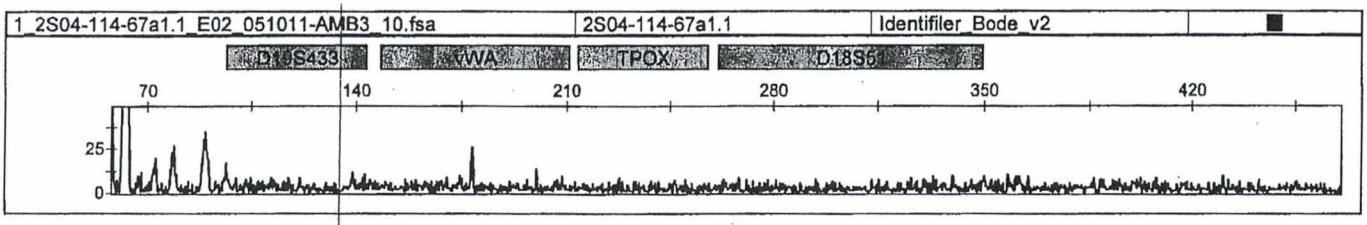
Sample File	Sample Name	Panel	SQ
1_2S04-114-67a1.1_E02_051011-AMB3_10.fsa	2S04-114-67a1.1	Identifiler_Bode_v2	



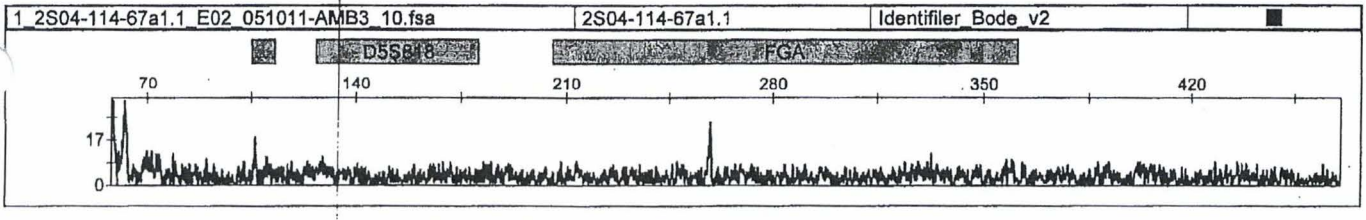
1_2S04-114-67a1.1_E02_051011-AMB3_10.fsa	2S04-114-67a1.1	Identifiler_Bode_v2	



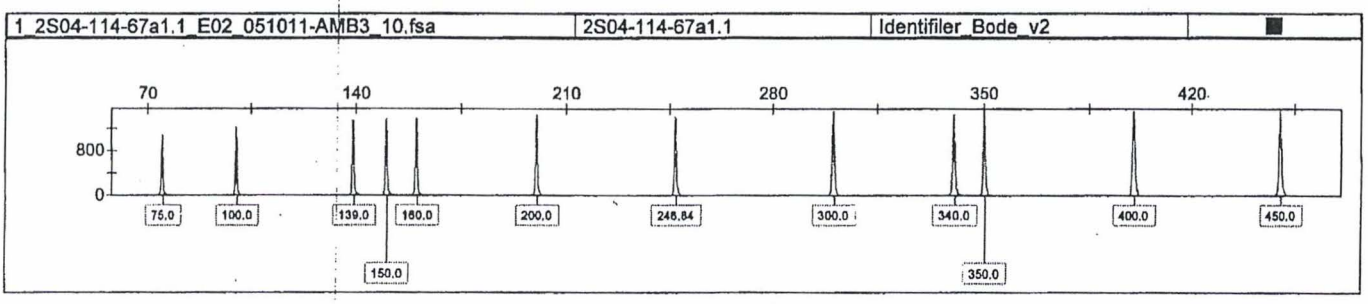
1_2S04-114-67a1.1_E02_051011-AMB3_10.fsa	2S04-114-67a1.1	Identifiler_Bode_v2	



1_2S04-114-67a1.1_E02_051011-AMB3_10.fsa	2S04-114-67a1.1	Identifiler_Bode_v2	



1_2S04-114-67a1.1_E02_051011-AMB3_10.fsa	2S04-114-67a1.1	Identifiler_Bode_v2	



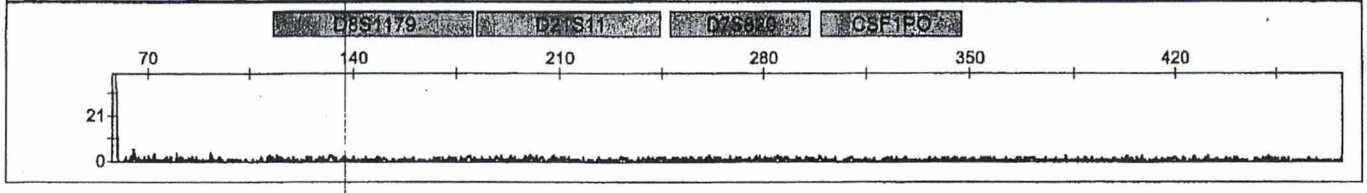
PBC 5/5/11

Applied Biosystems

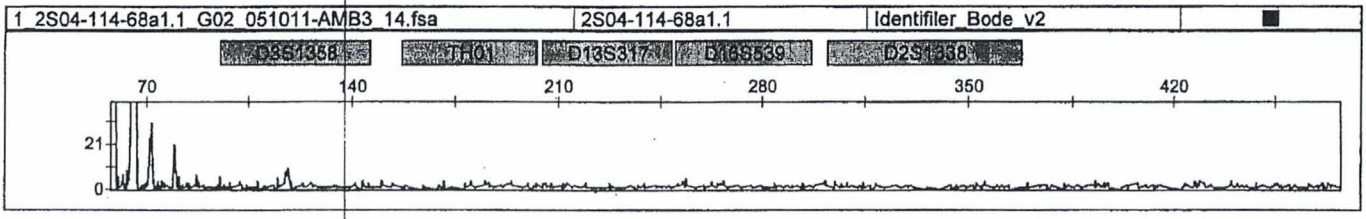
neMapper ID v3.2.1

GMID14_051011-AMB3_2S04-114_ABG_ID

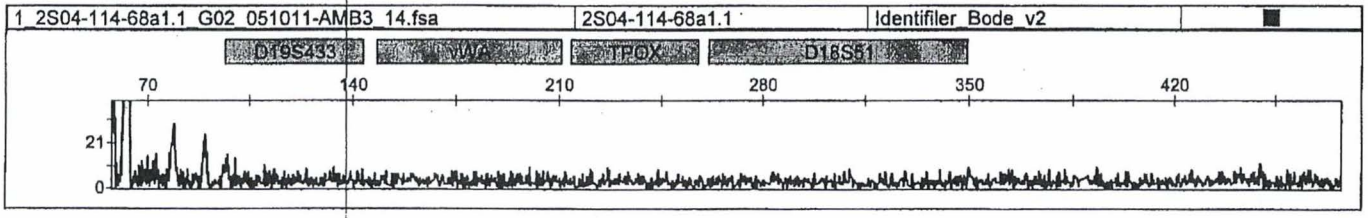
Sample File	Sample Name	Panel	SQ
1_2S04-114-68a1.1_G02_051011-AMB3_14.fsa	2S04-114-68a1.1	Identifiler_Bode_v2	



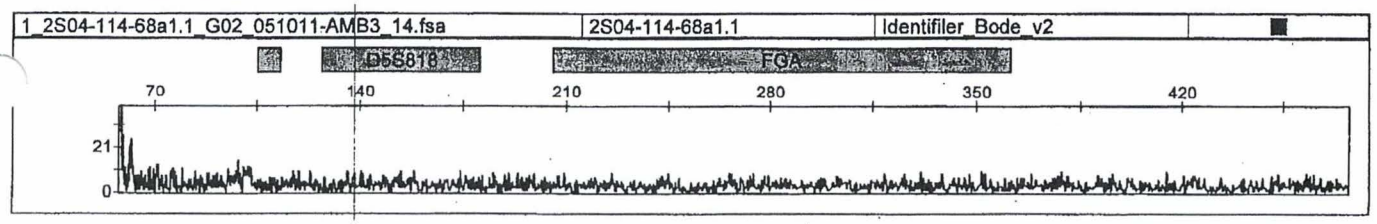
1_2S04-114-68a1.1_G02_051011-AMB3_14.fsa	2S04-114-68a1.1	Identifiler_Bode_v2	



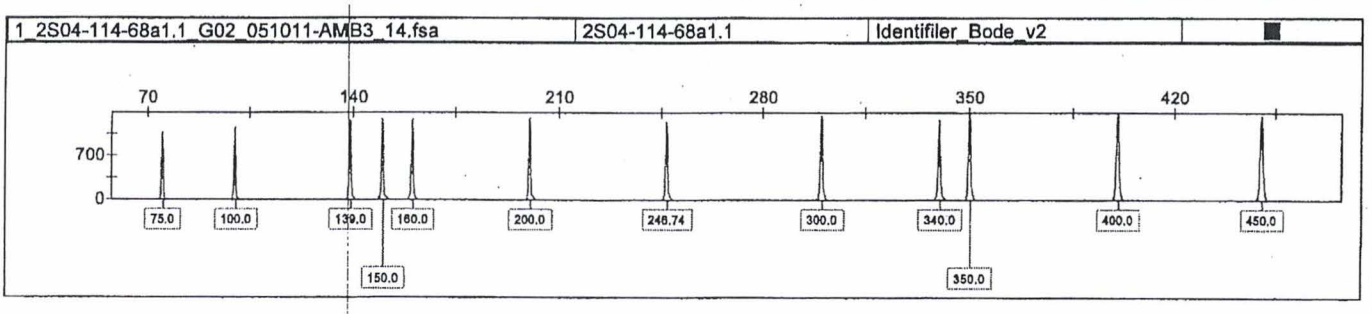
1_2S04-114-68a1.1_G02_051011-AMB3_14.fsa	2S04-114-68a1.1	Identifiler_Bode_v2	



1_2S04-114-68a1.1_G02_051011-AMB3_14.fsa	2S04-114-68a1.1	Identifiler_Bode_v2	



1_2S04-114-68a1.1_G02_051011-AMB3_14.fsa	2S04-114-68a1.1	Identifiler_Bode_v2	



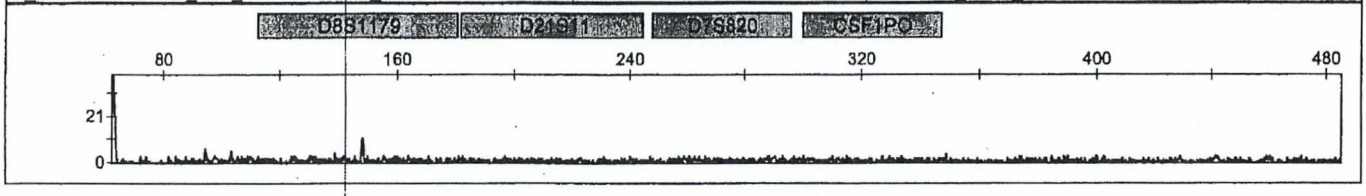
MBC 5/10/11

Applied Biosystems

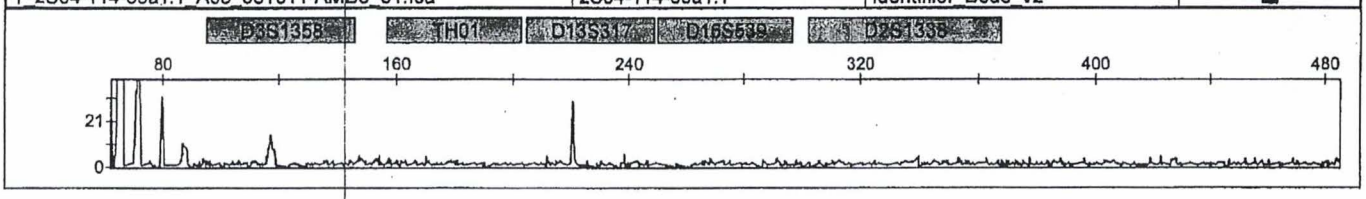
GMID14_051011-AMB3_2S04-114_ABG_ID

neMapper ID v3.2.1

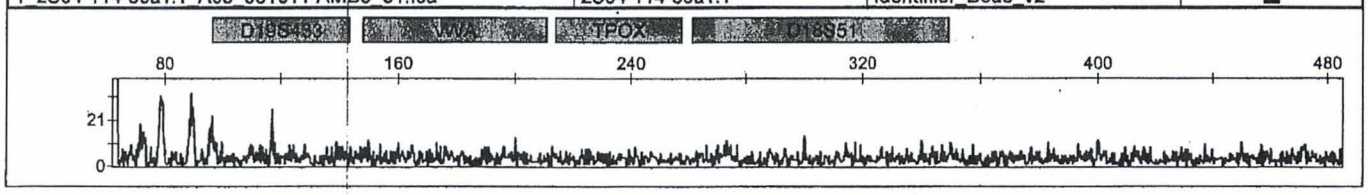
Sample File	Sample Name	Panel	SQ
1_2S04-114-69a1.1_A03_051011-AMB3_01.fsa	2S04-114-69a1.1	Identifiler_Bode_v2	■



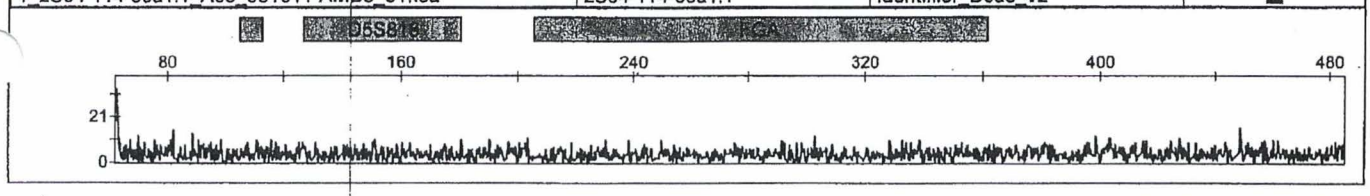
1_2S04-114-69a1.1_A03_051011-AMB3_01.fsa	2S04-114-69a1.1	Identifiler_Bode_v2	■



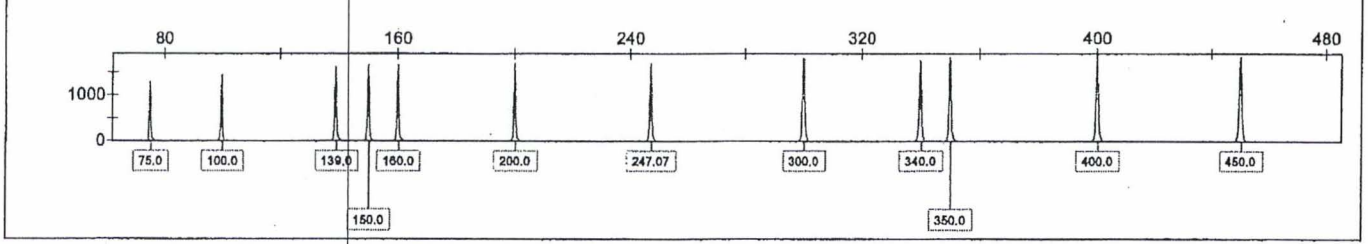
1_2S04-114-69a1.1_A03_051011-AMB3_01.fsa	2S04-114-69a1.1	Identifiler_Bode_v2	■



1_2S04-114-69a1.1_A03_051011-AMB3_01.fsa	2S04-114-69a1.1	Identifiler_Bode_v2	■



1_2S04-114-69a1.1_A03_051011-AMB3_01.fsa	2S04-114-69a1.1	Identifiler_Bode_v2	■



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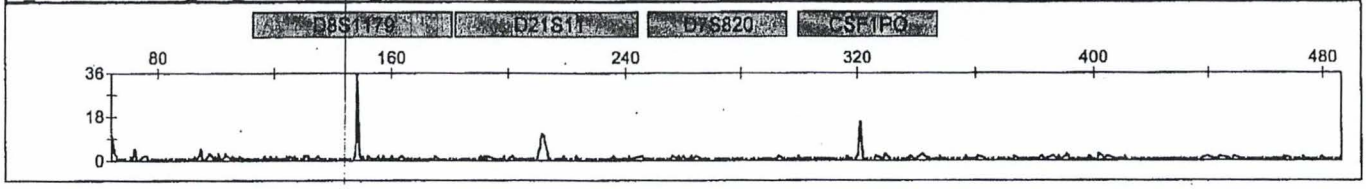
Applied Biosystems

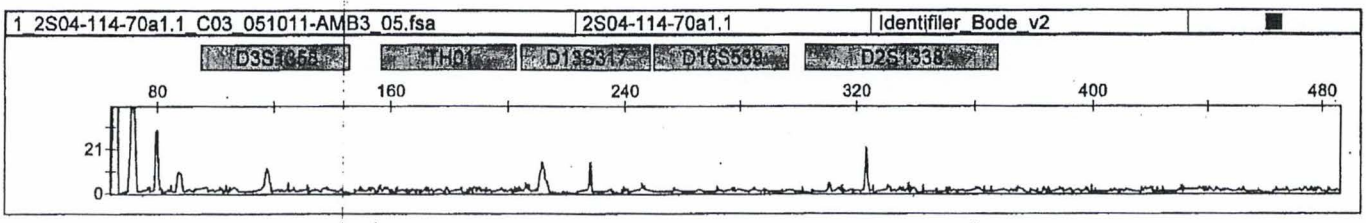
neMapper ID v3.2.1

GMID14_051011-AMB3_2S04-114_ABG_ID

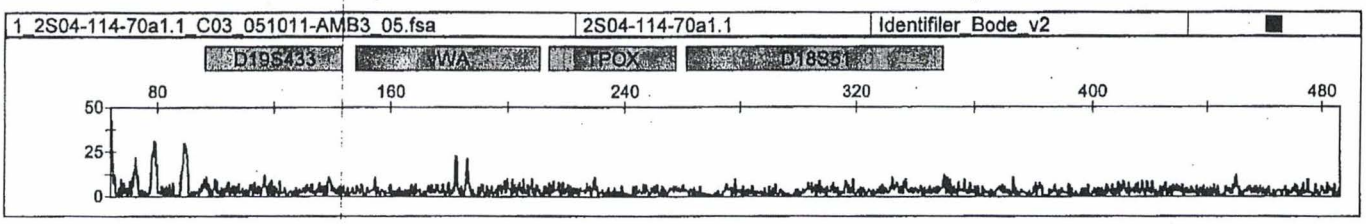
Sample File	Sample Name	Panel	SQ
1_2S04-114-70a1.1_C03_051011-AMB3_05.fsa	2S04-114-70a1.1	Identifiler_Bode_v2	



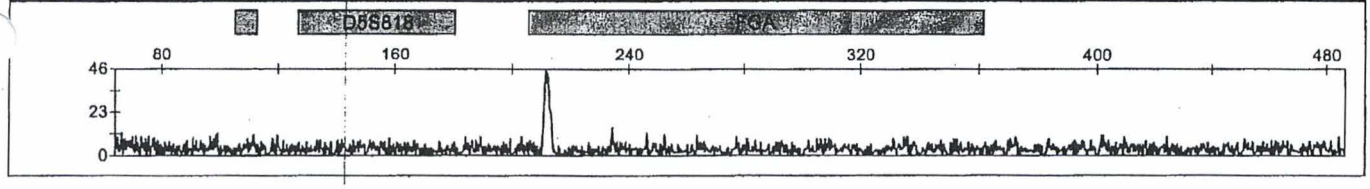
1_2S04-114-70a1.1_C03_051011-AMB3_05.fsa	2S04-114-70a1.1	Identifiler_Bode_v2	



1_2S04-114-70a1.1_C03_051011-AMB3_05.fsa	2S04-114-70a1.1	Identifiler_Bode_v2	



1_2S04-114-70a1.1_C03_051011-AMB3_05.fsa	2S04-114-70a1.1	Identifiler_Bode_v2	



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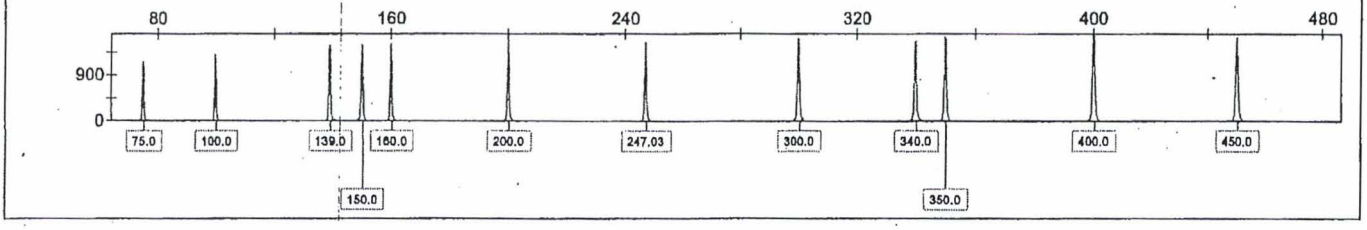
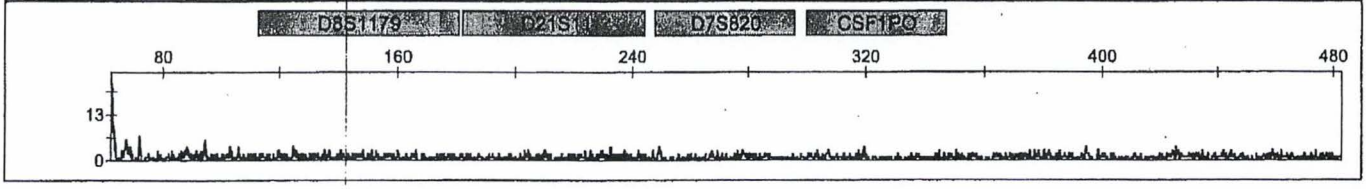


Applied Biosystems

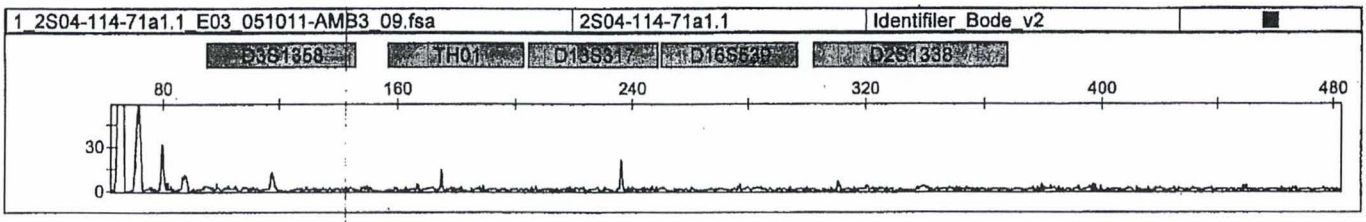
eMapper ID v3.2.1

GMID14_051011-AMB3_2S04-114_ABG_ID

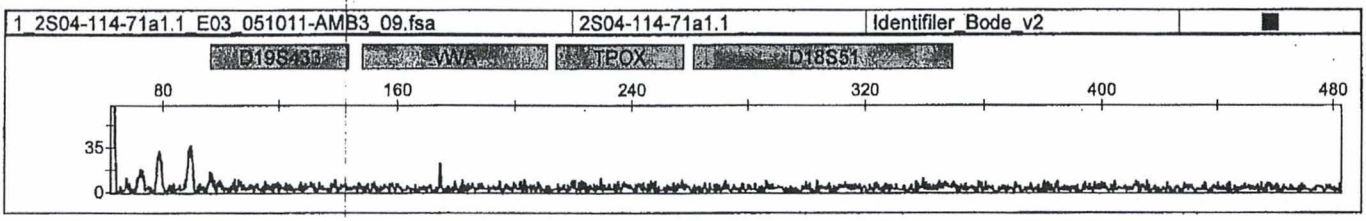
Sample File	Sample Name	Panel	SQ
1_2S04-114-71a1.1_E03_051011-AMB3_09.fsa	2S04-114-71a1.1	Identifiler_Bode_v2	



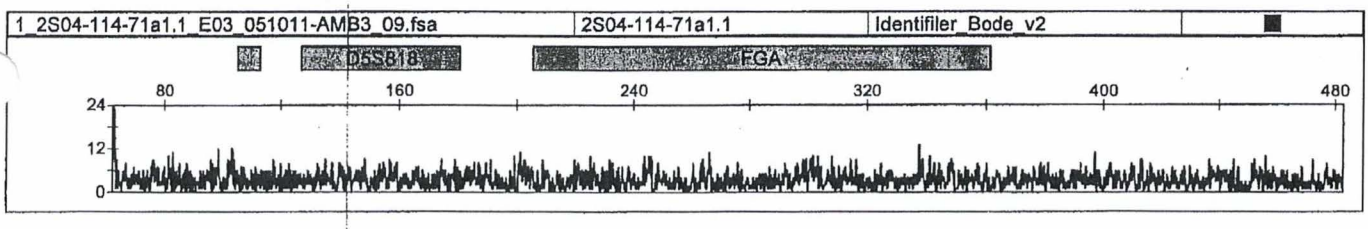
1_2S04-114-71a1.1_E03_051011-AMB3_09.fsa	2S04-114-71a1.1	Identifiler_Bode_v2	



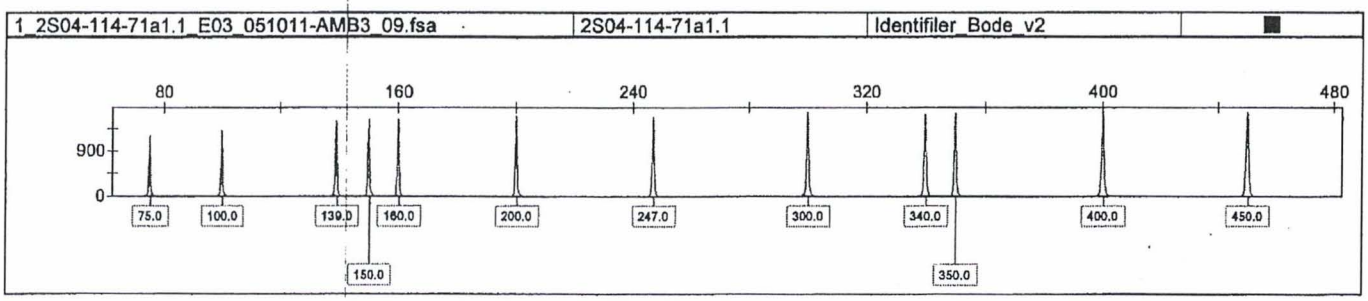
1_2S04-114-71a1.1_E03_051011-AMB3_09.fsa	2S04-114-71a1.1	Identifiler_Bode_v2	



1_2S04-114-71a1.1_E03_051011-AMB3_09.fsa	2S04-114-71a1.1	Identifiler_Bode_v2	



1_2S04-114-71a1.1_E03_051011-AMB3_09.fsa	2S04-114-71a1.1	Identifiler_Bode_v2	

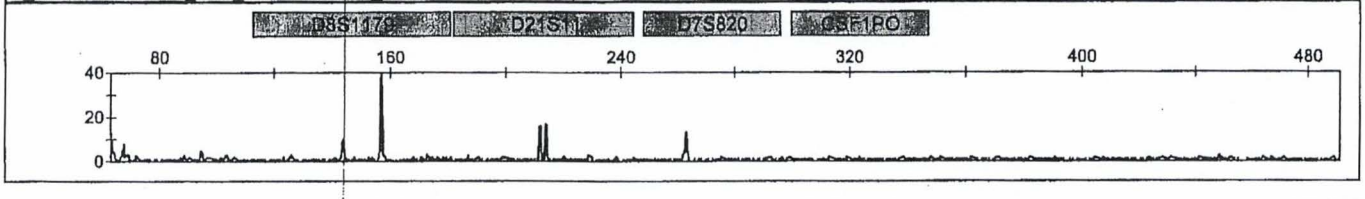


Applied Biosystems

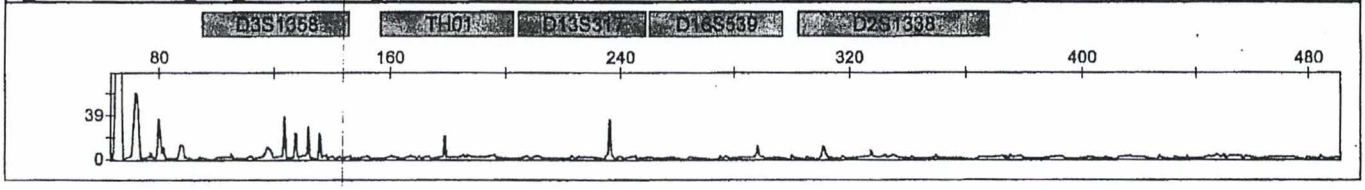
eMapper ID v3.2.1

GMID14_051011-AMB3_2S04-114_ABG_1

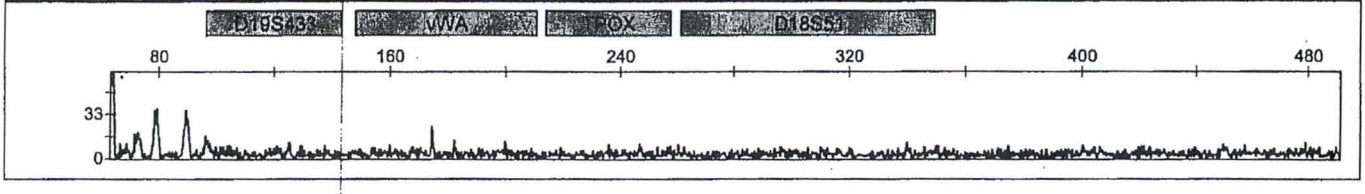
Sample File	Sample Name	Panel	SQ
1_2S04-114-72a1.1_G03_051011-AMB3_13.fsa	2S04-114-72a1.1	Identifiler_Bode_v2	



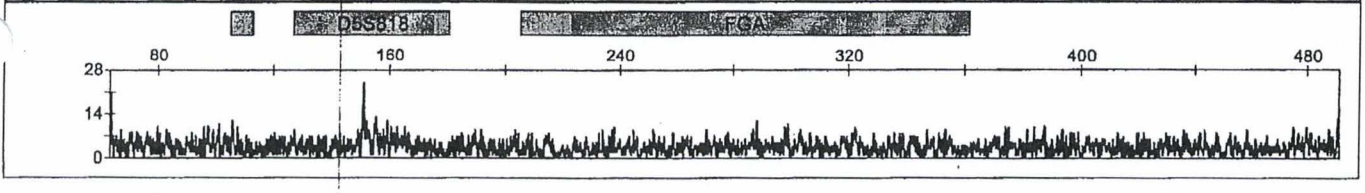
1_2S04-114-72a1.1_G03_051011-AMB3_13.fsa	2S04-114-72a1.1	Identifiler_Bode_v2	



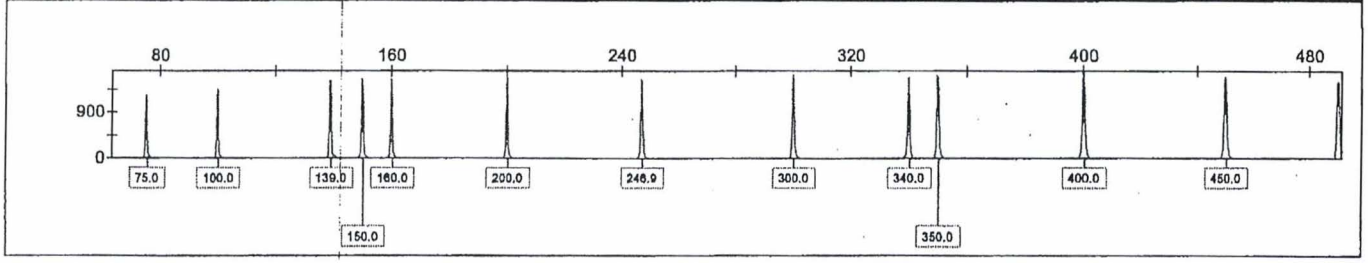
1_2S04-114-72a1.1_G03_051011-AMB3_13.fsa	2S04-114-72a1.1	Identifiler_Bode_v2	



1_2S04-114-72a1.1_G03_051011-AMB3_13.fsa	2S04-114-72a1.1	Identifiler_Bode_v2	



1_2S04-114-72a1.1_G03_051011-AMB3_13.fsa	2S04-114-72a1.1	Identifiler_Bode_v2	



Applied Biosystems

neMapper ID v3.2.1

GMID11_051011-ABG1_2S04-114_EBH_ID

Sample File	Panel	SQO	SQ
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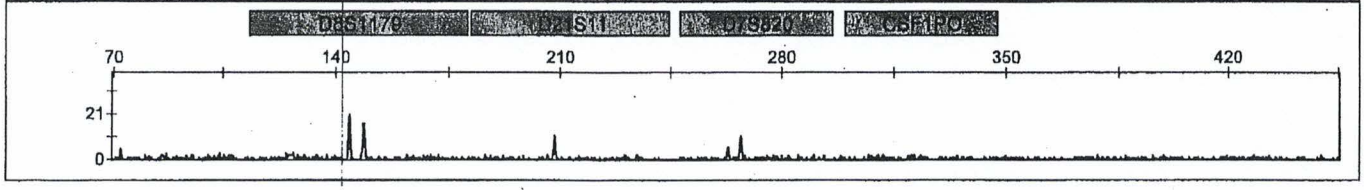
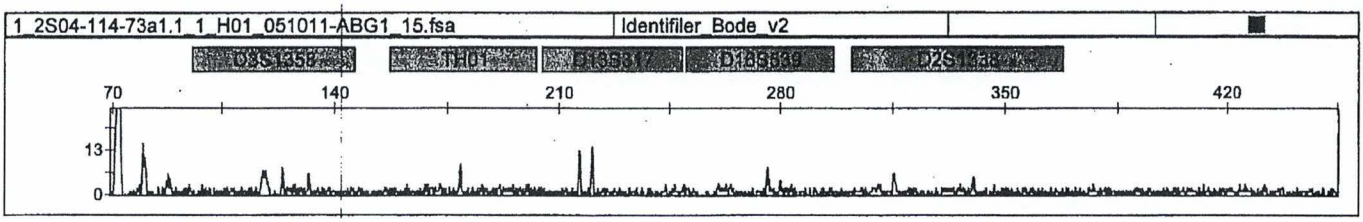
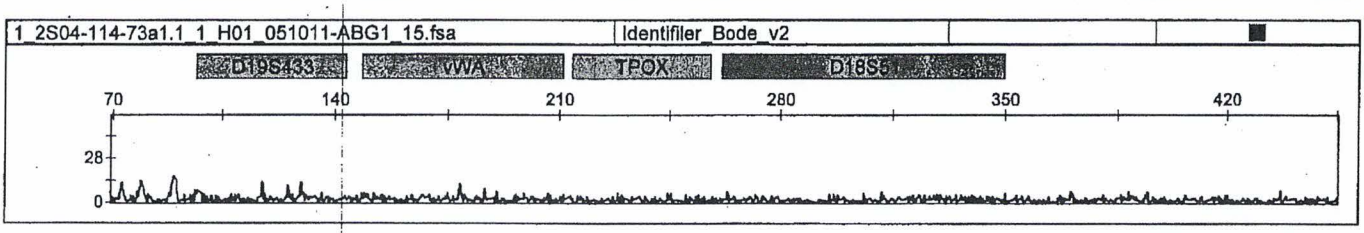


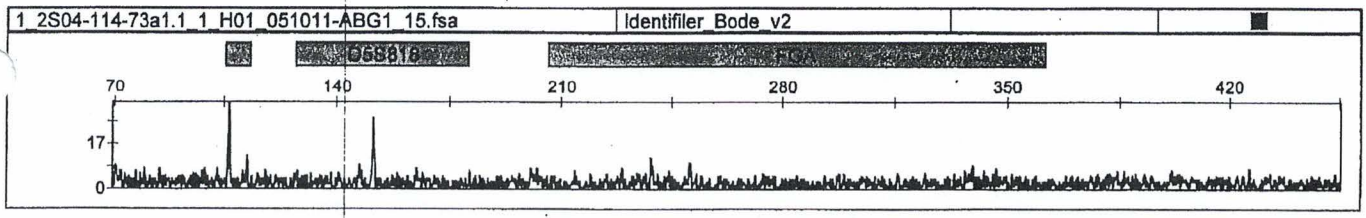
1_2S04-114-73a1.1_1_H01_051011-ABG1_15.fsa | Identifiler_Bode_v2



1_2S04-114-73a1.1_1_H01_051011-ABG1_15.fsa | Identifiler_Bode_v2



1_2S04-114-73a1.1_1_H01_051011-ABG1_15.fsa | Identifiler_Bode_v2



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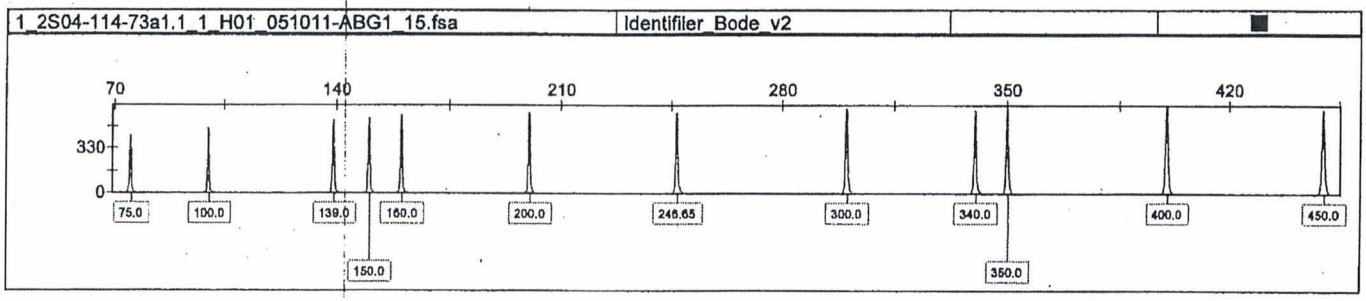

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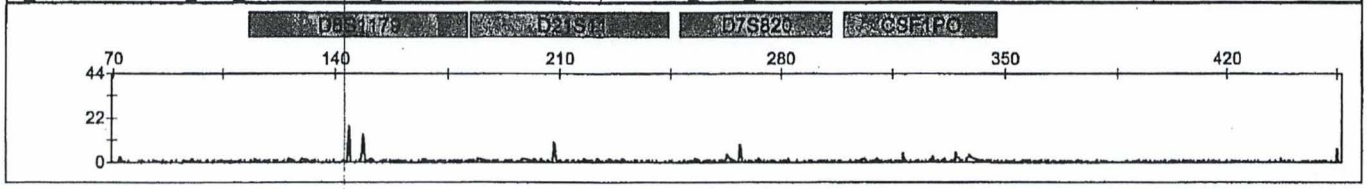
Applied Biosystems

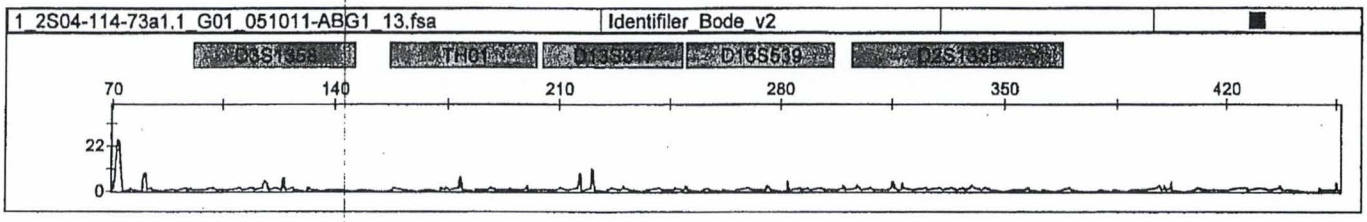
neMapper ID v3.2.1

GMID11_051011-ABG1_2S04-114_EBH_ID

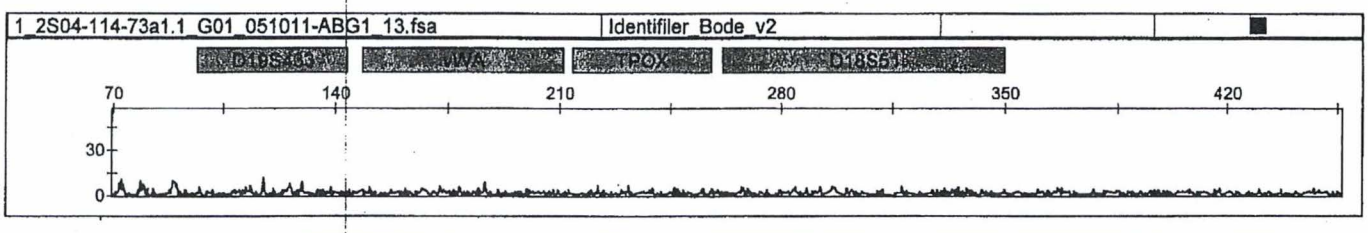
Sample File	Panel	SQO	SQ
1_2S04-114-73a1.1_G01_051011-ABG1_13.fsa	Identifiler_Bode_v2		



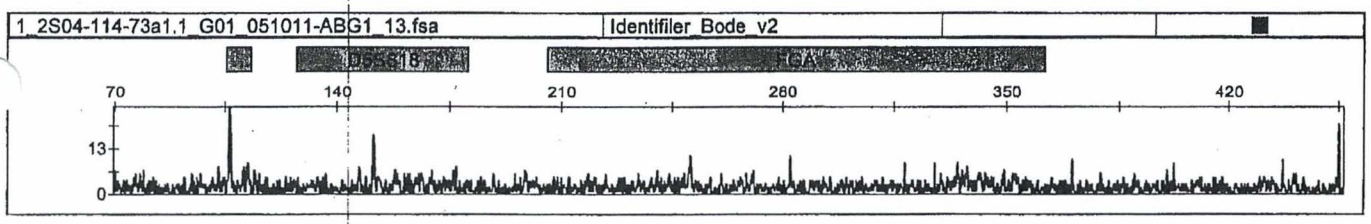
1_2S04-114-73a1.1_G01_051011-ABG1_13.fsa | Identifiler_Bode_v2



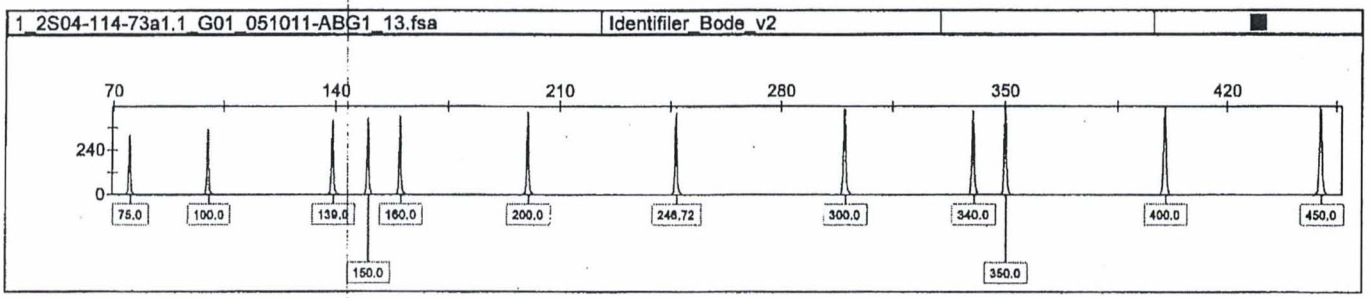
1_2S04-114-73a1.1_G01_051011-ABG1_13.fsa | Identifiler_Bode_v2



1_2S04-114-73a1.1_G01_051011-ABG1_13.fsa | Identifiler_Bode_v2



1_2S04-114-73a1.1_G01_051011-ABG1_13.fsa | Identifiler_Bode_v2



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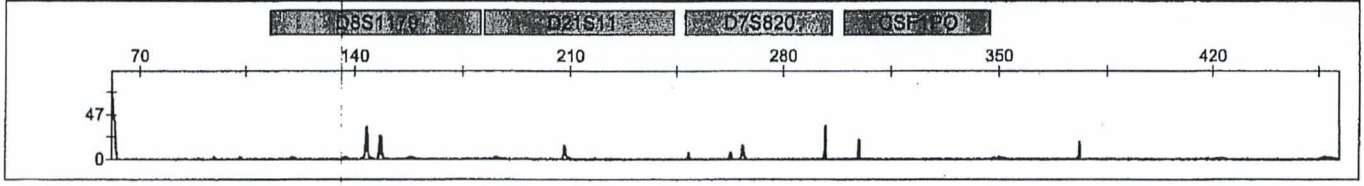
Applied Biosystems

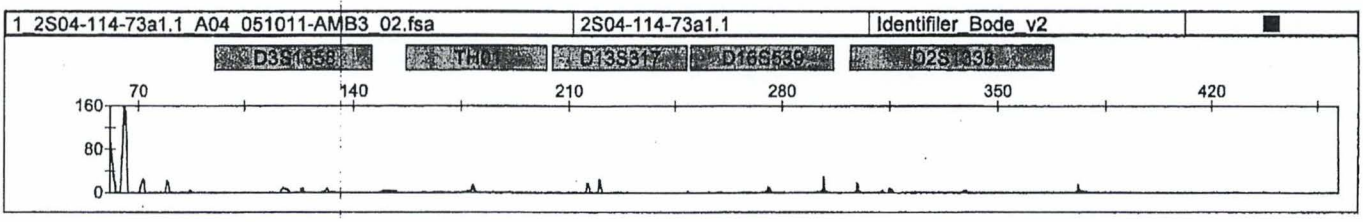
neMapper ID v3.2.1

GMID14_051011-AMB3_2S04-114_ABG_ID

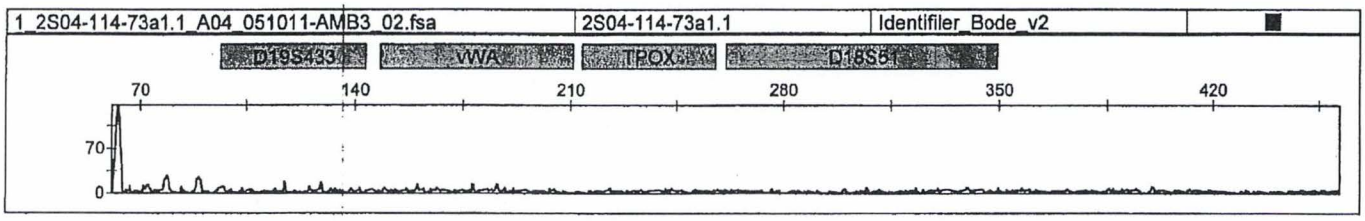
Sample File	Sample Name	Panel	SQ
1_2S04-114-73a1.1_A04_051011-AMB3_02.fsa	2S04-114-73a1.1	Identifiler_Bode_v2	



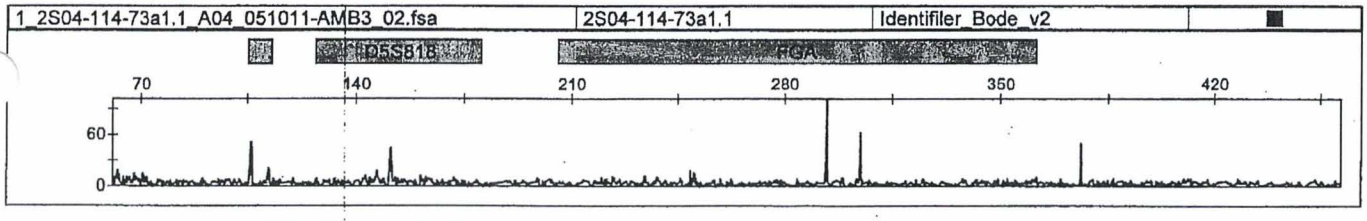
1_2S04-114-73a1.1_A04_051011-AMB3_02.fsa	2S04-114-73a1.1	Identifiler_Bode_v2	



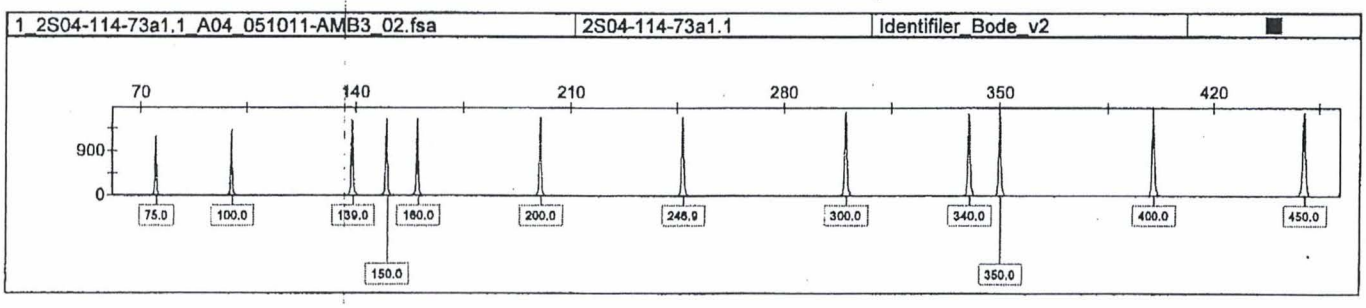
1_2S04-114-73a1.1_A04_051011-AMB3_02.fsa	2S04-114-73a1.1	Identifiler_Bode_v2	



1_2S04-114-73a1.1_A04_051011-AMB3_02.fsa	2S04-114-73a1.1	Identifiler_Bode_v2	



1_2S04-114-73a1.1_A04_051011-AMB3_02.fsa	2S04-114-73a1.1	Identifiler_Bode_v2	



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Sample File	Sample Name	Panel	SQ
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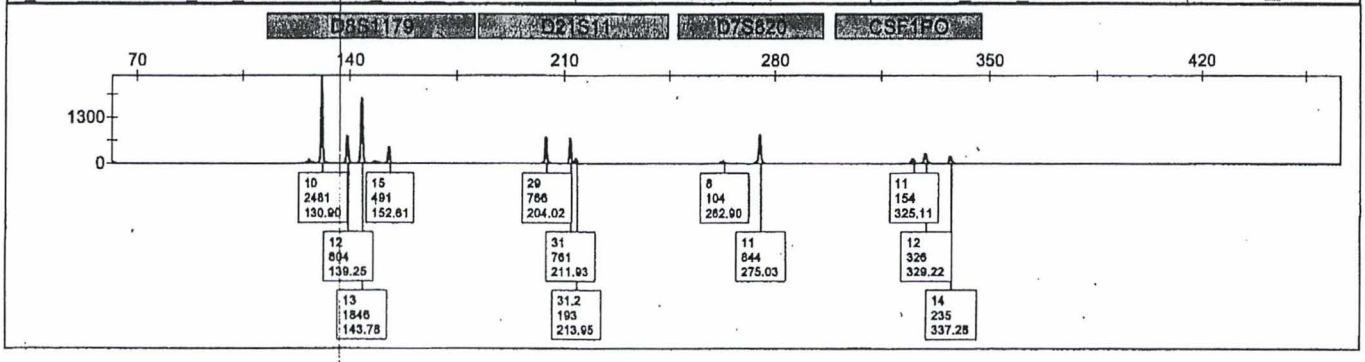
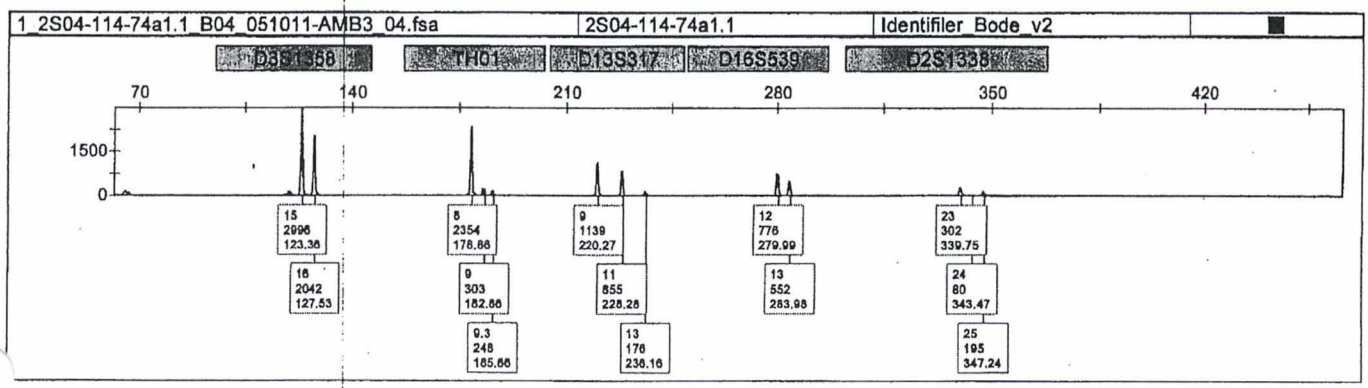
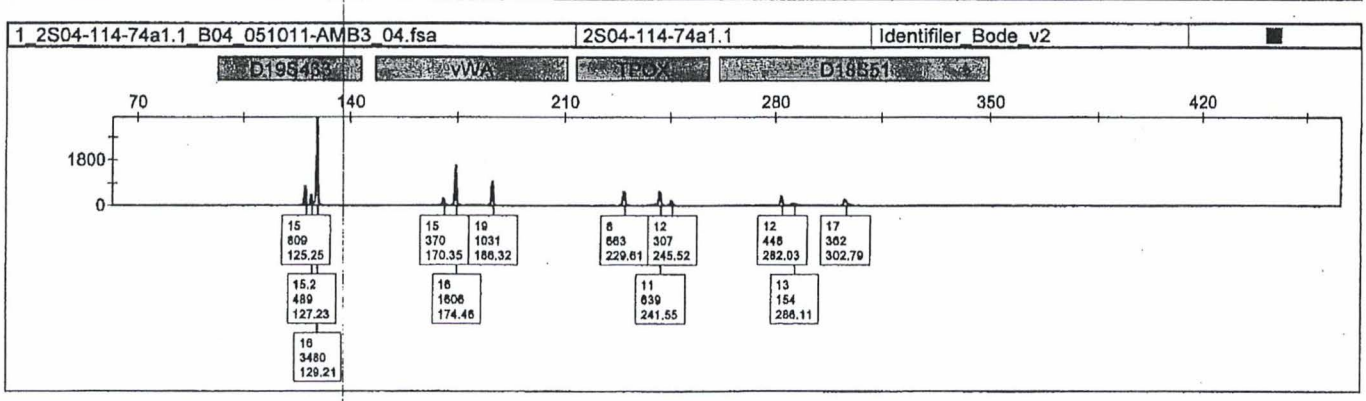


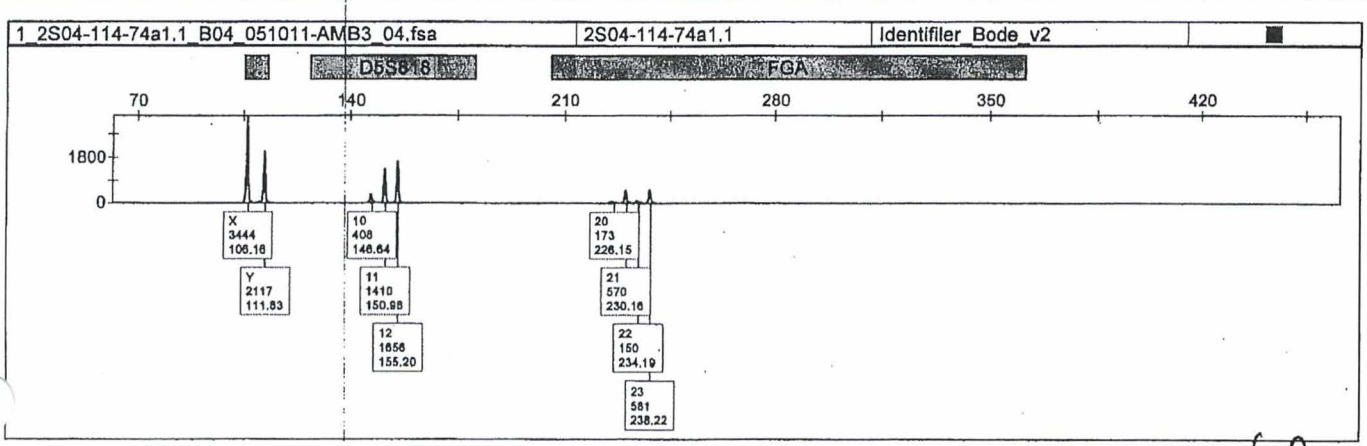
1_2S04-114-74a1.1_B04_051011-AMB3_04.fsa	2S04-114-74a1.1	Identifiler_Bode_v2	



1_2S04-114-74a1.1_B04_051011-AMB3_04.fsa	2S04-114-74a1.1	Identifiler_Bode_v2	



1_2S04-114-74a1.1_B04_051011-AMB3_04.fsa	2S04-114-74a1.1	Identifiler_Bode_v2	



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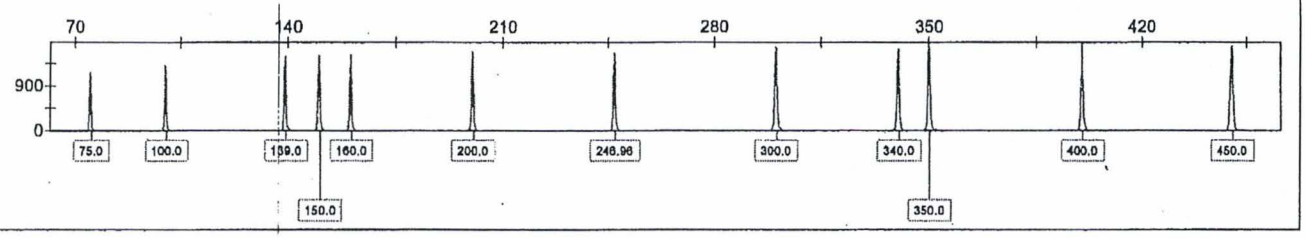
Sample File	Sample Name	Panel	SQ
1_2S04-114-74a1.1_B04_051011-AMB3_04.fsa	2S04-114-74a1.1	Identifiler_Bode_v2	



Sample File	Sample Name	Panel	SQ
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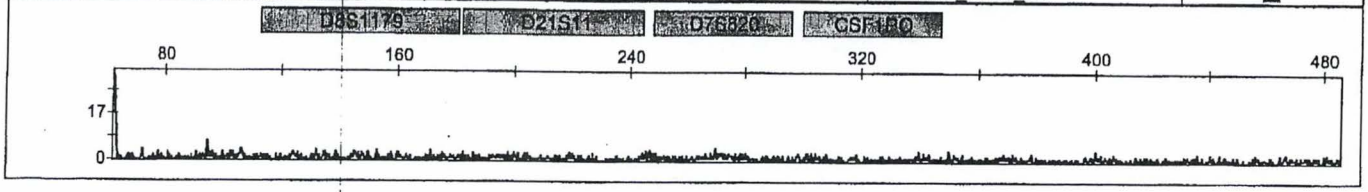
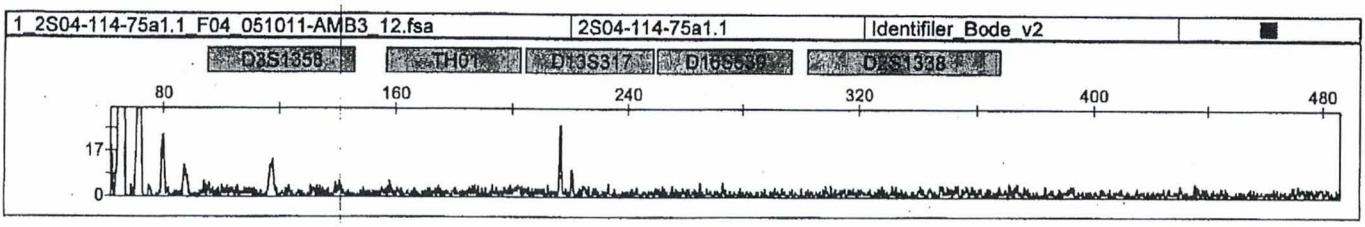
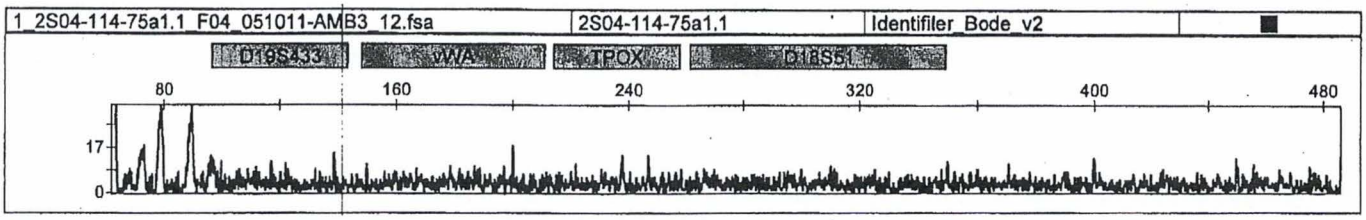


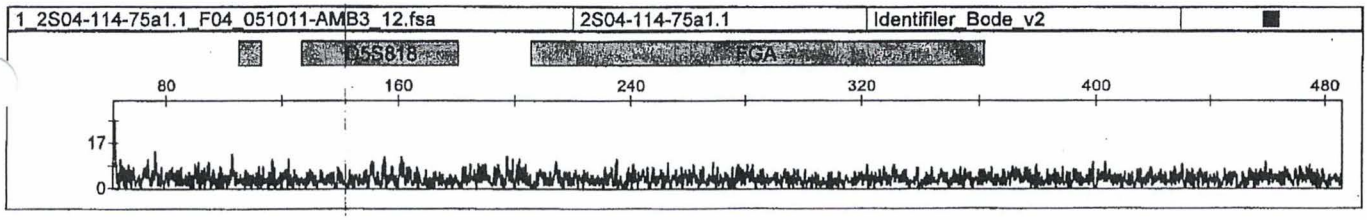
1_2S04-114-75a1.1_F04_051011-AMB3_12.fsa | 2S04-114-75a1.1 | Identifiler_Bode_v2



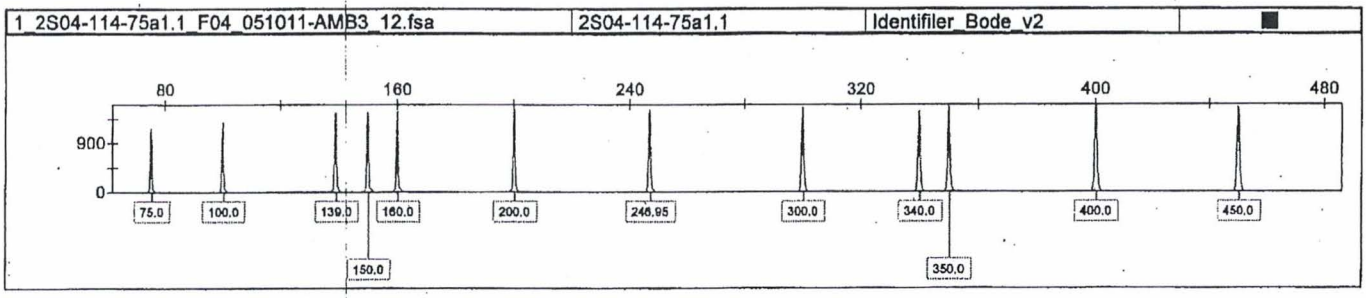
1_2S04-114-75a1.1_F04_051011-AMB3_12.fsa | 2S04-114-75a1.1 | Identifiler_Bode_v2



1_2S04-114-75a1.1_F04_051011-AMB3_12.fsa | 2S04-114-75a1.1 | Identifiler_Bode_v2



1_2S04-114-75a1.1_F04_051011-AMB3_12.fsa | 2S04-114-75a1.1 | Identifiler_Bode_v2



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Sample File	Sample Name	Panel	SQ
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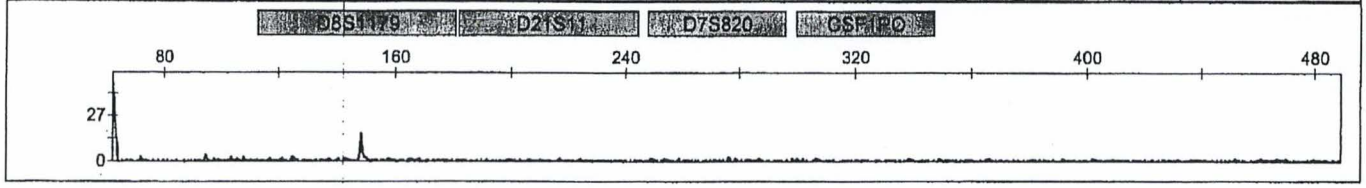
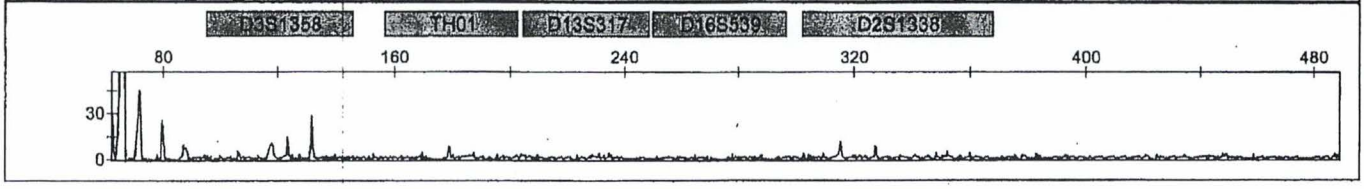


1_2S04-114-75b1.1_G04_051011-AMB3_14.fsa	2S04-114-75b1.1	Identifiler_Bode_v2	



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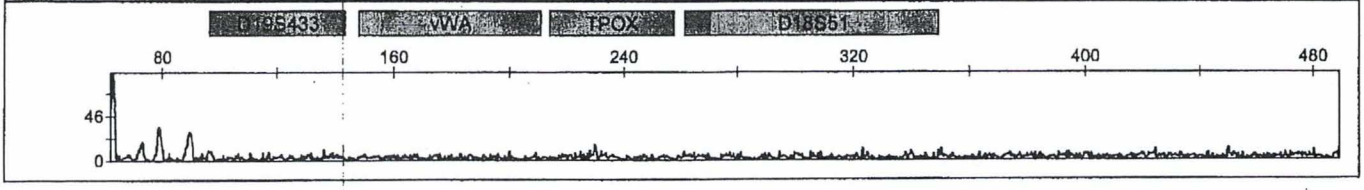

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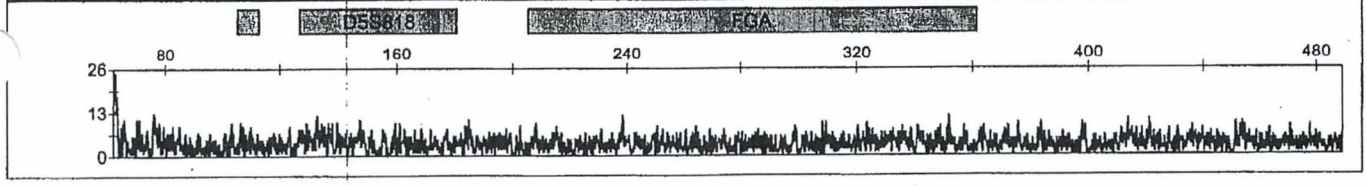
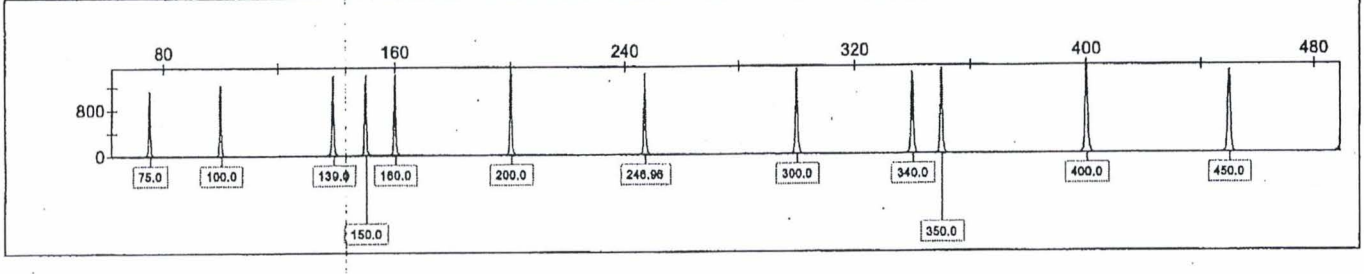


1_2S04-114-75b1.1_G04_051011-AMB3_14.fsa	2S04-114-75b1.1	Identifiler_Bode_v2	



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CE GMID Editing Sheet – ID

Tray ID: 051011-ABG1
Analyst: EBN
GMID Panel: Identifiler_Bode_v2

Shipment or Case #: 2504-114
Date: 5/11/11

Well	Edit: Locus, Base pair size - reason
	No Edits

Editing Key

20%: 20% filter applied (after confirming no mixtures)

-A: -A/Split peaks

AUT: single allele below minimum threshold

Artifact (non-specific)

D/I: Degraded and/or Inhibited

Dye artifact

Elevated BL: Labels placed on elevated basline(s)

FC: Failed capillary

ILS<MIN: ILS below minimum rfu threshold

IA: Imbalanced Alleles

LOR: Loss of resolution

Matrix Issue

OL: Off ladder allele

Other: provide explanation in text box (currently using this for FDLE alleles btw. 75-99 rfu)

PU: Pullup

RFU<MIN: sample rfu below minimum threshold

RFU>MAX: sample rfu above maximum threshold

Shoulder: Shoulder peak

Sizing: incorrect sizing (eg: migration issue)

Spikes

Stutter (n-4 if other record)

9947 Positive Control

Well Numbers Checked Against Known: C02, D02

D8S1179: 13,13	D21S11: 30,30	D7S820: 10,11	CSF1PO: 10,12		
D3S1358: 14,15	TH01: 8,9.3	D13S317: 11,11	D16S539: 11,12	D2S1338: 19,23	
D19S433: 14,15	vWA: 17,18	TPOX: 8,8	D18S51: 15,19		
AMEL: X,X	D5S818: 11,11	FGA: 23,24			

EBN 5/11/11

CE GMID Editing Sheet – ID

Tray ID: 051011-ABG1
Analyst: AMB
GMID Panel: Identifiler_Bode_v2

Shipment or Case #: 2504-114
Date: 5/11/11

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	NO Edits

Editing Key

20%: 20% filter applied (after confirming no mixtures)

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AUT: single allele below minimum threshold

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Spikes

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9947 Positive Control

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AMEL: X,X	D5S818: 11,11	FGA: 23,24			

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Applied Biosystems

neMapper ID v3.2.1

GMID11_051011-ABG1_2S04-114_EBH_ID

Sample File	Panel	SQO	SQ
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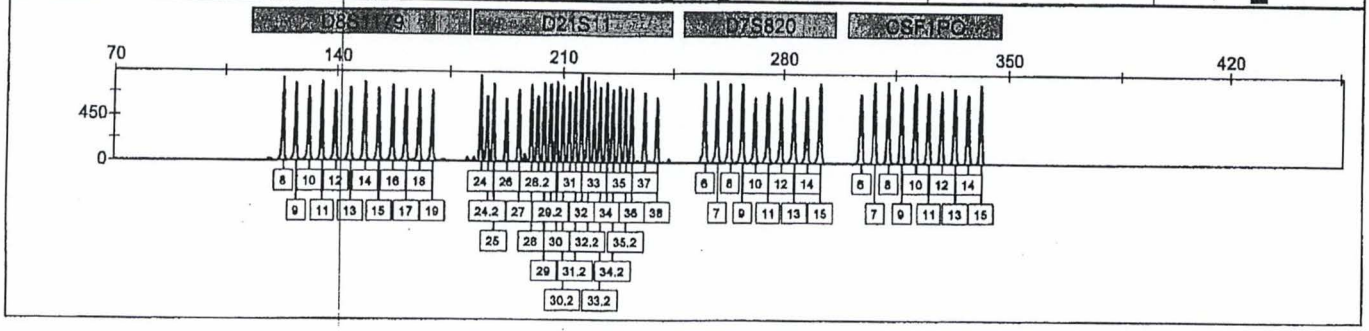
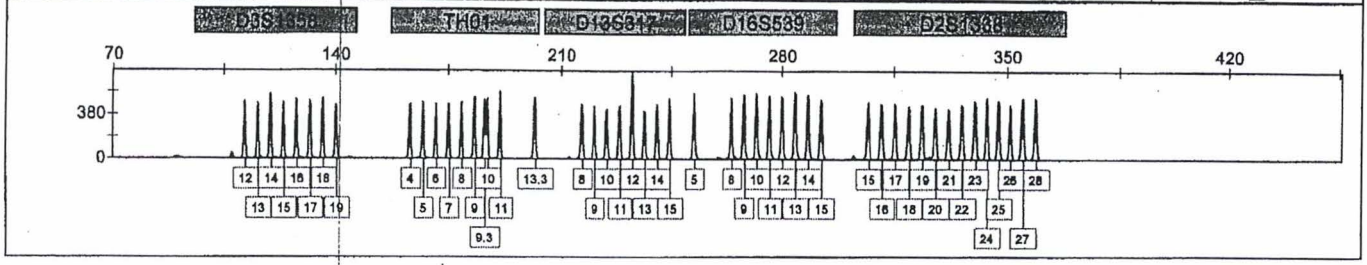
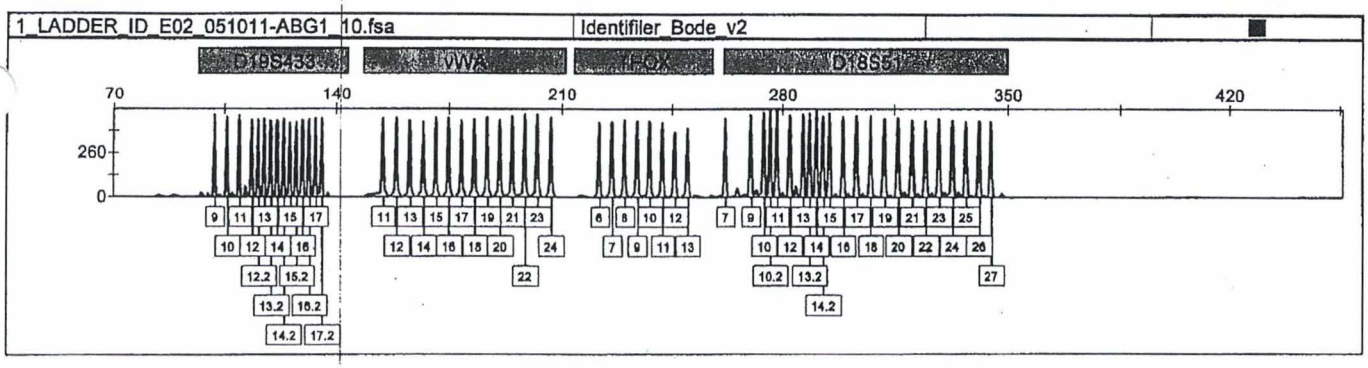


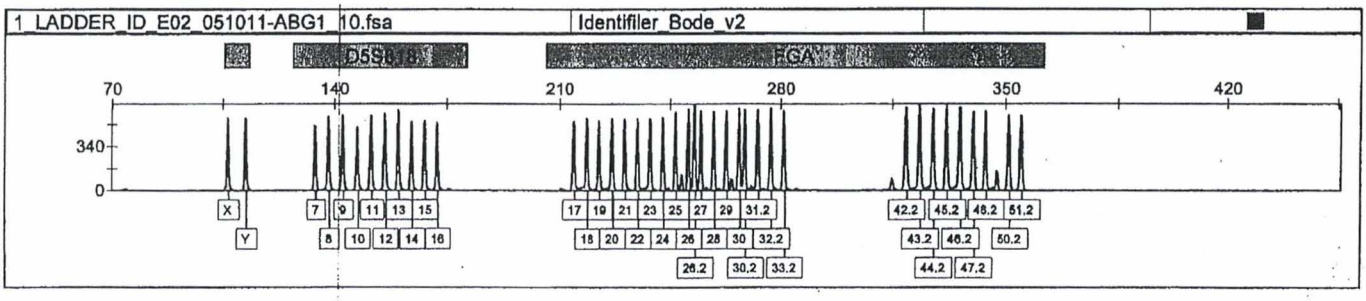
1_LADDER_ID_E02_051011-ABG1_10.fsa | Identifiler_Bode_v2



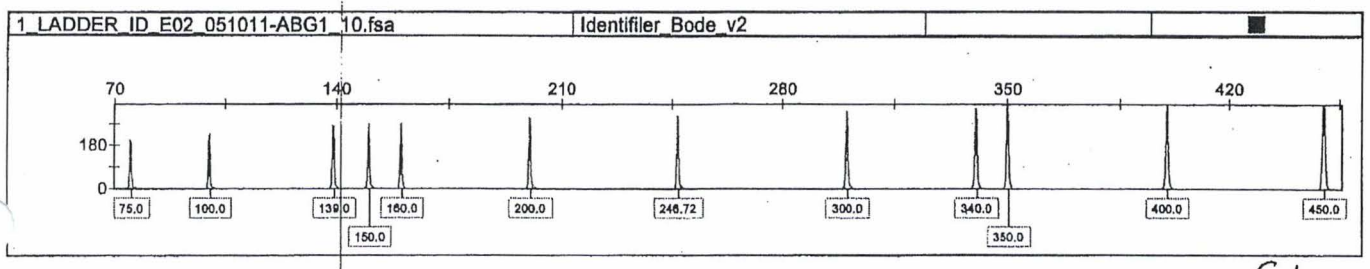
1_LADDER_ID_E02_051011-ABG1_10.fsa | Identifiler_Bode_v2



1_LADDER_ID_E02_051011-ABG1_10.fsa | Identifiler_Bode_v2



1_LADDER_ID_E02_051011-ABG1_10.fsa | Identifiler_Bode_v2



Wed May 11,2011 08:33AM, EDT

Printed by: gmid

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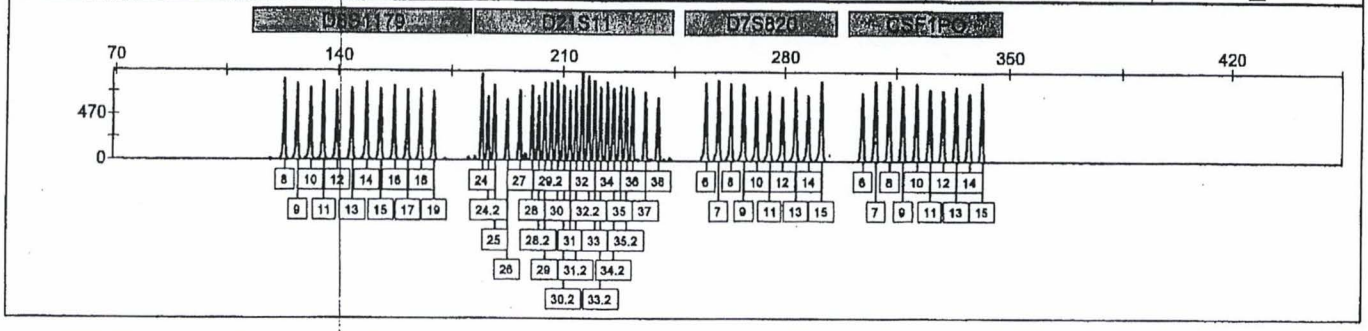
Applied Biosystems

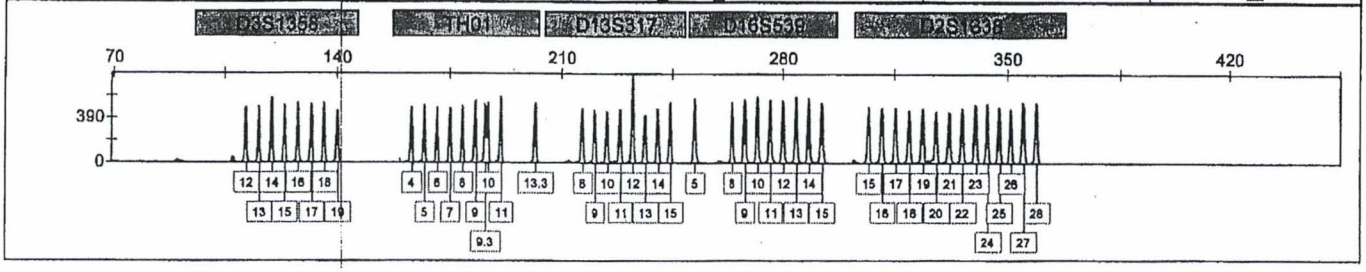
neMapper ID v3.2.1

GMID11_051011-ABG1_2S04-114_EBH_ID

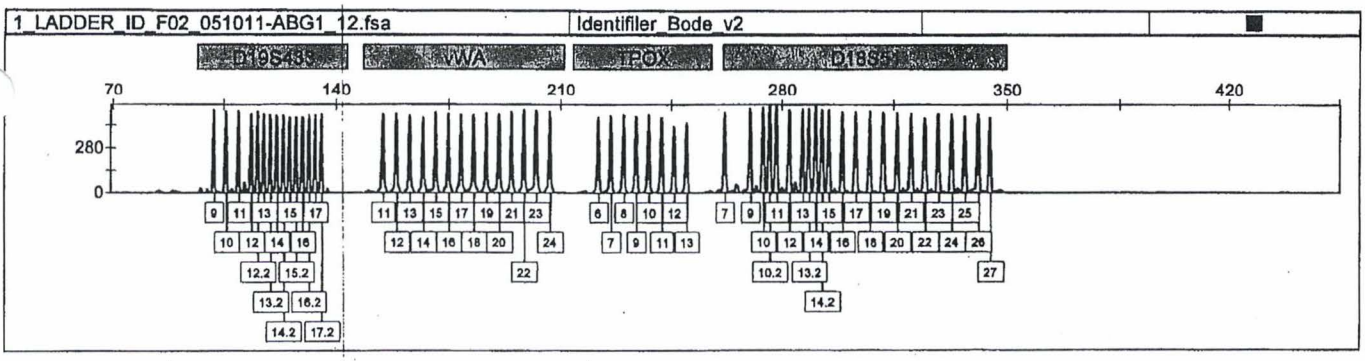
Sample File	Panel	SQO	SQ
1_LADDER_ID_F02_051011-ABG1_12.fsa	Identifiler_Bode_v2		



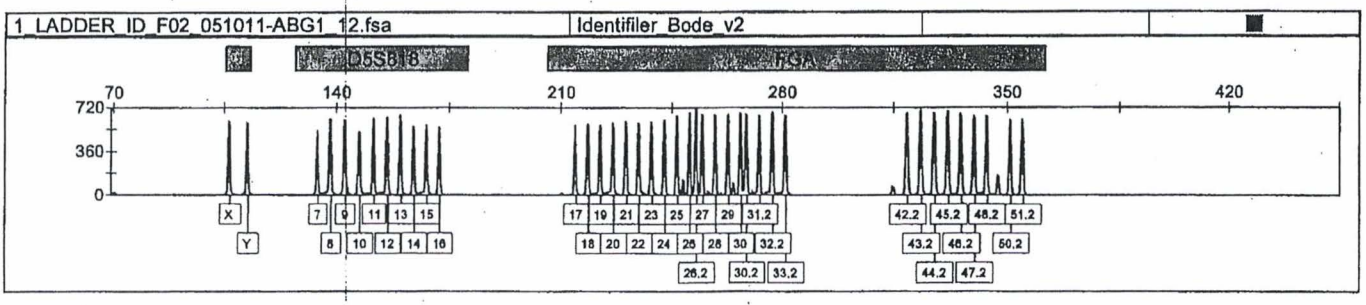
1_LADDER_ID_F02_051011-ABG1_12.fsa | Identifiler_Bode_v2



1_LADDER_ID_F02_051011-ABG1_12.fsa | Identifiler_Bode_v2



1_LADDER_ID_F02_051011-ABG1_12.fsa | Identifiler_Bode_v2



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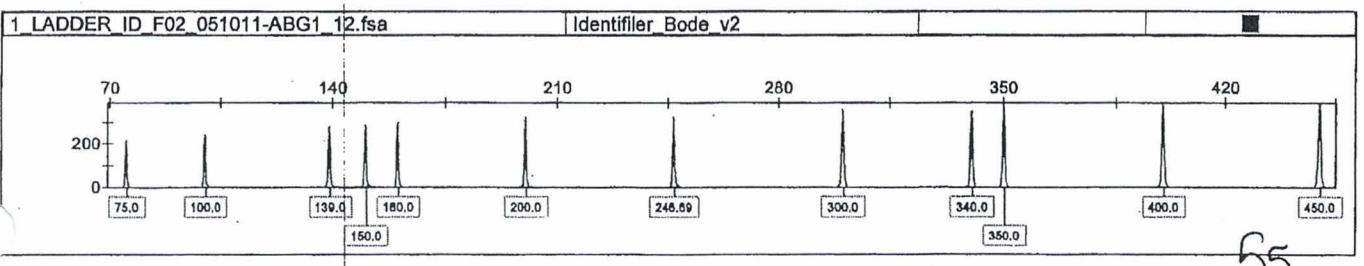

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Sample File	Panel	SQO	SQ
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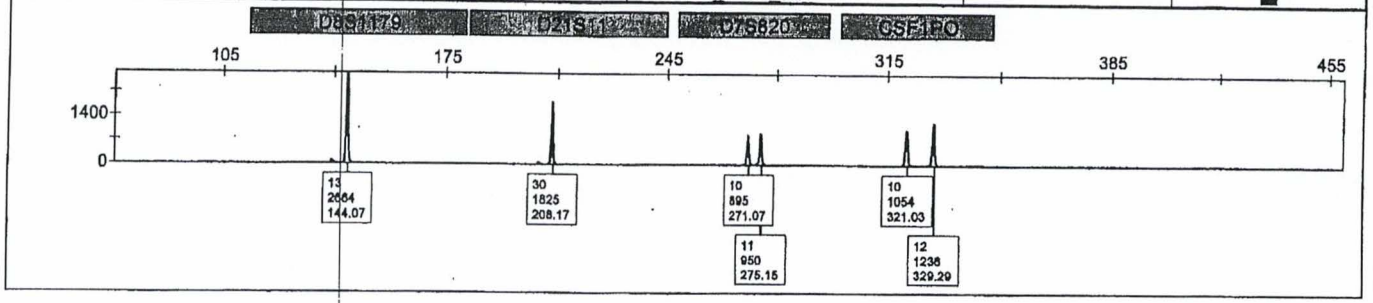

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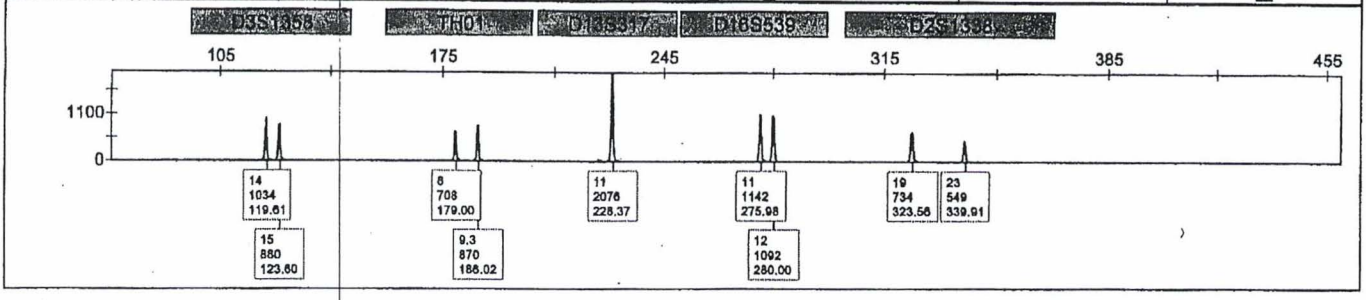

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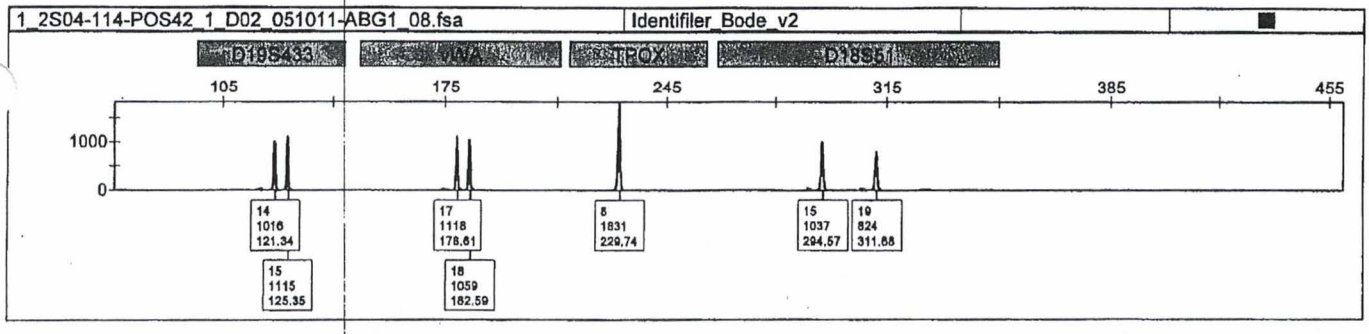

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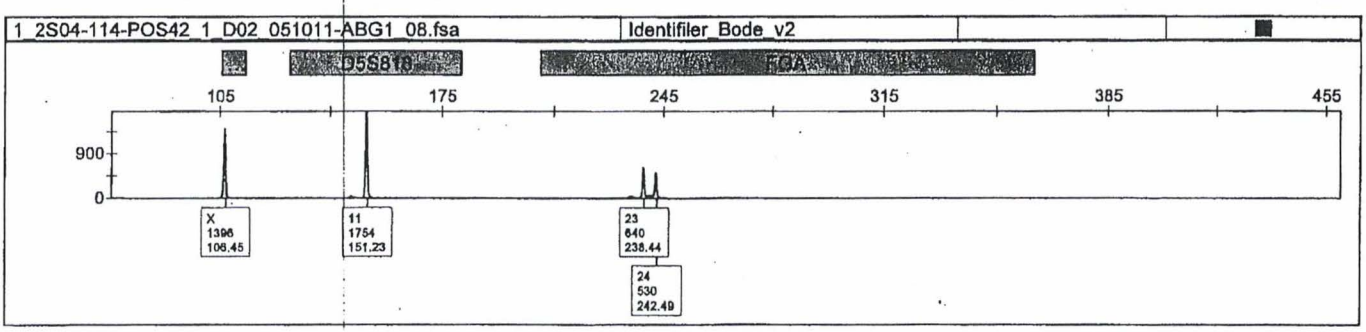

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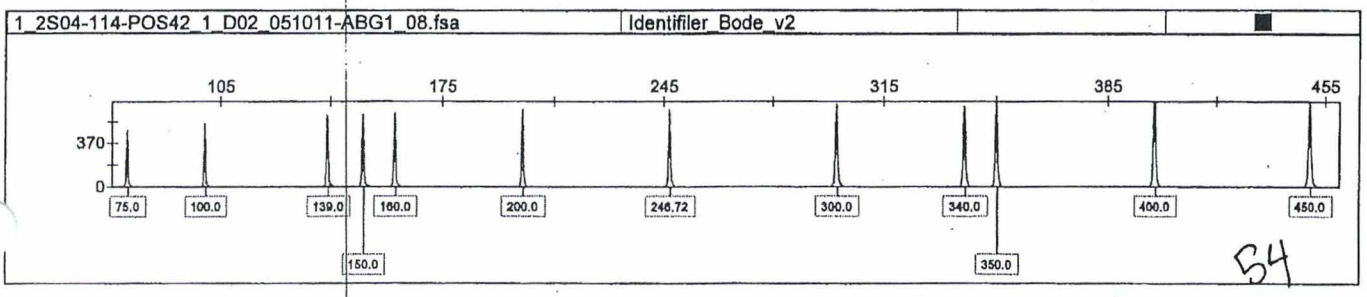

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Sample File	Panel	SQO	SQ
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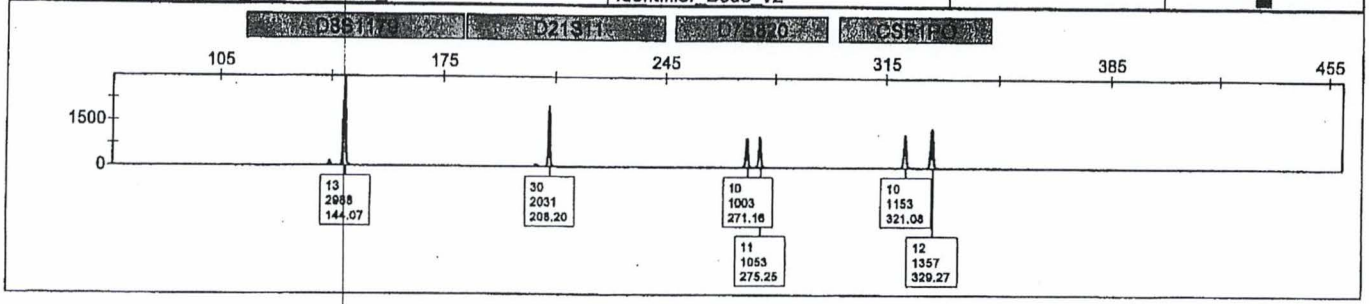

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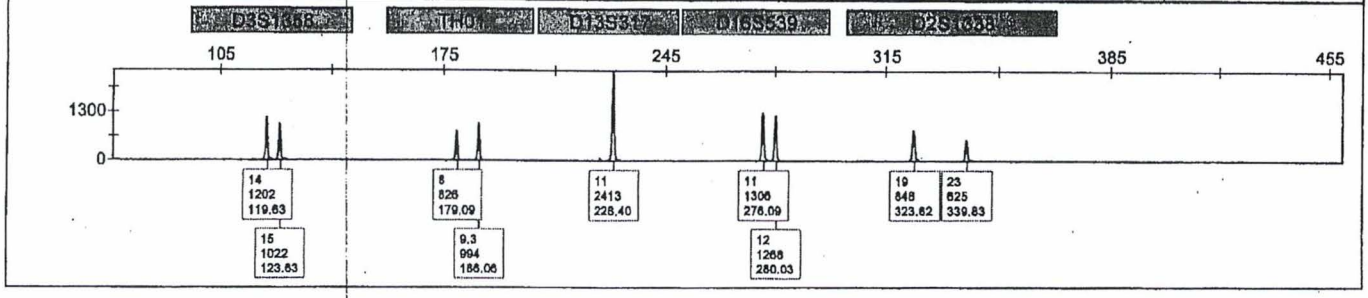

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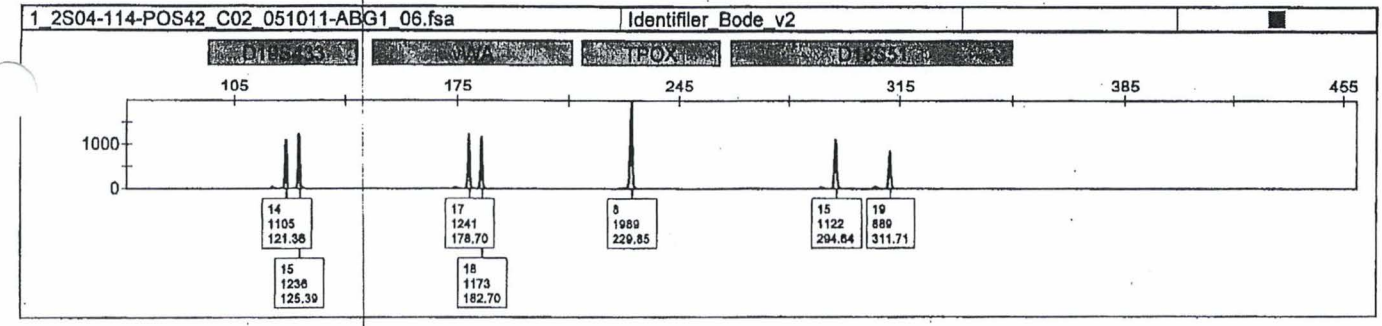

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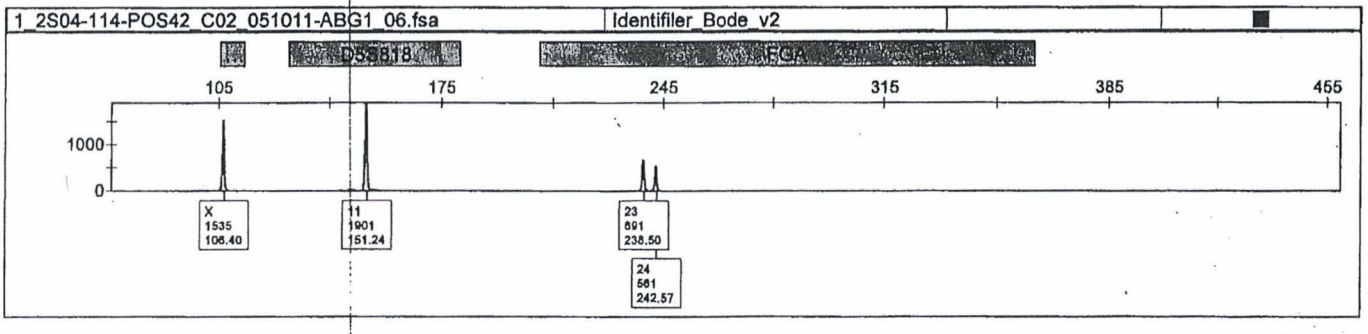

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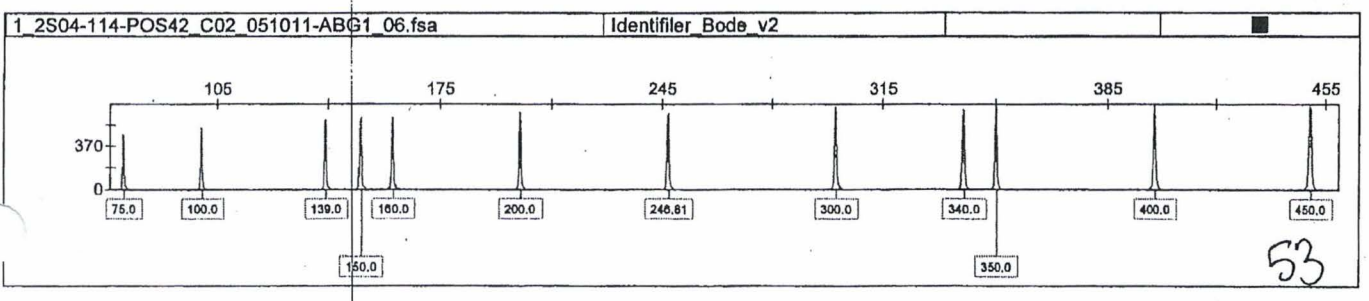

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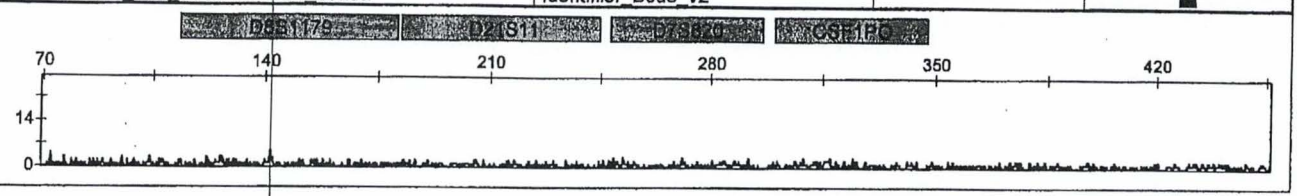
Applied Biosystems

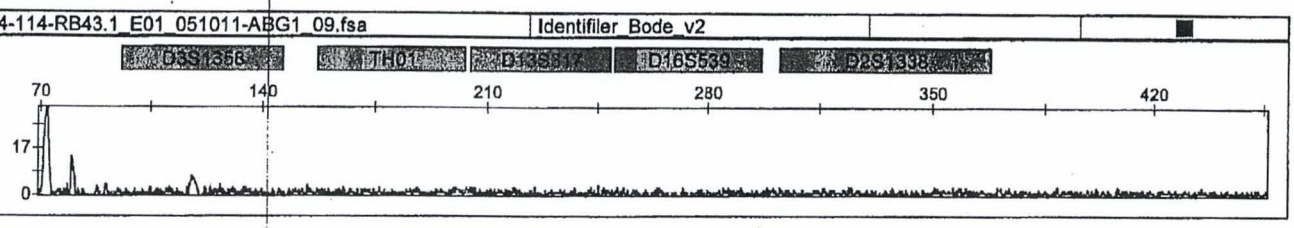
neMapper ID v3.2.1

GMID11_051011-ABG1_2S04-114_EBH_ID

Sample File	Panel	SQO	SQ
1_2S04-114-RB43.1_E01_051011-ABG1_09.fsa	Identifiler_Bode_v2		



1_2S04-114-RB43.1_E01_051011-ABG1_09.fsa | Identifiler_Bode_v2



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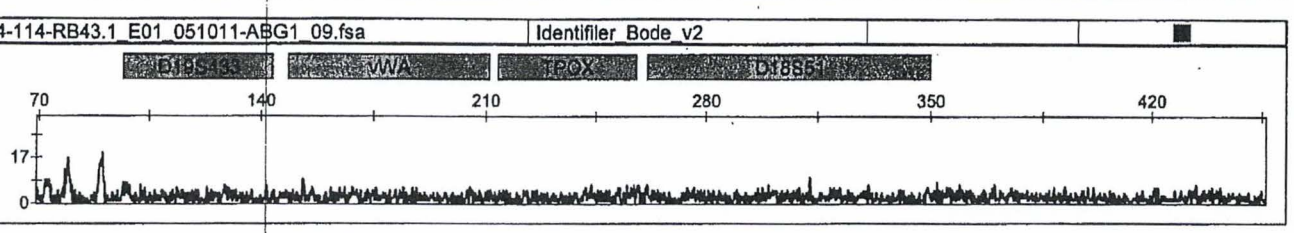
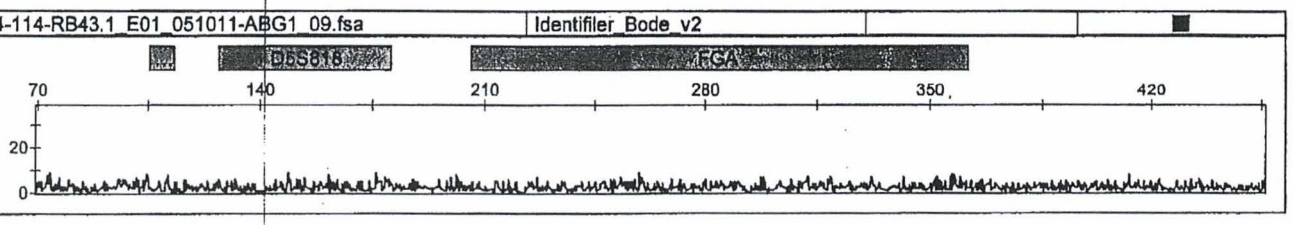


1_2S04-114-RB43.1_E01_051011-ABG1_09.fsa | Identifiler_Bode_v2



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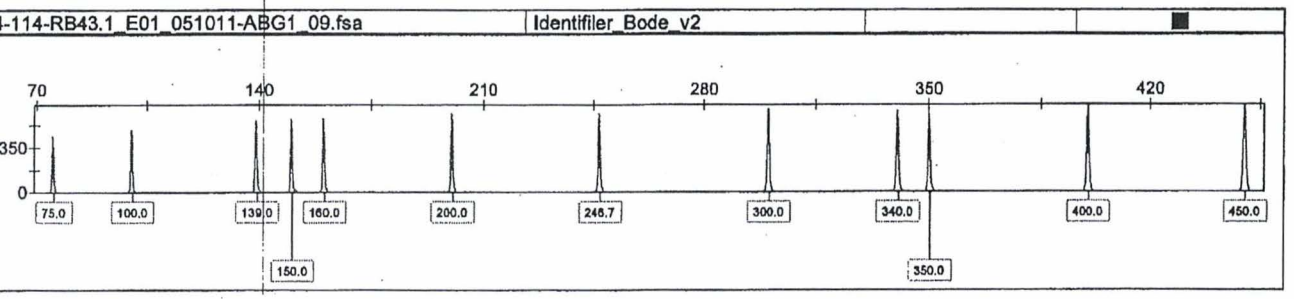

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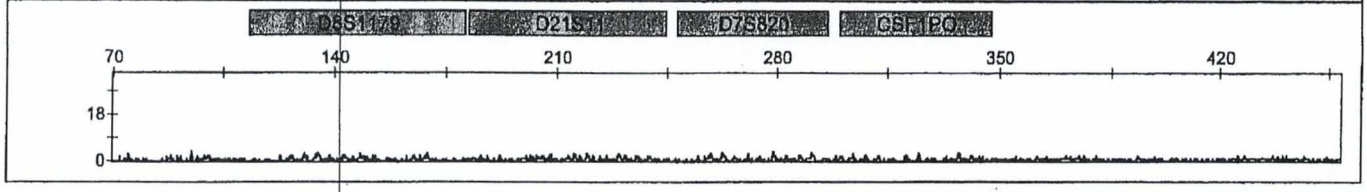
Applied Biosystems

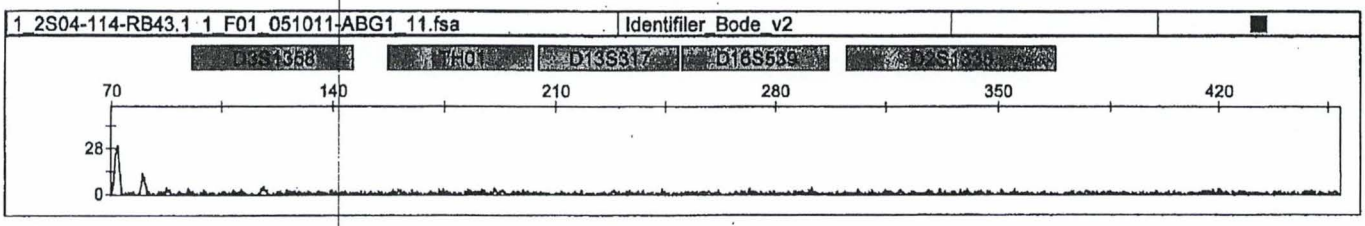
neMapper ID v3.2.1

GMID11_051011-ABG1_2S04-114_EBH_ID

Sample File	Panel	SQO	SQ
1_2S04-114-RB43.1_1_F01_051011-ABG1_11.fsa	Identifiler_Bode_v2		



1_2S04-114-RB43.1_1_F01_051011-ABG1_11.fsa | Identifiler_Bode_v2



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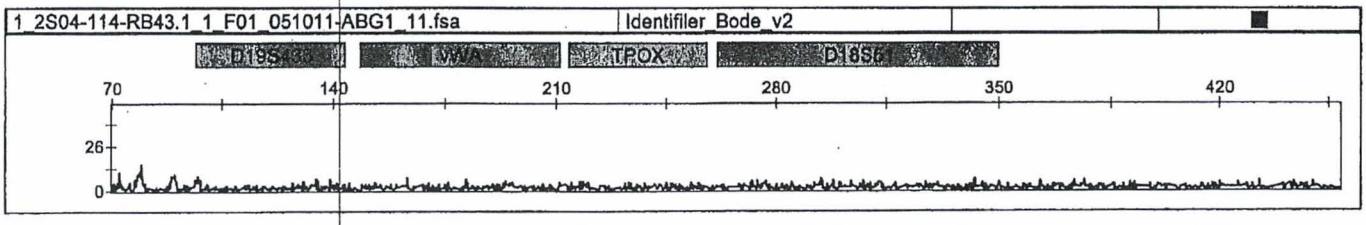
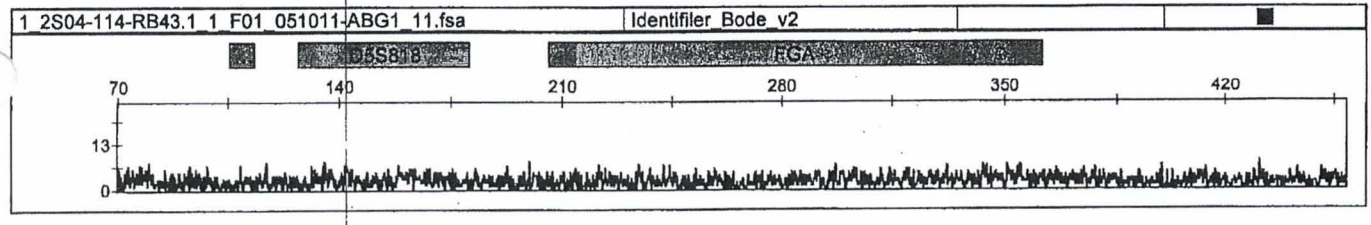
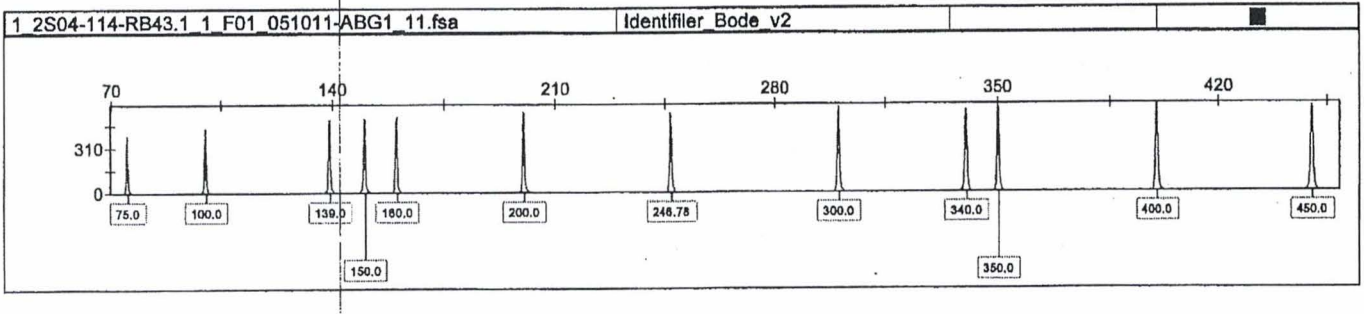


1_2S04-114-RB43.1_1_F01_051011-ABG1_11.fsa | Identifiler_Bode_v2



1_2S04-114-RB43.1_1_F01_051011-ABG1_11.fsa | Identifiler_Bode_v2



EBH 5/11/11 51

CE GMID Editing Sheet – ID

Tray ID: 051011-AMB3
Analyst: EBN
GMID Panel: Identifiler_Bode_v2

Shipment or Case #: 2S04-114
Date: 5/11/11

Well	Edit: Locus, Base pair size - reason
A05	TPOX, 228.12, PU
A01	SPIKES
A04	SPIKES

Editing Key

20%: 20% filter applied (after confirming no mixtures)

-A: -A/Split peaks

AUT: single allele below minimum threshold

Artifact (non-specific)

D/I: Degraded and/or Inhibited

Dye artifact

Elevated BL: Labels placed on elevated basline(s)

FC: Failed capillary

ILS<MIN: ILS below minimum rfu threshold

IA: Imbalanced Alleles

LOR: Loss of resolution

Matrix Issue

OL: Off ladder allele

Other: provide explanation in text box (currently using this for FDLE alleles btw. 75-99 rfu)

PU: Pullup

RFU<MIN: sample rfu below minimum threshold

RFU>MAX: sample rfu above maximum threshold

Shoulder: Shoulder peak

Sizing: incorrect sizing (eg: migration issue)

Spikes

Stutter (n-4 if other record)

9947 Positive Control

Well Numbers Checked Against Known: A05, C05

D8S1179: 13,13	D21S11: 30,30	D7S820: 10,11	CSF1PO: 10,12		
D3S1358: 14,15	TH01: 8,9.3	D13S317: 11,11	D16S539: 11,12	D2S1338: 19,23	
D19S433: 14,15	vWA: 17,18	TPOX: 8,8	D18S51: 15,19		
AMEL: X,X	D5S818: 11,11	FGA: 23,24			

EBN 5/11/11

CE GMID Editing Sheet – ID

Tray ID: 051011-AMB3
Analyst: ADG
GMID Panel; Identifiler_Bode_v2

Shipment or Case #: 2504-114
Date: 5-10-11

Well	Edit: Locus, Base pair size - reason
A5	TPOX 228.12 PU
A1	Spike
A4	Spike

Editing Key

20%: 20% filter applied (after confirming no mixtures)

-A: -A/Split peaks

AUT: single allele below minimum threshold

Artifact (non-specific)

D/I: Degraded and/or Inhibited

Dye artifact

Elevated BL: Labels placed on elevated basline(s)

FC: Failed capillary

ILS<MIN: ILS below minimum rfu threshold

IA: Imbalanced Alleles

LOR: Loss of resolution

Matrix Issue

OL: Off ladder allele

Other: provide explanation in text box (currently using this for FDLE alleles btw. 75-99 rfu)

PU: Pullup

RFU<MIN: sample rfu below minimum threshold

RFU>MAX: sample rfu above maximum threshold

Shoulder: Shoulder peak

Sizing: incorrect sizing (eg: migration issue)

Spikes

Stutter (n-4 if other record)

9947 Positive Control

Well Numbers Checked Against Known: A5, C5

D8S1179: 8,13	D21S11: 30,30	D7S820: 10,11	CSF1PO: 10,12		
D3S1358: 14,15	TH01: 8,9.3	D13S317: 11,11	D16S539: 11,12	D2S1338: 19,23	
D19S433: 14,15	vWA: 17,18	TPOX: 8,8	D18S51: 15,19		
AMEL: X,X	D5S818: 11,11	FGA: 23,24			

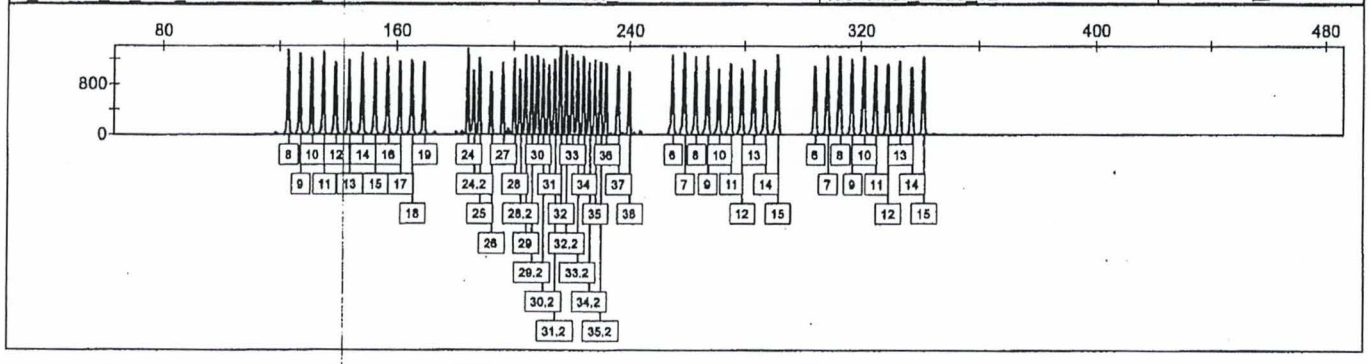
ADG 5-10-11

Applied Biosystems

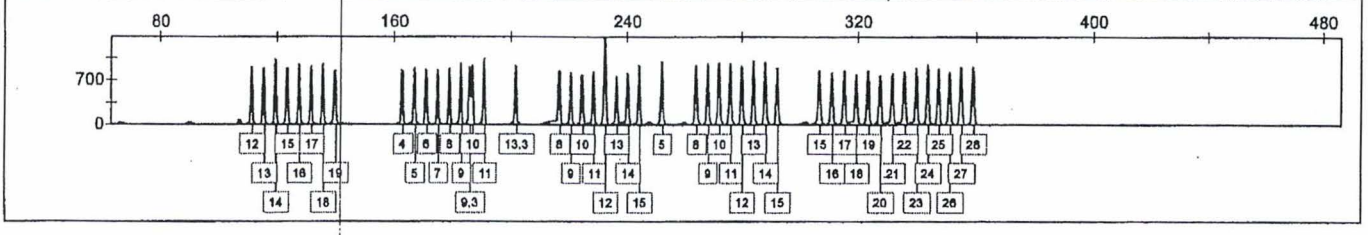
neMapper ID v3.2.1

GMID14_051011-AMB3_2S04-114_ABG_ID

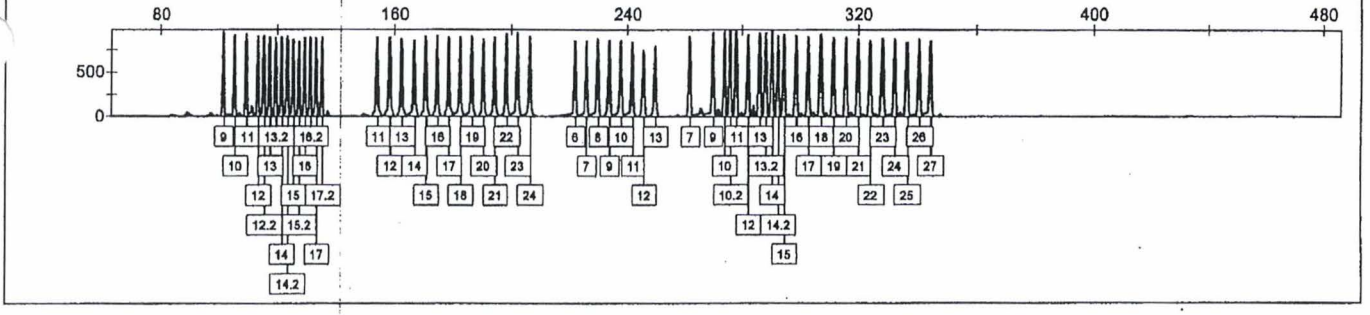
Sample File	Sample Name	Panel	SQ
1_Ladder_ID_E05_051011-AMB3_09.fsa	Ladder_ID	Identifiler_Bode_v2	



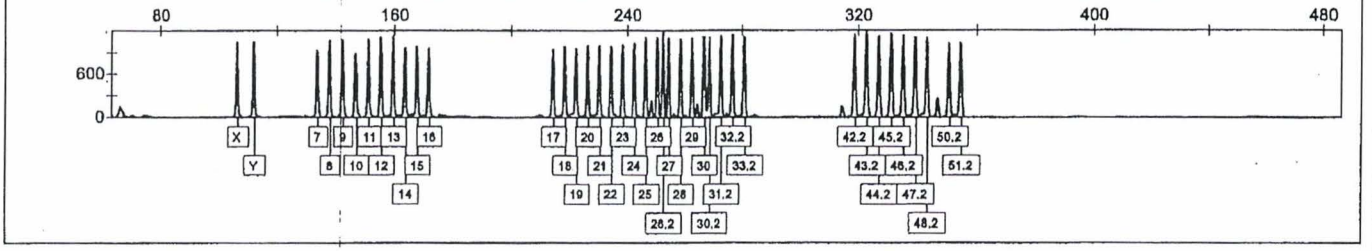
1_Ladder_ID_E05_051011-AMB3_09.fsa	Ladder_ID	Identifiler_Bode_v2	



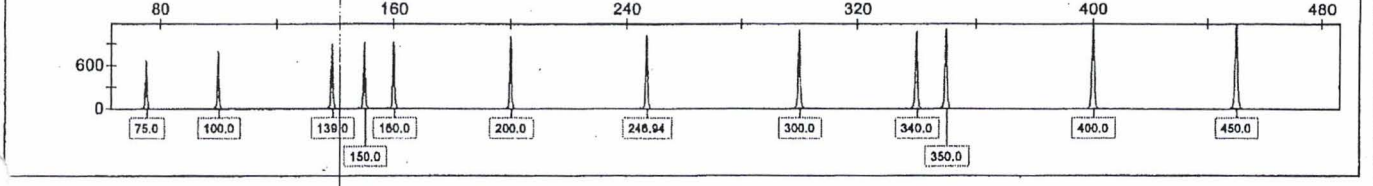
1_Ladder_ID_E05_051011-AMB3_09.fsa	Ladder_ID	Identifiler_Bode_v2	



1_Ladder_ID_E05_051011-AMB3_09.fsa	Ladder_ID	Identifiler_Bode_v2	



1_Ladder_ID_E05_051011-AMB3_09.fsa	Ladder_ID	Identifiler_Bode_v2	



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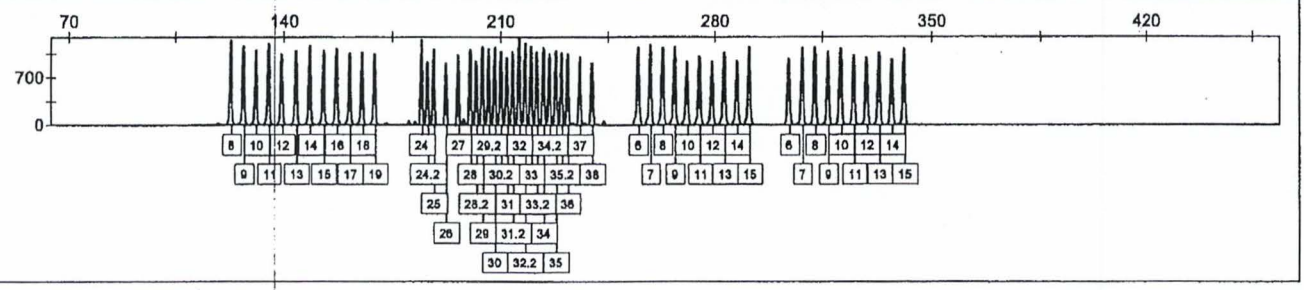
Applied Biosystems

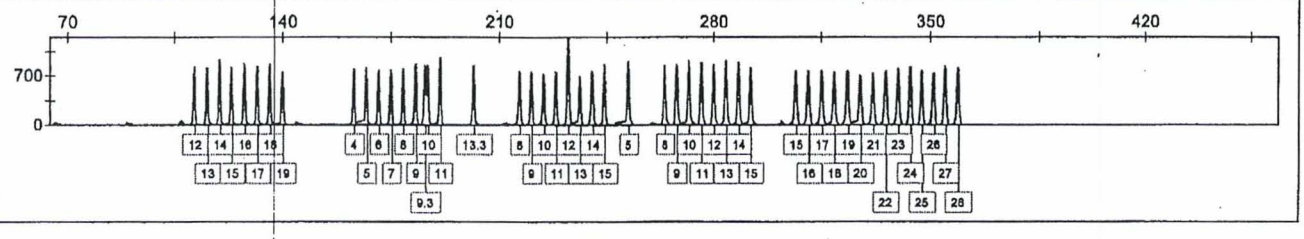
neMapper ID v3.2.1

GMID14_051011-AMB3_2S04-114_ABG_ID

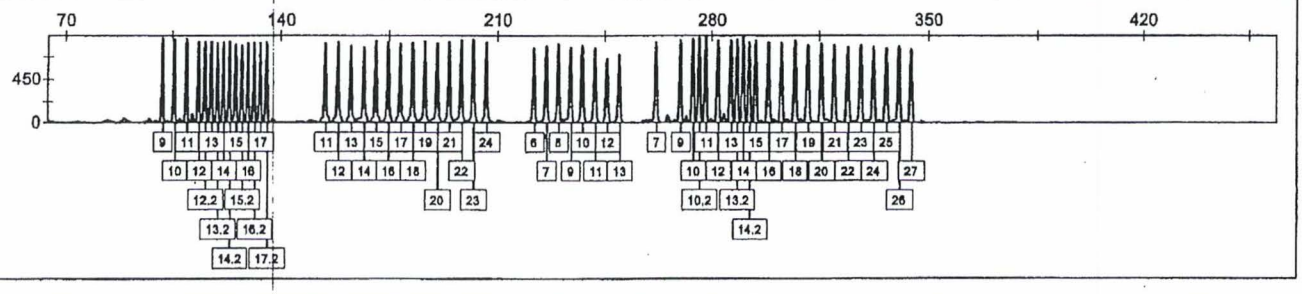
Sample File	Sample Name	Panel	SQ
1_Ladder_ID_F05_051011-AMB3_11.fsa	Ladder_ID	Identifiler_Bode_v2	



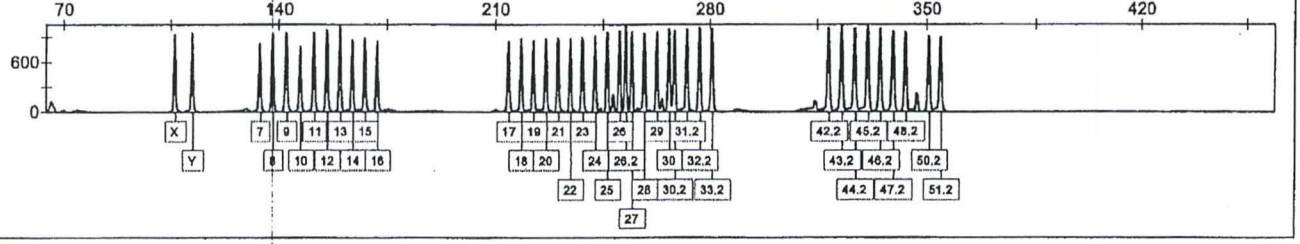
1_Ladder_ID_F05_051011-AMB3_11.fsa	Ladder_ID	Identifiler_Bode_v2	



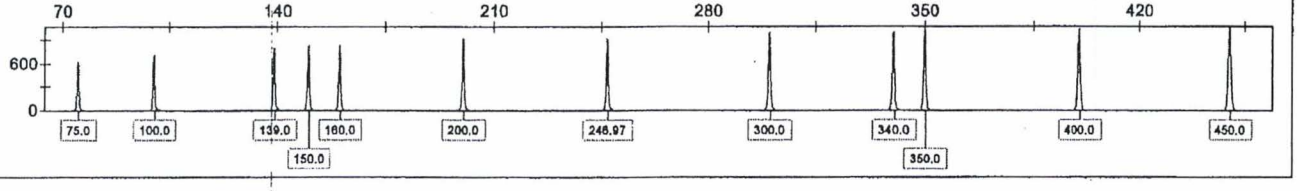
1_Ladder_ID_F05_051011-AMB3_11.fsa	Ladder_ID	Identifiler_Bode_v2	



1_Ladder_ID_F05_051011-AMB3_11.fsa	Ladder_ID	Identifiler_Bode_v2	



1_Ladder_ID_F05_051011-AMB3_11.fsa	Ladder_ID	Identifiler_Bode_v2	



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Tue May 10,2011 08:05PM, EDT

Printed by: gmid

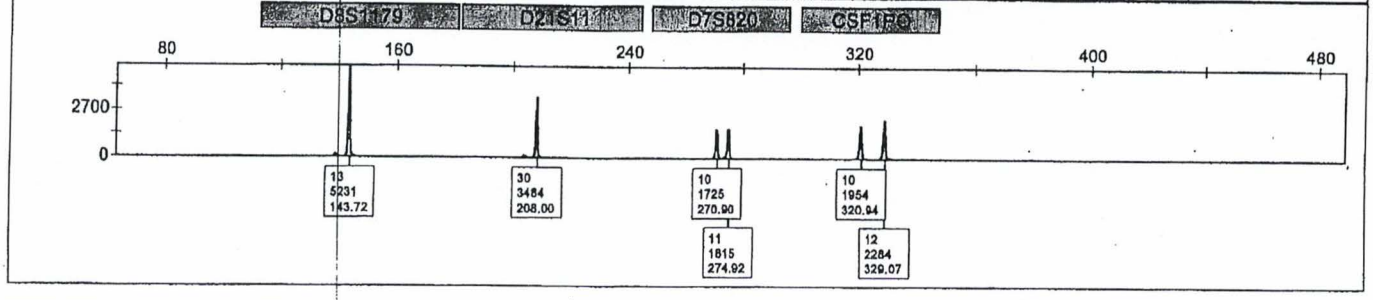
ABS 5-10-11

Applied Biosystems

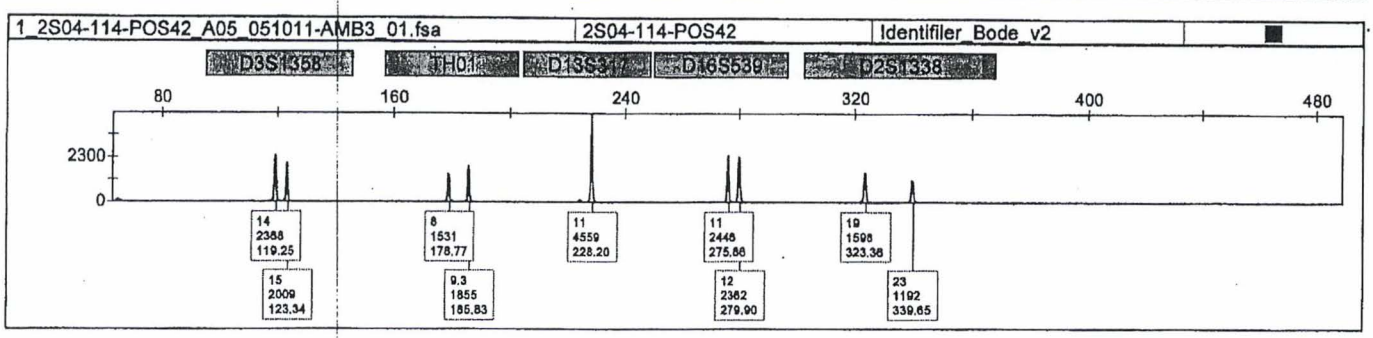
eneMapper ID v3.2.1

GMID14_051011-AMB3_2S04-114_ABG_ID

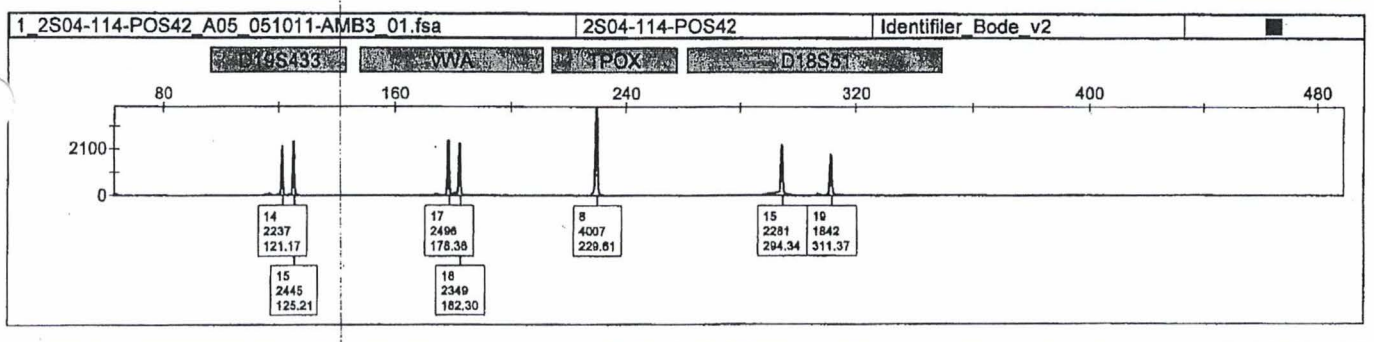
Sample File	Sample Name	Panel	SQ
1_2S04-114-POS42_A05_051011-AMB3_01.fsa	2S04-114-POS42	Identifiler_Bode_v2	



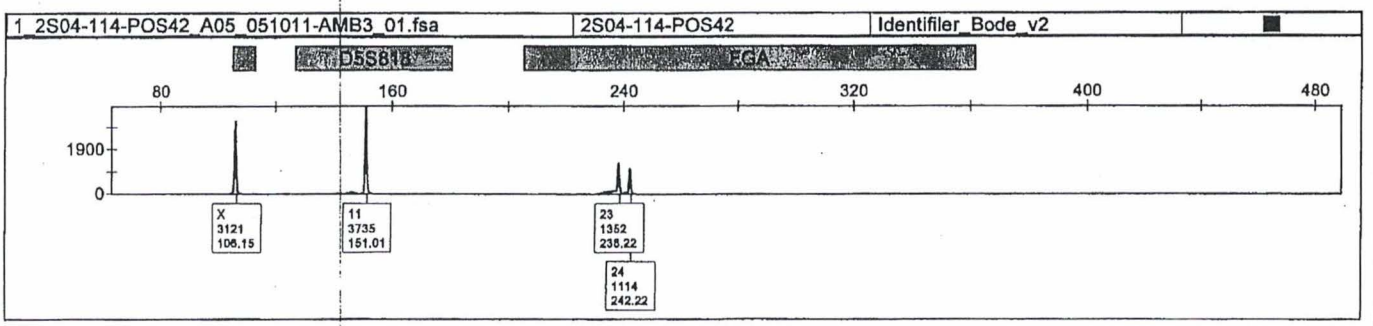
1_2S04-114-POS42_A05_051011-AMB3_01.fsa	2S04-114-POS42	Identifiler_Bode_v2	



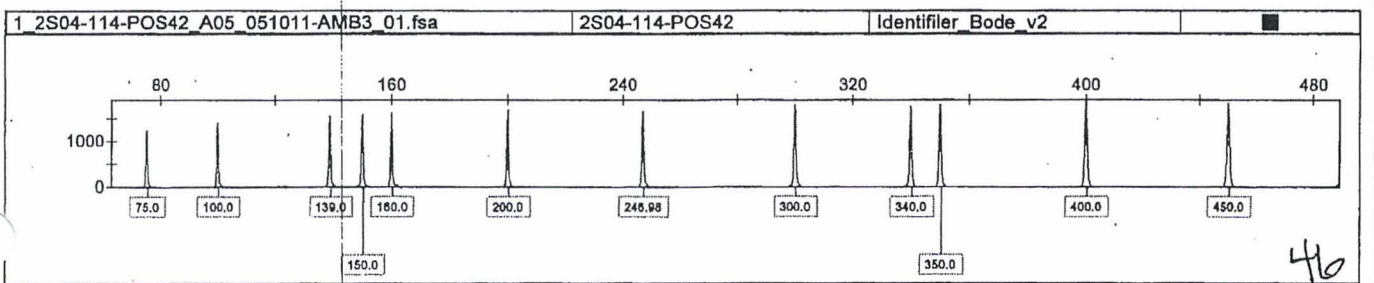
1_2S04-114-POS42_A05_051011-AMB3_01.fsa	2S04-114-POS42	Identifiler_Bode_v2	



1_2S04-114-POS42_A05_051011-AMB3_01.fsa	2S04-114-POS42	Identifiler_Bode_v2	



1_2S04-114-POS42_A05_051011-AMB3_01.fsa	2S04-114-POS42	Identifiler_Bode_v2	



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Applied Biosystems

neMapper ID v3.2.1

GMID14_051011-AMB3_2S04-114_ABG_ID

Sample File	Sample Name	Panel	SQ
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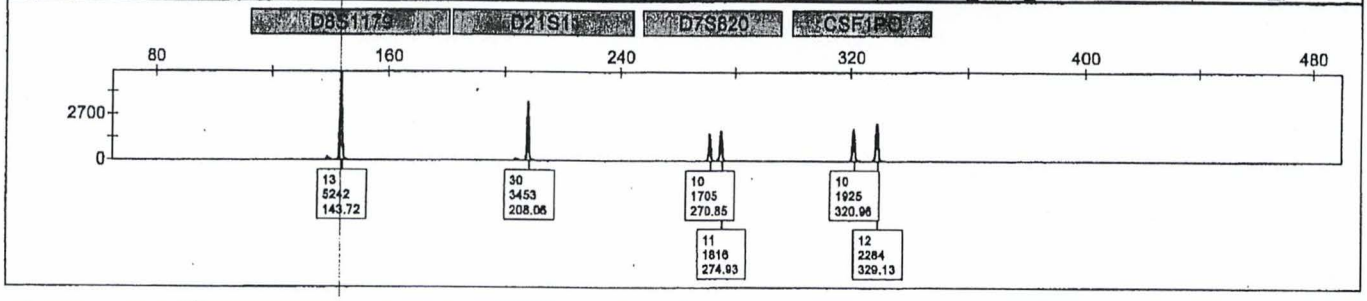

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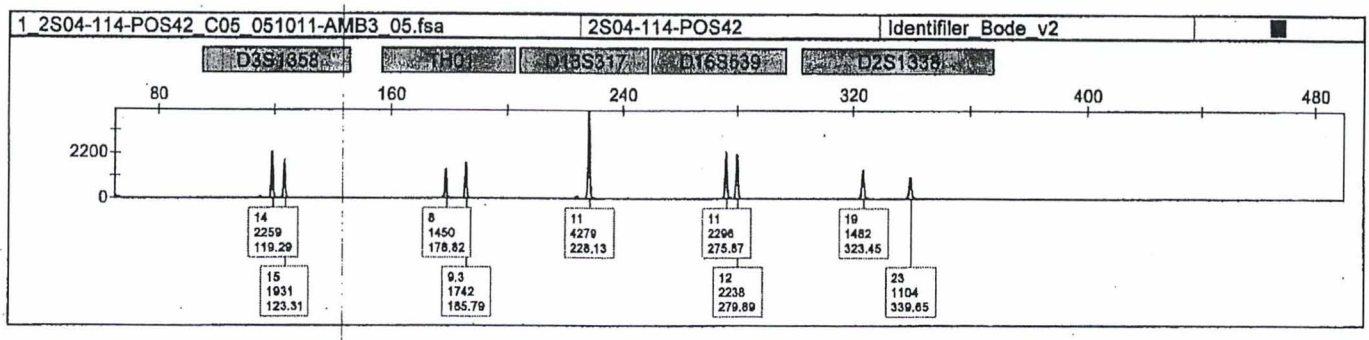

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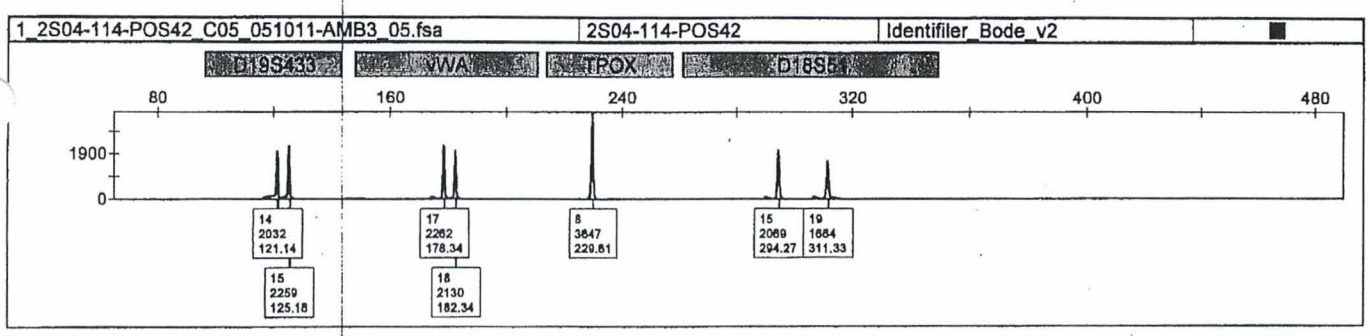

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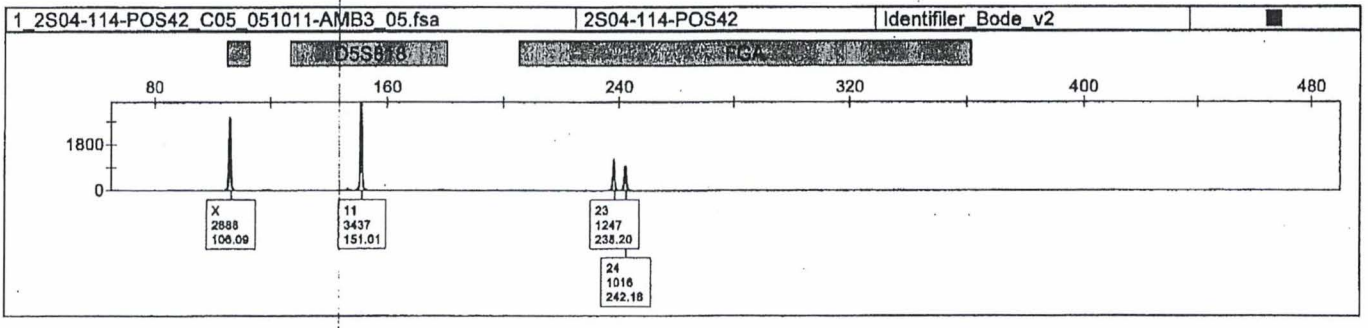
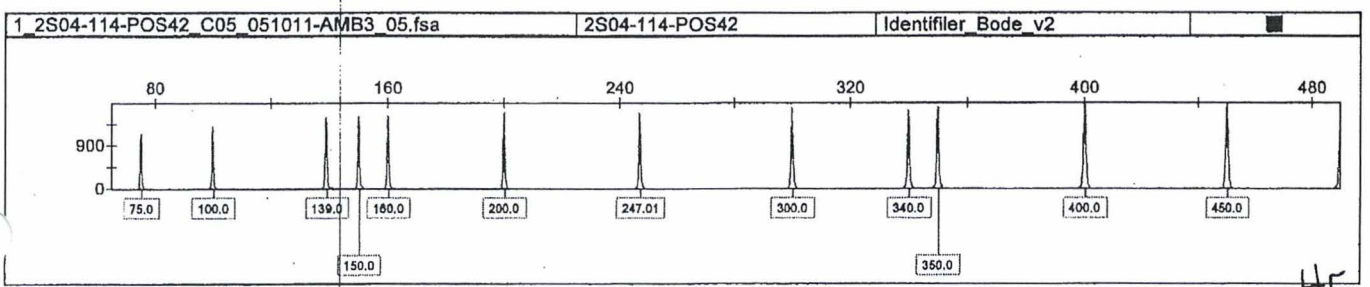


1_2S04-114-POS42_C05_051011-AMB3_05.fsa	2S04-114-POS42	Identifiler_Bode_v2	



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Applied Biosystems

GeneMapper ID v3.2.1

GMID14_051011-AMB3_2S04-114_ABG_ID

Sample File	Sample Name	Panel	SQ
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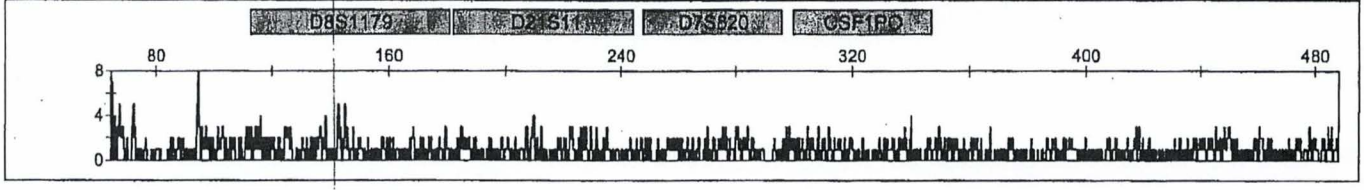
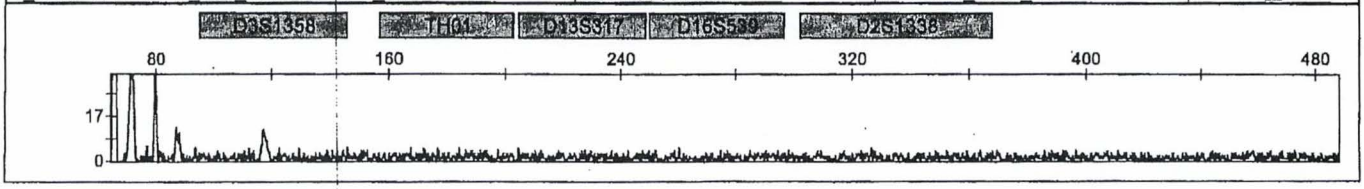


1_2S04-114-NEG42_B05_051011-AMB3_03.fsa	2S04-114-NEG42	Identifiler_Bode_v2	



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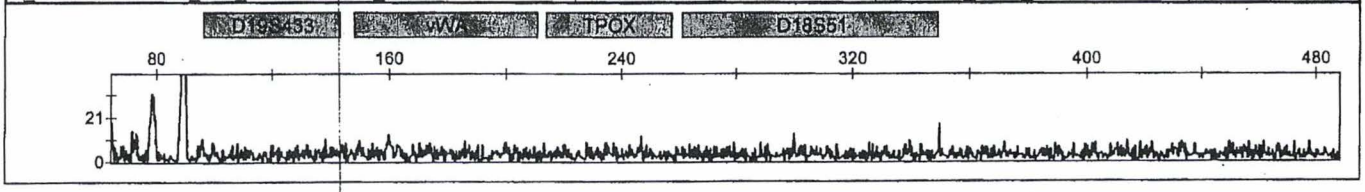
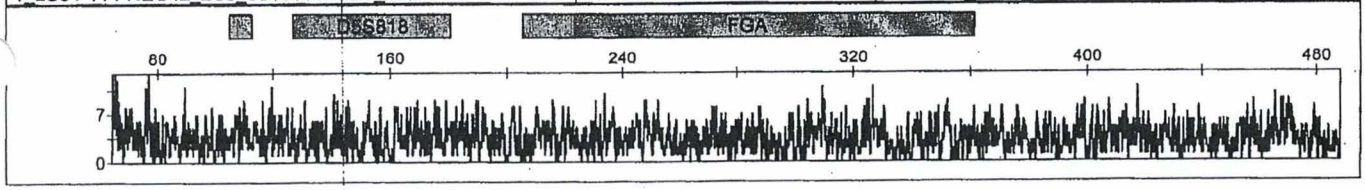


1_2S04-114-NEG42_B05_051011-AMB3_03.fsa	2S04-114-NEG42	Identifiler_Bode_v2	



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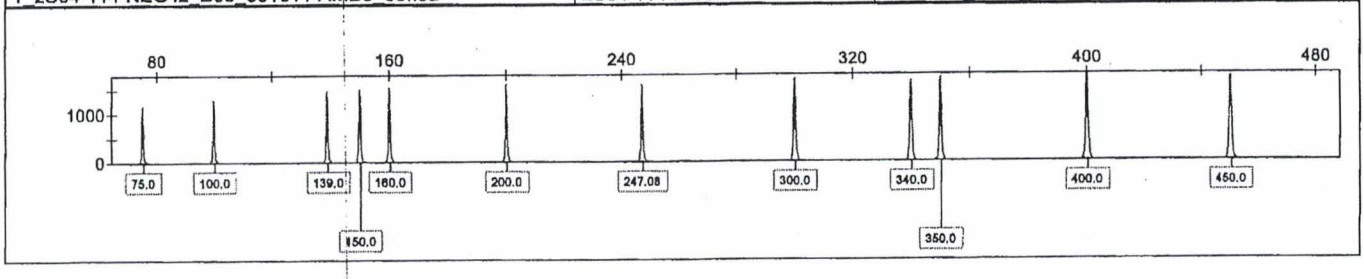

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Applied Biosystems

neMapper ID v3.2.1

GMID14_051011-AMB3_2S04-114_ABG_ID

Sample File	Sample Name	Panel	SQ
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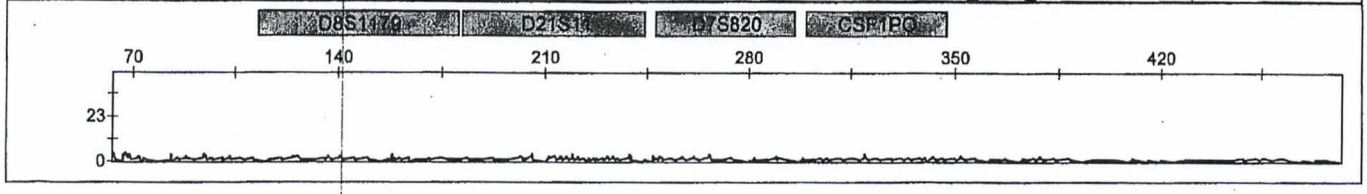
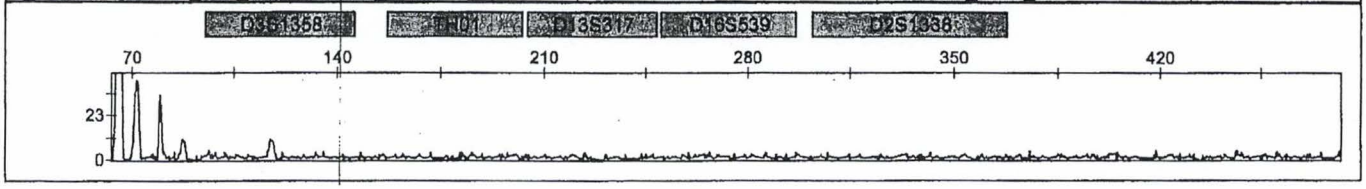


1_2S04-114-NEG42_D05_051011-AMB3_07.fsa	2S04-114-NEG42	Identifiler_Bode_v2	



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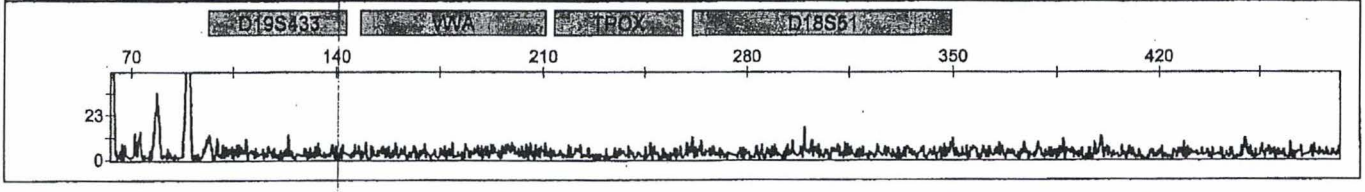
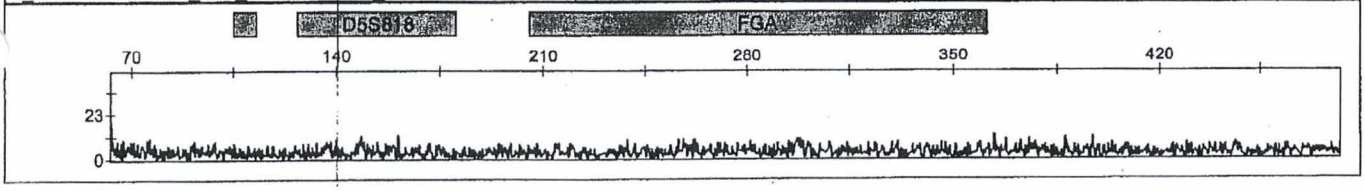
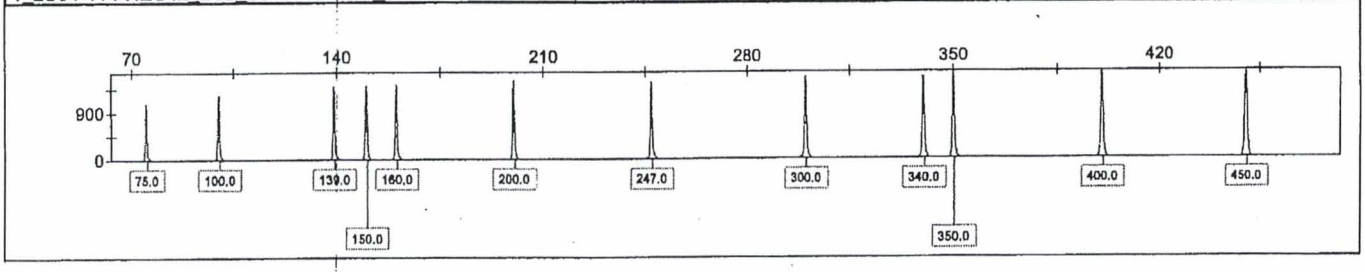


1_2S04-114-NEG42_D05_051011-AMB3_07.fsa	2S04-114-NEG42	Identifiler_Bode_v2	



1_2S04-114-NEG42_D05_051011-AMB3_07.fsa	2S04-114-NEG42	Identifiler_Bode_v2	



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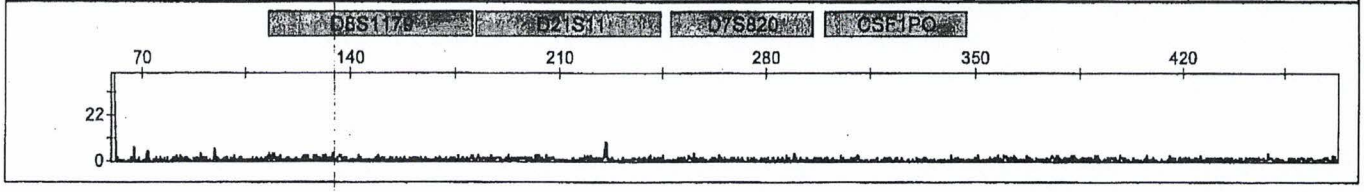
DOC 510(k)

Applied Biosystems

GeneMapper ID v3.2.1

GMID14_051011-AMB3_2S04-114_ABG_ID

Sample File	Sample Name	Panel	SQ
1_2S04-114-RB32.1_B01_051011-AMB3_03.fsa	2S04-114-RB32.1	Identifiler_Bode_v2	



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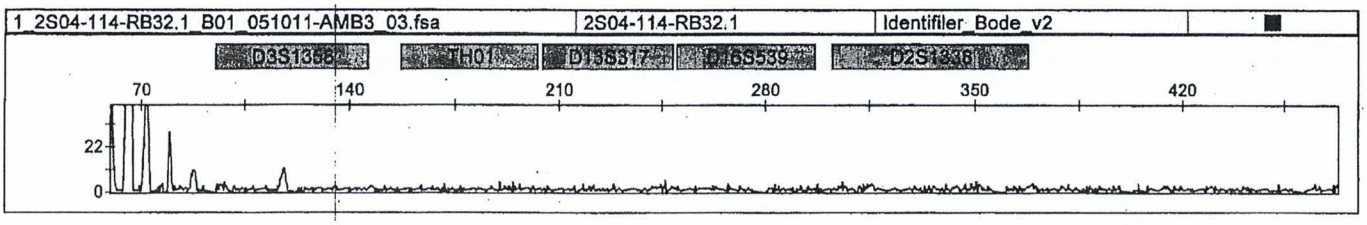

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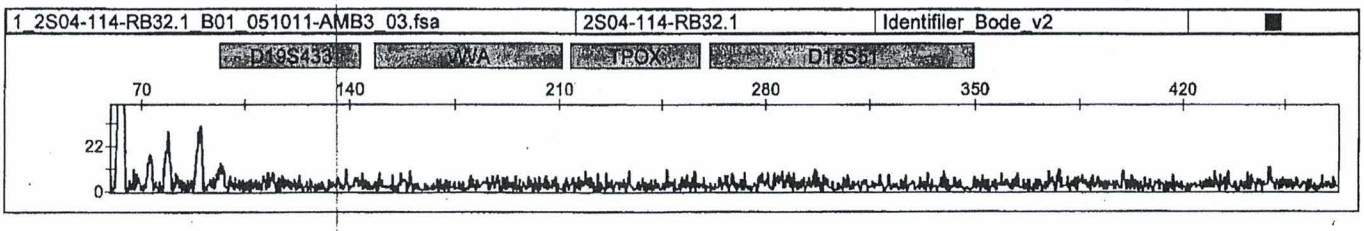
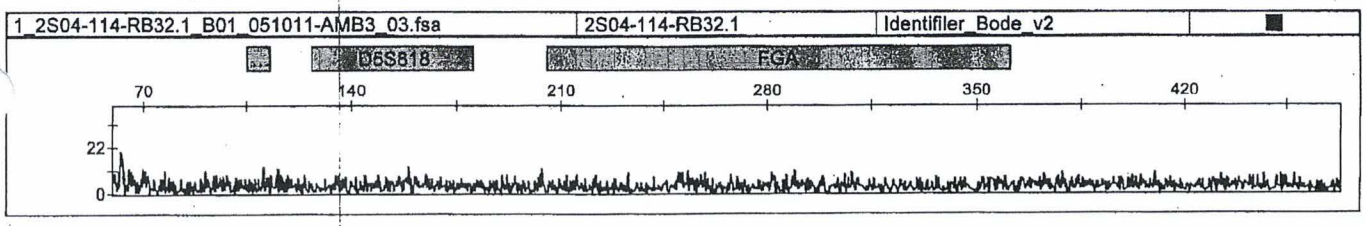
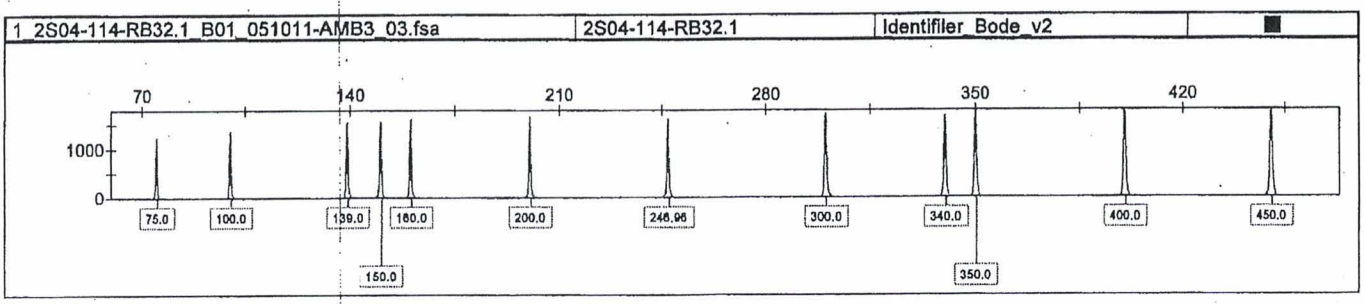


1_2S04-114-RB32.1_B01_051011-AMB3_03.fsa	2S04-114-RB32.1	Identifiler_Bode_v2	



1_2S04-114-RB32.1_B01_051011-AMB3_03.fsa	2S04-114-RB32.1	Identifiler_Bode_v2	



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Applied Biosystems

neMapper ID v3.2.1

GMID14_051011-AMB3_2S04-114_ABG_ID

Sample File	Sample Name	Panel	SQ
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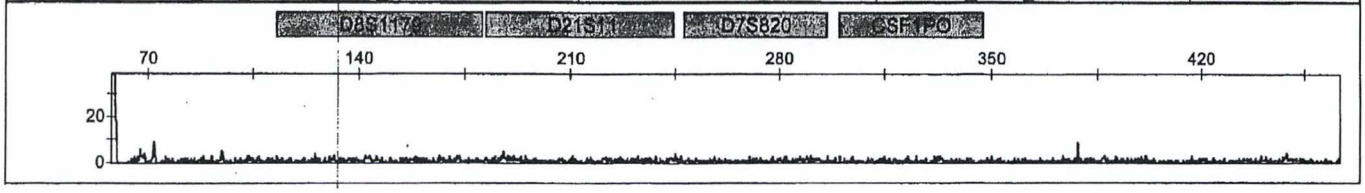

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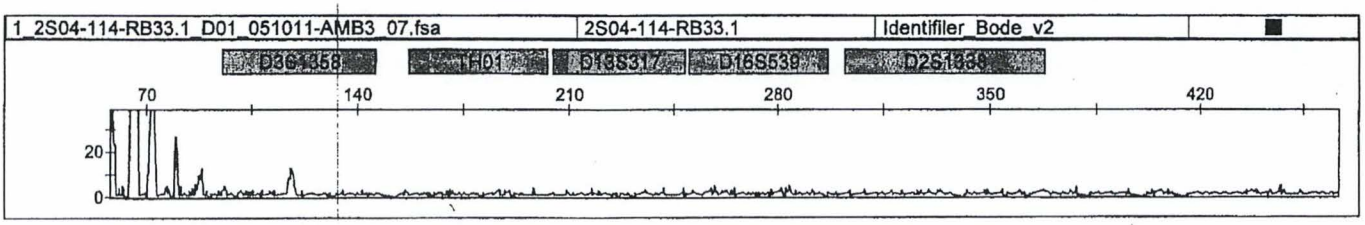

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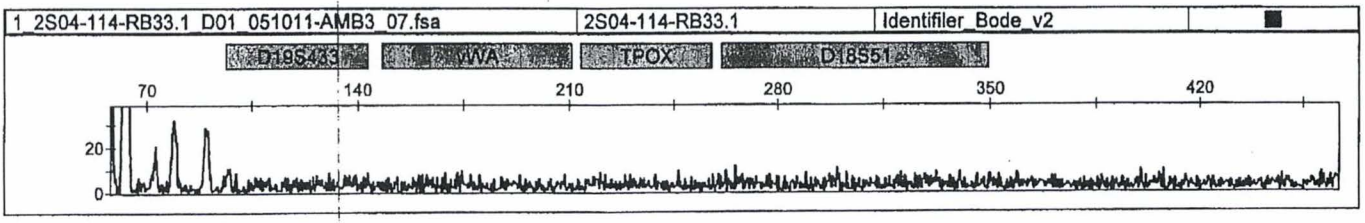
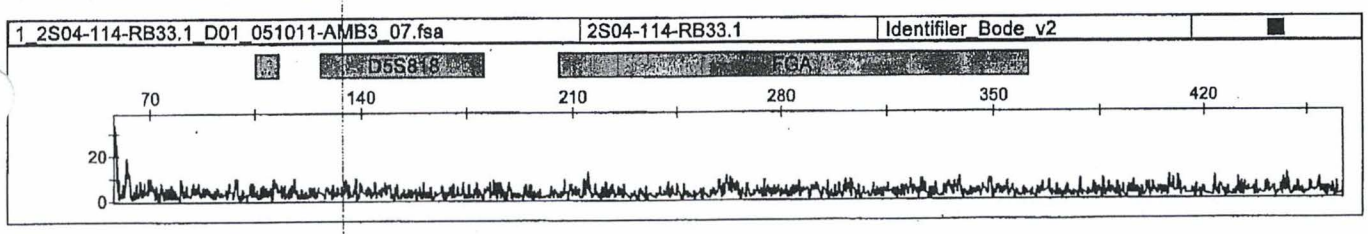
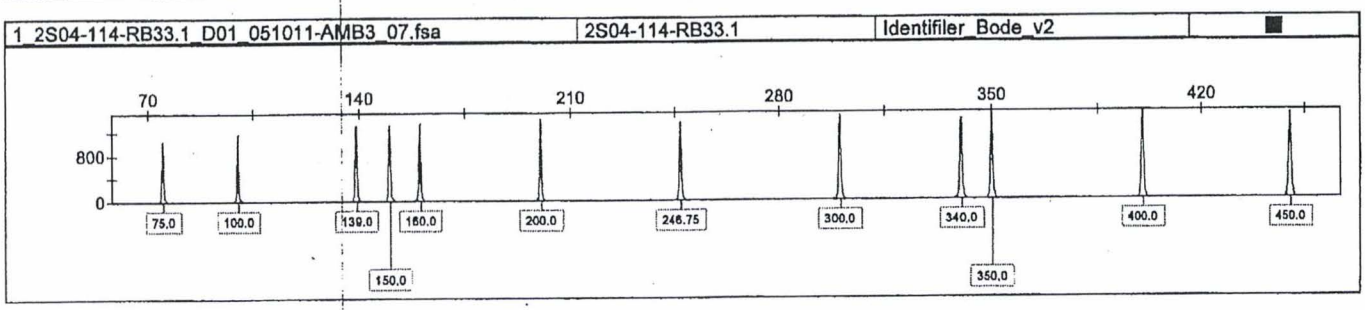


1_2S04-114-RB33.1_D01_051011-AMB3_07.fsa	2S04-114-RB33.1	Identifiler_Bode_v2	



1_2S04-114-RB33.1_D01_051011-AMB3_07.fsa	2S04-114-RB33.1	Identifiler_Bode_v2	



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Applied Biosystems

neMapper ID v3.2.1

GMID14_051011-AMB3_2S04-114_ABG_ID

Sample File	Sample Name	Panel	SQ
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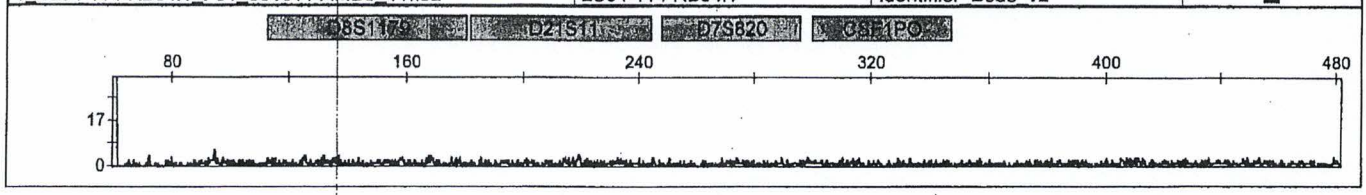
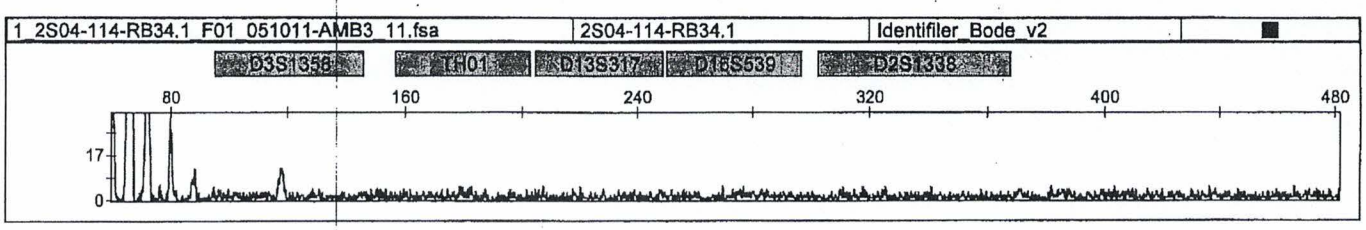


1_2S04-114-RB34.1_F01_051011-AMB3_11.fsa	2S04-114-RB34.1	Identifiler_Bode_v2	



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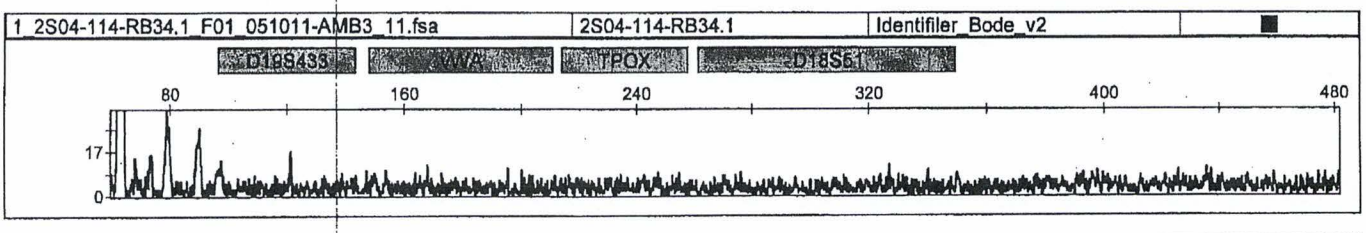
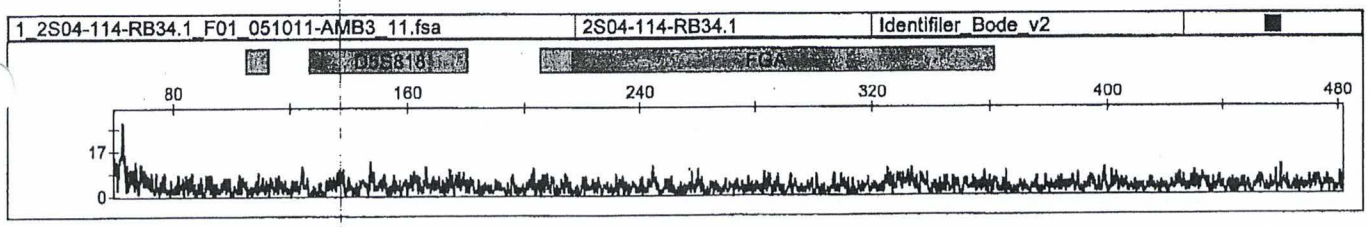


1_2S04-114-RB34.1_F01_051011-AMB3_11.fsa	2S04-114-RB34.1	Identifiler_Bode_v2	



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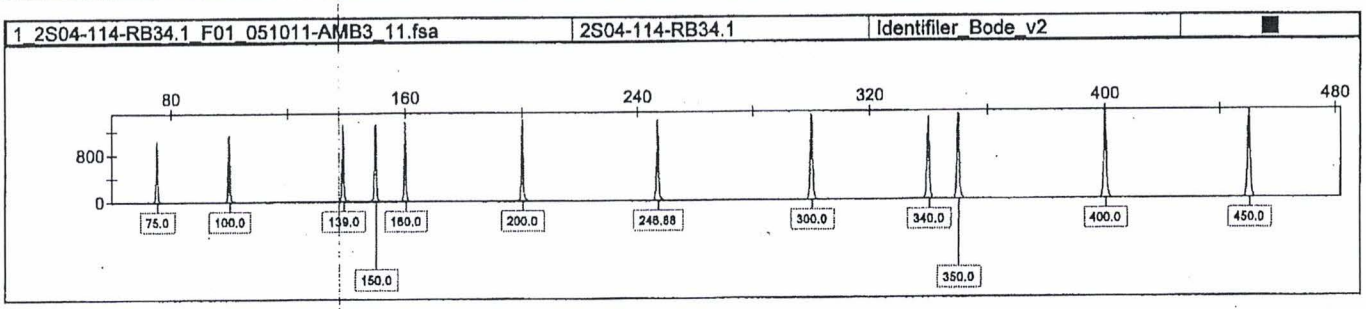
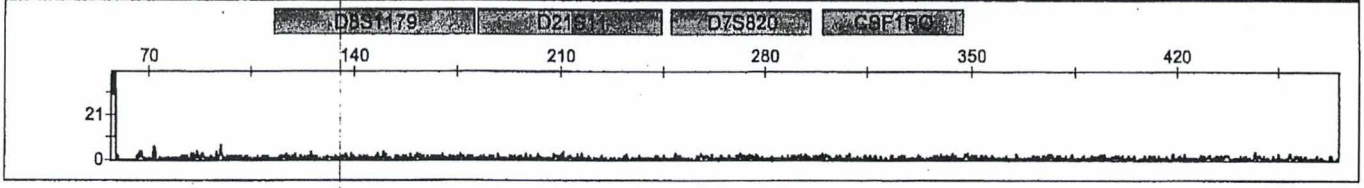
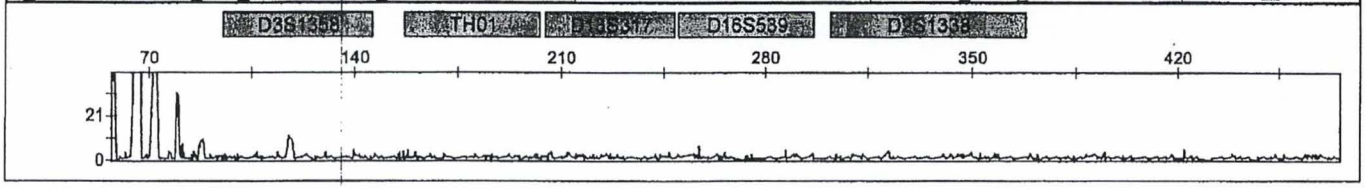


Sample File	Sample Name	Panel	SQ
1_2S04-114-RB35.1_H01_051011-AMB3_15.fsa	2S04-114-RB35.1	Identifiler_Bode_v2	



1_2S04-114-RB35.1_H01_051011-AMB3_15.fsa | 2S04-114-RB35.1 | Identifiler_Bode_v2



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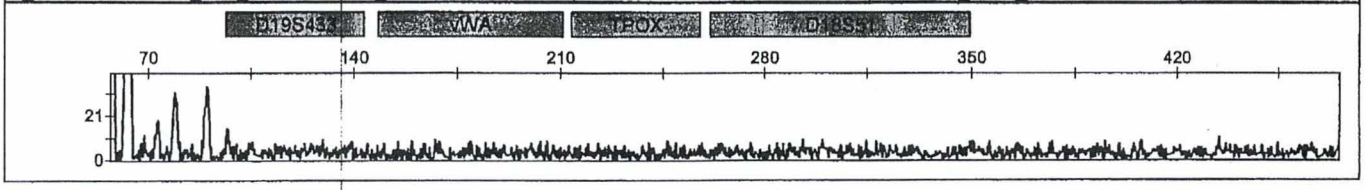
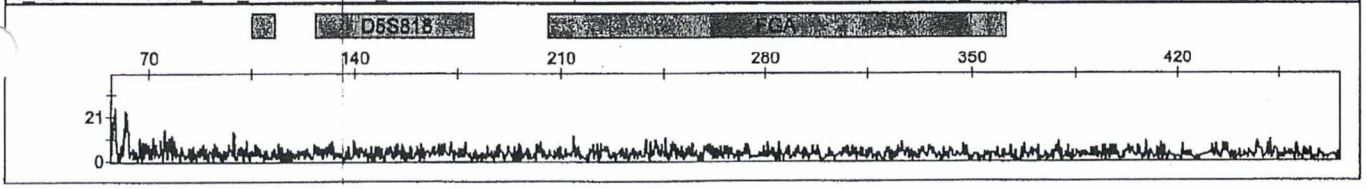


1_2S04-114-RB35.1_H01_051011-AMB3_15.fsa | 2S04-114-RB35.1 | Identifiler_Bode_v2



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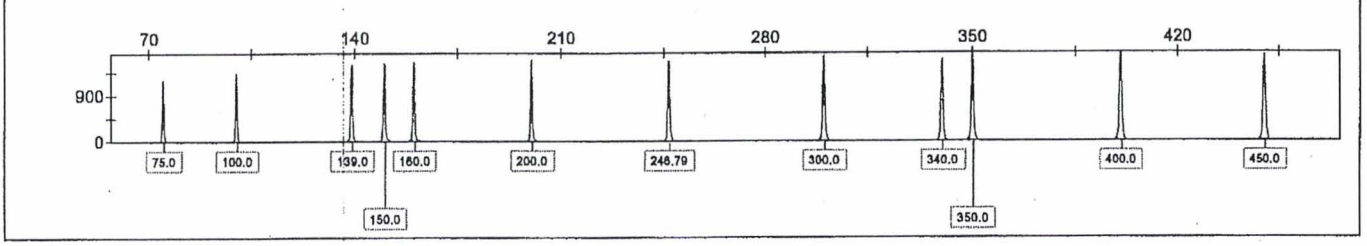
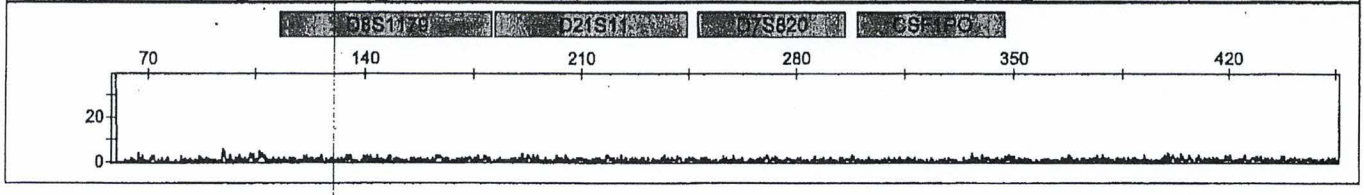


Applied Biosystems

eneMapper ID v3.2.1

GMID14_051011-AMB3_2S04-114_ABG_ID

Sample File	Sample Name	Panel	SQ
1_2S04-114-RB36.1_B02_051011-AMB3_04.fsa	2S04-114-RB36.1	Identifiler_Bode_v2	



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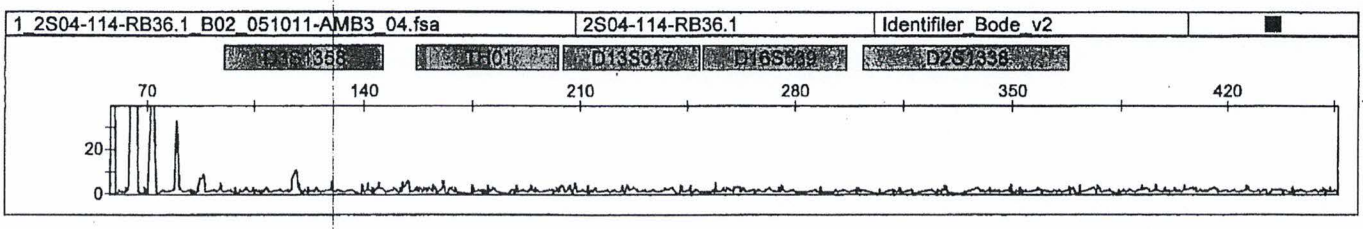

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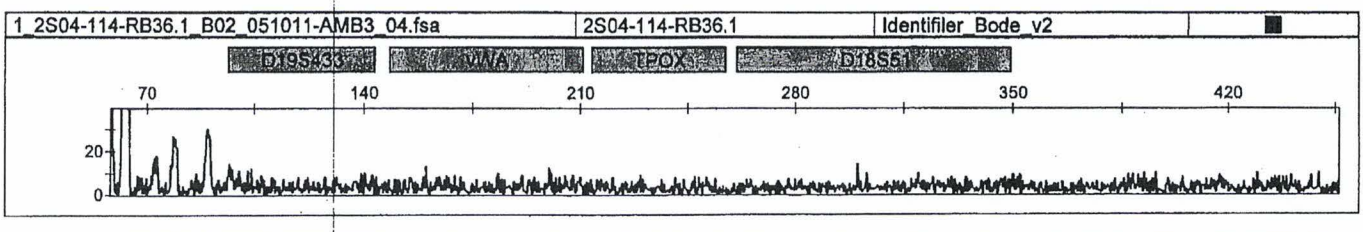

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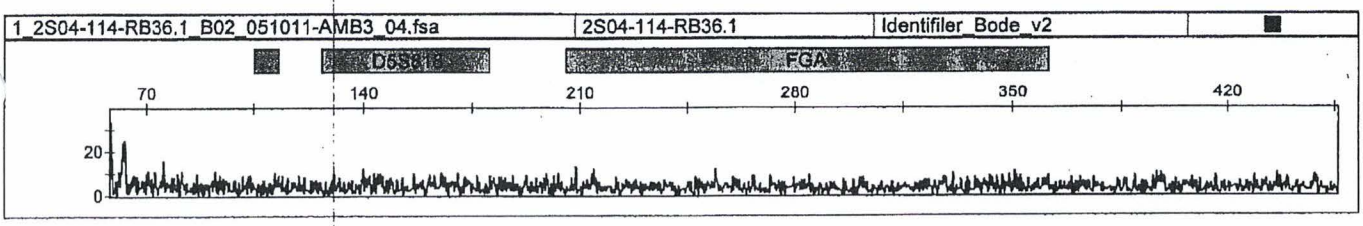

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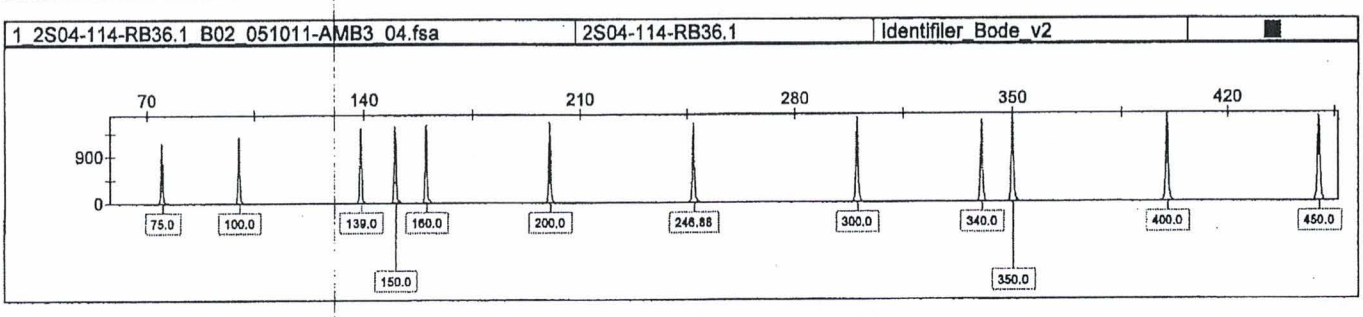

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Tue May 10,2011 08:03PM, EDT

Printed by: gmid

ASC 5/10/11

Applied Biosystems

neMapper ID v3.2.1

GMID14_051011-AMB3_2S04-114_ABG_ID

Sample File	Sample Name	Panel	SQ
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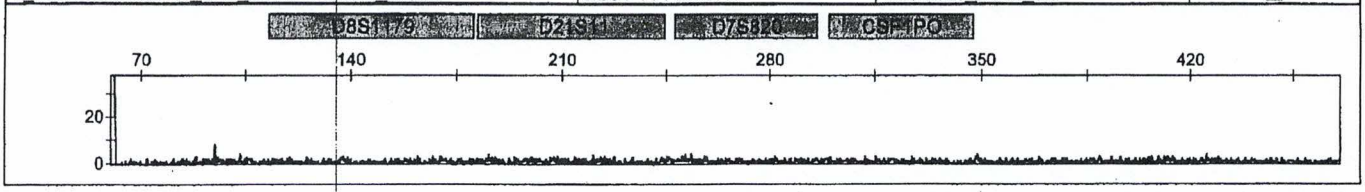
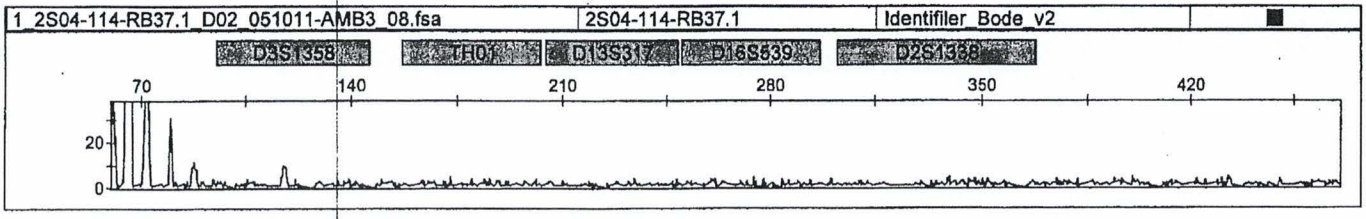
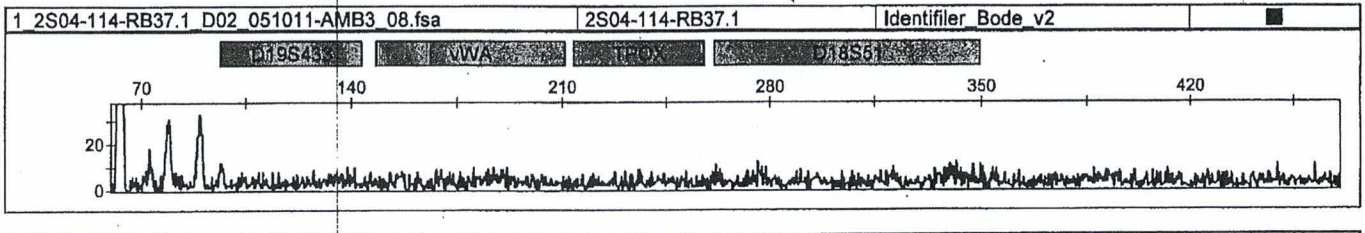


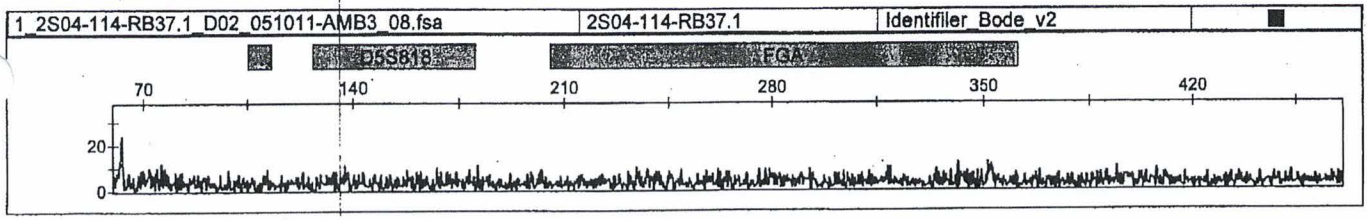
1_2S04-114-RB37.1_D02_051011-AMB3_08.fsa	2S04-114-RB37.1	Identifiler_Bode_v2	



1_2S04-114-RB37.1_D02_051011-AMB3_08.fsa	2S04-114-RB37.1	Identifiler_Bode_v2	



1_2S04-114-RB37.1_D02_051011-AMB3_08.fsa	2S04-114-RB37.1	Identifiler_Bode_v2	



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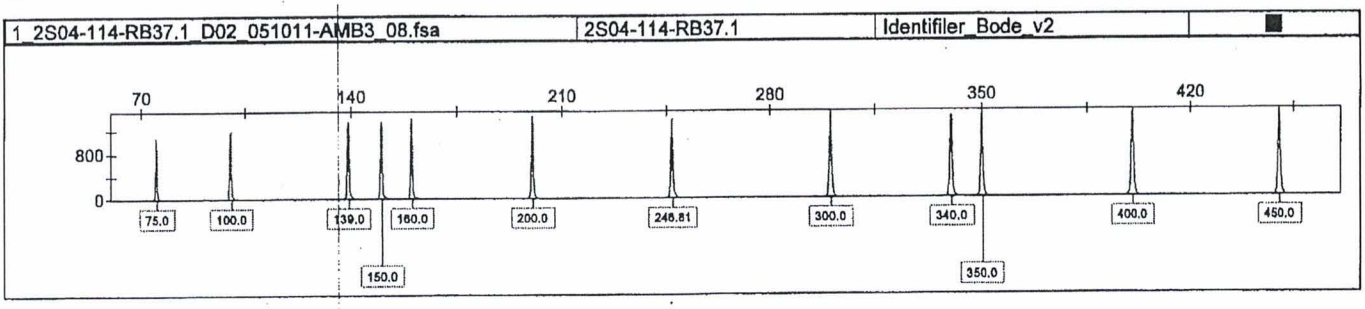

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Sample File	Sample Name	Panel	SQ
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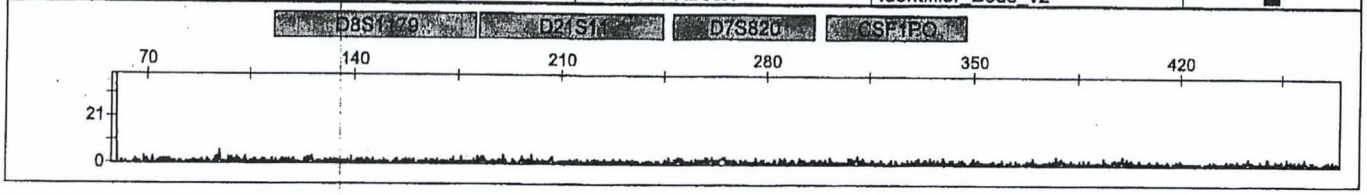
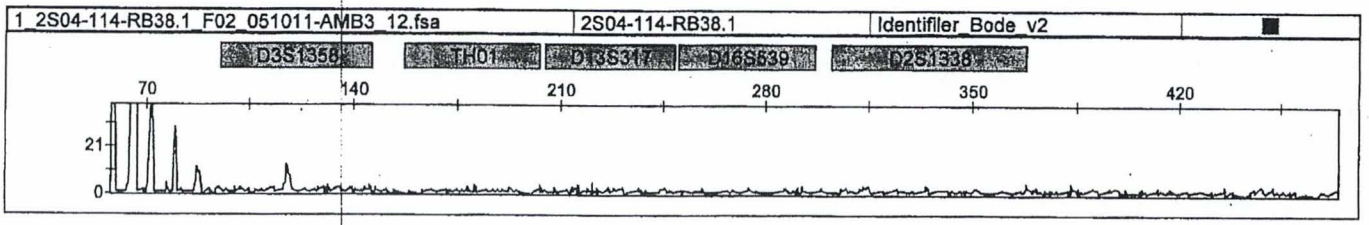


1_2S04-114-RB38.1_F02_051011-AMB3_12.fsa | 2S04-114-RB38.1 | Identifiler_Bode_v2



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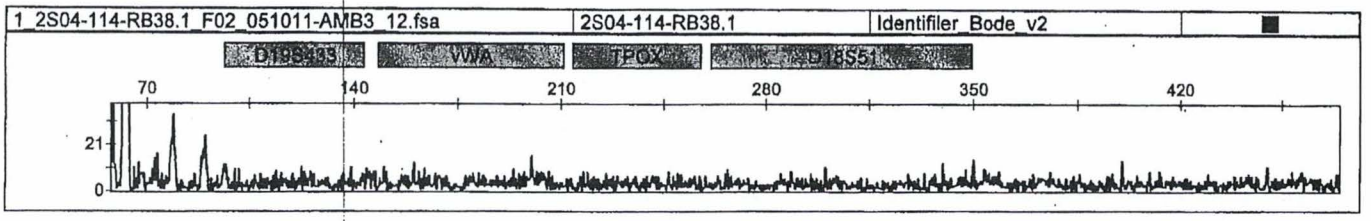

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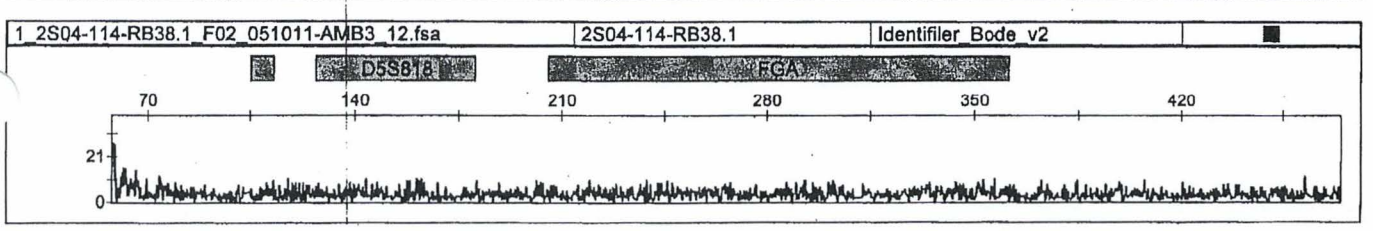

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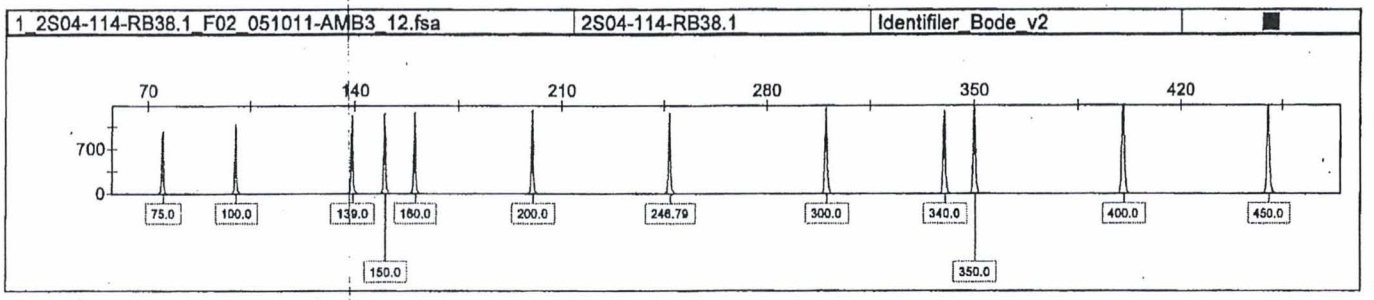

Applied Biosystems

neMapper ID v3.2.1

GMID14_051011-AMB3_2S04-114_ABG_ID

Sample File	Sample Name	Panel	SQ
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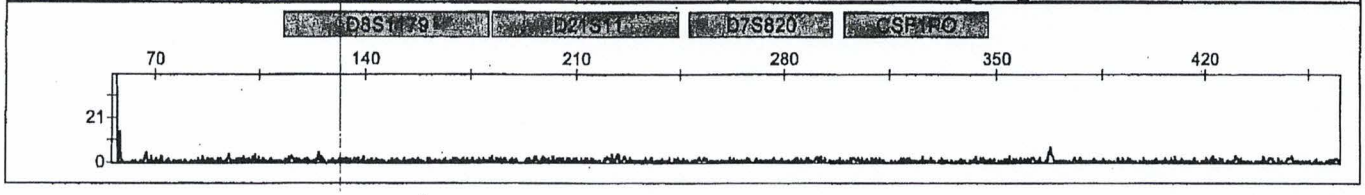

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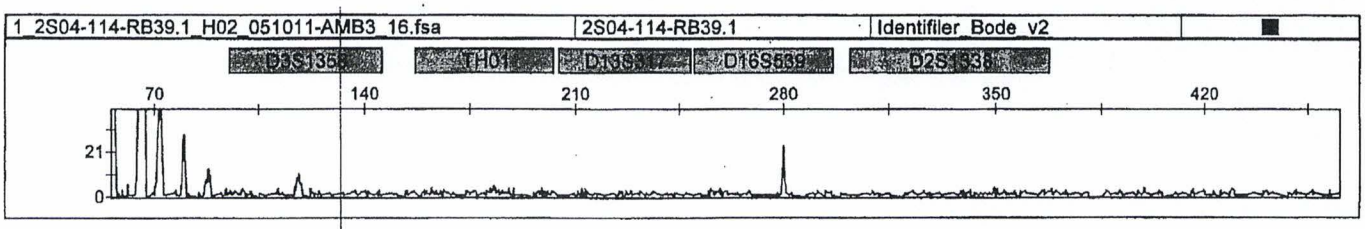

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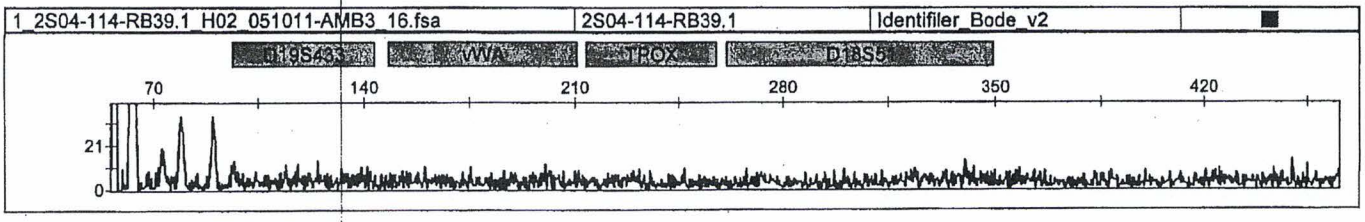

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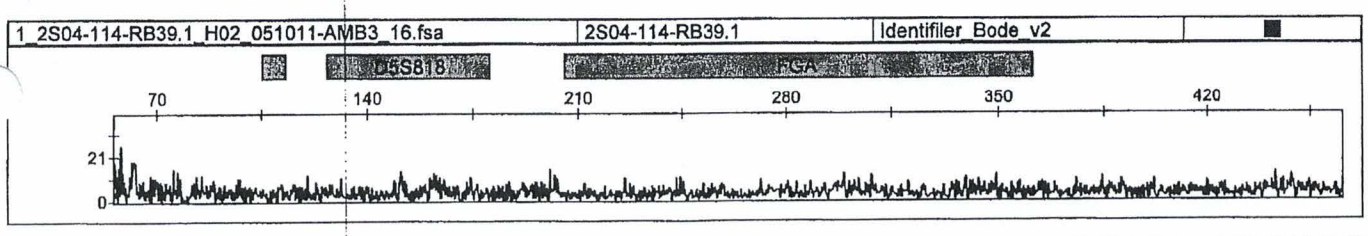

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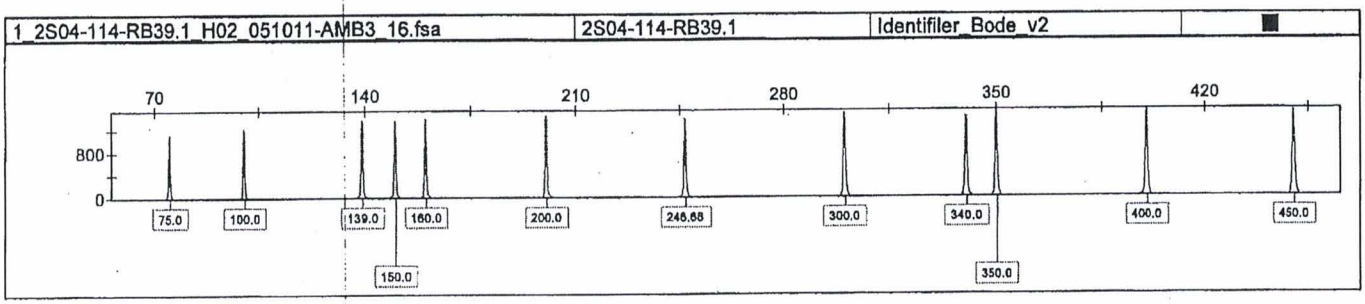

ABC 5-10-11

Applied Biosystems

GMID14_051011-AMB3_2S04-114_ABG_ID

neMapper ID v3.2.1

Sample File	Sample Name	Panel	SQ
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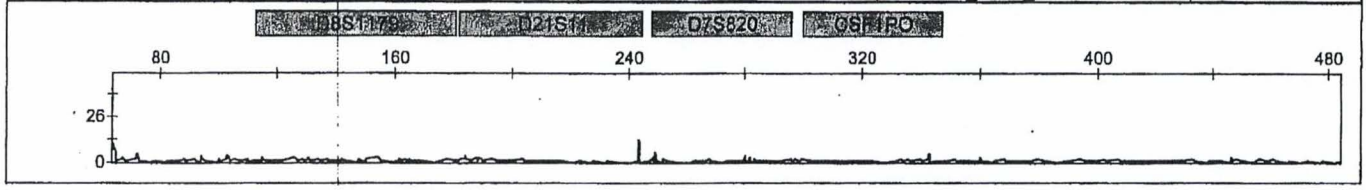

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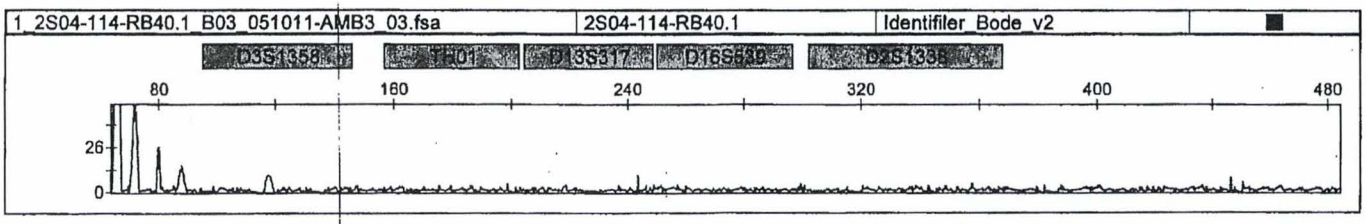

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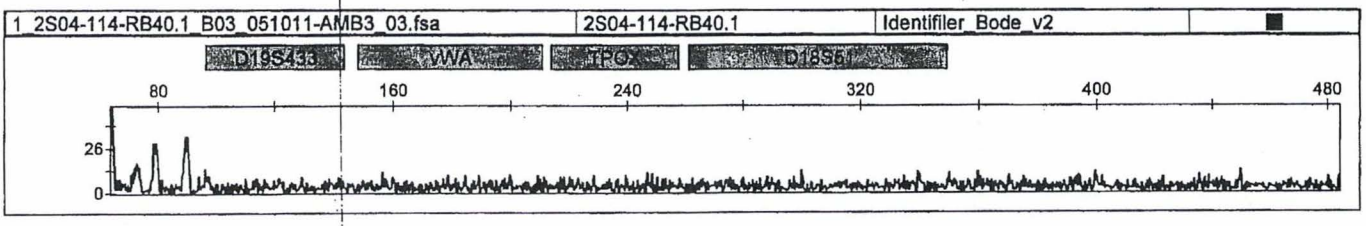
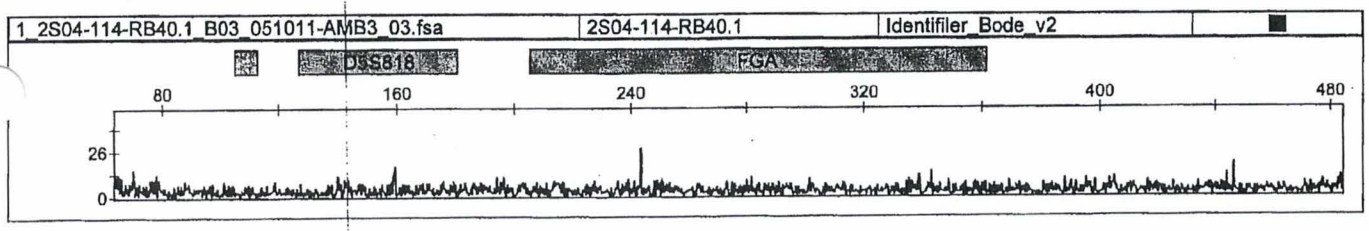
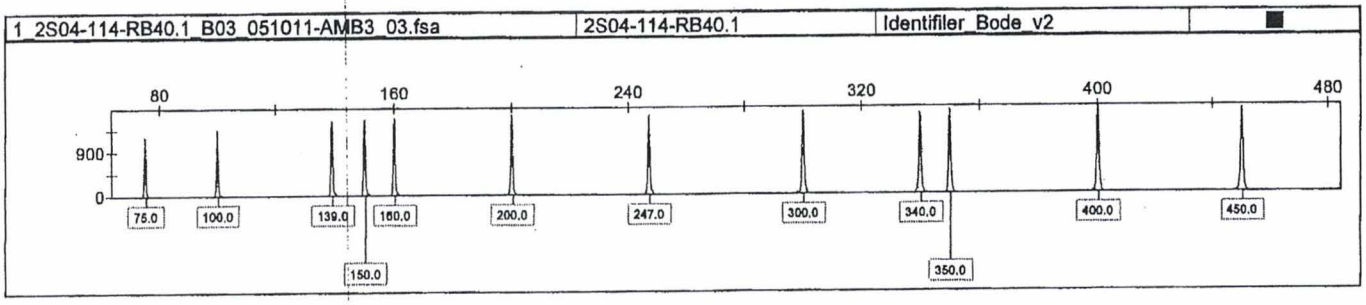


1_2S04-114-RB40.1_B03_051011-AMB3_03.fsa | 2S04-114-RB40.1 | Identifiler_Bode_v2



1_2S04-114-RB40.1_B03_051011-AMB3_03.fsa | 2S04-114-RB40.1 | Identifiler_Bode_v2



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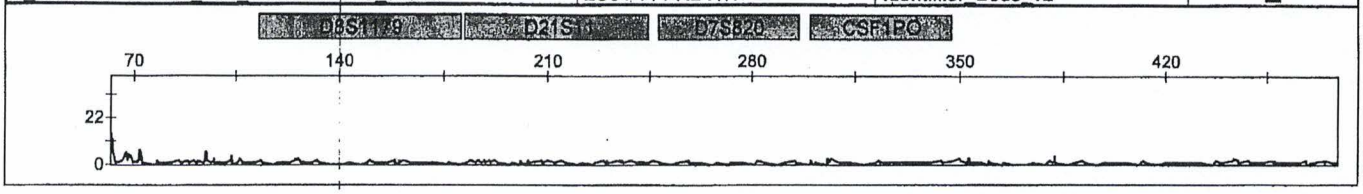
Applied Biosystems

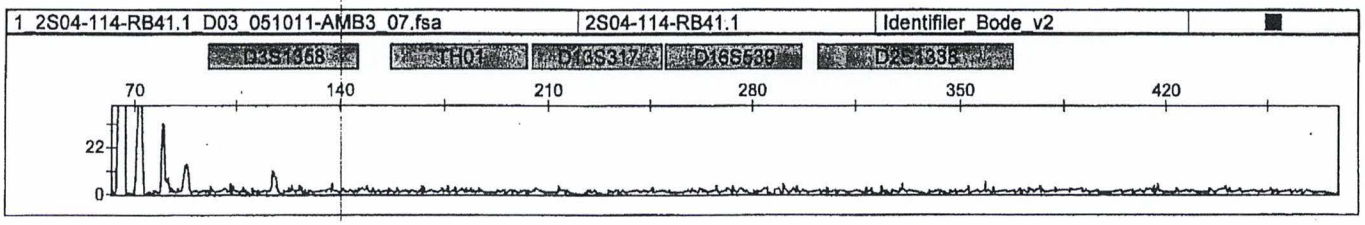
neMapper ID v3.2.1

GMID14_051011-AMB3_2S04-114_ABG_ID

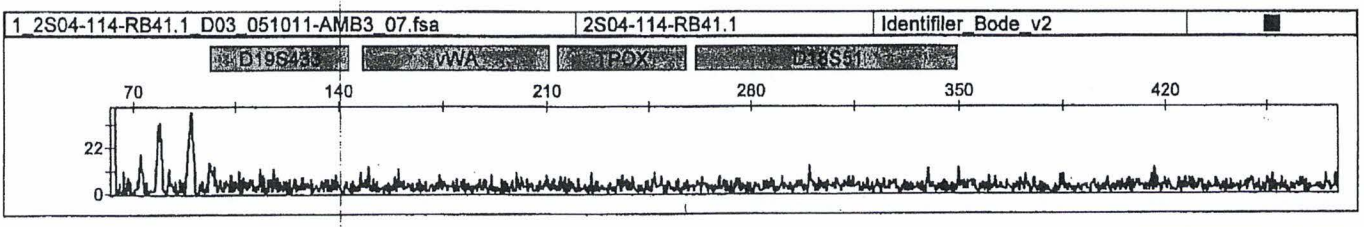
Sample File	Sample Name	Panel	SQ
1_2S04-114-RB41.1_D03_051011-AMB3_07.fsa	2S04-114-RB41.1	Identifiler_Bode_v2	



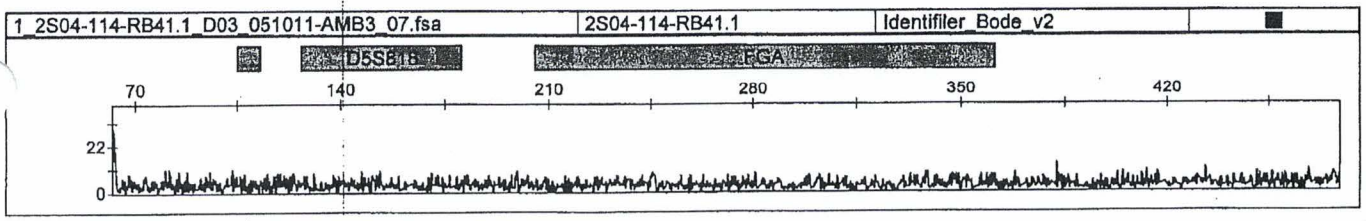
1_2S04-114-RB41.1_D03_051011-AMB3_07.fsa	2S04-114-RB41.1	Identifiler_Bode_v2	



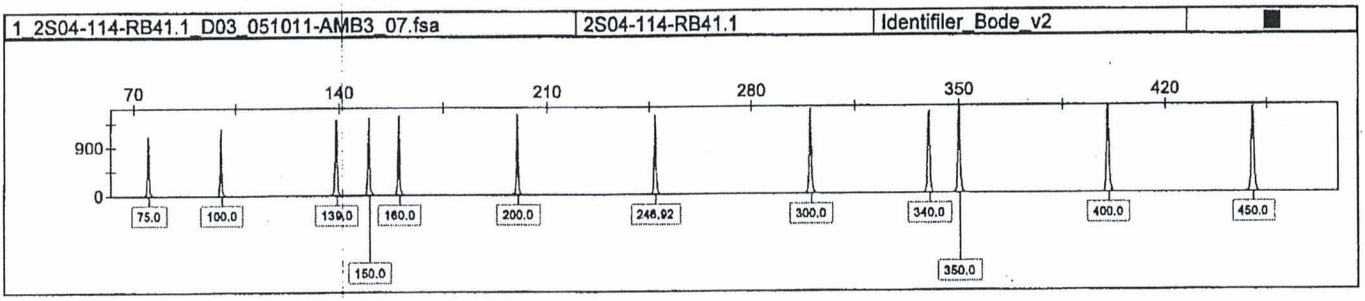
1_2S04-114-RB41.1_D03_051011-AMB3_07.fsa	2S04-114-RB41.1	Identifiler_Bode_v2	



1_2S04-114-RB41.1_D03_051011-AMB3_07.fsa	2S04-114-RB41.1	Identifiler_Bode_v2	



1_2S04-114-RB41.1_D03_051011-AMB3_07.fsa	2S04-114-RB41.1	Identifiler_Bode_v2	

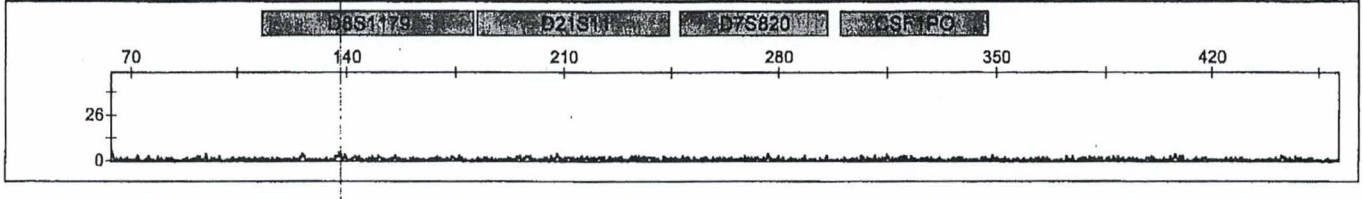


Applied Biosystems

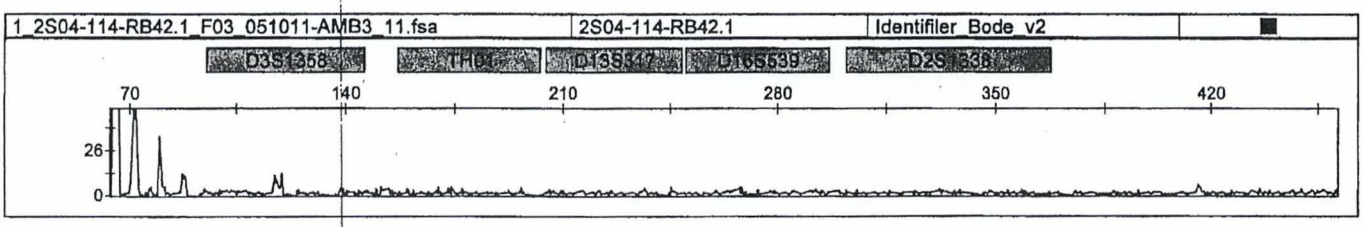
GeneMapper ID v3.2.1

GMID14_051011-AMB3_2S04-114_ABG_ID

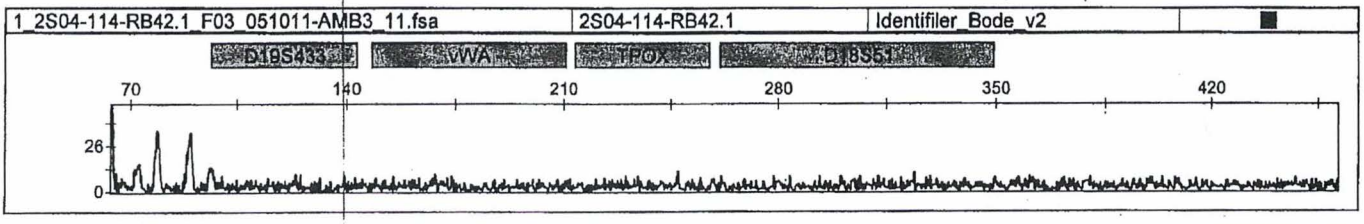
Sample File	Sample Name	Panel	SQ
1_2S04-114-RB42.1_F03_051011-AMB3_11.fsa	2S04-114-RB42.1	Identifiler_Bode_v2	



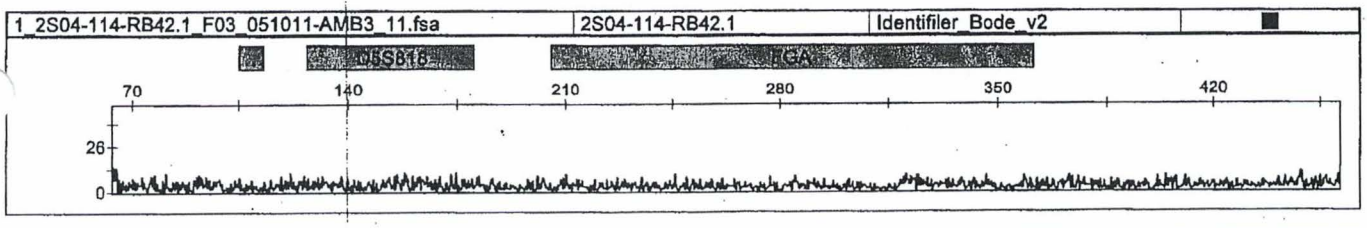
1_2S04-114-RB42.1_F03_051011-AMB3_11.fsa	2S04-114-RB42.1	Identifiler_Bode_v2	



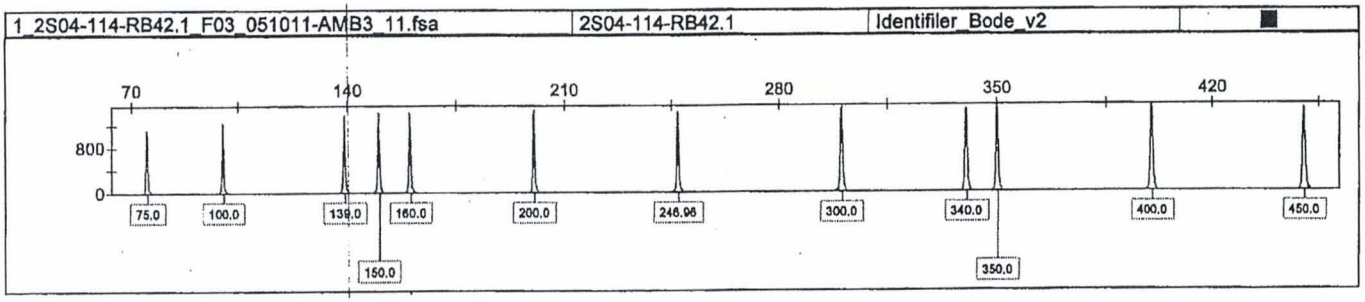
1_2S04-114-RB42.1_F03_051011-AMB3_11.fsa	2S04-114-RB42.1	Identifiler_Bode_v2	



1_2S04-114-RB42.1_F03_051011-AMB3_11.fsa	2S04-114-RB42.1	Identifiler_Bode_v2	



1_2S04-114-RB42.1_F03_051011-AMB3_11.fsa	2S04-114-RB42.1	Identifiler_Bode_v2	



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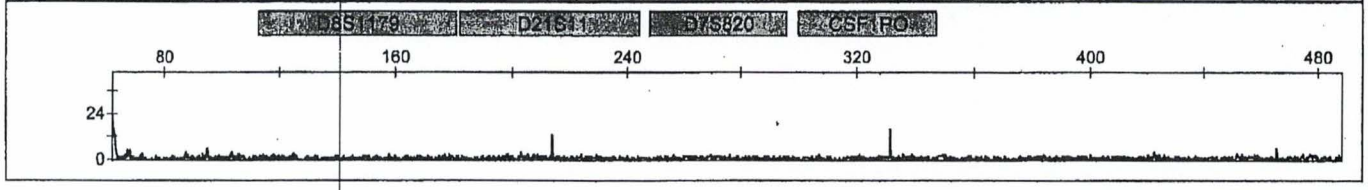
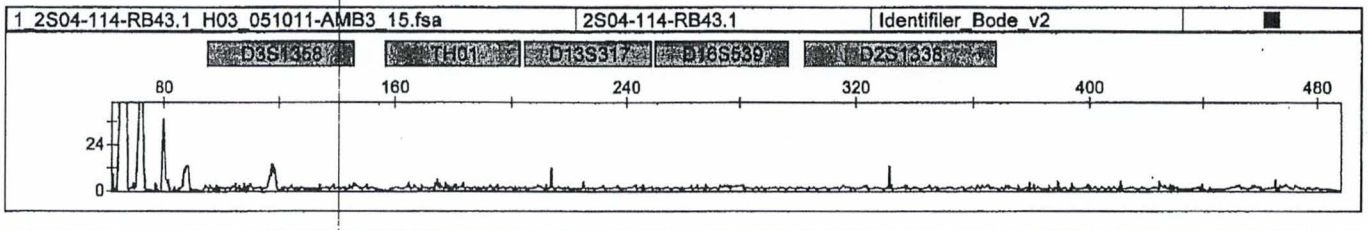
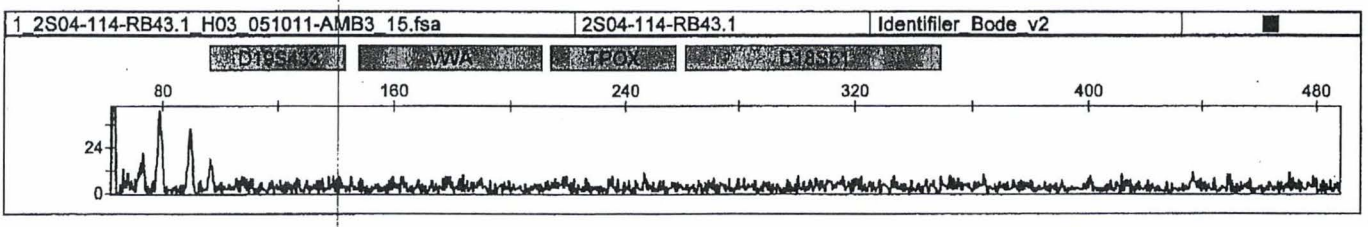
Sample File	Sample Name	Panel	SQ
1_2S04-114-RB43.1_H03_051011-AMB3_15.fsa	2S04-114-RB43.1	Identifiler_Bode_v2	



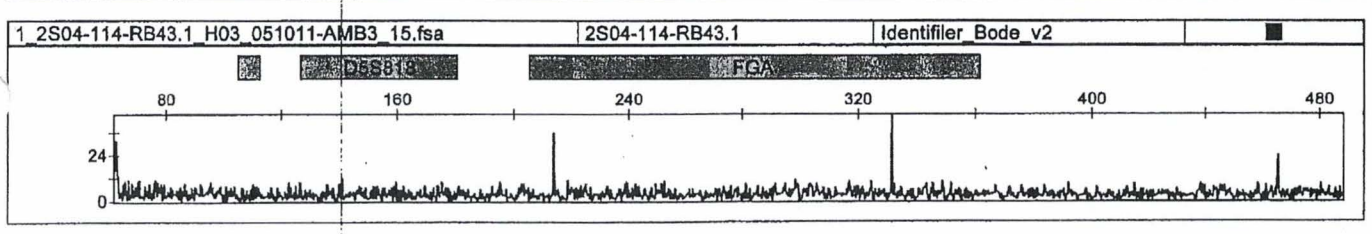
1_2S04-114-RB43.1_H03_051011-AMB3_15.fsa	2S04-114-RB43.1	Identifiler_Bode_v2	



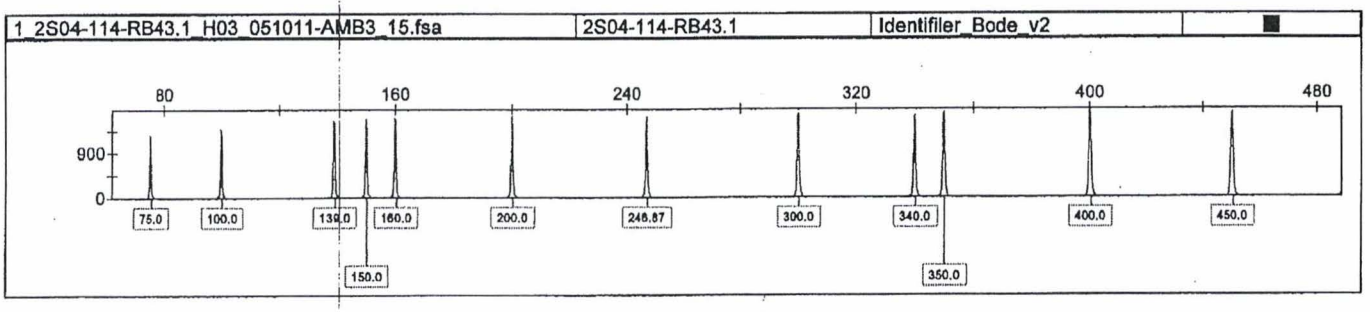
1_2S04-114-RB43.1_H03_051011-AMB3_15.fsa	2S04-114-RB43.1	Identifiler_Bode_v2	



1_2S04-114-RB43.1_H03_051011-AMB3_15.fsa	2S04-114-RB43.1	Identifiler_Bode_v2	

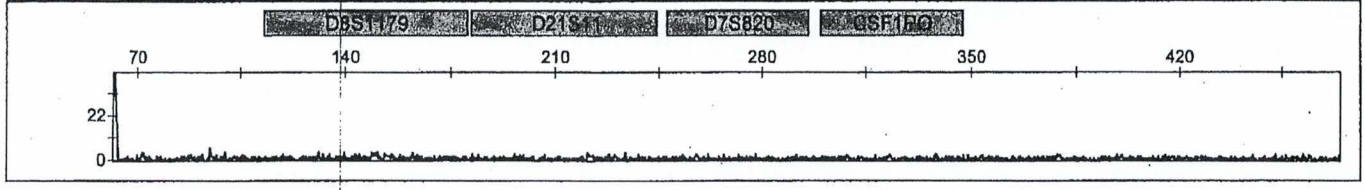


1_2S04-114-RB43.1_H03_051011-AMB3_15.fsa	2S04-114-RB43.1	Identifiler_Bode_v2	

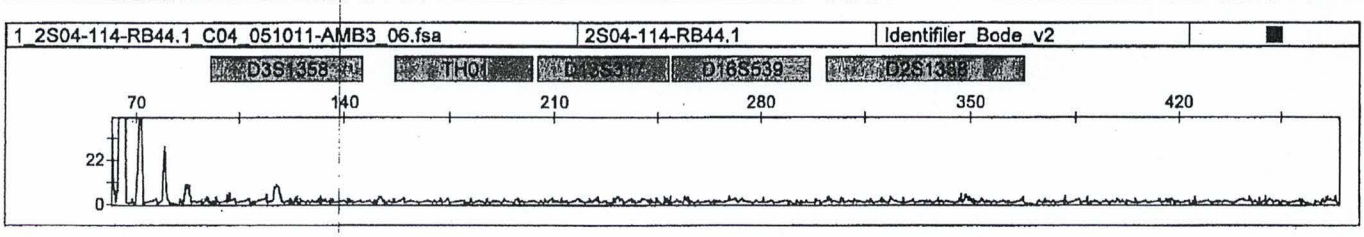


See wells E01 and F01 on tray 051011-ABG1
for re-loads. EBH 5/11/11

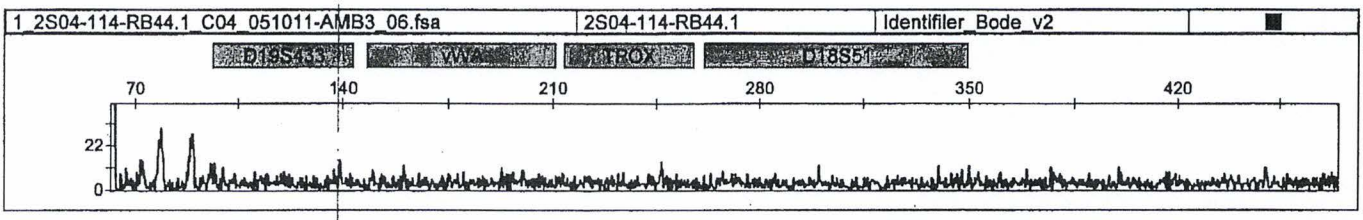
Sample File	Sample Name	Panel	SQ
1_2S04-114-RB44.1_C04_051011-AMB3_06.fsa	2S04-114-RB44.1	Identifiler_Bode_v2	



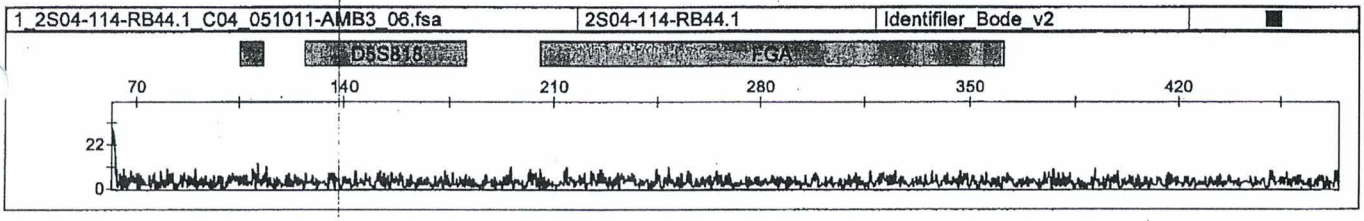
1_2S04-114-RB44.1_C04_051011-AMB3_06.fsa | 2S04-114-RB44.1 | Identifiler_Bode_v2



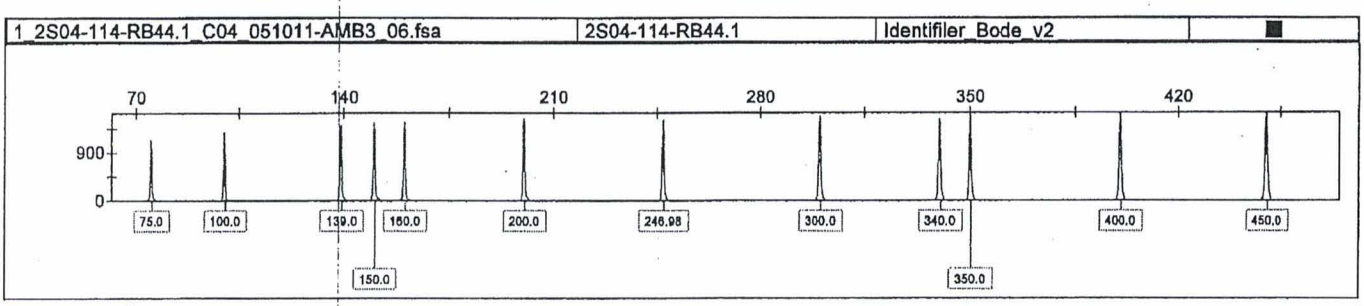
1_2S04-114-RB44.1_C04_051011-AMB3_06.fsa | 2S04-114-RB44.1 | Identifiler_Bode_v2



1_2S04-114-RB44.1_C04_051011-AMB3_06.fsa | 2S04-114-RB44.1 | Identifiler_Bode_v2



1_2S04-114-RB44.1_C04_051011-AMB3_06.fsa | 2S04-114-RB44.1 | Identifiler_Bode_v2

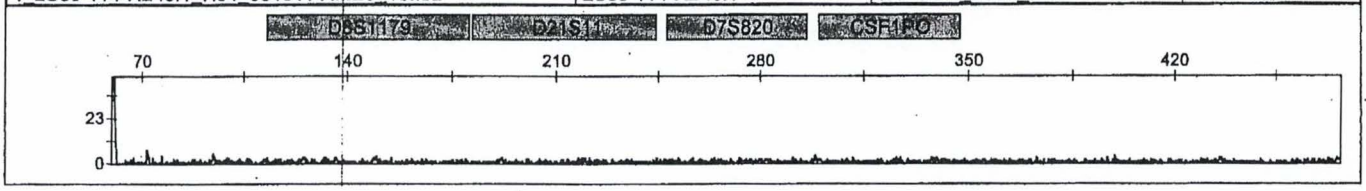


Applied Biosystems

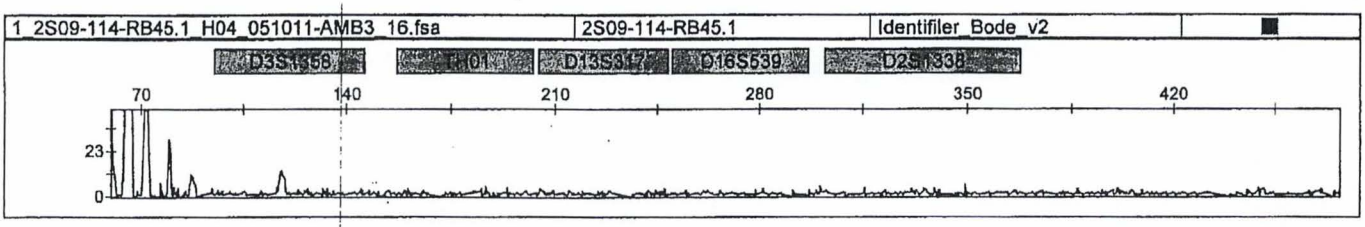
neMapper ID v3.2.1

GMID14_051011-AMB3_2S04-114_ABG_ID

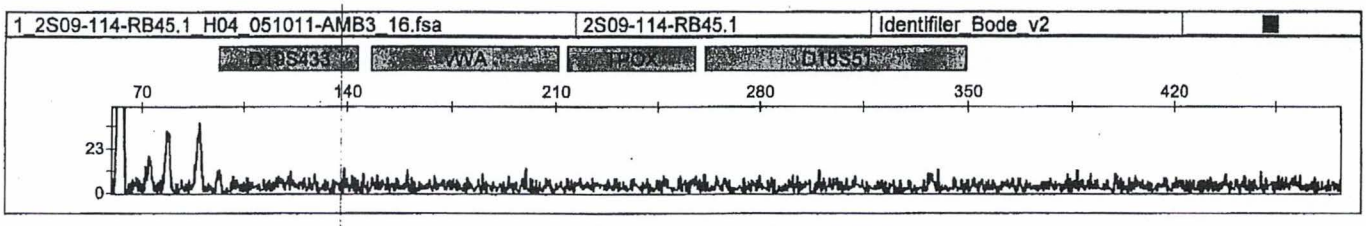
Sample File	Sample Name	Panel	SQ
1_2S09-114-RB45.1_H04_051011-AMB3_16.fsa	2S09-114-RB45.1	Identifiler_Bode_v2	



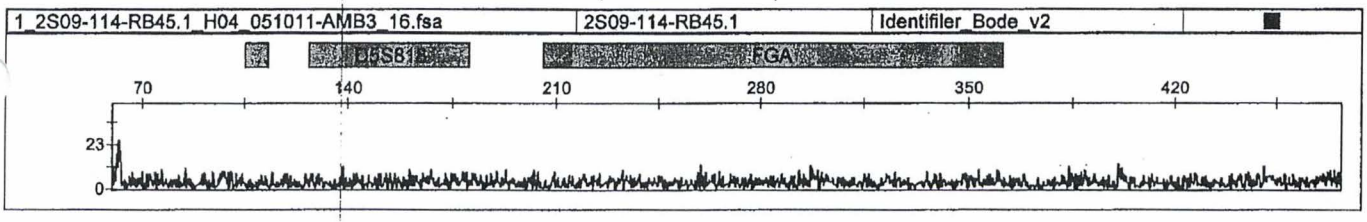
1_2S09-114-RB45.1_H04_051011-AMB3_16.fsa	2S09-114-RB45.1	Identifiler_Bode_v2	



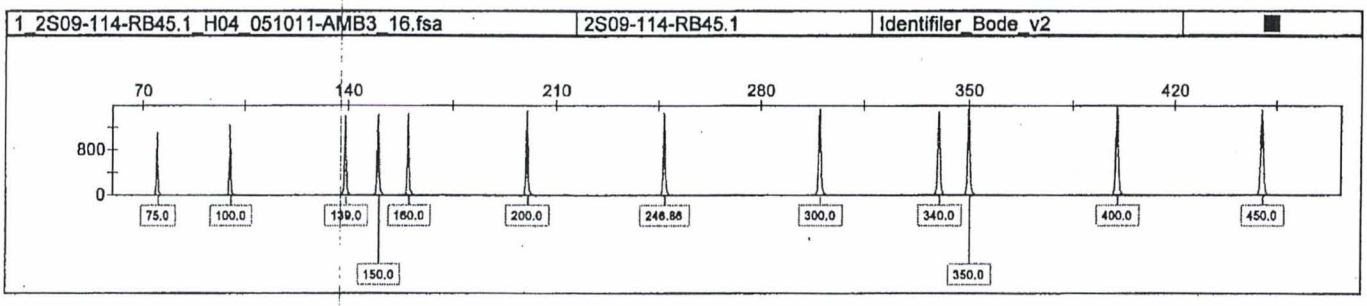
1_2S09-114-RB45.1_H04_051011-AMB3_16.fsa	2S09-114-RB45.1	Identifiler_Bode_v2	



1_2S09-114-RB45.1_H04_051011-AMB3_16.fsa	2S09-114-RB45.1	Identifiler_Bode_v2	



1_2S09-114-RB45.1_H04_051011-AMB3_16.fsa	2S09-114-RB45.1	Identifiler_Bode_v2	



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CE Set-up Sheet

TRAY ID: 051011-ABG1 **Amp. Tray:** 2S04-114-AMP42 reloads **Analyst:** ABG **Date:** 5/10/11

	1	2	3	4	5	6	7	8	9	10	11	12
A	2S04-114-61a1.1	2S04-114-57a1.1	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
B	2S04-114-61a1.1_1	2S04-114-57a1.1_1	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
C	2S04-114-65a1.1	2S04-114-POS42	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
D	2S04-114-65a1.1_1	2S04-114-POS42_1	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
E	2S04-114-RB43.1	LADDER_ID	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
F	2S04-114-RB43.1_1	LADDER_ID	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
G	2S04-114-73a1.1	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
H	2S04-114-73a1.1_1	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank

	Vol.(ul)/Well		No. of Rxns		Vol. Total (ul)
Formamide Lot# 1102039	10.0 ul	x	20	=	200
GS-500LIZ Lot# 1102127	0.12 ul	x	20	=	2.4

Master Mix 10.0 ul

\+

Amp. Product 0.7ul

PIPETTORS LOT #S:	
Formamide:	P-048
ILS:	P-031
Formamide & ILS Mix:	P-031
Ladders:	P-067
Amp Product (3100 tray):	P-067
Amp Product (if diluted):	N/A
Diluent (for dilutions):	N/A

Machine:	11
Run #'s:	31
System:	Identifiler
Ladder Lot#:	0903016
Run Module:	Active_Run_Module_G5
Analysis Module:	75minrfu.gsp

Injected by: NJB

Date of Injection: 5/11/2011

Primer Peak Verification	
Primer peaks verified for all negative samples.	
Read 1 Analyst: EBH	Date: 5/11/11
Integrity Report Evaluation	
Integrity Report Evaluation Date*:	N/A
Analyst:	N/A

Integrity performed manually EBH 5/11/11

*If possible contamination is detected, provide case note with details for affected cases

NJB 5/11/11

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CE Set-up Sheet

TRAY ID: 051011-AMB3 **Amp. Tray:** 2S04-114-AMP42 **Analyst:** AMB **Date:** 5/10/11

	1	2	3	4	5	6	7	8	9	10	11	12
A	2S04-114-61a1.1	2S04-114-65a1.1	2S04-114-69a1.1	2S04-114-73a1.1	2S04-114-POS42	Blank	Blank	Blank	Blank	Blank	Blank	Blank
B	2S04-114-RB32.1	2S04-114-RB36.1	2S04-114-RB40.1	2S04-114-74a1.1	2S04-114-NEG42	Blank	Blank	Blank	Blank	Blank	Blank	Blank
C	2S04-114-62a1.1	2S04-114-66a1.1	2S04-114-70a1.1	2S04-114-RB44.1	2S04-114-POS42	Blank	Blank	Blank	Blank	Blank	Blank	Blank
D	2S04-114-RB33.1	2S04-114-RB37.1	2S04-114-RB41.1	2S04-114-55a1.1	2S04-114-NEG42	Blank	Blank	Blank	Blank	Blank	Blank	Blank
E	2S04-114-63a1.1	2S04-114-67a1.1	2S04-114-71a1.1	2S04-114-57a1.1	Ladder_ID	Blank	Blank	Blank	Blank	Blank	Blank	Blank
F	2S04-114-RB34.1	2S04-114-RB38.1	2S04-114-RB42.1	2S04-114-75a1.1	Ladder_ID	Blank	Blank	Blank	Blank	Blank	Blank	Blank
G	2S04-114-64a1.1	2S04-114-68a1.1	2S04-114-72a1.1	2S04-114-75b1.1	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
H	2S04-114-RB35.1	2S04-114-RB39.1	2S04-114-RB43.1	2S09-114-RB45.1	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank

	Vol.(ul)/Well		No. of Rxns		Vol. Total (ul)
Formamide Lot# 11107039	10.0 ul	x	50	=	500
GS-500LIZ Lot# 11021/27	0.12 ul	x	50	=	6
Master Mix	10.0 ul				
	+				
Amp. Product	0.7ul				

PIPETTORS LOT #S:	
Formamide:	P-118
ILS:	P-110
Formamide & ILS Mix:	P-117
Ladders:	P-053
Amp Product (3100 tray):	P-040
Amp Product (if diluted):	N/A
Diluent (for dilutions):	N/A

Machine:	14
Run #'s:	57-59
System:	Identifiler
Ladder Lot#:	0903016
Run Module:	Active_Run_Module_G5
Analysis Module:	75minrfu.gsp

Injected by: PDH
Date of Injection: 5/10/11

Primer Peak Verification	
Primer peaks verified for all negative samples.	
Read 1 Analyst: PDC	Date: 5/11/11
Integrity Report Evaluation	
Integrity Report Evaluation Date*:	N/A
Analyst:	N/A

AMB 5/10/11

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*If possible contamination is detected, provide case note with details for affected cases

AmpF*l* STR Identifiler

Amplification Worksheet (25µl Volume Reaction)

See amplification notes for reagents, lot numbers, and pipettor numbers

Tray Coordinate (well)	Sample	Dilution	Master Mix (µl)	DNA/dH2O (µl/µl)	Total (µl)
A1.42	2S04-114-61a1.1	---	15	10/0	25
B1.42	2S04-114-RB32.1	---	15	10/0	25
C1.42	2S04-114-62a1.1	---	15	10/0	25
D1.42	2S04-114-RB33.1	---	15	10/0	25
E1.42	2S04-114-63a1.1	---	15	10/0	25
F1.42	2S04-114-RB34.1	---	15	10/0	25
G1.42	2S04-114-64a1.1	---	15	10/0	25
H1.42	2S04-114-RB35.1	---	15	10/0	25
A2.42	2S04-114-65a1.1	---	15	10/0	25
B2.42	2S04-114-RB36.1	---	15	10/0	25
C2.42	2S04-114-66a1.1	---	15	10/0	25
D2.42	2S04-114-RB37.1	---	15	10/0	25
E2.42	2S04-114-67a1.1	---	15	10/0	25
F2.42	2S04-114-RB38.1	---	15	10/0	25
G2.42	2S04-114-68a1.1	---	15	10/0	25
H2.42	2S04-114-RB39.1	---	15	10/0	25
A3.42	2S04-114-69a1.1	---	15	10/0	25
B3.42	2S04-114-RB40.1	---	15	10/0	25
C3.42	2S04-114-70a1.1	---	15	10/0	25
D3.42	2S04-114-RB41.1	---	15	10/0	25
E3.42	2S04-114-71a1.1	---	15	10/0	25
F3.42	2S04-114-RB42.1	---	15	10/0	25
G3.42	2S04-114-72a1.1	---	15	10/0	25
H3.42	2S04-114-RB43.1	---	15	10/0	25
A4.42	2S04-114-73a1.1	---	15	10/0	25
B4.42	2S04-114-74a1.1	---	15	10/0	25
C4.42	2S04-114-RB44.1	---	15	10/0	25
D4.42	2S04-114-55a1.1	---	15	10/0	25
E4.42	2S04-114-57a1.1	---	15	10/0	25
F4.42	2S04-114-75a1.1	---	15	10/0	25
G4.42	2S04-114-75b1.1	---	15	10/0	25
H4.42	2S09-114-RB45.1	---	15	10/0	25
A5.42	2S04-114-POS42	---	15	2/8	25
B5.42	2S04-114-NEG42	---	15	0/10	25

TC#: 28 **Program#:** ID_28CYCL **2S04-114-AMP42**

Analyst: EBH **Date:** 5/10/11

Tube Witness: YSB **Date:** 05/10/11

Document: BT00429 - Identifiler Amp (CCW WS)
Revision: 3
Effective: Friday, March 05, 2010 12:27:07 PM

EBH 5/10/11

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AmpF*l* STR Identifiler

Amplification Worksheet (25µl Volume Reaction)

AMPLIFICATION NOTES:
2S04-114-AMP42

Reagent	Source	Lot #	Sample Volume (µl)	Number of Reactions	Final Volume (µl)
Water	Fisher	107828			
PCR Reaction Mix	ABI	1102176	10.5	37	388.5
Identifiler Primer Set	ABI	0909070	5.5	37	203.5
AmpliTaq Gold	ABI	N12473	0.5	37	18.5
POS 9947	BODE	051011SS			
TE	BODE	N/A			

Analyst: EBH
Date: 5/10/11

Pipettes Used:

For all volumes <2 uL	N/A
For all volumes between 2 and 10 uL	A-089
For all volumes between 11 and 100 uL	A-078
For all volumes between 101 and 1000 uL	A-053
For master mix	A-078
For water	A-089

Document: BT00429 - Identifiler Amp (CCW WS)
Revision: 3
Effective: Friday, March 05, 2010 12:27:07 PM

EBH 5/10/11 25

Vivacon Purification/Concentration of DNA Extracts

Item	Source	Lot #
Vivacon 500-30K	Sartorius	1101003VS
cRNA	BODE	011211JJ
dH_2O	Fisher	N/A
TE-4 Buffer	BODE	081910JJ

Tube #	Sample	Approximate Volume Recovered (ul)	Approximate Final Volume (ul)	Comments
1	2S04-114-61a1	11	22	
2	2S04-114-RB32	12	22	
3	2S04-114-62a1	14	22	
4	2S04-114-RB33	12	22	
5	2S04-114-63a1	13	22	
6	2S04-114-RB34	14	22	
7	2S04-114-64a1	12	22	
8	2S04-114-RB35	12	22	
9	2S04-114-65a1	12	22	
10	2S04-114-RB36	12	22	
11	2S04-114-66a1	12	22	
12	2S04-114-RB37	11	22	
13	2S04-114-67a1	12	22	
14	2S04-114-RB38	13	22	Black speck was noticed on filter after sample was added. Speck eluted with sample when filter was inverted.
15	2S04-114-68a1	12	22	
16	2S04-114-RB39	12	22	
17	2S04-114-69a1	12	22	
18	2S04-114-RB40	12	22	
19	2S04-114-70a1	12	22	
20	2S04-114-RB41	13	22	
21	2S04-114-71a1	13	22	
22	2S04-114-RB42	13	22	
23	2S04-114-72a1	12	22	
24	2S04-114-RB43	14	22	
25	2S04-114-73a1	13	22	
26	2S04-114-74a1	13	22	
27	2S04-114-RB44	13	22	
28	2S04-114-55a1	13	22	
29	2S04-114-57a1	13	22	
30	2S04-114-75a1	13	22	
31	2S04-114-75b1	13	22	
32	2S09-114-RB45	12	22	

Analyst: AMB
Case Number: 2S04-114

Date: 5/10/2011

Pipettes Used:

Volumes <2 uL	A-039
Volumes 2-10 uL	A-039
Volumes 11-100 uL	A-034
Volumes 101-1000 uL	A-133

AMB 5/11/11

QUANTIFILER DUO QUANT

Shipment: 2S04-114
Tray ID: 050911ABG-QT1

Analyst: ABG
Date: 05/09/11

Yellow: Concentration = Zero; Below limit of detection of assay.

IPC is outside of the expected range - Inhibitors may be present OR DNA yield is greater than 50ng/µl OR both. Dilute prior to amplification.

	Sample Name	Sample Type	Human Target CT	Human Target Quantity (ng/ul)	Male Target CT	Male Target Quantity (ng/ul)	IPC Ct	Male Quantity/ Human Quantity	Status
	STD 50	Standard	21.88	50	22.28	50.000	30.36	100.00%	
	STD 16.67	Standard	24.15	16.67	24.27	16.670	29.47	100.00%	
	STD 5.56	Standard	25.86	5.56	26.15	5.560	29.45	100.00%	
	STD 1.85	Standard	28.13	1.85	28.25	1.850	29.18	100.00%	
	STD 0.617	Standard	30.04	0.617	30.06	0.617	29.43	100.00%	
	STD 0.206	Standard	30.99	0.206	31.19	0.206	29.65	100.00%	
	STD 0.069	Standard	33.25	0.069	32.44	0.069	29.33	100.00%	
	STD 0.023	Standard	35.29	0.023	34.1	0.023	29.44	100.00%	
	NTC	Unknown	Undetermined	*<0.023*	Undetermined	*<0.023*	29.37	--	
						Average IPC Ct	29.42		
A1	2S04-114-61a1	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.51	--	NR
B1	2S04-114-RB32	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.47	--	NR
C1	2S04-114-62a1	Unknown	37.6	0.00569	Undetermined	<0.001	29.6	--	NR
D1	2S04-114-RB33	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.57	--	NR
E1	2S04-114-63a1	Unknown	35.98	0.0147	Undetermined	<0.001	29.57	--	NR
F1	2S04-114-RB34	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.45	--	NR
G1	2S04-114-64a1	Unknown	35.4	0.0208	Undetermined	<0.001	29.5	--	NR
H1	2S04-114-RB35	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.61	--	NR
A2	2S04-114-65a1	Unknown	37.64	0.00554	Undetermined	<0.001	29.46	--	NR
B2	2S04-114-RB36	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.46	--	NR
C2	2S04-114-66a1	Unknown	36.42	0.0114	Undetermined	<0.001	29.53	--	NR
D2	2S04-114-RB37	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.59	--	NR
E2	2S04-114-67a1	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.58	--	NR
F2	2S04-114-RB38	Unknown	Undetermined	<0.001	Undetermined	<0.001		--	NR
G2	2S04-114-68a1	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.61	--	NR
H2	2S04-114-RB39	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.51	--	NR
A3	2S04-114-69a1	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.63	--	NR
B3	2S04-114-RB40	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.44	--	NR
C3	2S04-114-70a1	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.61	--	NR
D3	2S04-114-RB41	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.57	--	NR
E3	2S04-114-71a1	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.82	--	NR
F3	2S04-114-RB42	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.43	--	NR
G3	2S04-114-72a1	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.72	--	NR
H3	2S04-114-RB43	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.29	--	NR
A4	2S04-114-73a1	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.57	--	NR
B4	2S04-114-74a1	Unknown	32.07	0.147	32.7	0.0722	29.66	49.12%	
C4	2S04-114-RB44	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.62	--	NR
D4	2S04-114-55a1	Unknown	36.38	0.0116	Undetermined	<0.001	29.67	--	NR
E4	2S04-114-57a1	Unknown	33.33	0.07	Undetermined	<0.001	29.68	--	NEG
F4	2S04-114-75a1	Unknown	Undetermined	<0.001	37.09	0.00406	29.92	--	INC
G4	2S04-114-75b1	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.61	--	NR
H4	2S09-114-RB45	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.58	--	NR

Shipment: 2S04-114
Tray ID: 050911ABG-QT1
Analyst: ABG
Date: 05/09/11

Document: BTF00242 - (3) Quantifiler Duo results (WS)
Revision: 8
Effective: Thursday, May 27, 2010 11:17:22 AM

	Male >0.023 ng/ul
INC	Male 0.001 -> 0.023 ng/ul
NEG	Male <0.001 ng/ul, Human >0.023 ng/ul
NR	Male <0.001 ng/ul, Human <0.023 ng/ul

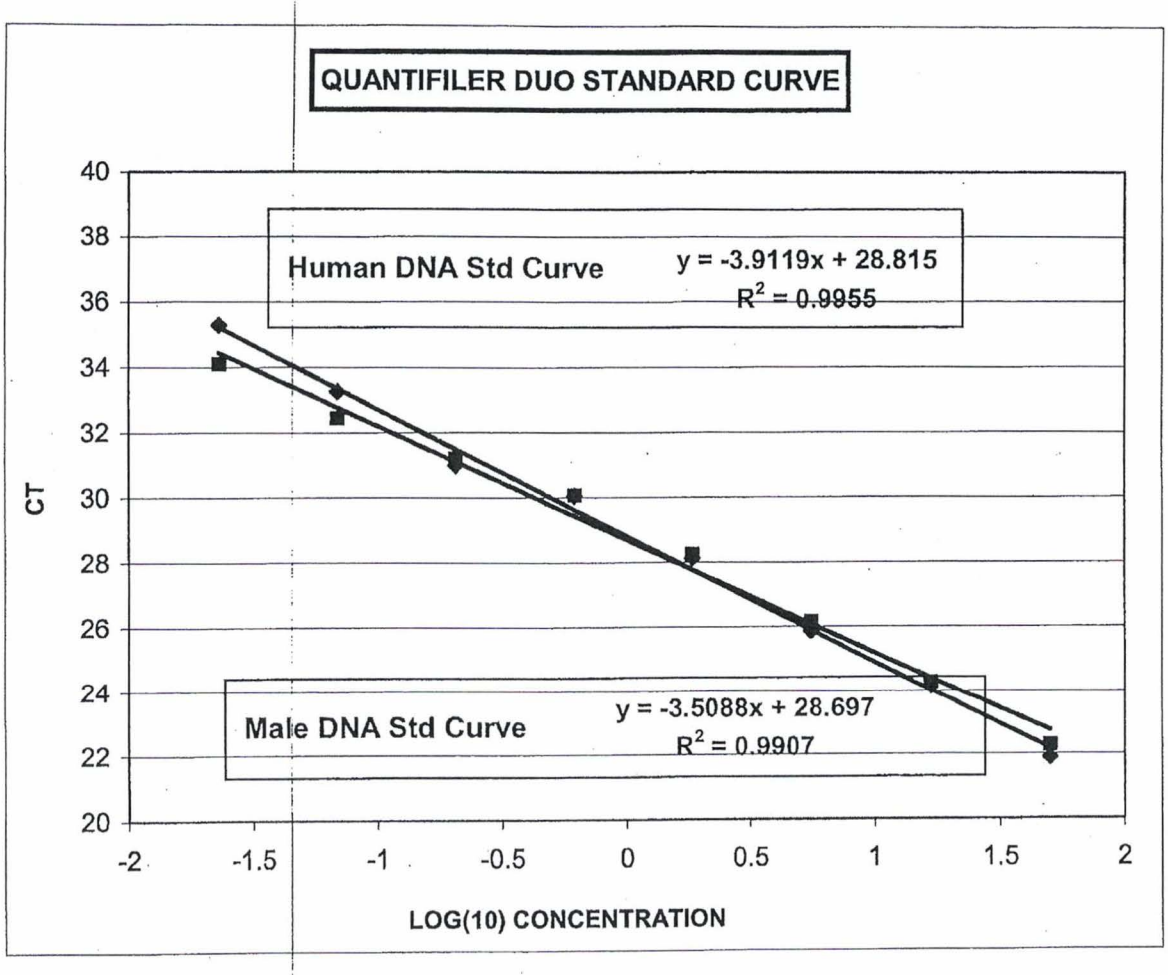
Note: CT values of 0.00 should be interpreted as "greater than 40 cycles."

5/10/2011

Dec 5-11-1, 23

QUANTIFILER DUO QUANT

Shipment:	2S04-114	**Analyst:**	ABG
Tray ID:	050911ABG-QT1	**Date:**	05/09/11



Document: BTF00242 - (3) Quantifiler Duo results (WS)
Revision: 6
Effective: Thursday, May 27, 2010 11:17:22 AM

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Quantifiler Duo Sample Sheet & Plate Set-up

Analyst: ABG Date: 5/9/2011

Case #: 2S04-114
TRAY ID: 050911ABG-QT1

	1	2	3	4	5	6	7	8	9	10	11	12
A	2S04-114-61a1	2S04-114-65a1	2S04-114-69a1	2S04-114-73a1	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 50
B	2S04-114-RB32	2S04-114-RB36	2S04-114-RB40	2S04-114-74a1	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 16.67
C	2S04-114-62a1	2S04-114-66a1	2S04-114-70a1	2S04-114-RB44	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 5.56
D	2S04-114-RB33	2S04-114-RB37	2S04-114-RB41	2S04-114-55a1	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 1.85
E	2S04-114-63a1	2S04-114-67a1	2S04-114-71a1	2S04-114-57a1	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 0.617
F	2S04-114-RB34	2S04-114-RB38	2S04-114-RB42	2S04-114-75a1	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 0.206
G	2S04-114-64a1	2S04-114-68a1	2S04-114-72a1	2S04-114-75b1	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 0.069
H	2S04-114-RB35	2S04-114-RB39	2S04-114-RB43	2S09-114-RB45	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	NTC	STD 0.023

Quantifiler Duo PCR Reaction Mix (ABI): 1101020
Primer Mix - *Duo* (ABI): 1007015
Human DNA Standard (ABI): 1007017
DNA Dilution Buffer Lot # (ABI): 0903006
7500 Machine #: 1

# of Wells + 10% Extra: *47*

	1	*47*	*Split in 2*
Quantifiler Duo PCR RxN Mix	*6.25*	**293.8**	**146.9**
Primer Mix	*5.25*	**246.8**	**123.4**
Master Mix	***11.5***		
DNA or DNA Dilution Buffer	***2***		
Total Volume	***13.5***		

Pipettes Used:

Volumes <2 uL	N/A
Volumes 2-10 uL	A-061, A055
Volumes 11-100 uL	A-023, A-069
Volumes 101-1000 uL	A-121
Master mix	A-023
p10 multichannel	N/A

Document: BTF00242 - (1) Quantifiler Duo samplesheet (WS)
Revision: 3
Effective: Thursday, May 07, 2009 11:25:49 AM

ABC 5-9-11

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QIAGEN EZ1 DNA Investigator (Individual Samples)

Extraction Worksheet

2S04-114

ITEM	SOURCE	LOT NUMBER
G2	QIAGEN	136250545
dH_2O	FISHER	107828
Proteinase K (20mg/ml)	Bode	050911ABG
MTL (for 500uL & 1500uL lysis only)	QIAGEN	136268061
Carrier RNA (1.00 ug/uL)	BODE	011211JJ
EZ1 Reagent Cartridge	QIAGEN	136256802

Tube #	Sample	EZ1 Robot #	*Tube Witness/Date
1	2S04-114-61a1	EZ01	JJ 5/9/11
2	2S04-114-RB32	EZ01	JJ 5/9/11
3	2S04-114-62a1	EZ01	JJ 5/9/11
4	2S04-114-RB33	EZ01	JJ 5/9/11
5	2S04-114-63a1	EZ01	JJ 5/9/11
6	2S04-114-RB34	EZ01	JJ 5/9/11
7	2S04-114-64a1	EZ02	JJ 5/9/11
8	2S04-114-RB35	EZ02	JJ 5/9/11
9	2S04-114-65a1	EZ02	JJ 5/9/11
10	2S04-114-RB36	EZ02	JJ 5/9/11
11	2S04-114-66a1	EZ02	JJ 5/9/11
12	2S04-114-RB37	EZ02	JJ 5/9/11
13	2S04-114-67a1	EZ01	SRS 5/9/11
14	2S04-114-RB38	EZ01	SRS 5/9/11
15	2S04-114-68a1	EZ01	SRS 5/9/11
16	2S04-114-RB39	EZ01	SRS 5/9/11
17	2S04-114-69a1	EZ01	SRS 5/9/11
18	2S04-114-RB40	EZ01	SRS 5/9/11
19	2S04-114-70a1	EZ02	SRS 5/9/11
20	2S04-114-RB41	EZ02	SRS 5/9/11
21	2S04-114-71a1	EZ02	SRS 5/9/11
22	2S04-114-RB42	EZ02	SRS 5/9/11
23	2S04-114-72a1	EZ02	SRS 5/9/11
24	2S04-114-RB43	EZ02	SRS 5/9/11

*see protocol for witness requirements.

Analyst: ABG
Cryobox Name: 2S04-114

Date: 5/9/11
Case Number: 2S04-114

EZ1 Protocol: 1.5 mL
Protocol complete verified: ABG

Lysis Volume: 1500 uL
Elution Volume: 50 uL

Notes: Sample -RB38 and -RB43 pipetted through filter during robotic extraction.

Pipettes Used:

Volumes <2 uL	N/A
Volumes 2-10 uL	N/A
Volumes 11-100 uL	A-119
Volumes 101-1000 uL	A-050
Volumes 1001-2000 uL	A-065

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ABC 5-9-11

QIAGEN EZ1 DNA Investigator (Individual Samples)

Extraction Worksheet

2S04-114

	ITEM	SOURCE	LOT NUMBER
G2		QIAGEN	136250545
dH_2O		FISHER	107828
Proteinase K (20mg/ml)		Bode	050911ABG
MTL (for 500uL & 1500uL lysis only)		QIAGEN	136268061
Carrier RNA (1.00 ug/uL)		BODE	011211JJ
EZ1 Reagent Cartridge		QIAGEN	136256802

Tube #	Sample	EZ1 Robot #	*Tube Witness/Date
25	2S04-114-73a1	EZ04	SRS 5/9/11
26	2S04-114-74a1	EZ04	SRS 5/9/11
27	2S04-114-RB44	EZ04	SRS 5/9/11

*see protocol for witness requirements.

Analyst: ABG
Cryobox Name: 2S04-114

Date: 5/9/11
Case Number: 2S04-114

EZ1 Protocol: Large Volume
Protocol complete verified: ABG

Lysis Volume: 500 uL
Elution Volume: 50 uL

Notes:N/A

Pipettes Used:

Volumes <2 uL	N/A
Volumes 2-10 uL	N/A
Volumes 11-100 uL	A-119
Volumes 101-1000 uL	A-050
Volumes 1001-2000 uL	A-065

Document: BTF00253 - EZ1 Individual Samples (CW WS)
Revision: 6
Effective: 7/20/2010 3:22:37 PM

TBA 5-9-11 19

QIAGEN EZ1 DNA Investigator (Individual Samples)

Extraction Worksheet

2S04-114

ITEM	SOURCE	LOT NUMBER
G2	QIAGEN	136250545
dH_2O	FISHER	107828
Proteinase K (20mg/ml)	BODE	042811JJ
MTL (for 500uL & 1500uL lysis only)	QIAGEN	136268061
Carrier RNA (1.00 ug/uL)	BODE	011211JJ
EZ1 Reagent Cartridge	QIAGEN	136256802

Tube #	Sample	EZ1 Robot #	*Tube Witness/Date
1	2S04-114-55a1	EZ03	DLT 5/9/11
2	2S04-114-57a1	EZ03	DLT 5/9/11
3	2S04-114-75a1	EZ03	DLT 5/9/11
4	2S04-114-75b1	EZ03	DLT 5/9/11
5	2S09-114-RB45	EZ03	DLT 5/9/11

*see protocol for witness requirements.

Analyst: AMB/ JLB (tech)
Cryobox Name: 2S04-114

Date: 5/9/11
Case Number: 2S04-114

EZ1 Protocol: Large Volume
Protocol complete verified: JLB

Lysis Volume: 500 ul
Elution Volume: 50 ul

Notes: JLB loaded all samples onto EZ03 on 5/9/11.

Pipettes Used:

Volumes <2 uL	A-090
Volumes 2-10 uL	N/A
Volumes 11-100 uL	A-119
Volumes 101-1000 uL	A-072
Volumes 1001-2000 uL	N/A

Document: BTF00253 - EZ1 Individual Samples (CW WS)
Revision: 6
Effective: 7/20/2010 3:22:37 PM

AMB 5/9/11

Transfer of Evidence Cuttings

Case #: 2S04-114

Tube #	Sample Name	Sample Type
1	2S04-114-61a1	1.5 ml
2	2S04-114-RB32	1.5 ml
3	2S04-114-62a1	1.5 ml
4	2S04-114-RB33	1.5 ml
5	2S04-114-63a1	1.5 ml
6	2S04-114-RB34	1.5 ml
7	2S04-114-64a1	1.5 ml
8	2S04-114-RB35	1.5 ml
9	2S04-114-65a1	1.5 ml
10	2S04-114-RB36	1.5 ml
11	2S04-114-66a1	1.5 ml
12	2S04-114-RB37	1.5 ml
13	2S04-114-67a1	1.5 ml
14	2S04-114-RB38	1.5 ml
15	2S04-114-68a1	1.5 ml
16	2S04-114-RB39	1.5 ml
17	2S04-114-69a1	1.5 ml
18	2S04-114-RB40	1.5 ml
19	2S04-114-70a1	1.5 ml
20	2S04-114-RB41	1.5 ml
21	2S04-114-71a1	1.5 ml
22	2S04-114-RB42	1.5 ml
23	2S04-114-72a1	1.5 ml
24	2S04-114-RB43	1.5 ml

All evidence cuttings listed above were transferred:

From Analyst: Emily Herren
(print)
Emily Herren
(sign)

Date: 5/9/2011

Time: 9:52 AM

Transfer Method (check one): ____Hand to Hand __X__Temporary Evidence Storage
____Secure Refrigerator/Freezer (add location) _____

To Analyst: Andrea Borchardt-Gardner
(print)
(sign)

Date: 5-9-11

Time: 3:32 pm

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RBG 5-9-11

Transfer of Evidence Cuttings

Case #: 2S04-114

Tube #	Sample Name	Sample Type
25 1	2S04-114-73a1	Touch
26 2	2S04-114-74a1	Touch
27 3	2S04-114-RB44	Touch

EHSN 5/10/11

All evidence cuttings listed above were transferred:

From Analyst: Emily Herren
(print)
Emily Herren
(sign)

Date: 5/9/2011

Time: 9:55 AM

Transfer Method (check one): ____Hand to Hand __X__Temporary Evidence Storage
____Secure Refrigerator/Freezer (add location)

To Analyst: Andrea Borchardt-Gardner
(print)
(sign)

Date: 5-9-11

Time: 3:32 pm

Document: BT00059 - Transfer of Evidence Cuttings (WS)
Revision: 3
Effective: 10/29/2010 9:03:53 AM

ABG 5-9-11 16

Transfer of Evidence Cuttings

Case #: 2S04-114

Page 1 of 1

Tube #	Sample Name	Sample Type
1	2S04-114-55a1	Blood
2	2S04-114-57a1	Blood
3	2S04-114-75a1	Blood
4	2S04-114-75b1	Blood
5	2S04-114-RB45	Blood

All evidence cuttings listed above were transferred:

From Analyst: Emily Herren
(print)
Emily Herren
(sign)

Date: 5/9/2011

Time: 9:53 AM

Transfer Method (check one): ____Hand to Hand __X__Temporary Evidence Storage
____Secure Refrigerator/Freezer (add location) _____

To Analyst: Amanda Bortolussi
(print)
Amanda Bortolussi
(sign)

Date: 5/9/11

Time: 10:05am

Document: BT00059 - Transfer of Evidence Cuttings (WS)
Revision: 3
Effective: 10/29/2010 9:03:53 AM

AMB
5/9/11

Inventory Case Notes

Bode Technology

Case Number: 2S04-114 Screening Dates: 5/6/2011; 5/7/11; 5/9/11 Analysts: EBH; RM; TV; SMW

Evidence Helper: AMB EBH 5/12/11

BODE SAMPLE NAME: 2S04-114-53

OUTER PACKAGING: Outer packaging labeled in part "...Item 1 Portion of linoleum from Kitchen near Curtain...".
CONTAINS: Contains one piece of linoleum ~17.0 x 12.0 cm in size. Red, gold, black, and white pattern on one side with a non-Bode analyst's initials and "item 1" written in the corner. Reverse side received with an area indicated with a small black arrow by a non-Bode analyst. Apparent hair/fiber attached to reverse side, could not be removed because it was embedded in the glue of the tile.

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	SEROLOGY RESULTS	QUANTITY CONSUMED
2S04-114-53	1	• EBH 5/6/11: 8 areas of dark brown staining on reverse side of tile PH(-). No visible red/brown staining on patterned side of tile. Not processed further at this time.	PH(-)	N/A

BODE SAMPLE NAME: 2S04-114-54

OUTER PACKAGING: Outer packaging labeled in part "...Item 2...under backing of linoleum in Kitchen near Curtain...".
CONTAINS: Contains two pieces of apparent tile, one ~6.0 x 13.0 cm in size with areas of brown discoloration and a non-Bode analyst's initials and "item 2" written on one side, the other ~7.0 x 15.0 cm in size with areas of brown discoloration and a paper towel attached to one side. Black staining on paper towel. Second piece received with no writing on either side.

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	SEROLOGY RESULTS	QUANTITY CONSUMED
2S04-114-54	2	• EBH 5/6/11 (Transcribed by AMB): First piece of tile containing non-Bode analyst's initials has 4 areas of dark brown staining PH(-). Second piece of tile has 3 areas of dark brown staining PH(-). No red/brown staining on paper towel. One apparent hair/fiber recovered from paper towel, examined microscopically to determine nuDNA suitability. One apparent human hair fragment, not suitable for nuDNA but may be suitable for mtDNA, ~ 0.75 cm in length, light brown in color. Repackaged with the evidence on a post-it note. Tiles not processed further at this time.	PH(-) 1 apparent human hair fragment	N/A

analyst TV unavailable. EBH 5/11/11

AMB 5/11/11 RM 5/11/11 SMW 5/11/11 EBH 5/9/11

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Evidence Helper: AMB

EBH 5/12/11

BODE SAMPLE NAME: 2S04-114-55

OUTER PACKAGING: Outer packaging labeled in part "...Item 3... swabs from bottom layer of linoleum in Kitchen near curtain...".
CONTAINS: Contains 2 swabs with brown staining, taped together with tag labeled "Item 3" with non-Bode analyst's initials. Swabs designated 1 and 2 by analyst (EBH).

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	SEROLOGY RESULTS	QUANTITY CONSUMED
2S04-114-55	2	• EBH 5/6/11 (Transcribed by AMB): Swab 1 PH weak (+). Swab 2 PH(-). Cut and consumed swab 1 for DNA analysis. Sample processed as 2S04-114-55a1.	PH weak (+)	100% of swab 1.

BODE SAMPLE NAME: 2S04-114-56

OUTER PACKAGING: Outer packaging labeled in part "...Item 4...Swabs from bottom of removed linoleum from near kitchen sink...".
CONTAINS: Contains 2 swabs with light brown staining, taped together with a tag labeled "Item 4" with non-Bode analyst's initials. Swabs designated 1 and 2 by analyst (EBH).

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	SEROLOGY RESULTS	QUANTITY CONSUMED
2S04-114-56	2	• EBH 5/6/11 (Transcribed by AMB): Swab 1 PH(-). Swab 2 PH(-). Not processed further at this time.	PH(-)	N/A

analyst TV unavailable EBH 5/11/11

AMB 5/12/11
RM 5/11/11
SMW 5/11/11
EBH 5/9/11

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Evidence Helper: AMB

EBH 5/12/11

BODE SAMPLE NAME: 2S04-114-57

OUTER PACKAGING: Outer packaging labeled in part "...Item 5...Swabs from side of washer near sink in kitchen...".
CONTAINS: Contains 2 swabs with light brown staining, taped together with a tag labeled "Item 5" with non-Bode analyst's initials. Swabs designated 1 and 2 by analyst (EBH).

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	SEROLOGY RESULTS	QUANTITY CONSUMED
2S04-114-57	2	• EBH 5/6/11 (Transcribed by AMB): Swab 1 PH weak (+). Swab 2 PH weak (+). Cut, combined and consumed both swabs for DNA analysis. Sample processed as 2S04-114-~~57x1~~ -57a1.	PH(weak +)	100% of both swabs

EBH 5/12/11

BODE SAMPLE NAME: 2S04-114-58

OUTER PACKAGING: Outer packaging labeled in part "...Item 6..."
CONTAINS: Maroon colored curtain. Two side panels of satin fabric with pattern and scalloped edges. Center panel maroon lace. Top with satin valence. Tag labeled in part "...MACHINE WASH COLD..." with a "37" previously written on the back of the tag by a non-Bode analyst. Curtains received with "Item 6" and a non-Bode analyst's initials written on the top valence part. Areas of dark staining on curtain. No apparent hairs/fibers observed.

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	SEROLOGY RESULTS	QUANTITY CONSUMED
2S04-114-58	1	• EBH 5/6/11: 58 areas of dark staining PH(-). Not processed further at this time.	PH(-)	N/A

analyst TV unavailable EBH 5/11/11

AMB 5/12/11
RM 5/11/11
SMW 5/11/11
EBH 5/9/11

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Analysts: EBH; RM; TV; SMW

Evidence Helper: AMB

EBH 5/12/11

BODE SAMPLE NAME: 2S04-114-59

OUTER PACKAGING: Bag labeled in part "...Item 7...Portion of linoleum from in front of kitchen...".
CONTAINS: Containing four pieces of flooring. Analyst designated pieces "A", "B", "C", and "D".

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	SEROLOGY RESULTS	QUANTITY CONSUMED
2S04-114-59	4	• EBH 5/6/11: Piece A: ~15.0 x 30.0 cm in size with a red, black, gold, and white pattern on one side. Areas of brown discoloration and staining, debris present. 8 areas of brown staining PH(-). Not processed further at this time. • EBH 5/6/11: Piece B: ~15.0 x 30.0 cm in size with a red, black, gold, and white pattern on one side. Areas of brown discoloration and staining, debris present. Tile received with "Item 7" and a non-Bode analyst's initials written on the patterned side and "Blue Star (+)" previously written on non-patterned side. 10 areas of brown staining PH(-). Not processed further at this time. • EBH 5/6/11: Piece C: ~15.0 x 10.0 cm in size. Areas of brown discoloration and staining, debris present. 4 areas of dark brown staining PH(-). Not processed further at this time. • EBH 5/6/11: Piece D: ~7.0 x 7.0 cm in size. Areas of brown discoloration and staining, debris present. 1 area of dark brown staining PH(-). Not processed further at this time. • EBH 5/6/11: 8 apparent hairs/fibers collected from tiles and examined microscopically to determine nuDNA suitability. Two apparent fibers. One apparent human hair in apparent telogen phase with 1+ follicular material, not suitable for nuDNA but may be suitable for mtDNA, red in color and ~5cm in length. Five apparent human hair fragments not suitable for nuDNA but may be suitable for mtDNA, two medium brown in color and ~1.5 cm and ~0.75 cm in length, three dark brown in color and ~1.5 cm, ~0.75 cm, and ~0.75 cm in length. All apparent hairs/fibers repackaged with the evidence on post-it notes.	PH(-) 2 apparent fibers 1 apparent human hair (T1) 5 apparent human hair fragments	N/A

analyst TV unavailable EBH 5/11/11

AMB 5/12/11 RM 5/11/11 SMW 5/11/11 EBH 5/9/11

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Evidence Helper: AMB
EBH 5/12/11

BODE SAMPLE NAME: 2S04-114-60

OUTER PACKAGING: Small coin envelope labeled in part "Hair collected from driver's side Inside handle".
CONTAINS: One light colored apparent hair/fiber (~6cm in length). Hair too light in color to photograph.

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	SEROLOGY RESULTS	QUANTITY CONSUMED
2S04-114-60	1	• TV 5/6/11: Apparent hair/fiber microscopically examined for nuDNA suitability. Apparent animal hair, collected on a post-it note and repackaged in the coin envelope.	Apparent animal hair	N/A

BODE SAMPLE NAME: 2S04-114-61

OUTER PACKAGING: Bag labeled in part "Tape lift bottom cushion of bench seat driver's side under steering wheel".
CONTAINS: One piece of apparent tape adhered to a clear piece of apparent thin plastic (~15cm x 45cm). Apparent hairs/fibers and debris present.

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	SEROLOGY RESULTS	QUANTITY CONSUMED
2S04-114-61	1	• TV 5/6/11: No red/brown staining observed. 3 apparent hairs/fibers microscopically examined for nuDNA suitability. One apparent human hair, light in color ~5cm in length in apparent telogen phase with 1+ follicular material, not suitable for nuDNA, may be suitable for mtDNA. 2 apparent animal hairs observed. All hairs collected on a post-it note and repackaged with the evidence. Wet/dry swabbed tape (~50% surface consumed), swabs consumed, sample processed as 2S04-114-61a1.	1 apparent human hair (T1) 2 apparent animal hairs	~50% of surface area of tape

analyst TV unavailable
EBH 5/11/11

EBH 5/11/11
SMW 5/11/11
AMB 5/12/11

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Evidence Helper: AMB
EBH 5/12/11

BODE SAMPLE NAME: 2S04-114-62

OUTER PACKAGING: Bag labeled in part "Tape lift of bottom bench seat Driver's side towards back of seat".
CONTAINS: One piece of apparent tape adhered to a clear piece of apparent thin plastic (~15cm x 45cm). Apparent hairs/fibers and debris present.

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	SEROLOGY RESULTS	QUANTITY CONSUMED
2S04-114-62	1	• TV 5/6/11: No red/brown staining observed. 9 apparent hairs/fibers microscopically examined for nuDNA suitability. 3 apparent human hair fragments, all light in color, ~2cm – 15cm in length, not suitable for nuDNA suitability, may be suitable for mtDNA. 5 apparent animal hairs. 1 apparent fiber. Wet/dry swabbed tape (~50% surface consumed), swabs consumed, sample processed as 2S04-114-62a1.	3 apparent human hair fragments 5 apparent animal hairs 1 apparent fiber	~50% of surface area of tape

BODE SAMPLE NAME: 2S04-114-63

OUTER PACKAGING: Bag labeled in part "...Item 11...Tape lift from middle bottom bench seat front...".
CONTAINS: One piece of apparent tape adhered to a clear piece of thin plastic (~15.0 x 45.0 cm). Apparent hairs/fibers and heavy debris present. Tape lift previously labeled " Item 11...tape lift from middle bottom bench seat front" with a non-Bode analyst's initials.

analyst TV unavailable EBH 5/11/11

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	SEROLOGY RESULTS	QUANTITY CONSUMED
2S04-114-63	1	• EBH 5/6/11: No visible red/brown staining observed. 8 apparent hairs/fibers microscopically examined for nuDNA suitability. 3 apparent fibers and 3 apparent animal hairs. 2 apparent human hair fragments, not suitable for nuDNA but may be suitable for mtDNA, one medium brown in color and ~1.0cm in length, the other light brown in color and ~5.0cm in length. Apparent hairs/fibers repackaged with the evidence on post-it notes. Wet/dry swabbed the adhesive side of the tape-lift using two swabs, avoiding areas of heavy debris. Cut and consumed swabs, sample processed as 2S04-114-63a1. Consumed ~50% of surface area of tape-lift sampled.	2 apparent human hair fragments 3 apparent animal hairs 3 apparent fibers	~50% surface area of tape

AMB 5/11/11
RM 5/11/11
SMW 5/11/11
EBH 5/9/11

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Evidence Helper: AMB
EBH 5/12/11

BODE SAMPLE NAME: 2S04-114-64

OUTER PACKAGING: Bag labeled in part "...Item 12...Tape lift from bottom bench seat middle towards back...".
CONTAINS: One piece of apparent tape adhered to a clear piece of thin plastic (~15 x 45 cm). Apparent hairs/fibers and debris present. Tape lift previously labeled "...Item 12...Tape lift from bottom bench seat middle towards back...".

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	SEROLOGY RESULTS	QUANTITY CONSUMED
2S04-114-64	1	• EBH 5/6/11: No visible red/brown staining. 12 apparent hairs/fibers microscopically examined for nuDNA suitability. 4 apparent fibers. 2 apparent animal hairs. 6 apparent human hair fragments, not suitable for nuDNA but may be suitable for mtDNA, one light brown in color and ~2cm in length, five blonde in color and ~0.75cm, ~5.5cm, ~1.0cm, ~2.5cm, and ~11.0cm in length. Apparent hairs/fibers repackaged with the evidence on post-it notes. Wet/dry swabbed the adhesive side of the tape-lift using two swabs, avoiding areas of heavy debris. Cut and consumed both swabs, sample processed as 2S04-114-64a1. Consumed ~50% of surface area of tape-lift sampled.	6 apparent human hair fragments 2 apparent animal hairs 4 apparent fibers	~50% surface area of tape

BODE SAMPLE NAME: 2S04-114-65

OUTER PACKAGING: Bag labeled in part "Tape lift passenger side bottom bench seat towards front".
CONTAINS: One piece of apparent tape adhered to a clear piece of apparent thin plastic (~15cm x 45cm). Apparent hairs/fibers and debris present. Tape lift previously labeled " Item 13... Tape lift passenger side bottom bench seat towards front".

analyst TV unavailable EBH 5/11/11

AMB 5/12/11 RM 5/11/11 SMW 5/11/11 EBH 5/9/11

Inventory Case Notes

Bode Technology

Case Number: 2S04-114 Screening Dates: 5/6/2011; 5/7/11; 5/9/11 Analysts: EBH; RM; TV; SMW

Evidence Helper: AMB EBH 5/10/11

BODE SAMPLE NAME: 2S04-114-65 (continued):

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	SEROLOGY RESULTS	QUANTITY CONSUMED
2S04-114-65	1	• RM 5/6/11: No red/brown staining observed. 17 apparent hairs/fibers microscopically examined for nuDNA suitability. 2 apparent human hair fragments, all light brown in color, ~0.5cm – 1cm in length, not suitable for nuDNA suitability, may be suitable for mtDNA. 3 apparent animal hairs. 12 apparent fibers. Apparent hairs/fibers repackaged with the evidence on post-it notes. Wet/dry swabbed tape (~50% surface consumed), swabs consumed, sample processed as 2S04-114-65a1.	2 apparent human hair fragments 3 apparent animal hairs 12 apparent fibers	~50% surface area of tape

BODE SAMPLE NAME: 2S04-114-66

EBH 5/10/11

OUTER PACKAGING: Bag labeled in part "Tape lift passenger side bottom bench seat towards ~~front".~~ ~~back EBH~~ ~~front~~ [SIC]. EBH 5/10/11

CONTAINS: One piece of apparent tape adhered to a clear piece of apparent thin plastic (~15cm x 45cm). Apparent hairs/fibers and debris present. Tape lift previously labeled "Item 14… Tape lift passenger side bottom bench seat towards front".

^ [SIC] EBH 5/11/11

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	SEROLOGY RESULTS	QUANTITY CONSUMED
2S04-114-66	1	• RM 5/6/11: No red/brown staining observed. 10 apparent hairs/fibers microscopically examined for nuDNA suitability. 2 apparent human hair fragments, all light brown in color, ~0.5cm – 1.5cm in length, not suitable for nuDNA suitability, may be suitable for mtDNA. 2 apparent animal hairs. 6 apparent fibers. Apparent hairs/fibers repackaged with the evidence on post-it notes. Wet/dry swabbed tape (~50% surface consumed), swabs consumed, sample processed as 2S04-114-66a1.	2 apparent human hair fragments 2 apparent animal hairs 6 ~~2~~ apparent fibers	~50%surface area of tape

EBH 5/11/11

analyst TV unavailable EBH 5/11/11

AMB 5/12/11 RM 5/11/11 SMW 5/11/11 EBH 5/9/11

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Case Number: 2S04-114 Screening Dates: 5/6/2011; 5/7/11; 5/9/11 Analysts: EBH; RM; TV; SMW

Evidence Helper: ANB EBH 5/12/11

BODE SAMPLE NAME: 2S04-114-67

OUTER PACKAGING: Bag labeled in part "Tape lift back of bench seat, bottom half driver's side".
CONTAINS: One piece of apparent tape adhered to a clear piece of apparent thin plastic (~15cm x 45cm). Apparent hairs/fibers and debris present. Tape lift previously labeled "Item 15... Tape lift back of bench seat, bottom half driver's side".

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	SEROLOGY RESULTS	QUANTITY CONSUMED
2S04-114-67	1	• RM 5/6/11: No red/brown staining observed. 4 apparent hairs/fibers microscopically examined for nuDNA suitability. 1 apparent human hair, light brown in color, in apparent telogen phase with 1+ follicular material, ~1.0cm in length, not suitable for nuDNA suitability, may be suitable for mtDNA. 1 apparent hair/fiber of undetermined origin. 2 apparent fibers. Apparent hairs/fibers repackaged with the evidence on post-it notes. Wet/dry swabbed tape (~50% surface consumed), swabs consumed, sample processed as 2S04-114-67a1.	1 apparent human hair (T1) 2 apparent fibers 1 apparent hair/fibers of undetermined origin EBH 5/12/11	~50% surface area of tape

BODE SAMPLE NAME: 2S04-114-68

OUTER PACKAGING: Bag labeled in part "...Item 16...Tape lift back of bench seat, top half drivers side...".
CONTAINS: One piece of apparent tape adhered to a clear piece of apparent thin plastic (~15cm x 45cm). Apparent hairs/fibers and debris present. Tape lift previously labeled "Item 16...tape lift back of bench seat, top half drivers side".

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	SEROLOGY RESULTS	QUANTITY CONSUMED
2S04-114-68	1	• SMW 5/6/11: No visible red/brown staining observed. 8 apparent hairs/fibers examined microscopically for nuDNA suitability. 3 apparent human hair fragments, one blonde in color and ~4mm in length, one brown in color and ~4mm in length, and one brown in color and ~6mm in length, not suitable for nuDNA but may be suitable for mtDNA. 4 apparent fibers. 1 apparent animal hair. Apparent hairs/fibers repackaged with the evidence on post-it notes. Wet/dry swabbed tape (~50% surface area consumed) using two swabs. Cut and consumed swabs, sample processed as 2S04-114-68a1.	3 apparent human hair fragments 1 apparent animal hair 4 apparent fibers	~50% surface area of tape

analyst TV unavailable EBH 5/11/11

EBH 5/12/11 SMW 5/11/11 RM 5/11/11 ANB 5/12/11

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Evidence Helper: ANB
EBH 5/12/11

BODE SAMPLE NAME: 2S04-114-69

OUTER PACKAGING: Bag labeled in part "...Item 17...Tape lift back of bench seat, bottom half middle...".
CONTAINS: Contains one piece of apparent tape adhered to a clear piece of thin clear plastic (~15cm x 45cm). Minimal debris present. Tape lift previously labeled "Item 17 tape lift back of bench seat, bottom half middle" with a non-Bode analyst's initials.

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	SEROLOGY RESULTS	QUANTITY CONSUMED
2S04-114-69	1	• EBH 5/9/11: No visible red/brown staining observed. One apparent hair/fiber recovered from tape lift. Examined microscopically to determine nuDNA suitability. One apparent fiber. Repackaged with the evidence on a post-it note. Wet/dry swabbed tape (~50% surface area consumed) using two swabs. Cut and consumed swabs. Sample processed as 2S04-114-69a1.	1 apparent fiber	~50% surface area of tape

BODE SAMPLE NAME: 2S04-114-70

OUTER PACKAGING: Bag labeled in part "...Item 18...Tape lift back of bench seat, passenger side bottom half...".
CONTAINS: Contains one piece of apparent tape adhered to a clear piece of thin plastic (~15cm x 45cm). Minimal debris present. Tape lift previously labeled "Item 18 Tape lift back of bench seat passenger side bottom half" with a non-Bode analyst's initials.

analyst-TV unavailable EBH 5/11/11

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	SEROLOGY RESULTS	QUANTITY CONSUMED
2S04-114-70	1	• EBH 5/9/11: No visible red/brown staining observed. Six apparent hairs/fibers examined microscopically to determine nuDNA suitability. Four apparent fibers and two apparent animal hairs. Repackaged apparent hairs/fibers with the evidence on post-it notes. Wet/dry swabbed tape (~50% surface area consumed) using two swabs. Cut and consumed both swabs. Sample processed 2S04-117-70a1	2 apparent animal hairs 4 apparent fibers	~50% surface area of tape

AMB 5/12/11 SMW 5/11/11 RM 5/11/11 EBH 5/9/11

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Evidence Helper: AMB

EBH 5/12/11

BODE SAMPLE NAME: 2S04-114-71

OUTER PACKAGING: Bag labeled in part "...Item 19...Tape lift back of bench seat, top half middle...".
CONTAINS: One piece of apparent tape adhered to a clear piece of apparent thin plastic (~15cm x 45cm). Apparent hairs/fibers and debris present. Tape lift previously labeled "...Item 19...Tape lift back of bench seat, top half middle...".

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	SEROLOGY RESULTS	QUANTITY CONSUMED
2S04-114-71	1	• SMW 5/9/11: No visible red/brown staining. 3 apparent hairs/fibers examined microscopically for nuDNA suitability. 2 apparent fibers. 1 apparent animal hair. Apparent hairs/fibers repackaged with the evidence on post-it notes. Wet/dry swabbed tape (~50% surface area consumed) using two swabs. Cut and consumed swabs, sample processed as 2S04-114-71a1.	1 apparent animal hair 2 apparent fibers	~50% surface area of tape

BODE SAMPLE NAME: 2S04-114-72

OUTER PACKAGING: Bag labeled in part "...Item 20...Tape lift back of bench seat, top half, passenger side...".
CONTAINS: Contains one piece of apparent tape adhered to a clear piece of thin plastic (~15cm x 45cm). Minimal debris present. Tape lift previously labeled "Item 20 Tape lift back of bench seat top half passenger side" with a non-Bode analyst's initials.

analyst TV unavailable EBH 5/11/11

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	SEROLOGY RESULTS	QUANTITY CONSUMED
2S04-114-72	1	• EBH 5/9/11: No visible red/brown staining observed. Two apparent hairs/fibers examined microscopically to determine nuDNA suitability. One apparent human hair fragment, not suitable for nuDNA but may be suitable for mtDNA, medium brown in color and ~0.5 cm in length. One apparent fiber. Apparent hairs/fibers repackaged with the evidence on post-it notes. Wet/dry swabbed tape (~50% surface area consumed) using two swabs. Cut and consumed both swabs. Sample processed as 2S04-117-72a1.	1 apparent human hair fragment 1 apparent fiber	~50% surface area of tape

AMB 5/12/11
RM 5/11/11
SMW 5/11/11
EBH 5/9/11

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Evidence Helper: AMB EBH 5/12/11

BODE SAMPLE NAME: 2S04-114-73

OUTER PACKAGING: Bag labeled in part "...Item 21...One brown (left hand) glove found in truck with hair in separate envelope...".
CONTAINS: One left hand brown cloth glove, apparent worn condition. Heavy debris present. Glove received with a piece of clear tape on the exterior top of the glove labeled "Item 21" with a non-Bode analyst's initials. No tag. Also received in outer bag: one manila envelope labeled in part "...hair observed on item 21...", sealed with clear tape containing a non-Bode analyst's initials.

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	SEROLOGY RESULTS	QUANTITY CONSUMED
2S04-114-73	1	• EBH 5/7/11: No visible red/brown staining. One apparent hair/fiber recovered from glove, found partially underneath the piece of tape labeled "Item 21". Apparent hair/fiber examined microscopically to determine nuDNA suitability. One apparent human hair in apparent telogen phase with 1+ follicular material, not suitable nuDNA but may be suitable for mtDNA, light brown in color and ~20.0 cm in length. Repackaged with the evidence on a post-it note. • EBH 5/7/11: Apparent hairs/fibers submitted in separate envelope removed and examined microscopically to determine nuDNA suitability. One apparent human hair fragment, not suitable for nuDNA but may be suitable for mtDNA, medium brown in color and ~7.0 cm in length. One apparent animal hair and one apparent fiber. Apparent hairs/fibers repackaged on post-it notes within the same manilla envelope in which they were submitted. • EBH 5/7/11: Scraped the interior ribbed wristband of glove and the interior palm region. Consumed ~50% of surface area sampled. Sample processed as 2S04-114-73a1.	1 apparent human hair (T1) 1 apparent human hair fragment 1 apparent animal hair 1 apparent fiber	~50% of surface area sampled

analyst TV unavailable EBH 5/11/11

AMB 5/12/11 PM 5/11/11 SMW 5/11/11 EBH 5/9/11

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Evidence Helper: AMB
EBH 5/12/11

BODE SAMPLE NAME: 2S04-114-74

OUTER PACKAGING: Bag labeled in part "...Item 22...Brown glove (right hand) found in truck with hair in separate envelope...".
CONTAINS: One right hand brown cloth glove, apparent worn condition. Heavy debris present. Glove received with a piece of clear tape on the exterior top of the glove labeled "Item 22" with a non-Bode analyst's initials. Also received in outer bag: one manila envelope labeled in part "...hair from glove in item 22...", sealed with clear tape containing a non-Bode analyst's initials. Areas of dark staining on glove. Tag inside glove labeled in part "...MADE IN CHINA RN#95300...".

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	SEROLOGY RESULTS	QUANTITY CONSUMED
2S04-114-74	1	• EBH 5/7/11: Six areas of dark staining on exterior of glove PH(-). 11 apparent hairs/fibers collected from glove and examined microscopically to determine nuDNA suitability. Three apparent human hairs in apparent telogen phase with 1+ follicular material, not suitable for nuDNA but may be suitable for mtDNA, one light brown in color and ~1.5 cm in length, the other two blonde in color and ~2.0 cm and ~1.5 cm in length. One apparent human hair fragment, not suitable for nuDNA but may be suitable for mtDNA, dark brown in color and ~5.5 cm in length. Four apparent animal hairs and three apparent fibers. Apparent hairs/fibers repackaged with the evidence on post-it notes. • EBH 5/7/11: Apparent hairs/fibers submitted in separate envelope removed and examined microscopically to determine nuDNA suitability. One apparent human hair in apparent telogen phase with 1+ follicular material, blonde in color and ~9.0 cm in length. Repackaged on a post-it note within the same manilla envelope in which it was submitted. • EBH 5/7/11: Scraped the interior ribbed wristband of glove and the interior palm region. Consumed ~50% of surface area sampled. Sample processed as 2S04-114-74a1.	PH(-) 4 apparent human hairs (T1) 1 apparent human hair fragment 4 apparent animal hairs 3 apparent fibers	~50% of surface area sampled

analyst TV unavailable EBH 5/11/11

AMB 5/12/11 RM 5/11/11 SMW 5/11/11 EBH 5/9/11

Inventory Case Notes

Bode Technology

Case Number: 2S04-114 Screening Dates: 5/6/2011; 5/7/11; 5/9/11 Analysts: EBH; RM; TV; SMW

Evidence Helper: ANB EBH 5/12/11

BODE SAMPLE NAME: 2S04-114-75

OUTER PACKAGING: Bag labeled in part "...Item 23...Portion of vinyl seat back of Driver's side of truck + swabs of area...".
CONTAINS: Contains one piece of apparent vinyl ~40.0 x 17.0 cm in size, tan on one side and brown on the other. Areas of brown staining on both sides. Received with "...Item 23...portion of vinyl seat back of driver's side of truck..." and a non-Bode analyst's initials written on the tan side and an arrow in black sharpie on the brown side. Also received: one swab box sealed with clear tape, labeled in part "...swab of seat back of driver's side of truck..." with a non-Bode analyst's initials. Piece of vinyl designated as 2S04-114-75a and swab box designated as 2S04-114-75b. No apparent hairs/fibers observed.

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	SEROLOGY RESULTS	QUANTITY CONSUMED
2S04-114-75	2	• EBH 5/7/11: 13 areas of brown staining on piece of vinyl PH(-). [Area on brown side below arrow PH(-)]. One area of brown staining to the left of the area previously designated with an arrow PH(+). Wet/dry swabbed PH(+) area using two swabs. Consumed ~50% of surface area sampled. Cut and consumed both swabs. Sample processed as 2S04-114-75a1. • EBH 5/7/11: One swab in swab box with a piece of clear tape on the stick labeled "...swab of...seat truck..." with a non-Bode analyst's initials. Gray staining on swab, PH(+). Cut ~1/2 of swab (consumed ~50% staining). Sample processed as 2S04-114-75b1.	PH(+)	~50% area sampled/ ~50% of staining on swab

NOTES:

Analyst TV unavailable EBH 5/11/11

See photo documentation for further details on evidence.

Fisher DNA Grade water used for swabbing lot# (5/6/11): 107828 (EBH and TV), 097050 (RM and SMW).

Phenolphthalein (PH) 5/6/11 EBH: Phenolphthalein Kit (012611-B/Evident), Sterile Water (107828/Fisher), Blood Positive Control (+), Blood Negative Control (-).

Phenolphthalein (PH) 5/7/11 EBH: Phenolphthalein Kit (012611-C/Evident), Sterile Water (107828/Fisher), Blood Positive Control (+), Blood Negative Control (-).

Fisher DNA Grade water used for swabbing lot# (5/9/11): 097050 (EBH), 107828 (RM and SMW).

Analyst RM 5/11/11 SMW 5/11/11 EBH 5/9/11

Document: BTF00245 - Inventory Case Notes w/Serology (CCW WS)
Revision: 2
Effective: Wednesday, January 30, 2008 2:21:04 PM

Bode Technology

10430 Furnace Road, Suite 107
Lorton, VA 22079
Phone: 703-646-9740

Supplemental Forensic Case Report
May 23, 2011

To:
Stephen Braga
Ropes and Gray LLP
700 12th Street, NW Suite 900
Washington, DC 20005

Bode Case #: 2S04-114

Partial list of evidence received on May 9, 2011 for possible DNA analysis:

Bode Sample Name	Agency Description
2S04-114-81	Labeled as "Starbucks Coffee Cup" (Chuck King)

Partial list of evidence received on May 5, 2011 for possible DNA analysis:

Bode Sample Name	Agency Item #	Agency Description
2S04-114-74	Item # 22	Labeled as "Sealed brown paper bag containing one brown right hand glove found in truck with hair packaged in separate sealed envelope"

Partial list of evidence received on May 4, 2011 for possible DNA analysis:

Bode Sample Name	Agency Item #	Agency Description
2S04-114-57	Item # 5	Labeled as "Sealed manila envelope containing two swabs from side of washer near sink in kitchen"

Partial list of evidence received on August 10, 2007 for possible DNA analysis:

Bode Sample Name	Agency Item #	Agency Description
2S04-114-49	3	Labeled as "One knife"
2S04-114-49a1		*Handle*

Partial list of evidence received on July 7, 2004 for possible DNA analysis:

Bode Sample Name	Agency Item #	Agency Description
2S04-114-05D	Not Listed	Two "penile" swabs (Moore)
2S04-114-05D1-NSF		*non-sperm fraction extract (Moore)*
2S04-114-10E	Not Listed	Two "penile" swabs (Branch)
2S04-114-10E2		*Cutting of 2nd swab*
2S04-114-26	93-05716 E7 Q6	Labeled as "Cutting from jeans"

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DNA Processing, Results, and Conclusions:

Sample 2S04-114-81 was processed for DNA typing by analysis of the 13 CODIS Short Tandem Repeat loci, the D2S1338 locus, the D19S433 locus, and the Amelogenin locus using the Applied Biosystems AmpFISTR Identifiler kit. Appropriate positive and negative controls were used concurrently throughout the analysis. The DNA profiles reported in this case were determined by procedures that have been validated according to standards established by the Scientific Working Group on DNA Analysis Methods (SWGDAM) and adopted as Federal Standards.

1. A DNA profile was obtained from sample 2S04-114-81 (Chuck King).

2. A partial DNA profile was previously obtained from sample 2S04-114-05D1-NSF. Due to the limited data obtained no statements regarding inclusion or exclusion to sample 2S04-114-05D1-NSF are provided.

3. A partial mixed DNA profile of at least two individuals including a male contributor was previously obtained from the epithelial fraction (EF) of sample 2S04-114-10E2. Due to the limited data obtained no statements regarding inclusion or exclusion to sample 2S04-114-10E2-EF are provided.

4. A partial DNA profile was previously obtained from the epithelial fraction (EF) of sample 2S04-114-26 that is consistent with a mixture. Due to the limited data obtained no statements regarding inclusion or exclusion to sample 2S04-114-26-EF are provided.

5. The DNA profile previously obtained from sample 2S04-114-49a1 is consistent with a mixture of at least two individuals including at least one male contributor. The individual associated with sample 2S04-114-81 (Chuck King) is excluded as a possible contributor to the mixture profile obtained from sample 2S04-114-49a1.

6. The DNA profile previously obtained from sample 2S04-114-57 is consistent with a mixture of at least two individuals including at least one male contributor. The individual associated with sample 2S04-114-81 (Chuck King) is excluded as a possible contributor to the mixture profile obtained from sample 2S04-114-57.

7. The DNA profile previously obtained from sample 2S04-114-74 is consistent with a mixture of two individuals including a major male contributor. The individual associated with sample 2S04-114-81 (Chuck King) is excluded as a possible contributor to the mixture profile obtained from sample 2S04-114-74.

See **Table 1** for summary of alleles reported for each sample.

Notes:

1. Any reference to body fluids in evidence descriptions are based on the written descriptions of the samples by the submitting agency.
2. The DNA extracts and submitted evidence will be retained at Bode until return is authorized by the client.
3. A supplemental STR case report was issued due a submission of additional evidence. Please refer to reports dated; May 11, 2011, March 25, 2011, January 25, 2011, June 4, 2008, April 10, 2008, March 7, 2008, September 27, 2007, January 2, 2007, and December 30, 2005 for complete lists of items received/tested for STRs.

Report submitted by,

Amy Jeanguenat, MFS
Technical Leader

Table 1: Analysis of Short Tandem Repeat Loci

Locus	2S04-114-05D1-NSF	2S04-114-10E2-EF	2S04-114-26-EF
D8S1179	14, ---	No Results	Not Tested
D21S11	No Results	29*	No Results
D7S820	No Results	8,10	No Results
CSF1PO	10, ---	11,12	No Results
D3S1358	14, ---	No Results	Not Tested
TH01	No Results	No Results	Not Tested
D13S317	11, ---	11*	8*
D16S539	No Results	No Results	No Results
D2S1338	No Results	23,24,25	16,23
D19S433	Not Tested	No Results	Not Tested
vWA	18, ---	No Results	Not Tested
TPOX	8, ---	No Results	Not Tested
D18S51	No Results	12,15	12,15
Amel.	X, Y	X,Y	X*
D5S818	9, 12, 13	No Results	Not Tested
FGA	No Results	No Results	No Results
Penta E	No Results	Not Tested	Not Tested
Penta D	No Results	Not Tested	Not Tested

Key: */--- : Possible additional allele; ( ) Minor allele

Table 1: Analysis of Short Tandem Repeat Loci (cont.)

Locus	2S04-114-49a1	2S04-114-57a1	2S04-114-74a1	2S04-114-81 (Chuck King)
D8S1179	10,(13)	11,(12),(13),(14),15	10,(12),13,(15)	12,13
D21S11	(27),(28),29,30.2	(28),29,(32.2),(35)	29,31,(31.2)	31,32.2
D7S820	8,10	(9),10	(8),11	10,12
CSF1PO	(9),11,(12),13	7,(10),11,(12)	(11),12,14	11,12
D3S1358	16,17	15,16,(17),18	15,16	18,18
TH01	No Results	6,7,(8),(9.3)	8,(9),(9.3)	6,9.3
D13S317	8,(11),12	11,12	9,11,(13)	12,14
D16S539	9,11,12	10,(11),(12)	12,13	12,12
D2S1338	17,18,(24),(25)	21,(22),(23),(25)	23,(24),25	17,17
D19S433	14,14	(11),(13),13.2,(14)	(15),(15.2),16	12,14
vWA	No Results	(16),17,(18)	(15),16,19	18,20
TPOX	No Results	(6),8,(9),10	8,11,(12)	8,10
D18S51	16,18,(19)	13,(17),18	12,(13),17	15,16
Amel.	X,Y	X,(Y)	X,Y	X,Y
D5S818	12,---	12,(13)	(10),11,12	11,11
FGA	23,2,25	21,---	(20),21,(22),23	20,22

Key: */--- : Possible additional allele; ( ) Minor allele

Bode Technology

Review Form: Complete Case File

Shipment or Case #: 2S04-114-81

Case File Documentation	Core Forms and Controls	Data and Report
Technical Review		
- Case submission form or submitted manifest complete - Client paperwork complete - Client communication documented* - Chain of custody (COC) completed and correct - Project guidelines followed* - Inventory sheet accurate and consistent with COC - Photodocumentation of all evidence complete* - Permission to consume documented* - Case notes complete and accurate - All pages have case or shipment #, date, initials	- Lab worksheets complete - Sample numbering correct throughout - Controls gave appropriate results : Allelic ladders Positive control(s) Negative controls(s) - Electropherograms documented properly - Internal lane standard verified - Two independent analyses performed and edits consistent - Index accurate* - Correct core forms and controls included for case+	- Electropherograms documented properly - Internal lane standard verified - Two independent analyses performed and edits consistent - Index accurate* - Allele table included and accurate* - Results accurate - Conclusions accurate* - Statistics provided* - Statistic calculations correct*
Administrative Review		
- COC accurate - Core forms and controls review form included+ SR-AM3 052311	- Case notes accurate* - Positive control correct	- Report editorially accurate and includes: case identifier, evidence examined, methodology, loci or kit, results and/or conclusions, interpretative statement, date issued, disposition of evidence, signature of person accepting responsibility

**if applicable, + For case files supplemented with controls and core forms*

Name and Title: [illegible] SVP Forensic Ops — ☒ Date-Type of review: 5/23/11 tech/Admin

Name and Title: Andrea Borchardt-Garcia DNA Analyst III — ☑ Date- Type of review: Admin 5-23-11

Name and Title: _____ — ☐ Date- Type of review: _____

Name and Title: Emily Neuen — ☒ Date- Bode Search including Staff DNA Search*: 5/23/11

Emily Herren

From: TrackingUpdates@fedex.com
Sent: Wednesday, May 25, 2011 9:14 AM
To: Emily Herren
Subject: FedEx Shipment 797129935014 Delivered

This tracking update has been requested by:

Company Name:	Bode Technology
Name:	Bode Technology
E-mail:	emily.herren@bodetech.com

Our records indicate that the following shipment has been delivered:

Reference:	2S04-114-81
Ship (P/U) date:	May 24, 2011
Delivery date:	May 25, 2011 9:10 AM
Sign for by:	C.HICKS
Delivery location:	WASHINGTON, DC
Delivered to:	Mailroom
Service type:	FedEx Standard Overnight
Packaging type:	FedEx Envelope
Number of pieces:	1
Weight:	0.50 lb.
Special handling/Services:	Deliver Weekday
Tracking number:	797129935014

Shipper Information	Recipient Information
Bode Technology	Stephen L. Braga
Bode Technology	Ropes & Gray LLP
10430 Furnace Road	700 12TH ST NW STE 900
Suite 107	ONE METRO CENTER
Lorton	WASHINGTON
VA	DC
US	US
22079	20005

Please do not respond to this message. This email was sent from an unattended mailbox. This report was generated at approximately 8:14 AM CDT on 05/25/2011.

To learn more about FedEx Express, please visit our website at fedex.com.

All weights are estimated.

To track the latest status of your shipment, click on the tracking number above, or visit us at fedex.com.

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Thank you for your business.

BRH 5/25/11

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Bode Technology™

INVOICE

Client:
Ropes and Gray LLP
Attn: Stephen Braga
One Metro Center, 700 12 Street
NW Suite 900
Washington, DC 20005

Invoice Date: 5/24/2011

Invoice #: Bill14799
Net Terms: 30 Days

PO Number:

Invoice Grand Total: $ 1,695.00

Requester: Stephen Braga
Phone: 202-508-4655
Fax:
email:

Bode Project #.: 2S04-114

Agency Case No.:

Line Item Number	Quantity	Item / Part Number	Description	Unit Price	Sales Amount
0001	1	STR	Analysis of Reference samples (Blood or Buccal)	$ 1,695.00	$ 1,695.00

One Week Rush

TOTAL AMOUNT DUE $ 1,695.00

Remit To:

The Bode Technology Group, Inc.
c/o GlobalOptions, Inc
Dept. AT 952056
Atlanta, GA 31192

Bode TIN: 54-1750293

Bank Information:

Silicon Valley Bank
Santa Clara, CA 95054
ABA# 121140399
Credit to: GlobalOptions, Inc.
Account # 3300418500

10430 Furnace Road, Suite 107
Lorton, VA 22079

1.866.BODE.4.ID
www.bodetech.com

tel. 703-646-9740
fax. 703-646-9741

EBH5124111

Emily Herren

From: Braga, Stephen [Stephen.Braga@ropesgray.com]
Sent: Monday, May 23, 2011 7:54 PM
To: Emily Herren
Cc: Teresa Vreeland; Amy Jeanguenat
Subject: Re:

Thanks. I will review and reach out to Amy tomorrow.

Steve

Stephen L. Braga
ROPES & GRAY LLP
T +1 202 508 4655 | F +1 202 383 9821
One Metro Center, 700 12th Street, NW, Suite 900
Washington, DC 20005-3948
Stephen.Braga@ropesgray.com
www.ropesgray.com

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From: Emily Herren [mailto:Emily.Herren@bodetech.com]
Sent: Monday, May 23, 2011 06:05 PM
To: Braga, Stephen
Cc: Teresa Vreeland <Teresa.Vreeland@bodetech.com>; Amy Jeanguenat <Amy.Jeanguenat@bodetech.com>
Subject:

Hi Mr. Braga,

Please find attached an electronic copy of the cover letter and report for 2S04-114-81. I do not have a copy of the invoice at this time, but will be sending it to you tomorrow along with the hard copy of the report and cover letter. A statement was made in the report regarding samples -05D1-NSF (penile swab from Moore), -10E2 (penile swab from Branch), and -26-EF (cutting from jeans) that no statements regarding inclusion or exclusion will be made for these items based on the limited amount of data. Amy is willing to discuss the data with you if you would like further explanation on this.

Let us know if you have any questions. Thanks so much,

Emily Herren
Forensic Biology Analyst/DNA Analyst
Bode Technology
10430 Furnace Rd, Suite 107
Lorton, VA 22079

Emily.Herren@bodetech.com
Phone (703)646-9801

2S04-114 EBN 5/24/11

FAX

TO: EMILY HERREN

BODE TECHNOLOGY GROUP

FAX # 703-646-9742

FROM: STEVE BRAGA

DATE: MAY 17, 2011

TOTAL PAGES — 3

2504-114
AMD 052311

Case Submission Form

Bode Technology
Part of GlobalOptions Group

Bode Case No (To be filled out by Bode): 2504 – 114

In order to process your DNA casework efficiently, this form must be filled out and sent along with the evidence. Prior to submitting a case, please call Customer Services 866-BODE-4-ID (866-263-3443).

Submitting Agency Reference/Case No: Ropes + Gray LLP

The Bode Technology Group
10430 Furnace Rd. Suite 107
Lorton, VA 22079
Phone: 703-646-9740
Fax: 703-646-9742
www.bodetech.com

Case Background:

The Starbucks coffee cup, Marked as Item Number 81 in Emily Herron's May 16 e-mail to me, is believed to contain the DNA of Chuck Kang. Please DNA test, and compare to all unknown profiles in case.

Specify platform (AB/Hitachi), kit (Co/Pro+, ID, PP16, PP16BIO, PPY, YFiler, miniFiler), and software (GS/GT, GMID) preferences. If no preference, check box for Analyst Discretion

☒ Analyst Discretion

List Evidence Items* (If needed, use Page 3 to include additional items or case information) Note: Descriptions may be reflected in Chain of Custody and Report	Please check the appropriate boxes for Pre-Screening and DNA Testing Requested	Permission to Consume (if necessary)
Starbucks Coffee Cup	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☒ STR ☒ miniSTR ☐ Y-STR ☐ mtDNA	☒ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No

☐ Check if additional evidence items or testing instructions are listed on Page 3

* When submitting extracts, the reagent blanks must also be included. Please be sure to include the following information: Total Human Quant, Total Y Quant, Volume Remaining, and Extraction Control Names associated with samples.

If STR data is obtained, will CODIS entry or search be requested? ☐ Yes ☒ No

(NOTE: Private Forensic DNA laboratories do not have access to enter or search samples in CODIS. If "yes" is marked, Bode will contact the appropriate CODIS laboratory Technical Leader prior to initiation of this case. Please be aware that this may increase the turnaround time.

I hereby certify that the information provided on this Case Submission Form is accurate to the best of my knowledge. I understand that I will be charged for services according to the fee schedule that I have received.

Print Name STEPHEN L. BRAGA Signature [signature]

Please submit this completed form with the evidence. All evidence items must be shipped using a traceable carrier (i.e. FedEx, UPS, DHL, Priority Mail). Overnight shipping is recommended. The evidence

ATTN: EVIDENCE DEPARTMENT
Bode Technology
10430 Furnace Rd. Suite 107
Lorton, VA 22079

AMJ 05/22/11

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Case Submission Form

Bode Technology
Part of GlobalOptions Group

Bode Case No (To be filled out by Bode): 2504-114

The Bode Technology Group
10430 Furnace Rd. Suite 107
Lorton, VA 22079
Phone: 703-646-9740
Fax: 703-646-9742
www.bodetech.com

In order to process your DNA casework efficiently, this form must be filled out and sent along with the evidence. Prior to submitting a case, please call Customer Services 866-BODE-4-ID (866-263-3443).

Submitting Agency: ROPES + GRAY LLP Date: 5/17/11

Name: STEPHEN L. BRAGA Phone Number: 202-508-4655

Select the type of Submission:

☐ Initial Evidence Submission ☒ Additional Evidence Submission (Please fill in Bode Case number at the top of the page)

Select the type of Service:

☐ Standard Service - Our standard service provides complete analysis of your samples when rush services are not required.

☒ Rush Service - This is the fastest service offered. Please contact Customer Service for turnaround time (Additional charge per sample).

Promotion Code: _____

☒ 5 business days ☐ 10 business days ☐ 15 business days

Authorized Point(s) of Contact:

Name:	STEPHEN L. BRAGA	Name:	
Agency:	ROPES + GRAY LLP	Agency;	
Title:	PARTNER	Title:	
Phone Number:	202-508-4655	Phone Number:	
Fax Number:	202-383-9821	Fax Number:	
Cell Phone/Pager:	617-304-7124	Cell Phone/Pager:	
Email Address:	stephen.braga@ropesgray.com	Email Address:	

Mailing Address (Where The Report Should be Sent):

Name:	SAME AS ABOVE
Agency:	
Address:	
City/State/Zip:	
Phone Number:	
Fax Number:	
Email Address:	

Billing Address:

Name:	SAME AS ABOVE
Agency:	
Address:	
City/State/Zip:	
Phone Number:	
Fax Number:	
Email Address:	
Purchase Order #	

Evidence Return Address:

Name:	
Agency:	
Address:	
City/State/Zip:	
Phone Number:	
Email Address:	

Select type of Evidence Return:

☐ Evidence should be returned following delivery of the case report.

☒ Evidence should be returned upon request from the Authorized Point of Contact(s).

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*MJ 052211

Emily Herren

From: Braga, Stephen [Stephen.Braga@ropesgray.com]
Sent: Tuesday, May 17, 2011 9:22 AM
To: Emily Herren
Subject: Re: 2S04-114 additional items

Thanks, Emily. I am going to fax you a Case Submission Form this morning for expedited testing on Number 81.

In addition, you should be receiving a number of additional items by Fed Exp this morning. These items are already covered by a previous Case Submission Form provided to you last week.

Once you receive the Case Submission Form described above, I would like you to proceed with the expedited testing of No. 81.

Next, all of the remaining items for which you have existing Case Submission Forms should go into regular testing as indicated on those forms.

Finally, the items you identify below for which you do not yet have Case Submission Forms should be put aside for now. They should not hold up other testing.

Thanks,

Steve

Stephen L. Braga
ROPES & GRAY LLP
T +1 202 508 4655 | F +1 202 383 9821
One Metro Center, 700 12th Street, NW, Suite 900
Washington, DC 20005-3948
Stephen.Braga@ropesgray.com
www.ropesgray.com

From: Emily Herren [mailto:Emily.Herren@bodetech.com]
Sent: Monday, May 16, 2011 11:52 AM
To: Braga, Stephen
Subject: RE: 2S04-114 additional items

Our evidence personnel said that it is a Starbucks cup.

From: Braga, Stephen [mailto:Stephen.Braga@ropesgray.com]
Sent: Monday, May 16, 2011 11:44 AM
To: Emily Herren
Subject: Re: 2S04-114 additional items

Thanks. Before I respond completely, is 81 a plastic cup, and does it have any description associated with it?

2S04-114 EBH 5/18/11

Stephen L. Braga
ROPES & GRAY LLP
T +1 202 508 4655 | F +1 202 383 9821
One Metro Center, 700 12th Street, NW, Suite 900
Washington, DC 20005-3948
Stephen.Braga@ropesgray.com
www.ropesgray.com

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This message (including attachments) is privileged and confidential. If you are not the intended recipient, please delete it without further distribution and reply to the sender that you have received the message in error.

From: Emily Herren [mailto:Emily.Herren@bodetech.com]
Sent: Monday, May 16, 2011 11:36 AM
To: Braga, Stephen
Cc: Teresa Vreeland <Teresa.Vreeland@bodetech.com>; Maggie Redmond <Maggie.Redmond@bodetech.com>; Rachel Wortman <Rachel.Wortman@bodetech.com>
Subject: 2S04-114 additional items

Hi Mr. Braga,

Before we get started on the next batch of evidence, I wanted to check with you to make sure that Bode has received all of the evidence that we were supposed to receive. We also still need case submission forms filled out for some of the items. Here is what we have in house right now:

Bode Item #	Item	case submission form received?
76	Fork from George Taylor's lunch	yes
77	pair of gloves	no
78	pair of gloves	no
79	large Corona beer bottle	no
80	off brand root beer can	no
81	cup	no
82	plastic beverage container	no
83	Wooden slats	yes
84	Rope	yes
85	Hook	yes
86	Doral Cigarette Pack	yes
87	Sheet	yes
88	Sheet	yes
89	Black Tennis Shoe and Lace	yes
not assigned	razor	no
not assigned	razor	no

Please let us know if we should be expecting any more items to arrive. If not, we will begin testing as soon as we receive the remaining case submission forms. Thanks!

Emily Herren
Forensic Biology Analyst/DNA Analyst
Bode Technology

2S04-114 BRH 5/18/11

5/18/2011

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10430 Furnace Rd, Suite 107
Lorton, VA 22079

Emily.Herren@bodetech.com
Phone (703)646-9801

2504-114 BIBN 5118711

5/18/2011

CHAIN OF CUSTODY

The Bode Technology Group, Inc.

Case Number: 2S04-114-80 to 82 **Agency ID Number:**

Submitting Agency Information

Name Ropes & Gray LLP
Address 700 12th Street, NW
Suite 900
Washington, DC 20005
Contact/Attorney Stephen L. Braga
Additional Authorized Contacts

Victim
Suspect

Phone Number (202) 508-4655
Fax Number (202) 383-9821
stephen.braga@ropesgray.com

Custody Record

Method of Delivery to Bode Fed Ex
Condition Good (Sealed)
Date Delivered 5/9/2011 Time: 9:51 AM
Delivered By Fed Ex
TRK # 8758 1611 8521
Delivered To Ben Bever
Signature

Date	Item No.	Released by (print)	Received by	Purpose of change:
5/9/2011 Time 9:55 AM	80 to 82	Ben Bever (sign)	Maggie Redmond, for EMS (print) M. Redmond (sign)	Accessioning/Storage
Date 5/17/11 Time 12:45pm	Item No. 81	Released by (print) Maggie Redmond, for EMS (sign) M. Redmond	Received by (print) Emily Herren (sign) Emily Herren	Purpose of change: analysis
Date 5/18/11 Time 2:19pm	Item No. 81	Released by (print) Emily Herren (sign) Emily Herren	Received by (print) Rachel Wortman, for EMS (sign)	Purpose of change: storage
Date	Item No.	Released by (print)	Received by (print)	Purpose of change:
Time		(sign)	(sign)	
Date	Item No.	Released by (print)	Sent via:	Purpose of change:
Time		(sign)	Tracking No.	FINAL DISPOSITION

Evidence Inventory

Bode Case #	Agency Item ID	Agency Description
2S04-114-80		off brand root beer can
2S04-114-81		~~cup~~ Starbucks coffee cup mc 5/17/11
2S04-114-82		plastic beverage container

Note: Evidence sent by Jessica Goldstein
1239 26th St.
Santa Monica, CA 90404

Storage of Evidence: Secure evidence room

2S04-114 EBN 518711

FedEx

Detailed Results

Tracking no.: 8758 1611 8521 Select time format: 12H

Delivered

Delivered
Signed for by: B.BEVER

Shipment Dates

Ship date May 7, 2011
Delivery date May 9, 2011 9:51 AM

Destination

Signature Proof of Delivery

Shipment Options

Hold at FedEx Location
Hold at FedEx Location service is not available for this shipment.

Shipment Facts

Service type	Priority Overnight	Delivered to	Shipping/Receiving
Weight	2.0 lbs/.9 kg		

Shipment Travel History

Select time zone: Local Scan Time

All shipment travel activity is displayed in local time for the location

Date/Time	Activity	Location	Details
May 9, 2011 9:51 AM	Delivered		
May 9, 2011 7:13 AM	On FedEx vehicle for delivery	ALEXANDRIA, VA	
May 9, 2011 6:39 AM	At local FedEx facility	ALEXANDRIA, VA	
May 9, 2011 3:55 AM	At dest sort facility	DULLES, VA	
May 8, 2011 3:39 PM	Departed FedEx location	MEMPHIS, TN	
May 7, 2011 8:35 PM	Arrived at FedEx location	MEMPHIS, TN	
May 7, 2011 8:15 PM	Left FedEx origin facility	MEMPHIS, TN	
May 7, 2011 2:14 PM	Picked up	MEMPHIS, TN	

2S04114 EIGH 5718111

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2504-114-80 to 82

Maggie Redmond

From: Angela Williamson
Sent: Sunday, May 08, 2011 6:03 PM
To: Evidence Team; Teresa Vreeland; Andrea Borchardt
Subject: Fw: West Memphis 3 - Evidence Submission

----- Original Message -----
From: Jessica Goldstein <jessicagoldstein@mac.com>
To: Angela Williamson
Cc: Stephen Braga <Stephen.Braga@ropesgray.com>
Sent: Sun May 08 17:47:10 2011
Subject: West Memphis 3 - Evidence Submission

Dr. Williamson,

On Friday, May 6th I collected a large corona beer bottle from the Sanders residence which I believe to contain John Sanders DNA. I sealed it in 2 plastic bags and packaged it in a FedEx box. I sent it to the Bode Technology Group for Monday morning delivery to the attention of Angela Williamson.

I also sent an off brand root beer can which I collected on May 7th at the residence of Jason Howard Baldwin (not the Jason who is a defendant in this case). I believe this can will contain DNA from Jason Howard Baldwin. I sealed the can in a plastic bag with a description and my initials and the date. This sample was sent in the same box as 2 samples from Holly Tunkel. All samples should arrive Monday, May 9th to the attention of Angela Williamson.

Please add this to the West Memphis 3 case inventory.

If you have have any further questions please contact Steve Braga who is in copy.

Thank you,
Jessica Goldstein

2504-114 EBN 571811

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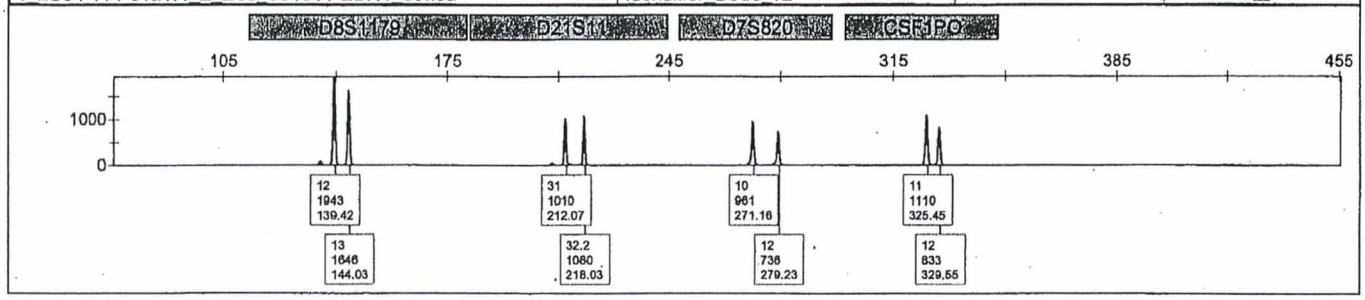
Applied Biosystems

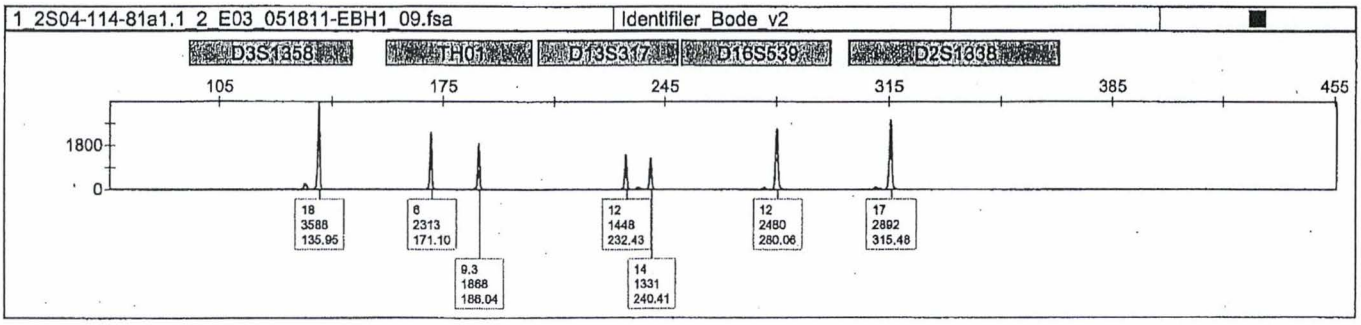
GeneMapper ID v3.2.1

GMID14_051811-EBH1_2S04-114_EBH_ID

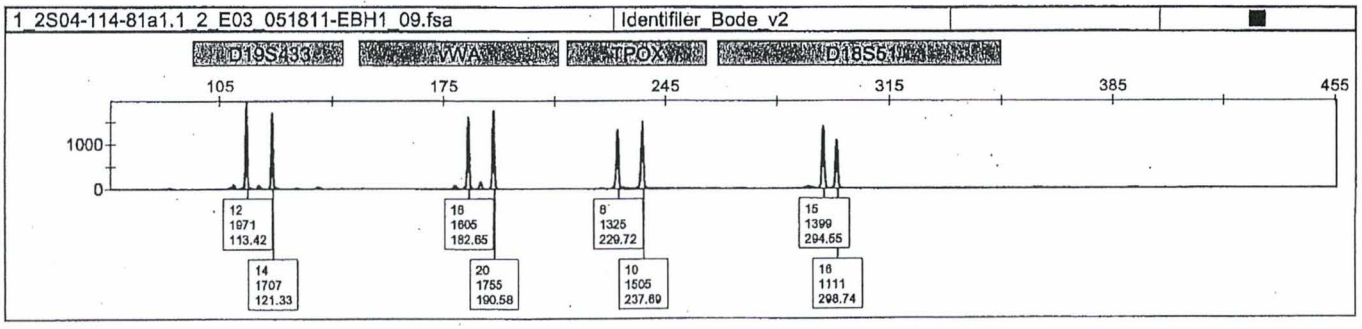
Sample File	Panel	SQO	SQ
1_2S04-114-81a1.1_2_E03_051811-EBH1_09.fsa	Identifiler_Bode_v2		



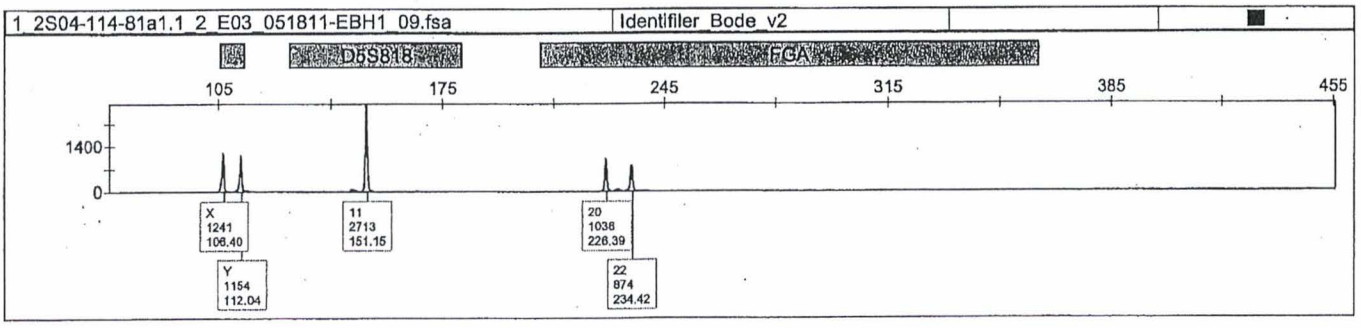
1_2S04-114-81a1.1_2_E03_051811-EBH1_09.fsa	Identifiler_Bode_v2		



1_2S04-114-81a1.1_2_E03_051811-EBH1_09.fsa	Identifiler_Bode_v2		



1_2S04-114-81a1.1_2_E03_051811-EBH1_09.fsa	Identifiler_Bode_v2		



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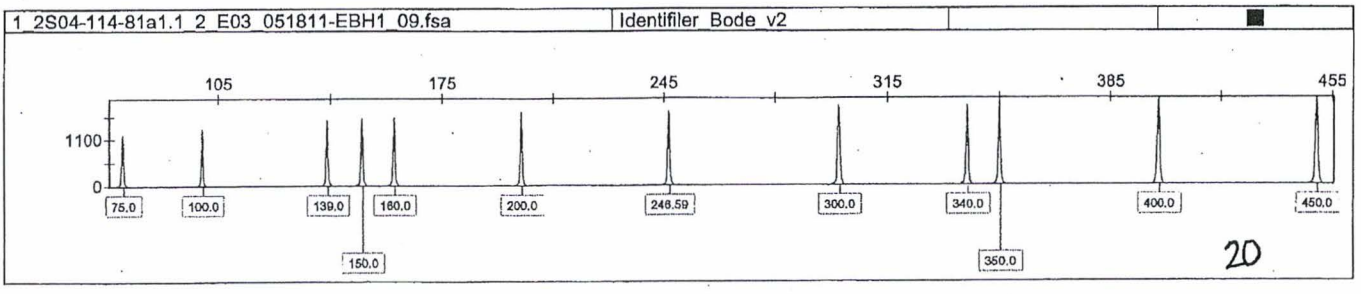

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Applied Biosystems

GeneMapper ID v3.2.1

GMID14_051811-EBH1_2S04-114_EBH_ID

Sample File	Panel	SQO	SQ
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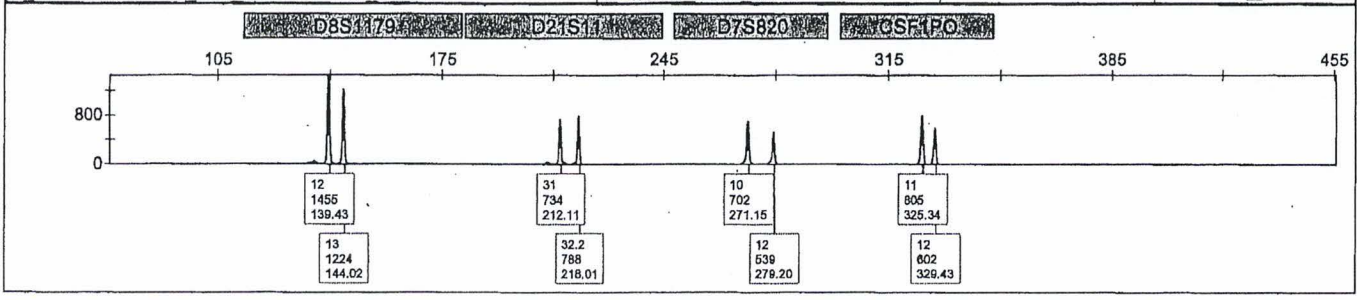

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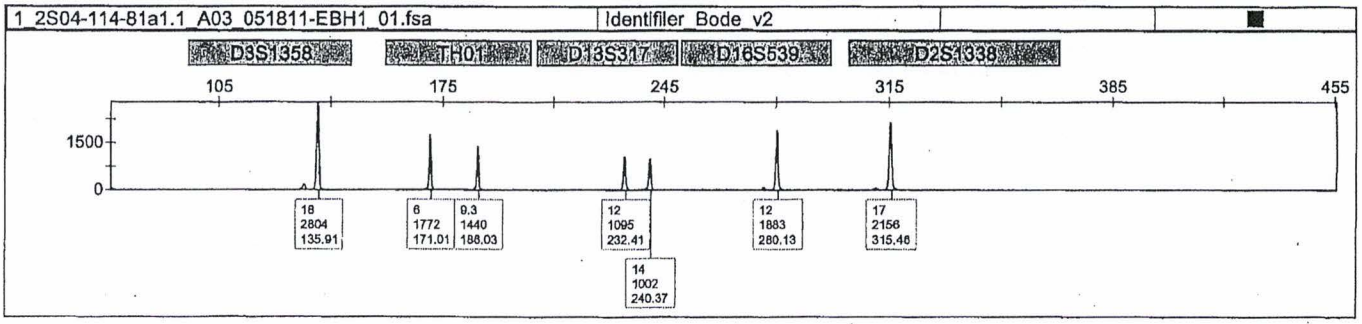

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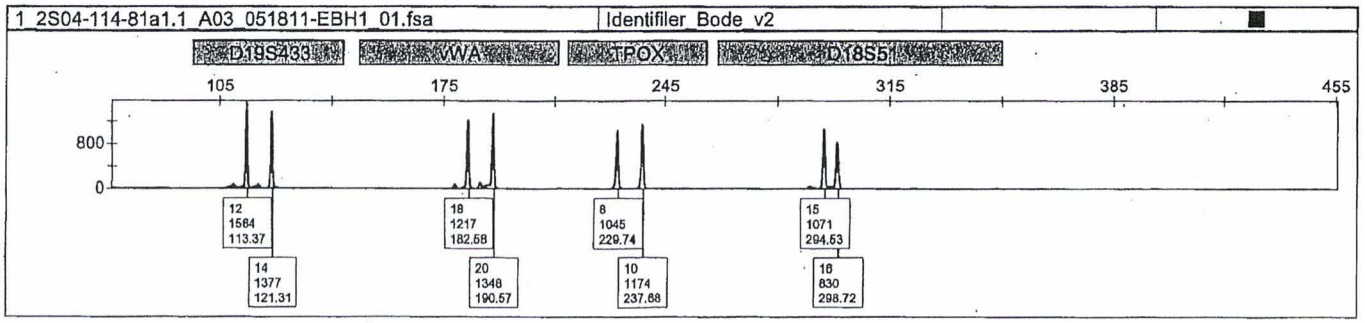
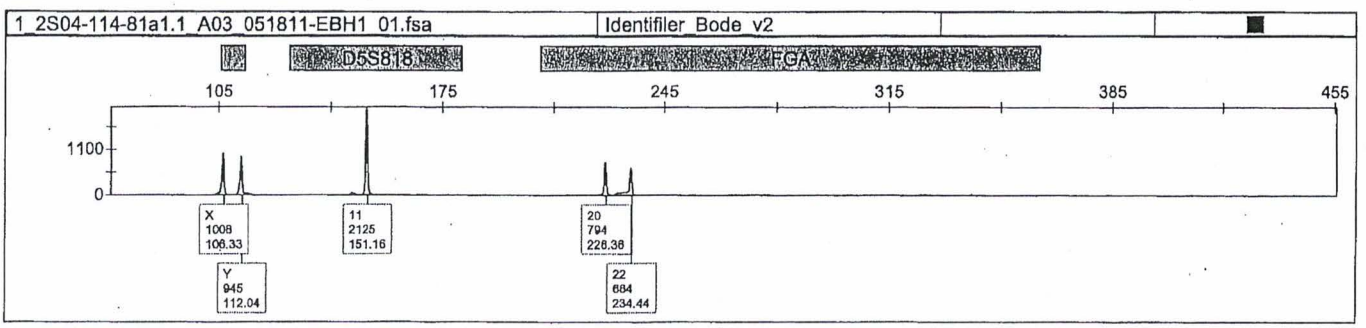
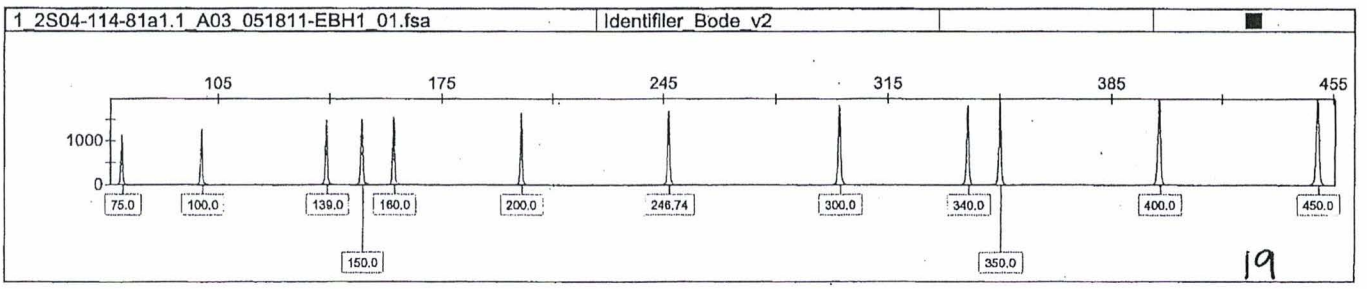


1_2S04-114-81a1.1_A03_051811-EBH1_01.fsa	Identifiler_Bode_v2		



1_2S04-114-81a1.1_A03_051811-EBH1_01.fsa	Identifiler_Bode_v2		



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CE GMID Editing Sheet – ID

Tray ID: 051811-EBT11
Analyst: AMB
GMID Panel: Identifiler_Bode_v2

Shipment or Case #: 2504-114
Date: 5/19/11

Well	Edit: Locus, Base pair size - reason
C03	TPOX, 228.26 - PU

Editing Key

20%: 20% filter applied (after confirming no mixtures)

-A: -A/Split peaks

AUT: single allele below minimum threshold

Artifact (non-specific)

D/I: Degraded and/or Inhibited

Dye artifact

Elevated BL: Labels placed on elevated baseline(s)

FC: Failed capillary

ILS<MIN: ILS below minimum rfu threshold

IA: Imbalanced Alleles

LOR: Loss of resolution

Matrix Issue

OL: Off ladder allele

Other: provide explanation in text box (currently using this for FDLE alleles btw. 75-99 rfu)

PU: Pullup

RFU<MIN: sample rfu below minimum threshold

RFU>MAX: sample rfu above maximum threshold

Shoulder: Shoulder peak

Sizing: incorrect sizing (eg: migration issue)

Spikes

Stutter (n-4 if other record)

9947 Positive Control

Well Numbers Checked Against Known: C03, G03

D8S1179: 13,13	D21S11: 30,30	D7S820: 10,11	CSF1PO: 10,12		
D3S1358: 14,15	TH01: 8,9.3	D13S317: 11,11	D16S539: 11,12	D2S1338: 19,23	
D19S433: 14,15	vWA: 17,18	TPOX: 8,8	D18S51: 15,19		
AMEL: X,X	D5S818: 11,11	FGA: 23,24			

AMB
5/19/11

CE GMID Editing Sheet – ID

Tray ID: 051811-EBH1
Analyst: EBH
GMID Panel: Identifiler_Bode_v2

Shipment or Case #: 2504-114
Date: 5/19/11

Well	Edit: Locus, Base pair size - reason
C03	TPOX, 228.26, PU

Editing Key

20%: 20% filter applied (after confirming no mixtures)

-A: -A/Split peaks

AUT: single allele below minimum threshold

Artifact (non-specific)

D/I: Degraded and/or Inhibited

Dye artifact

Elevated BL: Labels placed on elevated basline(s)

FC: Failed capillary

ILS<MIN: ILS below minimum rfu threshold

IA: Imbalanced Alleles

LOR: Loss of resolution

Matrix Issue

OL: Off ladder allele

Other: provide explanation in text box (currently using this for FDLE alleles btw. 75-99 rfu)

PU: Pullup

RFU<MIN: sample rfu below minimum threshold

RFU>MAX: sample rfu above maximum threshold

Shoulder: Shoulder peak

Sizing: incorrect sizing (eg: migration issue)

Spikes

Stutter (n-4 if other record)

9947 Positive Control

Well Numbers Checked Against Known: C03, G03

D8S1179: 13,13	D21S11: 30,30	D7S820: 10,11	CSF1PO: 10,12		
D3S1358: 14,15	TH01: 8,9.3	D13S317: 11,11	D16S539: 11,12	D2S1338: 19,23	
D19S433: 14,15	vWA: 17,18	TPOX: 8,8	D18S51: 15,19		
AMEL: X,X	D5S818: 11,11	FGA: 23,24			

EBH 5/19/11

Applied Biosystems

GeneMapper ID v3.2.1

GMID14_051811-EBH1_2S04-114_EBH_ID

Sample File	Panel	SQO	SQ
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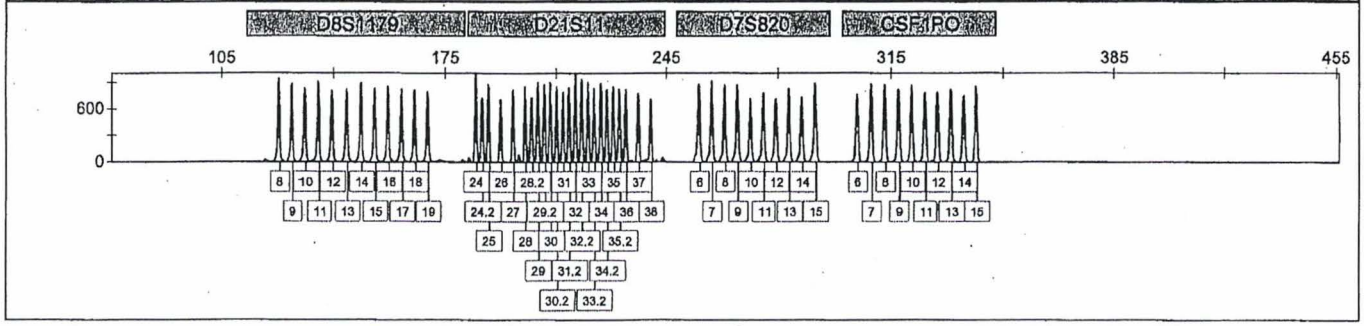
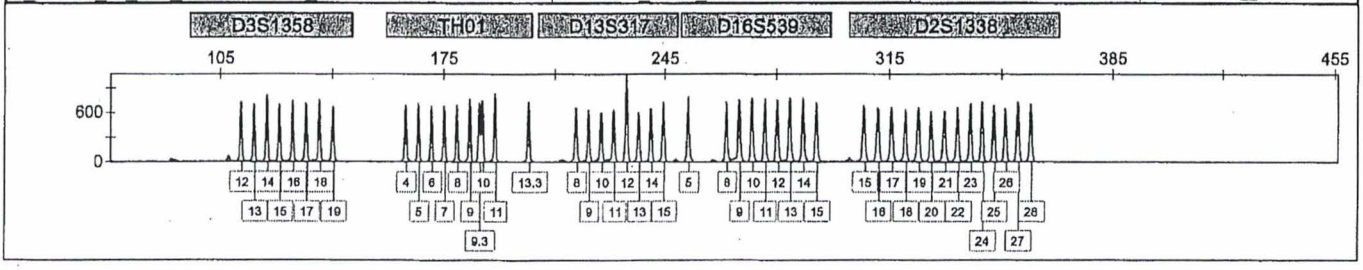
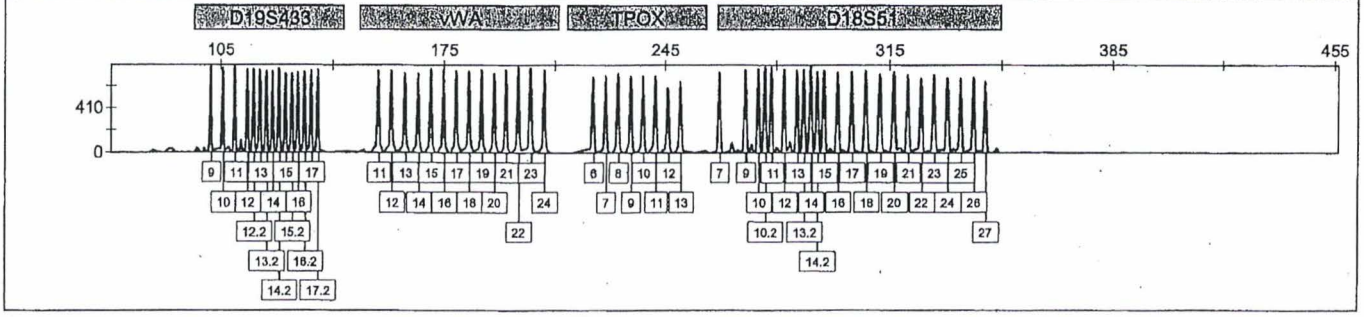


1_Ladder_ID_F01_051811-EBH1_11.fsa | Identifiler_Bode_v2



1_Ladder_ID_F01_051811-EBH1_11.fsa | Identifiler_Bode_v2



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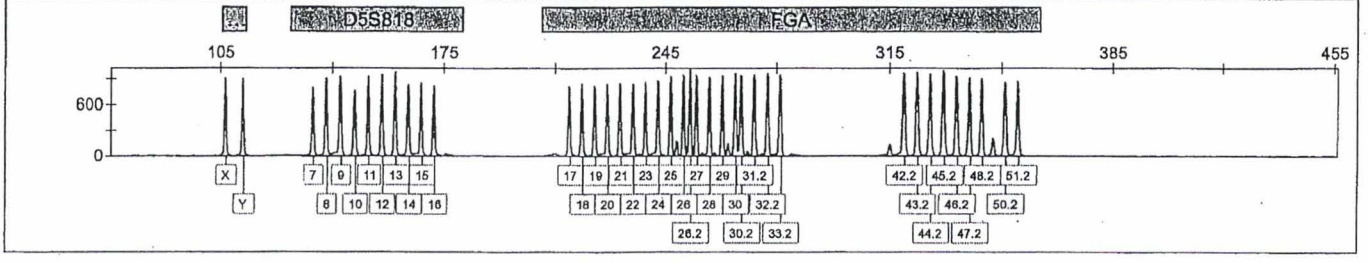
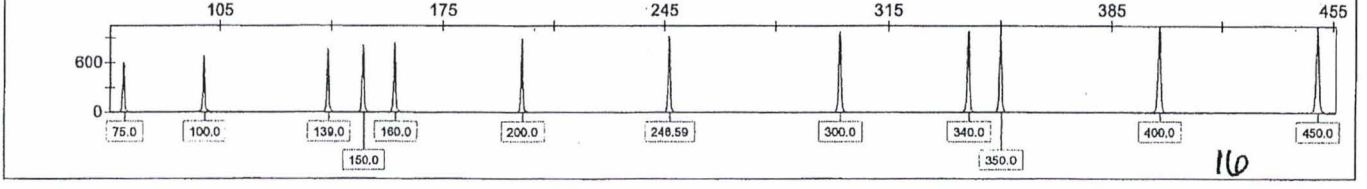


1_Ladder_ID_F01_051811-EBH1_11.fsa | Identifiler_Bode_v2



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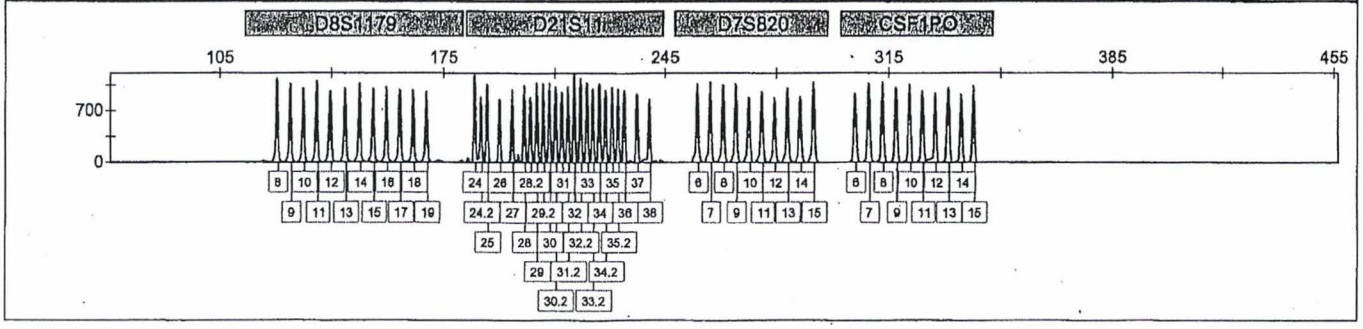
EBH 5/19/11

Applied Biosystems

GeneMapper ID v3.2.1

GMID14_051811-EBH1_2S04-114_EBH_ID

Sample File	Panel	SQO	SQ
1_Ladder_ID_G01_051811-EBH1_13.fsa	Identifiler_Bode_v2		



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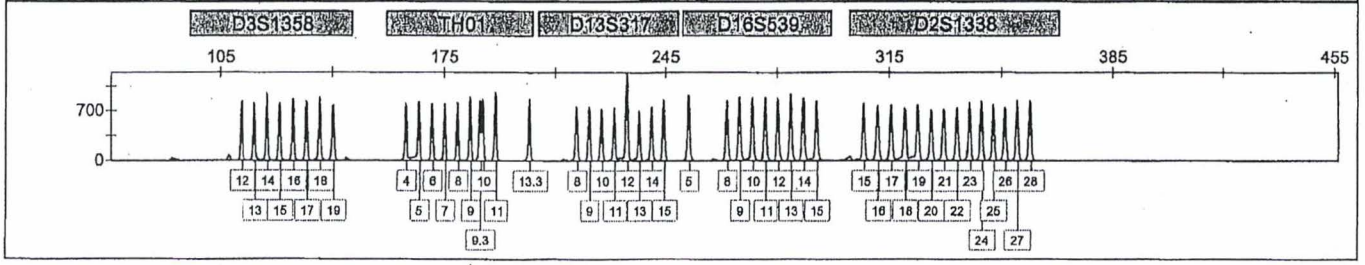

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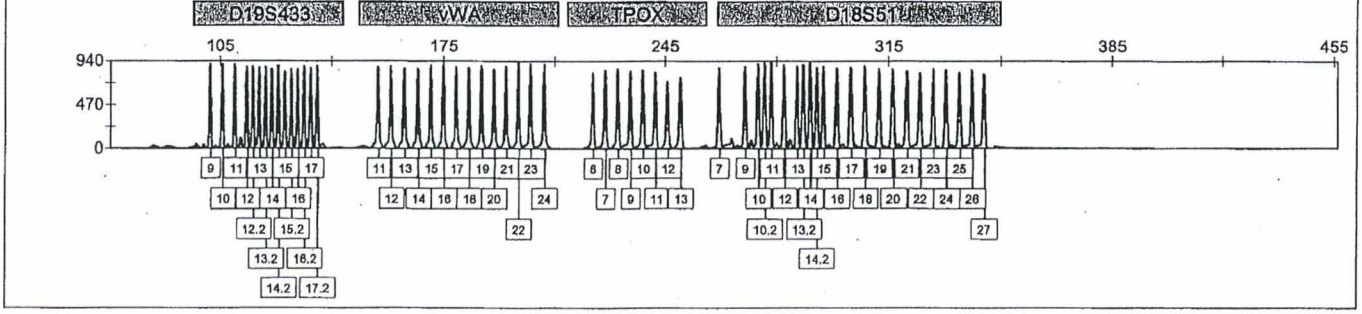
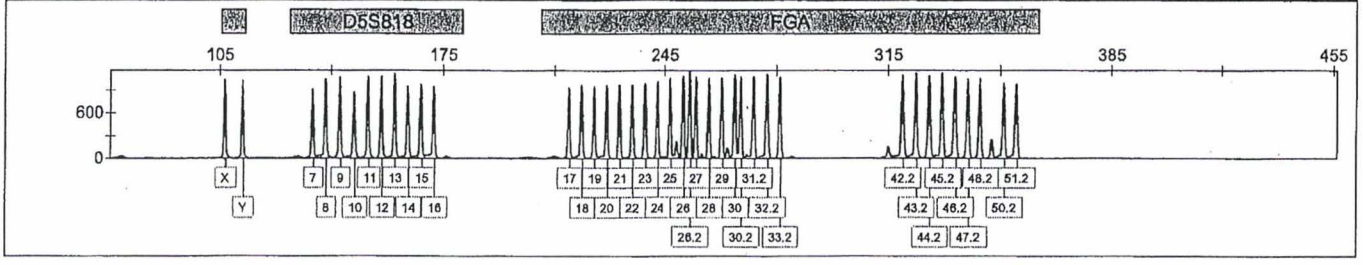


1_Ladder_ID_G01_051811-EBH1_13.fsa | Identifiler_Bode_v2



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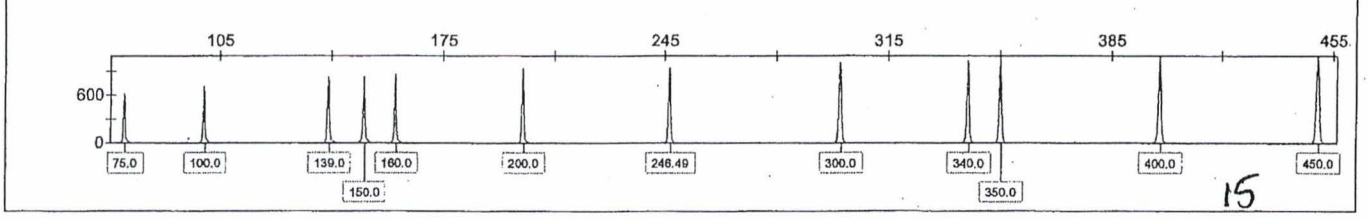

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EBH 5/19/11

Applied Biosystems

GeneMapper ID v3.2.1

GMID14_051811-EBH1_2S04-114_EBH_ID

Sample File	Panel	SQO	SQ
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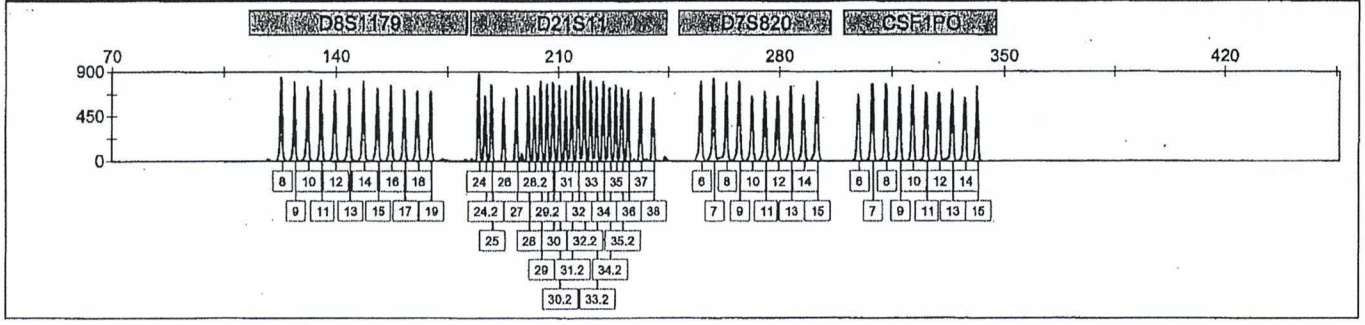

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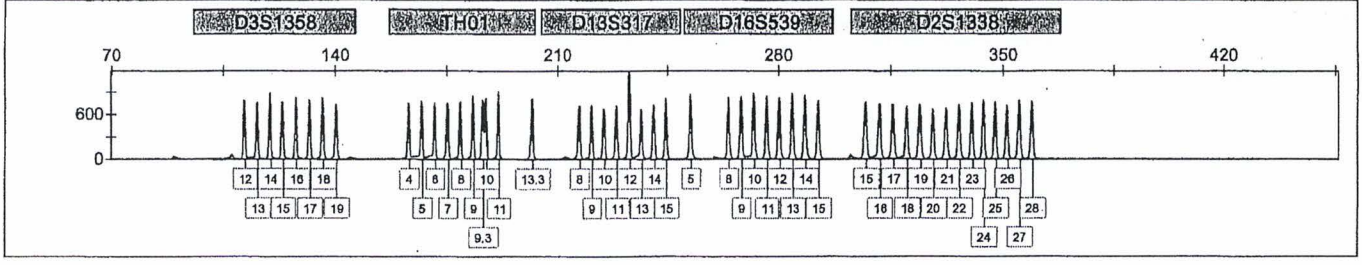

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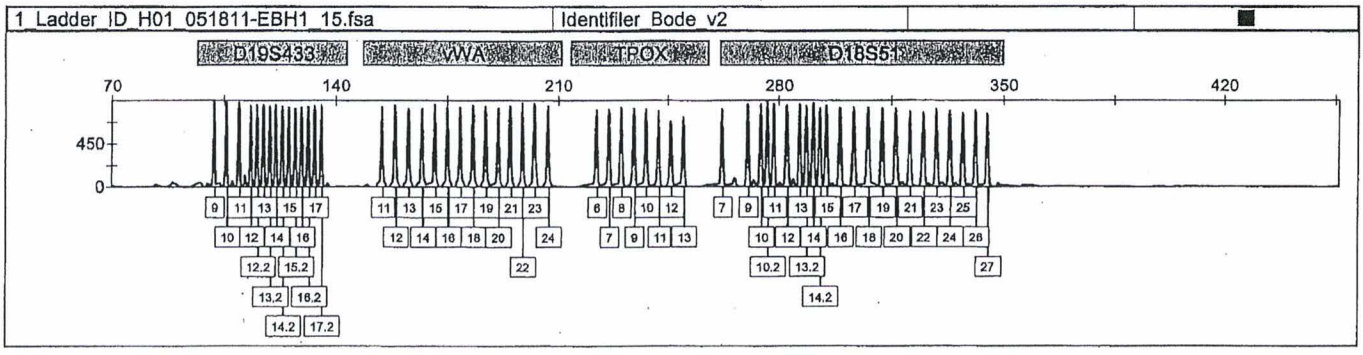

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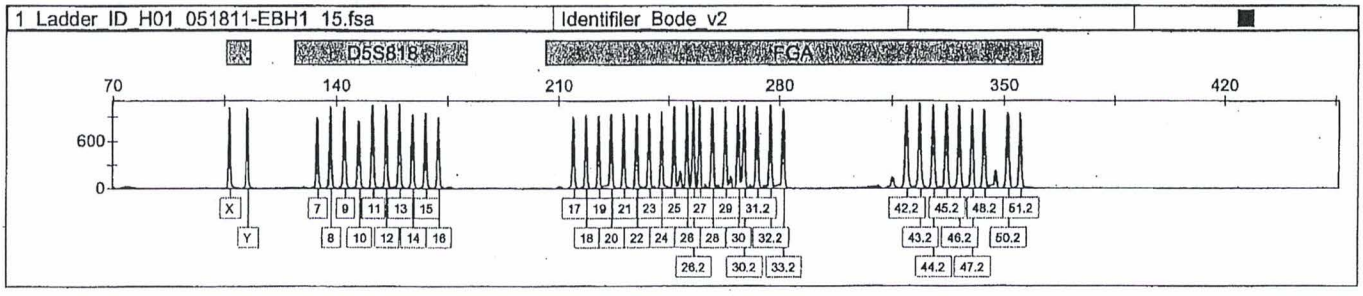

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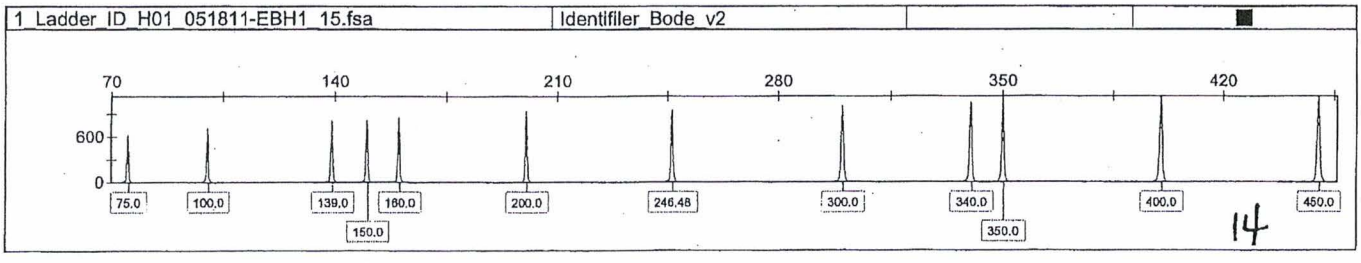

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EBH 5/19/11

Applied Biosystems

GeneMapper ID v3.2.1

GMID14_051811-EBH1_2S04-114_EBH_ID

Sample File	Panel	SQO	SQ
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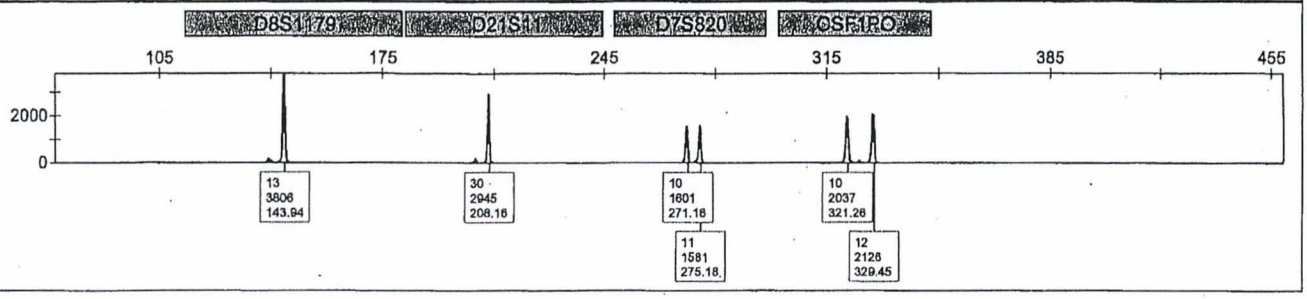

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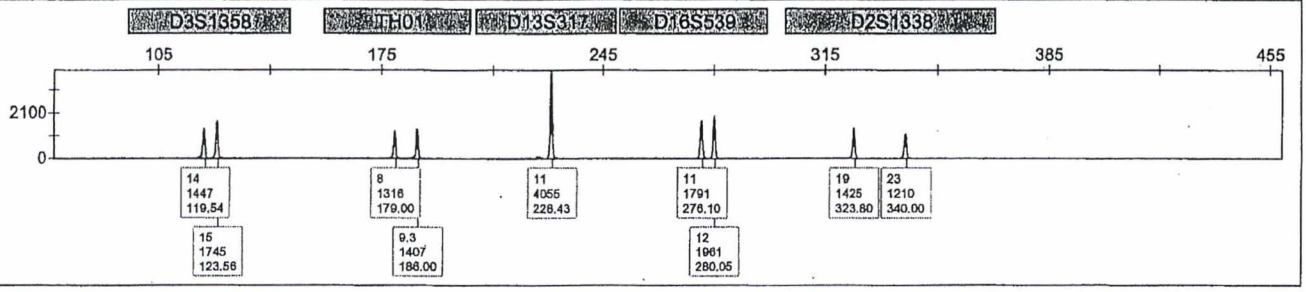

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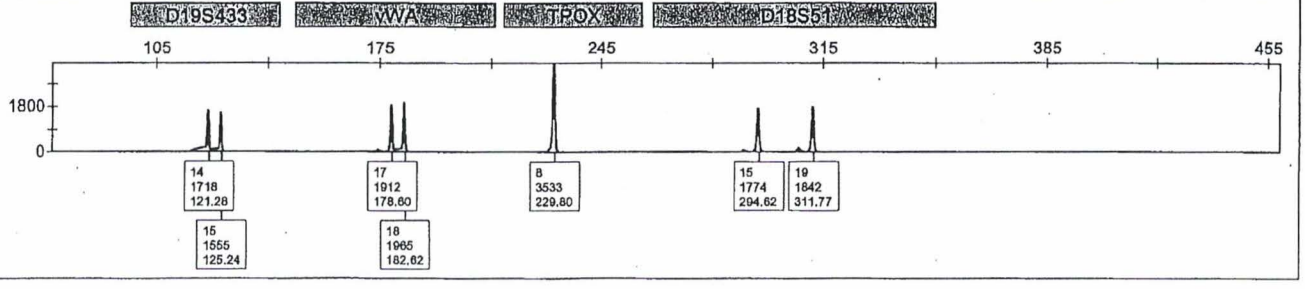

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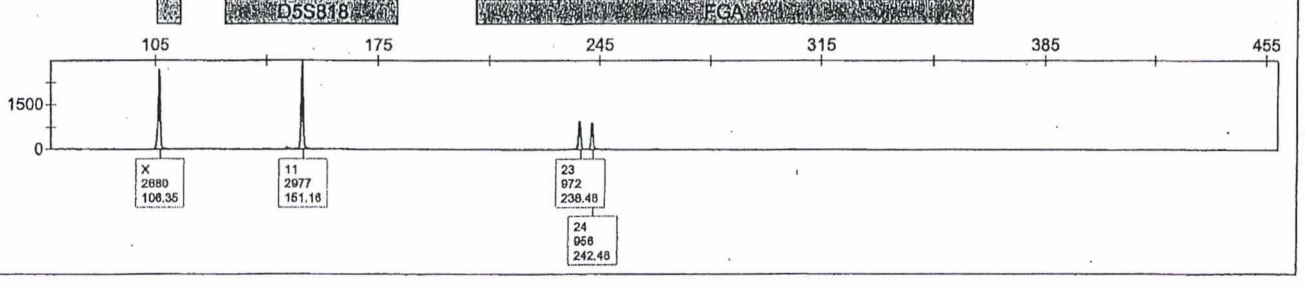

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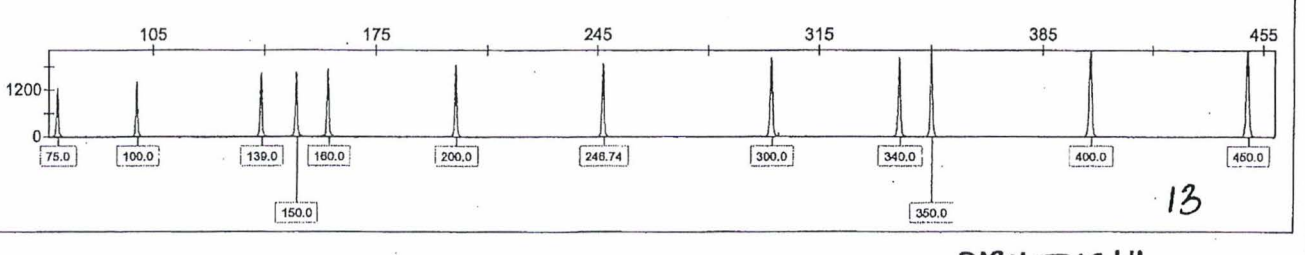

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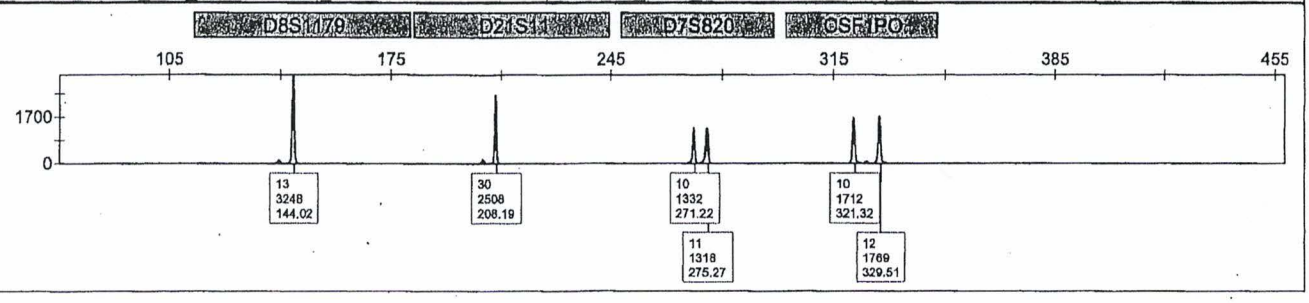
Applied Biosystems

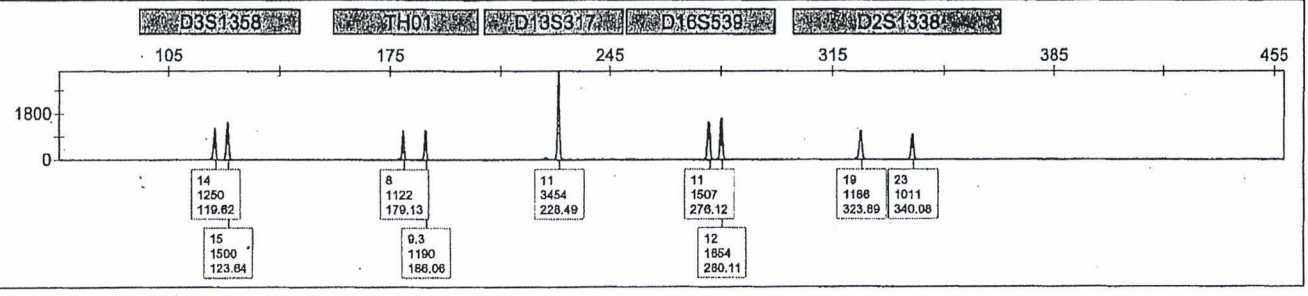
GeneMapper ID v3.2.1

GMID14_051811-EBH1_2S04-114_EBH_ID

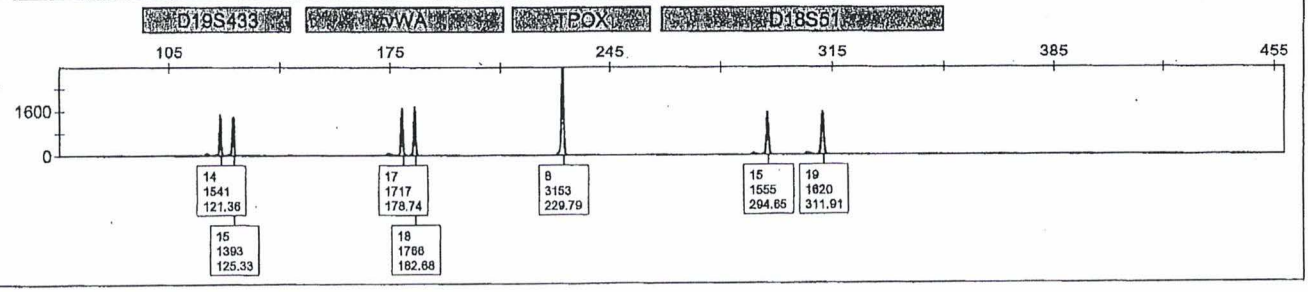
Sample File	Panel	SQO	SQ
1_2S04-114-POS43_G03_051811-EBH1_13.fsa	Identifiler_Bode_v2		



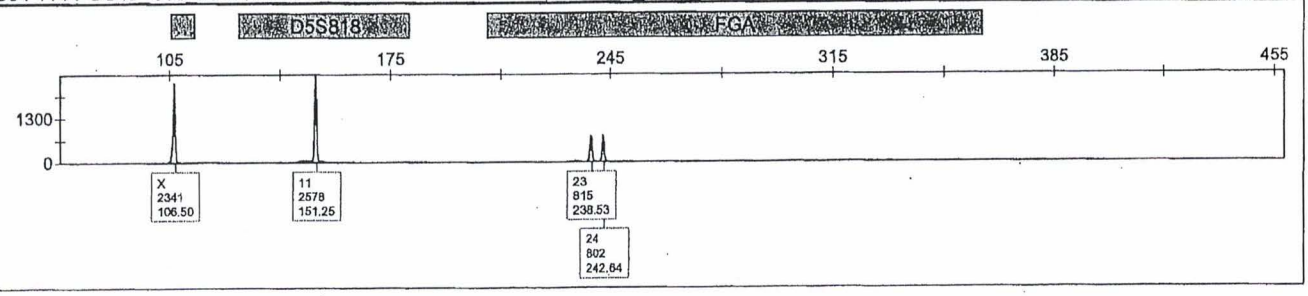
1_2S04-114-POS43_G03_051811-EBH1_13.fsa	Identifiler_Bode_v2		



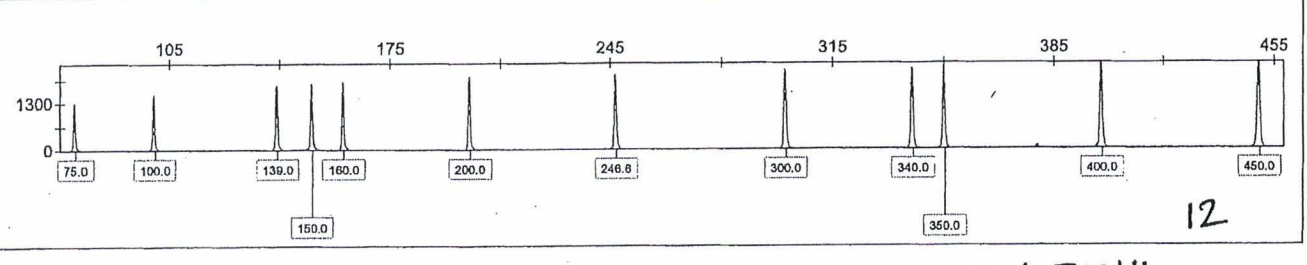
1_2S04-114-POS43_G03_051811-EBH1_13.fsa	Identifiler_Bode_v2		



1_2S04-114-POS43_G03_051811-EBH1_13.fsa	Identifiler_Bode_v2		

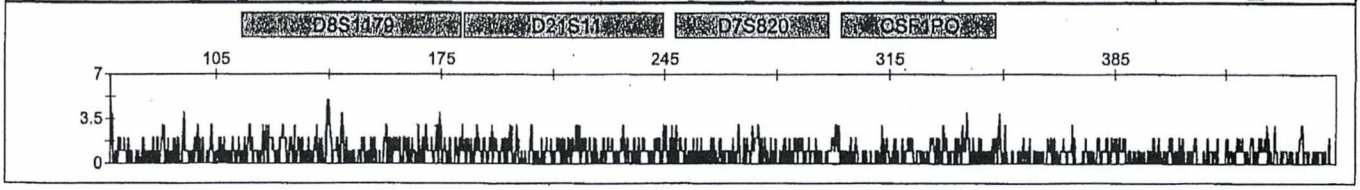


1_2S04-114-POS43_G03_051811-EBH1_13.fsa	Identifiler_Bode_v2		

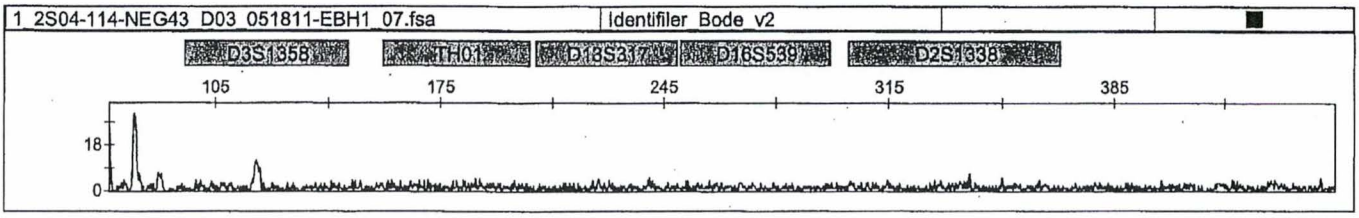


12

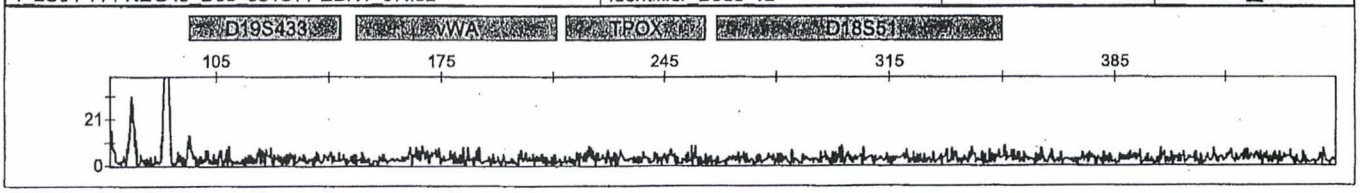
Sample File	Panel	SQO	SQ
1_2S04-114-NEG43_D03_051811-EBH1_07.fsa	Identifiler_Bode_v2		



1_2S04-114-NEG43_D03_051811-EBH1_07.fsa | Identifiler_Bode_v2



1_2S04-114-NEG43_D03_051811-EBH1_07.fsa | Identifiler_Bode_v2



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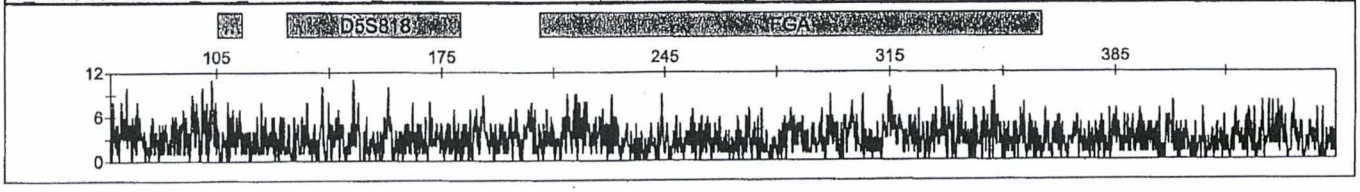
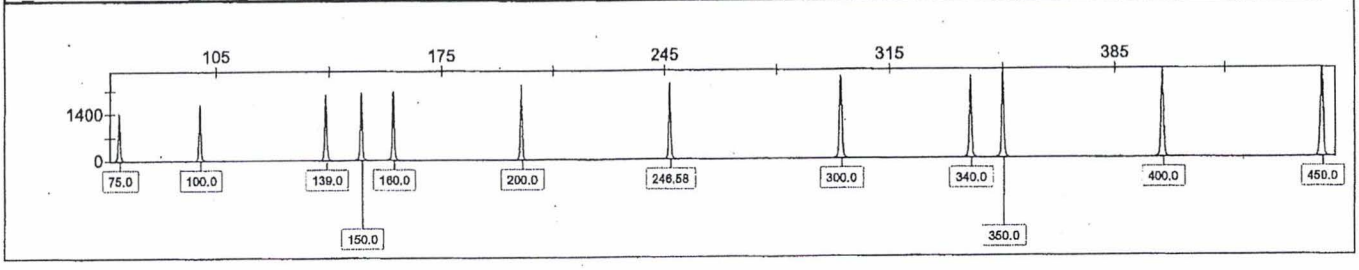


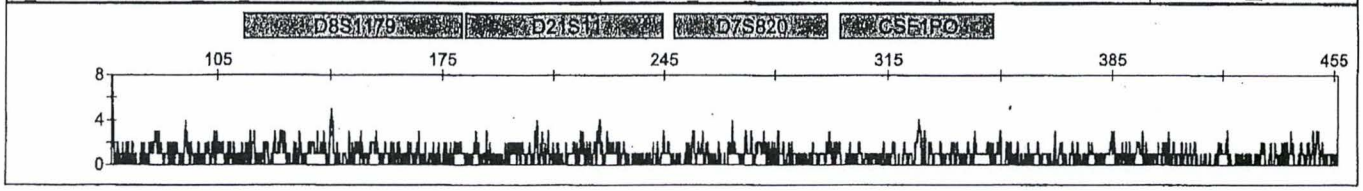
1_2S04-114-NEG43_D03_051811-EBH1_07.fsa | Identifiler_Bode_v2



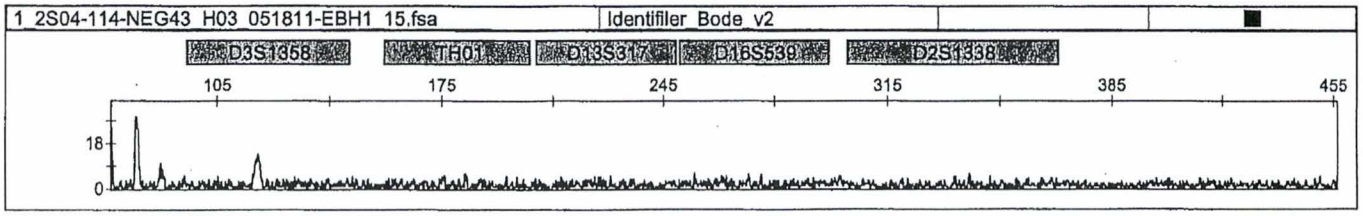
11

EBH 5/19/11

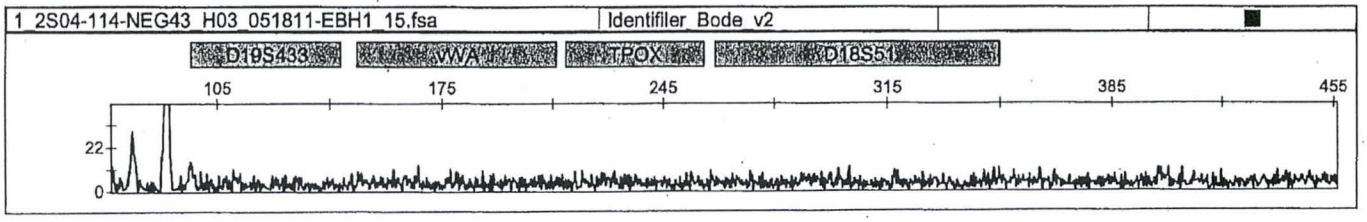
Sample File	Panel	SQO	SQ
1_2S04-114-NEG43_H03_051811-EBH1_15.fsa	Identifiler_Bode_v2		



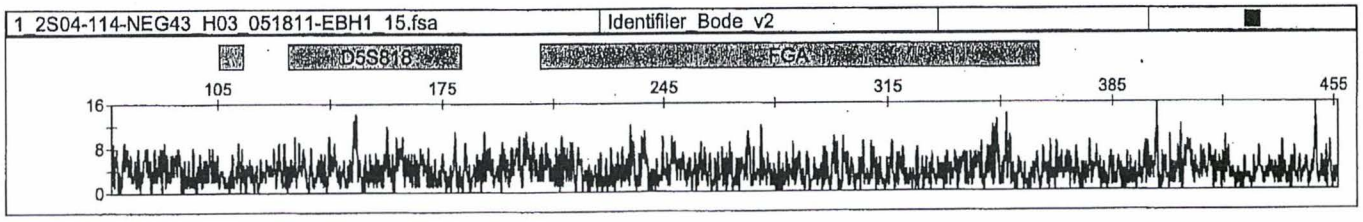
1_2S04-114-NEG43_H03_051811-EBH1_15.fsa | Identifiler_Bode_v2



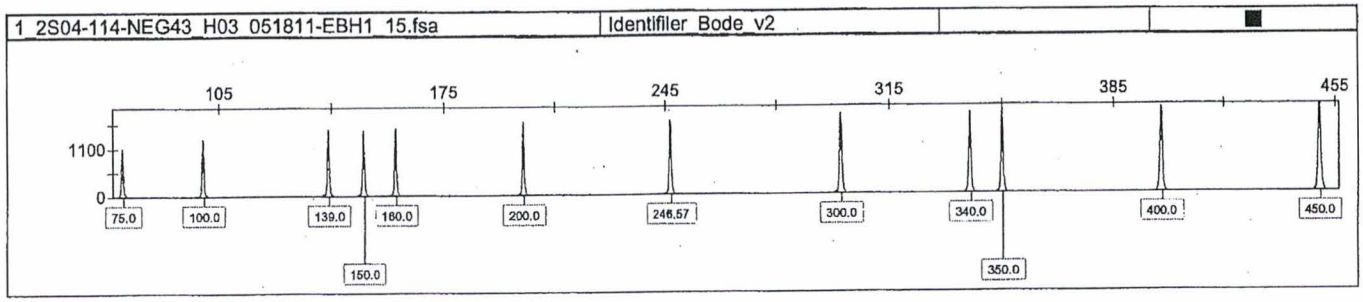
1_2S04-114-NEG43_H03_051811-EBH1_15.fsa | Identifiler_Bode_v2



1_2S04-114-NEG43_H03_051811-EBH1_15.fsa | Identifiler_Bode_v2



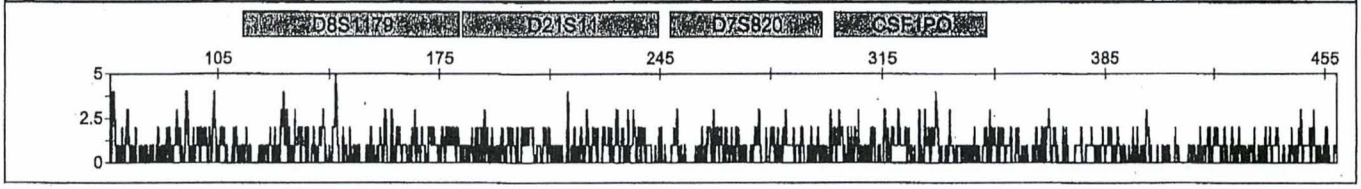
1_2S04-114-NEG43_H03_051811-EBH1_15.fsa | Identifiler_Bode_v2



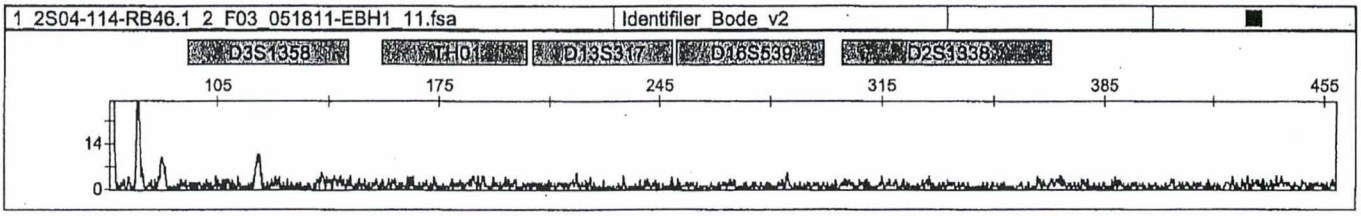
10

EBH 5/19/11

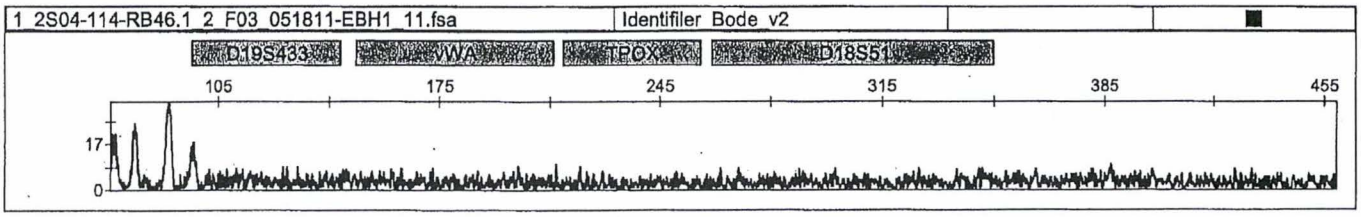
Sample File	Panel	SQO	SQ
1_2S04-114-RB46.1_2_F03_051811-EBH1_11.fsa	Identifiler_Bode_v2		



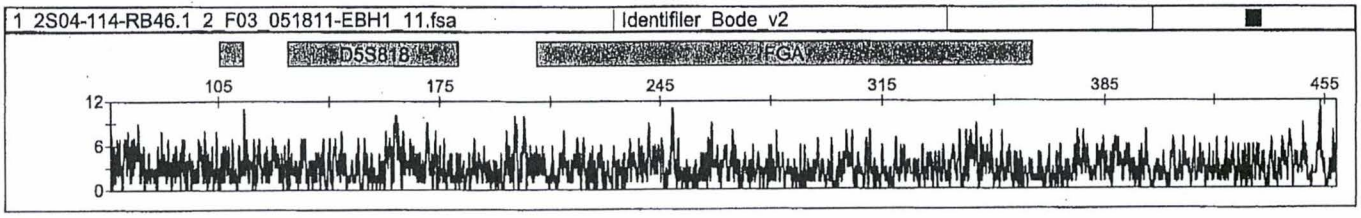
1_2S04-114-RB46.1_2_F03_051811-EBH1_11.fsa | Identifiler_Bode_v2



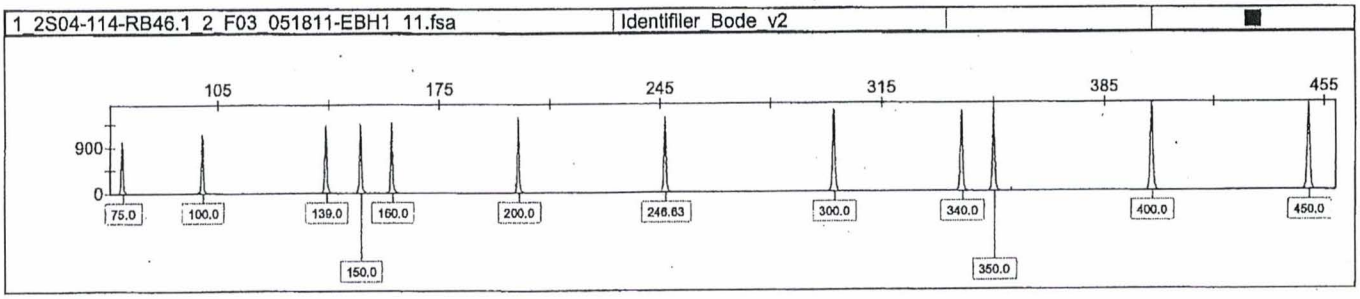
1_2S04-114-RB46.1_2_F03_051811-EBH1_11.fsa | Identifiler_Bode_v2



1_2S04-114-RB46.1_2_F03_051811-EBH1_11.fsa | Identifiler_Bode_v2



1_2S04-114-RB46.1_2_F03_051811-EBH1_11.fsa | Identifiler_Bode_v2



9

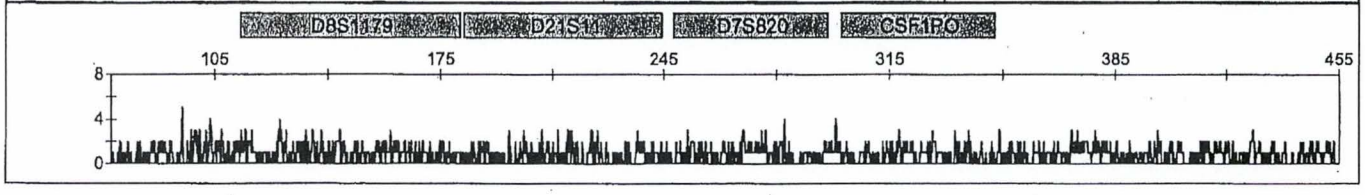
EBN 5/19/11

Applied Biosystems

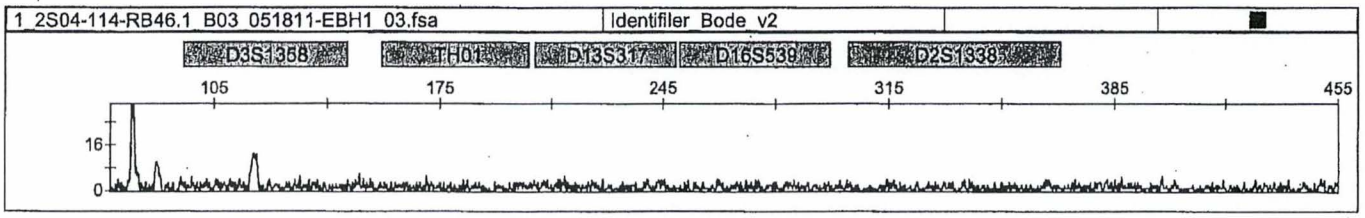
GeneMapper ID v3.2.1

GMID14_051811-EBH1_2S04-114_EBH_ID

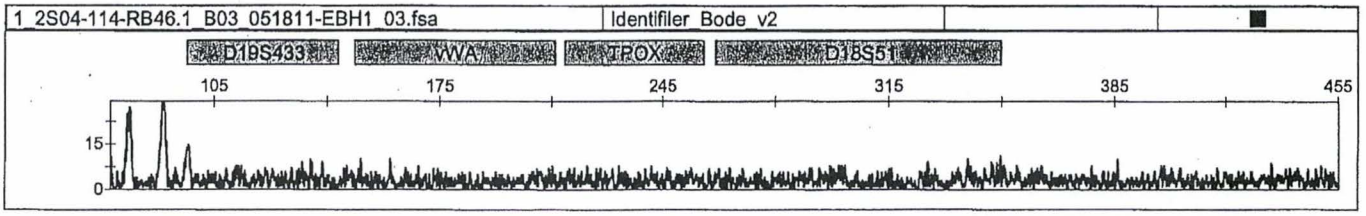
Sample File	Panel	SQO	SQ
1_2S04-114-RB46.1_B03_051811-EBH1_03.fsa	Identifiler_Bode_v2		



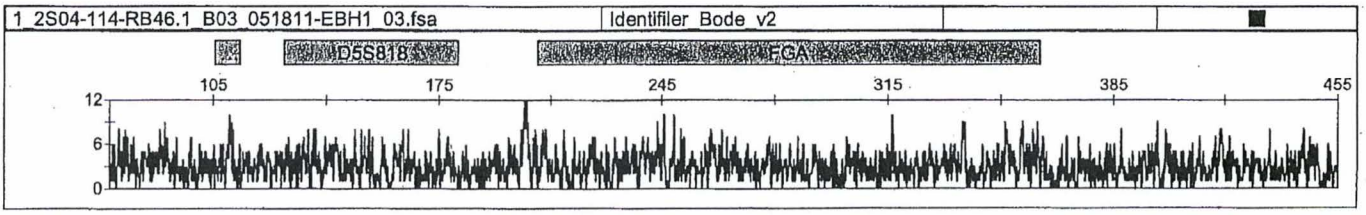
1_2S04-114-RB46.1_B03_051811-EBH1_03.fsa | Identifiler_Bode_v2



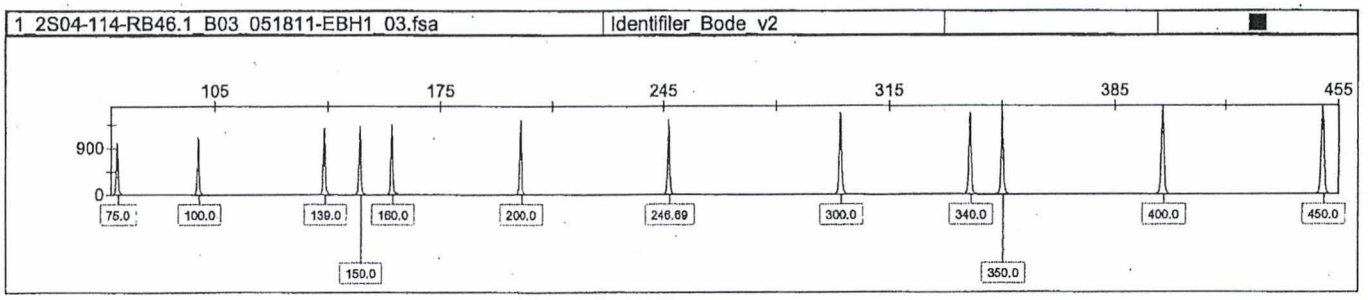
1_2S04-114-RB46.1_B03_051811-EBH1_03.fsa | Identifiler_Bode_v2



1_2S04-114-RB46.1_B03_051811-EBH1_03.fsa | Identifiler_Bode_v2



1_2S04-114-RB46.1_B03_051811-EBH1_03.fsa | Identifiler_Bode_v2



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EBH 5/19/11

CE Set-up Sheet

TRAY ID: 051811-EBH1 **Amp. Tray:** CCA1143-AMP3_2S04-114-AMP43 **Analyst:** EBH **Date:** 5/18/11

	1	2	3	4	5	6	7	8	9	10	11	12
A	CCA1143-0052-R04a1.1	CCA1143-0052-R04a1.1_2	2S04-114-81a1.1	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
B	CCA1143-0052-R05a1.1	CCA1143-0052-R05a1.1_2	2S04-114-RB46.1	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
C	CCA1143-RB3.1	CCA1143-RB3.1_2	2S04-114-POS43	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
D	CCA1143-POS3	CCA1143-POS3	2S04-114-NEG43	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
E	CCA1143-NEG3	CCA1143-NEG3	2S04-114-81a1.1_2	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
F	Ladder_ID	Blank	2S04-114-RB46.1_2	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
G	Ladder_ID	Blank	2S04-114-POS43	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
H	Ladder_ID	Blank	2S04-114-NEG43	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank

	Vol.(ul)/Well		No. of Rxns		Vol. Total (ul)
Formamide Lot# 1103051	10.0 ul	x	100	=	1000
GS-500LIZ Lot# 1102127	0.12 ul	x	100	=	12

Master Mix 10.0 ul

\+

Amp. Product 0.7ul

PIPETTORS LOT #S:	
Formamide:	P-048
ILS:	P-109
Formamide & ILS Mix:	P-116
Ladders:	P-067
Amp Product (3100 tray):	P-036
Amp Product (if diluted):	N/A
Diluent (for dilutions):	N/A

Machine:	14
Run #'s:	55-56
System:	Identifiler
Ladder Lot#:	0903016
Run Module:	Active_Run_Module_G5
Analysis Module:	75minrfu.gsp

Injected by: HMB

Date of Injection: 5/18/2011

Primer Peak Verification	
Primer peaks verified for all negative samples.	
Read 1 Analyst: EBH	**Date:** 5/19/11
Integrity Report Evaluation	
Integrity Report Evaluation Date*:	5/19/11
Analyst:	EBH

*If possible contamination is detected, provide case note with details for affected cases

5/18/11 EBH 7

AmpF*l* STR Identifiler

Amplification Worksheet (25µl Volume Reaction)

See amplification notes for reagents, lot numbers, and pipettor numbers					
Tray Coordinate (well)	Sample	Dilution	Master Mix (µl)	DNA/dH2O (µl/µl)	Total (µl)
A1.3	CCA1143-0052-R04a1.1	1:19	15	2/8	25
B1.3	CCA1143-0052-R05a1.1	1:21	15	2/8	25
C1.3	CCA1143-RB3.1	---	15	2/8	25
D1.3	CCA1143-POS3	---	15	2/8	25
E1.3	CCA1143-NEG3	---	15	0/10	25
A2.43	2S04-114-81a1.1	---	15	10/0	25
B2.43	2S04-114-RB46.1	---	15	10/0	25
C2.43	2S04-114-POS43	---	15	2/8	25
D2.43	2S04-114-NEG43	---	15	0/10	25

TC#: 28 **Program#:** ID_28CYCL **CCA1143-AMP3**
Analyst: EBH **Date:** 5/18/11 **2S04-114-AMP43**
Tube Witness: AMB **Date:** 5/18/11

AMPLIFICATION NOTES:

CCA1143-AMP3

			Sample Volume (µl)	Number of Reactions	Final Volume (µl)
Reagent	**Source**	**Lot #**			
Water	Fisher	107828			
PCR Reaction Mix	ABI	1102176	10.5	6	63
Identifiler Primer Set	ABI	0909070	5.5	6	33
AmpliTaq Gold	ABI	N12473	0.5	6	3
POS 9947	BODE	051811JAD			
TE	BODE	041311JJ			

2S04-114-AMP43

			Sample Volume (µl)	Number of Reactions	Final Volume (µl)
Reagent	**Source**	**Lot #**			
Water	Fisher	107828			
PCR Reaction Mix	ABI	1102176	10.5	5	52.5
Identifiler Primer Set	ABI	0909070	5.5	5	27.5
AmpliTaq Gold	ABI	N12473	0.5	5	2.5
POS 9947	BODE	051811JAD			
TE	BODE	041311JJ			

Pipettes Used:

For all volumes <2 uL	A-116
For all volumes between 2 and 10 uL	A-116
For all volumes between 11 and 100 uL	A-122
For all volumes between 101 and 1000 uL	N/A
For master mix	A-122
For water	A-116

Document: BT00429 - Identifiler Amp (CCW WS)
Revision: 3
Effective: Friday, March 05, 2010 12:27:07 PM

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EBN 5/18/11

Vivacon Purification/Concentration of DNA Extracts

Item	Source	Lot #
Vivacon 500-30K	Sartorius	1103005VS
cRNA	BODE	011211JJ
dH_2O	Fisher	N/A
TE-4 Buffer	BODE	081910JJ

Tube #	Sample	Approximate Volume Recovered (ul)	Approximate Final Volume (ul)	Comments
1	2S04-114-81a1	20	22	
2	2S04-114-RB46	21	22	

Analyst: EBH **Date:** 5/18/11

Case Number: 2S04-114

Pipettes Used:

Volumes <2 uL	A-061
Volumes 2-10 uL	N/A
Volumes 11-100 uL	A-034
Volumes 101-1000 uL	A-028

Document: BTF00222 - Vivacon 500-30K (WS)
Revision: 1
Effective: 11/15/2010 11:14:54 AM

BODEQUANT LCN QUANT

Shipment: CCA1143; 2S04-114
Tray ID: 051811EBH-QT1

Analyst: EBH
Date: 5/18/11

Yellow: Concentration = Zero; Below limit of detection of assay.

Blue: IPC is outside of the expected range - Inhibitors may be present OR DNA yield is greater than 5ng/µl OR both. Dilute prior to amplification.

	Sample Name	Sample Type	CT	Quantity (ng/ul)	Quantity (pg/ul)	IPC Ct
	STD 50	Standard	12.44	50	50000	24.21
	STD 5	Standard	16.07	5	5000	20.57
	STD 0.5	Standard	19.13	0.5	500	20.32
	STD 0.05	Standard	23.03	0.05	50	20.62
	*	*	0.00	0.005	5	*
	STD 0.0005	Standard	31.10	0.0005	0.5	20.84
	NTC	NTC	37.07	*<0.005*	*<5*	21.20
					Avg IPC Ct for Stds:	**21.29**
A1	CCA1143-0052-R04a1	Unknown	13.72	19.21	19210	20.98
B1	CCA1143-0052-R05a1	Unknown	13.53	21.62	21620	21.93
C1	CCA1143-RB3	Unknown	35.15	<0.005	<5	20.88
D1	2S04-114-81a1	Unknown	21.62	0.144	144	20.46
E1	2S04-114-RB46	Unknown	31.10	<0.005	<5	20.85

Document: BTF00241 - (3) BodeQuant LCN RESULTS Analysis (V
Revision: 4
Effective: Wednesday, January 06, 2010 4:51:57 PM

Shipment: CCA1143; 2S04-114
Tray ID: 051811EBH-QT1

*STD 0.005 was removed to produce a better R2 value.

EBH 5/23/11

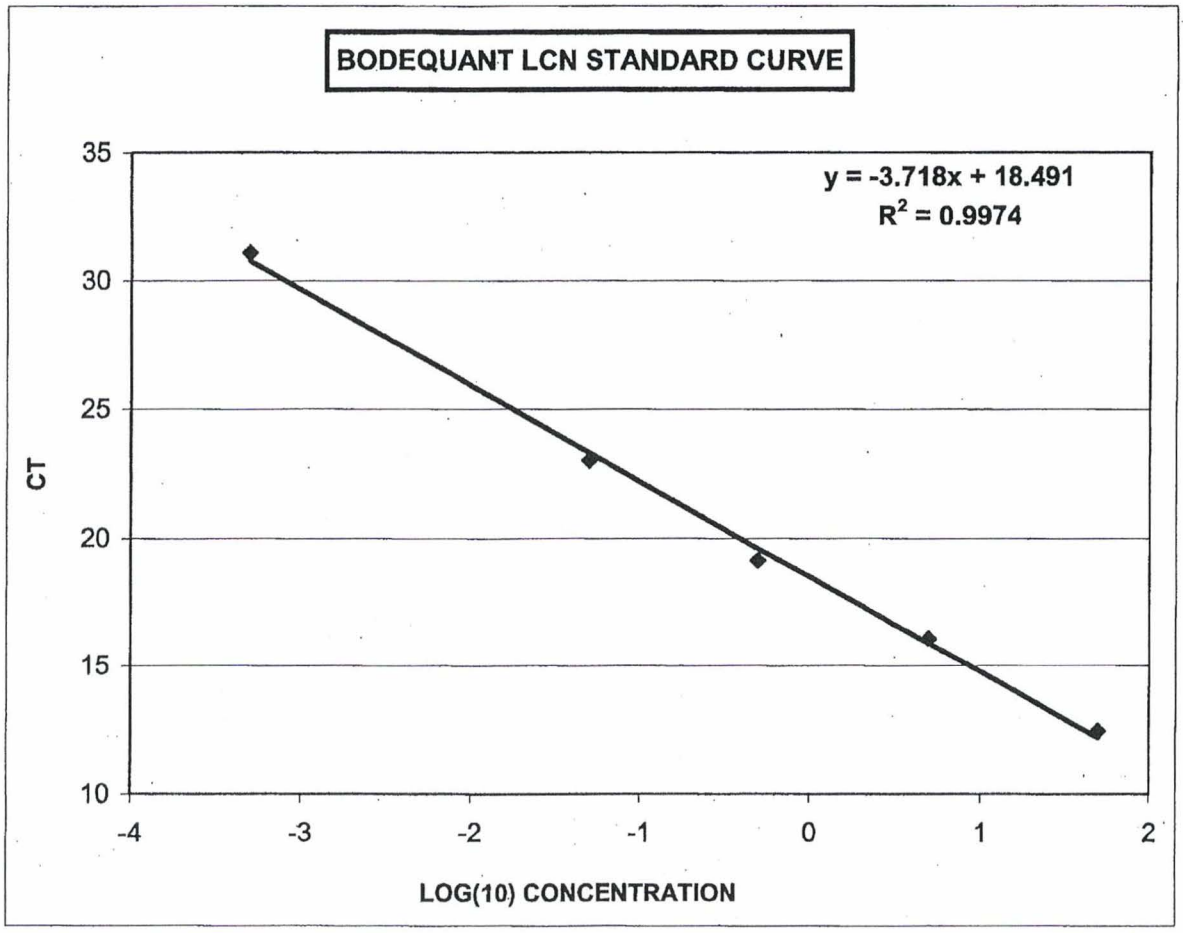
5/23/2011

Note: CT values of 0.00 should be interpreted as "greater than 40 cycles."

5a

BODEQUANT LCN QUANT

Shipment:	CCA1143; 2S04-114	**Analyst:**	EBH
TRAY ID:	051811EBH-QT1	**Date:**	5/18/2011



Document: BTF00241 - (3) BodeQuant LCN RESULTS Analysis (WS)
Revision: 4
Effective: Wednesday, January 06, 2010 4:51:57 PM

*STD 0.005 was removed to produce a better R2 value.

EBH 518111

5/18/2011

BodeQuant LCN Sample Sheet & Plate Set-up

Analyst: EBH Date: 5/18/2011

CASE #: CCA1143; 2S04-114
TRAY ID: 051811EBH-QT1

	1	2	3	4	5	6	7	8	9	10	11	12
A	CCA1143-0052-R04a1	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 50
B	CCA1143-0052-R05a1	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 5
C	CCA1143-RB3	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 0.5
D	2S04-114-81a1	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 0.05
E	2S04-114-RB46	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 0.005
F	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 0.0005
G	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	NTC
H	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK

# of Wells + 10% Extra: 14

	1	14	Split in 2
2X QPCR mix	10	140.0	70.0
Primer/Probe Blend	0.87	12.2	6.1
IPC Template (10^{-5})	2	28.0	14.0
Water	5.13	71.8	35.9
DNA or TE	2		
Total Volume	20		

QPCR Mix Lot # (AB Gene): 0908117
Primer/Probe Blend Lot # (BODE): 050611JJ
IPC Template Lot # (BODE): 050411JJ
dH2O Lot # (Fisher): 107828
9947 Standards Lot # (Coriell): D1-091808
TE^{-4} Lot # (BODE): 041311JJ

7000 Machine #: 7003

Pipettes Used:

For all volumes <2 uL	A-060, A-089
For all volumes between 2 and 10 uL	A-116, A-089, A-091
For all volumes between 11 and 100 uL	A-122, A-078
For all volumes between 101 and 1000 uL	A-053
For master mix	A-078

EBH 051811 3

QIAGEN EZ1 DNA Investigator (Individual Samples)

Extraction Worksheet

2S04-114

ITEM	SOURCE	LOT NUMBER
G2	QIAGEN	136236003
dH_2O	FISHER	107828
Proteinase K (20mg/ml)	BODE	042811JJ
MTL (for 500uL & 1500uL lysis only)	QIAGEN	136268061
Carrier RNA (1.00 ug/uL)	BODE	011211JJ
EZ1 Reagent Cartridge	QIAGEN	136256802

Tube #	Sample	EZ1 Robot #	*Tube Witness/Date
1	2S04-114-81a1	EZ01	JGB 5/17/11
2	2S04-114-RB46	EZ01	JGB 5/17/11

*see protocol for witness requirements.

Analyst: EBH/ JLB (tech)
Cryobox Name: 2S04-114

Date: 5/17/11
Case Number: 2S04-114

EZ1 Protocol: Large Volume
Protocol complete verified: JLB

Lysis Volume: 500 ul
Elution Volume: 50 ul

Notes: JLB loaded all samples onto EZ01 on 5/17/11.

Pipettes Used:

Volumes <2 uL	A-044
Volumes 2-10 uL	N/A
Volumes 11-100 uL	A-119
Volumes 101-1000 uL	A-009
Volumes 1001-2000 uL	N/A

Document: BTF00253 - EZ1 Individual Samples (CW WS)
Revision: 6
Effective: 7/20/2010 3:22:37 PM

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EBH 5/17/11

Inventory Case Notes

Bode Technology, Inc.

Case Number: 2S04-114 Date: 5/17/11 Analyst: EBH

OUTER PACKAGING: Clear plastic bag labeled in part "...Specimen #4...Chuck King...", sealed with clear tape and a non-Bode analyst's initials.

CONTAINS: Inner clear plastic bag, unlabeled and unsealed, containing one white paper cup with a green piece of cardboard around it. Cup and cardboard labeled "STARBUCKS".

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	QUANTITY CONSUMED
2S04-114-81	1	• Brown staining on the inside and around the rim of the cup. Wet/dry swabbed the inner and outer rim of the cup ~1cm down from the edge on both sides using two swabs. Cut and combined swabs. Sample processed as 2S04-114-81a1. Consumed ~50% of surface area sampled.	~50% of surface area

(swabs were consumed)
EBH 5/23/11

NOTES:

See photo documentation for additional details on description of evidence.

Fisher DNA Grade water used for swabbing lot# 107828.

Document: BTF00245 - Inventory Notes w/out Serology (CCW WS)
Revision: 2
Effective: Wednesday, January 30, 2008 2:06:20 PM

EBH 5/17/11

1

Bode Technology

10430 Furnace Road, Suite 107
Lorton, VA 22079
Phone: 703-646-9740

Supplemental Forensic Case Report
June 14, 2011

To:
Stephen Braga
Ropes and Gray LLP
700 12th Street, NW Suite 900
Washington, DC 20005

Bode Case #: 2S04-114

Partial list of evidence received on May 17, 2011 for possible DNA analysis:

Bode Sample Name	Agency Item #	Agency Description
2S04-114-33	93-05718 FP8 L1	Labeled as "Ligature between L-leg and L-wrist and R-wrist [Byers]"
2S04-114-33A4		*White ligature labeled "L-Leg and L-Wrist", knot in shoelace near area labeled "L-leg"*
2S04-114-33A5		*White ligature labeled "L-Leg and L-Wrist", knot in shoelace near area labeled "L-Wrist"*
2S04-114-33B4		*Black ligature labeled "R-Leg and R-Wrist", knot in shoelace near area labeled "R-leg"*
2S04-114-33B5		*Black ligature labeled "R-Leg and R-Wrist", knot in shoelace near area labeled "R-Wrist"*
2S04-114-34	93-05717 FP6 L2	Labeled as "Ligature between ankles and wrist, L-leg, L-wrist, R-leg, R-wrist [Branch]"
2S04-114-34A4		*White ligature labeled "L-leg and L-Wrist", knot in shoelace near area labeled "L-leg"*
2S04-114-34A5		*White ligature labeled "L-leg and L-Wrist", knot in shoelace near area labeled "L-leg"*
2S04-114-34A8		*White ligature labeled "L-leg and L-Wrist", knot in shoelace near area labeled "L-Wrist"*
2S04-114-34B4		*Black ligature labeled "R-Leg and R-Wrist", knot in shoelace near area labeled "R-Leg"*
2S04-114-34B7		*Black ligature labeled "R-Leg and R-Wrist", knot in shoelace near area labeled "R-Wrist"*
2S04-114-35	93-05717 FP6 L3	Labeled as "Ligature, L-leg, L-wrist, R-leg, R-wrist [Moore]"
2S04-114-35A4		*Black ligature labeled "L-Wrist and L-Leg", knot in shoelace near area labeled "L-leg"*
2S04-114-35A7		*Black ligature labeled "L-Wrist and L-Leg", knot in shoelace near area labeled "L-Wrist"*
2S04-114-35B4		*Black ligature labeled "R-Wrist and R-Leg", knot in shoelace near area labeled "R-leg"*
2S04-114-35B7		*Black ligature labeled "R-Wrist and R-Leg", knot in shoelace near area labeled "R-Wrist"*

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Partial list of evidence received on May 12, 2011 for possible DNA analysis:

Bode Sample Name	Agency Item #	Agency Description
2S04-114-89	E-006	Labeled as "Black Tennis Shoe and Lace"
2S04-114-89a1		*Area around shoelace holes on shoe*
2S04-114-89a2		*Shoelace received still in shoe*

Partial list of evidence received on May 24, 2011 for possible DNA analysis:

Bode Sample Name	Agency Item #	Agency Description
2S04-114-100	E-04	Labeled as "White Tennis Shoe"
2S04-114-103	E-08	Labeled as "Black/Purple Tennis Shoe"
2S04-114-106	E-11	Labeled as "White Tennis Shoe"
2S04-114-107	E-12	Labeled as "Black Tennis Shoe/Sock" [shoe]
2S04-114-109	E-14	Labeled as "Black Tennis Shoe"

Partial list of evidence received on October 12, 2006 for possible DNA analysis:

Bode Sample Name	Agency Description
2S04-114-37	Labeled as "reference buccal swabs (ECHOLS)"
2S04-114-38	Labeled as "reference buccal swabs (MISSKELLEY)"
2S04-114-39	Labeled as "reference buccal swabs (BALDWIN)"

Partial list of evidence received on April 5, 2007 for possible DNA analysis:

Bode Sample Name	Agency Item #	Agency Description
2S04-114-41	93-05716/ME-329-93	Labeled as "Dried Bld Sample James M. Moore"
2S04-114-43	93-05717/ME-330-93	Labeled as "Dried Blood Sample Steve Branch"
2S04-114-45	93-05718/ME-331-93	Labeled as "Dried Blood Sample Christopher Byers"

Partial list of evidence received on August 10, 2007 for possible DNA analysis:

Bode Sample Name	Agency Item #	Agency Description
2S04-114-47	#1	Labeled as "partial denture" [Terry Hobbs]

Partial list of evidence received on May 9, 2011 for possible DNA analysis:

Bode Sample Name	Agency Description
2S04-114-81	Labeled as "Starbucks Coffee Cup" (Chuck King)

Forensic Biology Results:

1. No blood was detected in the following samples:

   2S04-114-103
   2S04-114-106

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DNA Processing, Results, and Conclusions:

The evidence was processed for DNA typing by analysis of the 13 CODIS Short Tandem Repeat loci, the D2S1338 locus, the D19S433 locus, and the Amelogenin locus using the Applied Biosystems AmpFISTR Identifiler kit. Appropriate positive and negative controls were used concurrently throughout the analysis. The DNA profiles reported in this case were determined by procedures that have been validated according to standards established by the Scientific Working Group on DNA Analysis Methods (SWGDAM) and adopted as Federal Standards.

1. DNA profiles were previously obtained for samples 2S04-114-37 (Echols), 2S04-114-38 (Misskelley), 2S04-114-39 (Baldwin), 2S04-114-41 (James Moore), 2S04-114-43 (Steve Branch), 2S04-114-45 (Christopher Byers), 2S04-114-47 (Terry Hobbs), and 2S04-114-81 (Chuck King).

2. The DNA profile obtained from sample 2S04-114-89a1 is consistent with a mixture of at least two individuals including a major male contributor (Male 1).

   The individuals associated with samples 2S04-114-37 (Echols), 2S04-114-38 (Misskelley), 2S04-114-39 (Baldwin), 2S04-114-41 (James Moore), 2S04-114-43 (Steve Branch), 2S04-114-45 (Christopher Byers), 2S04-114-47 (Terry Hobbs), and 2S04-114-81 (Chuck King) are excluded as possible contributors to the mixture profile obtained from sample 2S04-114-89a1.

3. The DNA profile obtained from sample 2S04-114-89a2 is consistent with a male contributor (Male 1).

   The individuals associated with samples 2S04-114-37 (Echols), 2S04-114-38 (Misskelley), 2S04-114-39 (Baldwin), 2S04-114-41 (James Moore), 2S04-114-43 (Steve Branch), 2S04-114-45 (Christopher Byers), 2S04-114-47 (Terry Hobbs), and 2S04-114-81 (Chuck King) are excluded as possible contributors to the profile obtained from sample 2S04-114-89a2.

4. The partial DNA profile obtained from sample 2S04-114-103 is consistent with a mixture of at least two individuals including at least one male contributor.

   The individuals associated with samples 2S04-114-37 (Echols), 2S04-114-38 (Misskelley), 2S04-114-39 (Baldwin), 2S04-114-41 (James Moore), 2S04-114-43 (Steve Branch), 2S04-114-45 (Christopher Byers), 2S04-114-47 (Terry Hobbs), and 2S04-114-81 (Chuck King) are excluded as possible contributors to the partial profile obtained from sample 2S04-114-103.

5. An allele was obtained from sample 2S04-114-106 at the Amelogenin locus. Due to the limited data obtained, no conclusions can be made on the allele present in sample 2S04-114-106.

6. A partial DNA profile including at least one male contributor was obtained from sample 2S04-114-107. Due to the limited data obtained, no conclusions can be made on this partial profile.

7. A partial DNA profile was obtained from sample 2S04-114-109. Due to the limited data obtained, no conclusions can be made on this partial profile.

8. No DNA profile was obtained from the following samples: 2S04-114-33A4, 2S04-114-33A5, 2S04-114-33B4, 2S04-114-33B5, 2S04-114-34A4, 2S04-114-34A5, 2S04-114-34A8, 2S04-114-34B4, 2S04-114-34B7, 2S04-114-35A4, 2S04-114-35A7, 2S04-114-35B4, 2S04-114-35B7, and 2S04-114-100.

See **Table 1** for summary of alleles reported for each sample.

Notes:

1. Any reference to body fluids in evidence descriptions are based on the written descriptions of the samples by the submitting agency.
2. The DNA extracts and submitted evidence will be retained at Bode until return is authorized by the client.
3. The DNA profile obtained from sample 2S04-114-103 was reported as a mixture; however, the allele table reflects a single source pattern. Alleles below threshold were observed in the sample.
4. The presence of red/brown staining was not observed in samples 2S04-114-89, 2S04-114-100, 2S04-114-107, and 2S04-114-109, therefore, no further serological testing for the presence of blood was performed.
5. A supplemental STR case report was issued due a submission of additional evidence. Please refer to reports dated: May 23, 2011, May 11, 2011, March 25, 2011, January 25, 2011, June 4, 2008, April 10, 2008, March 7, 2008, September 27, 2007, January 2, 2007, and December 30, 2005 for complete lists of items received/tested for STRs.

Report submitted by,

Emily Herren

Emily Herren, MFS
Forensic Biology/DNA Analyst I

Table 1: Analysis of Short Tandem Repeat Loci

Locus	2S04-114-33A4	2S04-114-33A5	2S04-114-33B4	2S04-114-33B5	2S04-114-34A4	2S04-114-34A5	2S04-114-34A8
D8S1179	No Results	No Results	No Results	No Results	No Results	No Results	No Results
D21S11	No Results	No Results	No Results	No Results	No Results	No Results	No Results
D7S820	No Results	No Results	No Results	No Results	No Results	No Results	No Results
CSF1PO	No Results	No Results	No Results	No Results	No Results	No Results	No Results
D3S1358	No Results	No Results	No Results	No Results	No Results	No Results	No Results
TH01	No Results	No Results	No Results	No Results	No Results	No Results	No Results
D13S317	No Results	No Results	No Results	No Results	No Results	No Results	No Results
D16S539	No Results	No Results	No Results	No Results	No Results	No Results	No Results
D2S1338	No Results	No Results	No Results	No Results	No Results	No Results	No Results
D19S433	No Results	No Results	No Results	No Results	No Results	No Results	No Results
vWA	No Results	No Results	No Results	No Results	No Results	No Results	No Results
TPOX	No Results	No Results	No Results	No Results	No Results	No Results	No Results
D18S51	No Results	No Results	No Results	No Results	No Results	No Results	No Results
Amel.	No Results	No Results	No Results	No Results	No Results	No Results	No Results
D5S818	No Results	No Results	No Results	No Results	No Results	No Results	No Results
FGA	No Results	No Results	No Results	No Results	No Results	No Results	No Results

Table 1: Analysis of Short Tandem Repeat Loci (Continued):

Locus	2S04-114-34B4	2S04-114-34B7	2S04-114-35A4	2S04-114-35A7	2S04-114-35B4	2S04-114-35B7
D8S1179	No Results	No Results	No Results	No Results	No Results	No Results
D21S11	No Results	No Results	No Results	No Results	No Results	No Results
D7S820	No Results	No Results	No Results	No Results	No Results	No Results
CSF1PO	No Results	No Results	No Results	No Results	No Results	No Results
D3S1358	No Results	No Results	No Results	No Results	No Results	No Results
TH01	No Results	No Results	No Results	No Results	No Results	No Results
D13S317	No Results	No Results	No Results	No Results	No Results	No Results
D16S539	No Results	No Results	No Results	No Results	No Results	No Results
D2S1338	No Results	No Results	No Results	No Results	No Results	No Results
D19S433	No Results	No Results	No Results	No Results	No Results	No Results
vWA	No Results	No Results	No Results	No Results	No Results	No Results
TPOX	No Results	No Results	No Results	No Results	No Results	No Results
D18S51	No Results	No Results	No Results	No Results	No Results	No Results
Amel.	No Results	No Results	No Results	No Results	No Results	No Results
D5S818	No Results	No Results	No Results	No Results	No Results	No Results
FGA	No Results	No Results	No Results	No Results	No Results	No Results

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Table 1: Analysis of Short Tandem Repeat Loci (Continued):

Locus	2S04-114-89a1	2S04-114-89a2	2S04-114-100	2S04-114-103	2S04-114-106	2S04-114-107	2S04-114-109
D8S1179	11, 12	11, 12	No Results	10, 14	No Results	10, ---	No Results
D21S11	27, 31.2	27, 31.2	No Results	No Results	No Results	No Results	No Results
D7S820	11, 12	11, 12	No Results	No Results	No Results	No Results	No Results
CSF1PO	12, 12	12, 12	No Results	No Results	No Results	No Results	No Results
D3S1358	16, 16	16, 16	No Results	15, ---	No Results	14, ---	16, ---
TH01	8, 8	8, 8	No Results	6, ---	No Results	6, ---	8, ---
D13S317	13, 14	13, 14	No Results	11, ---	No Results	No Results	No Results
D16S539	12, 13	12, 13	No Results	No Results	No Results	No Results	No Results
D2S1338	17, (23)	17, 23	No Results	No Results	No Results	No Results	No Results
D19S433	12, (13), 14	12, 14	No Results	13, ---	No Results	14, ---	14, ---
vWA	16, 16	16, 16	No Results	17, ---	No Results	17, ---	16, ---
TPOX	(8), 9	8, 9	No Results	8, 11	No Results	No Results	No Results
D18S51	13, 17	13, 17	No Results	No Results	No Results	No Results	No Results
Amel.	X, Y	X, Y	No Results	X, (Y)	X, ---	X, (Y)	X, ---
D5S818	12, (14)	12, 14	No Results	11, 12	No Results	No Results	No Results
FGA	21, 24	21, 24	No Results	No Results	No Results	No Results	No Results

Key: ( ) = minor allele
--- = possible additional alleles

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Table 1: Analysis of Short Tandem Repeat Loci (Continued):

Locus	2S04-114-37A (Echols)	2S04-114-38A (Misskelley)	2S04-114-39A (Baldwin)	2S04-114-41A (James M. Moore)	2S04-114-43A (Steve Branch)	2S04-114-45A (Christopher Byers)	2S04-114-47a1 (Terry Hobbs)	2S04-114-81 (Chuck King)
D8S1179	12,13	13,15	11,12	12,14	12,13	12,14	10,10	12, 13
D21S11	29,31	29,31.2	28,31.2	29,32.2	29,29	30,32.2	29,30.2	31, 32.2
D7S820	10,12	11,12	11,11	8,9	8,10	9,12	8,10	10, 12
CSF1PO	10,11	10,12	10,12	10,10	12,12	10,13	11,13	11, 12
D3S1358	14,15	15,17	16,17	14,18	14,17	14,16	16,17	18, 18
TH01	7,9.3	9.3,9.3	6,7	8,9.3	6,9.3	9.3,9.3	8,9.3	6, 9.3
D13S317	8,11	9,12	9,11	11,12	8,11	8,12	8,12	12, 14
D16S539	11,12	11,12	11,11	9,13	9,12	9,11	9,12	12, 12
D2S1338	24,24	23,23	24,25	17,23	23,24	18,24	17,18	17, 17
D19S433	13,16	13.2,14	14,15	14,14	14,17	14,15	14,14	12, 14
vWA	16,20	15,17,(18)	16,18	18,19	18,19	17,19	18,20	18, 20
TPOX	8,8	8,11	9,11	8,8	8,11	8,8	8,11	8, 10
D18S51	14,17	12,17	13,17	14,16	12,15	12,17	16,18	15, 16
Amel.	X,Y	X,Y	X,Y	X,Y	X,Y	X,Y	X,Y	X, Y
D5S818	11,12	11,12	9,9	9,13	10,12	11,12	11,12	11, 11
FGA	21,24	21,22	24,24	22,23	21,24	22,25	23.2,25	20, 22

Key: ( ) = minor allele

Bode Technology™

Review Form: Complete Case File

Shipment or Case #: 2S04-114-33, -34, -35, -89, -100, -103, -106, -107, -109

Case File Documentation	Core Forms and Controls	Data and Report
Technical Review		
- Case submission form or submitted manifest complete - Client paperwork complete - Client communication documented* - Chain of custody (COC) completed and correct - Project guidelines followed* - Inventory sheet accurate and consistent with COC - Photodocumentation of all evidence complete* - Permission to consume documented* - Case notes complete and accurate - All pages have case or shipment #, date, initials	- Lab worksheets complete - Sample numbering correct throughout - Controls gave appropriate results : Allelic ladders Positive control(s) Negative controls(s) - Electropherograms documented properly - Internal lane standard verified - Two independent analyses performed and edits consistent - Index accurate* - Correct core forms and controls included for case+	- Electropherograms documented properly - Internal lane standard verified - Two independent analyses performed and edits consistent - Index accurate* - Allele table included and accurate* - Results accurate - Conclusions accurate* - Statistics provided* - Statistic calculations correct*
Administrative Review		
- COC accurate - Core forms and controls review form included+	- Case notes accurate* - Positive control correct	- Report editorially accurate and includes: case identifier, evidence examined, methodology, loci or kit, results and/or conclusions, interpretative statement, date issued, disposition of evidence, signature of person accepting responsibility

**if applicable, + For case files supplemented with controls and core forms*

Amy Quist Technical Leader — 061411 Tech
Name and Title — ☑ Date-Type of review

Teresa Vreeland, Supervisor — 6.14.11 Sero + Tech/Admin on WS completed by AMJ.
Name and Title — ☑ Date- Type of review

Andrea Burchardt-Gardner, DNA Analyst III — 6-15-11 Admin
Name and Title — ☐ Date- Type of review

Emily Heuen — 6/15/11
Name and Title — ☒ Date- Bode Search including Staff DNA Search*

Self Review: EBH 6/14/11

Document: BT00067 - Review Form: Entire file including: case, controls, core forms
Revision: 3
Effective: Tuesday, February 09, 2010 2:05:32 PM

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Emily Herren

From: TrackingUpdates@fedex.com
Sent: Thursday, June 16, 2011 9:19 AM
To: Emily Herren
Subject: FedEx Shipment 797207743883 Delivered

This tracking update has been requested by:

Company Name:	Bode Technology
Name:	Bode Technology
E-mail:	emily.herren@bodetech.com

Our records indicate that the following shipment has been delivered:

Reference:	2S04-114
Ship (P/U) date:	Jun 15, 2011
Delivery date:	Jun 16, 2011 9:08 AM
Sign for by:	C.HICKS
Delivery location:	WASHINGTON, DC
Delivered to:	Mailroom
Service type:	FedEx Standard Overnight
Packaging type:	FedEx Envelope
Number of pieces:	1
Weight:	0.50 lb.
Special handling/Services:	Deliver Weekday
Tracking number:	797207743883

Shipper Information	Recipient Information
Bode Technology	Stephen L. Braga
Bode Technology	Ropes & Gray LLP
10430 Furnace Road	700 12TH ST NW STE 900
Suite 107	ONE METRO CENTER
Lorton	WASHINGTON
VA	DC
US	US
22079	20005

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Thank you for your business.

EXH 6/16/11 142

6/16/2011

Bode Technology™

INVOICE

Client:
Ropes and Gray
Attn: Stephen Braga
One Metro Center, 700 12th St.
NW, Suite 900
Washington, DC 20005

Invoice Date: 6/20/2011

Invoice #: Bill14921
Net Terms: 30 Days

PO Number:

Invoice Grand Total: $ 25,060.12

Requester: Stephen Braga
Phone: 202-508-4655
Fax:
email:

Bode Project #.: 2S04-114

Agency Case No.: 1993-WVS-05716 93-05-0666

Line Item Number	Quantity	Item / Part Number	Description	Unit Price	Sales Amount
0001	6	Pre	Pre-Screening Small Items	$ 600.00	$ 3,600.00
0002	7	STR	Analysis of evidence items (excluding skeletal remains)	$ 1,845.00	$ 12,915.00
0003	13	STR	Analysis of Extracted DNA	$ 997.50	$ 12,967.50
			Rush Order Discount 15%		**$ (4,422.38)**
				TOTAL AMOUNT DUE	**$ 25,060.12**

Remit To:

The Bode Technology Group, Inc.
c/o GlobalOptions, Inc
Dept. AT 952056
Atlanta, GA 31192

Bode TIN: 54-1750293

Bank Information:

Silicon Valley Bank
Santa Clara, CA 95054
ABA# 121140399
Credit to: GlobalOptions, Inc.
Account # 3300418500

10430 Furnace Road, Suite 107
Lorton, VA 22079

1.866.BODE.4.ID
www.bodetech.com

tel. 703-646-9740
fax. 703-646-9741

EBH 6/21/11 141

Emily Herren

From: Emily Herren
Sent: Tuesday, June 21, 2011 8:59 AM
To: 'Braga, Stephen'
Cc: Teresa Vreeland
Subject: RE: 2S04-114 report

Hi

These are the covert references that have been tested for mito:

George Taylor (Fork)
James Vaughn (Soda can)
Lynn Vaughn (Razor)
Cindy Hobbs (hair and cig butts)

We also have three more which you previously told us not to test:

Large corona beer bottle
Off brand root beer can
Plastic beverage container

Let me know which of these you would like processed for STRs.

Thanks
Emily

From: Braga, Stephen [mailto:Stephen.Braga@ropesgray.com]
Sent: Tuesday, June 21, 2011 8:16 AM
To: Emily Herren
Subject: Re: 2S04-114 report

Thanks Emily. Can you remind me who the covert references are? (I'm on the road in NY without my file.)

Steve

Stephen L. Braga
ROPES & GRAY LLP
T +1 202 508 4655 | F +1 202 383 9821
One Metro Center, 700 12th Street, NW, Suite 900
Washington, DC 20005-3948
Stephen.Braga@ropesgray.com
www.ropesgray.com

From: Emily Herren [mailto:Emily.Herren@bodetech.com]
Sent: Tuesday, June 21, 2011 08:12 AM
To: Braga, Stephen
Cc: Teresa Vreeland <Teresa.Vreeland@bodetech.com>
Subject: FW: 2S04-114 report

Hi Mr. Braga,

2S04-114 EBN 6/24/11 140

Please find attached the invoice for the report dated June 14, 2011 (Bode items 33 to 35, 89, 100, 103, 106, 107, and 109). Let me know if you would like us to FedEx a hard copy to you.

Also, in reference to the questions below, did you want the covert references processed for STRs?

Thanks,
Emily

From: Emily Herren
Sent: Thursday, June 16, 2011 7:37 AM
To: 'Braga, Stephen'
Cc: Teresa Vreeland; Amy Jeanguenat
Subject: RE: 2S04-114 report

Hi Mr. Braga,

1. Yes, the "Male 1" referred to in paragraphs 2 and 3 are the same profile
2. Data obtained from the partial profile obtained for sample 103 is not consistent with the profile of "Male 1"
3. No, we currently do not have samples from others involved in the collection, testing, or handling of this evidence. As part of our standard operating procedure this profile was searched against Bode's staff database and did not match anyone. We would recommend this profile be searched against other staff databases if they exist. The reference profiles we have for this case that have been STR tested are listed in the report. We also have the covert references but those have not been processed for STRs. Would you like us to proceed with this testing?
4. The recovery of DNA from items that have been touched is recommended for STR typing and STR typing generally will consume or not yield enough remaining extract to proceed to mtDNA typing. So unfortunately this type of testing does not lend itself to also being typed for a mtDNA profile.

Thanks,
Emily

From: Braga, Stephen [mailto:Stephen.Braga@ropesgray.com]
Sent: Wednesday, June 15, 2011 3:37 PM
To: Emily Herren
Cc: Teresa Vreeland; Amy Jeanguenat
Subject: RE: 2S04-114 report

Emily,

Now that I've had the chance to read the report, just a couple of quick questions:

- On page 3, does the reference to (Male 1) in both paragraphs 2 and 3 indicate that the male contributor to both those samples is the same profile?
- Is the male contributor profile referenced in paragraph 4 different than the male profiles found in paragraphs 2 and 3?
- Do you have DNA samples from the police officers and other law enforcement authorities who might have handled the above items of evidence to compare the foregoing male profiles against?
- Are the male profiles you found above capable of being reduced further to mito profiles?

2S04-114 EBN 0124111

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Many thanks,

Steve

Stephen L. Braga
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From: Emily Herren [mailto:Emily.Herren@bodetech.com]
Sent: Wednesday, June 15, 2011 3:18 PM
To: Braga, Stephen
Cc: Teresa Vreeland; Amy Jeanguenat
Subject: 2S04-114 report

Hi Mr. Braga,

Please find attached an electronic copy of the cover letter and report for Bode case# 2S04-114 (for Bode items 33, 34, 35; 89, 100, 103, 106, 107, and 109). You will receive the hard copies via FedEx tomorrow. Let me know if you would like any additional references processed for STRs to make additional comparisons.

Thanks,

Emily Herren

2S04-114 EHN 6/24/11

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Teresa Vreeland

From: Braga, Stephen [Stephen.Braga@ropesgray.com]
Sent: Friday, June 10, 2011 3:21 PM
To: Teresa Vreeland
Subject: RE: Ligature measurements

Thank you, and have a nice weekend as well.

Stephen L. Braga
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From: Teresa Vreeland [mailto:Teresa.Vreeland@bodetech.com]
Sent: Friday, June 10, 2011 3:17 PM
To: Braga, Stephen
Subject: Ligature measurements

Good afternoon Mr. Braga,

Emily was able to look at the two ligatures for Moore, below are the measurements and attached are photographs. Using the picture she previously had taken of the shoe lace that was located in one of the shoes, she was able to determine an approximate measurement. This photograph is also attached.

Two black ligatures: Item 35A was a total of 32 inches, Item 35B was a total of 33 inches.
Shoe lace: Item 89 was a total of 39.5 inches.

Have a good weekend,
Teresa Vreeland

2504-114
TV 6.15.11

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Teresa Vreeland

From: Braga, Stephen [Stephen.Braga@ropesgray.com]
Sent: Wednesday, June 08, 2011 4:57 PM
To: Teresa Vreeland
Subject: RE: ligature and shoe requested information

Many thanks, Teresa. Very nice meeting you and the team as well, and no worries on the quote.

On the ligatures, can you also measure for me the black ligature for Moore?

And can you also measure the black shoe lace remaining in E-006 (Bode No. 89)?

Steve

Stephen L. Braga
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From: Teresa Vreeland [mailto:Teresa.Vreeland@bodetech.com]
Sent: Wednesday, June 08, 2011 4:48 PM
To: Braga, Stephen
Subject: ligature and shoe requested information

Hi Mr. Braga,
It was a pleasure meeting with you this morning. We have started testing on the items for this case and will keep in touch with you regarding any results or reports. I have attached a powerpoint including all new photos of the 2 ligatures you requested to be measured today. I have also attached photos of the bottom soles of the white sneakers. I am unable to fit all photographs onto this email, so I will be sending another email with the remaining photos of the shoe bottoms.

Ligature information:

Bode item 33B (Agency item 93-05718 FP8 L1) black ligature from Byers: currently in three pieces with a total length of 46.5 inches.
Bode item 34B (Agency item 93-05717 FP6 L2) black ligature from Branch: currently in four pieces with a total length of 43.5 inches.

I am still working on the price quote and hope to have a preliminary quote completed for you tomorrow (my afternoon meetings took longer than expected). I will get you this information as soon as possible.

Please let me know if there is anything else that you need,

2504-114 TT 6.15.11

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Teresa Vreeland
Customized Casework Supervisor
10430 Furnace Rd. Suite 107
Lorton, VA 22079
703-646-9757
Teresa.vreeland@bodetech.com

2S04-114 TV 6.15.11

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6/15/2011

Emily Herren

From: Teresa Vreeland
Sent: Thursday, June 16, 2011 7:29 AM
To: Braga, Stephen
Cc: Emily Herren; Amy Jeanguenat; Sarah Bettinger; Adrienne Barranco
Subject: RE: 2S04-114 testing

Thank you for taking the time to look over these documents. I have made updates to the meeting notes to include the items you have listed below.

-For the ligature testing you mentioned below, generally when completing STR testing on items that have been handled (which is the recommended testing method for touch DNA on this type of item), enough sample does not remain to perform mtDNA typing. Mitochondrial testing is best used on hairs (with little or no follicular/root material) or bones where the DNA may be degraded. We understand you want to compare foreign mtDNA profiles to other foreign profiles developed in this case but due to the nature of the testing this will not always be possible.

I have made the recommended updates to the spreadsheet also in reference to Bode items 90 and 115.

-No further testing is recommended for Bode 14 since mito has already been performed on this item and the mito results obtained were consistent with the victim C. Byers.

Please let me know if you have any other questions,
Teresa

From: Braga, Stephen [mailto:Stephen.Braga@ropesgray.com]
Sent: Wednesday, June 15, 2011 2:55 PM
To: Teresa Vreeland
Cc: Amy Jeanguenat; Emily Herren; Sarah Bettinger; Adrienne Barranco; Natalie Morgan
Subject: RE: 2S04-114 testing

Teresa,

The memo looks fine and I agree with it. A couple of clarifications and/or answers:

- No need to screen the possible clothing items for blood, just touch.
- With reference to the ligatures being taken forward for STR processing, as discussed, if there is DNA we ultimately want mito results too wherever possible for comparative purposes.
- His name if Roy Todd Moore.

The spreadsheet looks fine as well, subject to a couple of questions/clarifications:

- Can you tell me (again possibly) why no further testing is recommended on Bode 14 (hair from lower body of C. Byers?
- On 6/9/11, I sent in a CSF form for Bode 90.
- Bode 115 should be in red for processing.

Thanks,

Steve

2S04-114 EBSN 10110111

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From: Teresa Vreeland [mailto:Teresa.Vreeland@bodetech.com]
Sent: Tuesday, June 14, 2011 2:51 PM
To: Braga, Stephen
Cc: Amy Jeanguenat; Emily Herren; Sarah Bettinger; Adrienne Barranco; Natalie Morgan
Subject: 2S04-114 testing

Hello Mr. Braga,

I have attached a word document to summarize our meeting on June 8th as well as capture our planned testing for the items at Bode. I have also attached an updated spreadsheet of the items at Bode. Both attachments also include information regarding the newest items that arrived at Bode on June 9th. If you could, please review both of these attachments at your convenience and let me know if I have missed anything.

Also, we have made a few recommendations for testing in regards to the newest items that have arrived. These recommendations are included in the final bullet of the word document. If you could please review this portion and get back with us, if you agree or disagree, so that we are able to begin any testing on these items if necessary.

Please let me know if you have any questions/concerns,

Teresa Vreeland
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Bode Technology
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Lorton, VA 22079
703-646-9757
Teresa.vreeland@bodetech.com

2S04-114 EB11 6116111

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Amy Jeanguenat

From: Braga, Stephen [Stephen.Braga@ropesgray.com]
Sent: Tuesday, June 14, 2011 3:17 PM
To: Teresa Vreeland
Cc: Amy Jeanguenat; Emily Herren; Sarah Bettinger; Adrienne Barranco; Natalie Morgan
Subject: RE: 2S04-114 testing

Will review and get back to you tomorrow AM. Thanks

Stephen L. Braga
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From: Teresa Vreeland [mailto:Teresa.Vreeland@bodetech.com]
Sent: Tuesday, June 14, 2011 2:51 PM
To: Braga, Stephen
Cc: Amy Jeanguenat; Emily Herren; Sarah Bettinger; Adrienne Barranco; Natalie Morgan
Subject: 2S04-114 testing

Hello Mr. Braga,

I have attached a word document to summarize our meeting on June 8th as well as capture our planned testing for the items at Bode. I have also attached an updated spreadsheet of the items at Bode. Both attachments also include information regarding the newest items that arrived at Bode on June 9th. If you could, please review both of these attachments at your convenience and let me know if I have missed anything.

Also, we have made a few recommendations for testing in regards to the newest items that have arrived. These recommendations are included in the final bullet of the word document. If you could please review this portion and get back with us, if you agree or disagree, so that we are able to begin any testing on these items if necessary.

Please let me know if you have any questions/concerns,

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2S04-114
20n2 061411

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Meeting with Mr. Braga at Bode 6/8/11 attended by: Teresa Vreeland, Emily Herren, Amy Jeanguenat, Sarah Bettinger, and Adrienne Barranco

-10 hairs will be tested for mito [Bode sample #'s: 2S04-114-11A, -11D, -11H, -11J, -11F, -11I, -11N, -11X, -17, and -09. 8 of these hairs have apparent roots and may be suitable for nuclear DNA; these samples will be extracted for mito and will be quantified to determine if any nuclear DNA is present. Based on quantification samples will either be recommended for STR testing and/or mtDNA testing. Permission to consume the hairs if needed was granted.

-The clothing items (pants, shoes, and shirts) will be screened for possible blood and touch. It was discussed that it is unlikely to develop a profile due to the condition of the items when recovered (ie under water). If DNA results are obtained, we cannot be sure that the results are probative results from the scene.

- -The shoes were sampled where the laces may have been removed from the shoes. The shoe containing the lace was sampled similarly and the lace was also sampled for touch DNA. The sock submitted with Bode # 107 will not be tested.
- -The pants will be sampled according to how they were believed to have been removed. The inside out pants will be sampled from the top waist band region. The pants that are inside right will be sampled from the ankle regions. If all pants are turned inside out or inside right, they will all be sampled from both the waistband and the ankles.
- -The shirts will be sampled where they may have been touch to be removed. We will determine the best area to sample once we have opened the shirts and determined the most logical area(s) to sample.

-The ligatures have been tested previously. Extract remains from previous testing. Extracts from the ligature knots, not the tag knots, will be taken forward for STR processing (13 samples total).

-For all touch DNA items, we will NOT stop processing at quantification regardless of the result. All samples will be taken forward.

-Cub scout hat and Child's underwear (may have been recovered in a tree) will be processed for touch DNA where they may have been removed.

-Miscellaneous items (Wooden slats, rope, hook and Doral cigarette pack) will be sampled randomly in an attempt to recover touch DNA. Samples may not be related to the crime and are a lower priority than the clothing and mito testing.

-Want all new results compared to all suspect and victim reference standards.

-We will issue reports as we have completed data (we will not wait until all testing is completed to issue a report).

-We have measured the black shoe laces and have provided the lengths to Mr. Braga along with photographs of the white shoe soles.

-I have also attached an updated spreadsheet of the items in-house and which ones will be processed. The list on the bottom is the newest items that arrived after Mr. Braga's visit. 2 items we have already discussed testing (Bode items 9 & 17). We have also discussed not testing the combed head hairs from the victims.

- -We also do not recommend testing the shaved head hairs (Bode #s 116, 119, 121)
- -For the possible tissue from ligatures (Bode #s 4 & 16), we feel that these items will be overwhelmed with the victim's DNA and will most likely not yield probative results.

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AMS 061411

-For the known blood sample from Moore (Roy or Todd) – this can be processed for mito as requested. The package is labeled as from Roy Moore, but the case submission form lists this item as from Todd Moore, do you know which of these descriptions is correct?

2504-114
DMS 061411

Bode Item #	Agency Item #	Item	case submission form received	evid/ref
1	93-05716 FP2	Left hand nail scrapings from M. Moore - No Further testing	yes	evidence
2	93-05716 FP3	Right hand nail scrapings from M. Moore - No Further testing	yes	evidence
6	93- 05717 FP3	Left hand nail scrapings from S. Branch - No Further testing	yes	evidence
7	93- 05717 FP4	Right hand nail scrapings from S. Branch - No Further testing	yes	evidence
11	93-05718 FP3	Hair found on C. Byers's body - Process for mito & possible STRs (8 hairs total)	yes	evidence
12	93-05718 FP4	Left hand nail scrapings from C. Byers - No Further testing	yes	evidence
13	93-05718 FP5	Right hand nail scrapings from C. Byers - No Further testing	yes	evidence
14	93-05718 FP6	Hair from lower body of C. Byers - No Further testing	yes	evidence
33	93-05718 FP8 L1	Ligature between L-leg and L-wrist and R-wrist [Byers] - No Further testing	yes	evidence
34	93-05717 FP6 L2	Ligature between ankles and wrist, L-leg, L-wrist, R-leg, R-wrist [Branch] - No Further testing	yes	evidence
35	93-05717 FP6 L3	Ligature, L-leg, L-wrist, R-leg, R-wrist [Moore] - No Further testing	yes	evidence
76	Item #1	Fork from George Taylor's lunch - Process for mitc	yes	reference
77	Not Listed	pair of gloves - Do Not Process	no	evidence?
78	Not Listed	pair of gloves - Do Not Process	no	evidence?
79	Not Listed	large Corona beer bottle - Do Not Process	no	reference
80	Not Listed	off brand root beer can - Do Not Process	no	reference
81	Not Listed	Starbucks cup - processing for mito only	yes: rush	reference
82	Not Listed	plastic beverage container - Do Not Process	no	reference
83	E-132	Wooden slats - see 6/8/11 meeting notes for processing plan	yes	evidence
84	E-019	Rope - see 6/8/11 meeting notes for processing plan	yes	evidence
85	E-130	Hook - see 6/8/11 meeting notes for processing plan	yes	evidence
86	E-130	Doral Cigarette Pack - see 6/8/11 meeting notes for processing plan	yes	evidence
87	Not Listed	Sheet - Do Not Process	yes	evidence
88	Not Listed	Sheet - Do Not Process	yes	evidence
89	E-006	Black Tennis Shoe and Lace - see 6/8/11 meeting notes for processing plan	yes	evidence
90	93-05716 E159	Hair of T. Hobbs - Process for mito	no	reference
91	93-05716 E56	Known Head Hair Samples [James Martin] - Do Not Process	no	reference
92	93-05716 BR11a	Known Head Hair Samples [Roy Todd Moore] - Do Not Process	no	reference
93	93-05716 E155	Known Head Hair Samples [Melissa Byers] - Do Not Process	no	reference
94	93-05716 E156	Known Head Hair Samples [Steve Branch] - Do Not Process	no	reference
95	93-05716 E162	Known Head Hair Samples [Pamela Hobbs] - Do Not Process	no	reference
96	93-05716 E163	Known Head Hair Samples [Diana Moore] - Do Not Process	no	reference
not assigned		razor - Do Not Process	no	evidence?
not assigned		razor - Do Not Process	no	evidence?
97	E-01	Blue Boy Scout Shirt - see 6/8/11 meeting notes for processing plan	yes	evidence
98	E-02	White Polka Dot Shirt - see 6/8/11 meeting notes for processing plan	yes	evidence
99	E-03	Blue Pants - see 6/8/11 meeting notes for processing plan	yes	evidence
100	E-04	White Tennis Shoe - see 6/8/11 meeting notes for processing plan	yes	evidence
101	E-05	Cub Scout Cap - see 6/8/11 meeting notes for processing plan	yes	evidence
102	E-07	Blue jeans/blue wallet - see 6/8/11 meeting notes for processing plan	yes	evidence
103	E-08	Black/Purple Tennis Shoe - see 6/8/11 meeting notes for processing plan	yes	evidence
104	E-09	Striped Shirt - see 6/8/11 meeting notes for processing plan	yes	evidence
105	E-10	Child's underwear - see 6/8/11 meeting notes for processing plan	yes	evidence
106	E-11	White Tennis Shoe - see 6/8/11 meeting notes for processing plan	yes	evidence
107	E-12	Black Tennis Shoe/Sock - see 6/8/11 meeting notes for processing plan	yes	evidence
108	E-13	Blue jeans - see 6/8/11 meeting notes for processing plan	yes	evidence
109	E-14	Black Tennis Shoe - see 6/8/11 meeting notes for processing plan	yes	evidence
110	E-01	Pair Blue Jeans/striped shirt - see 6/8/11 meeting notes for processing plan	no	evidence
111	E-01	Pair Pants/Pull over shirt - see 6/8/11 meeting notes for processing plan	no	evidence
112	Not Listed	Soda can - James Vaughn - processing for mito only	yes: rush	reference
113	Not Listed	Razor - Lynn Vaughn - processing for mito only	yes: rush	reference
114	Not Listed	Cindy Hobbs Evidence - processing for mito only	yes: rush	reference

2S04-114
Form 06/11

		NEW SAMPLES - ARRIVED 6/9/11			Technology requested on CSF
3	93-05718 FP6	Hair from M. Moore ligature - Previously tested for mito	yes	evidence	mito
4	93-05716 FP6-Q39	**Possible tissue from ligature from M. Moore - Not yet tested by Bode**	yes	evidence	STR
8	93-05717 FP5	Two dark Caucasian hairs from S. Branch - Previously tested for mito	yes	evidence	mito
9	93-05717 FP6	Hair from ligature from S. Branch (skin, tissue hair from ligature) - Hair will be tested for mito	yes	evidence	mito
15	93-05718 FP8	Hair from C. Byers ligature - Previously tested for mito	yes	evidence	mito
16	93-05718 Q4	**Possible tissue from C. Byers ligature (skin, tissue, hair from ligature) - Not yet tested by Bode**	yes	evidence	STR
17	93-05718 FP9	Hair from perineum of C. Byers ligature - Hair will be tested for mito	yes	evidence	mito
20	93-05716 E3	Hair from E3 - Previously tested for mito	yes	evidence	mito
21	93-05716 E5	Hair from scout cap - Previously tested for mito	yes	evidence	mito
23	93-05716 E127 LS1-QH	Hair from tree stump - Previously tested for mito	yes	evidence	mito
27	93-05717 FP7	Dyed hair from white sheet used to cover S. Branch - Previously tested for mito	yes	evidence	mito
115	K35	**Dried known blood sample Roy Moore (CSF lists this sample as from Todd Moore) - Not yet tested by Bode**	yes	evidence	mito
116	93-05716 FP5	**Shaved head hair M. Moore - Not yet tested by Bode**	yes	evidence	mito
117	93-15716 FP7	Combed head hair M. Moore - Do Not Process	yes	evidence	mito
118	93-0517 FP1	Head hair combings S. Branch - Do Not Process	yes	evidence	mito
119	93-05717 FP5	**Shaved head hair S. Branch - Not yet tested by Bode**	yes	evidence	mito
120	93-05718 FP1	Combed head hair C. Byers - Do Not Process	yes	evidence	mito
121	93-05718 FP7	**Shaved head hair C. Byers - Not yet tested by Bode**	yes	evidence	mito

Samples in red are samples that will be processed
Samples highlighted in yellow are rush mito references
Samples in gray are ones that do NOT need to be processed

2S04-114
tm 061411

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Amy Jeanguenat

From: Braga, Stephen [Stephen.Braga@ropesgray.com]
Sent: Tuesday, June 14, 2011 11:01 AM
To: Amy Jeanguenat
Cc: Emily Herren; Teresa Vreeland
Subject: RE: Case 2SO4-114

Perfect, and yes I think it would be helpful if you could request the bench notes.

Thanks,

Steve

Stephen L. Braga
ROPES & GRAY LLP
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One Metro Center, 700 12th Street, NW, Suite 900
Washington, DC 20005-3948
Stephen.Braga@ropesgray.com
www.ropesgray.com

From: Amy Jeanguenat [mailto:Amy.Jeanguenat@bodetech.com]
Sent: Tuesday, June 14, 2011 10:46 AM
To: Braga, Stephen
Cc: Emily Herren; Teresa Vreeland
Subject: RE: Case 2SO4-114

Hi Stephen:

Not a problem. We have all the possible fiber slides from Microtrace packaged with the evidence. I pulled the slides associated with Bode #: 2S04-114-48E. There appears to be 26 fibers collected from this item. I do not know which ten were preliminary important for further testing.
Do you want me to contact Microtrace and request any bench notes they took during the examination?

We'll plan to ship the request evidence to Christopher today or first thing tomorrow. I'll send you both the details for shipping.

-Amy

From: Braga, Stephen [mailto:Stephen.Braga@ropesgray.com]
Sent: Monday, June 13, 2011 4:14 PM
To: Amy Jeanguenat
Cc: Emily Herren
Subject: Case 2SO4-114

Amy,

Following up on one aspect of our recent discussions, the time has now arrived for me to have Bode ship certain evidence to a fiber testing lab.

The evidence to be shipped is as follows:

E-06 (black sneaker with shoe lace intact)

2S04-114 127
DMC 061411

FP6-5716 (ligatures Moore)

FP6-5717 (ligatures Branch)

FP6-5718 (ligatures Byers)

The "ten polyester fibers" referenced in the September 25, 2009 preliminary report from Skip Palenik at Microtrace to Shannon Weitz at Bode Technology. You forwarded a copy of this preliminary report that same day to Don Horgan.

This evidence should be shipped by secure means designed to ensure an effective chain of custody to:

Christopher Bommarito
Forensic Science Consultants
Forensic Testing Services
1099 Grand River Avenue
Williamston, MI 48895
Phone 517-202-5971
Fax 517-579-4847
Email Bommarito@forsci.com

Chris has asked that you contact him in advance when this evidence is being sent, with tracking numbers etc, so that he can be ready on his end to receive it promptly. Please let me know when this evidence goes out as well.

Once Chris has completed his testing, I will be asking him to send the evidence back to you at Bode subject to my further direction at that point.

Thanks, Amy, and if you have any questions just let me know.

Best,

Steve

Stephen L. Braga
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2504-114
DM006141 126

Emily Herren

From: Braga, Stephen [Stephen.Braga@ropesgray.com]
Sent: Tuesday, May 31, 2011 4:25 PM
To: Emily Herren
Cc: Teresa Vreeland; Sarah Bettinger; Amy Jeanguenat
Subject: Re: 2S04-114

Thanks for the note Emily, and yes June 8 at 10 is still good. I will see you then.

Other responses below, correlated to your paragraph numbers:

1. Understood and correct

2. 74 and 57 are not presently important comparisons so you can stop them. 49 remains an item to be compared.

3. Yes, these are important profiles to continue comparisons with.

4. Understood. Skin cell testing would be great, as well as fluids. All of these items were underwater if that influences your approavh to them.

5. Understood as topic for discussion at our meeting. Have you previously determined - by appearance and/or measurement -whether any of the ligatures were cut, and if so which ones?

6. We will need all of these additional hairs tested, and you have permission to consume the samples if necessary in doing so.

7. We don't have 8-10 weeks. Under the Court's scheduling order, we are only going to have 4-6 weeks so can you think about a strategy - and include it in your price quote - for how we can get this done within that time period?

8. Understood, and no problem.

Best,

Steve

Stephen L. Braga
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Washington, DC 20005-3948
Stephen.Braga@ropesgray.com
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From: Emily Herren [mailto:Emily.Herren@bodetech.com]
Sent: Tuesday, May 31, 2011 12:50 PM
To: Braga, Stephen
Cc: Teresa Vreeland <Teresa.Vreeland@bodetech.com>; Sarah Bettinger <Sarah.Bettinger@bodetech.com>; Amy Jeanguenat <Amy.Jeanguenat@bodetech.com>
Subject: 2S04-114

Hi Mr. Braga,

We sat down and went over the testing that we have in front of us for 2S04-114.

June 8th at 10am works for us if you are still available to come to Bode to meet and discuss the case.

1. Rush references:

   We can attempt to test the reference items that have been sent for mito. Since the samples are not direct references they might not be ideal for mtDNA testing. If we start processing them and deem them unsuitable for mito analysis (if the items show a presence of a mixture they can not be used for comparison purposes) then we will stop. For mito processing the fastest turn around time we can provide will be four weeks. The only items that you want processed with the fastest turn around time are the Starbucks coffee cup (item 81), the soda can from James Vaughn (item 112), the razor from Lynn Vaughn (item 113), and the Cindy Hobbs evidence (item 114). Is this correct?

2. Foreign STR profiles:

   From the data that has been generated for the case so far, we have three items that produced mixture profiles that references can be compared to: "right hand glove found in truck" (item 74), "two swabs from side of washer near sink in kitchen" (item 57), and "knife handle" (item 49). We wanted to bring these items to your attention to make sure they are probative items in the case that you want us to continue comparing references to.

3. Foreign mito profiles:

   The foreign mito profiles that we have include: "hair from ligature" (item 3Aa), "hair from ligature" (item 15), "hair from sheet" (item 18A/B), "hair from scout cap" (item 21B), "hair from tree stump" (item 23), and "hair from sheet" (item 27). Again, we wanted to make sure these are probative items in the case that you would like us to continue comparing references to.

4. Testing of the victim's pants and shoes

   In testing for biological material, would you like for Bode to test the pants and shoes for possible skin cells or would you like these items screened for possible fluids? Also, were any of these items recovered underwater? If so, touch DNA (possible skin cell) sampling will be difficult to recover. If any DNA results are obtained from these samples it is possible the DNA may not be from the original crime scene. For the shoes, we will photograph them and determine the brand of shoes if possible and have this information available to you for our June 8th meeting.

5. Testing of the Ligatures

   The majority of the testing you requested for these ligatures has previously been completed by Bode. We can go over these items in more depth on the 8th and determine if there is any further testing possible for these items.

6. Remaining hairs for possible STR/mito typing

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We have looked through our past reports/testing and have noted 11 hairs that are suitable for additional testing (STR and/or mtDNA). There are a couple of additional hairs that we are looking into more. For most of these hairs we would need permission to consume.

7. TAT

For the covert reference samples submitted for mito testing, we can complete this testing in 4 weeks. For the items listed above, due to the bulk of the samples and the different types of testing, we would need 8-10 weeks to complete the testing.

8. Pricing

Due to the volume of the requested testing we will be writing up a quote and will need to arrange pre-payment for some of the testing.

Please let us know if you have any questions. Thanks!

Emily Herren
Forensic Biology Analyst/DNA Analyst
Bode Technology
10430 Furnace Rd, Suite 107
Lorton, VA 22079

Emily.Herren@bodetech.com
Phone (703)646-9801

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8BH 6/9/11

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Emily Herren

From: Braga, Stephen [Stephen.Braga@ropesgray.com]
Sent: Tuesday, May 31, 2011 10:58 AM
To: Amy Jeanguenat; Emily Herren
Subject: Re: Case # 2S04-114

Amy and Emily,

A clarification and a couple of additions to the special instructions below:

- With respect to the ligatures, the white shoe laces do not need to be measured, only the black ones. As a result, the knots on the white shoe laces do not need to be completely untied for measuring, only the black ones do. On the white shoe laces, you can still listen the knots to test for DNA within.

- with respect to the blue wallet in E-07, please focus on "touch" DNA

Thanks,

Steve

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From: Braga, Stephen
Sent: Thursday, May 26, 2011 05:51 PM
To: 'Amy Jeanguenat' <Amy.Jeanguenat@bodetech.com>; 'Emily Herren' <Emily.Herren@bodetech.com>
Subject: Case # 2S04-114

Amy and Emily,

Per my conversation with Amy yesterday, I write to address a few special points of note with regard to certain of the items I have now had delivered to Bode for testing.

- You have received the victims' pants from the West Memphis Police Department ("WMPD"). These should be identified as E-03, E-07 and E-013. These pants all need to be tested for any biological material. In addition, two of these pairs of pants should already be turned inside out,

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as they were found by the police; on those "inside out" pants, we would like you to pay particular attention to testing the waistbands of the pants where they might have been grabbed and pulled down from. With respect to the pair of pants which is not "inside out," we would like you to pay particular attention to testing the bottoms of the legs where those pants might have been grabbed and pulled down from.

- You have received the victims' tennis shoes/sneakers from the WMPD. These should be identified as E-04, E-06, E-08, E-011, E-012 and E-014. It appears that E-04 and E-011 go together as a pair, as do E-06 and E-08, and as do E-012 and E-014. The first thing we need to do is identify what kinds of sneakers these are, if possible. The second thing we need to do is to photograph the tongues and the soles of the sneakers. The third thing we need to do is remove the lace remaining in E-06, measure its length and determine, if possible, whether it has been cut in half or whether it remains intact and uncut. The fourth thing we need to do is to test that lace for any biological material. The fifth thing we need to do is to test all of the sneakers for any biological material; with respect to all of the sneakers without laces (everyone except E-06), we would like you to pay particular attention to testing the uppermost eyelet areas where the laces might have been grabbed and pulled out of.

- You have received the ligatures from the Arkansas State Crime Lab ("ASCL"). These should be identified as FP6-5716 (ligatures Moore), FP6-5717 (ligatures Branch) and FP6-5718 (ligatures Byers). There should be two ligatures under each number. The first thing we need to do is identify the colors of the ligatures (e.g, black, white or black and white). The second thing we need to do is to photograph the knots in the ligatures. The third thing we need to do is to loosen the knots to test for any biological material within the knots. The fourth thing we need to do is to untie the knots and measure the full lengths of each of the ligatures and determine, if possible, whether any of them have been cut in half or whether they all remain intact and uncut. The fifth thing we need to do is to test the remainder of the ligatures for any biological material.

- Finally, for now (although I'm sure there will be additional special instructions to come in the weeks ahead), we are focusing at present on trying to identify the sources of the various as yet unidentified hairs recovered from the crime scene and the victims. As a result, it seems that mitochondrial analysis will be our best opportunity to try to match those hairs, so wherever possible we would now like you to perform that analysis. For example, in the past you recommended that mitochondrial analysis be attempted to test 93-05717 FP6 (hair from the ligature from S Branch), we would now like that to be done. Also, in the past, there were a number of hairs which were not tested for various reasons, we now want every hair to be tested to the extent that they can be. So at bottom, at this juncture, anything that has not previously been tested should be tested and anything that was previously tested in only a limited capacity (i.e. STR) should now be tested in any additionally available capacities as well (i.e. mtDNA) if in your judgment it makes sense to try to do so.

Of course, at the end of the day, we are looking to your expertise to guide us toward the most reliable and accurate manner of testing possible. So if you have any questions about any of the points above, or have any other alternative approaches to recommend, please do not hesitate to contact me directly.

Lastly, as suggested by Amy yesterday, I think it would be a good idea for me to meet you at Bode to view the various items of evidence in your possession in one of your conference rooms, and to review the outstanding testing issues with you. Would 10:00 AM on June 8 work?

Thanks,

Steve

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2504-114 EBN 69111

Phone Contact Form

Bode Technology

Case Number/Subject: 2S04-114 Date: 05-25-11

____ Incoming call

✓ Outgoing call

Person calling	Organization	Phone Number
Amy Jeanguenat	Bode	703-646-9745

Receiver of call	Organization	Phone Number
Stephen Braga	Ropes and Gray LLP	202-508-4655

Notes:

I called Stephen to discuss the report issued May 23, 2011. I clarified that samples 2S04-114-05D1-NSF, -10E2, and 26 were not really suitable for comparison due to the limited amount of data available. I also wanted to verify if -49, -57, and -74 were probative to continue to compare reference samples to. Stephen will email if the samples continue to be important.

We also discussed the difference between STR and mtDNA typing. Stephen would like several of the "covert" reference samples submitted tested for mtDNA to compare mtDNA profiles of hair samples. I explained items such as a fork and soda can may produce mtDNA mixtures but that we could attempt the testing if he wished.

We also discussed the past ligature testing and Stephen would like several of the ligatures measured.

I recommended Stephen summarize any comments and questions into an email so that it was documented. I also recommend he set up a time to come to Bode to discuss testing in this case.

AMJ 061411

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Amy Jeanguenat

From: Braga, Stephen [Stephen.Braga@ropesgray.com]
Sent: Wednesday, May 25, 2011 3:51 PM
To: Emily Herren
Cc: Amy Jeanguenat
Subject: Expedited Bode Sample 2SO4-114-81
Follow Up Flag: Follow up
Flag Status: Red

Emily,

Per my conversation with Amy a short while ago, can you process this Starbucks Coffee Cup sample to determine if it is suitable for mitochondrial DNA testing and let me know?

Thanks,

Steve

Stephen L. Braga
ROPES & GRAY LLP
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www.ropesgray.com

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AM3064411

Amy Jeanguenat

From: Braga, Stephen [Stephen.Braga@ropesgray.com]
Sent: Tuesday, May 24, 2011 3:07 PM
To: Amy Jeanguenat
Subject: RE:

Okay. I have a couple of additional questions as well. How about tomorrow at 3?

Steve

Stephen L. Braga
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Washington, DC 20005-3948
Stephen.Braga@ropesgray.com
www.ropesgray.com

From: Amy Jeanguenat [mailto:Amy.Jeanguenat@bodetech.com]
Sent: Tuesday, May 24, 2011 3:04 PM
To: Braga, Stephen; Emily Herren
Cc: Teresa Vreeland
Subject: RE:

Hi Steve:

I am not available today but I am flexible the rest of the week if we can set up a different time. I just want to explain the value of the previous data.

-Amy

Amy Jeanguenat, MFS
Technical Leader, Forensic Operations
Bode Technology
10430 Furnace Road, Suite 107
(t):703-646-9745
(f):703-646-9741
www.bodetech.com

From: Braga, Stephen [mailto:Stephen.Braga@ropesgray.com]
Sent: Tuesday, May 24, 2011 2:34 PM
To: Emily Herren
Cc: Teresa Vreeland; Amy Jeanguenat
Subject: RE:

Amy,

Could you give me a call at 5 PM today to discuss?

Thanks,

Steve

2504-114
AM2061411

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Stephen L. Braga
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From: Emily Herren [mailto:Emily.Herren@bodetech.com]
Sent: Monday, May 23, 2011 6:05 PM
To: Braga, Stephen
Cc: Teresa Vreeland; Amy Jeanguenat
Subject:

Hi Mr. Braga,

Please find attached an electronic copy of the cover letter and report for 2S04-114-81. I do not have a copy of the invoice at this time, but will be sending it to you tomorrow along with the hard copy of the report and cover letter. A statement was made in the report regarding samples -05D1-NSF (penile swab from Moore), -10E2 (penile swab from Branch), and -26-EF (cutting from jeans) that no statements regarding inclusion or exclusion will be made for these items based on the limited amount of data. Amy is willing to discuss the data with you if you would like further explanation on this.

Let us know if you have any questions. Thanks so much,

Emily Herren
Forensic Biology Analyst/DNA Analyst
Bode Technology
10430 Furnace Rd, Suite 107
Lorton, VA 22079

Emily.Herren@bodetech.com
Phone (703)646-9801

2S04-114
AMJ061411

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Emily Herren

From: Braga, Stephen [Stephen.Braga@ropesgray.com]
Sent: Thursday, May 19, 2011 11:29 AM
To: Angela Williamson; Emily Herren
Subject: Case 2SO4-114

Angela and Emily,

Just a couple of quick general guides to the additional testing you are doing, and will be asked to do, with respect to various items of evidence in this case.

1. I realize that a number of the items of evidence I've directed to Bode have been to Bode before for testing. With respect to these items previously at Bode, I am interested in having you (a) test any additional parts of the sample not previously tested (for example, all hairs instead of just one), and/or (b) apply whatever enhanced testing techniques not previously performed on this sample that you would now recommend (for example, mito testing in addition to STR).

2. There are also new items at and coming to Bode. With respect to the new items, I have tried to indicate what I am looking to be done on the case submission forms. But if you would recommend any different or additional tests or follow-ups with respect to any of these new items, just let me know and I'll decide promptly.

3. Finally, in either category if there is any testing beyond your capabilities at Bode that you believe should be performed on any of this evidence, please let me know that as well. At bottom, we are after the best and most comprehensive analysis we can obtain right now.

Thanks,

Steve

Stephen L. Braga
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2SO4-114 EBN 619111

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Emily Herren

From: Braga, Stephen [Stephen.Braga@ropesgray.com]
Sent: Wednesday, May 18, 2011 8:20 AM
To: Emily Herren
Cc: Teresa Vreeland
Subject: Re: 2S04-114

Perfect. Thank you, and please proceed ahead as indicated.

Stephen L. Braga
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Washington, DC 20005-3948
Stephen.Braga@ropesgray.com
www.ropesgray.com

From: Emily Herren [mailto:Emily.Herren@bodetech.com]
Sent: Wednesday, May 18, 2011 08:14 AM
To: Braga, Stephen
Cc: Teresa Vreeland <Teresa.Vreeland@bodetech.com>
Subject: RE: 2S04-114

Hi Steve,

I forgot the re-submissions. I was only looking at the new items. Yes we have received the items from the state crime lab and have the submission form for them. Sorry about that!

So add this to the list below:

Bode Item #	Item	case submis recel
1	Left hand nail scrapings from M. Moore	yes
2	Right hand nail scrapings from M. Moore	yes
6	Left hand nail scrapings from S. Branch	yes
7	Right hand nail scrapings from S. Branch	yes
11	Hair found on C. Byers's body	yes
12	Left hand nail scrapings from C. Byers	yes
13	Right hand nail scrapings from C. Byers	yes
14	Hair from lower body of C. Byers	yes
33	Ligature between L-leg and L-wrist and R-wrist [Byers]	yes
34	Ligature between ankles and wrist, L-leg, L-wrist, R-leg, R-wrist [Branch]	yes
35	Ligature, L-leg, L-wrist, R-leg, R-wrist [Moore]	yes

~Emily

From: Braga, Stephen [mailto:Stephen.Braga@ropesgray.com]
Sent: Tuesday, May 17, 2011 4:32 PM
To: Emily Herren
Subject: Re: 2S04-114

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2S04-114 EMH 5/18/11

Emily,

Thanks, this looks right as far as it goes with one exception. The T Hobbs head hair sample should be tested to the extent it will aid in expanding or verifying any aspects of your existing T Hobbs DNA profile. This is indicated on the 5/13 Case Submission Form I just pdf'ed to you a moment ago.

Also, there are no entries on your list for the other items on this Case Submission Form which were supposed to be sent to you by the Arkansas State Crime Lab, such as the nail scrapings, ligatures and other items listed thereon. Have you received those yet?

Steve

Stephen L. Braga
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From: Emily Herren [mailto:Emily.Herren@bodetech.com]
Sent: Tuesday, May 17, 2011 03:22 PM
To: Braga, Stephen
Cc: Teresa Vreeland <Teresa.Vreeland@bodetech.com>
Subject: 2S04-114

Hi

Just to re-cap:

I received the case submission form for the Starbucks cup and I have begun testing that item. We will get the results to you by 5/23. The other items we have in house:

Bode Item #	Item	case submission form received
76	Fork from George Taylor's lunch	yes
77	pair of gloves	no
78	pair of gloves	no
79	large Corona beer bottle	no
80	off brand root beer can	no
81	Starbucks cup	Yes: rush
82	plastic beverage container	no
83	Wooden slats	yes
84	Rope	yes
85	Hook	yes
86	Doral Cigarette Pack	yes
87	Sheet	yes

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2S04-114 SGH 5/18/11

88	Sheet	yes
89	Black Tennis Shoe and Lace	yes
90	Hair of T. Hobbs	no
91	Known Head Hair Samples [James Martin]	no
92	Known Head Hair Samples [Roy Todd Moore]	no
93	Known Head Hair Samples [Melissa Byers]	no
94	Known Head Hair Samples [Steve Branch]	no
95	Known Head Hair Samples [Pamela Hobbs]	no
96	Known Head Hair Samples [Diana Moore]	no
not assigned	razor	no
not assigned	razor	no

For the items I have in yellow, we have all of the paperwork and are ready to being testing. We will hold off on the other items that do not have a case submission form until we hear from you. Let me know if this all sounds correct to you or if you have any questions.

Thanks,

Emily Herren
Forensic Biology Analyst/DNA Analyst
Bode Technology
10430 Furnace Rd, Suite 107
Lorton, VA 22079

Emily.Herren@bodetech.com
Phone (703)646-9801

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2804-114 964 518111

Emily Herren

From: Emily Herren
Sent: Monday, May 23, 2011 2:54 PM
To: 'Braga, Stephen'
Subject: Case Submission Form

Hi Mr. Braga,

I have received the case submission form that you faxed me this morning. And was the case submission form you are referring to from 5/17 the one for the Starbucks cup? If it is, we also received that one.

Thanks

Emily Herren
Forensic Biology Analyst/DNA Analyst
Bode Technology
10430 Furnace Rd, Suite 107
Lorton, VA 22079

Emily.Herren@bodetech.com
Phone (703)646-9801

2504-114 EVSH 6/14/11

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CHAIN OF CUSTODY

The Bode Technology Group, Inc.

Case Number: 2S04-114-97 to 111 **Agency ID Number:**

Submitting Agency Information

Name Ropes & Gray LLP
Address 700 12th Street, NW
Suite 900
Washington, DC 20005
Contact/Attorney Stephen L. Braga
Additional Authorized Contacts

Victim
Suspect

Phone Number (202) 508-4655
Fax Number (202) 383-9821
stephen.braga@ropesgray.com

Custody Record

Method of Delivery to Bode Fed Ex
Condition Good (Sealed)
Date Delivered 5/24/2011 Time: 10:07 AM
Delivered By Fed Ex
TRK # 8726 4096 5194
Delivered To Ben Bever
Signature

Date	Item No.	Released by (print)	Received by (print)	Purpose of change:
5/24/2011 Time 10:10 AM	97 to 111	Ben Bever (sign)	Maggie Redmond, for EMS (sign) M. Redmond	Accessioning/Storage
6/3/11 Time 8:14am	97 to 111	Maggie Redmond, for EMS (sign) M. Redmond	Emily Herren (sign) Emily Herren	analysis
6/9/11 Time 10:15am	100, 103, 106, 107, 109	Emily Herren (sign) Emily Herren	Maggie Redmond, for EMS (sign) M. Redmond	storage
Date Time	Item No.	Released by (print) (sign)	Received by (print) (sign)	Purpose of change:
Date Time	Item No.	Released by (print) (sign)	Sent via: Tracking No	Purpose of change: FINAL DISPOSITION

Evidence Inventory

Bode Case #	Agency Item ID	Agency Description
2S04-114-97	E-01	Labeled as "Blue Boy Scout Shirt"
2S04-114-98	E-02	Labeled as "White Polka Dot Shirt"
2S04-114-99	E-03	Labeled as "Blue Pants"
2S04-114-100	E-04	Labeled as "White Tennis Shoe"
2S04-114-101	E-05	Labeled as "Cub Scout Cap"
2S04-114-102	E-07	Labeled as "Blue jeans/blue wallet"
2S04-114-103	E-08	Labeled as "Black/Purple Tennis Shoe"
2S04-114-104	E-09	Labeled as "Striped Shirt"
2S04-114-105	E-10	Labeled as "Child's underwear"
2S04-114-106	E-11	Labeled as "White Tennis Shoe"
2S04-114-107	E-12	Labeled as "Black Tennis Shoe/Sock"

Note: Evidence sent by West Memphis Police Department

Storage of Evidence: Secure evidence room

2S04-114 EVH 6/9/11

Evidence Inventory Continued

Bode Number	Agency Item ID	Agency Description
2S04-114-108	E-13	Labeled as "Blue jeans"
2S04-114-109	E-14	Labeled as "Black Tennis Shoe"
2S04-114-110	E-01	Pair Blue Jeans/striped shirt
2S04-114-111	E-01	Pair Pants/Pull over shirt

2S04-114 EBIN 6/9/11

Print page | Close

FedEx

Detailed Results

Tracking no.: 872640965194 Select time format: **12H**

Delivered

Delivered
Signed for by: B.BEVER

Shipment Dates	Destination
Ship date May 23, 2011	Signature Proof of Delivery
Delivery date May 24, 2011 10:07 AM	

Shipment Options

Hold at FedEx Location
Hold at FedEx Location service is not available for this shipment.

Shipment Facts

Service type	Priority Overnight	Delivered to	Shipping/Receiving
Weight	19.0 lbs/8.6 kg		

Shipment Travel History

Select time zone: Local Scan Time

All shipment travel activity is displayed in local time for the location

Date/Time	Activity	Location	Details
May 24, 2011 10:07 AM	Delivered		
May 24, 2011 7:23 AM	On FedEx vehicle for delivery	ALEXANDRIA, VA	
May 24, 2011 7:18 AM	At local FedEx facility	ALEXANDRIA, VA	
May 24, 2011 5:26 AM	At dest sort facility	DULLES, VA	
May 24, 2011 2:47 AM	Departed FedEx location	MEMPHIS, TN	
May 23, 2011 10:42 PM	Arrived at FedEx location	MEMPHIS, TN	
May 23, 2011 10:15 PM	Left FedEx origin facility	CORDOVA, TN	
May 23, 2011 1:08 PM	Picked up	CORDOVA, TN	

2504-114 EBH WR111

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BOSTON HARBOR HOTEL

AT ROWES WHARF

To: EMILY HERREN	**From:** STEPHEN L. BRAGA Business Center / ROPES + GRAY
Fax: 703-646-9742	**Pages:** 4
Phone: 703-646-9740	**Date:** 5/22/11
Re: CASE # 2504-114	**Fax:** 1 617 330 9450
	Phone: 1 617 439 7000 Ext 4500

Emily,

Can you please e-mail me Monday to confirm receipt of this Case Submission Form, as well as the one I sent on 5/17? Thanks,

Steve

PS - The evidence covered by this new form should be arriving at Bode by Federal Express on Monday.

2504-114 EBN 5123111 108

Case Submission Form

Bode Technology
Part of ChoicePoint Group

Bode Case No (To be filled out by Bode): 2504-114

The Bode Technology Group
10430 Furnace Rd. Suite 107
Lorton, VA 22079
Phone: 703-646-9740
Fax: 703-646-9742
www.bodetech.com

In order to process your DNA casework efficiently, this form must be filled out and sent along with the evidence. Prior to submitting a case, please call Customer Services 866-BODE-4-ID (866-263-3443).

Submitting Agency: ROPES + GRAY LLP Date: 5/22/11

Name: STEPHEN L. BRAGA Phone Number: 202-508-4655

Select the type of Submission:

☐ Initial Evidence Submission ☒ Additional Evidence Submission (Please fill in Bode Case number at the top of the page)

Select the type of Service:

☒ Standard Service - Our standard service provides complete analysis of your samples when rush services are not required.

☐ Rush Service - This is the fastest service offered. Please contact Customer Service for turnaround time (Additional charge per sample).

☐ 5 business days ☐ 10 business days ☐ 15 business days

Promotion Code: _____

Authorized Point(s) of Contact:

Name:	STEPHEN L. BRAGA	Name:	
Agency:	ROPES + GRAY LLP	Agency:	
Title:	PARTNER	Title:	
Phone Number:	202-508-4655	Phone Number:	
Fax Number:	202-383-9821	Fax Number:	
Cell Phone/Pager:	617-304-7124	Cell Phone/Pager:	
Email Address:	stephen.braga@ropesgray.com	Email Address:	

Mailing Address (Where The Report Should be Sent):

Name:	SAME AS ABOVE
Agency:	
Address:	
City/State/Zip:	
Phone Number:	
Fax Number:	
Email Address:	

Billing Address:

Name:	SAME AS ABOVE
Agency:	
Address:	
City/State/Zip:	
Phone Number:	
Fax Number:	
Email Address:	
Purchase Order #	

Evidence Return Address:

Name:	
Agency:	
Address:	
City/State/Zip:	
Phone Number:	
Email Address:	

Select type of Evidence Return:

☐ Evidence should be returned following delivery of the case report.

☒ Evidence should be returned upon request from the Authorized Point of Contact(s).

2504-114 EBN 5/23/11 107

05/22/2011 08:33 6173303450 BOSTON HARBOR HOTEL PAGE 02/04

Case Submission Form

Bode Technology
Part of GlobalOptions Group

Bode Case No (To be filled out by Bode): 2504 – 114

In order to process your DNA casework efficiently, this form must be filled out and sent along with the evidence. Prior to submitting a case, please call Customer Services 866-BODE-4-ID (866-263-3443).

Submitting Agency Reference/Case No: ROPES + GRAY LLP

The Bode Technology Group
10430 Furnace Rd. Suite 107
Lorton, VA 22079
Phone: 703-646-9740
Fax: 703-646-9742
www.bodetech.com

Case Background:

These are 13 items of original case evidence from the West Memphis Police Department. They need to be thoroughly examined for biological material, which – if any exists – should then be DNA tested and compared to all profiles in the case. Use your testing discretion.

Specify platform (AB/Hitachi), kit (Co/Pro+, ID, PP16, PP16BIO, PPY, YFiler, miniFiler), and software (GS/GT, GMID) preferences. If no preference, check box for Analyst Discretion

☒ Analyst Discretion

List Evidence Items* (If needed, use Page 3 to include additional items or case information) Note: Descriptions may be reflected in Chain of Custody and Report	Please check the appropriate boxes for Pre-Screening and DNA Testing Requested	Permission to Consume (if necessary)
E-01 (Blue Boy Scout Shirt)	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
E-02 (White Polka Dot Shirt)	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
E-03 (Blue Pants)	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
E-04 (White Tennis Shoe)	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
E-05 (Cub Scout Cap)	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No

☒ Check if additional evidence items or testing instructions are listed on Page 3

* When submitting extracts, the reagent blanks must also be included. Please be sure to include the following information: Total Human Quant, Total Y Quant, Volume Remaining, and Extraction Control Names associated with samples.

If STR data is obtained, will CODIS entry or search be requested? ☐ Yes ☒ No

(NOTE: Private Forensic DNA laboratories do not have access to enter or search samples in CODIS. If "yes" is marked, Bode will contact the appropriate CODIS laboratory Technical Leader prior to initiation of this case. Please be aware that this may increase the turnaround time.

I hereby certify that the information provided on this Case Submission Form is accurate to the best of my knowledge. I understand that I will be charged for services according to the fee schedule that I have received.

Print Name STEPHEN L. BRAGA Signature

Please submit this completed form with the evidence. All evidence items must be shipped using a traceable carrier (i.e. FedEx, UPS, DHL, Priority Mail). Overnight shipping is recommended. The evidence should be shipped to:

ATTN: EVIDENCE DEPARTMENT
Bode Technology
10430 Furnace Rd, Suite 107
Lorton, VA 22079

2504-114 EVSN 5123111

05/22/2011 08:33 6173303450 BOSTON HARBOR HOTEL PAGE 03/04

Case Submission Form

Bode Technology
Part of GlobalOptions Group

Bode Case No (To be filled out by Bode): 2504 - 114

In order to process your DNA casework efficiently, this form must be filled out and sent along with the evidence. Prior to submitting a case, please call Customer Services 866-BODE-4-ID (866-263-3443).

The Bode Technology Group
10430 Furnace Rd. Suite 107
Lorton, VA 22079
Phone: 703-646-9740
Fax: 703-646-9742
www.bodetech.com

Additional Evidence Items* Note: Descriptions may be reflected in Chain of Custody and Report	Please check the appropriate boxes for Pre-Screening and DNA Testing Requested	Permission to Consume (if necessary)
E-07 (Blue jeans / blue wallet)	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
E-08 (Black / Purple Tennis Shoe)	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
E-09 (Striped shirt)	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
E-10 (Child's underwear)	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
E-11 (White Tennis Shoe)	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
E-12 (Black Tennis Shoe / Sock)	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
E-13 (Blue jeans)	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
E-14 (Black Tennis Shoe)	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No

* When submitting extracts, the reagent blanks must also be included. Please be sure to include the following information: Total Human Quant, Total Y Quant, Volume Remaining, and Extraction Control Names associated with samples.

Additional Case Information:

In addition to the DNA testing described above, I need to view the tennis shoes (E-04, E-08, E-11, E-12, E-14 - and E-06 previously submitted). Please contact me to discuss how best to accomodate such viewing - photographs might work. Thx Steve

2504-114 EBH 5/23/11

05/22/2011 08:33 6173303450 BOSTON HARBOR HOTEL PAGE 04/04

CHAIN OF CUSTODY

The Bode Technology Group, Inc.

Case Number: 2S04-114-84 to 89 **Agency ID Number:**

Submitting Agency Information

Name Ropes & Gray LLP
Address 700 12th Street, NW
Suite 900
Washington, DC 20005
Contact/Attorney Stephen L. Braga
Additional Authorized Contacts

Victim
Suspect

Phone Number (202) 508-4655
Fax Number (202) 383-9821
stephen.braga@ropesgray.com

Custody Record

Method of Delivery to Bode Fed Ex
Date Delivered 5/12/2011 Time: 10:23 AM
Delivered By Fed Ex
Delivered To Brandon Jones

Condition Good (Sealed)
TRK # 8625 4677 9605
Signature

Date	Item No.	Released by (print)	Received by (print)	Purpose of change:
5/12/2011 Time 10:27 AM	84 to 89	Brandon Jones (sign)	Rachel Wortman, for EMS (sign)	Accessioning/Storage
Date 6/8/11 Time 2:15pm	Item No. 84 to 89	Released by (print) Rachel Wortman, for EMS (sign)	Received by (print) Emily Herren (sign) Emily Herren	Purpose of change: Analysis
Date 6/9/11 Time 10:15am	Item No. 89	Released by (print) Emily Herren (sign) Emily Herren	Received by (print) Maggie Redmond, for EMS (sign) M. Redmond	Purpose of change: Storage
Date	Item No.	Released by (print)	Received by (print)	Purpose of change:
Time		(sign)	(sign)	
Date	Item No.	Released by (print)	Sent via:	Purpose of change:
Time		(sign)	Tracking No.	FINAL DISPOSITION

Evidence Inventory

Bode Case #	Agency Item ID	Agency Description
2S04-114-84	E-019	Labeled as "Rope"
2S04-114-85	E-130	Labeled as "Hook"
2S04-114-86	E-130	Labeled as "Doral Cigarette Pack"
2S04-114-87		Labeled as "Sheet"
2S04-114-88		Labeled as "Sheet"
2S04-114-89	E-006	Labeled as "Black Tennis Shoe and Lace"

Note: Evidence sent by the West Memphis Police Department
626 W. Broadway
West Memphis, AR 72301

Storage of Evidence: Secure evidence room

2S04-114 EIBN 619111

Print page | Close

FedEx

Detailed Results

This shipment is part of a multiple-piece shipment

Master tracking no. 862546779605

Total pieces 2
Total shipment weight 14.0 lbs/6.4 kg

View all associated shipments

Tracking no.: 862546779605 Select time format: 12H

Delivered

Delivered
Signed for by: B.JONES

Shipment Dates

Ship date May 11, 2011
Delivery date May 12, 2011 10:23 AM

Destination

Signature Proof of Delivery

Shipment Options

Hold at FedEx Location
Hold at FedEx Location service is not available for this shipment.

Shipment Facts

Service type	Priority Overnight	Delivered to	Shipping/Receiving
Weight	7.0 lbs/3.2 kg		
Total Shipment Weight	14.0 lbs/6.4 kg		

Shipment Travel History

Select time zone: Local Scan Time

All shipment travel activity is displayed in local time for the location

Date/Time	Activity	Location	Details
May 12, 2011 10:23 AM	Delivered		
May 12, 2011 7:54 AM	On FedEx vehicle for delivery	ALEXANDRIA, VA	
May 12, 2011 7:18 AM	At local FedEx facility	ALEXANDRIA, VA	
May 12, 2011 5:19 AM	At dest sort facility	DULLES, VA	
May 12, 2011 2:41 AM	Departed FedEx location	MEMPHIS, TN	
May 11, 2011 10:50 PM	Arrived at FedEx location	MEMPHIS, TN	
May 11, 2011 10:25 PM	Left FedEx origin facility	CORDOVA, TN	
May 11, 2011 11:30 AM	Picked up	CORDOVA, TN	

2504-114 ERH 6/10/11

103

Case Submission Form

Bode Technology
Part of GlobalOptions Group

Bode Case No (To be filled out by Bode): 2504 – 114

In order to process your DNA casework efficiently, this form must be filled out and sent along with the evidence. Prior to submitting a case, please call Customer Services 866-BODE-4-ID (866-263-3443).

The Bode Technology Group
10430 Furnace Rd, Suite 107
Lorton, VA 22079
Phone: 703-646-9740
Fax: 703-646-9742
www.bodetech.com

Submitting Agency: Ropes + Gray LLP Date: 5/13/11

Name: Stephen L. Braga Phone Number: 202-508-4655

Select the type of Submission:

☐ Initial Evidence Submission ☒ Additional Evidence Submission (Please fill in Bode Case number at the top of the page)

Select the type of Service:

☒ Standard Service - Our standard service provides complete analysis of your samples when rush services are not required.

☐ Rush Service - This is the fastest service offered. Please contact Customer Service for turnaround time (Additional charge per sample).

Promotion Code: _____

☐ 5 business days ☐ 10 business days ☐ 15 business days

Authorized Point(s) of Contact:

Name:	STEPHEN L. BRAGA	Name:	
Agency:	ROPES + GRAY LLP	Agency:	
Title:	PARTNER	Title:	
Phone Number:	202-508-4655	Phone Number:	
Fax Number:	202-383-9821	Fax Number:	
Cell Phone/Pager:	617-304-7124	Cell Phone/Pager:	
Email Address:	stephen.braga@ropesgray.com	Email Address:	

Mailing Address (Where The Report Should be Sent):

Name:	Same as above
Agency:	
Address:	
City/State/Zip:	
Phone Number:	
Fax Number:	
Email Address:	

Billing Address:

Name:	Same as above
Agency:	
Address:	
City/State/Zip:	
Phone Number:	
Fax Number:	
Email Address:	
Purchase Order #	

Evidence Return Address:

Name:	
Agency:	
Address:	
City/State/Zip:	
Phone Number:	
Email Address:	

Select type of Evidence Return:

☐ Evidence should be returned following delivery of the case report.

☒ Evidence should be returned upon request from the Authorized Point of Contact(s).

2504-114 EBN 5113111 102

Case Submission Form

Bode Technology
Part of GlobalOptions Group

Bode Case No (To be filled out by Bode): 2504 – 114

In order to process your DNA casework efficiently, this form must be filled out and sent along with the evidence. Prior to submitting a case, please call Customer Services 866-BODE-4-ID (866-263-3443).

Submitting Agency Reference/Case No: _____

The Bode Technology Group
10430 Furnace Rd. Suite 107
Lorton, VA 22079
Phone: 703-646-9740
Fax: 703-646-9742
www.bodetech.com

Case Background:

The six items listed below from the West Memphis Police Department need to be DNA-tested and compared to all existing profiles in this case. Use your discretion to perform best tests available.

Specify platform (AB/Hitachi), kit (Co/Pro+, ID, PP16, PP16BIO, PPY, YFiler, miniFiler), and software (GS/GT, GMID) preferences. If no preference, check box for Analyst Discretion

☒ Analyst Discretion

List Evidence Items* (If needed, use Page 3 to include additional items or case information) Note: Descriptions may be reflected in Chain of Custody and Report	Please check the appropriate boxes for Pre-Screening and DNA Testing Requested	Permission to Consume (If necessary)
E-019 Rope + Hook	Pre-Screen: ☒ Blood ☐ Semen ☒ Saliva ☒ Hair DNA Testing: ☒ STR ☒ miniSTR ☐ Y-STR ☐ mtDNA	☒ Yes ☐ No
E-130 Doral Cigarette Pack	Pre-Screen: ☒ Blood ☐ Semen ☒ Saliva ☒ Hair DNA Testing: ☒ STR ☒ miniSTR ☐ Y-STR ☐ mtDNA	☒ Yes ☐ No
E-132 Wooden slats	Pre-Screen: ☒ Blood ☐ Semen ☒ Saliva ☒ Hair DNA Testing: ☒ STR ☒ miniSTR ☐ Y-STR ☐ mtDNA	☒ Yes ☐ No
Sheet from Box 9	Pre-Screen: ☒ Blood ☐ Semen ☒ Saliva ☒ Hair DNA Testing: ☒ STR ☒ miniSTR ☐ Y-STR ☐ mtDNA	☒ Yes ☐ No
Sheet from Box D	Pre-Screen: ☒ Blood ☐ Semen ☒ Saliva ☒ Hair DNA Testing: ☒ STR ☒ miniSTR ☐ Y-STR ☐ mtDNA	☒ Yes ☐ No

☒ Check if additional evidence items or testing instructions are listed on Page 3

* When submitting extracts, the reagent blanks must also be included. Please be sure to include the following information: Total Human Quant, Total Y Quant, Volume Remaining, and Extraction Control Names associated with samples.

If STR data is obtained, will CODIS entry or search be requested? ☐ Yes ☒ No

(NOTE: Private Forensic DNA laboratories do not have access to enter or search samples in CODIS. If "yes" is marked, Bode will contact the appropriate CODIS laboratory Technical Leader prior to initiation of this case. Please be aware that this may increase the turnaround time.

I hereby certify that the information provided on this Case Submission Form is accurate to the best of my knowledge. I understand that I will be charged for services according to the fee schedule that I have received.

Print Name STEPHEN L. BRAGA Signature _____

Please submit this completed form with the evidence. All evidence items must be shipped using a traceable carrier (i.e. FedEx, UPS, DHL, Priority Mail). Overnight shipping is recommended. The evidence should be shipped to:

ATTN: EVIDENCE DEPARTMENT
Bode Technology
10430 Furnace Rd. Suite 107
Lorton, VA 22079

2504-114 EBN 5/13/11

101

Case Submission Form

Bode Technology
Part of GlobalOptions Group

Bode Case No (To be filled out by Bode): 2504 – 114

In order to process your DNA casework efficiently, this form must be filled out and sent along with the evidence. Prior to submitting a case, please call Customer Services 866-BODE-4-ID (866-263-3443).

The Bode Technology Group
10430 Furnace Rd. Suite 107
Lorton, VA 22079
Phone: 703-646-9740
Fax: 703-646-9742
www.bodetech.com

Additional Evidence Items* Note: Descriptions may be reflected in Chain of Custody and Report	Please check the appropriate boxes for Pre-Screening and DNA Testing Requested	Permission to Consume (If necessary)
* E-006 Black Tennis Shoe + Lace	Pre-Screen: ☒ Blood ☐ Semen ☒ Saliva ☒ Hair DNA Testing: ☒ STR ☒ miniSTR ☐ Y-STR ☐ mtDNA	☒ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No

* When submitting extracts, the reagent blanks must also be included. Please be sure to include the following information: Total Human Quant, Total Y Quant, Volume Remaining, and Extraction Control Names associated with samples.

Additional Case Information: SPECIAL INSTRUCTIONS

(1) Both the Black and Purple Tennis Shoe, and the Shoe Lace, Need to Be DNA-Tested

(2) When you remove the shoe lace for testing, can you also (a) measure the length of the shoe lace and (b) examine whether either end of the lace appears to have been cut with a knife.

2504-114 EBH 5/13/11

100

CHAIN OF CUSTODY

The Bode Technology Group, Inc.

Case Number: 2S04-114-90 to 96 and Resubmissions **Agency ID Number:**

Submitting Agency Information

Name Ropes & Gray LLP
Address 700 12th Street, NW
Suite 900
Washington, DC 20005
Contact/Attorney Stephen L. Braga
Additional Authorized Contacts

Victim
Suspect

Phone Number (202) 508-4655
Fax Number (202) 383-9821
stephen.braga@ropesgray.com

Custody Record

Method of Delivery to Bode Fed Ex
Condition Good (Sealed)
Date Delivered 5/17/2011 Time: 9:55 AM
Delivered By Fed Ex
TRK # 8735 2032 4925
Delivered To Carmen Pozo
Signature Carmen Pozo

Date	Item No.	Released by (print)	Received by (print)	Purpose of change:
5/17/2011 Time 10:00 AM	01,02,06,07 11-14,33-35,90-96	Carmen Pozo (sign) Carmen Pozo	Rachel Wortman, for EMS (sign)	Accessioning/Storage
Date 5/18/11 Time 2:15 PM	Item No. 01, 02, 06, 07, 11-14	Released by (print) Rachel Wortman, for EMS (sign)	Received by (print) Emily Herren (sign) Emily Herren	Purpose of change: analysis
Date 6/8/11 Time 3:20pm	Item No. 33 + 34	Released by (print) Maggie Redmond, for EMS (sign) M. Redmond	Received by (print) Emily Herren (sign) Emily Herren	Purpose of change: analysis
Date 6/8/11 Time 3:45pm	Item No. 33 + 34	Released by (print) Emily Herren (sign) Emily Herren	Received by (print) Maggie Redmond, for EMS (sign) M. Redmond	Purpose of change: Storage
Date	Item No.	Released by (print)	Sent via	Purpose of change:
Time		(sign)	Tracking No.	FINAL DISPOSITION

Evidence Inventory

Bode Case #	Agency Item ID	Agency Description
2S04-114-01	93-05716 FP2	Labeled as "Left hand nail scrapings from M. Moore"
2S04-114-02	93-05716 FP3	Labeled as "Right hand nail scrapings from M. Moore"
2S04-114-06	93- 05717 FP3	Labeled as "Left hand nail scrapings from S. Branch"
2S04-114-07	93- 05717 FP4	Labeled as "Right hand nail scrapings from S. Branch"
2S04-114-11	93-05718 FP3	Labeled as "Hair found on C. Byers's body"
2S04-114-12	93-05718 FP4	Labeled as "Left hand nail scrapings from C. Byers"
2S04-114-13	93-05718 FP5	Labeled as "Right hand nail scrapings from C. Byers"
2S04-114-14	93-05718 FP6	Labeled as "Hair from lower body of C. Byers"
2S04-114-33	93-05718 FP8 L1	Labeled as "Ligature between L-leg and L-wrist and R-wrist [Byers]"
2S04-114-34	93-05717 FP6 L2	Labeled as "Ligature between ankles and wrist, L-leg, L-wrist, R-leg, R-wrist [Branch]"

Note: Evidence sent by Lisa Channell, State Crime Laboratory
3 Natural Resources Dr.
Little Rock, AR 72205

Storage of Evidence: Secure evidence room

2S04-114 EXH 6/9/11

Evidence Inventory Continued

Bode Number	Agency Item ID	Agency Description
2S04-114-35	93-05717 FP6 L3	Labeled as "Ligature, L-leg, L-wrist, R-leg, R-wrist [Moore]"
2S04-114-90	93-05716 E159	Labeled as "Hair of T. Hobbs"
2S04-114-91	93-05716 E56	Labeled as "Known Head Hair Samples [James Martin]"
2S04-114-92	93-05716 BR11a	Labeled as "Known Head Hair Samples [Roy Todd Moore]"
2S04-114-93	93-05716 E155	Labeled as "Known Head Hair Samples [Melissa Byers]"
2S04-114-94	93-05716 E156	Labeled as "Known Head Hair Samples [Steve Branch]"
2S04-114-95	93-05716 E162	Labeled as "Known Head Hair Samples [Pamela Hobbs]"
2S04-114-96	93-05716 E163	Labeled as "Known Head Hair Samples [Diana Moore]"

2S04-114 BRN 01911

CHAIN OF CUSTODY

The Bode Technology Group, Inc.

Case Number: 2504-114-90 to 96 and Resubmissions Agency Item ID Number:

Date / Time	Item No.	Released by (print) / (sign)	Received by (print) / (sign)	Purpose of change:
6/9/11 9:57am	35	Maggie Redmond, for EMS M. Redmond	Emily Herren Emily Herren	analysis
6/9/11 10:15am	35	Emily Herren Emily Herren	Maggie Redmond, for EMS M. Redmond	Storage

MR 6/9/11

2504-114 EBN 6/9/11

Print page | Close

FedEx

Detailed Results

Tracking no.: 873520324925 Select time format: 12H

Delivered

Delivered
Signed for by: C.POZOS

Shipment Dates

Ship date May 16, 2011
Delivery date May 17, 2011 9:55 AM

Destination

Signature Proof of Delivery

Shipment Options

Hold at FedEx Location
Hold at FedEx Location service is not available for this shipment.

Shipment Facts

Service type	Priority Overnight	Delivered to	Shipping/Receiving
Weight	4.0 lbs/1.8 kg		

Shipment Travel History

Select time zone: Local Scan Time

All shipment travel activity is displayed in local time for the location

Date/Time	Activity	Location	Details
May 17, 2011 9:55 AM	Delivered		
May 17, 2011 7:59 AM	On FedEx vehicle for delivery	ALEXANDRIA, VA	
May 17, 2011 7:52 AM	At local FedEx facility	ALEXANDRIA, VA	
May 17, 2011 6:16 AM	At dest sort facility	DULLES, VA	
May 17, 2011 3:39 AM	Departed FedEx location	MEMPHIS, TN	
May 17, 2011 12:58 AM	Arrived at FedEx location	MEMPHIS, TN	
May 16, 2011 10:00 PM	Left FedEx origin facility	LITTLE ROCK, AR	
May 16, 2011 11:28 AM	Picked up	LITTLE ROCK, AR	

2504-114 EBH 6K111

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Case Submission Form

Bode Technology
Part of GlobalOptions Group

Bode Case No (To be filled out by Bode): 2504-114

In order to process your DNA casework efficiently, this form must be filled out and sent along with the evidence. Prior to submitting a case, please call Customer Services 866-BODE-4-ID (866-263-3443).

The Bode Technology Group
10430 Furnace Rd. Suite 107
Lorton, VA 22079
Phone: 703-646-9740
Fax: 703-646-9742
www.bodetech.com

Submitting Agency: Ropes + Gray LLP Date: 5/13/11

Name: Stephen L. Braga Phone Number: 202-508-4655

Select the type of Submission:

☐ Initial Evidence Submission ☒ Additional Evidence Submission (Please fill in Bode Case number at the top of the page)

Select the type of Service:

☒ Standard Service - Our standard service provides complete analysis of your samples when rush services are not required.

☐ Rush Service - This is the fastest service offered. Please contact Customer Service for turnaround time (Additional charge per sample).

☐ 5 business days ☐ 10 business days ☐ 15 business days

Promotion Code: _____

Authorized Point(s) of Contact:

Name:	STEPHEN L. BRAGA	Name:	
Agency:	ROPES + GRAY LLP	Agency:	
Title:	PARTNER	Title:	
Phone Number:	202-508-4655	Phone Number:	
Fax Number:	202-383-9821	Fax Number:	
Cell Phone/Pager:	617-304-7124	Cell Phone/Pager:	
Email Address:	stephen.braga@ropesgray.com	Email Address:	

Mailing Address (Where The Report Should be Sent):

Name:	Same as above
Agency:	
Address:	
City/State/Zip:	
Phone Number:	
Fax Number:	
Email Address:	

Billing Address:

Name:	Same as above
Agency:	
Address:	
City/State/Zip:	
Phone Number:	
Fax Number:	
Email Address:	
Purchase Order #	

Evidence Return Address:

Name:	
Agency:	
Address:	
City/State/Zip:	
Phone Number:	
Email Address:	

Select type of Evidence Return:

☐ Evidence should be returned following delivery of the case report.

☒ Evidence should be returned upon request from the Authorized Point of Contact(s).

2504-114 EBN 6/9/11

95

Case Submission Form

Bode Technology
Part of GlobalOptions Group

Bode Case No (To be filled out by Bode): 2504-114

In order to process your DNA casework efficiently, this form must be filled out and sent along with the evidence. Prior to submitting a case, please call Customer Services 866-BODE-4-ID (866-263-3443).

Submitting Agency Reference/Case No: _____

The Bode Technology Group
10430 Furnace Rd. Suite 107
Lorton, VA 22079
Phone: 703-646-9740
Fax: 703-646-9742
www.bodetech.com

Case Background:

The items listed below from the Arkansas State Crime Laboratory need to be DNA-tested and compared to all existing profiles in this case. Use your discretion to perform best tests available, and let me know if any hair sample is too small to test.

Specify platform (AB/Hitachi), kit (Co/Pro+, ID, PP16, PP16BIO, PPY, YFiler, miniFiler), and software (GS/GT, GMID) preferences. If no preference, check box for Analyst Discretion

☒ Analyst Discretion

List Evidence Items* (If needed, use Page 3 to include additional items or case information) Note: Descriptions may be reflected in Chain of Custody and Report	Please check the appropriate boxes for Pre-Screening and DNA Testing Requested	Permission to Consume (if necessary)
MOORE FP2 + FP3 Nail Scrapings	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☒ STR ☒ miniSTR ☐ Y-STR ☐ mtDNA	☒ Yes ☐ No
BRANCH FP3 + FP4 Nail Scrapings	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☒ STR ☒ miniSTR ☐ Y-STR ☐ mtDNA	☒ Yes ☐ No
BYERS FP4 + FP5 Nail Scrapings	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☒ STR ☒ miniSTR ☐ Y-STR ☐ mtDNA	☒ Yes ☐ No
BYERS FP3 Hair found on body	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☒ Hair DNA Testing: ☒ STR ☒ miniSTR ☐ Y-STR ☐ mtDNA	☒ Yes ☐ No
BYERS FP6 Hair found on lower left leg	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☒ Hair DNA Testing: ☒ STR ☒ miniSTR ☐ Y-STR ☐ mtDNA	☒ Yes ☐ No

☒ Check if additional evidence items or testing instructions are listed on Page 3

* When submitting extracts, the reagent blanks must also be included. Please be sure to include the following information: Total Human Quant, Total Y Quant, Volume Remaining, and Extraction Control Names associated with samples.

If STR data is obtained, will CODIS entry or search be requested? ☐ Yes ☒ No

(NOTE: Private Forensic DNA laboratories do not have access to enter or search samples in CODIS. If "yes" is marked, Bode will contact the appropriate CODIS laboratory Technical Leader prior to initiation of this case. Please be aware that this may increase the turnaround time.

I hereby certify that the information provided on this Case Submission Form is accurate to the best of my knowledge. I understand that I will be charged for services according to the fee schedule that I have received.

Print Name STEPHEN L. BRAGA Signature _____

Please submit this completed form with the evidence. All evidence items must be shipped using a traceable carrier (i.e. FedEx, UPS, DHL, Priority Mail). Overnight shipping is recommended. The evidence should be shipped to:

ATTN: EVIDENCE DEPARTMENT
Bode Technology
10430 Furnace Rd. Suite 107
Lorton, VA 22079

2504-114 EBN 609111

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Case Submission Form

Bode Technology
Part of GlobalOptions Group

Bode Case No (To be filled out by Bode): 2504-114

In order to process your DNA casework efficiently, this form must be filled out and sent along with the evidence. Prior to submitting a case, please call Customer Services 866-BODE-4-ID (866-263-3443).

The Bode Technology Group
10430 Furnace Rd. Suite 107
Lorton, VA 22079
Phone: 703-646-9740
Fax: 703-646-9742
www.bodetech.com

Additional Evidence Items* Note: Descriptions may be reflected in Chain of Custody and Report	Please check the appropriate boxes for Pre-Screening and DNA Testing Requested	Permission to Consume (if necessary)
(1)* E-159, Hair of T. Hobbs	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☒ Hair DNA Testing: ☒ STR ☒ miniSTR ☐ Y-STR ☐ mtDNA	☒ Yes ☐ No
93-05716 FP-6 Ligatures Hair	Pre-Screen: ☒ Blood ☐ Semen ☒ Saliva ☒ Hair DNA Testing: ☒ STR ☒ miniSTR ☐ Y-STR ☐ mtDNA	☒ Yes ☐ No
(2) FP6-5717 Ligatures	Pre-Screen: ☒ Blood ☐ Semen ☒ Saliva ☒ Hair DNA Testing: ☒ STR ☒ miniSTR ☐ Y-STR ☐ mtDNA	☒ Yes ☐ No
FP8-5718 Ligatures	Pre-Screen: ☒ Blood ☐ Semen ☒ Saliva ☒ Hair DNA Testing: ☒ STR ☒ miniSTR ☐ Y-STR ☐ mtDNA	☒ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No

* When submitting extracts, the reagent blanks must also be included. Please be sure to include the following information: Total Human Quant, Total Y Quant, Volume Remaining, and Extraction Control Names associated with samples.

Additional Case Information:

(1) Bode has already examined a hair sample from Mr. Hobbs at Case # 2504-114-46. This sample is being provided in case any further testing may expand the Hobbs profile characteristics on file.

(2) Please untie the knots in all ligatures prior to testing, and test especially the areas untied.

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Applied Biosystems

GeneMapper ID v3.2.1

GMID3_061011-EBH1_2S04-114_EBH_1...

Sample File	Panel	SQO	SQ
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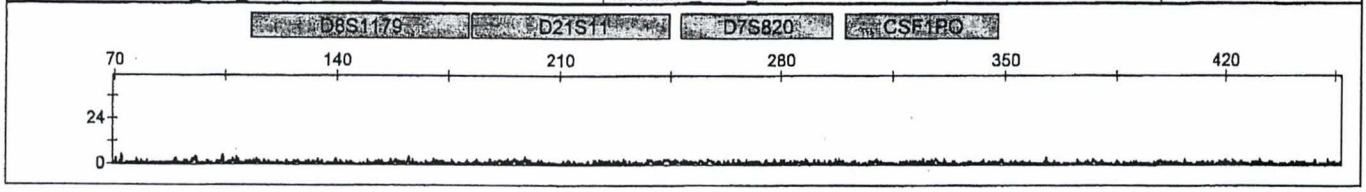

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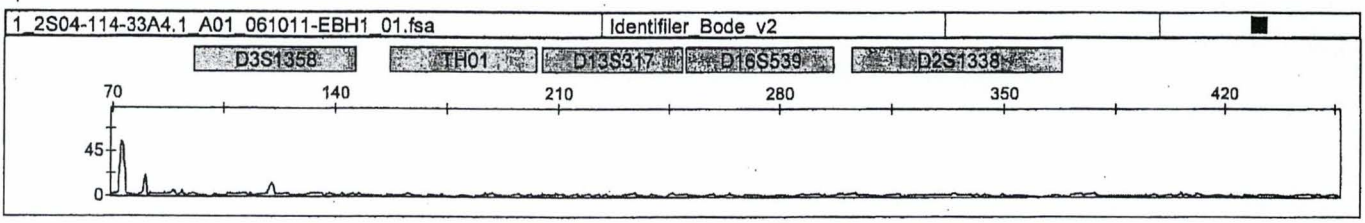

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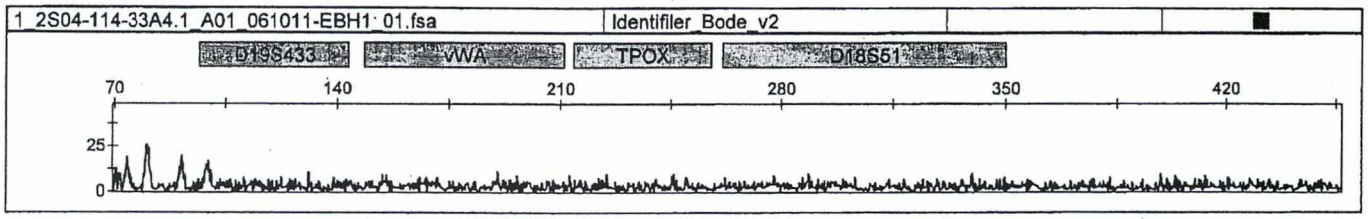

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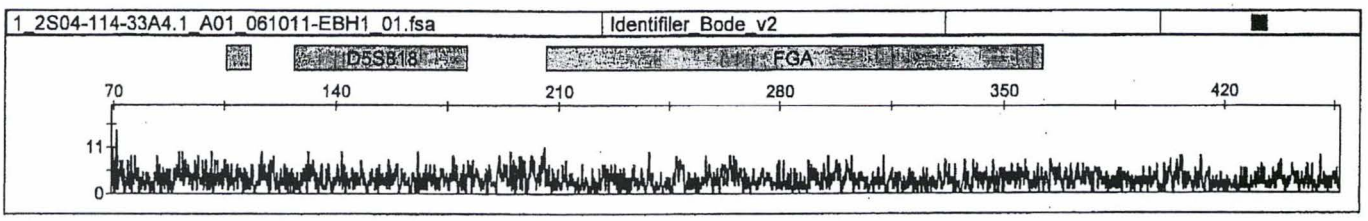

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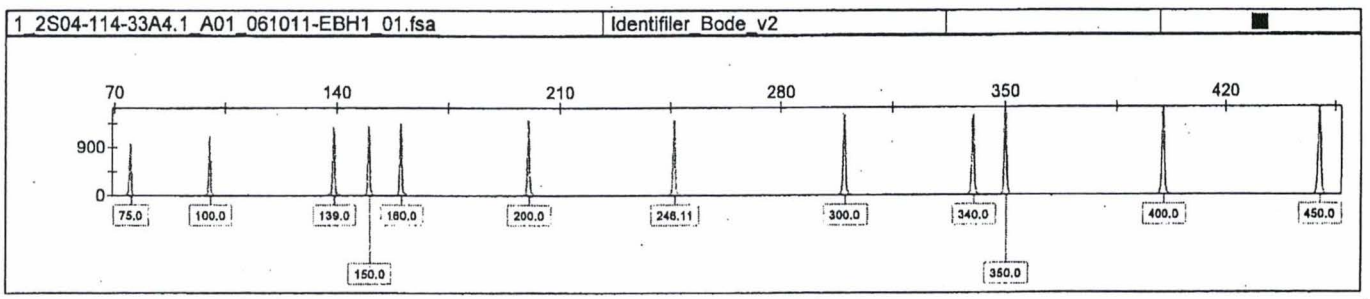

Qt < 0.0005 ng/ul

Sample was vivaconned.

EBH 10/10/11

92

EBH 10/10/11

Applied Biosystems

GeneMapper ID v3.2.1

GMID3_061011-EBH1_2S04-114_EBH_1L

Sample File	Panel	SQO	SQ
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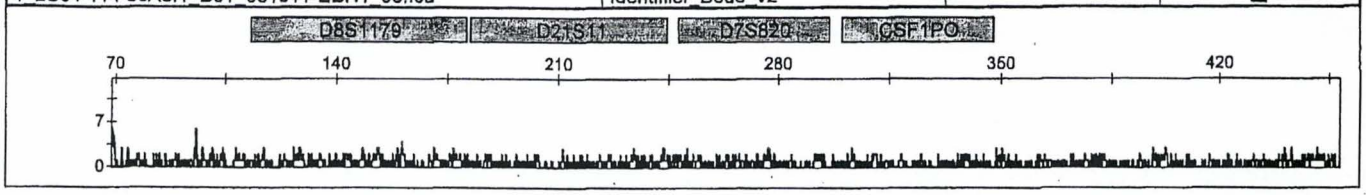

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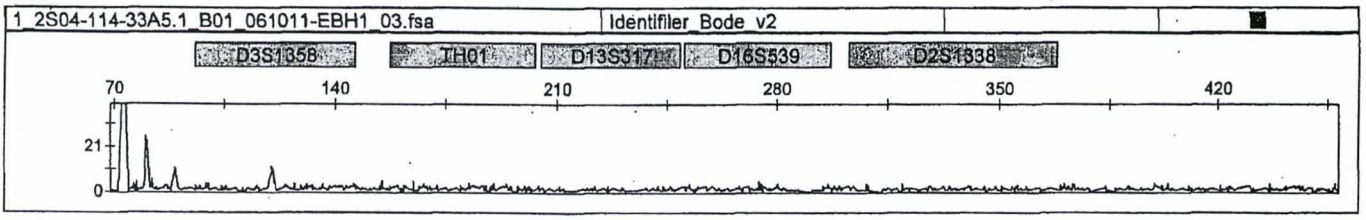

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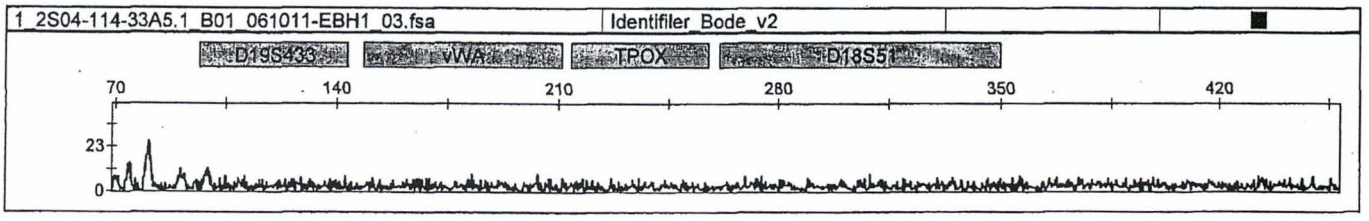

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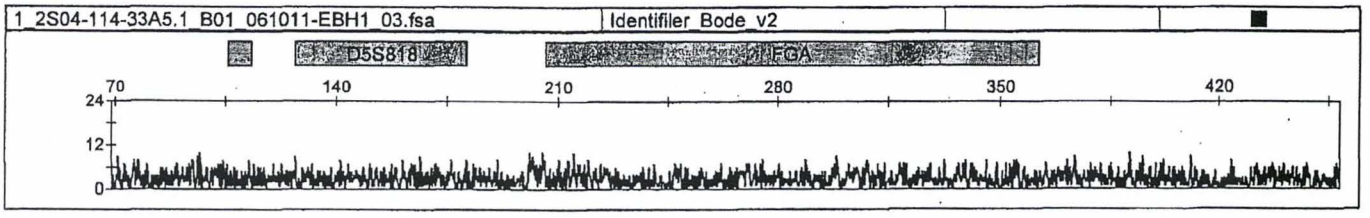

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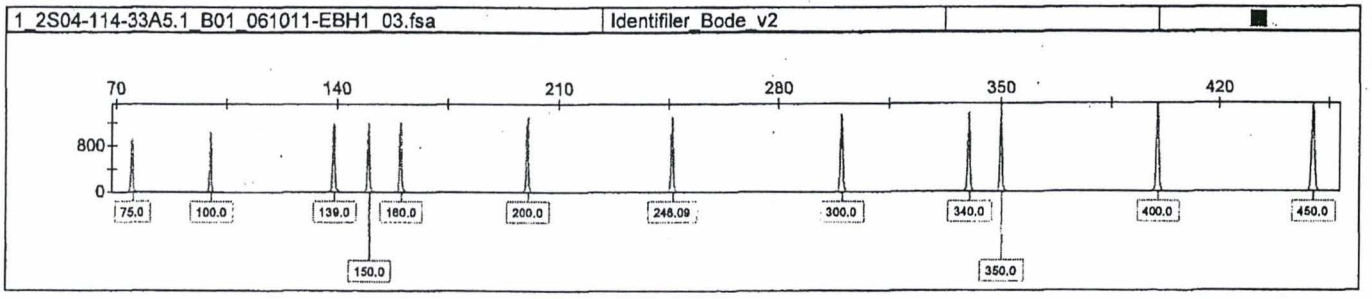

Qt <0.0005 ng/ul

Sample was vivaconned.

EBH 061011

91

EBH 061011

Fri Jun 10,2011 10:52AM, EDT

Printed by: gmid

Applied Biosystems

GeneMapper ID v3.2.1

GMID3_061011-EBH1_2S04-114_EBH_ID

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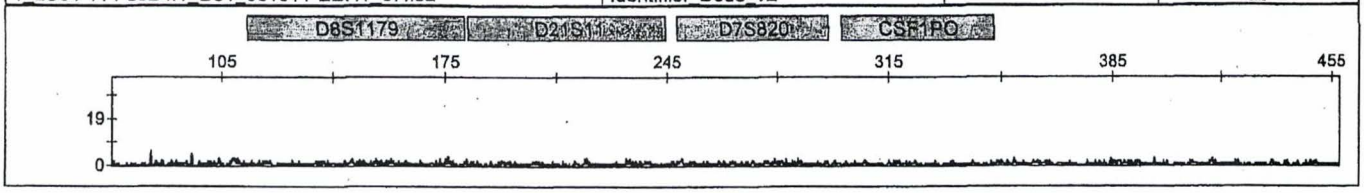

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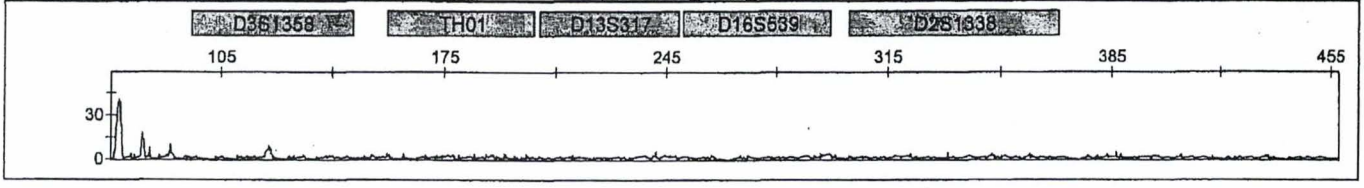

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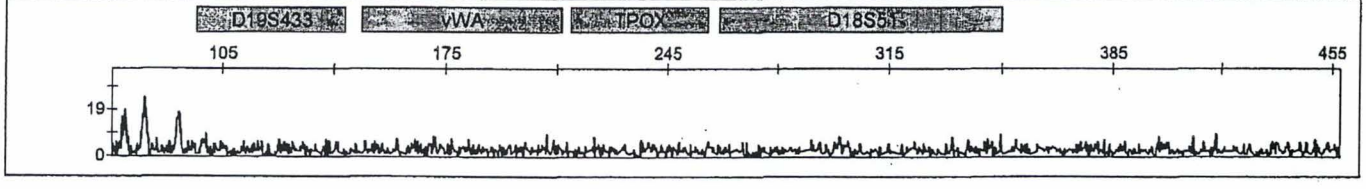

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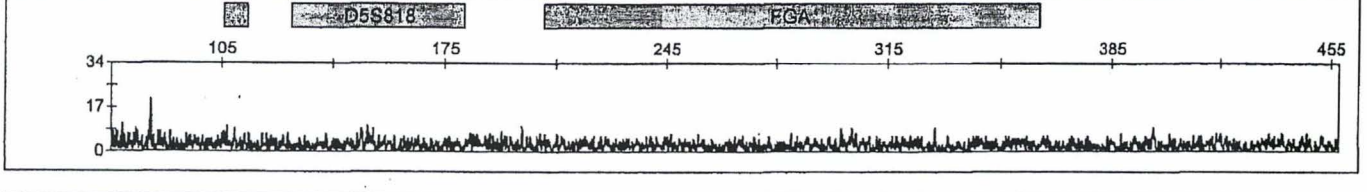

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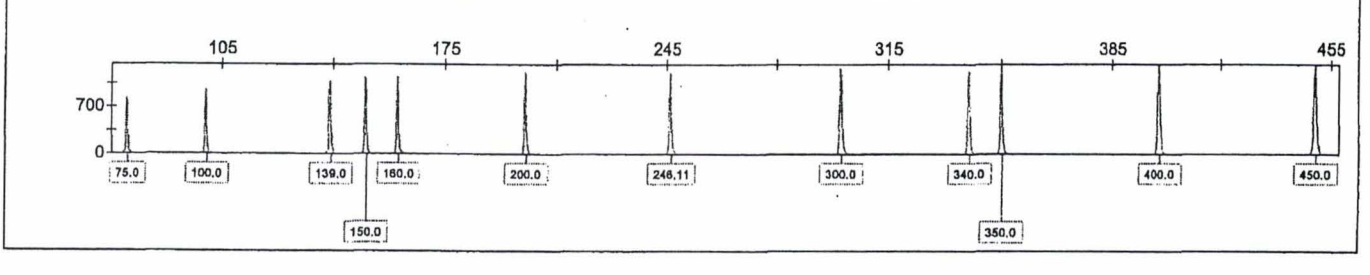


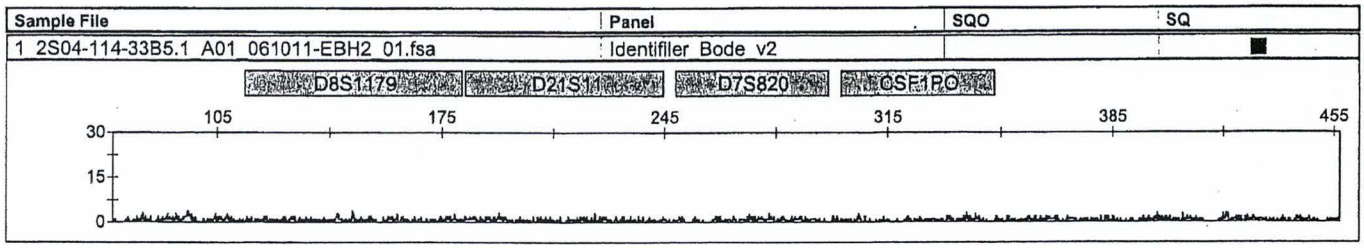
Qt <0.0005 ng/ul

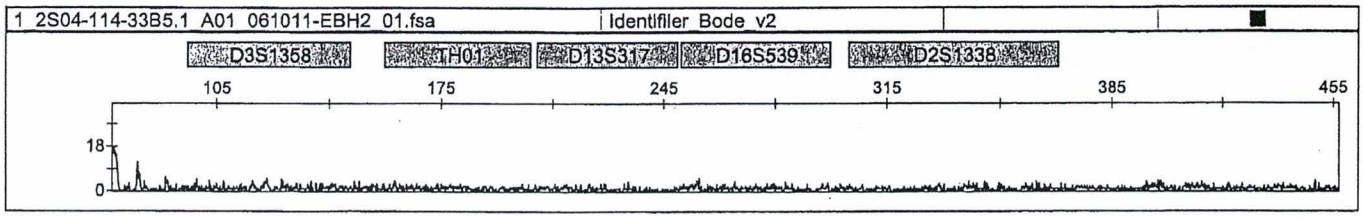
sample was vivaconned.

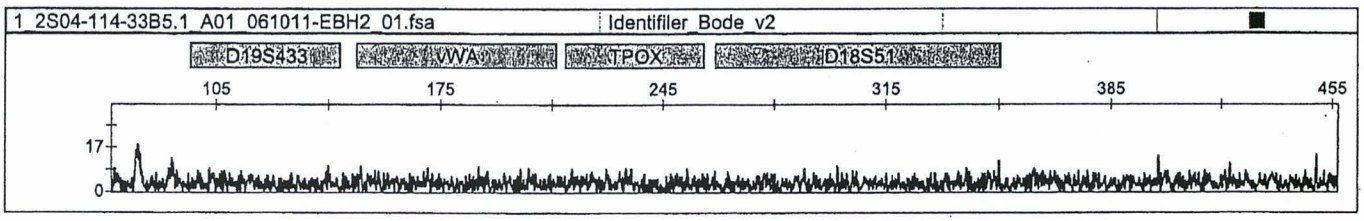
EBH 6/10/11

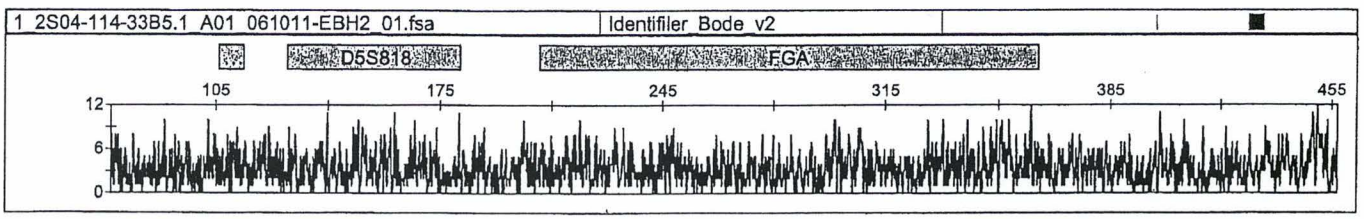
90

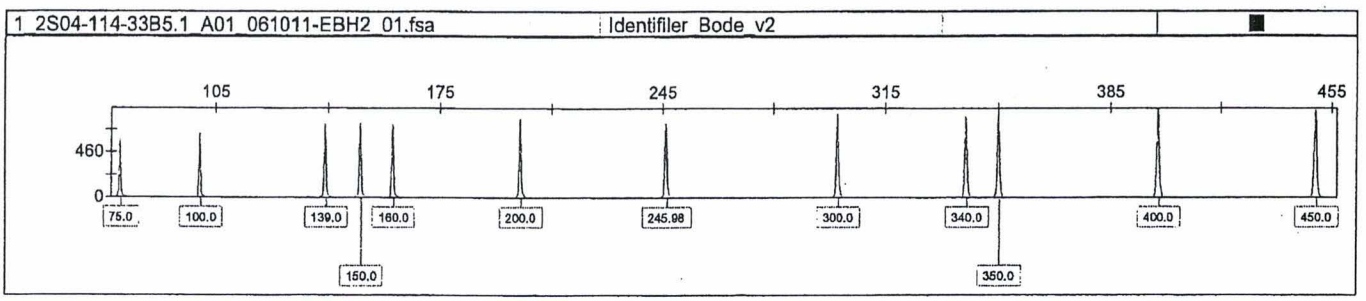
EBH 6/10/11











Qt <0.0005 ng/ul

Sample was vivaconned.

EBH 6/10/11

89

EBH 6/10/11

Sample File	Panel	SQO	SQ
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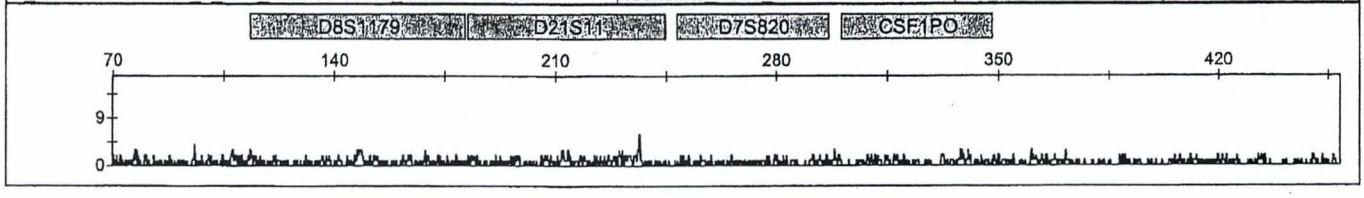

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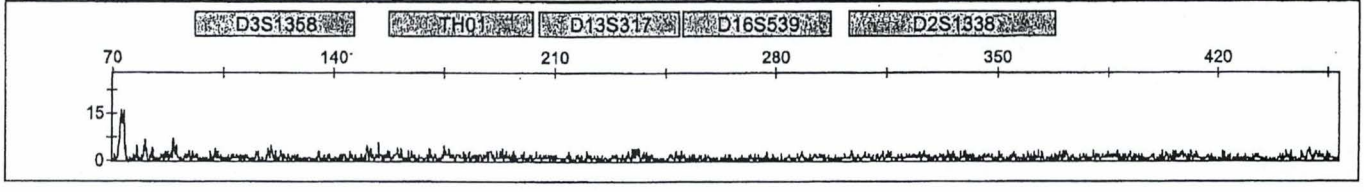

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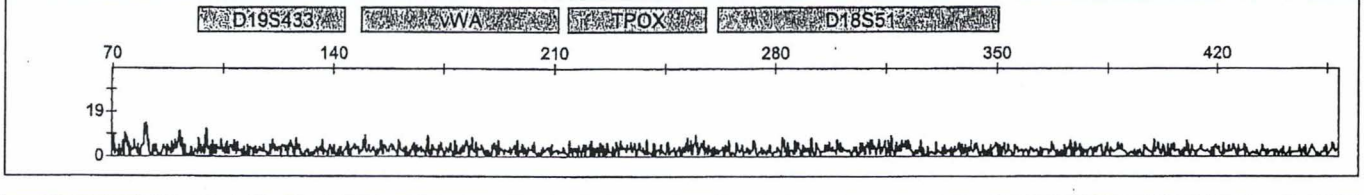

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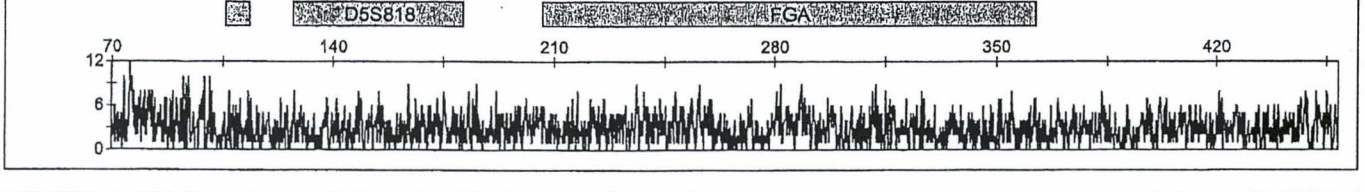

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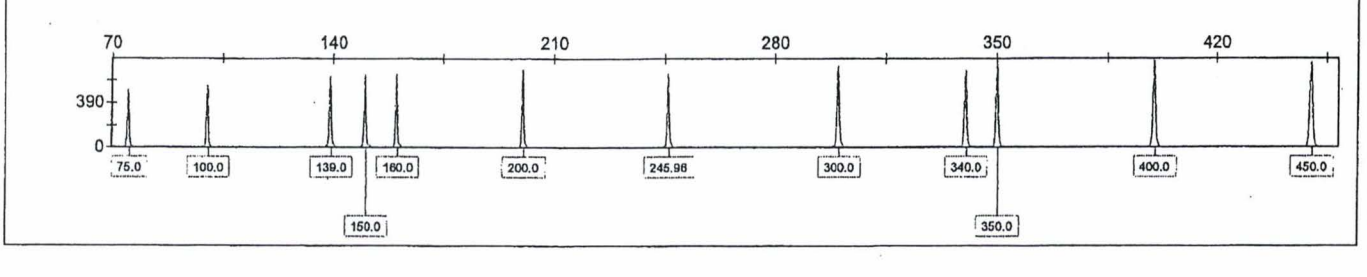

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EBH 061011

Applied Biosystems

GeneMapper ID v3.2.1

GMID3_061011-EBH1_2S04-114_EBH_[redacted]

Sample File	Panel	SQO	SQ
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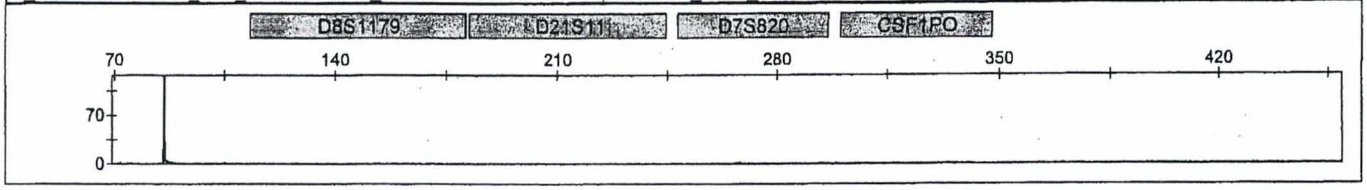

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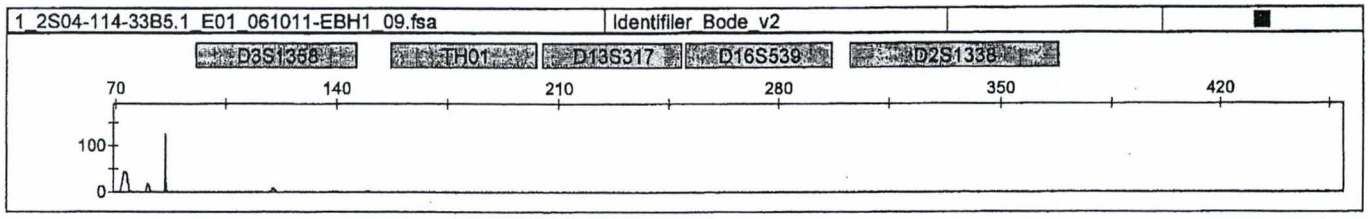
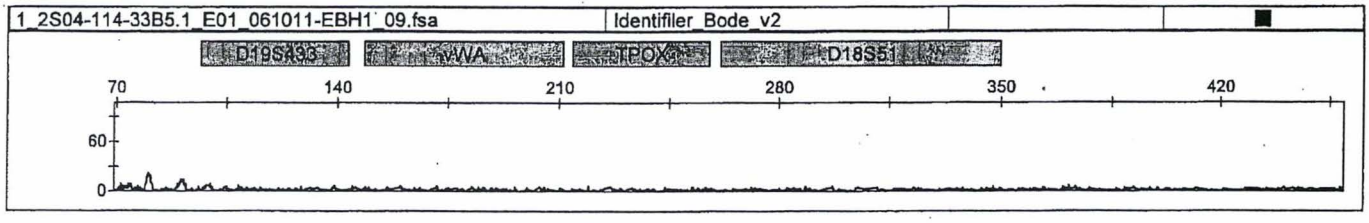
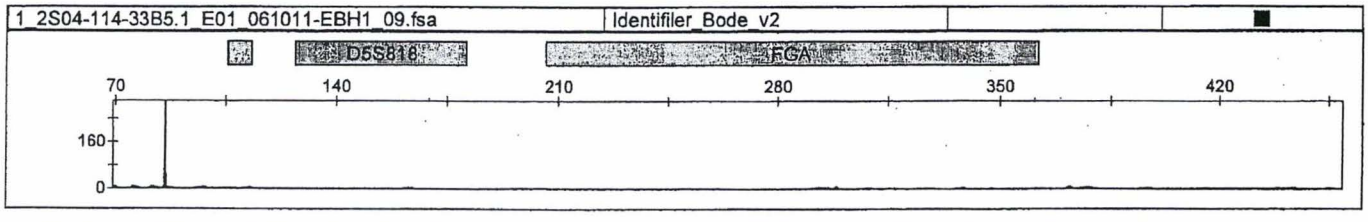


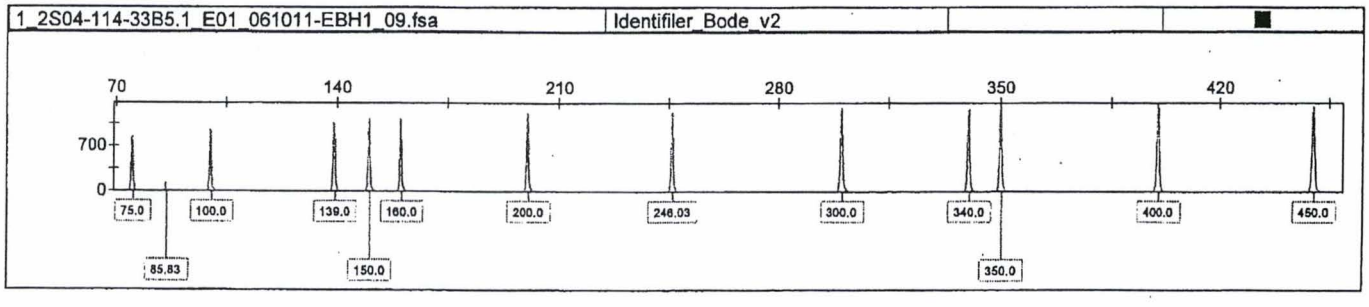
1_2S04-114-33B5.1_E01_061011-EBH1_09.fsa | Identifiler_Bode_v2



1_2S04-114-33B5.1_E01_061011-EBH1_09.fsa | Identifiler_Bode_v2



1_2S04-114-33B5.1_E01_061011-EBH1_09.fsa | Identifiler_Bode_v2



Qt < 0.0005 ng/ul

Sample was vivaconed.

EBH 6/10/11

87

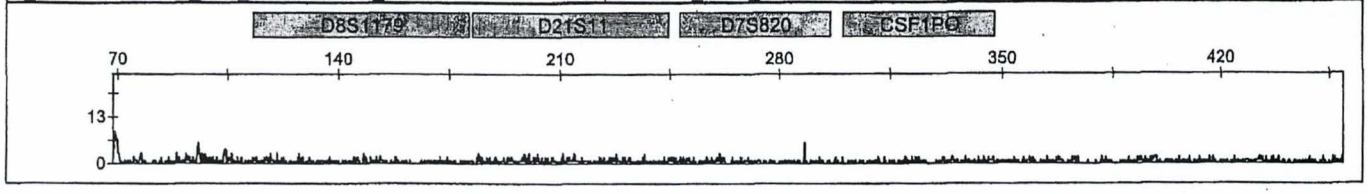
EBH 6/10/11

Applied Biosystems

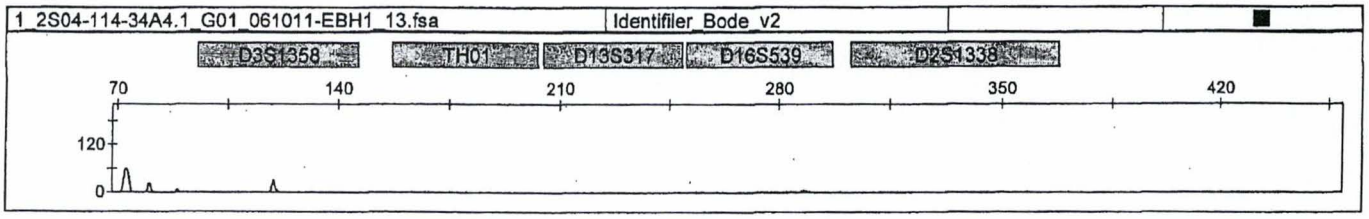
GeneMapper ID v3.2.1

GMID3_061011-EBH1_2S04-114_EBH_1B

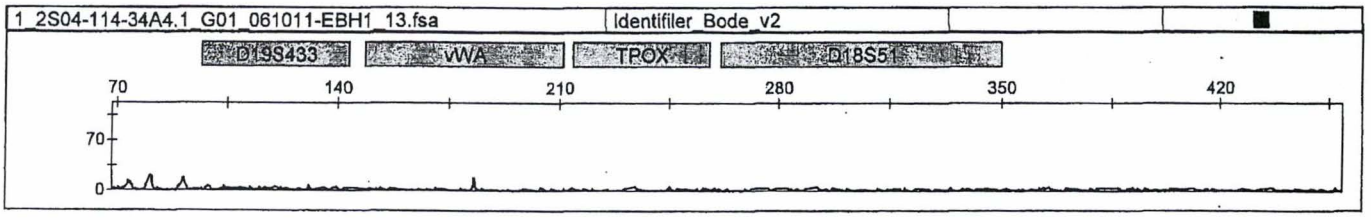
Sample File	Panel	SQO	SQ
1_2S04-114-34A4.1_G01_061011-EBH1_13.fsa	Identifiler_Bode_v2		



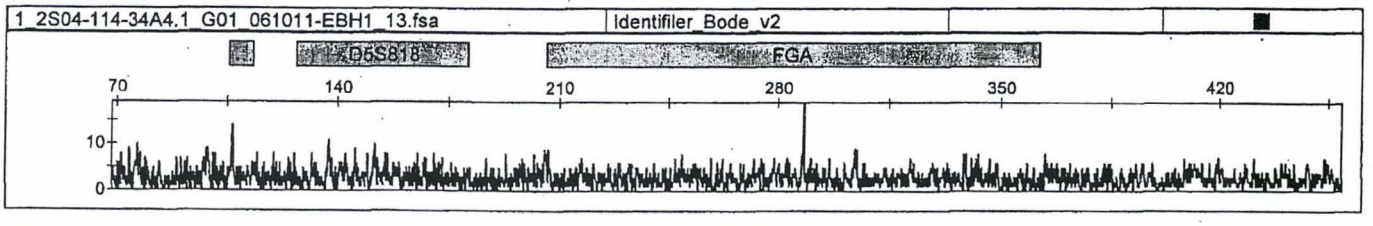
1_2S04-114-34A4.1_G01_061011-EBH1_13.fsa | Identifiler_Bode_v2



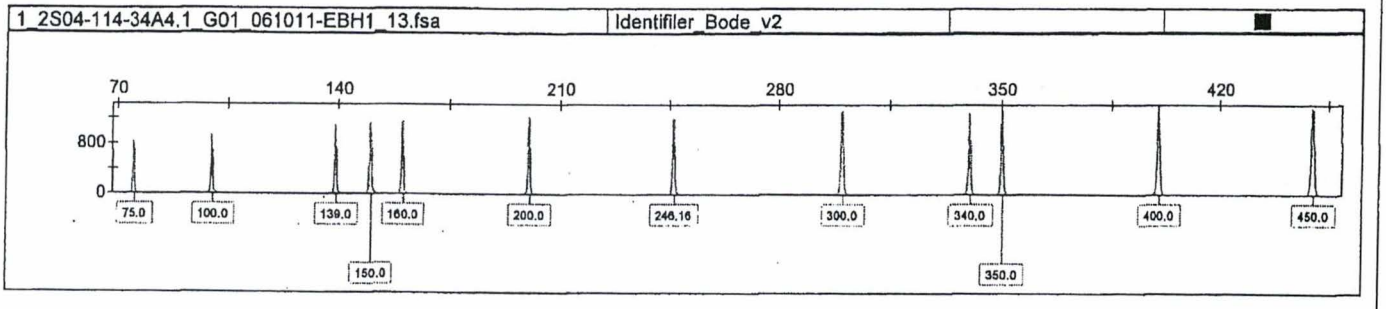
1_2S04-114-34A4.1_G01_061011-EBH1_13.fsa | Identifiler_Bode_v2



1_2S04-114-34A4.1_G01_061011-EBH1_13.fsa | Identifiler_Bode_v2



1_2S04-114-34A4.1_G01_061011-EBH1_13.fsa | Identifiler_Bode_v2



Qt= 0.000857 ng/ul

Sample was vivaconned.

EKH 6/10/11

80

EKH 6/10/11

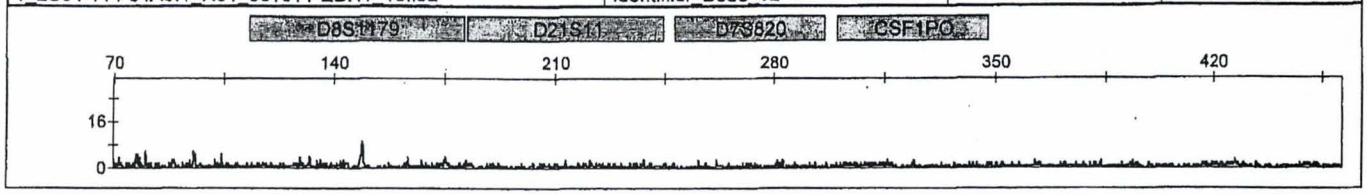
Fri Jun 10,2011 10:53AM, EDT

Printed by: gmid

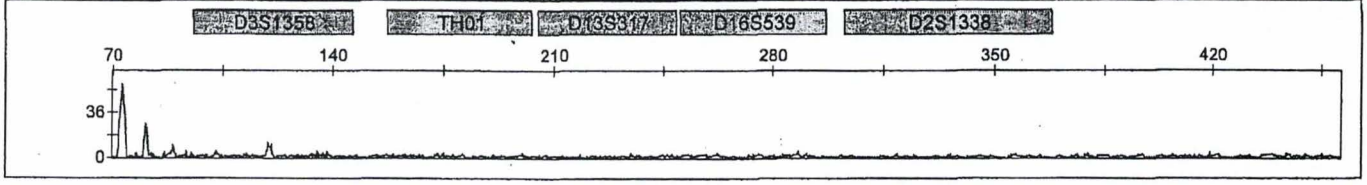
Applied Biosystems
GeneMapper ID v3.2.1

GMID3_061011-EBH1_2S04-114_EBH_ID

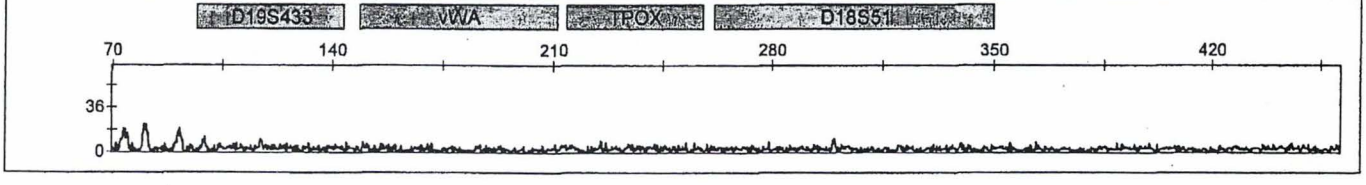
Sample File	Panel	SQO	SQ
1_2S04-114-34A5.1_H01_061011-EBH1_15.fsa	Identifiler_Bode_v2		



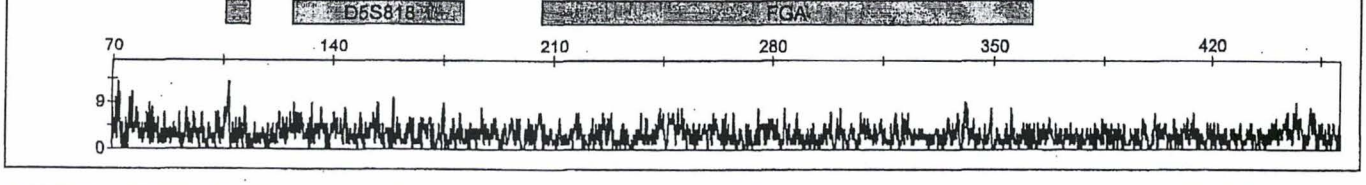
1_2S04-114-34A5.1_H01_061011-EBH1_15.fsa | Identifiler_Bode_v2



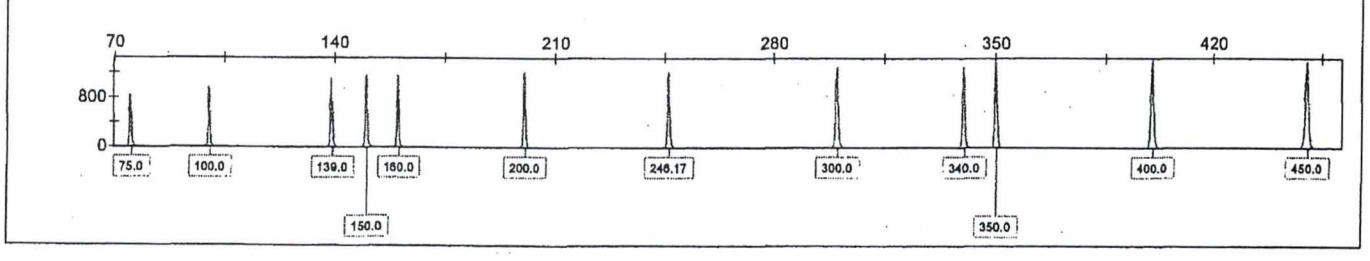
1_2S04-114-34A5.1_H01_061011-EBH1_15.fsa | Identifiler_Bode_v2



1_2S04-114-34A5.1_H01_061011-EBH1_15.fsa | Identifiler_Bode_v2



1_2S04-114-34A5.1_H01_061011-EBH1_15.fsa | Identifiler_Bode_v2



Qt= 0.000544 ng/ul
sample was nvaconned.
EBH 6/10/11

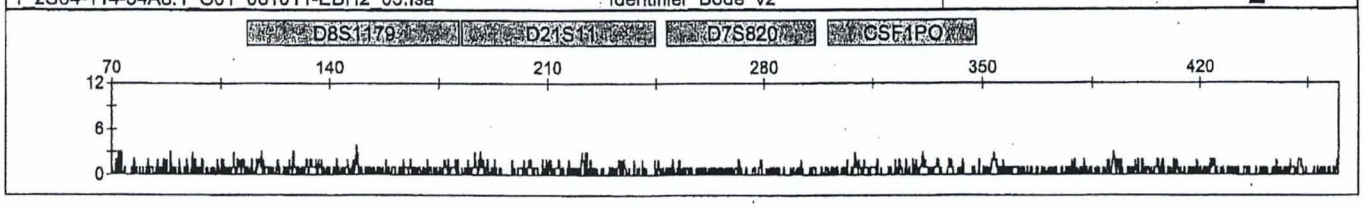
85
EBH 6/10/11

Applied Biosystems

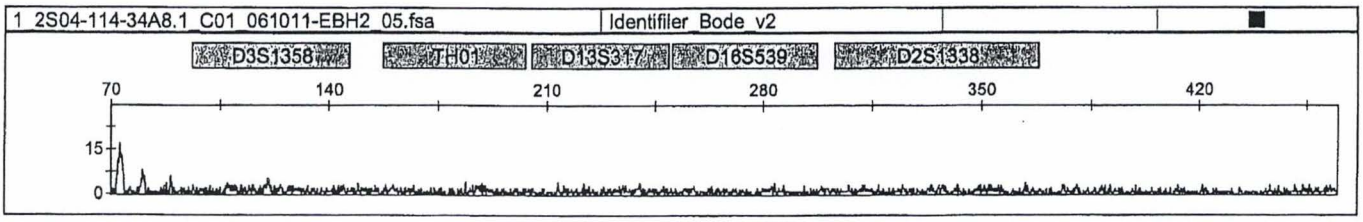
GeneMapper ID v3.2.1

GMID11_061011-EBH2_2S04-114_EBH_ID

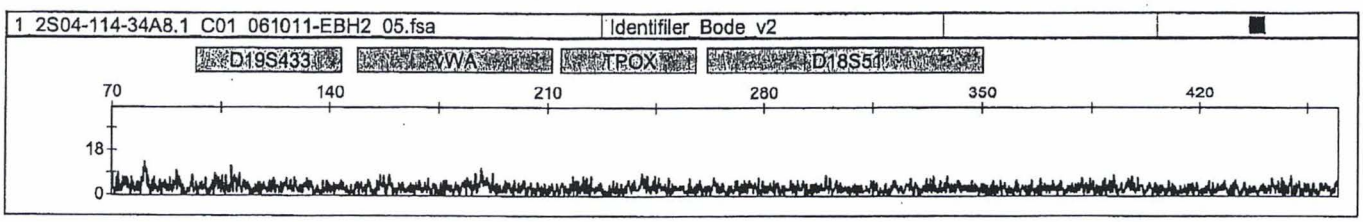
Sample File	Panel	SQO	SQ
1_2S04-114-34A8.1_C01_061011-EBH2_05.fsa	Identifiler_Bode_v2		



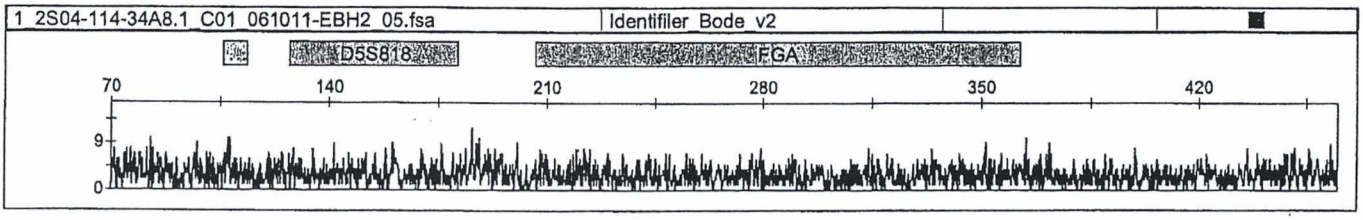
1_2S04-114-34A8.1_C01_061011-EBH2_05.fsa | Identifiler_Bode_v2



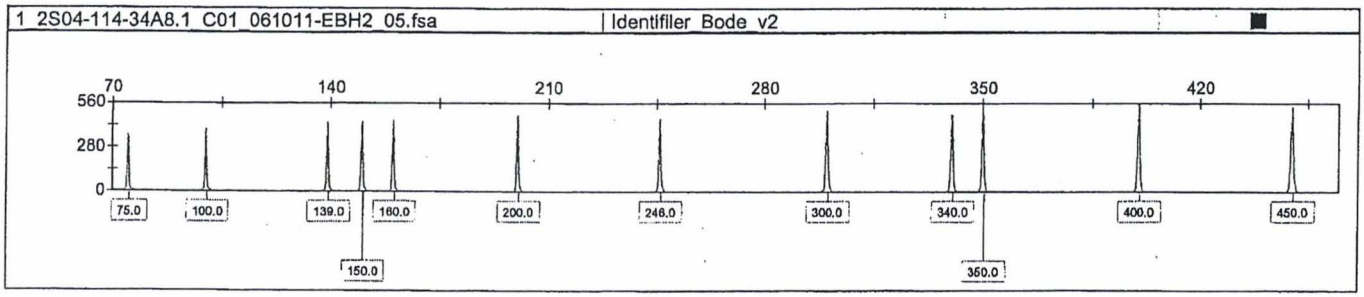
1_2S04-114-34A8.1_C01_061011-EBH2_05.fsa | Identifiler_Bode_v2



1_2S04-114-34A8.1_C01_061011-EBH2_05.fsa | Identifiler_Bode_v2



1_2S04-114-34A8.1_C01_061011-EBH2_05.fsa | Identifiler_Bode_v2



QT<0.0005 ng/ul

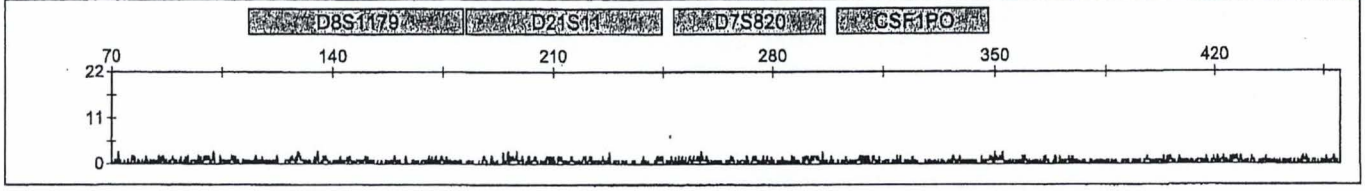
Sample was nanodropped.

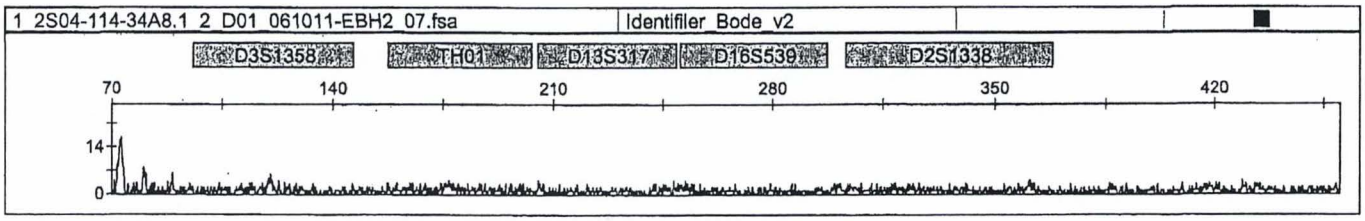
EBH 6/10/11

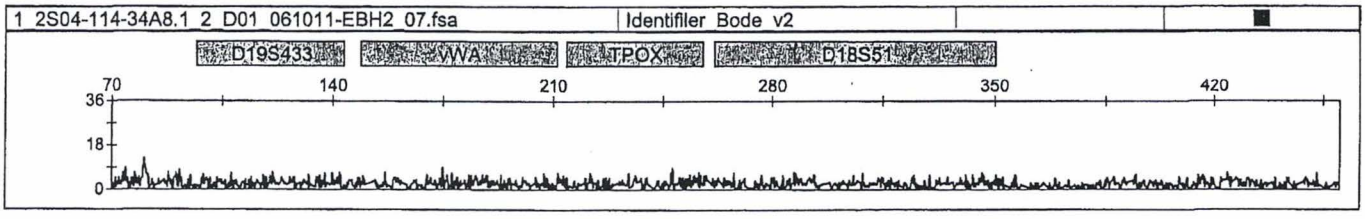
84

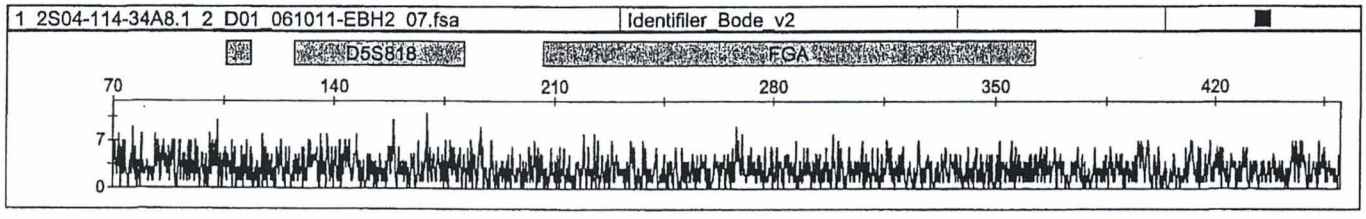
EBH 6/10/11

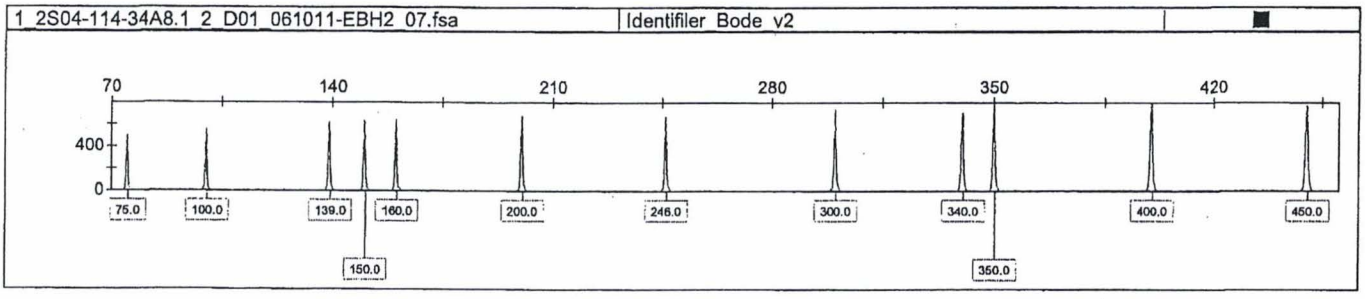
Sample File	Panel	SQO	SQ
1_2S04-114-34A8.1_2_D01_061011-EBH2_07.fsa	Identifiler_Bode_v2		











83

EBH 6/10/11

Sample File	Panel	SQO	SQ
1_2S04-114-34A8.1_A02_061011-EBH1_02.fsa	Identifiler_Bode_v2	X	

No Sizing Data: 1_2S04-114-34A8.1_A02_061011-EBH1_02.fsa

1_2S04-114-34A8.1_A02_061011-EBH1_02.fsa	Identifiler_Bode_v2	X	

No Sizing Data: 1_2S04-114-34A8.1_A02_061011-EBH1_02.fsa

1_2S04-114-34A8.1_A02_061011-EBH1_02.fsa	Identifiler_Bode_v2	X	

No Sizing Data: 1_2S04-114-34A8.1_A02_061011-EBH1_02.fsa

1_2S04-114-34A8.1_A02_061011-EBH1_02.fsa	Identifiler_Bode_v2	X	

No Sizing Data: 1_2S04-114-34A8.1_A02_061011-EBH1_02.fsa

1_2S04-114-34A8.1_A02_061011-EBH1_02.fsa	Identifiler_Bode_v2	X	

No Sizing Data: 1_2S04-114-34A8.1_A02_061011-EBH1_02.fsa

82

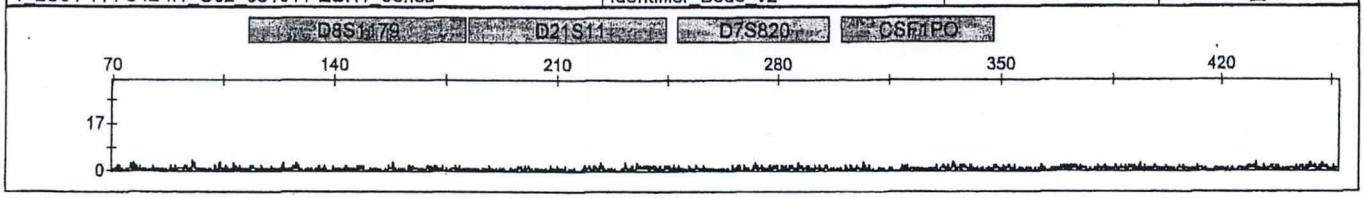
EBH 6/10/11

Applied Biosystems

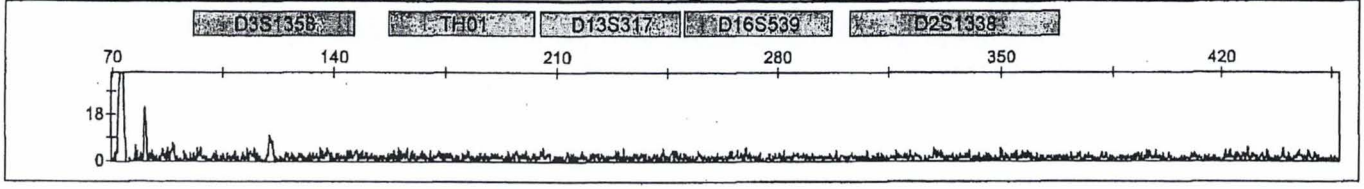
GeneMapper ID v3.2.1

GMID3_061011-EBH1_2S04-114_EBH_ID

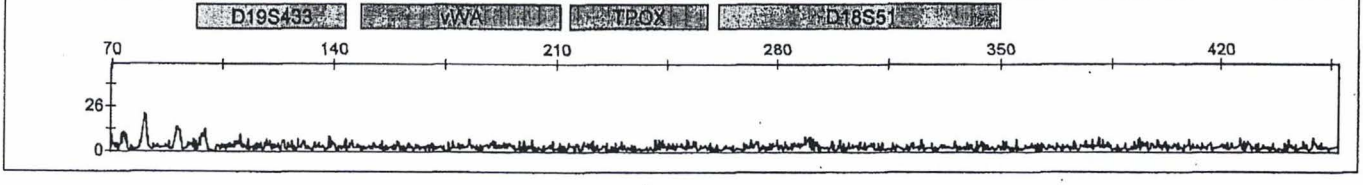
Sample File	Panel	SQO	SQ
1_2S04-114-34B4.1_C02_061011-EBH1_06.fsa	Identifiler_Bode_v2		■



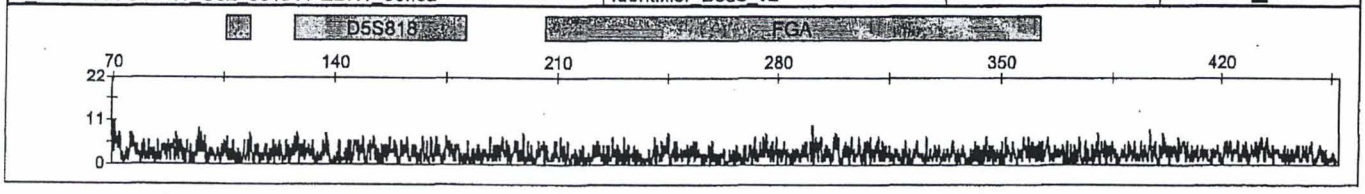
1_2S04-114-34B4.1_C02_061011-EBH1_06.fsa	Identifiler_Bode_v2		■



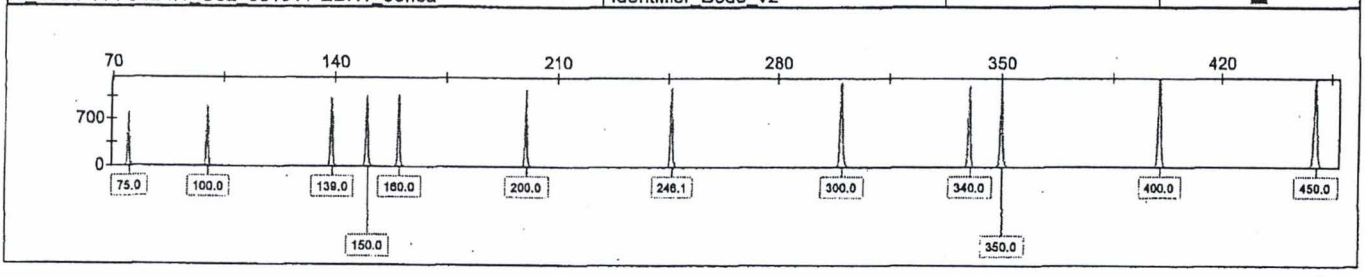
1_2S04-114-34B4.1_C02_061011-EBH1_06.fsa	Identifiler_Bode_v2		■



1_2S04-114-34B4.1_C02_061011-EBH1_06.fsa	Identifiler_Bode_v2		■



1_2S04-114-34B4.1_C02_061011-EBH1_06.fsa	Identifiler_Bode_v2		■



Qt < 0.0005 ng/ul

sample was vivaconned.

EBH 6/10/11

81

EBH 6/10/11

Applied Biosystems

GeneMapper ID v3.2.1

GMID3_061011-EBH1_2S04-114_EBH_ID

Sample File	Panel	SQO	SQ
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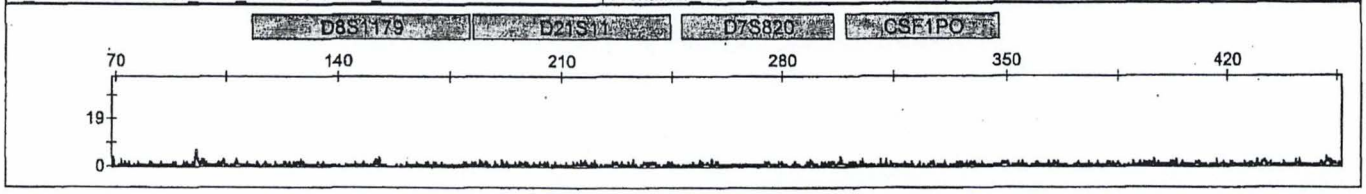
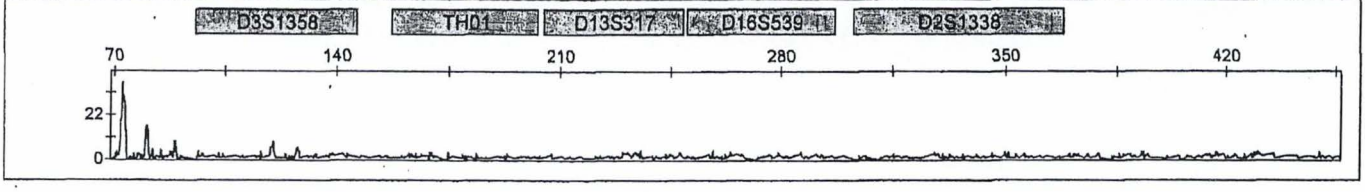
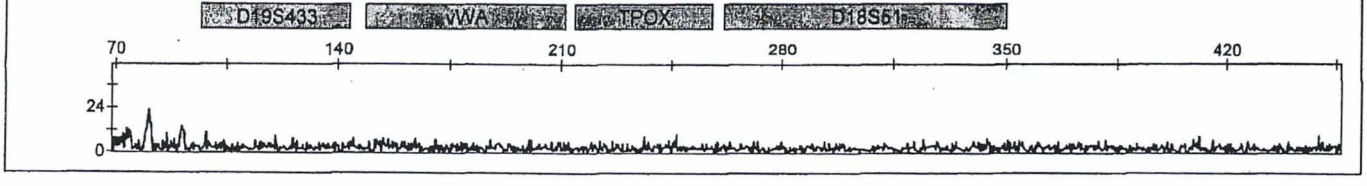


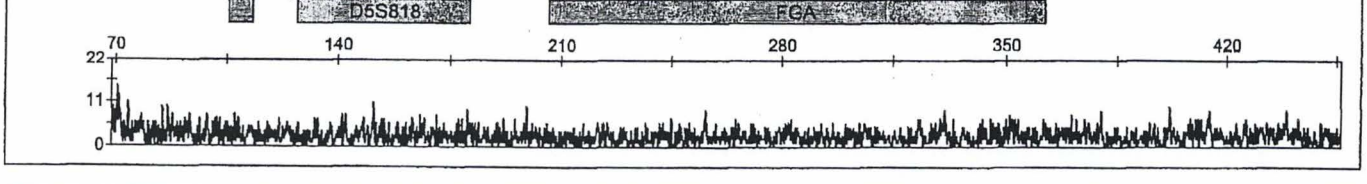
1_2S04-114-34B7.1_D02_061011-EBH1_08.fsa | Identifiler_Bode_v2



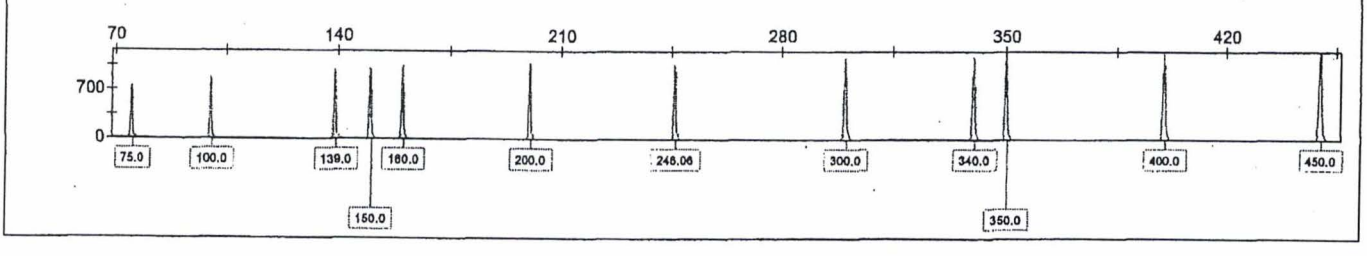
1_2S04-114-34B7.1_D02_061011-EBH1_08.fsa | Identifiler_Bode_v2



1_2S04-114-34B7.1_D02_061011-EBH1_08.fsa | Identifiler_Bode_v2



1_2S04-114-34B7.1_D02_061011-EBH1_08.fsa | Identifiler_Bode_v2



@t <0.0005 ng/ul

sample was vivaconned.

EBH 6/10/11

80

EBH 6/10/11

Applied Biosystems

GeneMapper ID v3.2.1

GMID3_061011-EBH1_2S04-114_EBH_ID

Sample File	Panel	SQO	SQ
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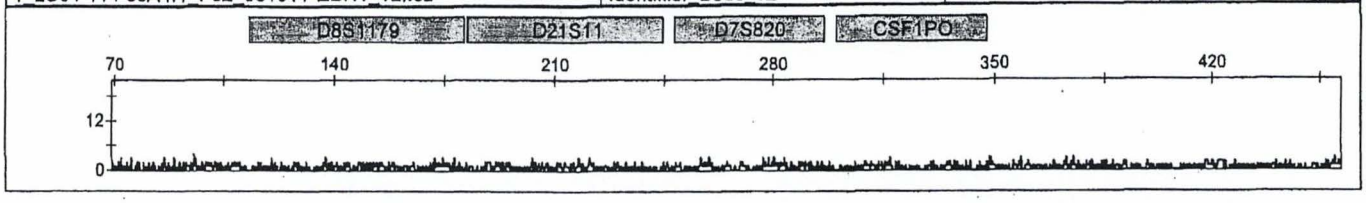
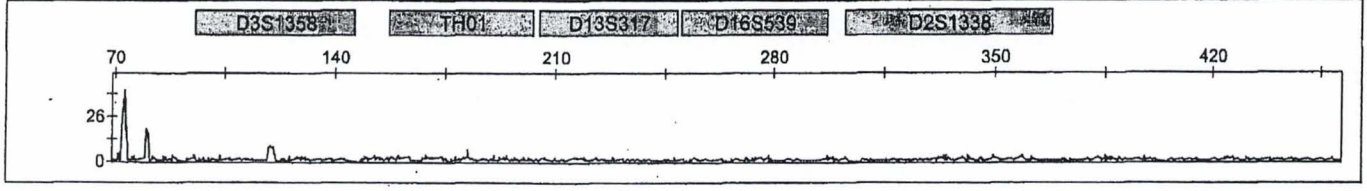
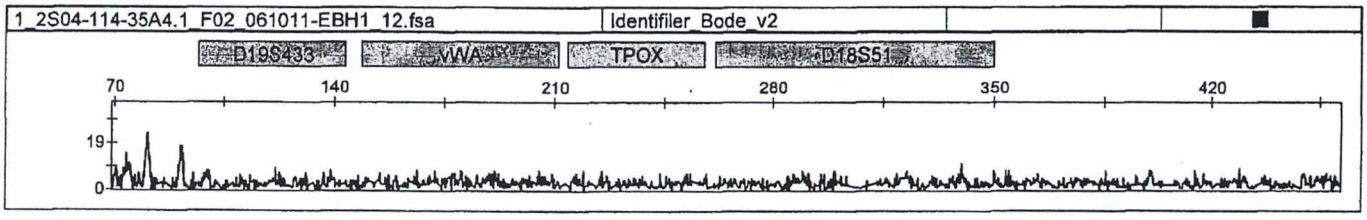


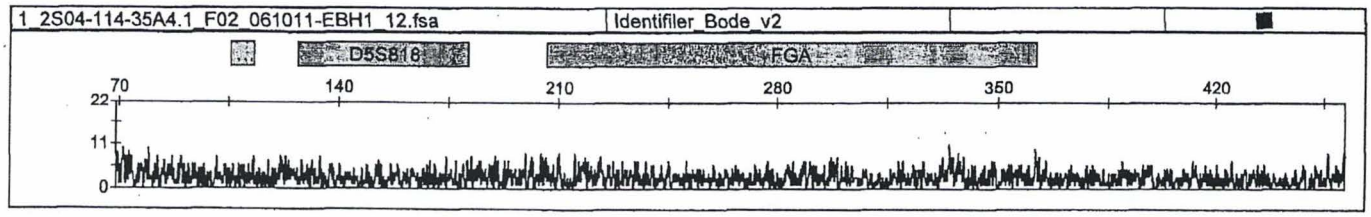
1_2S04-114-35A4.1_F02_061011-EBH1_12.fsa | Identifiler_Bode_v2



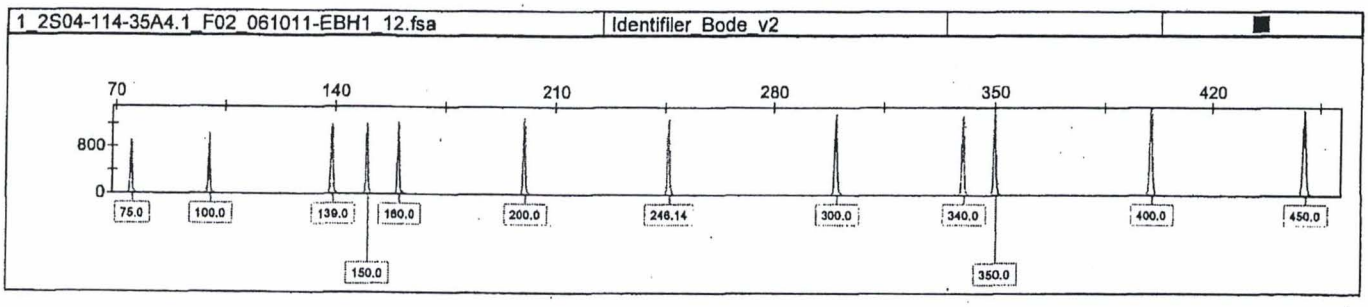
1_2S04-114-35A4.1_F02_061011-EBH1_12.fsa | Identifiler_Bode_v2



1_2S04-114-35A4.1_F02_061011-EBH1_12.fsa | Identifiler_Bode_v2



1_2S04-114-35A4.1_F02_061011-EBH1_12.fsa | Identifiler_Bode_v2



Qt < 0.0005 ng/ul

Sample was vivaconned.

SRH 061011

79

SRH 061011

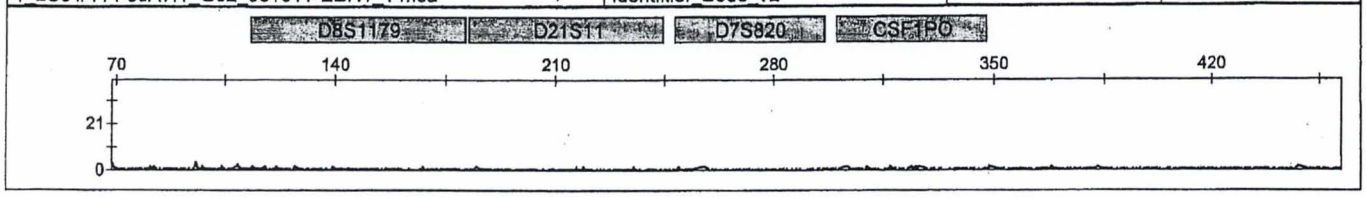
Fri Jun 10,2011 10:55AM, EDT

Printed by: gmid

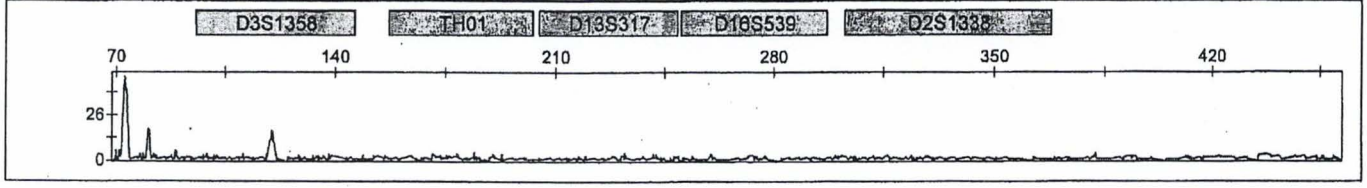
Applied Biosystems
GeneMapper ID v3.2.1

GMID3_061011-EBH1_2S04-114_EBH_ID

Sample File	Panel	SQO	SQ
1_2S04-114-35A7.1_G02_061011-EBH1_14.fsa	Identifiler_Bode_v2		



1_2S04-114-35A7.1_G02_061011-EBH1_14.fsa | Identifiler_Bode_v2



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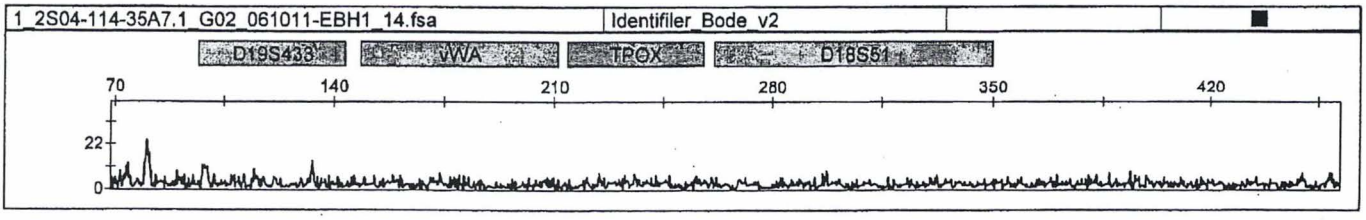

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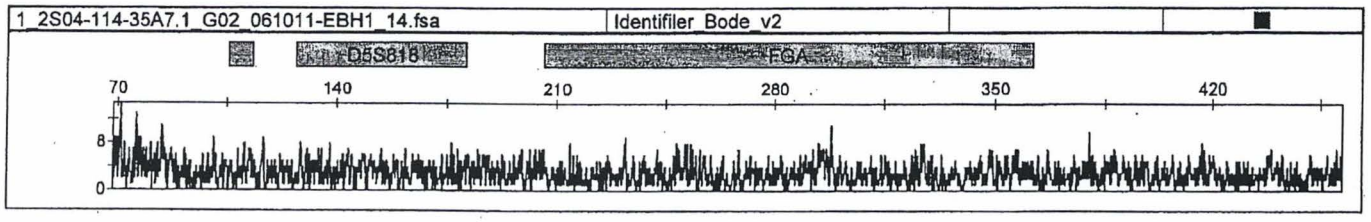
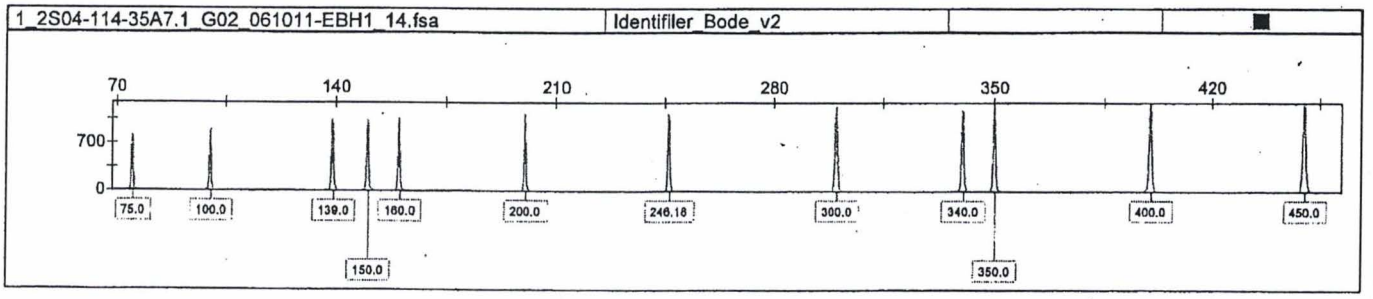


1_2S04-114-35A7.1_G02_061011-EBH1_14.fsa | Identifiler_Bode_v2



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Sample was vivaconned.
EBH 6/10/11

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EBH 6/10/11

Sample File	Panel	SQO	SQ
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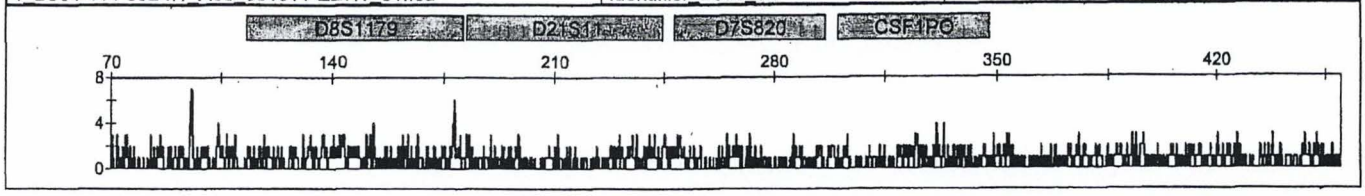
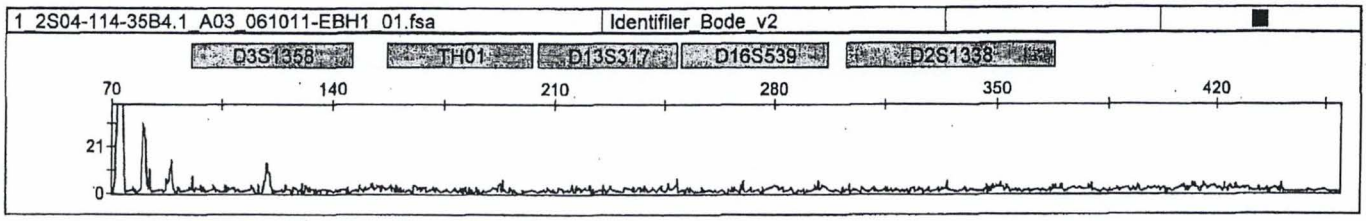
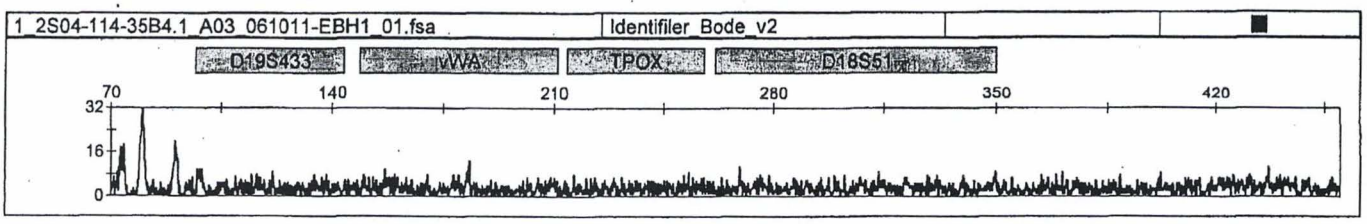


1_2S04-114-35B4.1_A03_061011-EBH1_01.fsa | Identifiler_Bode_v2



1_2S04-114-35B4.1_A03_061011-EBH1_01.fsa | Identifiler_Bode_v2



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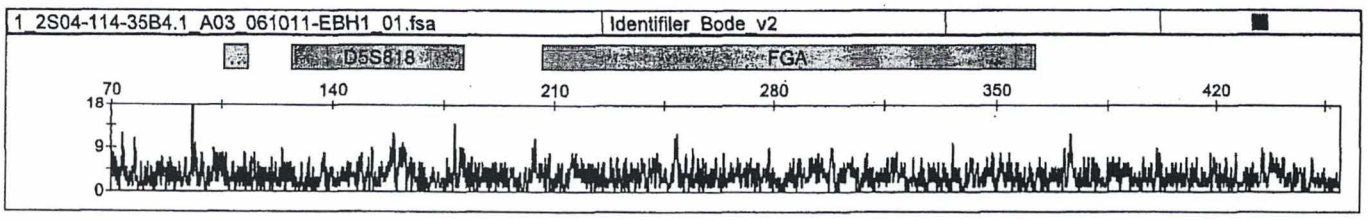

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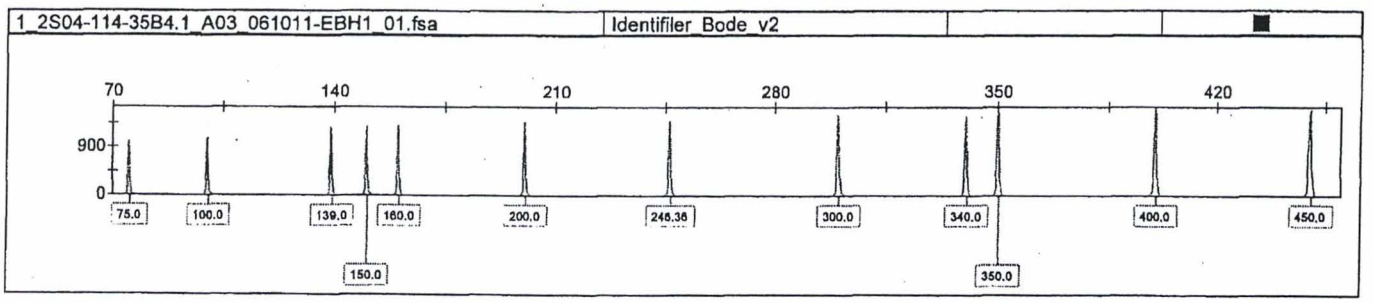

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Sample was vivaconned.
EBH 6/10/11

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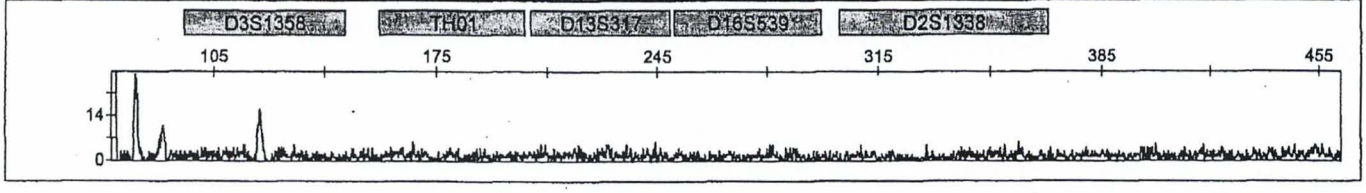
EBH 6/10/11

Sample File	Panel	SQO	SQ
1_2S04-114-35B7.1_B03_061011-EBH1_03.fsa	Identifiler_Bode_v2		



1_2S04-114-35B7.1_B03_061011-EBH1_03.fsa | Identifiler_Bode_v2



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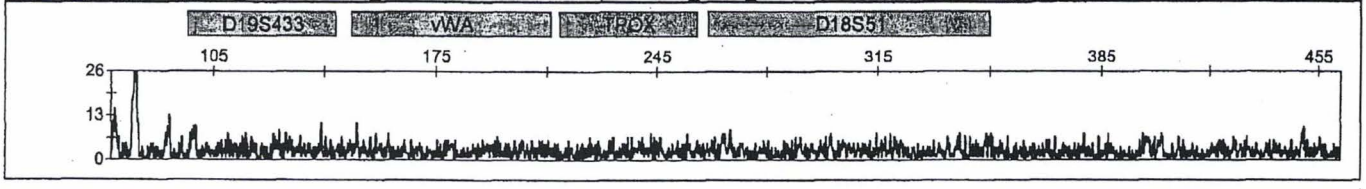

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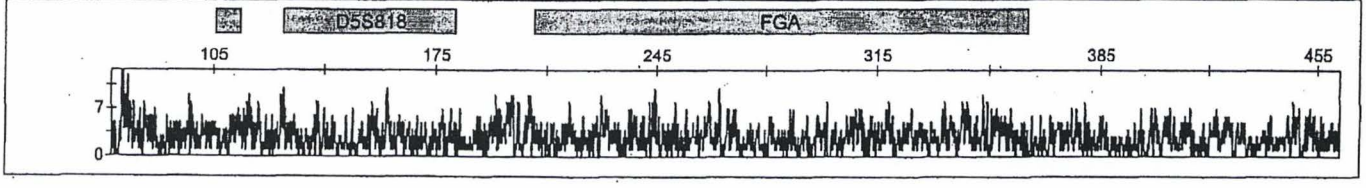
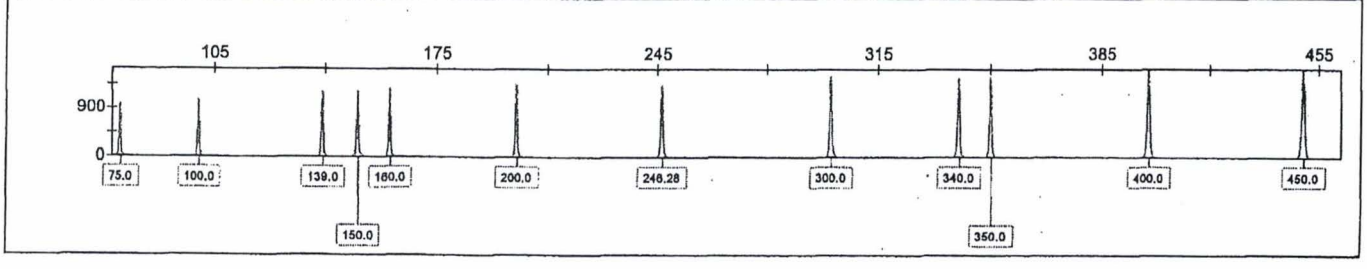


1_2S04-114-35B7.1_B03_061011-EBH1_03.fsa | Identifiler_Bode_v2



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Sample was vivaconned.

EBH 061011

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EBH 061011

Applied Biosystems
GeneMapper ID v3.2.1

GMID3_061011-EBH3_2S04-114_EBH_ID

Sample File	Panel	SQO	SQ
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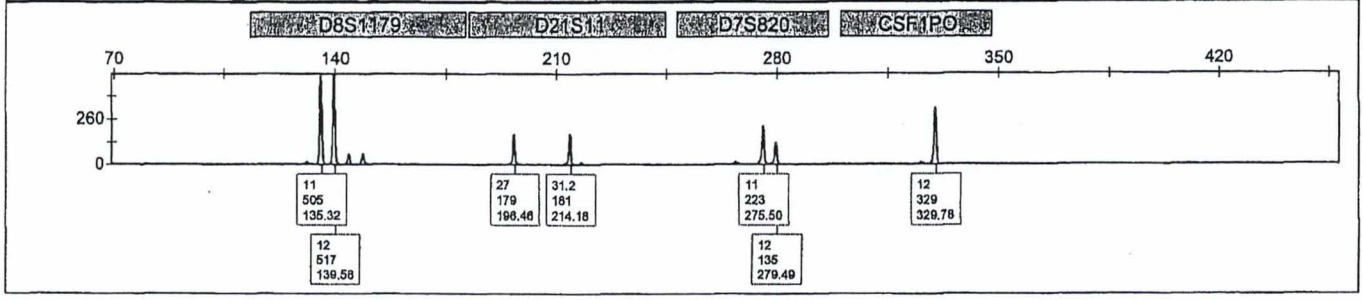

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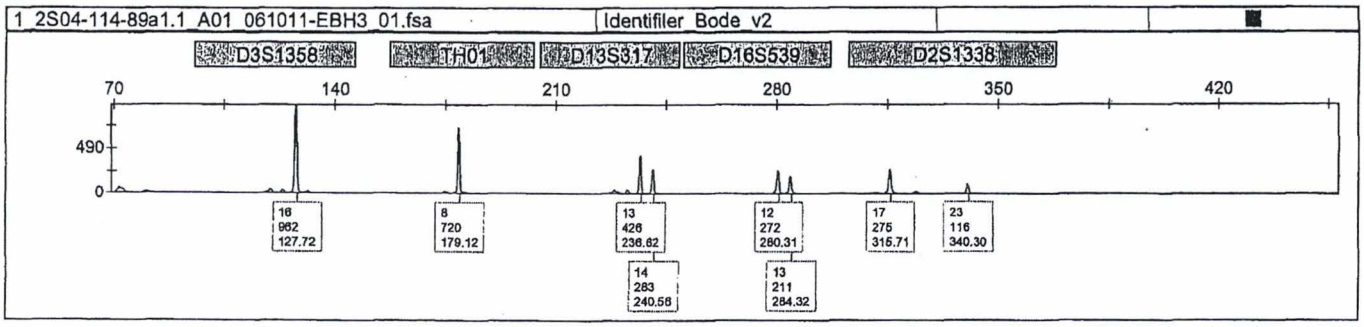

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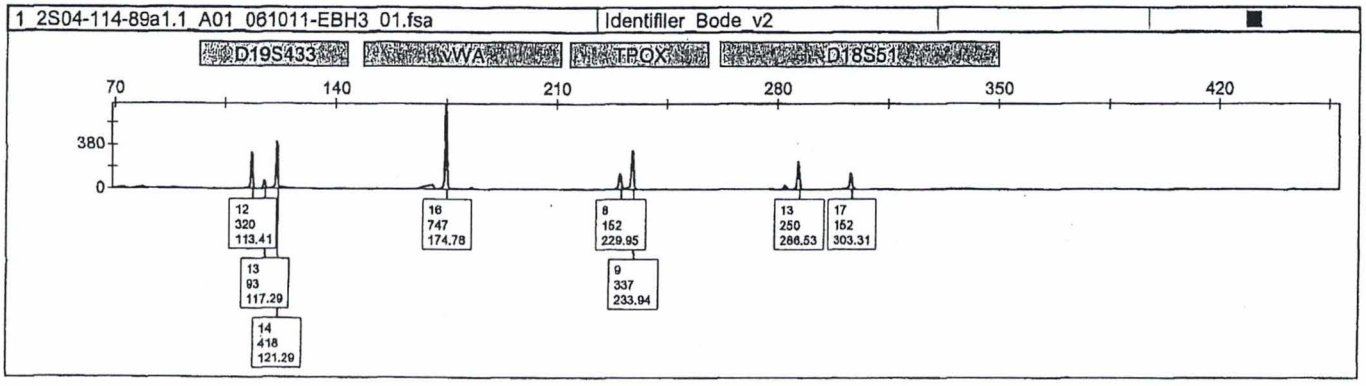

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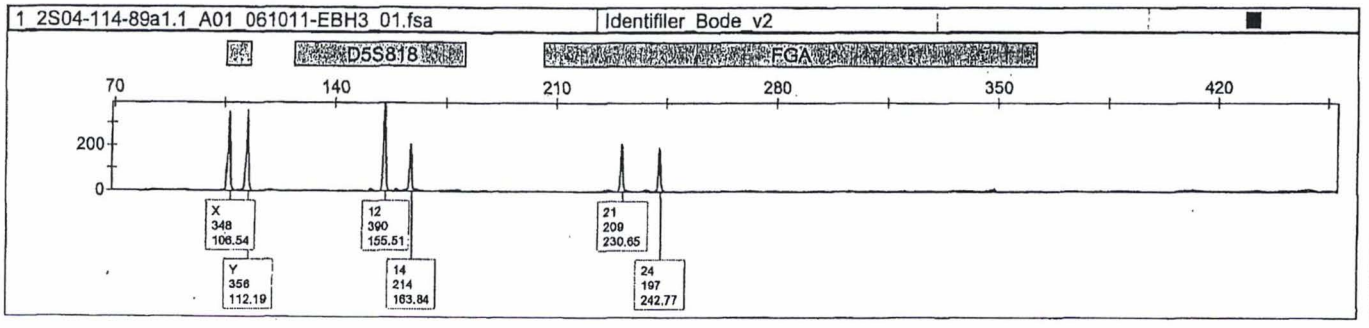

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EBH 6/14/11

Sample File	Panel	SQO	SQ
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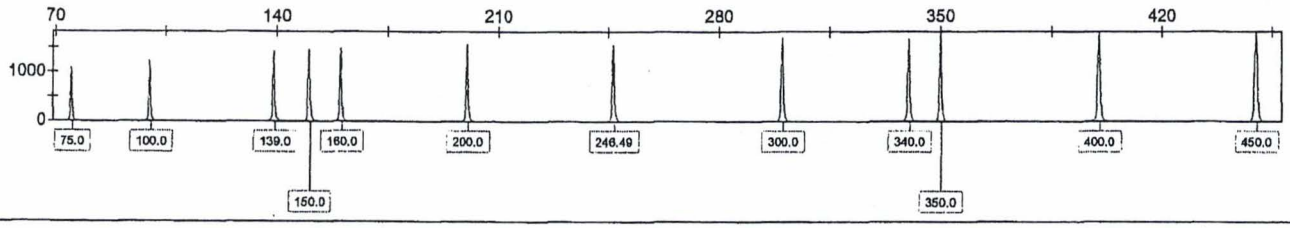

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EBH 6/14/11

Sample File	Panel	SQO	SQ
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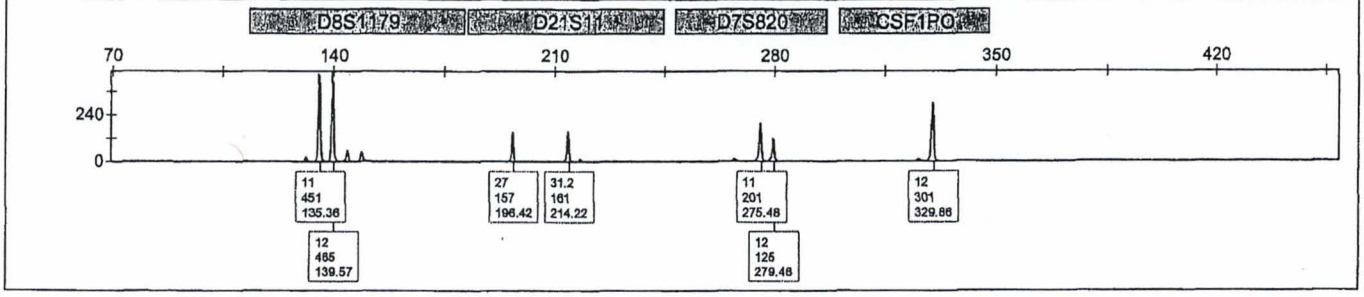

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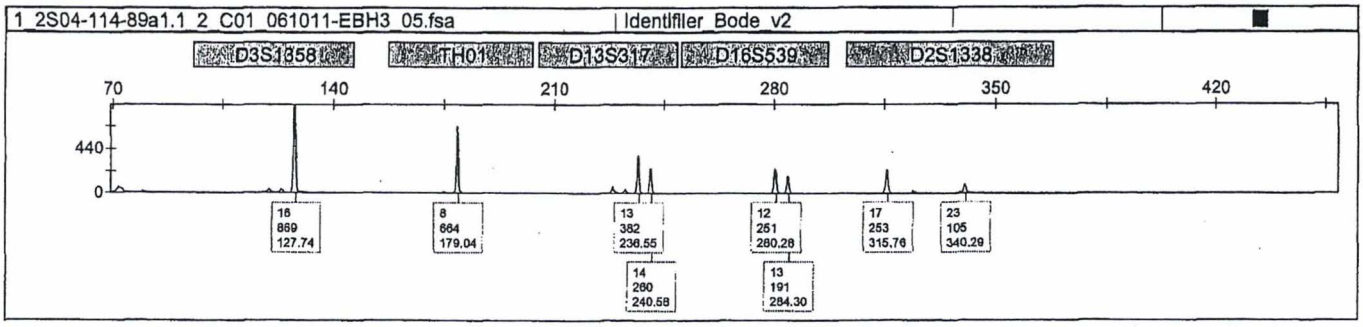
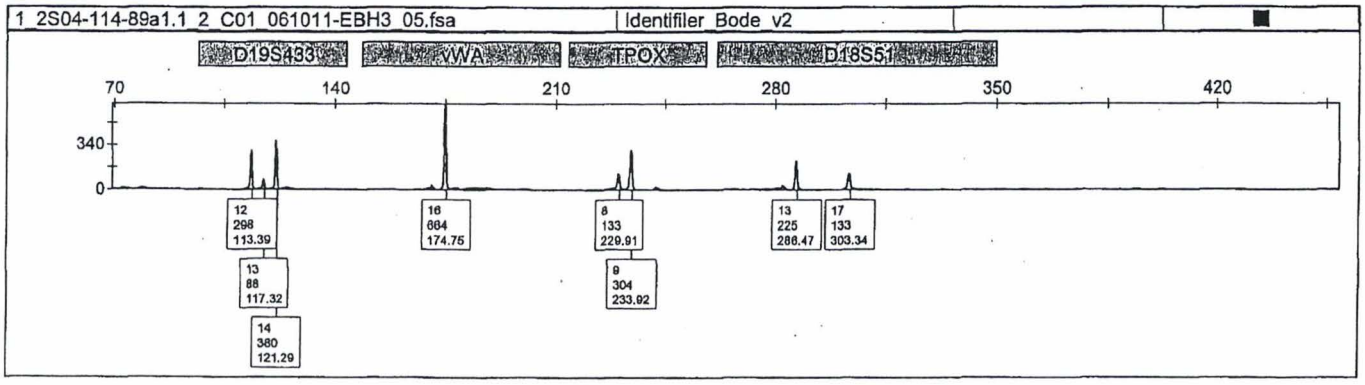


1_2S04-114-89a1.1_2_C01_061011-EBH3_05.fsa | Identifiler_Bode_v2



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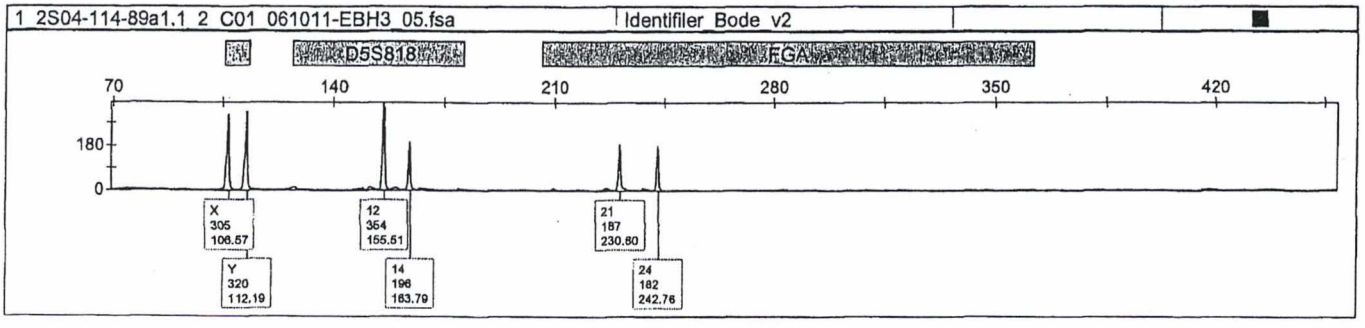

ERH 6/14/11 73

Sample File	Panel	SQO	SQ
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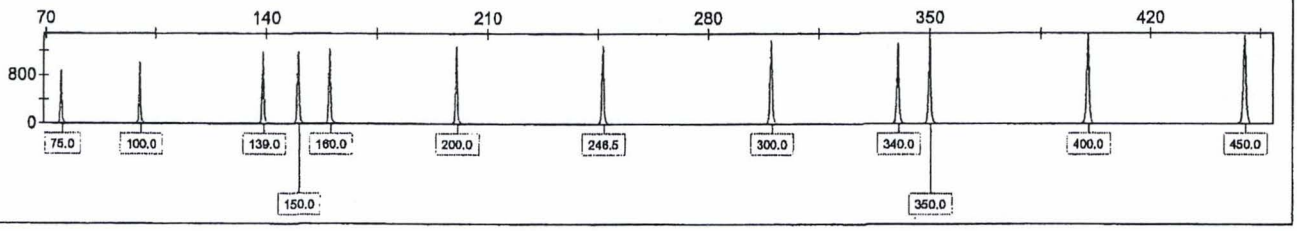

EBH 6/14/11

Sample File	Panel	SQO	SQ
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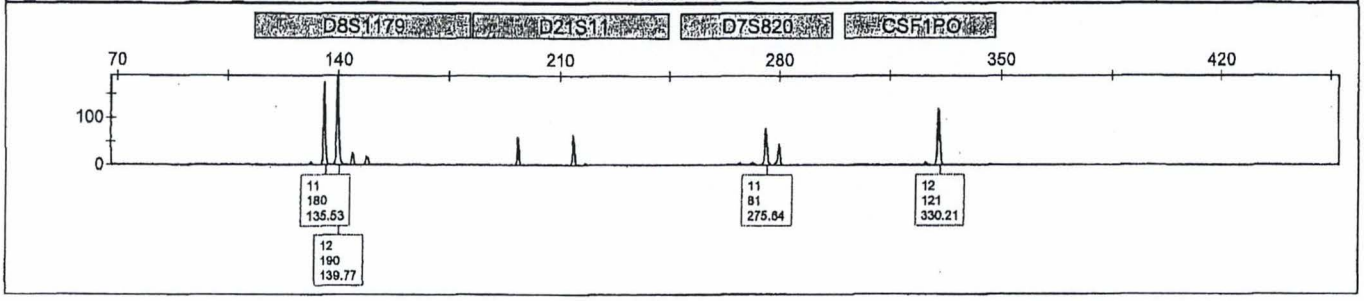

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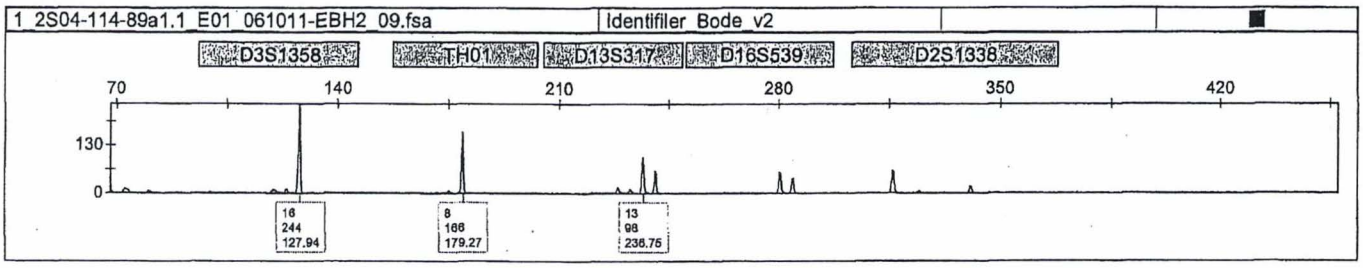

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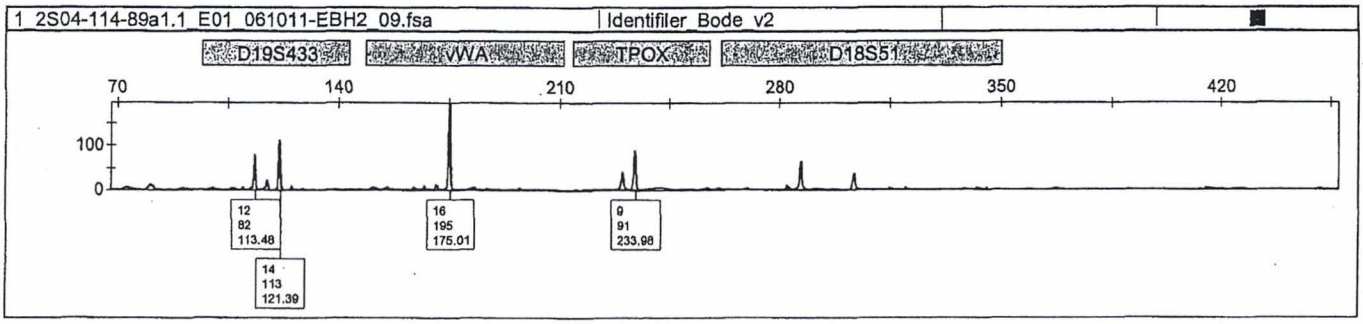

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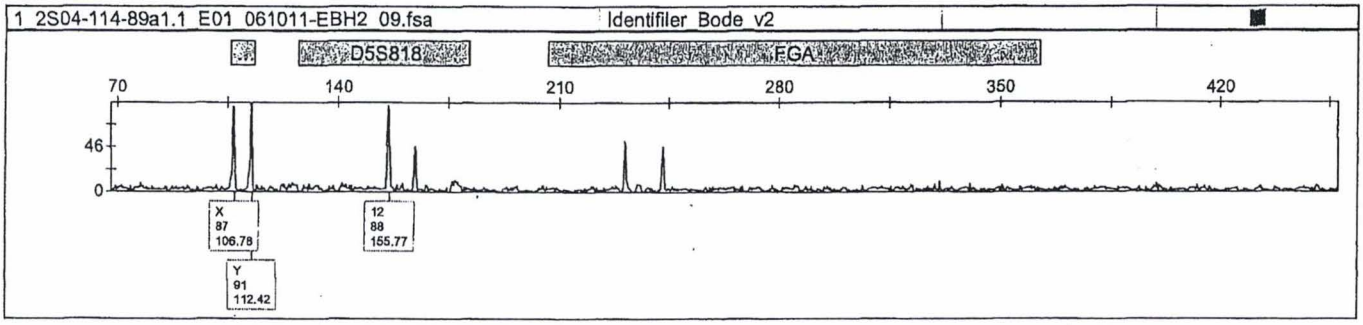
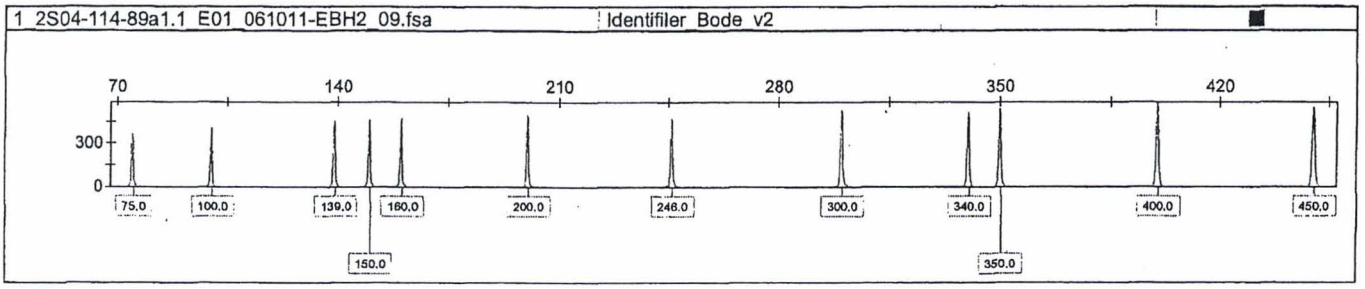


1_2S04-114-89a1.1_E01_061011-EBH2_09.fsa | Identifiler_Bode_v2



EBH 6/10/11

Applied Biosystems
GeneMapper ID v3.2.1

GMID11_061011-EBH2_2S04-114_EBH_ID

Sample File	Panel	SQO	SQ
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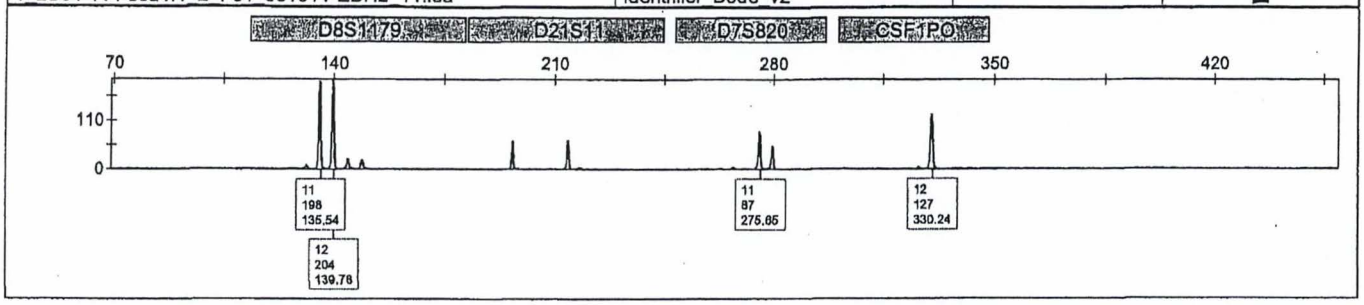
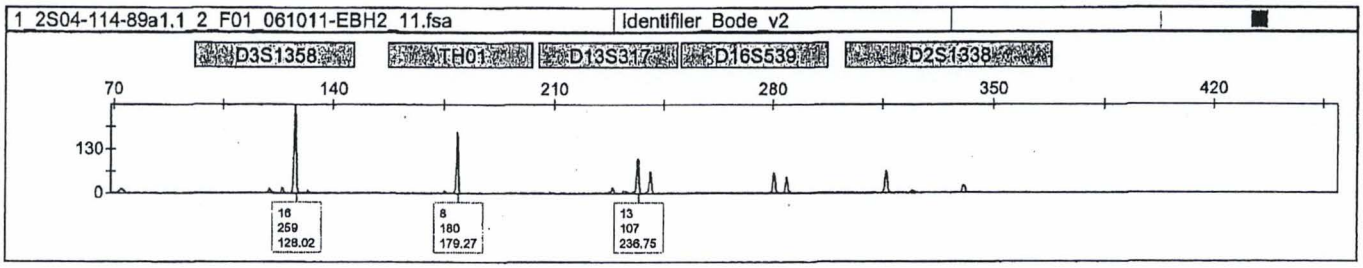
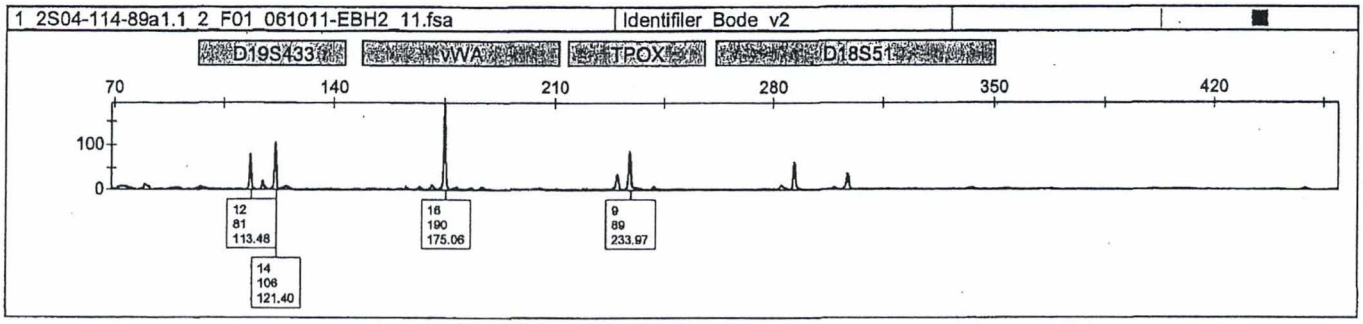


1_2S04-114-89a1.1_2_F01_061011-EBH2_11.fsa	Identifiler_Bode_v2		



1_2S04-114-89a1.1_2_F01_061011-EBH2_11.fsa	Identifiler_Bode_v2		



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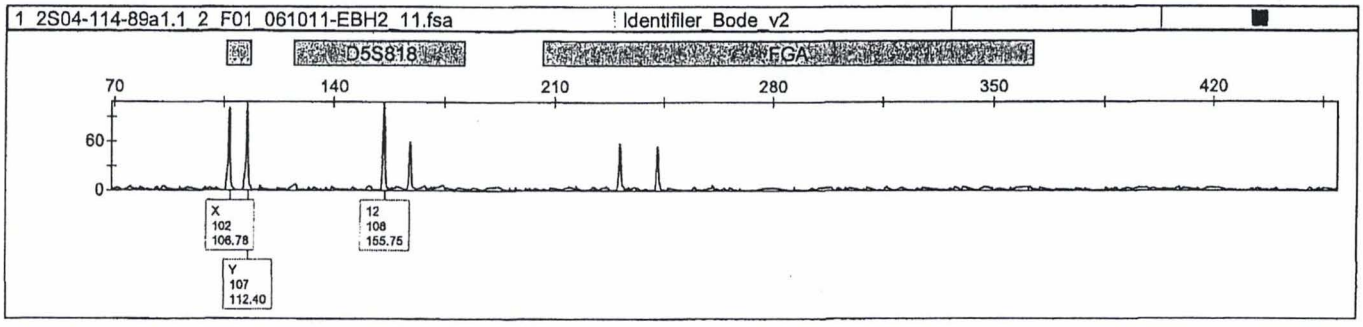

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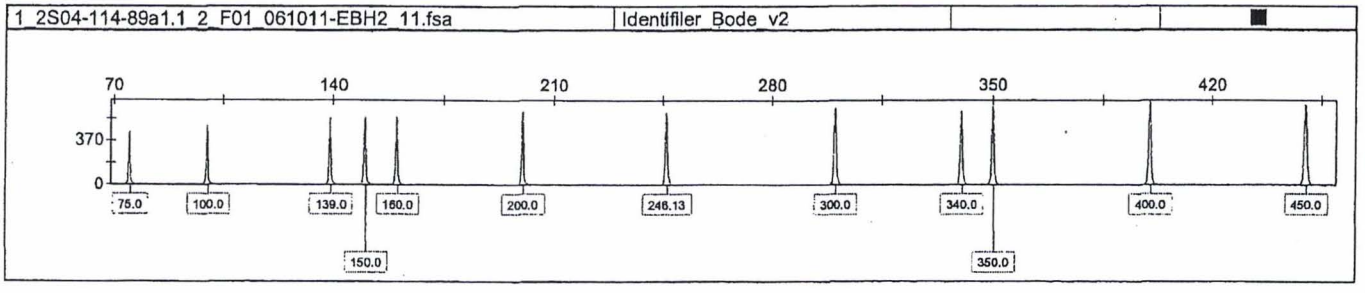

EKH 6/10/11

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Applied Biosystems

GeneMapper ID v3.2.1

GMID3_061011-EBH1_2S04-114_EBH_ID

Sample File	Panel	SQO	SQ
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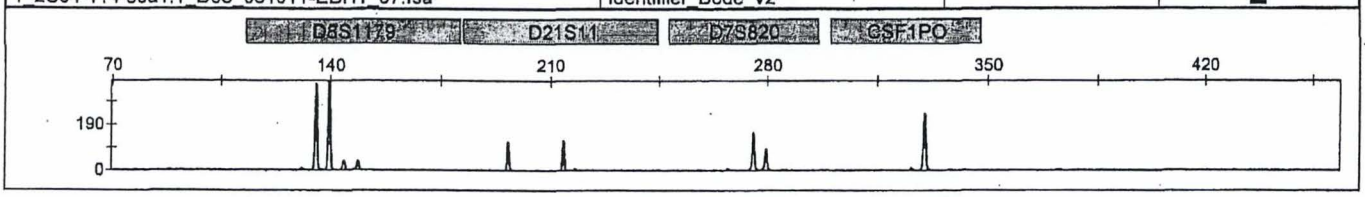

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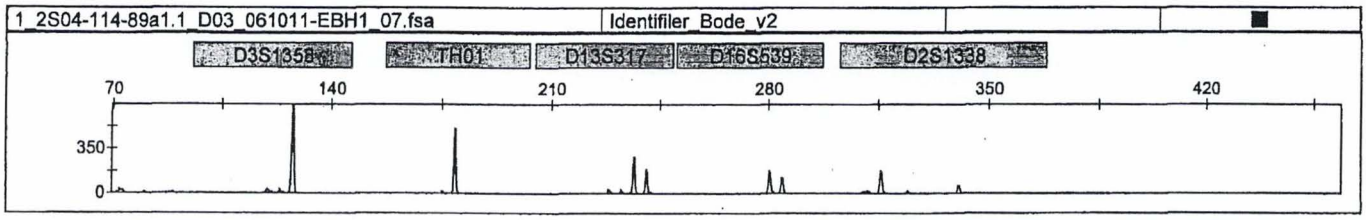

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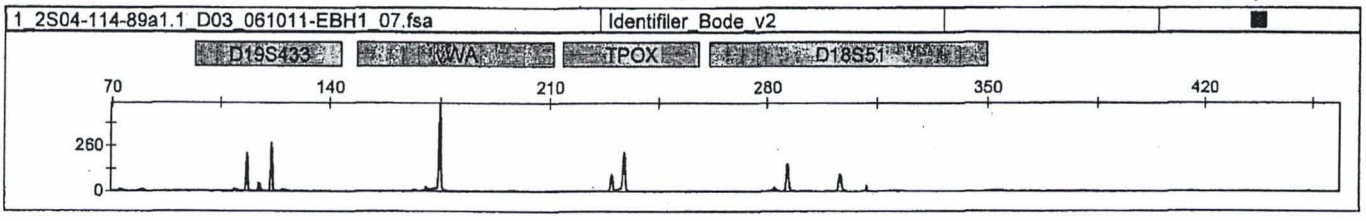
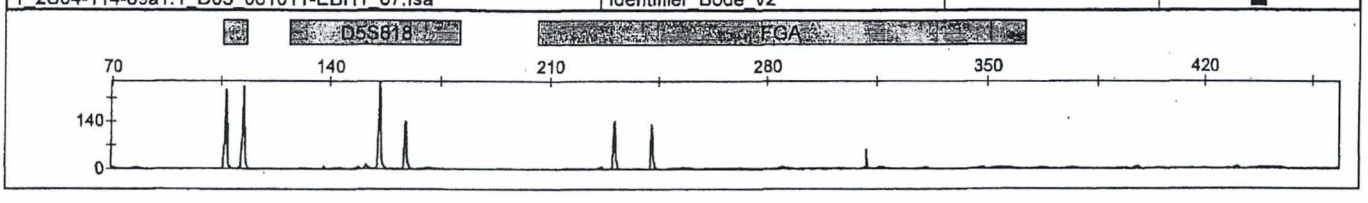


1_2S04-114-89a1.1_D03_061011-EBH1_07.fsa | Identifiler_Bode_v2



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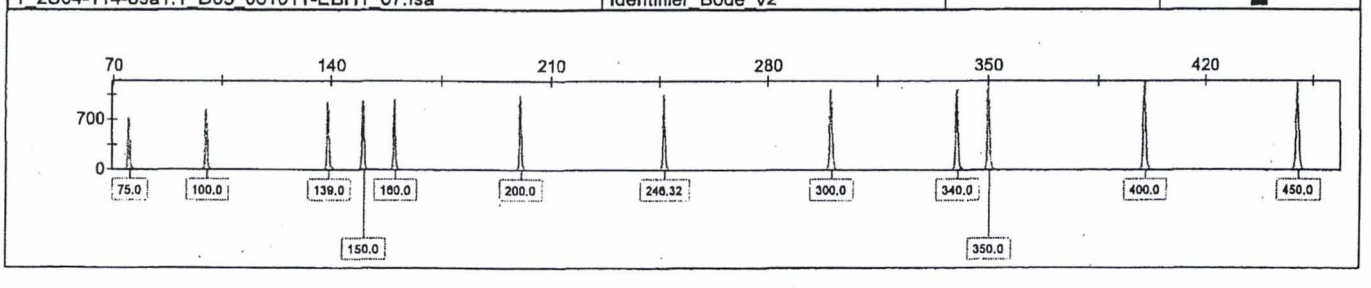

EBH 6/10/11

Sample File	Panel	SQO	SQ
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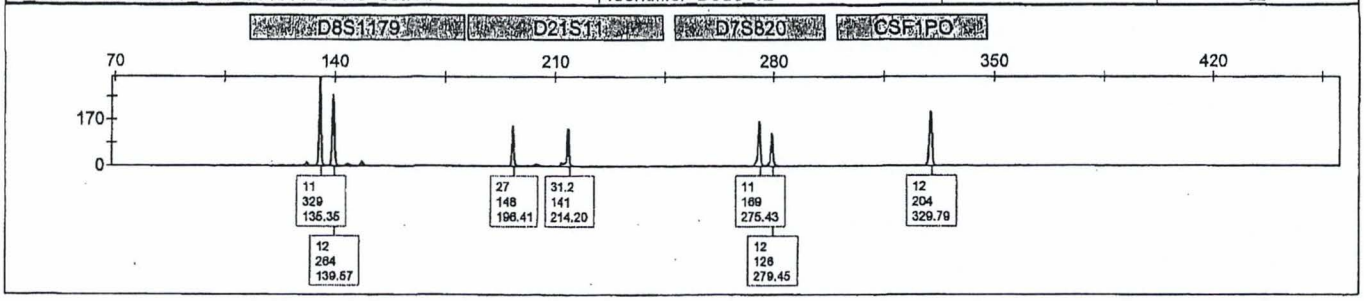

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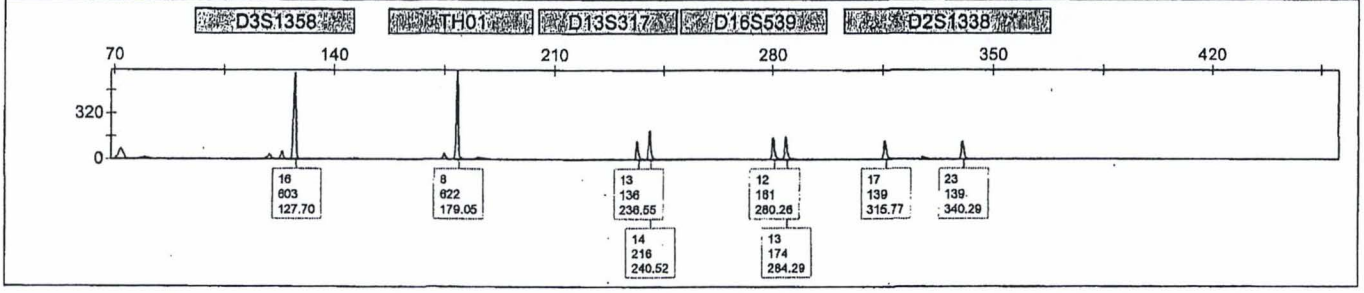

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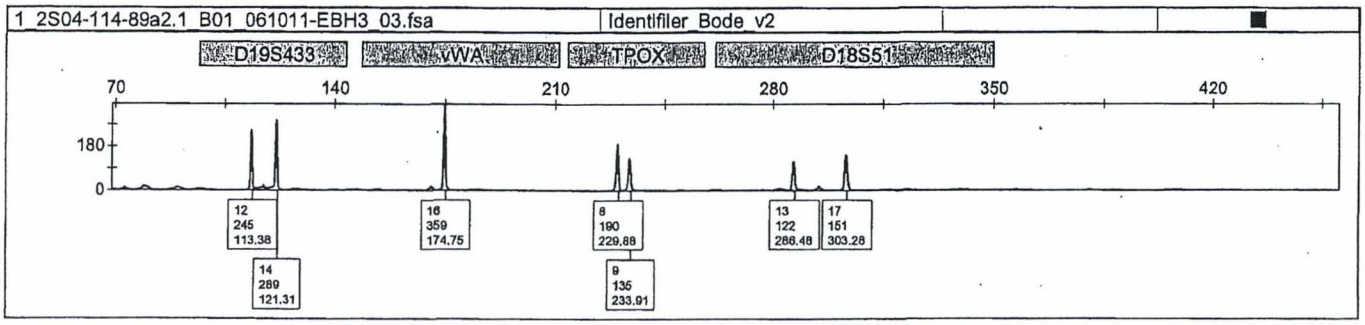
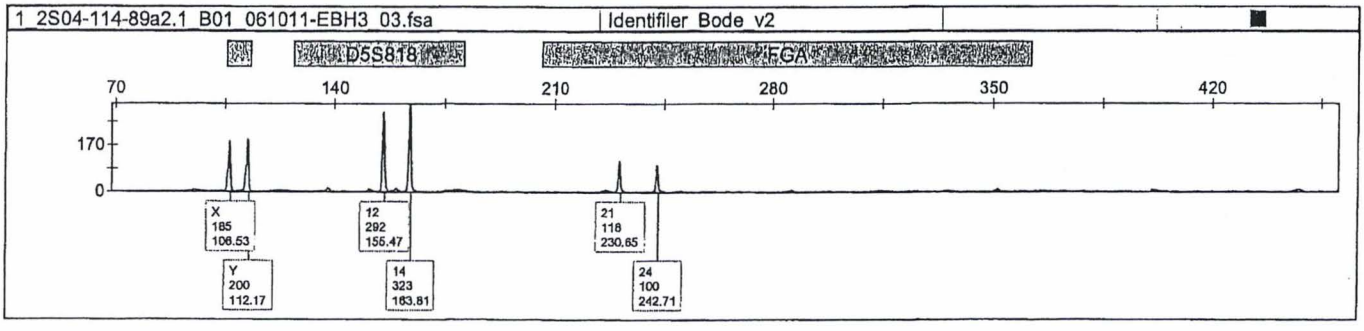
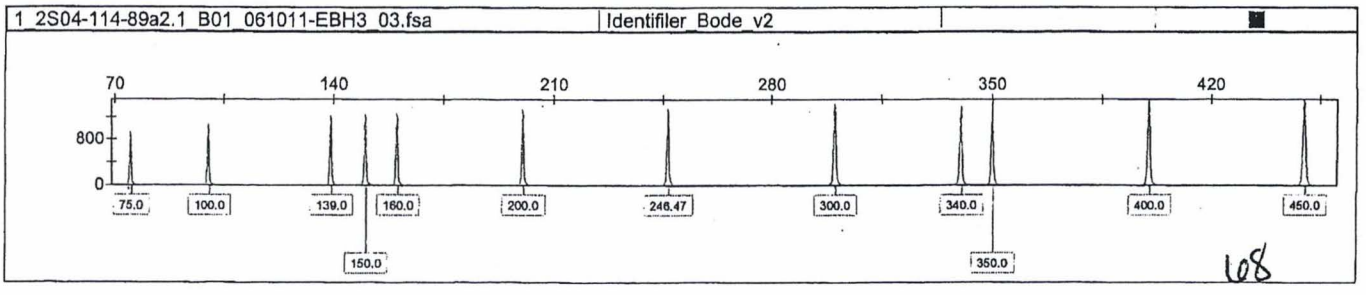


1_2S04-114-89a2.1_B01_061011-EBH3_03.fsa | Identifiler_Bode_v2



1_2S04-114-89a2.1_B01_061011-EBH3_03.fsa | Identifiler_Bode_v2



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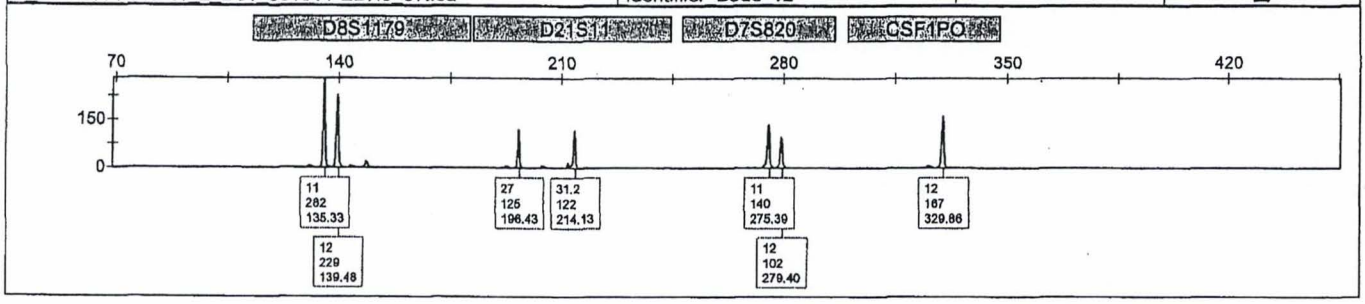
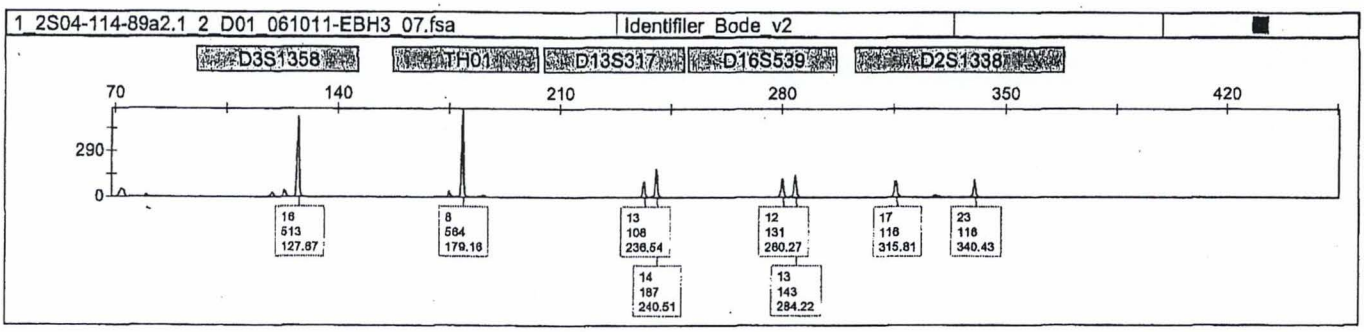
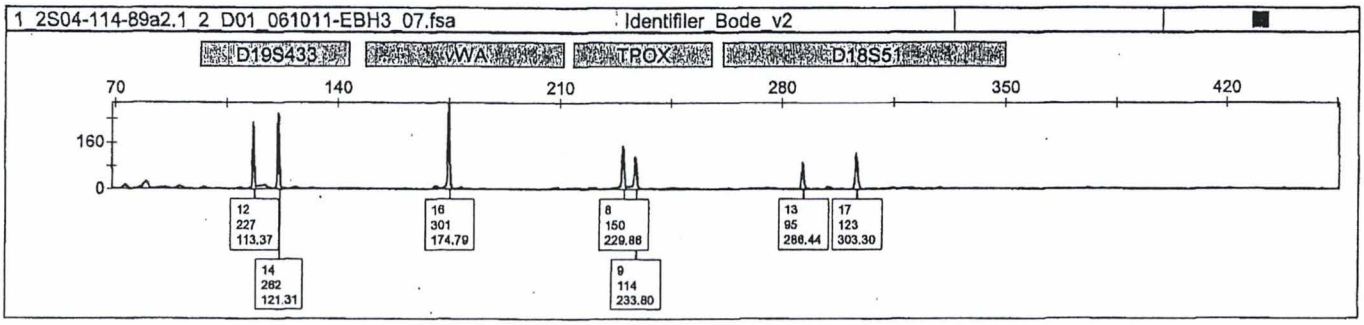
Sample File	Panel	SQO	SQ
1_2S04-114-89a2.1_2_D01_061011-EBH3_07.fsa	Identifiler_Bode_v2		



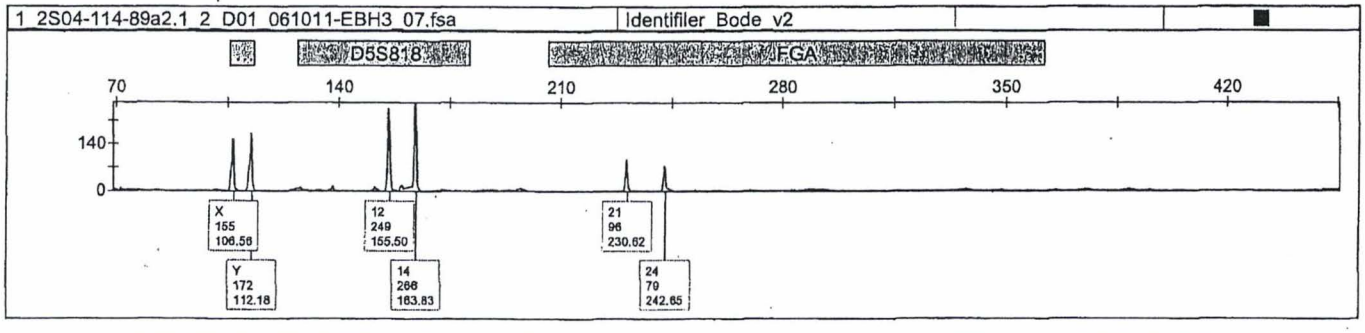
1_2S04-114-89a2.1_2_D01_061011-EBH3_07.fsa | Identifiler_Bode_v2



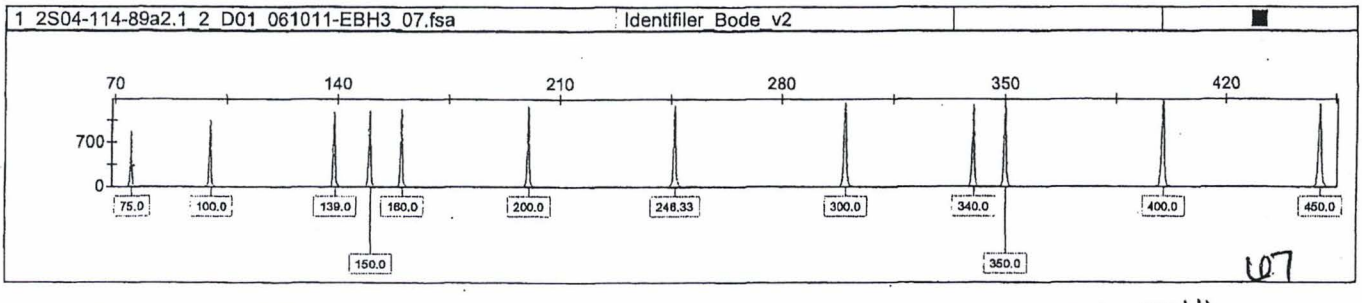
1_2S04-114-89a2.1_2_D01_061011-EBH3_07.fsa | Identifiler_Bode_v2



1_2S04-114-89a2.1_2_D01_061011-EBH3_07.fsa | Identifiler_Bode_v2



1_2S04-114-89a2.1_2_D01_061011-EBH3_07.fsa | Identifiler_Bode_v2

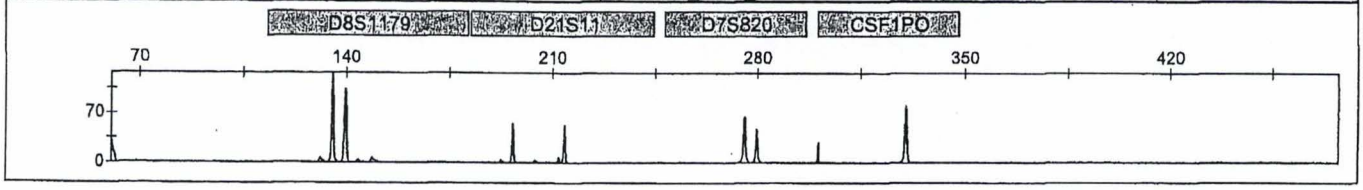


07

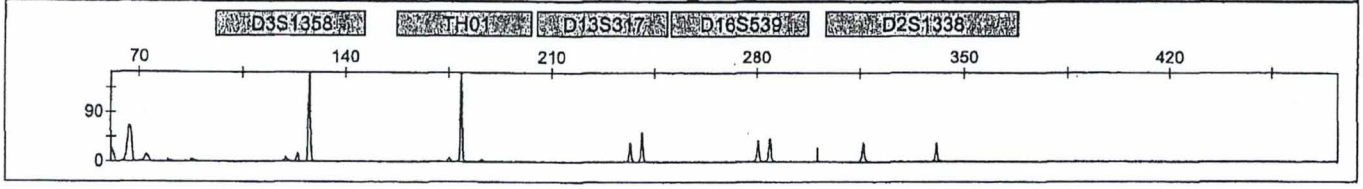
Applied Biosystems
GeneMapper ID v3.2.1

GMID11_061011-EBH2_2S04-114_EBH_ID

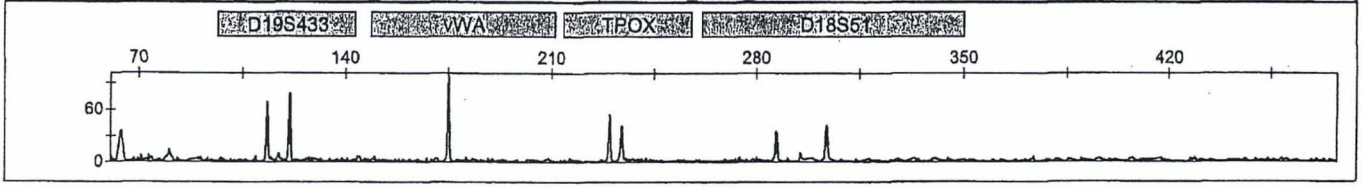
Sample File	Panel	SQO	SQ
1_2S04-114-89a2.1_G01_061011-EBH2_13.fsa	Identifiler_Bode_v2		



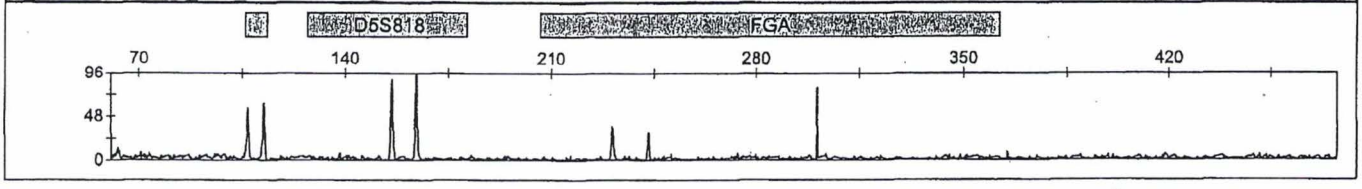
1_2S04-114-89a2.1_G01_061011-EBH2_13.fsa | Identifiler_Bode_v2



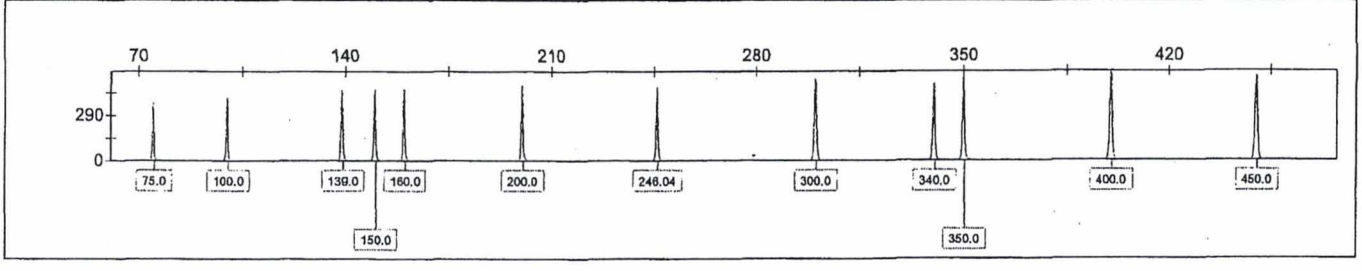
1_2S04-114-89a2.1_G01_061011-EBH2_13.fsa | Identifiler_Bode_v2



1_2S04-114-89a2.1_G01_061011-EBH2_13.fsa | Identifiler_Bode_v2



1_2S04-114-89a2.1_G01_061011-EBH2_13.fsa | Identifiler_Bode_v2



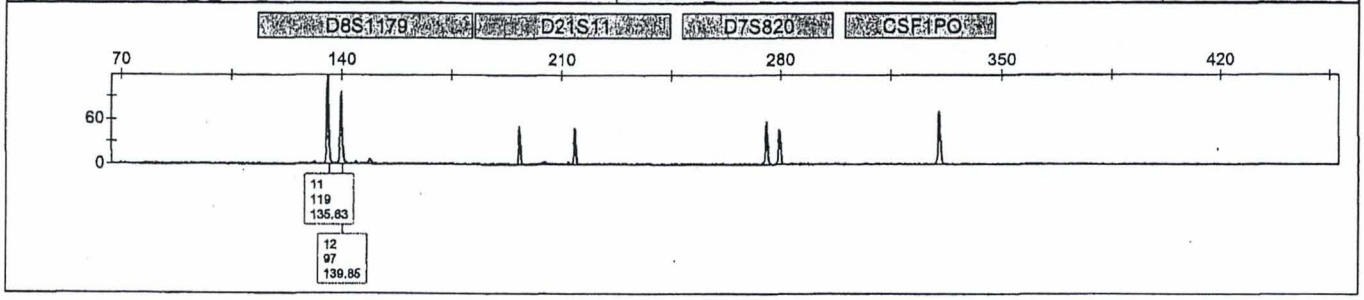
EBH 061011

Applied Biosystems

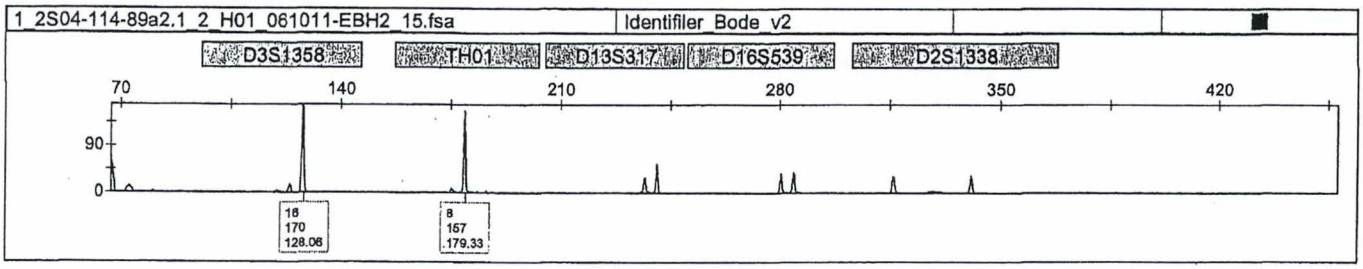
GeneMapper ID v3.2.1

GMID11_061011-EBH2_2S04-114_EBH_ID

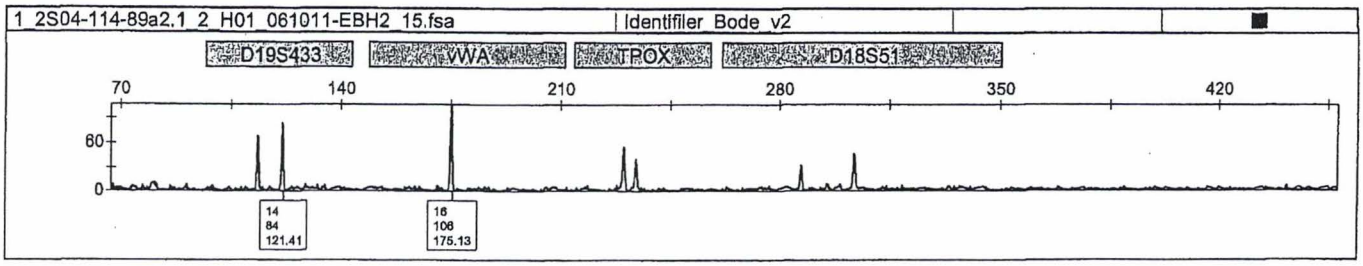
Sample File	Panel	SQO	SQ
1_2S04-114-89a2.1_2_H01_061011-EBH2_15.fsa	Identifiler_Bode_v2		



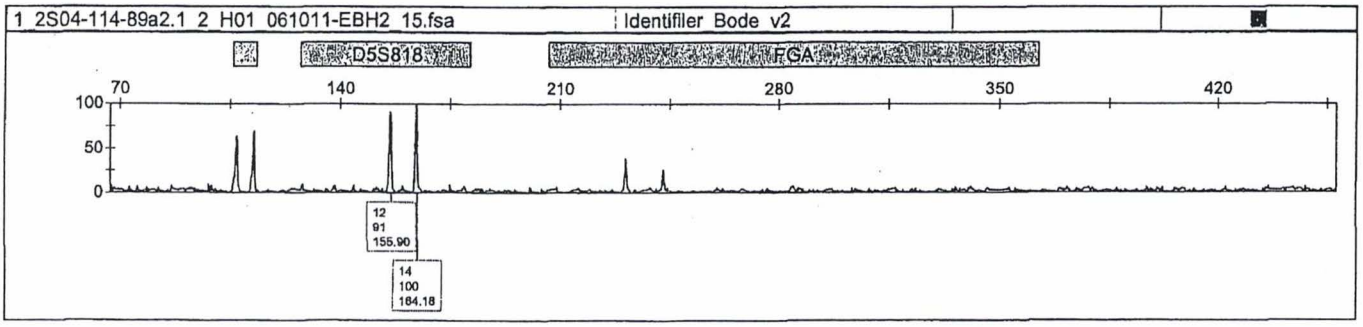
1_2S04-114-89a2.1_2_H01_061011-EBH2_15.fsa	Identifiler_Bode_v2		



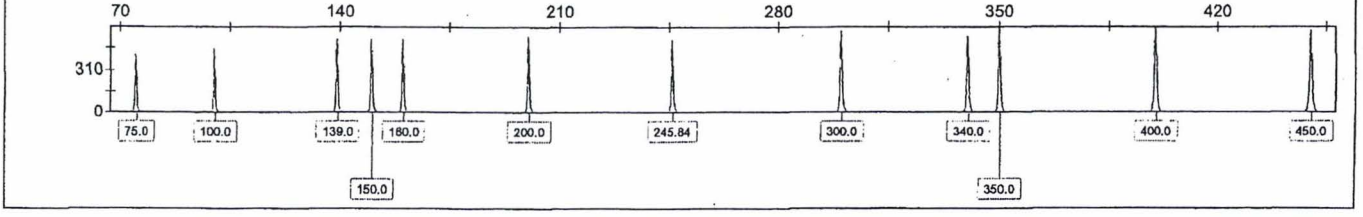
1_2S04-114-89a2.1_2_H01_061011-EBH2_15.fsa	Identifiler_Bode_v2		



1_2S04-114-89a2.1_2_H01_061011-EBH2_15.fsa	Identifiler_Bode_v2		



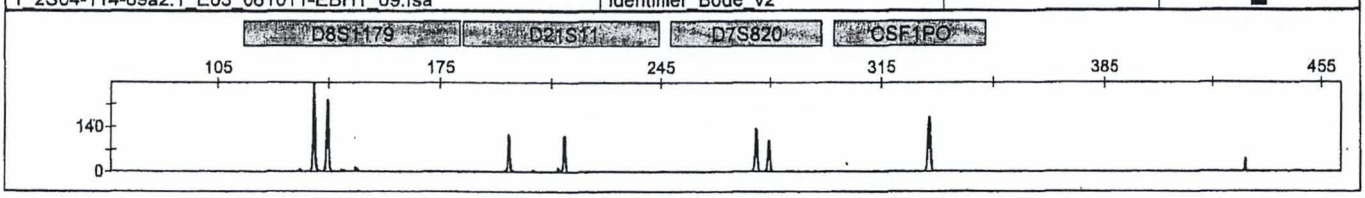
1_2S04-114-89a2.1_2_H01_061011-EBH2_15.fsa	Identifiler_Bode_v2		



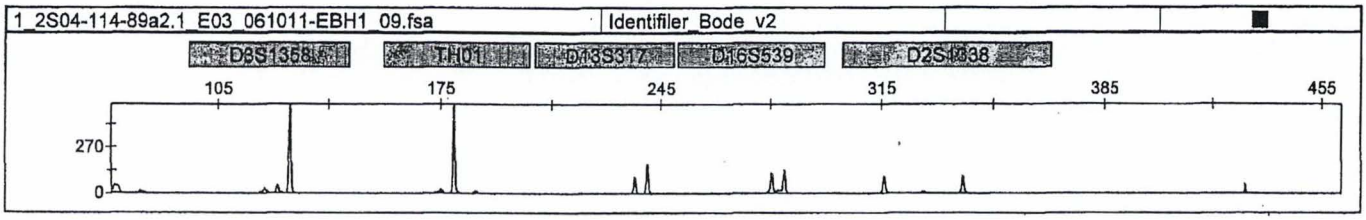
EBH 061011

05

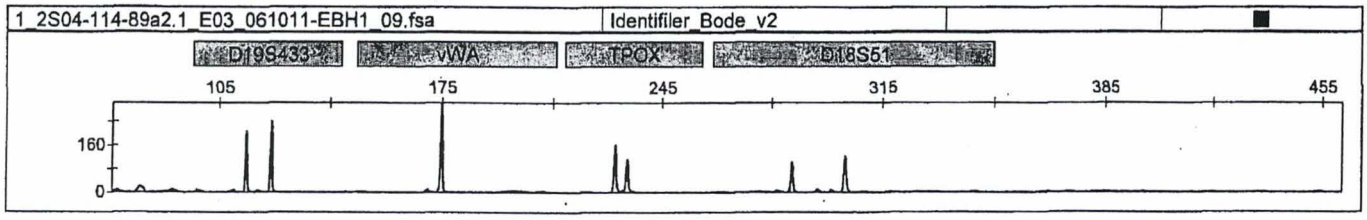
Sample File	Panel	SQO	SQ
1_2S04-114-89a2.1_E03_061011-EBH1_09.fsa	Identifiler_Bode_v2		



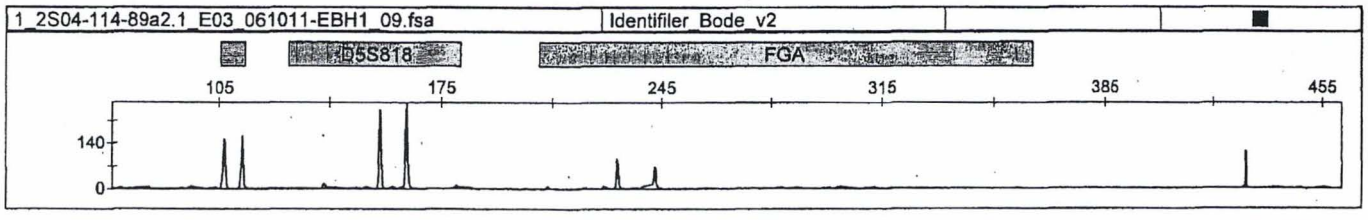
1_2S04-114-89a2.1_E03_061011-EBH1_09.fsa | Identifiler_Bode_v2



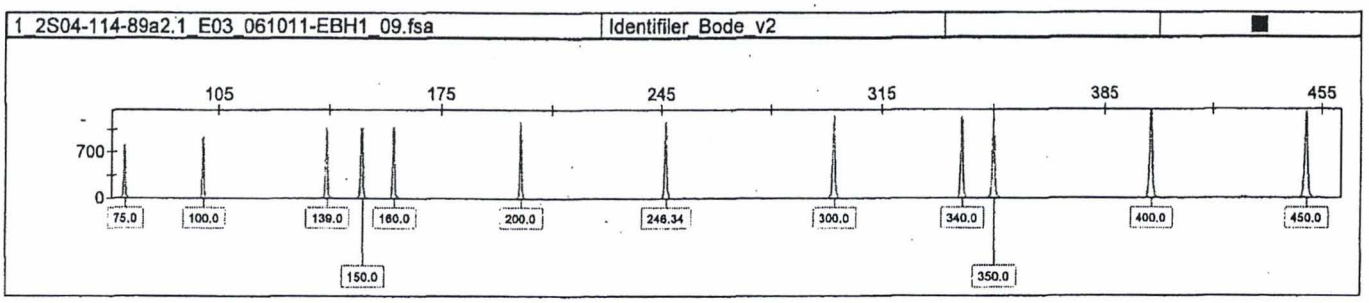
1_2S04-114-89a2.1_E03_061011-EBH1_09.fsa | Identifiler_Bode_v2



1_2S04-114-89a2.1_E03_061011-EBH1_09.fsa | Identifiler_Bode_v2



1_2S04-114-89a2.1_E03_061011-EBH1_09.fsa | Identifiler_Bode_v2



EBH 6/10/11

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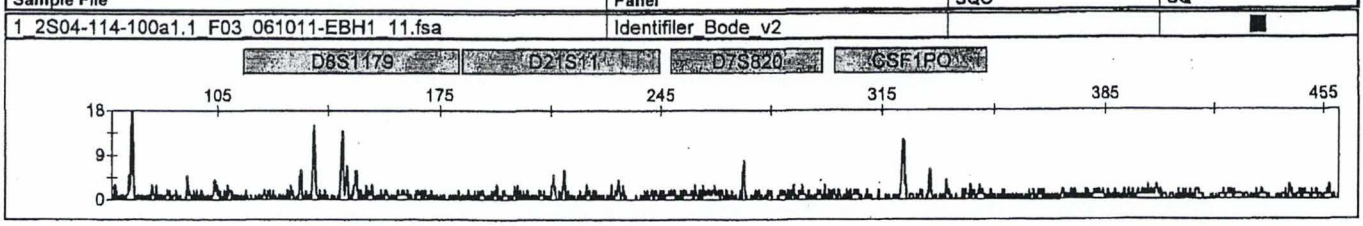
Applied Biosystems

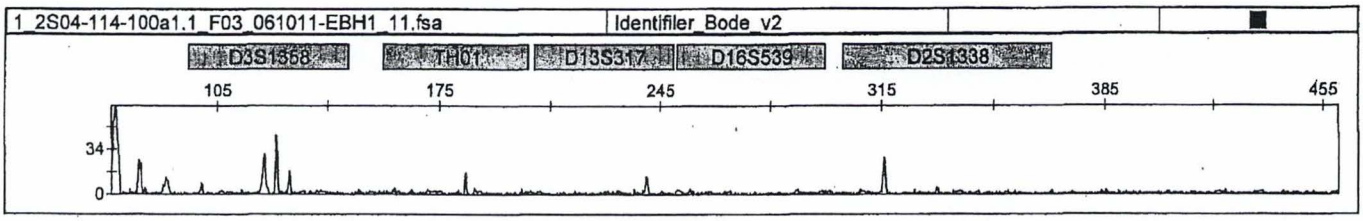
GeneMapper ID v3.2.1

GMID3_061011-EBH1_2S04-114_EBH_ID

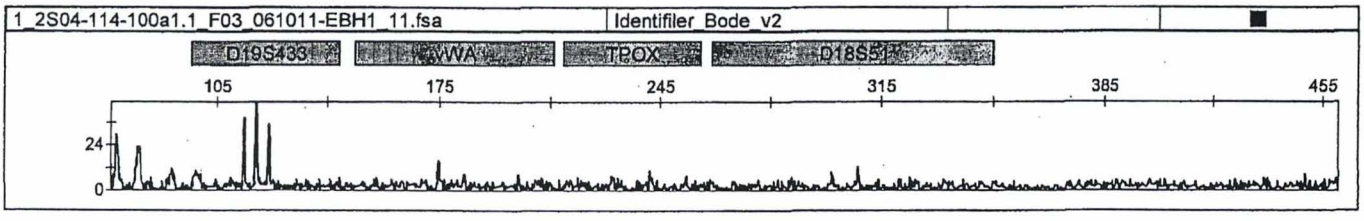
Sample File	Panel	SQO	SQ
1_2S04-114-100a1.1_F03_061011-EBH1_11.fsa	Identifiler_Bode_v2		



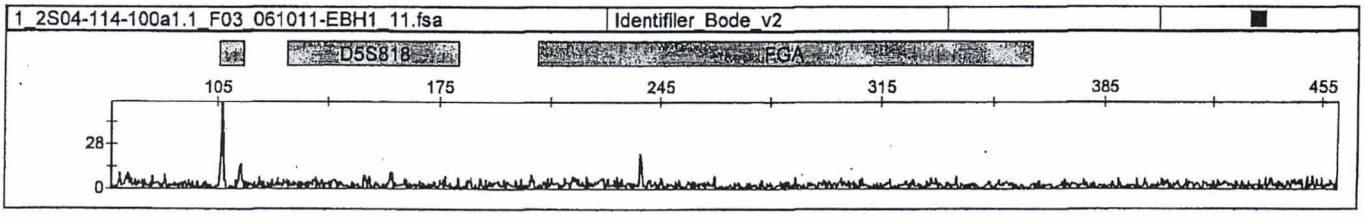
1_2S04-114-100a1.1_F03_061011-EBH1_11.fsa | Identifiler_Bode_v2



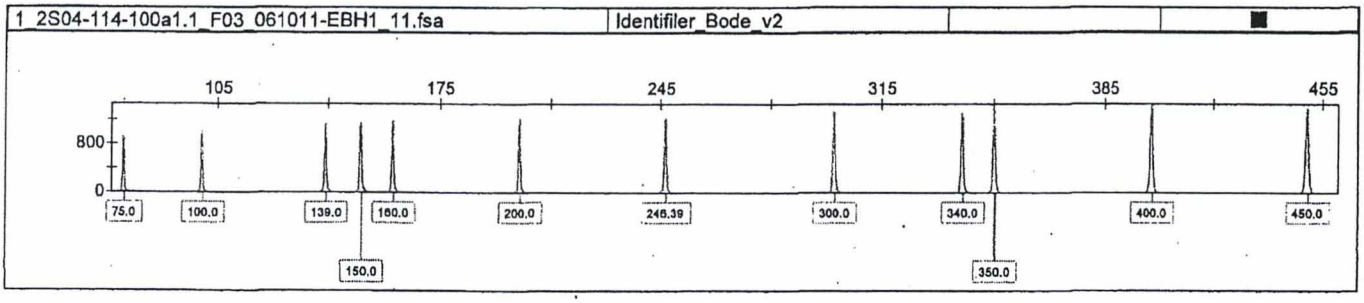
1_2S04-114-100a1.1_F03_061011-EBH1_11.fsa | Identifiler_Bode_v2



1_2S04-114-100a1.1_F03_061011-EBH1_11.fsa | Identifiler_Bode_v2



1_2S04-114-100a1.1_F03_061011-EBH1_11.fsa | Identifiler_Bode_v2



Qt = 0.00297 ng/ul

sample was vivacormed.

EBH 011411

EBH 011011

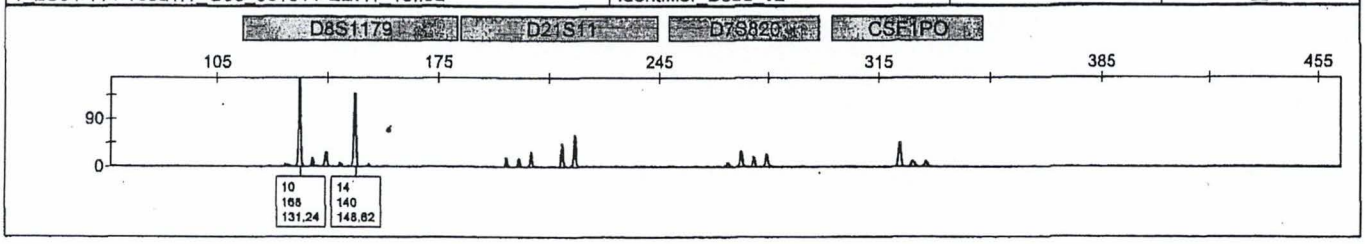
03

Applied Biosystems

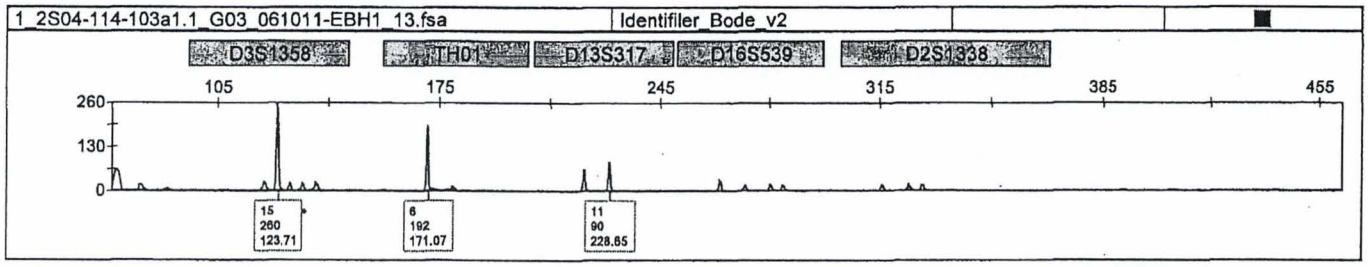
GeneMapper ID v3.2.1

GMID3_061011-EBH1_2S04-114_EBH_ID

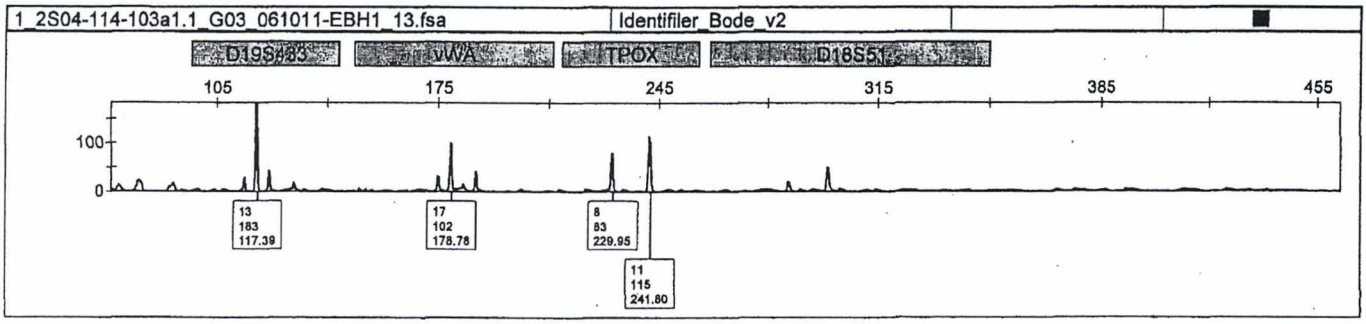
Sample File	Panel	SQO	SQ
1_2S04-114-103a1.1_G03_061011-EBH1_13.fsa	Identifiler_Bode_v2		



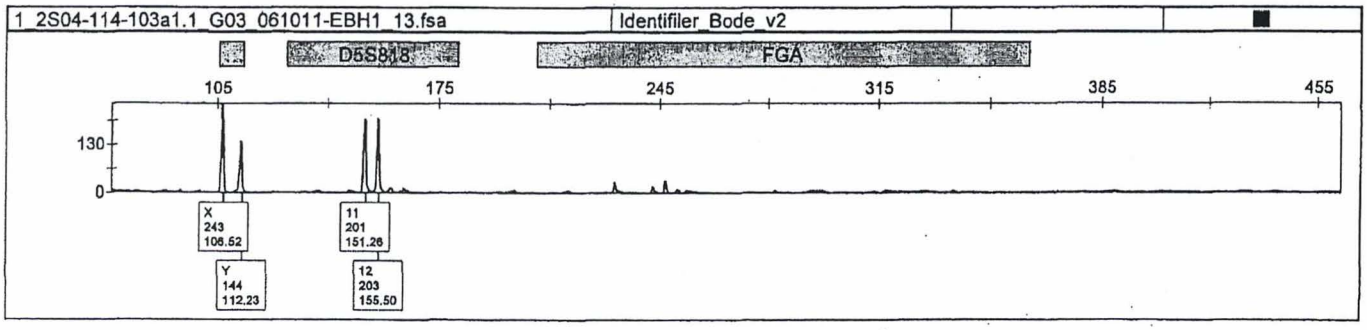
1_2S04-114-103a1.1_G03_061011-EBH1_13.fsa | Identifiler_Bode_v2



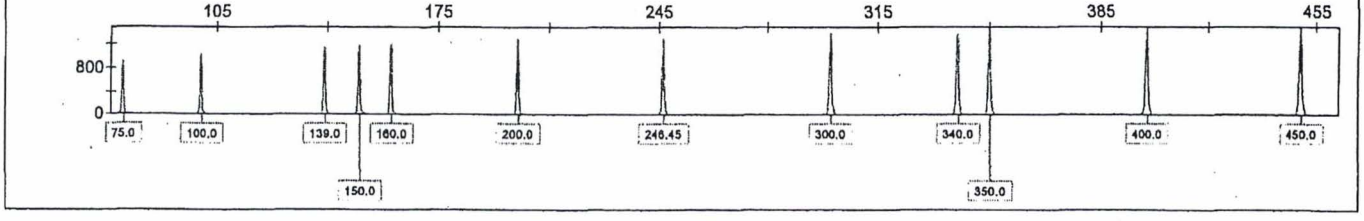
1_2S04-114-103a1.1_G03_061011-EBH1_13.fsa | Identifiler_Bode_v2



1_2S04-114-103a1.1_G03_061011-EBH1_13.fsa | Identifiler_Bode_v2



1_2S04-114-103a1.1_G03_061011-EBH1_13.fsa | Identifiler_Bode_v2



QT = 0.00483 ng/ul

Sample was vivaconned.

EBH 6/14/11

EBH 6/10/11

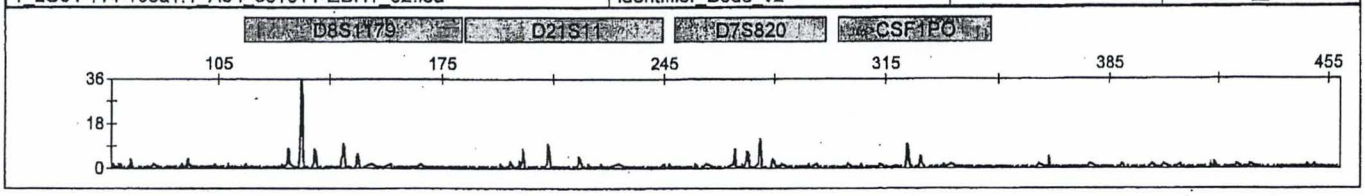
Q2

Applied Biosystems

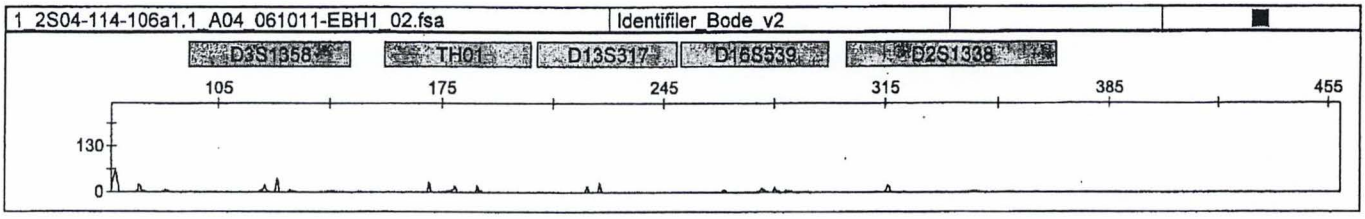
GeneMapper ID v3.2.1

GMID3_061011-EBH1_2S04-114_EBH_ID

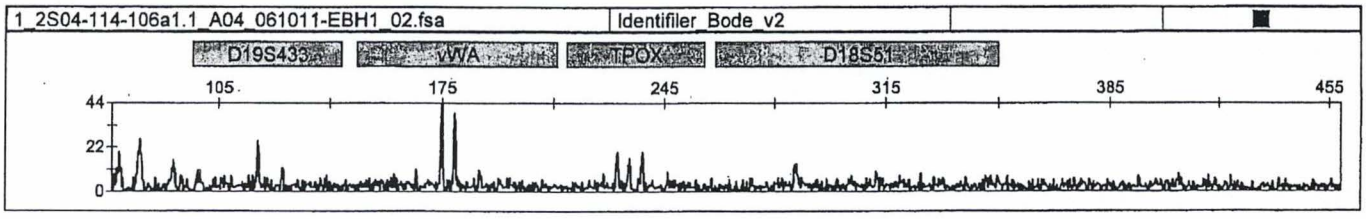
Sample File	Panel	SQO	SQ
1_2S04-114-106a1.1_A04_061011-EBH1_02.fsa	Identifiler_Bode_v2		



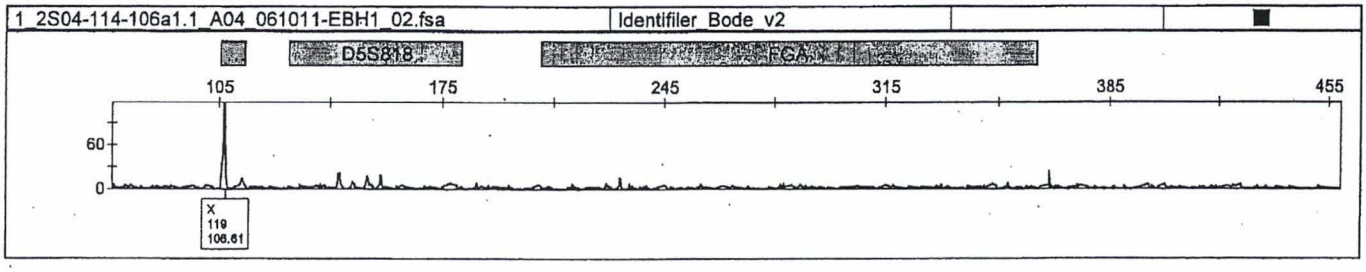
1_2S04-114-106a1.1_A04_061011-EBH1_02.fsa | Identifiler_Bode_v2



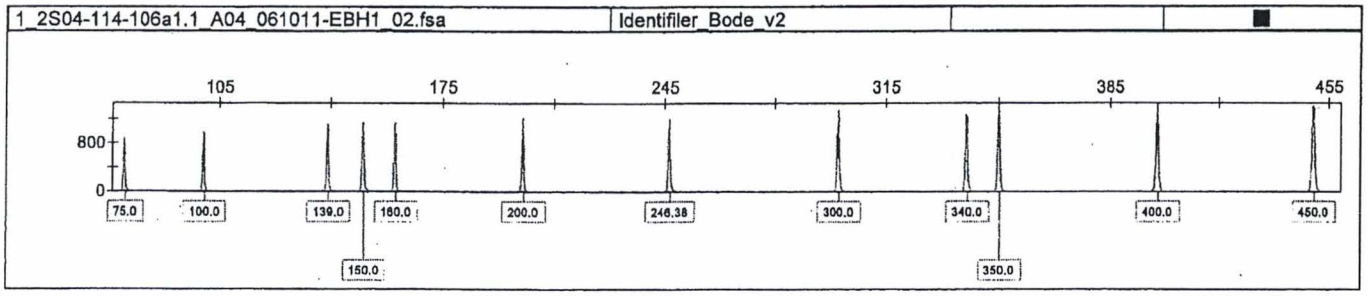
1_2S04-114-106a1.1_A04_061011-EBH1_02.fsa | Identifiler_Bode_v2



1_2S04-114-106a1.1_A04_061011-EBH1_02.fsa | Identifiler_Bode_v2



1_2S04-114-106a1.1_A04_061011-EBH1_02.fsa | Identifiler_Bode_v2



Qt = 0.00439 ng/ul

Sample was vivaconned.

EBH 061411

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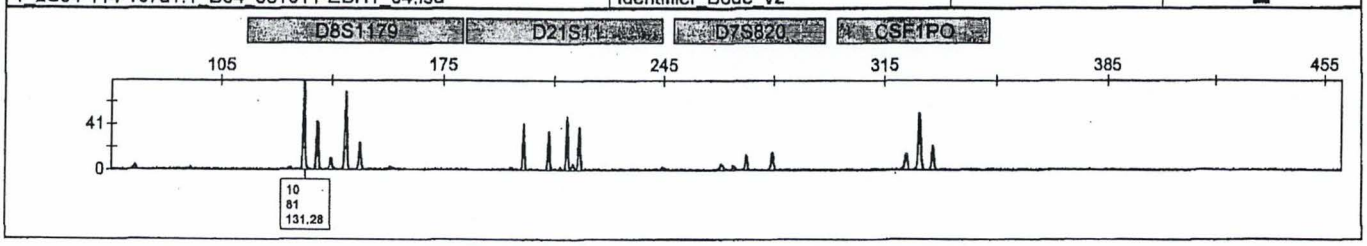
EBH 061011

Applied Biosystems

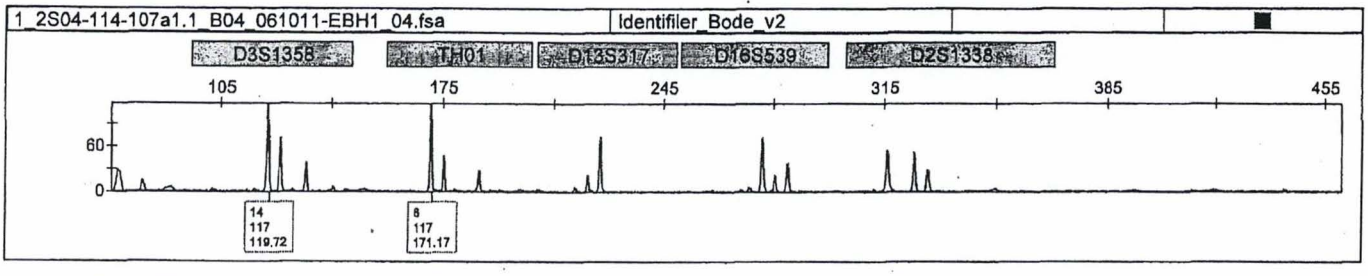
GeneMapper ID v3.2.1

GMID3_061011-EBH1_2S04-114_EBH_ID

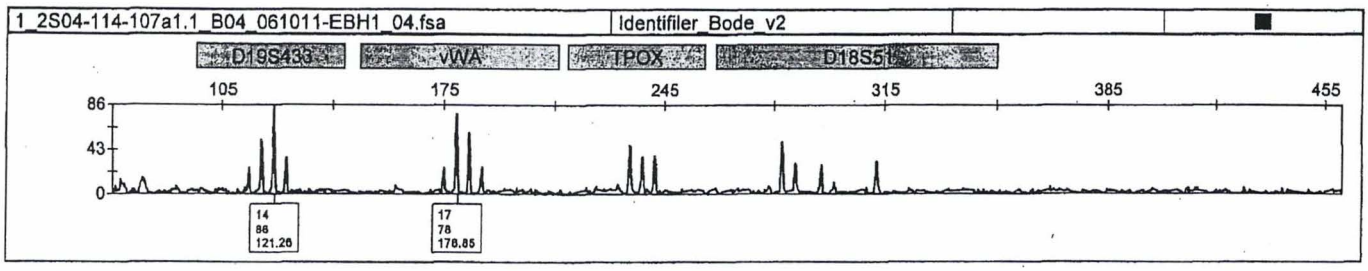
Sample File	Panel	SQO	SQ
1_2S04-114-107a1.1_B04_061011-EBH1_04.fsa	Identifiler_Bode_v2		



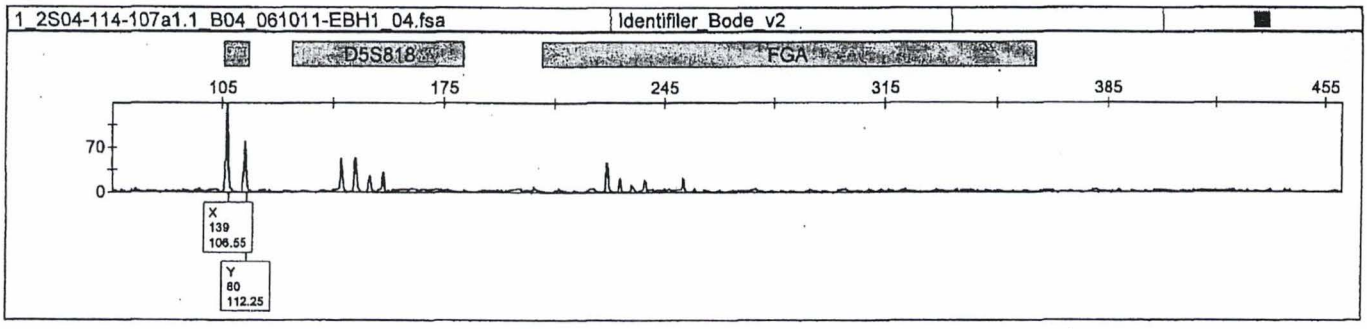
1_2S04-114-107a1.1_B04_061011-EBH1_04.fsa	Identifiler_Bode_v2		



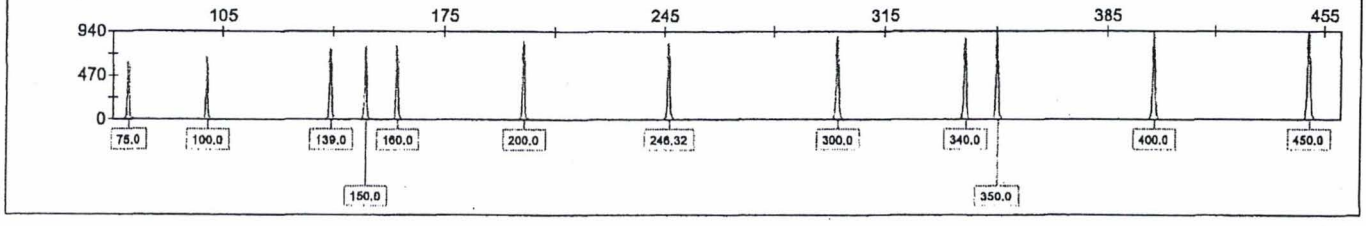
1_2S04-114-107a1.1_B04_061011-EBH1_04.fsa	Identifiler_Bode_v2		



1_2S04-114-107a1.1_B04_061011-EBH1_04.fsa	Identifiler_Bode_v2		



1_2S04-114-107a1.1_B04_061011-EBH1_04.fsa	Identifiler_Bode_v2		



60

At = 0.012 ng/ul

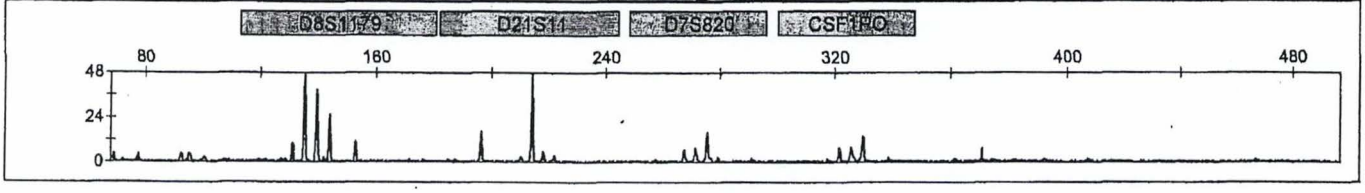
Sample was vivaconned. SRH 6/10/11

SRH 6/14/11

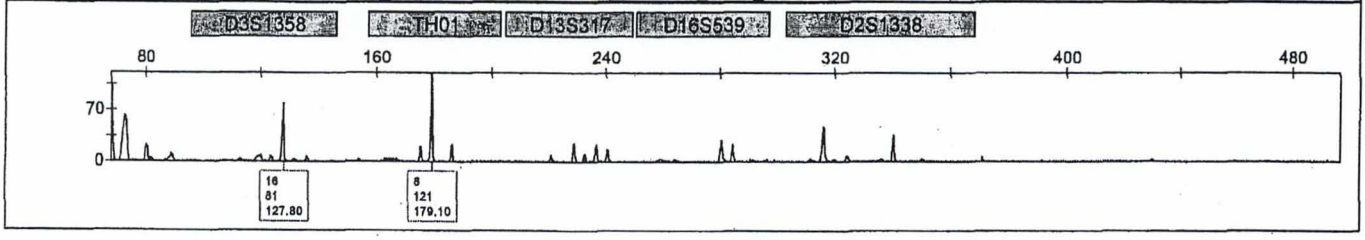
Applied Biosystems
GeneMapper ID v3.2.1

GMID3_061011-EBH1_2S04-114_EBH_1b

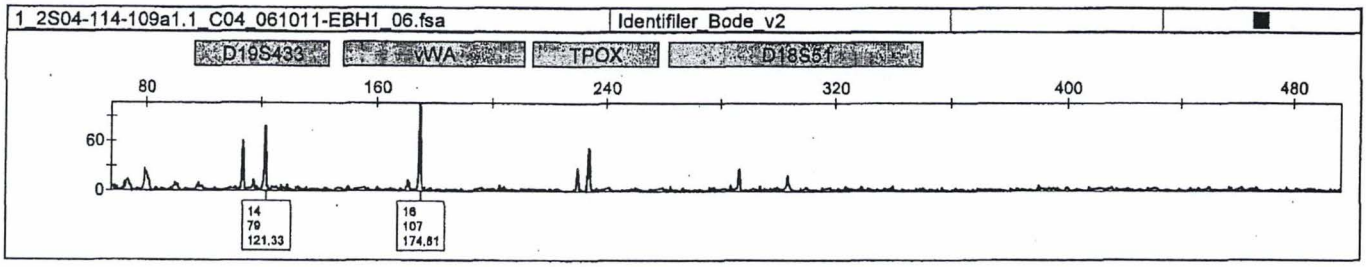
Sample File	Panel	SQO	SQ
1_2S04-114-109a1.1_C04_061011-EBH1_06.fsa	Identifiler_Bode_v2		



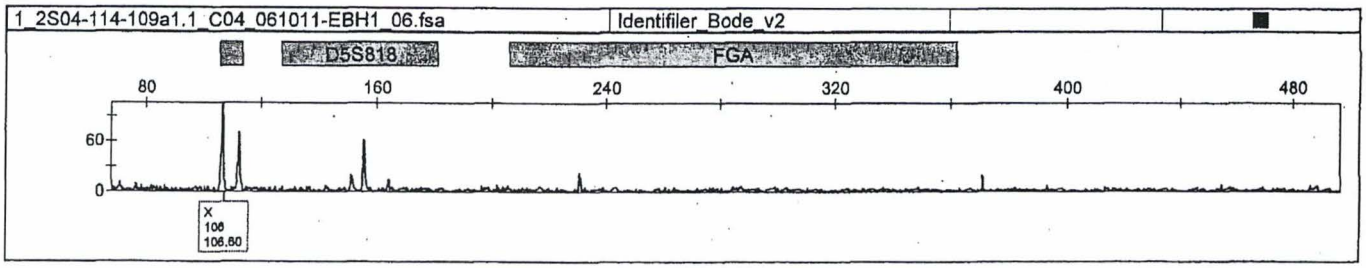
1_2S04-114-109a1.1_C04_061011-EBH1_06.fsa | Identifiler_Bode_v2



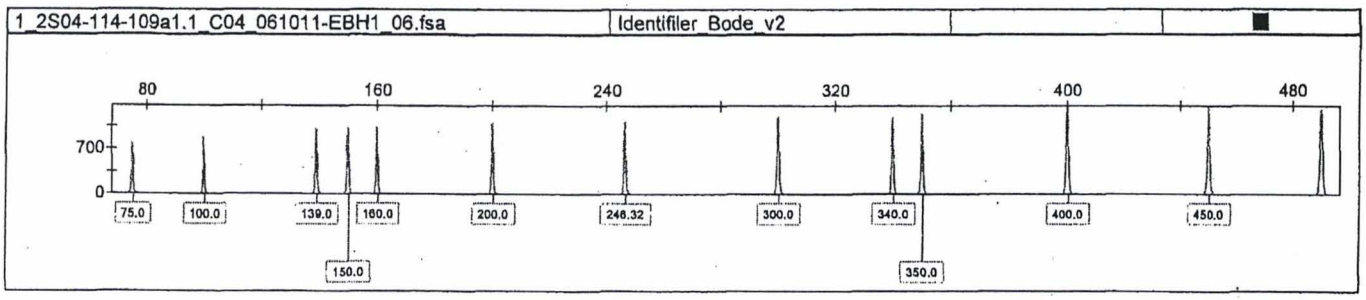
1_2S04-114-109a1.1_C04_061011-EBH1_06.fsa | Identifiler_Bode_v2



1_2S04-114-109a1.1_C04_061011-EBH1_06.fsa | Identifiler_Bode_v2



1_2S04-114-109a1.1_C04_061011-EBH1_06.fsa | Identifiler_Bode_v2



Qt= 0.00478 ng/ul
Sample was Vivaconned.
EBH 6/14/11

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EBH 6/10/11

CE GMID Editing Sheet – ID

Tray ID: CGID11-EBH3
Analyst: EBH
GMID Panel: Identifiler_Bode_v2

Shipment or Case #: 2504-114
Date: 6/14/11

Well	Edit: Locus, Base pair size - reason
E01	TPOX, 228.42, PU

Editing Key

20%: 20% filter applied (after confirming no mixtures)

-A: -A/Split peaks

AUT: single allele below minimum threshold

Artifact (non-specific)

D/I: Degraded and/or Inhibited

Dye artifact

Elevated BL: Labels placed on elevated baseline(s)

FC: Failed capillary

ILS<MIN: ILS below minimum rfu threshold

IA: Imbalanced Alleles

LOR: Loss of resolution

Matrix Issue

OL: Off ladder allele

Other: provide explanation in text box (currently using this for FDLE alleles btw. 75-99 rfu)

PU: Pullup

RFU<MIN: sample rfu below minimum threshold

RFU>MAX: sample rfu above maximum threshold

Shoulder: Shoulder peak

Sizing: incorrect sizing (eg: migration issue)

Spikes

Stutter (n-4 if other record)

9947 Positive Control

Well Numbers Checked Against Known: E01, F01

D8S1179: 13,13	D21S11: 30,30	D7S820: 10,11	CSF1PO: 10,12		
D3S1358: 14,15	TH01: 8,9.3	D13S317: 11,11	D16S539: 11,12	D2S1338: 19,23	
D19S433: 14,15	vWA: 17,18	TPOX: 8,8	D18S51: 15,19		
AMEL: X,X	D5S818: 11,11	FGA: 23,24			

EBH 6/14/11

CE GMID Editing Sheet – ID

Tray ID: 061011-EB#3
Analyst: ABC
GMID Panel: Identifiler_Bode_v2

Shipment or Case #: 2504114
Date: 6-14-11

Well	Edit: Locus, Base pair size - reason
E1	TPOX 228.42 PU

Editing Key

20%: 20% filter applied (after confirming no mixtures)

-A. -A/Split peaks

AUT: single allele below minimum threshold

Artifact (non-specific)

D/I: Degraded and/or Inhibited

Dye artifact

Elevated BL: Labels placed on elevated basline(s)

FC: Failed capillary

ILS<MIN: ILS below minimum rfu threshold

IA: Imbalanced Alleles

LOR: Loss of resolution

Matrix Issue

OL: Off ladder allele

Other: provide explanation in text box (currently using this for FDLE alleles btw. 75-99 rfu)

PU: Pullup

RFU<MIN: sample rfu below minimum threshold

RFU>MAX: sample rfu above maximum threshold

Shoulder: Shoulder peak

Sizing: incorrect sizing (eg: migration issue)

Spikes

Stutter (n-4 if other record)

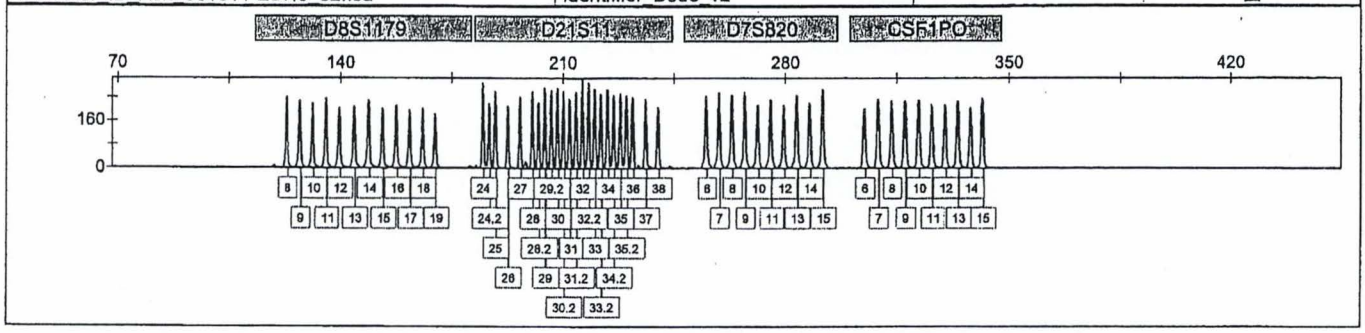
9947 Positive Control

Well Numbers Checked Against Known: E1, F1

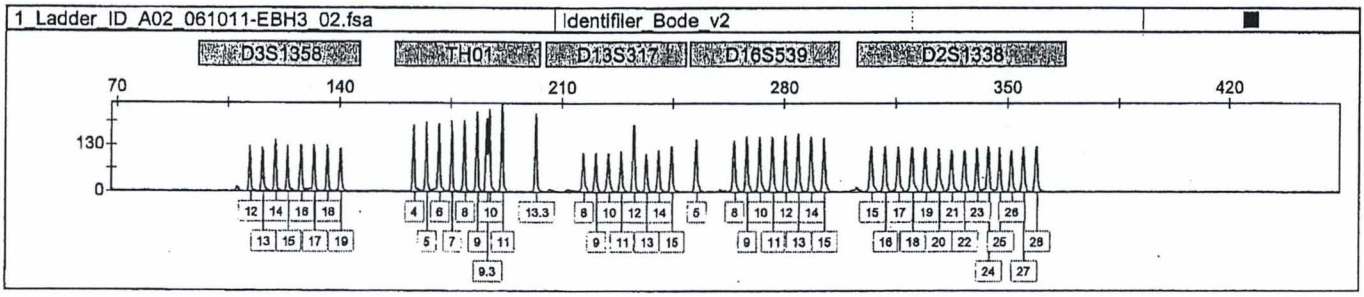
D8S1179: 13,13	D21S11: 30,30	D7S820: 10,11	CSF1PO: 10,12		
D3S1358: 14,15	TH01: 8,9.3	D13S317: 11,11	D16S539: 11,12	D2S1338: 19,23	
D19S433: 14,15	vWA: 17,18	TPOX: 8,8	D18S51: 15,19		
AMEL: X,X	D5S818: 11,11	FGA: 23,24			

ABC 6-14-11

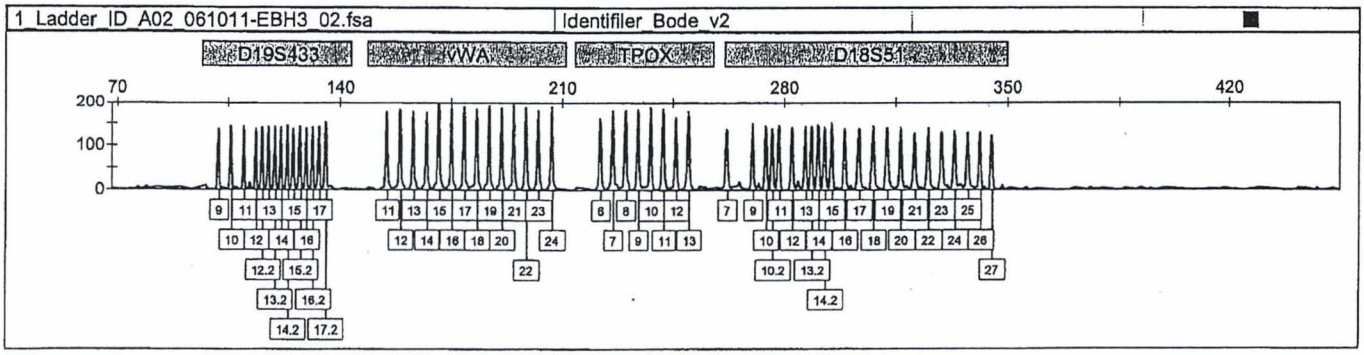
Sample File	Panel	SQO	SQ
1_Ladder_ID_A02_061011-EBH3_02.fsa	Identifiler_Bode_v2		



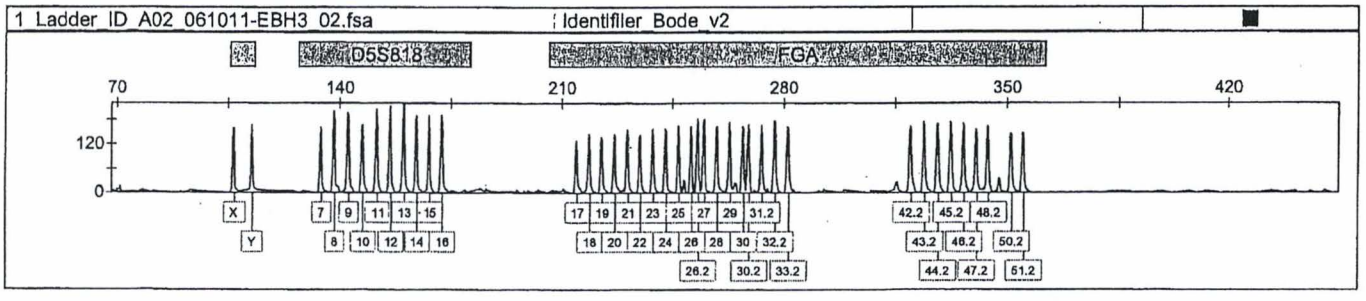
1_Ladder_ID_A02_061011-EBH3_02.fsa | Identifiler_Bode_v2



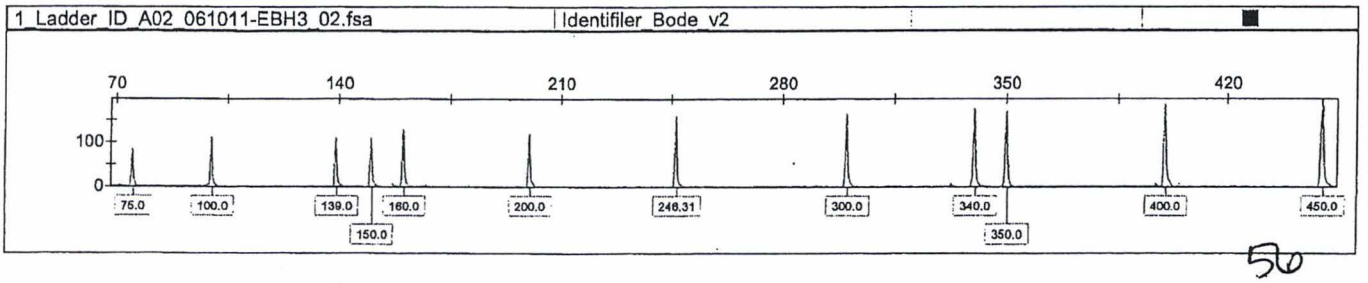
1_Ladder_ID_A02_061011-EBH3_02.fsa | Identifiler_Bode_v2



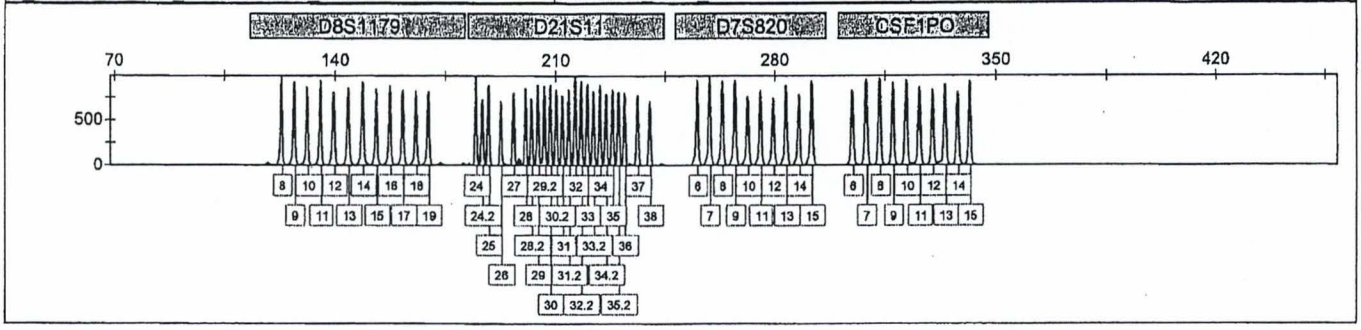
1_Ladder_ID_A02_061011-EBH3_02.fsa | Identifiler_Bode_v2



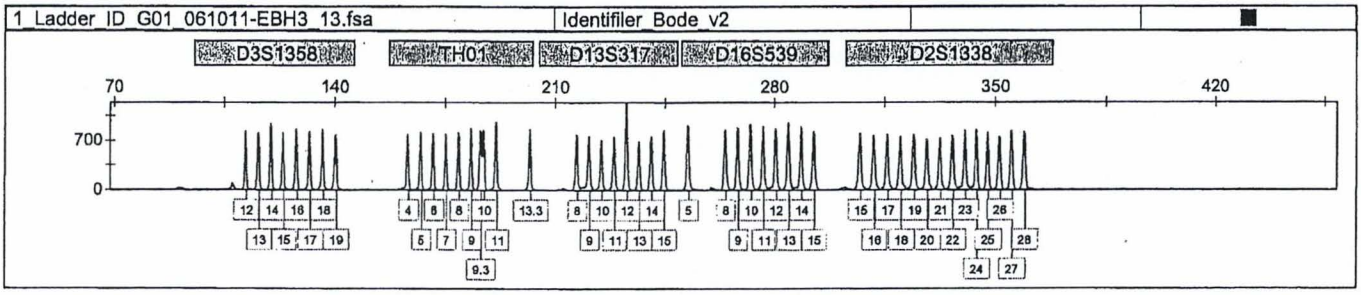
1_Ladder_ID_A02_061011-EBH3_02.fsa | Identifiler_Bode_v2



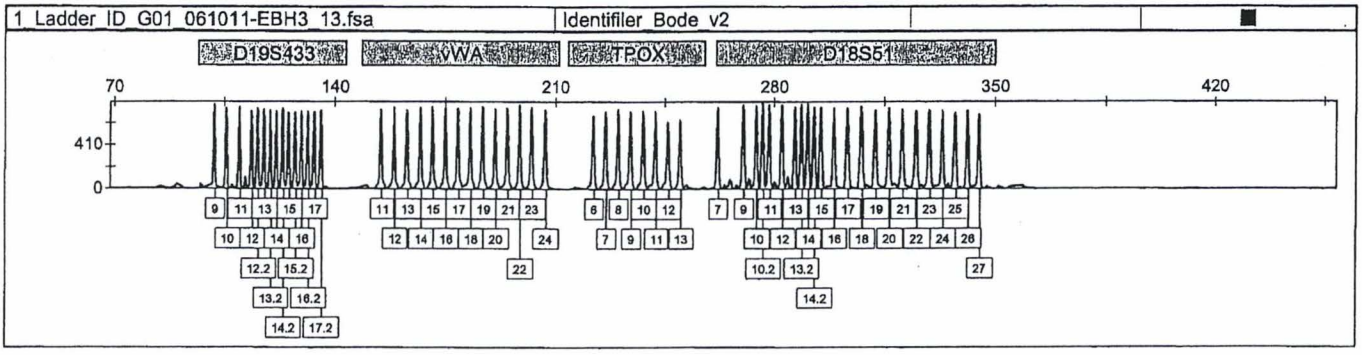
Sample File	Panel	SQO	SQ
1_Ladder_ID_G01_061011-EBH3_13.fsa	Identifiler_Bode_v2		



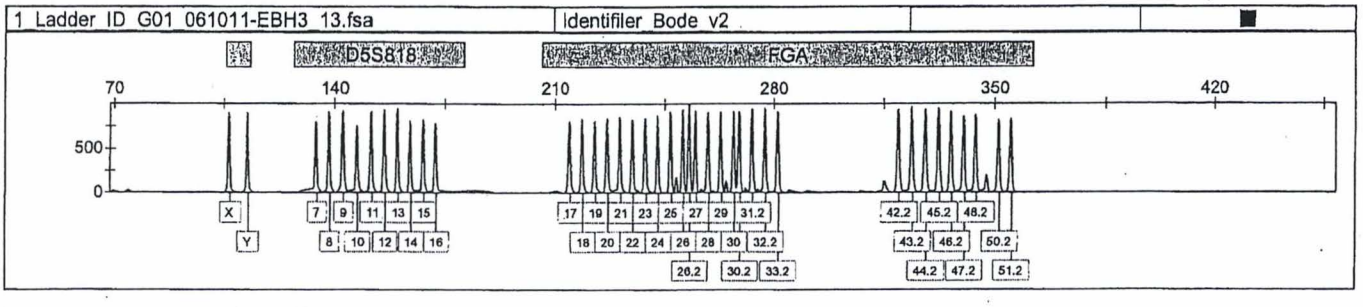
1_Ladder_ID_G01_061011-EBH3_13.fsa | Identifiler_Bode_v2



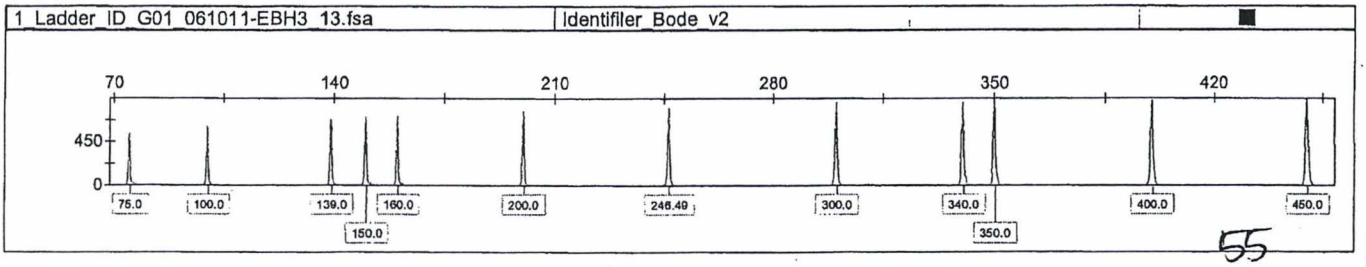
1_Ladder_ID_G01_061011-EBH3_13.fsa | Identifiler_Bode_v2



1_Ladder_ID_G01_061011-EBH3_13.fsa | Identifiler_Bode_v2



1_Ladder_ID_G01_061011-EBH3_13.fsa | Identifiler_Bode_v2



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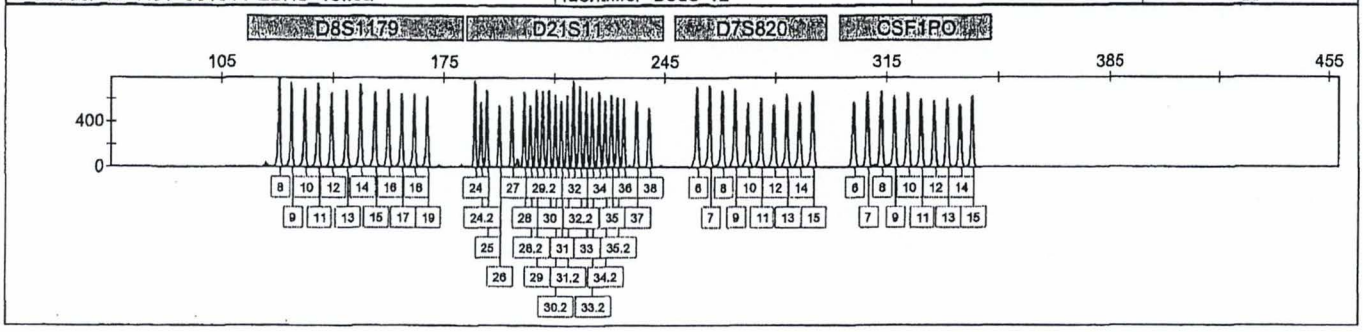
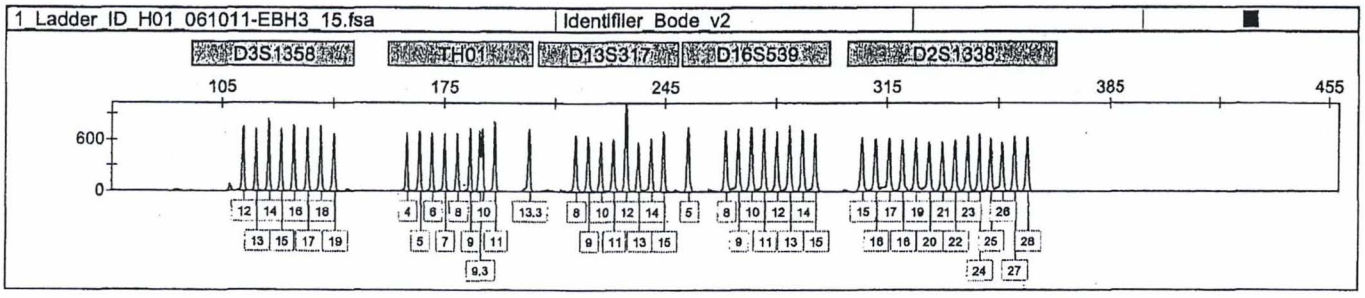
EBH 061411

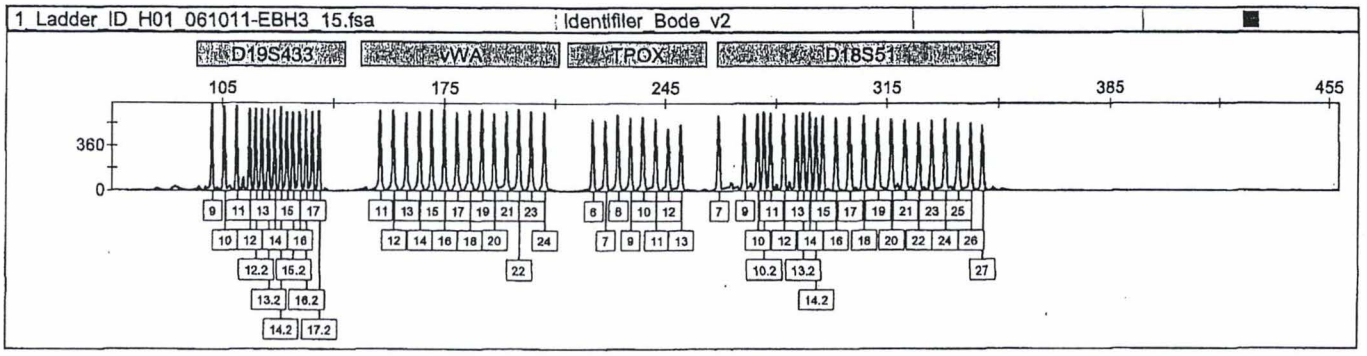
Sample File	Panel	SQO	SQ
1_Ladder_ID_H01_061011-EBH3_15.fsa	Identifiler_Bode_v2		



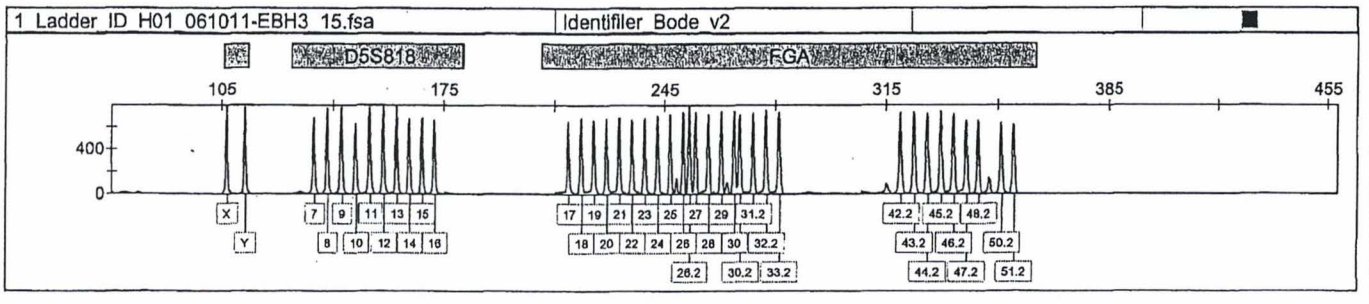
1_Ladder_ID_H01_061011-EBH3_15.fsa | Identifiler_Bode_v2



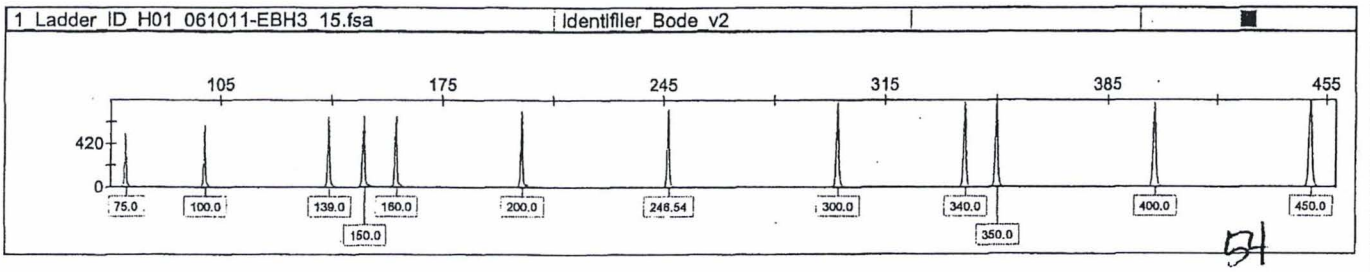
1_Ladder_ID_H01_061011-EBH3_15.fsa | Identifiler_Bode_v2



1_Ladder_ID_H01_061011-EBH3_15.fsa | Identifiler_Bode_v2



1_Ladder_ID_H01_061011-EBH3_15.fsa | Identifiler_Bode_v2



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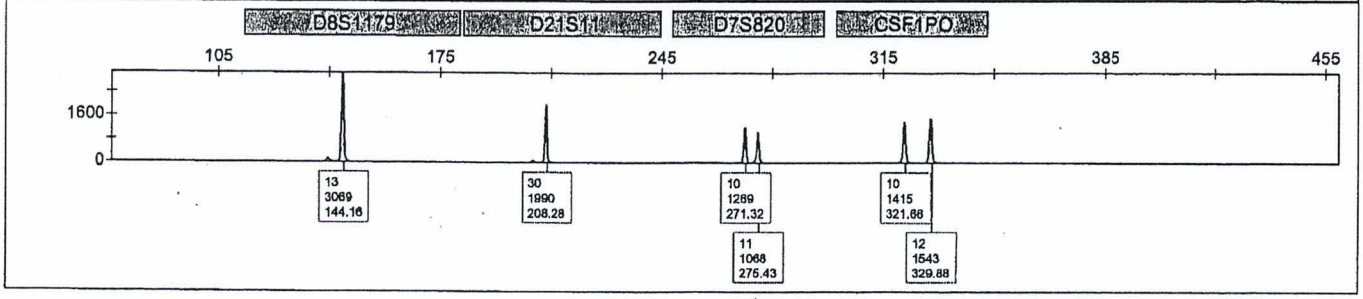
EBN 6/14/11

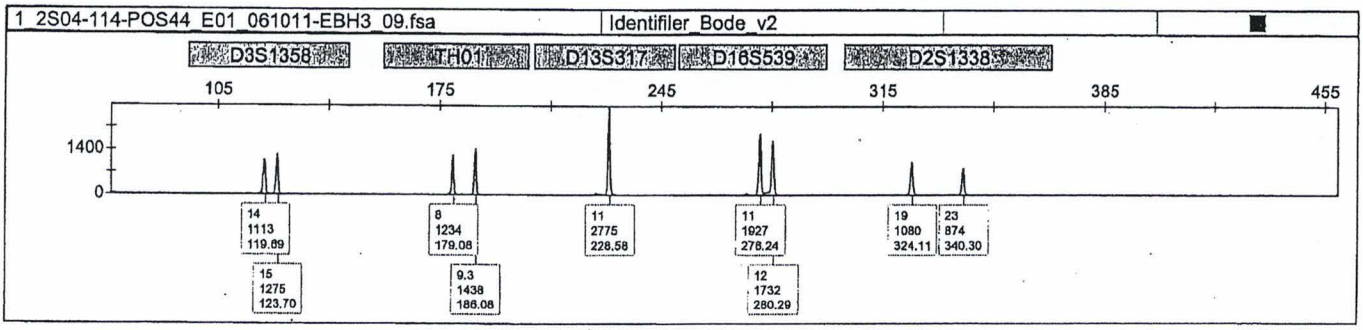
Applied Biosystems
GeneMapper ID v3.2.1

GMID3_061011-EBH3_2S04-114_EBH_ID

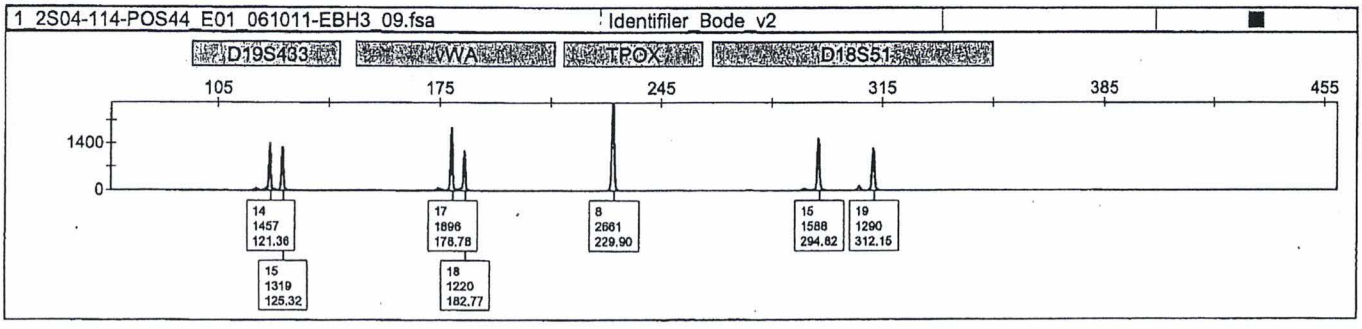
Sample File	Panel	SQO	SQ
1_2S04-114-POS44_E01_061011-EBH3_09.fsa	Identifiler_Bode_v2		



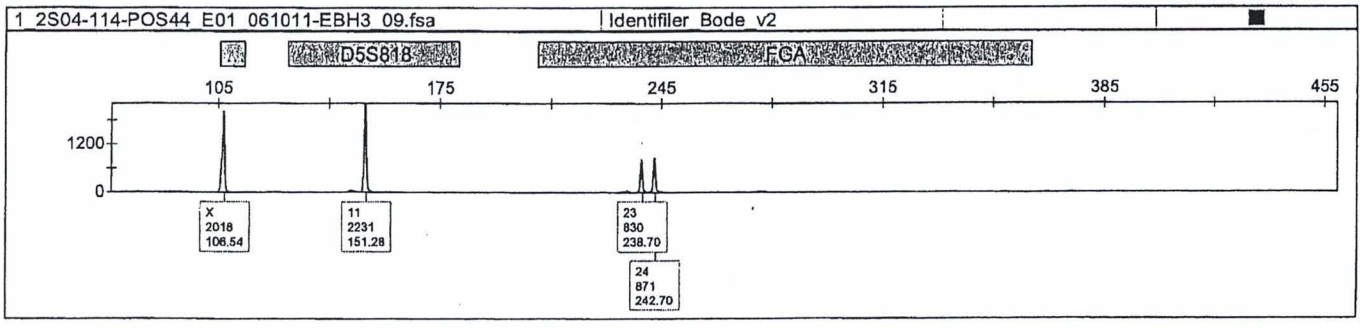
1_2S04-114-POS44_E01_061011-EBH3_09.fsa | Identifiler_Bode_v2



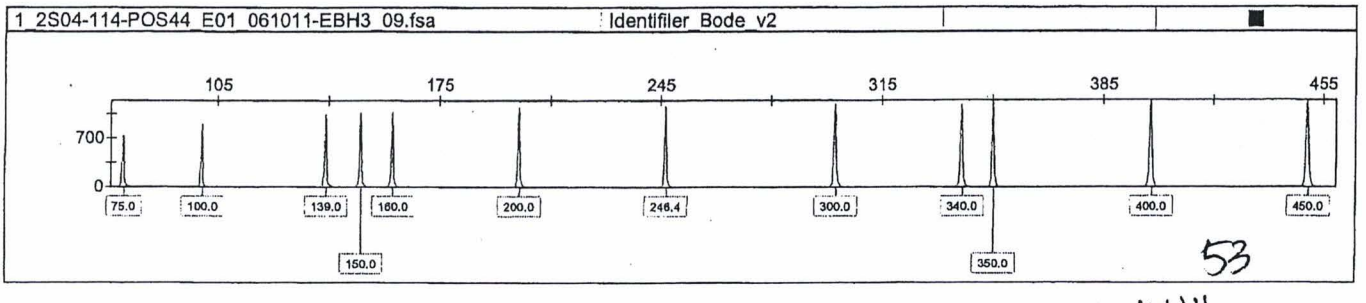
1_2S04-114-POS44_E01_061011-EBH3_09.fsa | Identifiler_Bode_v2



1_2S04-114-POS44_E01_061011-EBH3_09.fsa | Identifiler_Bode_v2



1_2S04-114-POS44_E01_061011-EBH3_09.fsa | Identifiler_Bode_v2



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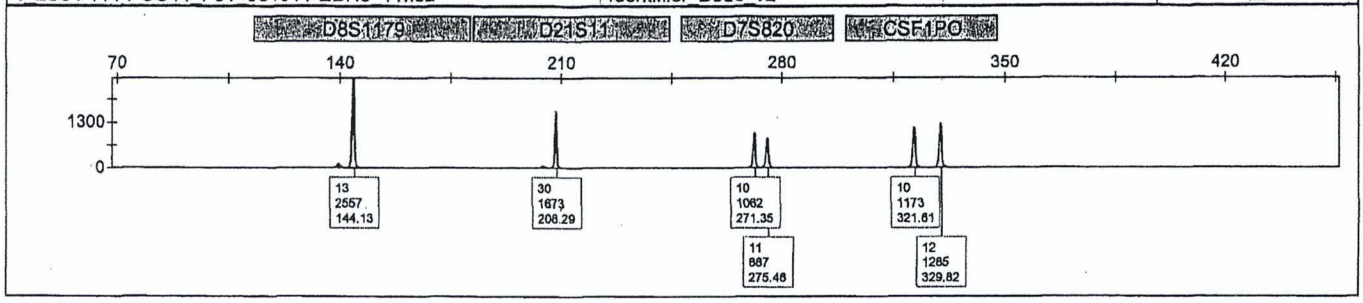
Applied Biosystems

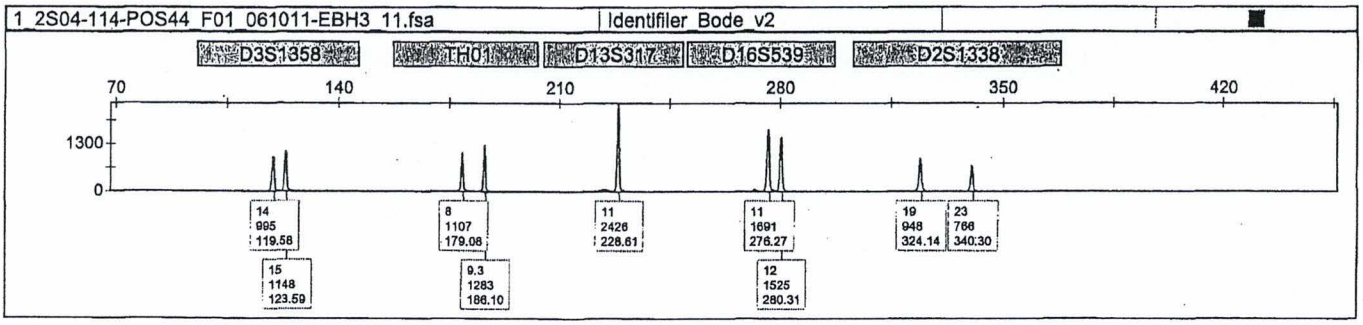
GeneMapper ID v3.2.1

GMID3_061011-EBH3_2S04-114_EBH_ID

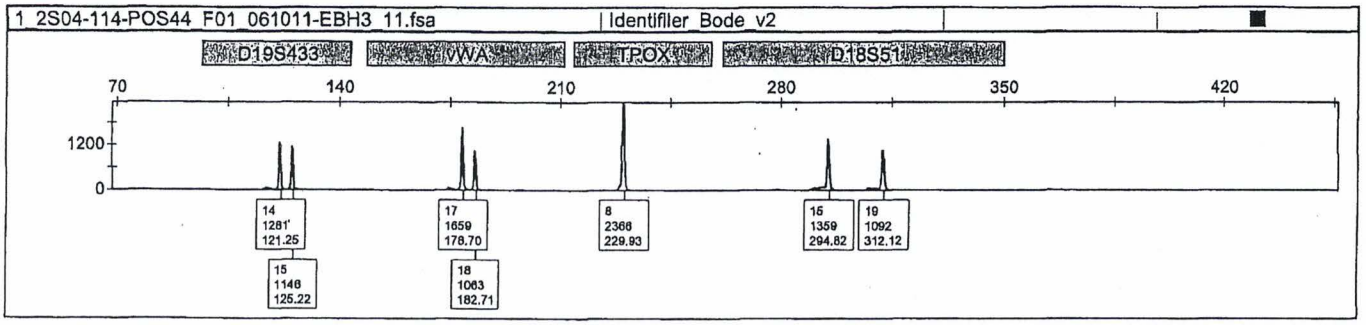
Sample File	Panel	SQO	SQ
1_2S04-114-POS44_F01_061011-EBH3_11.fsa	Identifiler_Bode_v2		



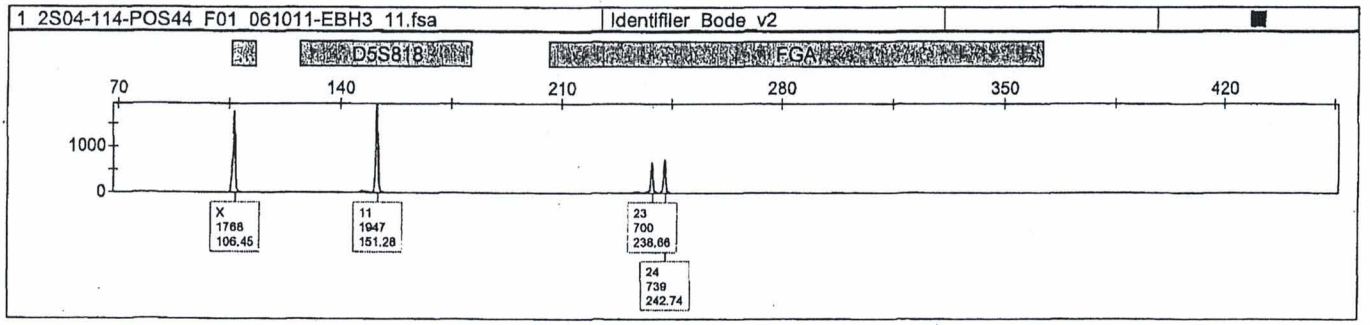
1_2S04-114-POS44_F01_061011-EBH3_11.fsa	Identifiler_Bode_v2		



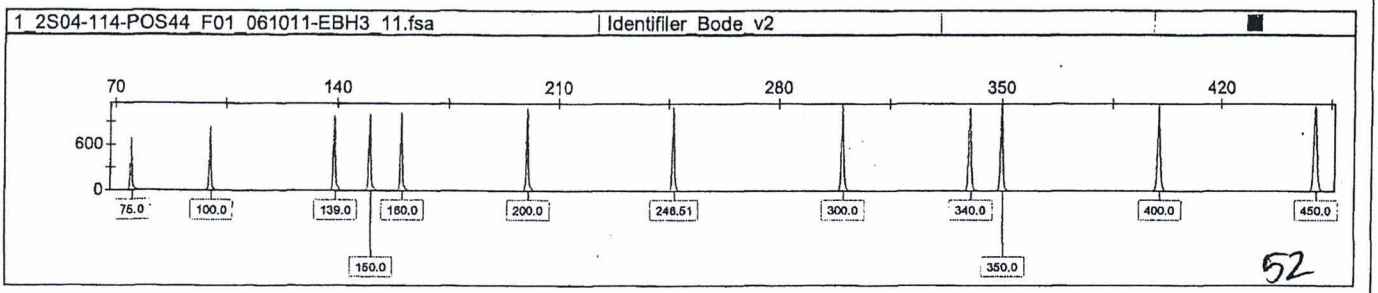
1_2S04-114-POS44_F01_061011-EBH3_11.fsa	Identifiler_Bode_v2		



1_2S04-114-POS44_F01_061011-EBH3_11.fsa	Identifiler_Bode_v2		



1_2S04-114-POS44_F01_061011-EBH3_11.fsa	Identifiler_Bode_v2		



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CE GMID Editing Sheet – ID

Tray ID: 061011-EBH2
Analyst: EBH
GMID Panel: Identifiler_Bode_v2

Shipment or Case #: 2504-114
Date: 6/10/11

Well	Edit: Locus, Base pair size - reason
G01	Spikes

Editing Key

20%: 20% filter applied (after confirming no mixtures)

-A: -A/Split peaks

AUT: single allele below minimum threshold

Artifact (non-specific)

D/I: Degraded and/or Inhibited

Dye artifact

Elevated BL: Labels placed on elevated basline(s)

FC: Failed capillary

ILS<MIN: ILS below minimum rfu threshold

IA: Imbalanced Alleles

LOR: Loss of resolution

Matrix Issue

OL: Off ladder allele

Other: provide explanation in text box (currently using this for FDLE alleles btw. 75-99 rfu)

PU: Pullup

RFU<MIN: sample rfu below minimum threshold

RFU>MAX: sample rfu above maximum threshold

Shoulder: Shoulder peak

Sizing: incorrect sizing (eg: migration issue)

Spikes

Stutter (n-4 if other record)

9947 Positive Control

Well Numbers Checked Against Known: A02, B02

D8S1179: 13,13	D21S11: 30,30	D7S820: 10,11	CSF1PO: 10,12		
D3S1358: 14,15	TH01: 8,9.3	D13S317: 11,11	D16S539: 11,12	D2S1338: 19,23	
D19S433: 14,15	vWA: 17,18	TPOX: 8,8	D18S51: 15,19		
AMEL: X,X	D5S818: 11,11	FGA: 23,24			

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EBH 6/10/11

CE GMID Editing Sheet – ID

Tray ID: 060101-EBH2
Analyst: ABC
GMID Panel: Identifiler_Bode_v2

Shipment or Case #: 2504714
Date: 6-14-11

Well	Edit: Locus, Base pair size - reason
G-1	spikes

Editing Key

20%: 20% filter applied (after confirming no mixtures)

-A: -A/Split peaks

AUT: single allele below minimum threshold

Artifact (non-specific)

D/I: Degraded and/or Inhibited

Dye artifact

Elevated BL: Labels placed on elevated basline(s)

FC: Failed capillary

ILS<MIN: ILS below minimum rfu threshold

IA: Imbalanced Alleles

LOR: Loss of resolution

Matrix Issue

OL: Off ladder allele

Other: provide explanation in text box (currently using this for FDLE alleles btw. 75-99 rfu)

PU: Pullup

RFU<MIN: sample rfu below minimum threshold

RFU>MAX: sample rfu above maximum threshold

Shoulder: Shoulder peak

Sizing incorrect sizing (eg: migration issue)

Spikes

Stutter (n-4 if other record)

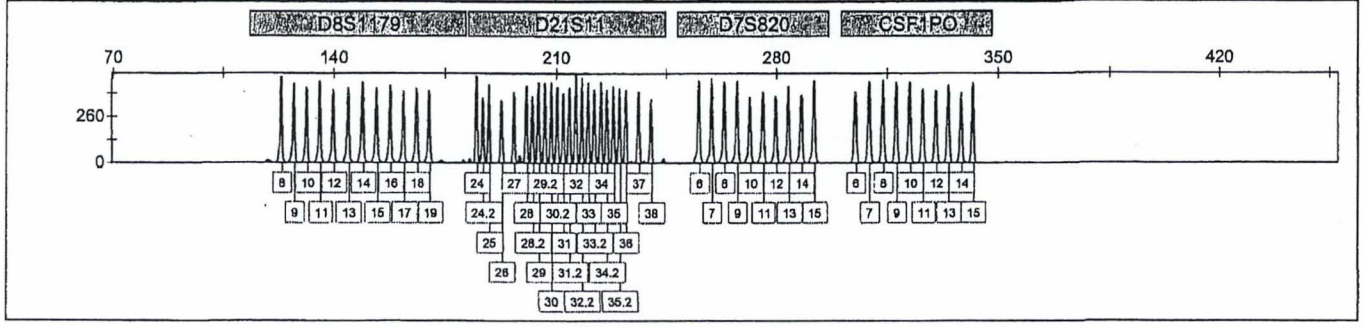
9947 Positive Control

Well Numbers Checked Against Known: A2, B2

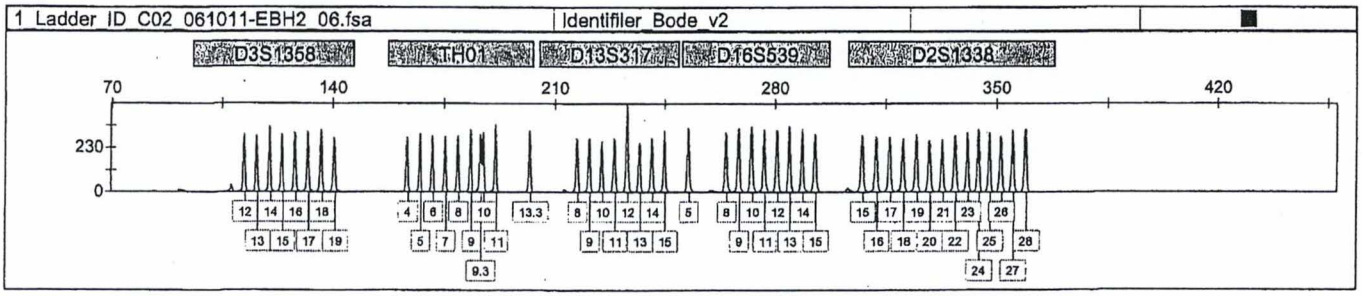
D8S1179: 13,13	D21S11: 30,30	D7S820: 10,11	CSF1PO: 10,12		
D3S1358: 14,15	TH01: 8,9.3	D13S317: 11,11	D16S539: 11,12	D2S1338: 19,23	
D19S433: 14,15	vWA: 17,18	TPOX: 8,8	D18S51: 15,19		
AMEL: X,X	D5S818: 11,11	FGA: 23,24			

ABG 6-14-11

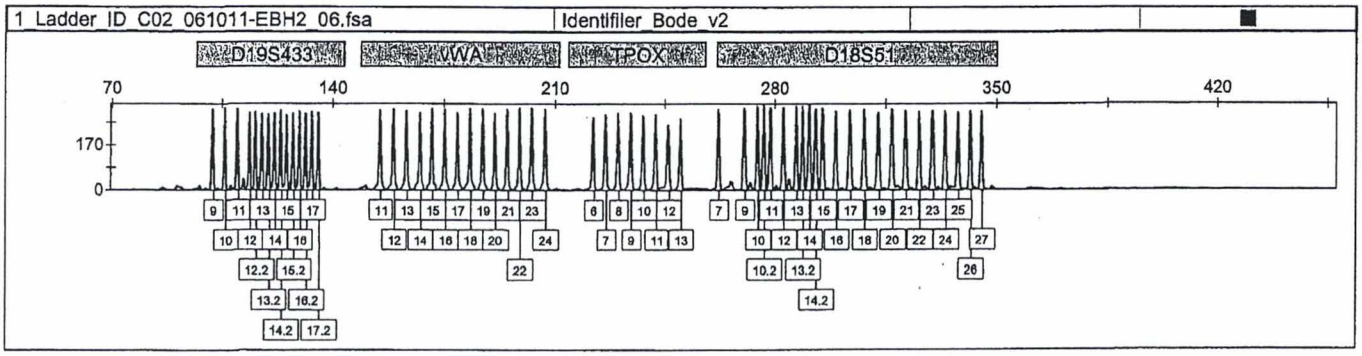
Sample File	Panel	SQO	SQ
1_Ladder_ID_C02_061011-EBH2_06.fsa	Identifiler_Bode_v2		



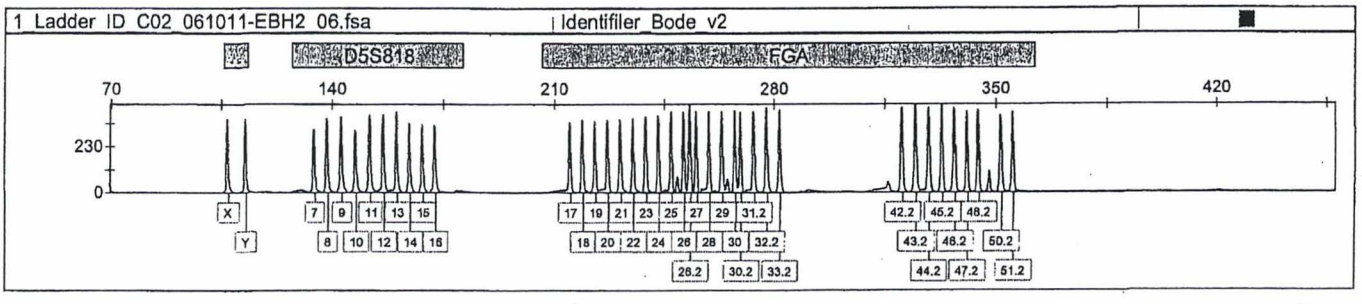
1_Ladder_ID_C02_061011-EBH2_06.fsa | Identifiler_Bode_v2



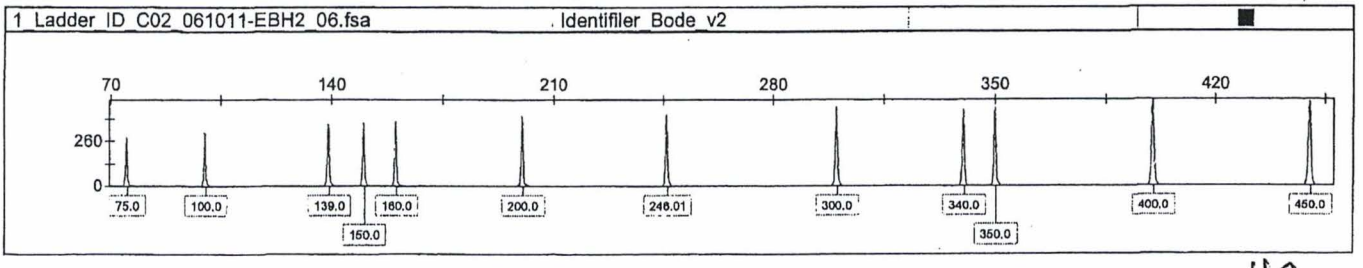
1_Ladder_ID_C02_061011-EBH2_06.fsa | Identifiler_Bode_v2



1_Ladder_ID_C02_061011-EBH2_06.fsa | Identifiler_Bode_v2



1_Ladder_ID_C02_061011-EBH2_06.fsa | Identifiler_Bode_v2

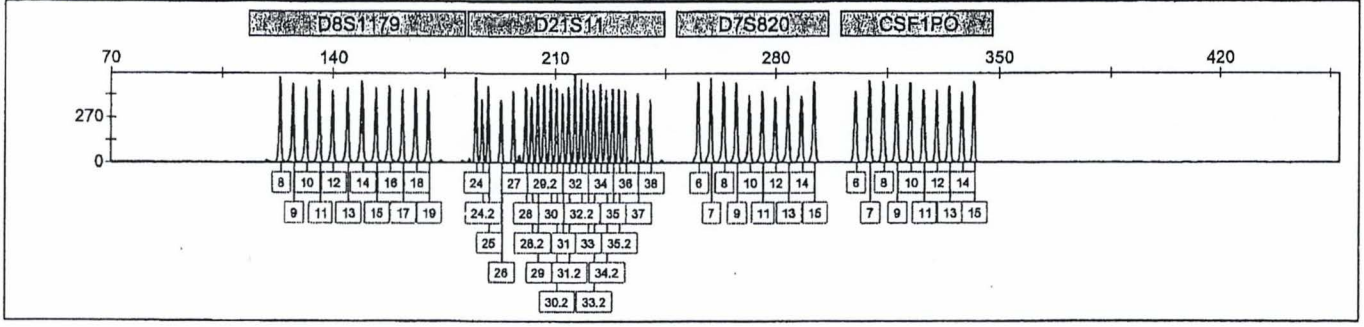


Applied Biosystems

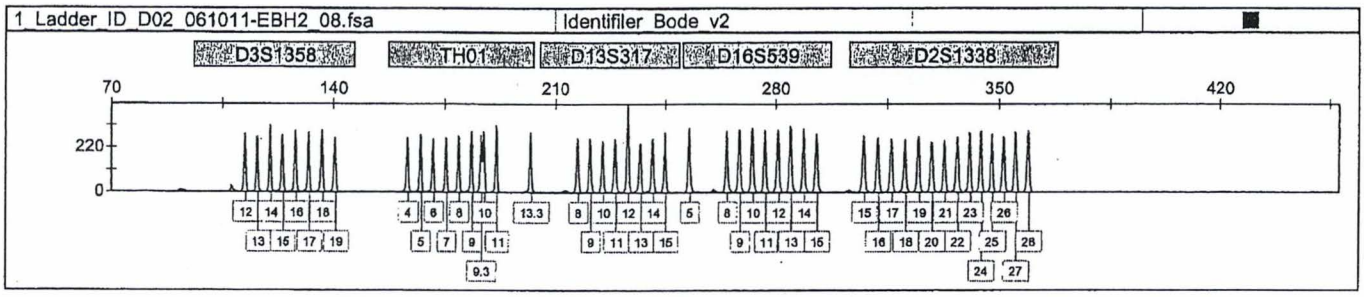
GeneMapper ID v3.2.1

GMID11_061011-EBH2_2S04-114_EBH_ID

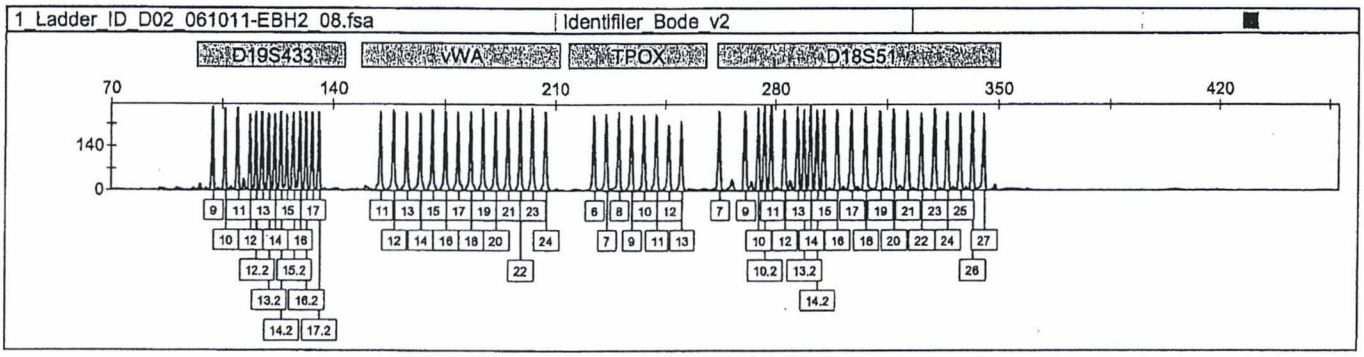
Sample File	Panel	SQO	SQ
1 Ladder ID D02 061011-EBH2 08.fsa	Identifiler Bode v2		



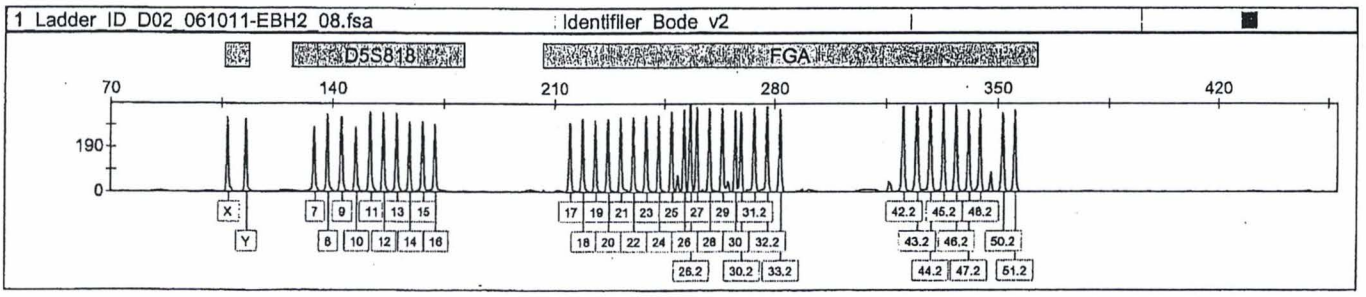
1 Ladder ID D02 061011-EBH2 08.fsa | Identifiler Bode v2



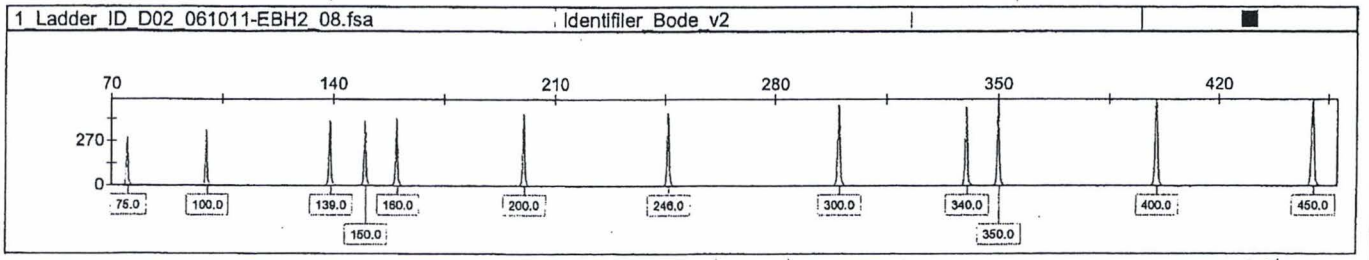
1 Ladder ID D02 061011-EBH2 08.fsa | Identifiler Bode v2



1 Ladder ID D02 061011-EBH2 08.fsa | Identifiler Bode v2

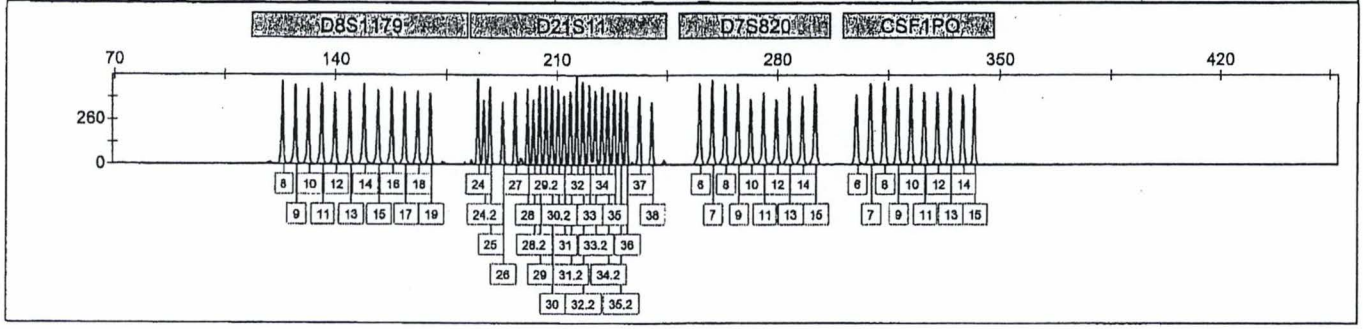


1 Ladder ID D02 061011-EBH2 08.fsa | Identifiler Bode v2

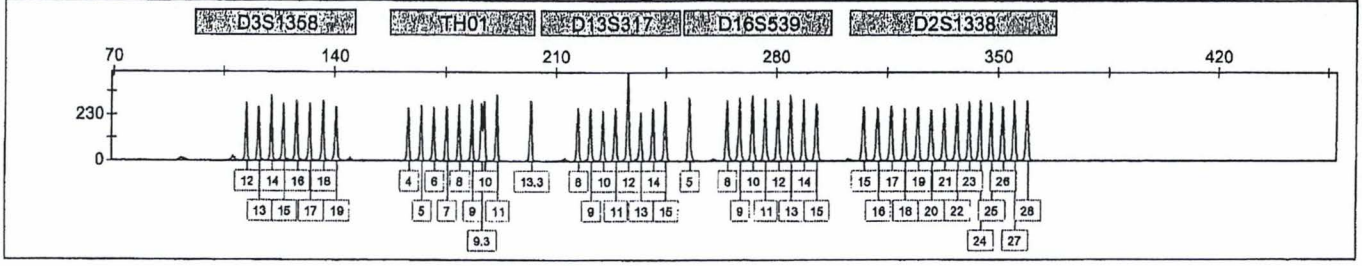


EBH 6/10/11 48

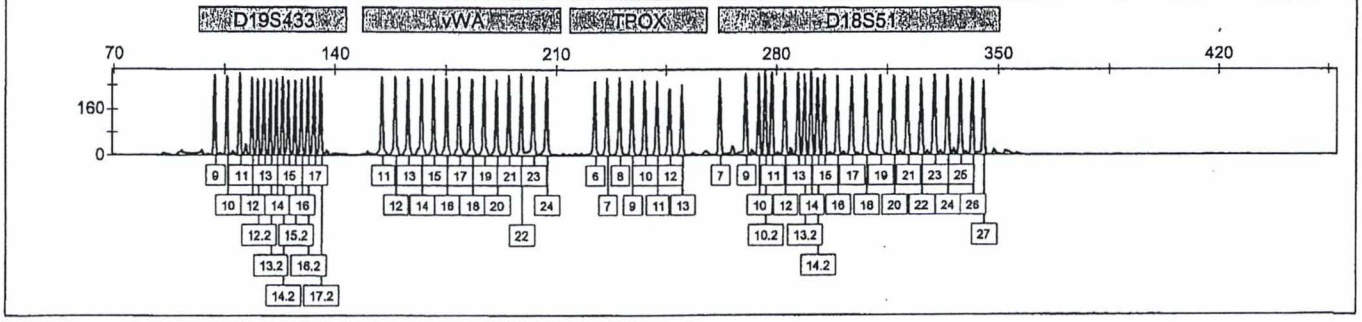
Sample File	Panel	SQO	SQ
1_Ladder_ID_E02_061011-EBH2_10.fsa	Identifiler_Bode_v2		



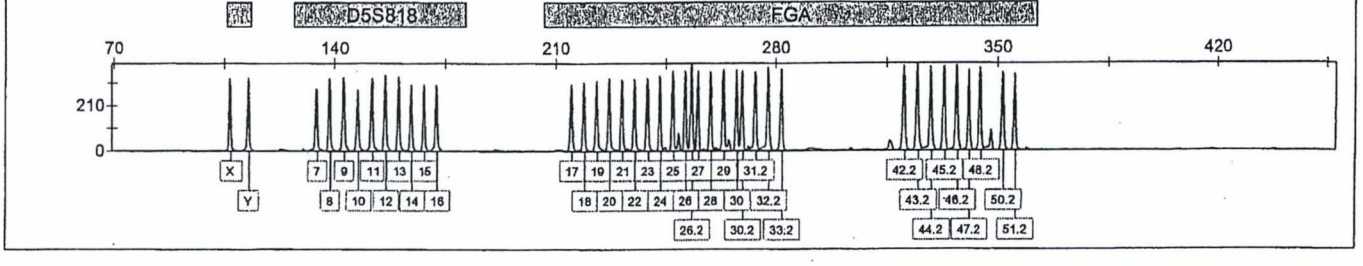
1_Ladder_ID_E02_061011-EBH2_10.fsa | Identifiler_Bode_v2



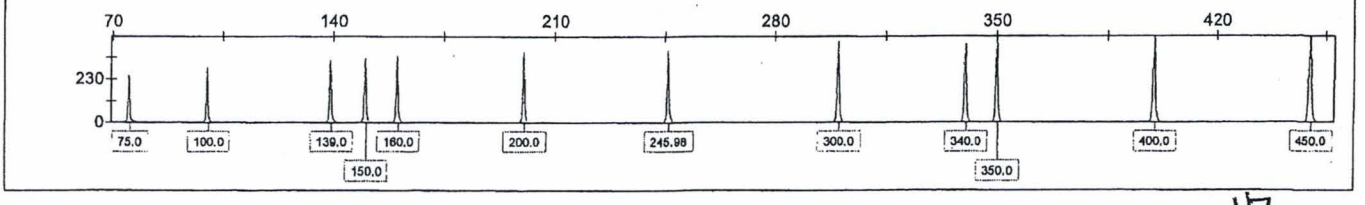
1_Ladder_ID_E02_061011-EBH2_10.fsa | Identifiler_Bode_v2



1_Ladder_ID_E02_061011-EBH2_10.fsa | Identifiler_Bode_v2



1_Ladder_ID_E02_061011-EBH2_10.fsa | Identifiler_Bode_v2



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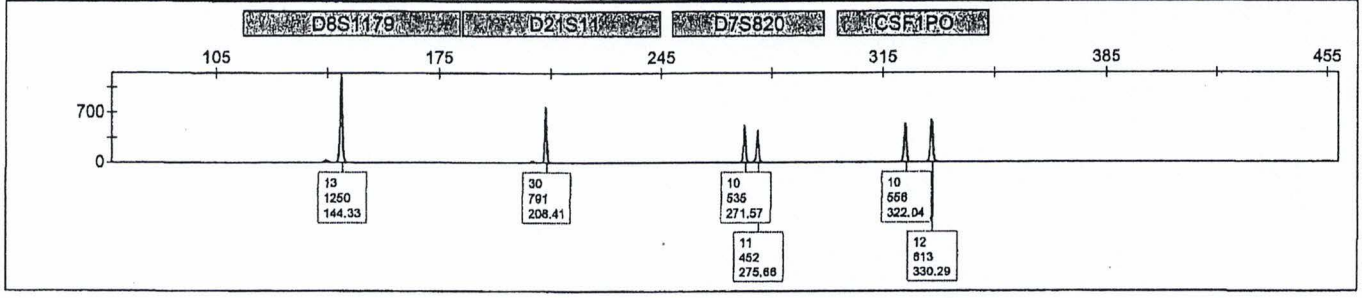
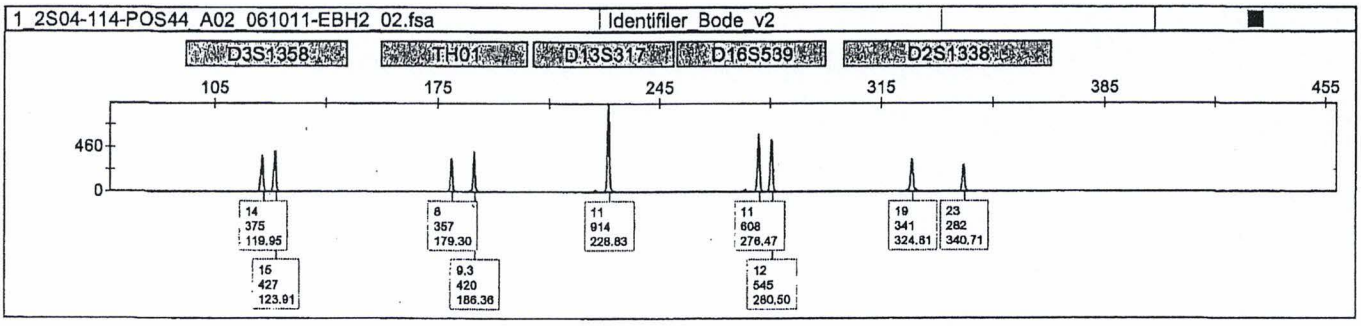
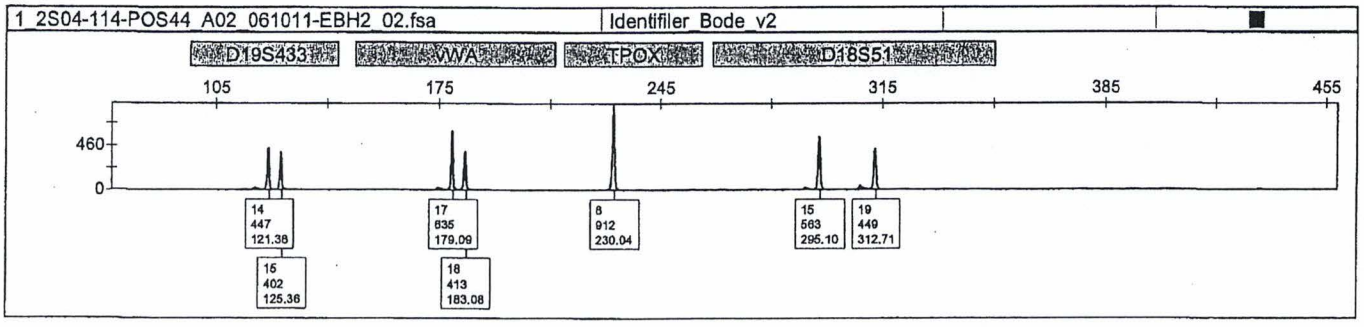
Sample File	Panel	SQO	SQ
1_2S04-114-POS44_A02_061011-EBH2_02.fsa	Identifiler_Bode_v2		



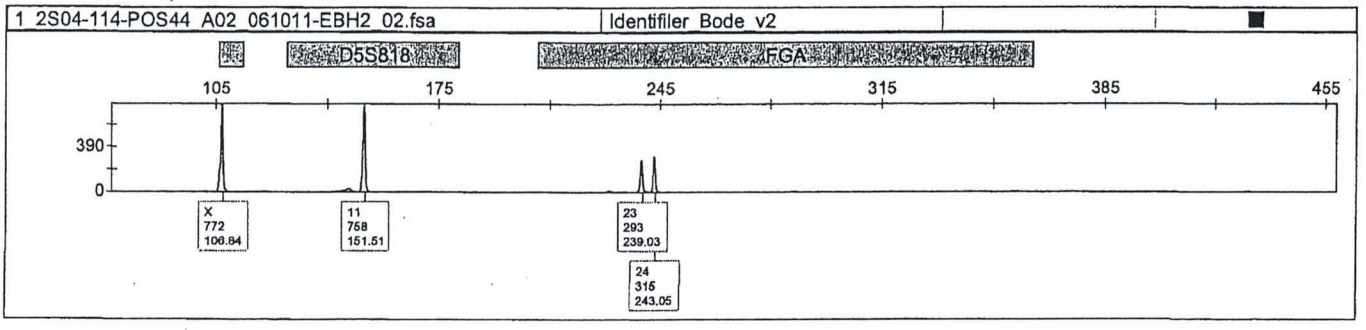
1_2S04-114-POS44_A02_061011-EBH2_02.fsa | Identifiler_Bode_v2



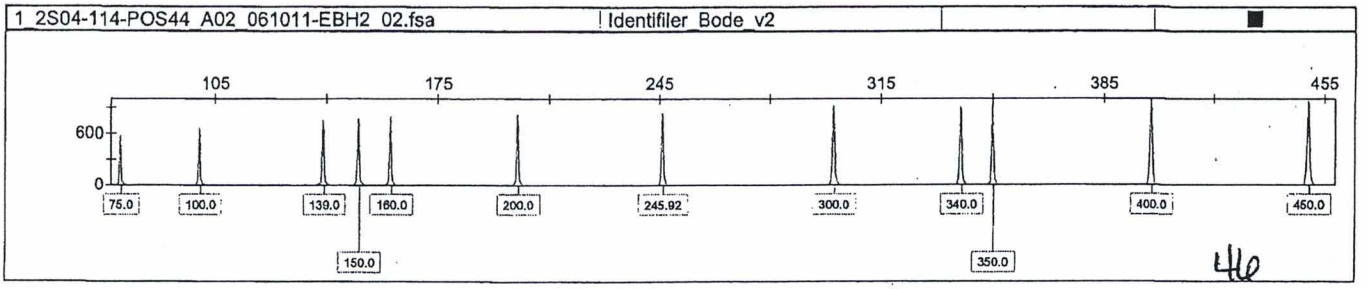
1_2S04-114-POS44_A02_061011-EBH2_02.fsa | Identifiler_Bode_v2



1_2S04-114-POS44_A02_061011-EBH2_02.fsa | Identifiler_Bode_v2



1_2S04-114-POS44_A02_061011-EBH2_02.fsa | Identifiler_Bode_v2



Applied Biosystems
GeneMapper ID v3.2.1

GMID11_061011-EBH2_2S04-114_EBH_ID

Sample File	Panel	SQO	SQ
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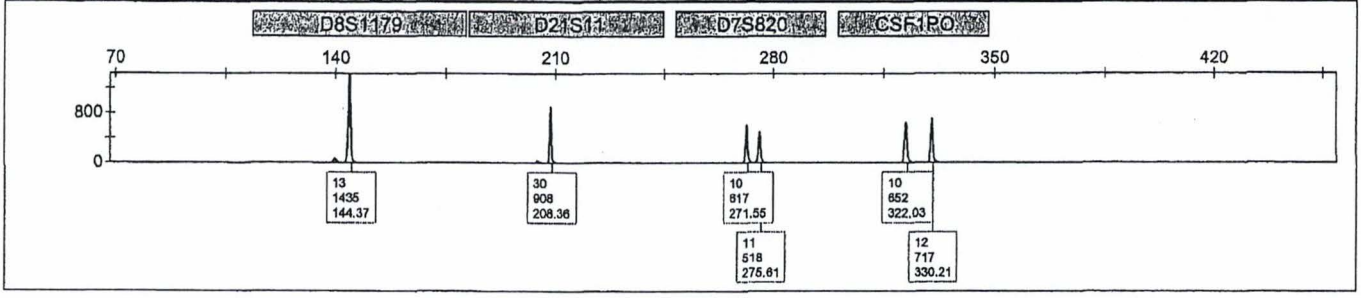
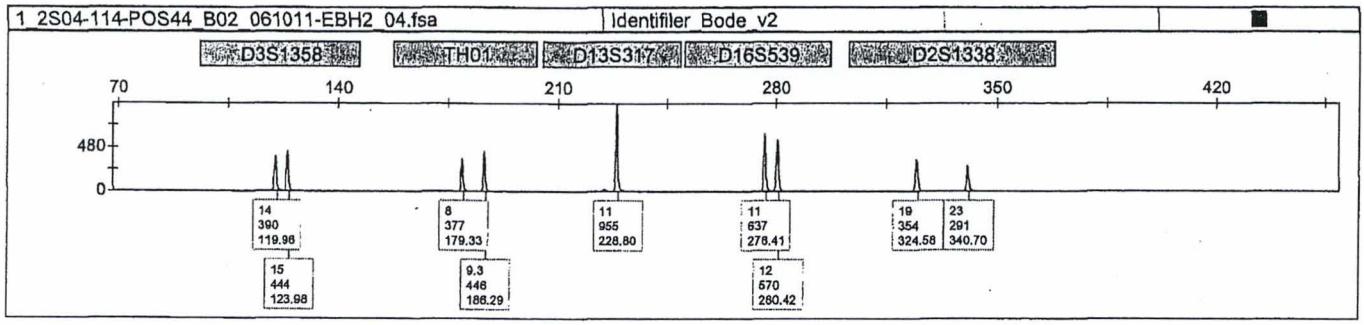


1_2S04-114-POS44_B02_061011-EBH2_04.fsa	Identifiler_Bode_v2		



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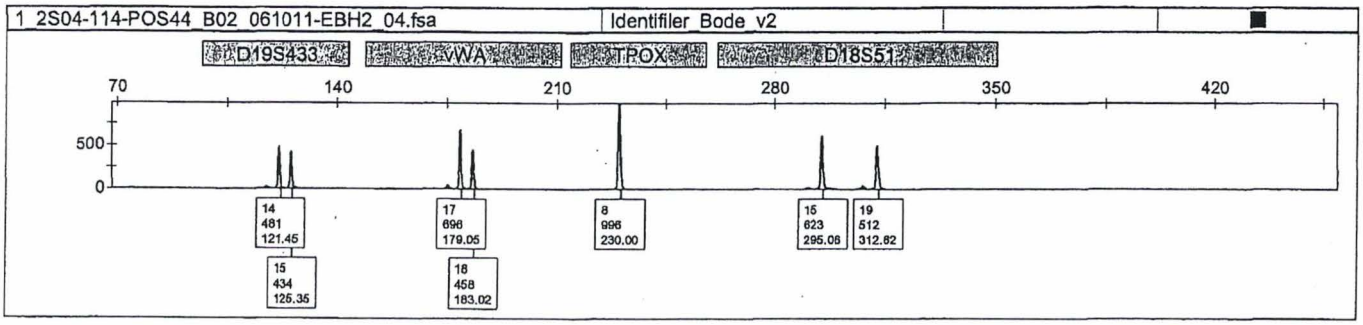
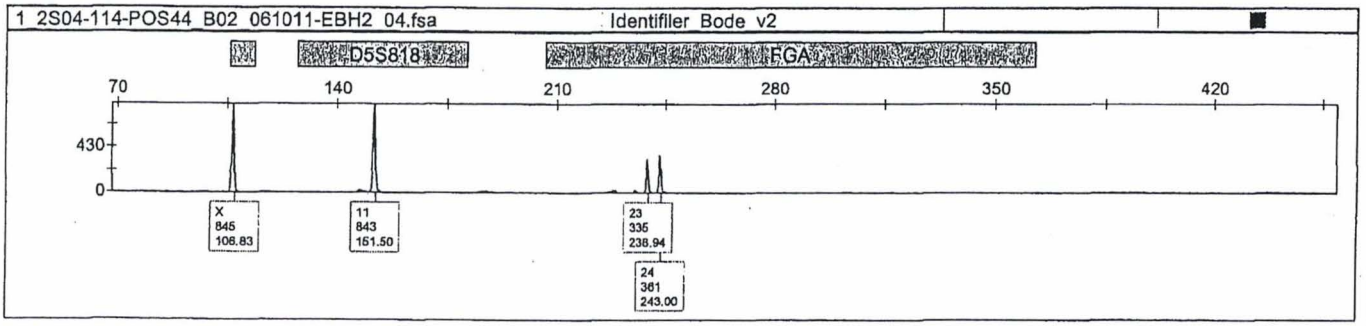
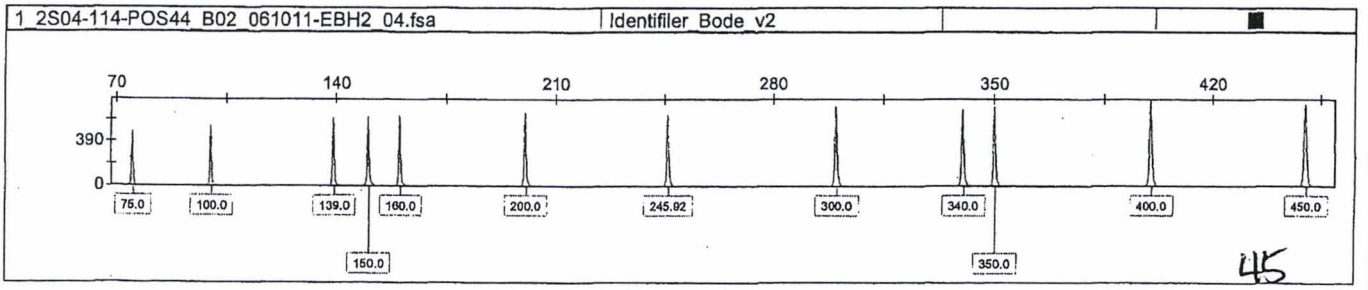


1_2S04-114-POS44_B02_061011-EBH2_04.fsa	Identifiler_Bode_v2		



1_2S04-114-POS44_B02_061011-EBH2_04.fsa	Identifiler_Bode_v2		



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CE GMID Editing Sheet – ID

Tray ID: 061011-EBH1
Analyst: EBN
GMID Panel: Identifiler_Bode_v2

Shipment or Case #: 2504-114
Date: 6/10/11

Well	Edit: Locus, Base pair size - reason
A02	ILS<MIN
E04	20%
G04	TPOX, 228.48, PU
D03	Spikes
E03	Spikes

Editing Key

20%: 20% filter applied (after confirming no mixtures)

-A: -A/Split peaks

AUT: single allele below minimum threshold

Artifact (non-specific)

D/I: Degraded and/or Inhibited

Dye artifact

Elevated BL: Labels placed on elevated basline(s)

FC: Failed capillary

ILS<MIN: ILS below minimum rfu threshold

IA: Imbalanced Alleles

LOR: Loss of resolution

Matrix issue

OL: Off ladder allele

Other: provide explanation in text box (currently using this for FDLE alleles btw. 75-99 rfu)

PU: Pullup

RFU<MIN: sample rfu below minimum threshold

RFU>MAX: sample rfu above maximum threshold

Shoulder: Shoulder peak

Sizing: Incorrect sizing (eg: migration issue)

Spikes

Stutter (n-4 if other record)

9947 Positive Control					
Well Numbers Checked Against Known: E04, G04					
D8S1179: 13,13	D21S11: 30,30	D7S820: 10,11	CSF1PO: 10,12		
D3S1358: 14,15	TH01: 8,9.3	D13S317: 11,11	D16S539: 11,12	D2S1338: 19,23	
D19S433: 14,15	vWA: 17,18	TPOX: 8,8	D18S51: 15,19		
AMEL: X,X	D5S818: 11,11	FGA: 23,24			

CE GMID Editing Sheet – ID

Tray ID: 060111-EB141
Analyst: ABC
GMID Panel: Identifiler_Bode_v2

Shipment or Case #: 2504-114
Date: 6.14.11

Well	Edit: Locus, Base pair size - reason
A2	ILS LMIN
E4	20%
G4	TPOX, 22848, PU
D3	spikes
E3	spikes

Editing Key

20%: 20% filter applied (after confirming no mixtures)

-A: -A/Split peaks

AUT: single allele below minimum threshold

Artifact (non-specific)

D/I: Degraded and/or Inhibited

Dye artifact

Elevated BL: Labels placed on elevated basline(s)

FC: Failed capillary

ILS<MIN: ILS below minimum rfu threshold

IA: Imbalanced Alleles

LOR: Loss of resolution

Matrix Issue

OL: Off ladder allele

Other: provide explanation in text box (currently using this for FDLE alleles btw. 75-99 rfu)

PU: Pullup

RFU<MIN: sample rfu below minimum threshold

RFU>MAX: sample rfu above maximum threshold

Shoulder: Shoulder peak

Sizing: incorrect sizing (eg: migration issue)

Spikes

Stutter (n-4 if other record)

9947 Positive Control
Well Numbers Checked Against Known: E4, G4

D8S1179: 13,13	D21S11: 30,30	D7S820: 10,11	CSF1PO: 10,12		
D3S1358: 14,15	TH01: 8,9.3	D13S317: 11,11	D16S539: 11,12	D2S1338: 19,23	
D19S433: 14,15	vWA: 17,18	TPOX: 8,9	D18S51: 15,19		
AMEL: X,X	D5S818: 11,11	FGA: 23,24			

Applied Biosystems

GeneMapper ID v3.2.1

GMID3_061011-EBH1_2S04-114_EBH_ID

Sample File	Panel	SQO	SQ
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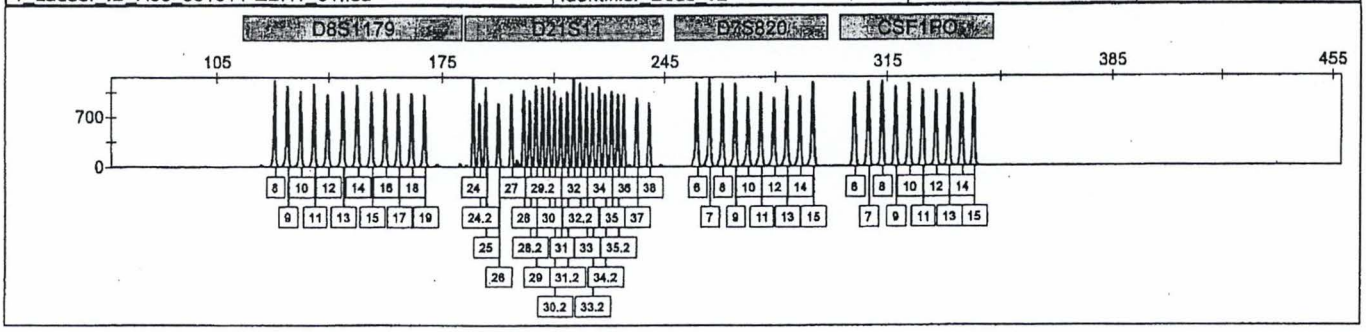
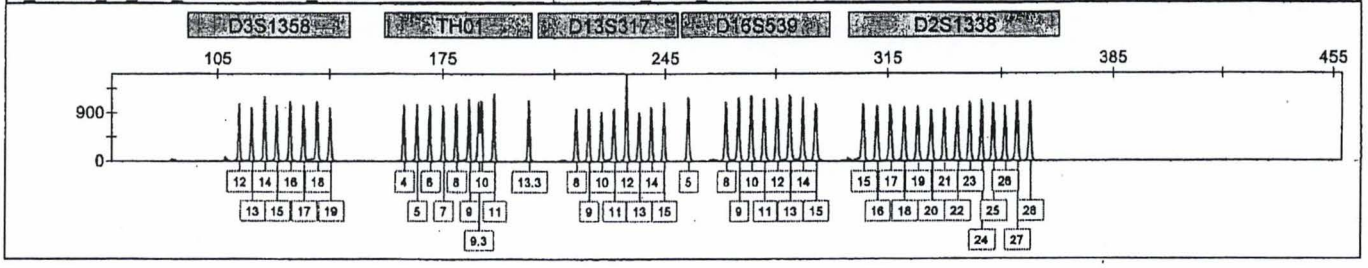
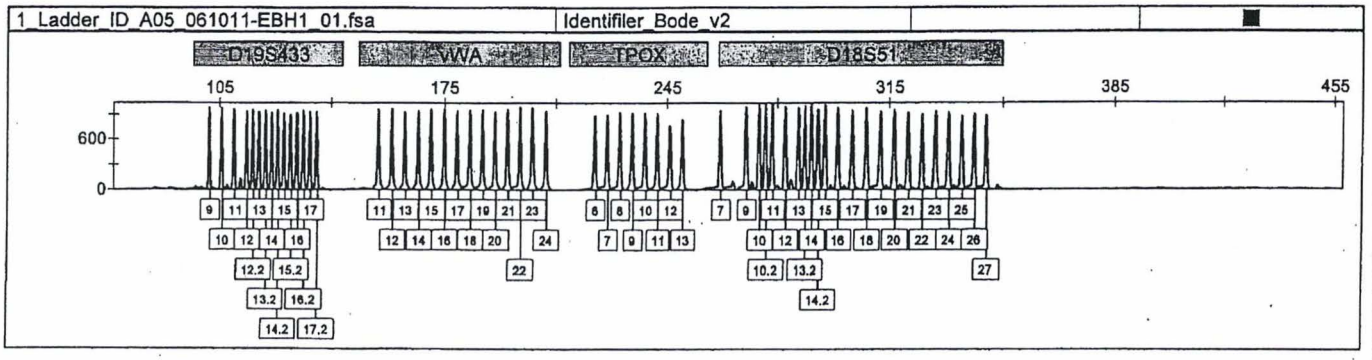


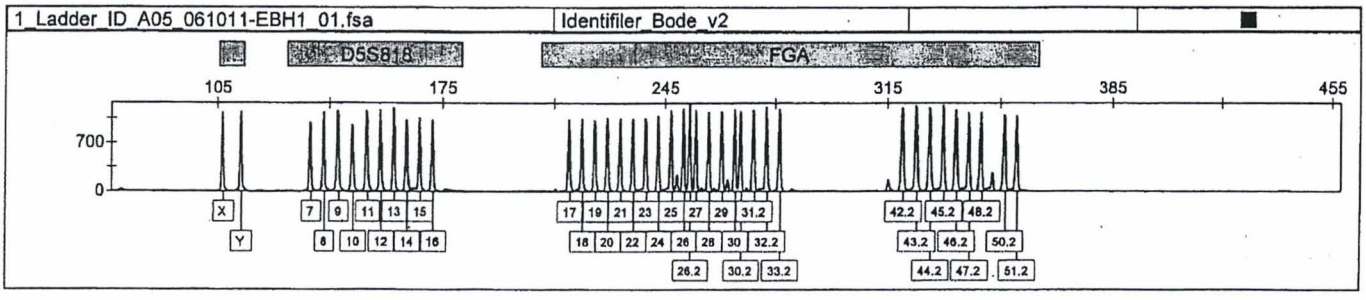
1_Ladder_ID_A05_061011-EBH1_01.fsa | Identifiler_Bode_v2



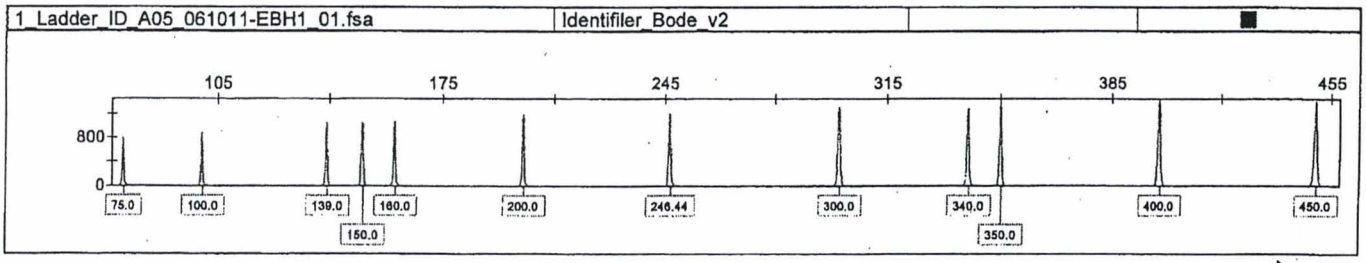
1_Ladder_ID_A05_061011-EBH1_01.fsa | Identifiler_Bode_v2



1_Ladder_ID_A05_061011-EBH1_01.fsa | Identifiler_Bode_v2

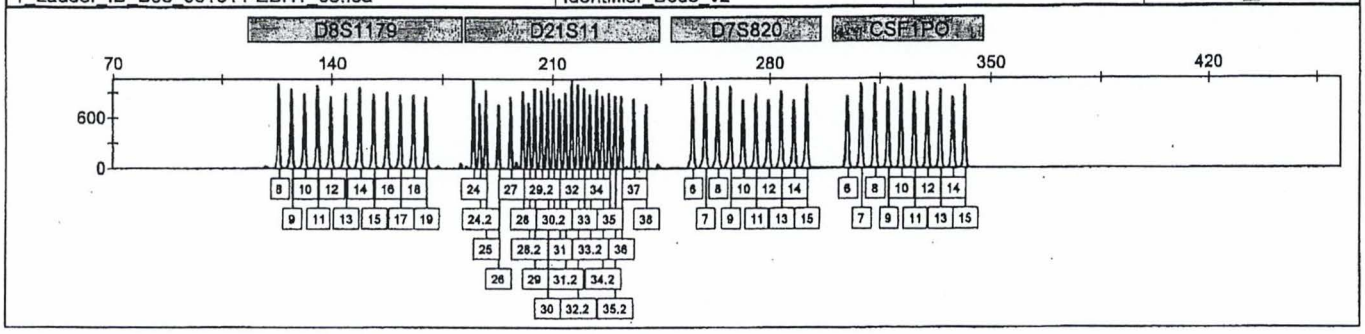


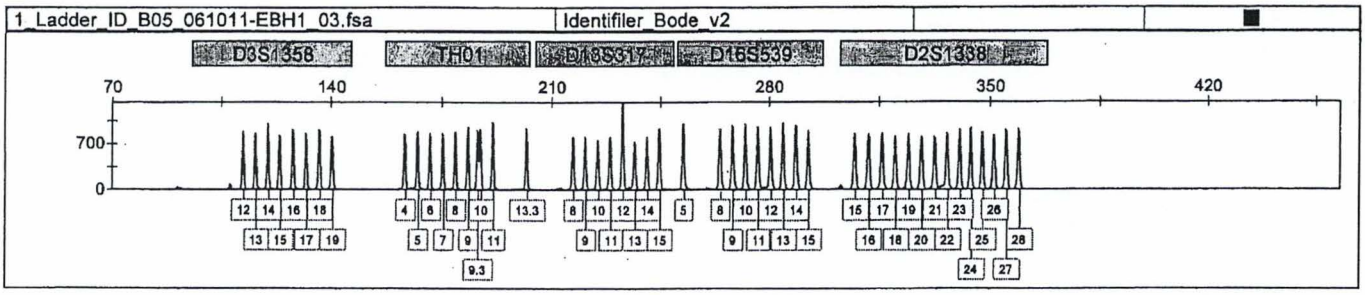
1_Ladder_ID_A05_061011-EBH1_01.fsa | Identifiler_Bode_v2

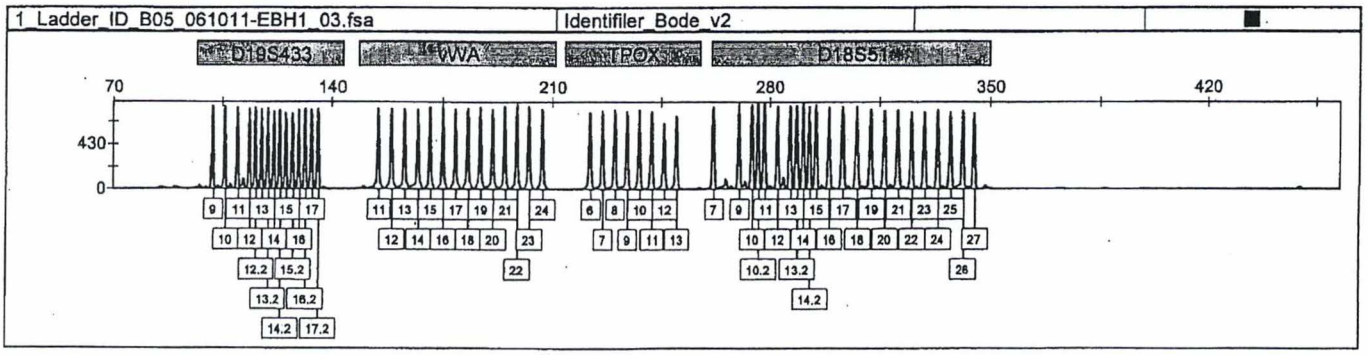


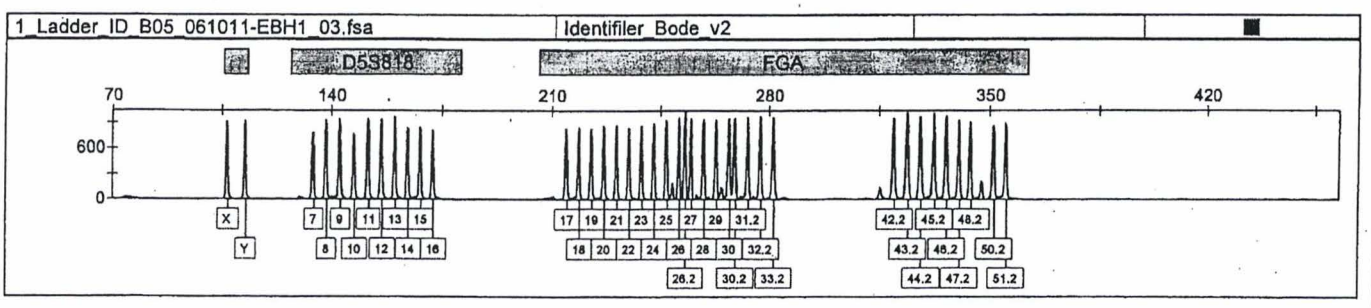
EBH 061011 42

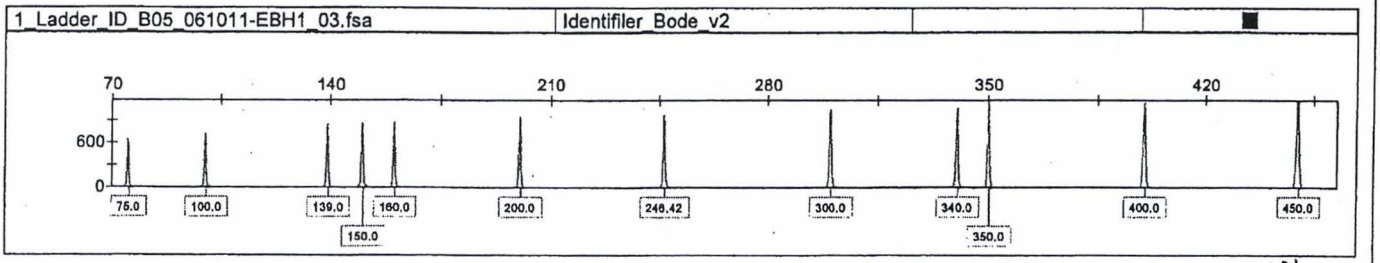
Sample File	Panel	SQO	SQ
1_Ladder_ID_B05_061011-EBH1_03.fsa	Identifiler_Bode_v2		



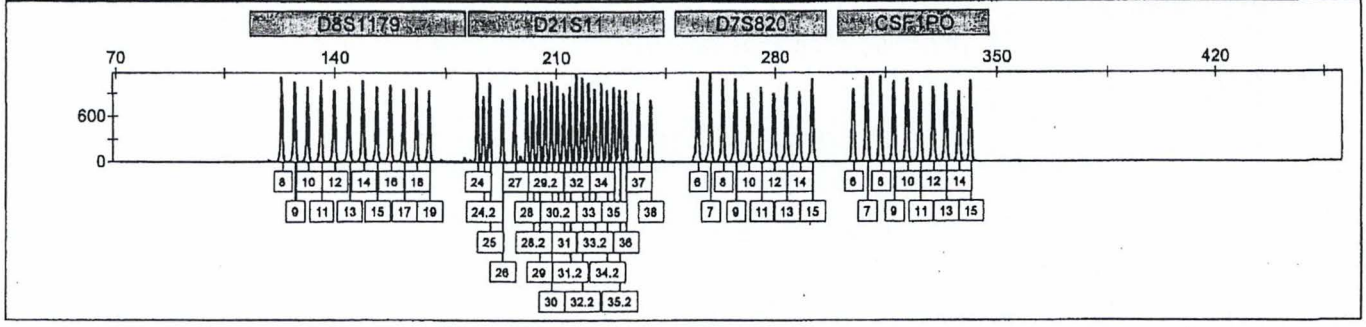




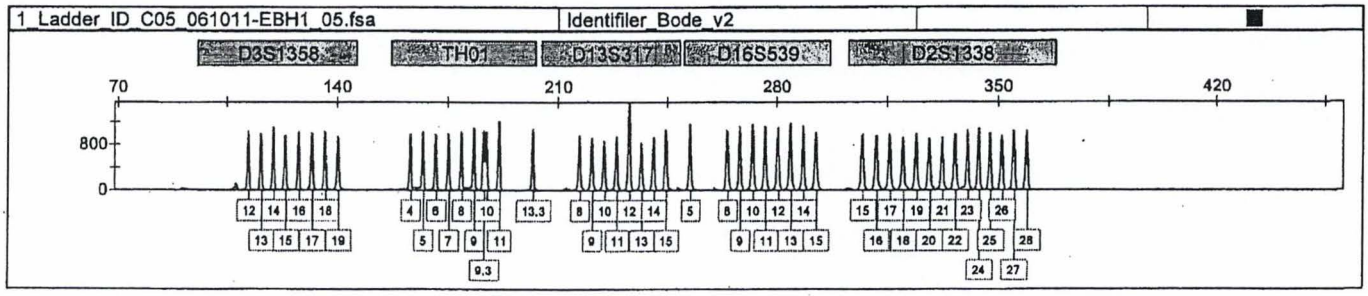




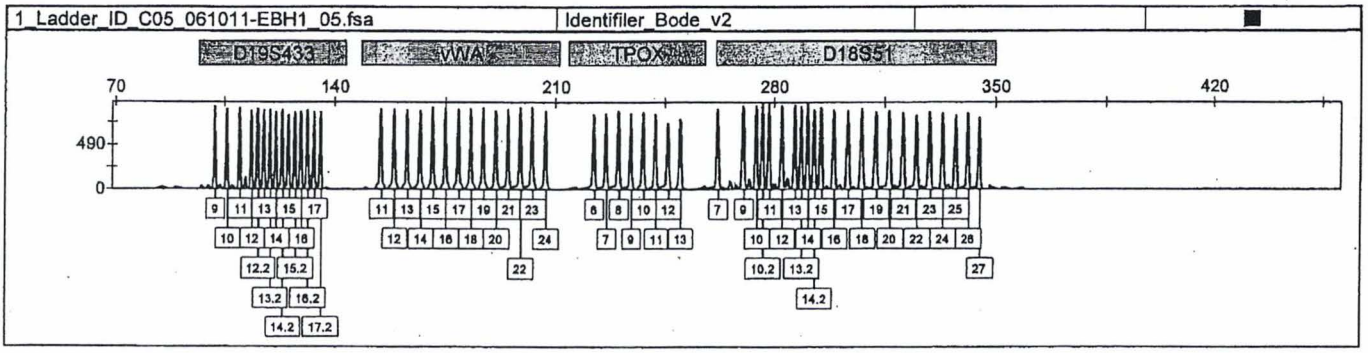
Sample File	Panel	SQO	SQ
1_Ladder_ID_C05_061011-EBH1_05.fsa	Identifiler_Bode_v2		



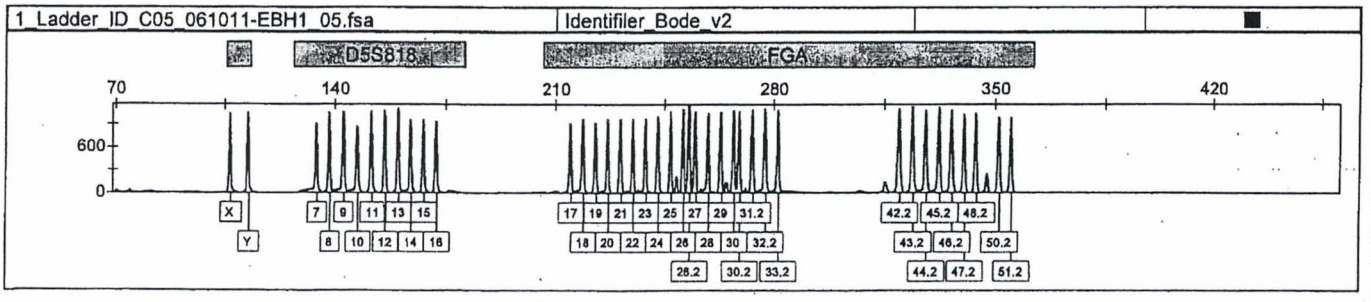
1_Ladder_ID_C05_061011-EBH1_05.fsa | Identifiler_Bode_v2



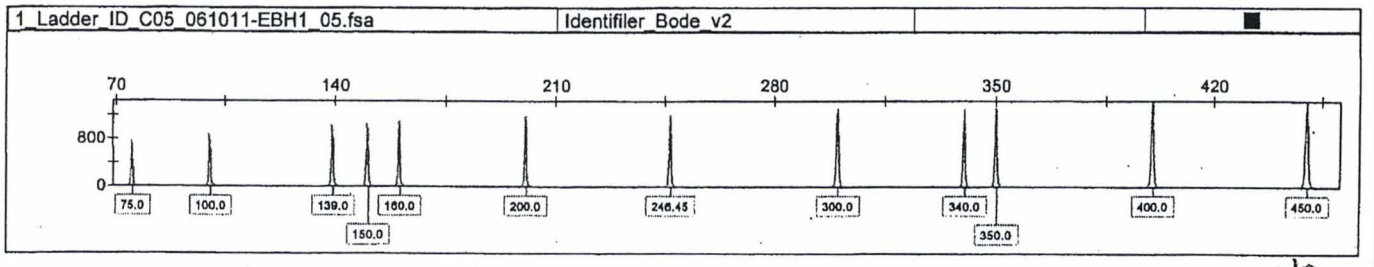
1_Ladder_ID_C05_061011-EBH1_05.fsa | Identifiler_Bode_v2



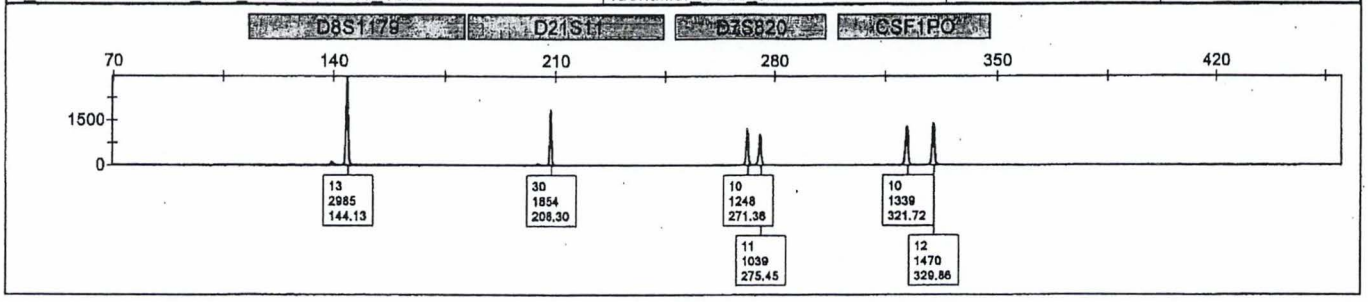
1_Ladder_ID_C05_061011-EBH1_05.fsa | Identifiler_Bode_v2



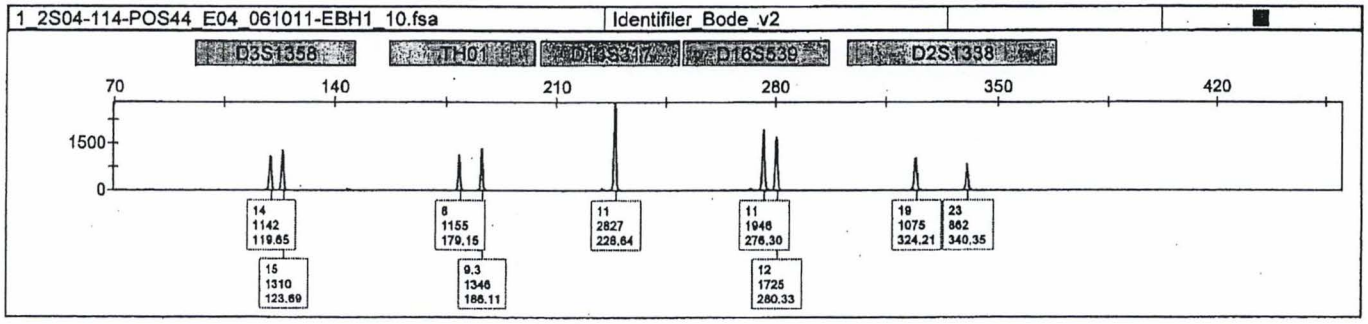
1_Ladder_ID_C05_061011-EBH1_05.fsa | Identifiler_Bode_v2



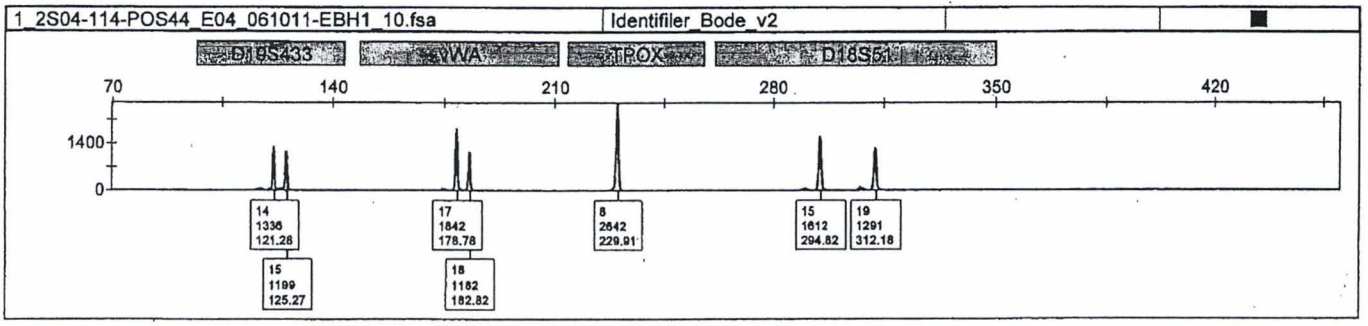
Sample File	Panel	SQO	SQ
1_2S04-114-POS44_E04_061011-EBH1_10.fsa	Identifiler_Bode_v2		



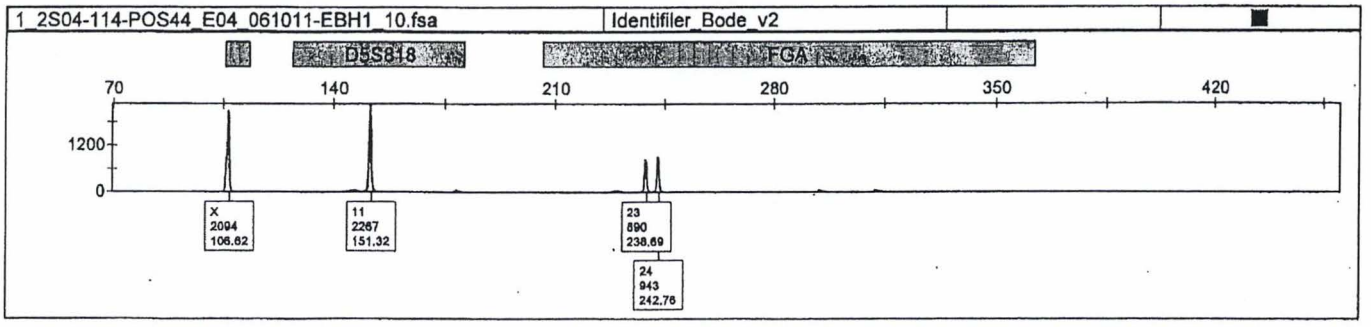
1_2S04-114-POS44_E04_061011-EBH1_10.fsa | Identifiler_Bode_v2



1_2S04-114-POS44_E04_061011-EBH1_10.fsa | Identifiler_Bode_v2



1_2S04-114-POS44_E04_061011-EBH1_10.fsa | Identifiler_Bode_v2



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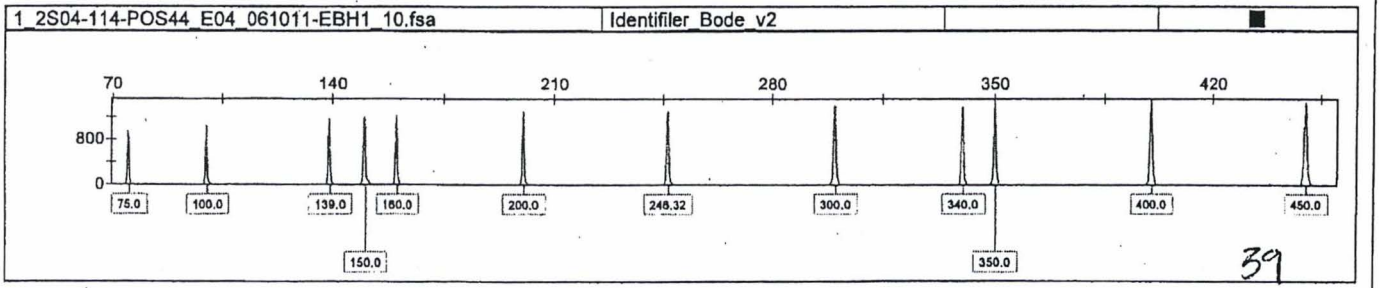

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Applied Biosystems

GeneMapper ID v3.2.1

GMID3_061011-EBH1_2S04-114_EBH_ID

Sample File	Panel	SQO	SQ
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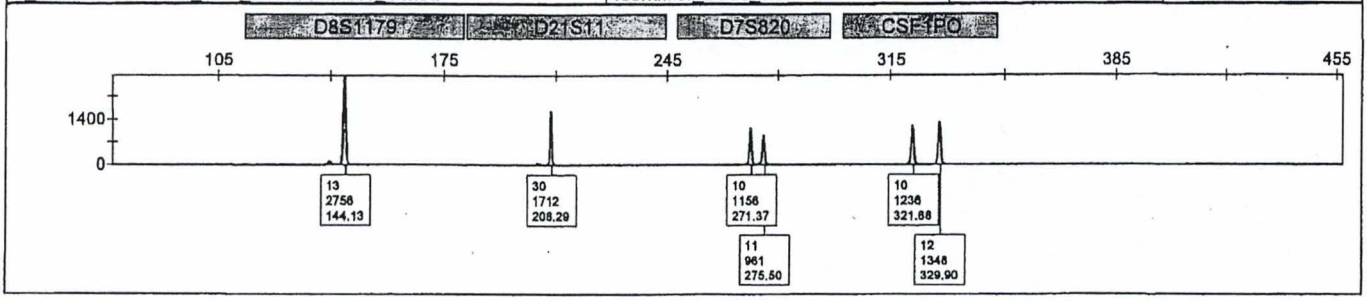
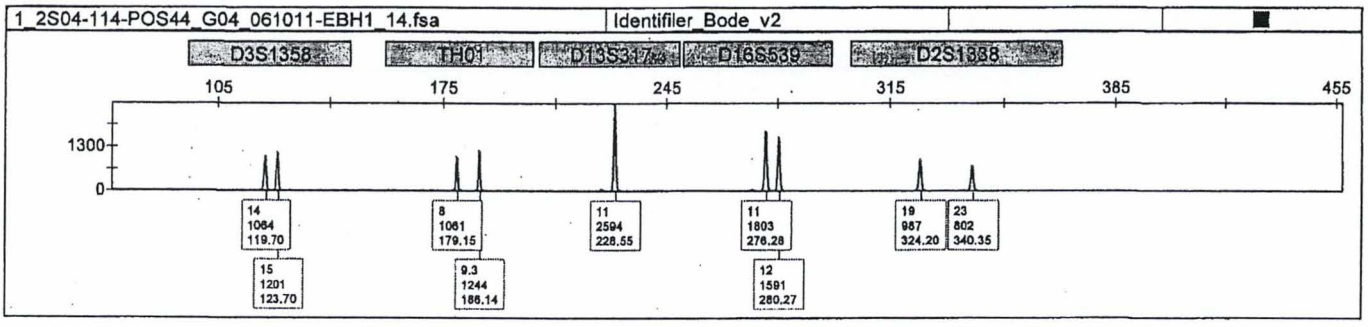


1_2S04-114-POS44_G04_061011-EBH1_14.fsa	Identifiler_Bode_v2		



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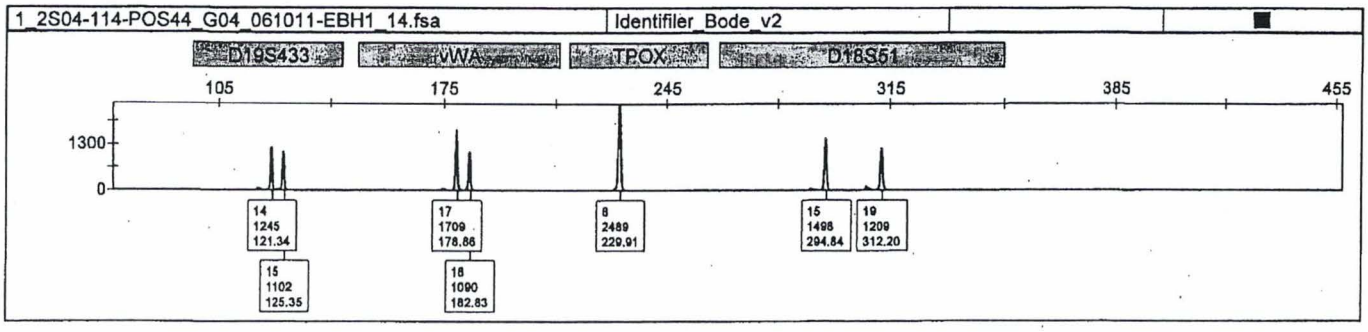

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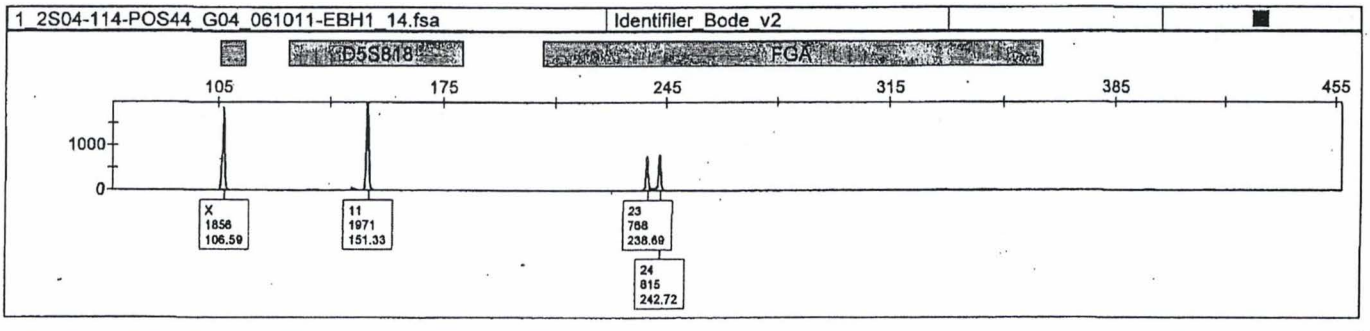
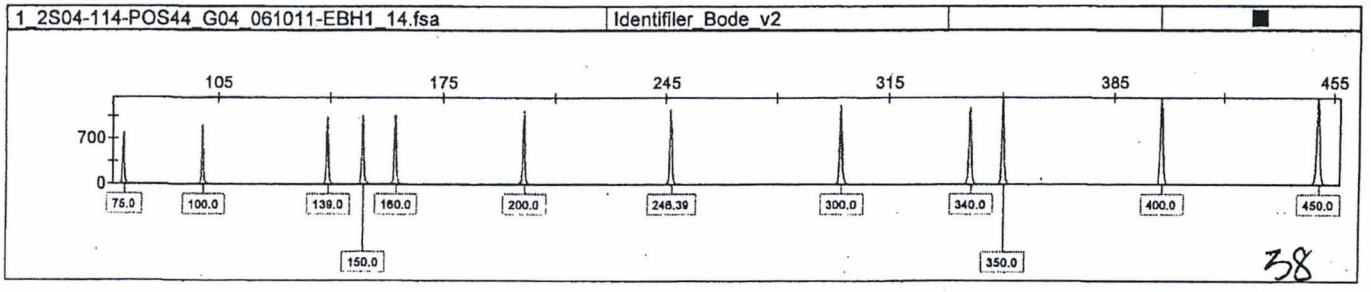


1_2S04-114-POS44_G04_061011-EBH1_14.fsa	Identifiler_Bode_v2		



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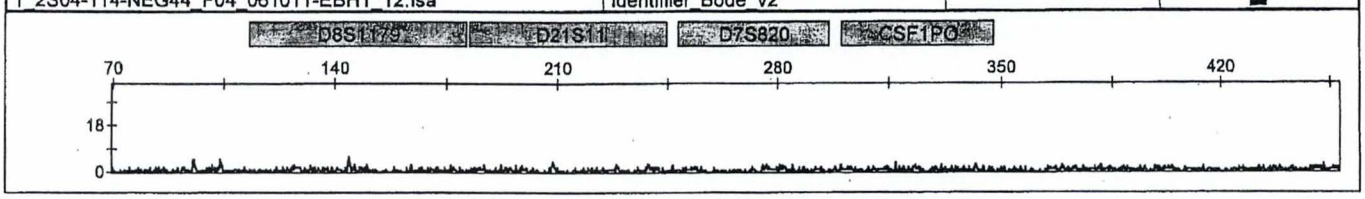
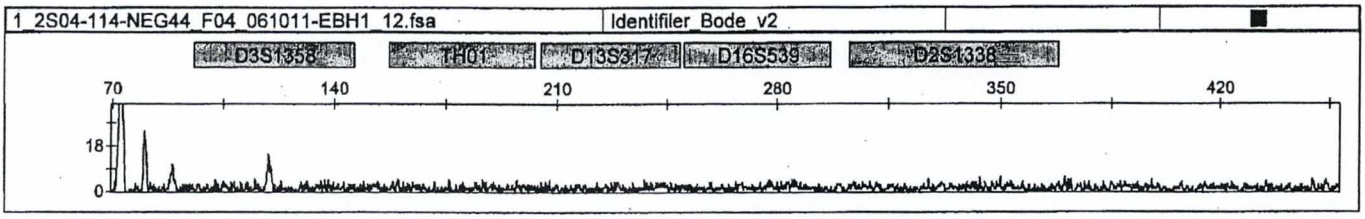
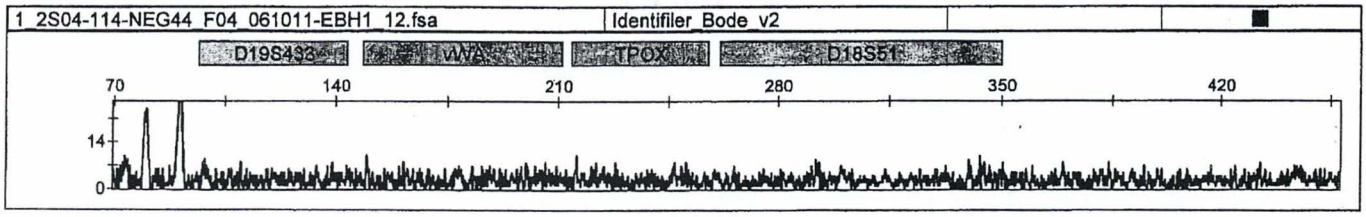
Sample File	Panel	SQO	SQ
1_2S04-114-NEG44_F04_061011-EBH1_12.fsa	Identifiler_Bode_v2		



1_2S04-114-NEG44_F04_061011-EBH1_12.fsa | Identifiler_Bode_v2



1_2S04-114-NEG44_F04_061011-EBH1_12.fsa | Identifiler_Bode_v2



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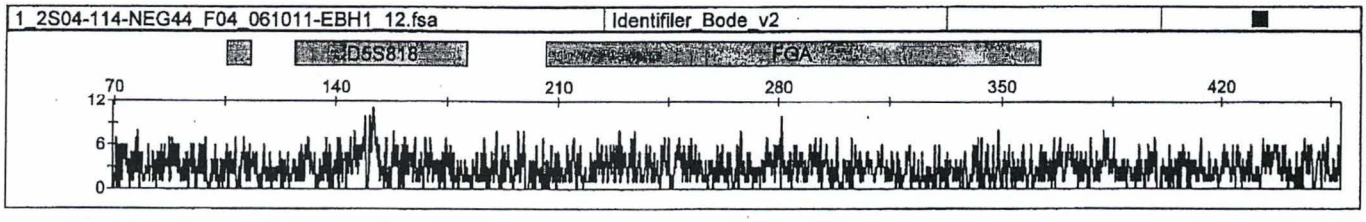

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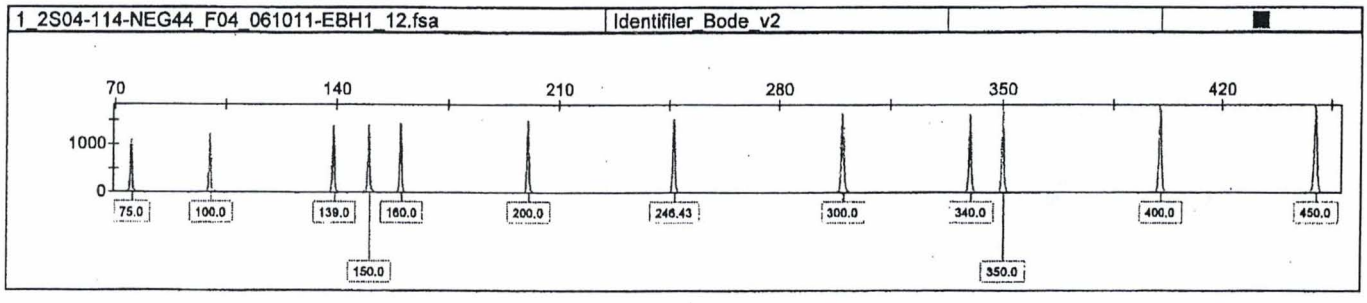

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Applied Biosystems

GeneMapper ID v3.2.1

GMID3_061011-EBH1_2S04-114_EBH_1B

Sample File	Panel	SQO	SQ
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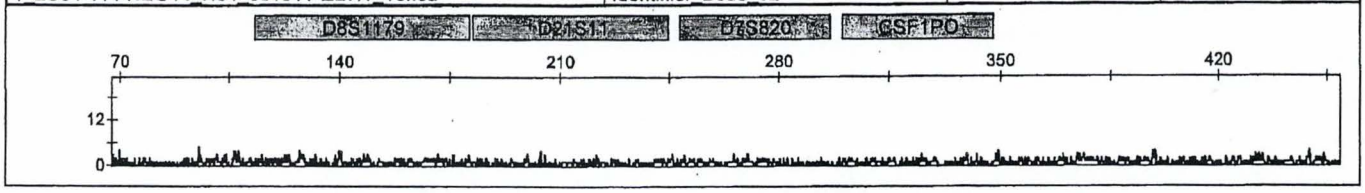
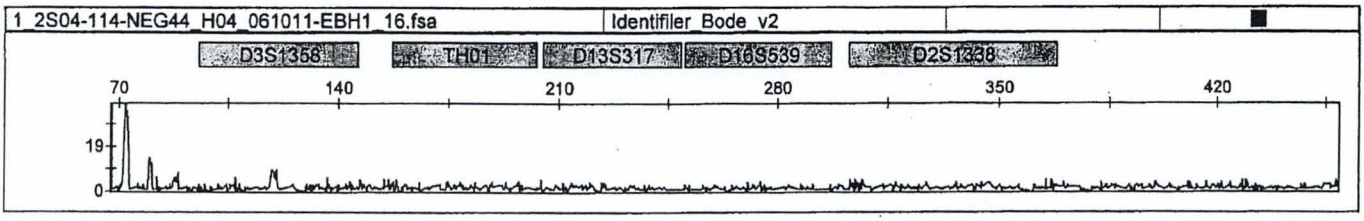
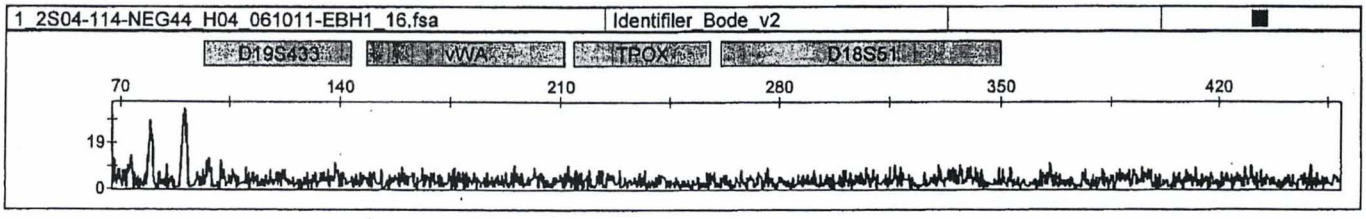


1_2S04-114-NEG44_H04_061011-EBH1_16.fsa | Identifiler_Bode_v2



1_2S04-114-NEG44_H04_061011-EBH1_16.fsa | Identifiler_Bode_v2



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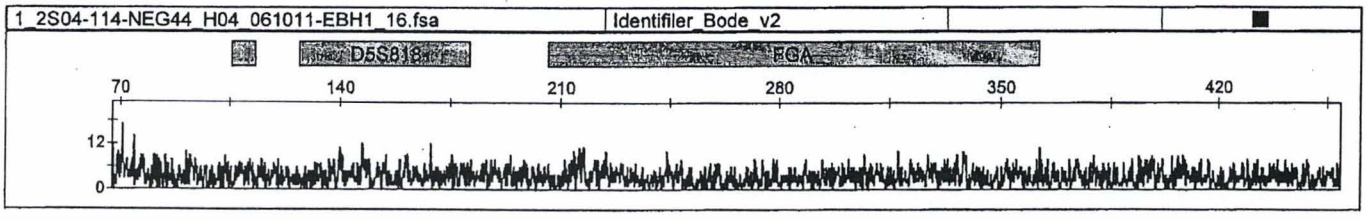

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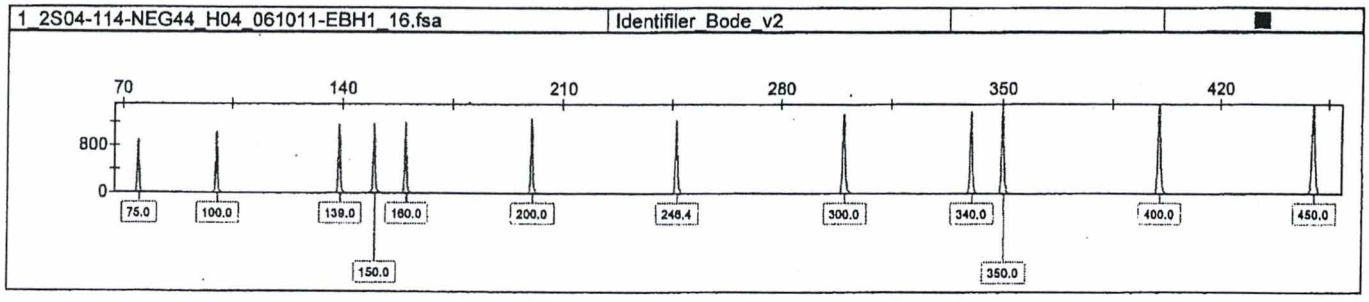

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Sample File	Panel	SQO	SQ
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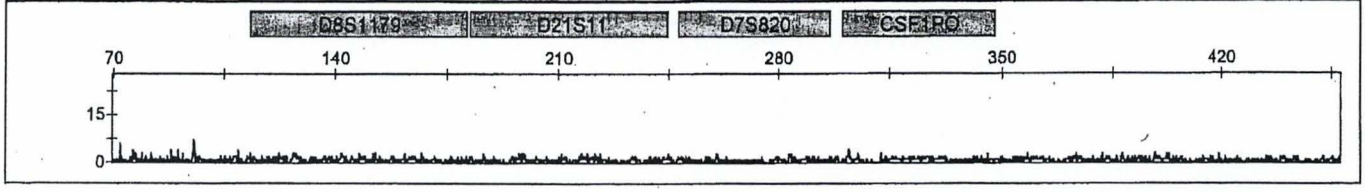

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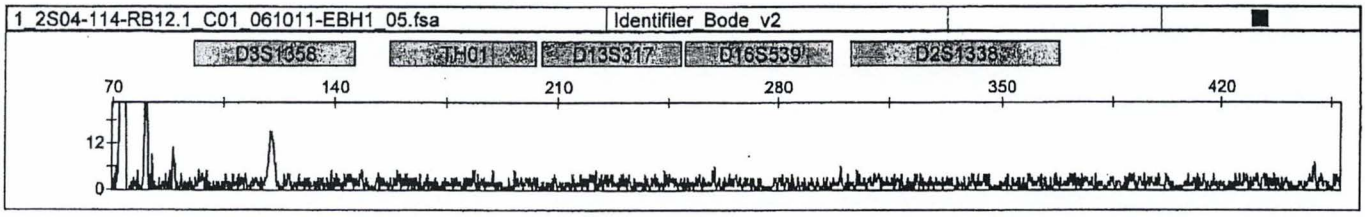

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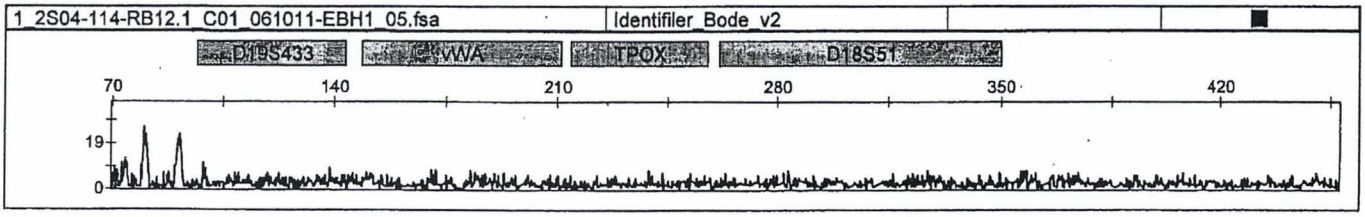

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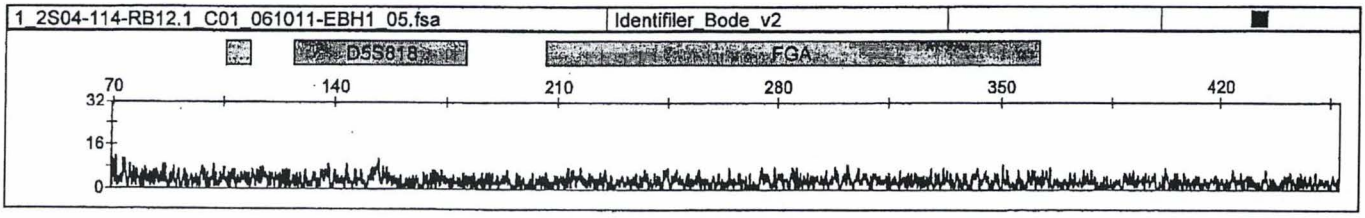

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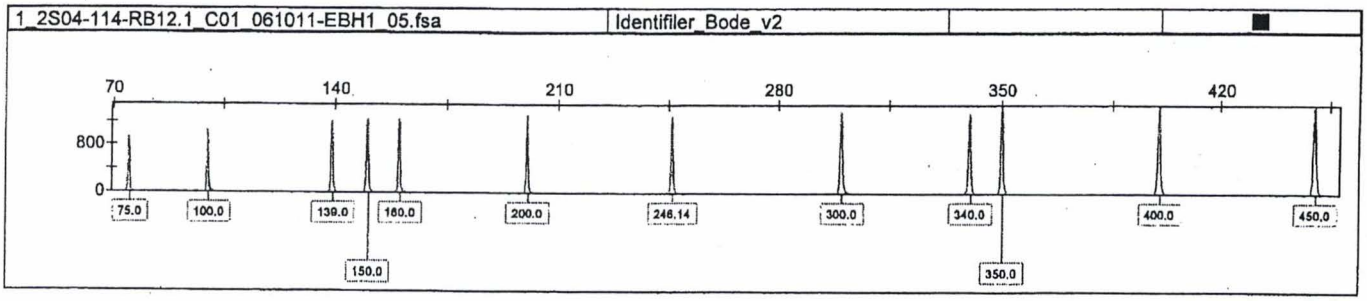

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Sample File	Panel	SQO	SQ
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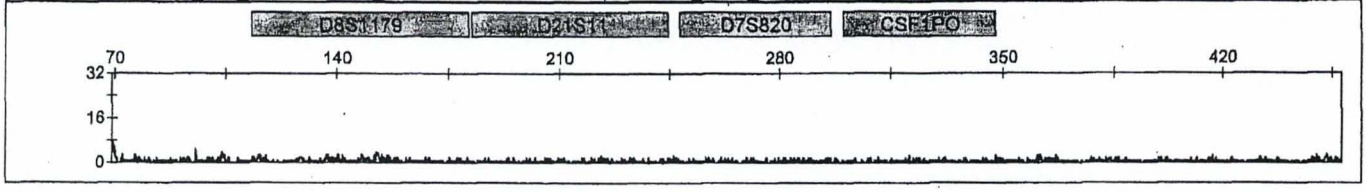

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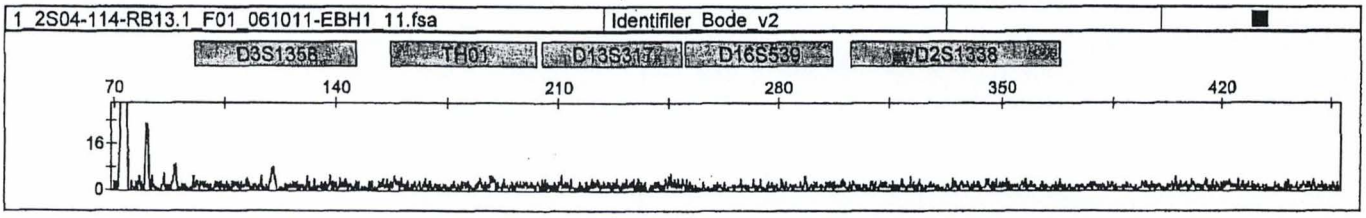

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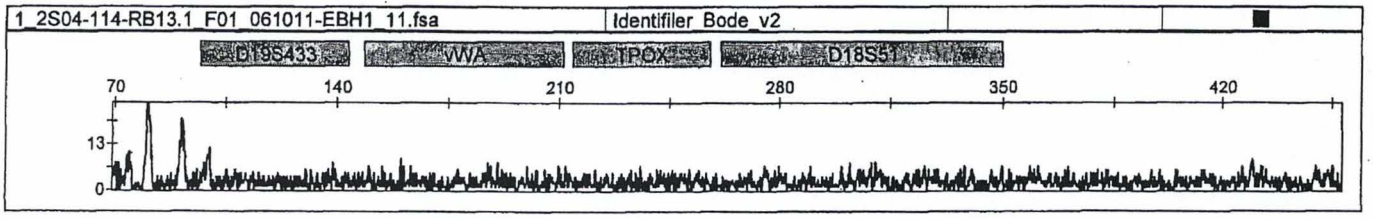

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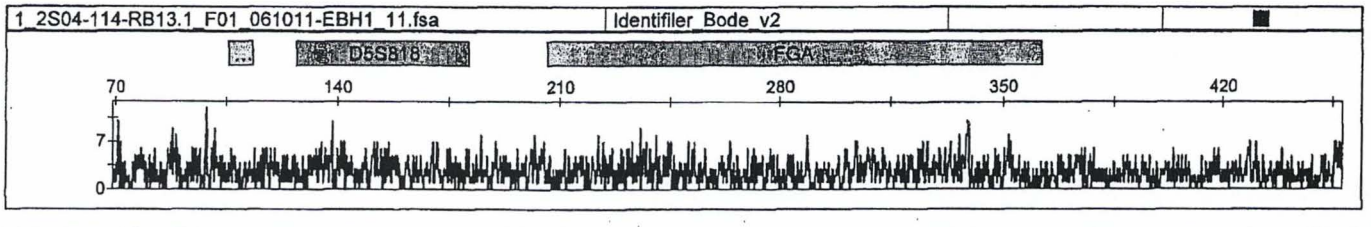

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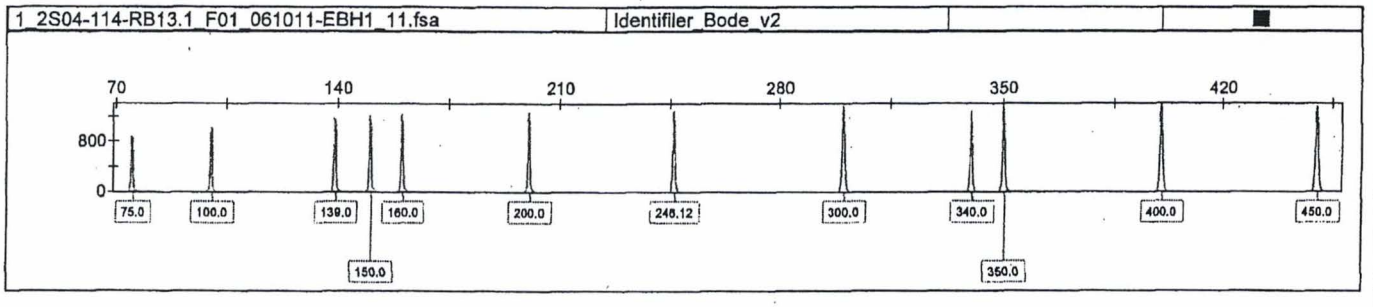

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GeneMapper ID v3.2.1

GMID3_061011-EBH1_2S04-114_EBH_ID

Sample File	Panel	SQO	SQ
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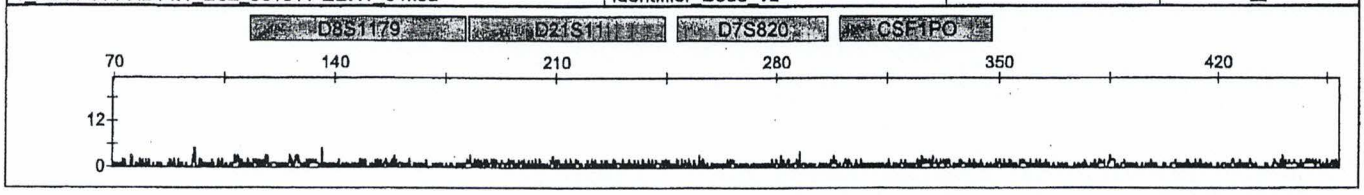

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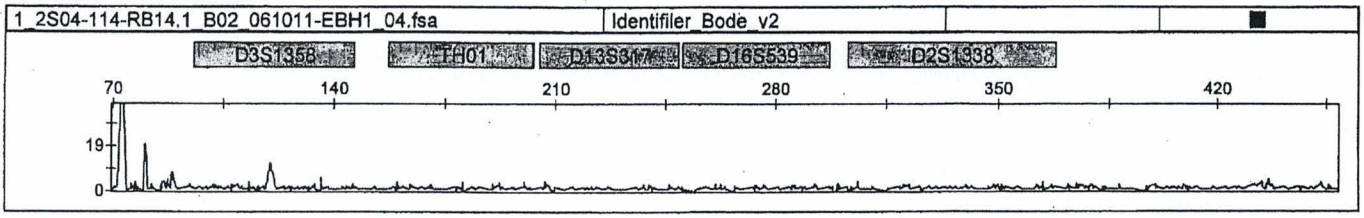

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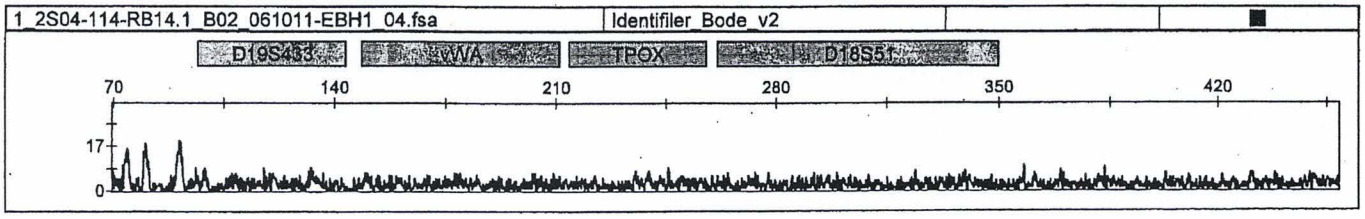

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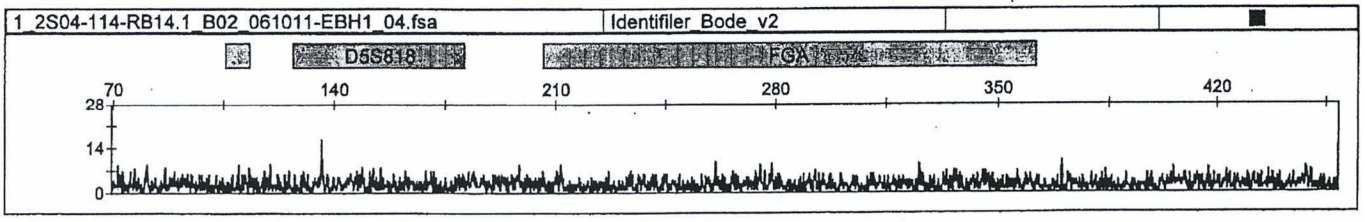

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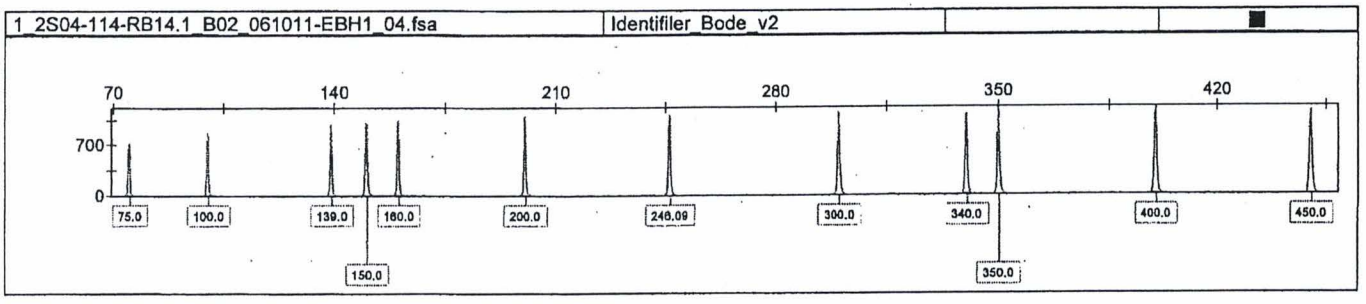

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Sample File	Panel	SQO	SQ
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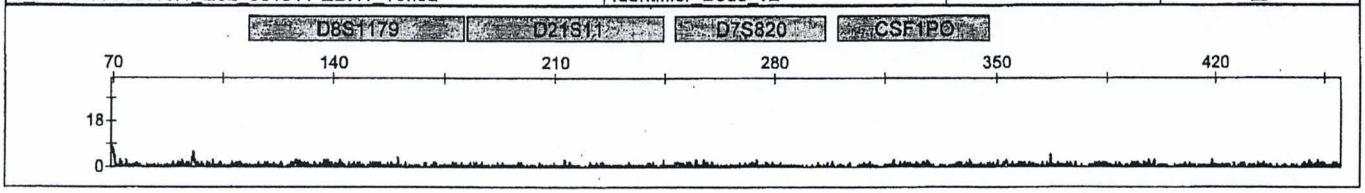

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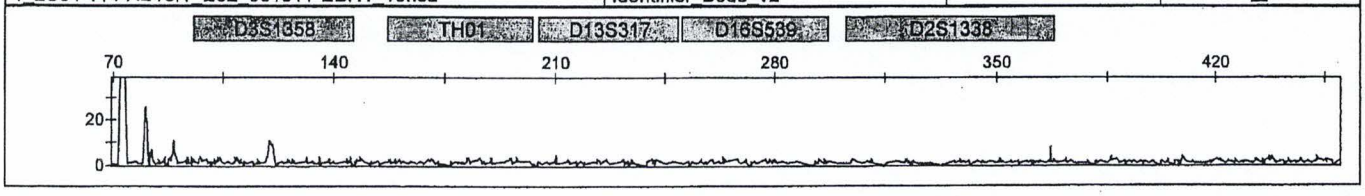

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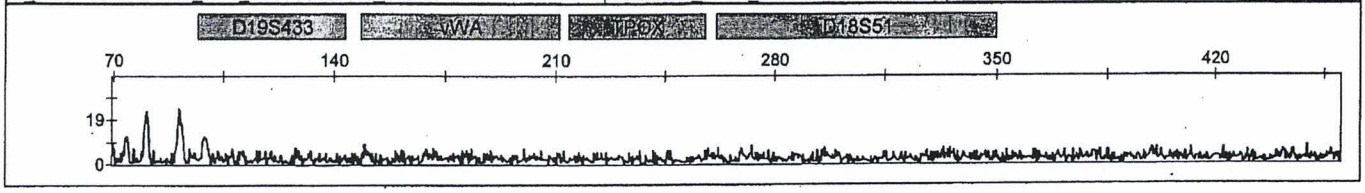
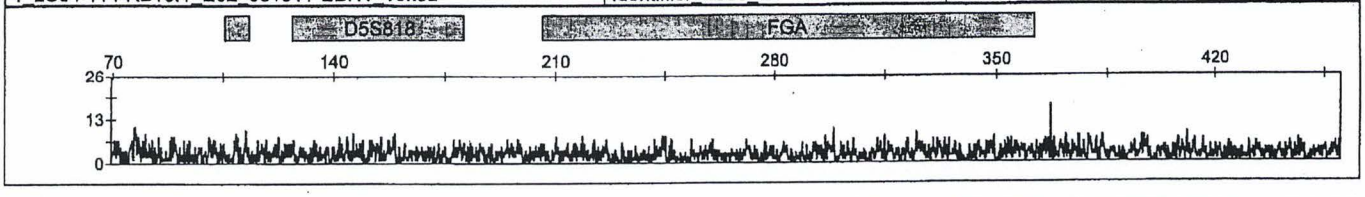


1_2S04-114-RB15.1_E02_061011-EBH1_10.fsa | Identifiler_Bode_v2



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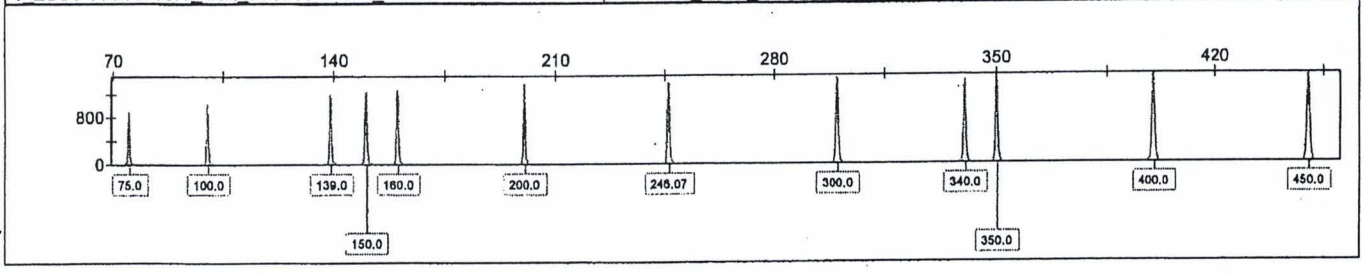

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GeneMapper ID v3.2.1

GMID3_061011-EBH1_2S04-114_EBH_ID

Sample File	Panel	SQO	SQ
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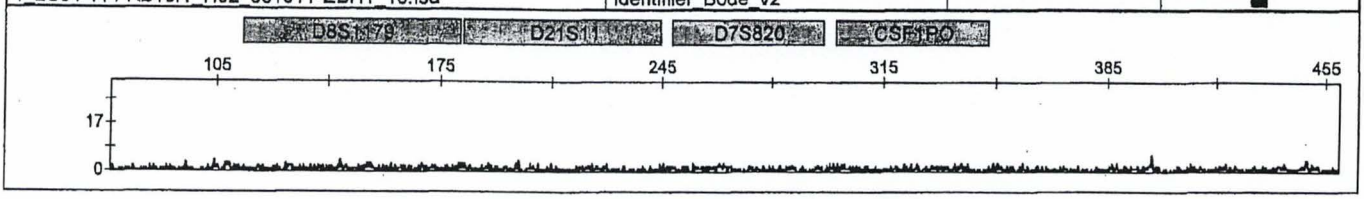

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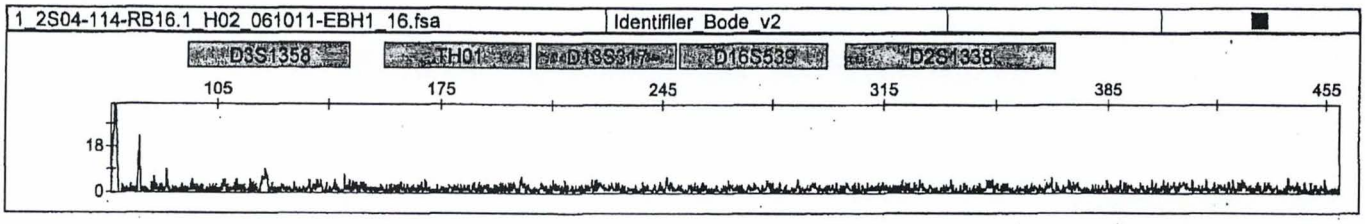

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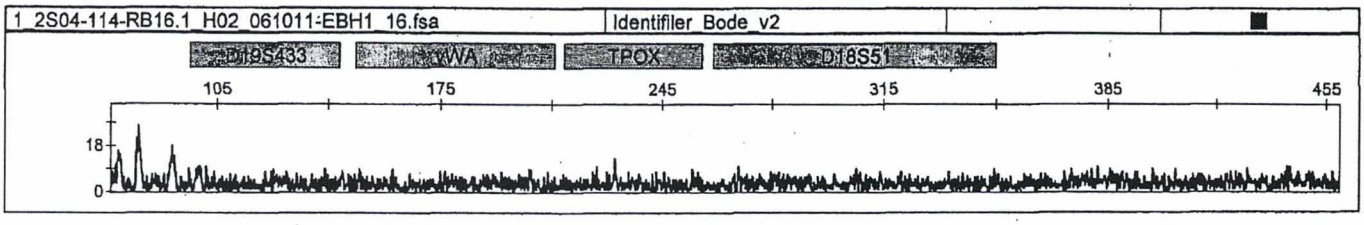

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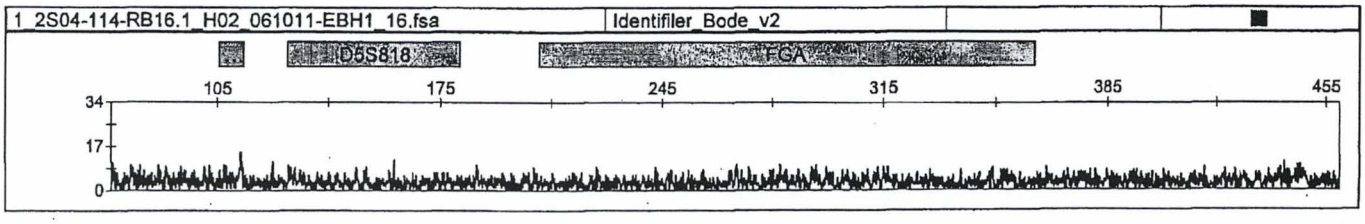

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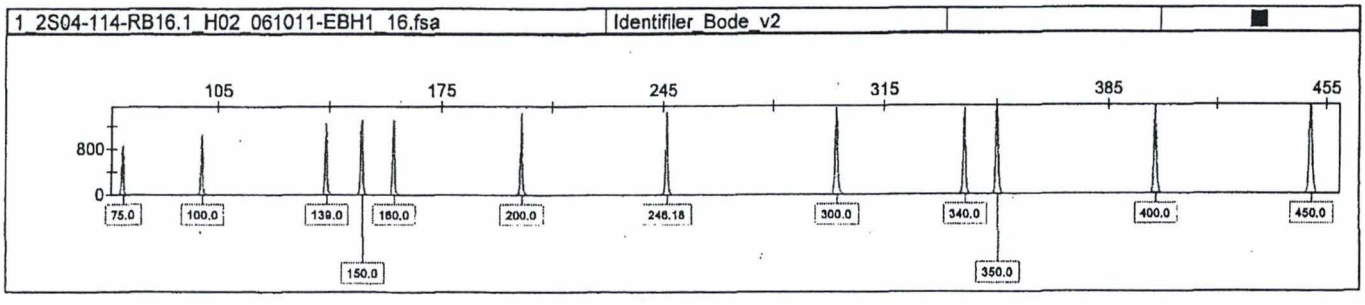

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Sample File	Panel	SQO	SQ
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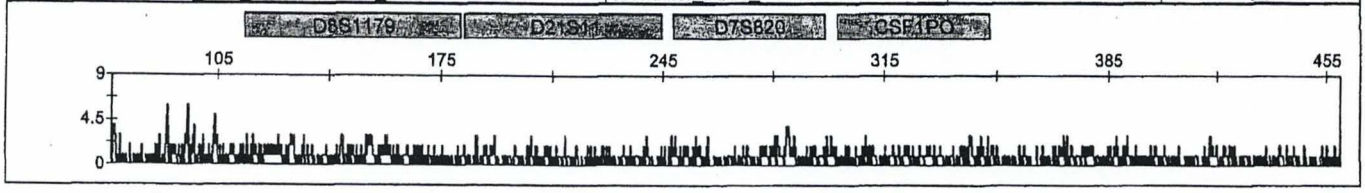
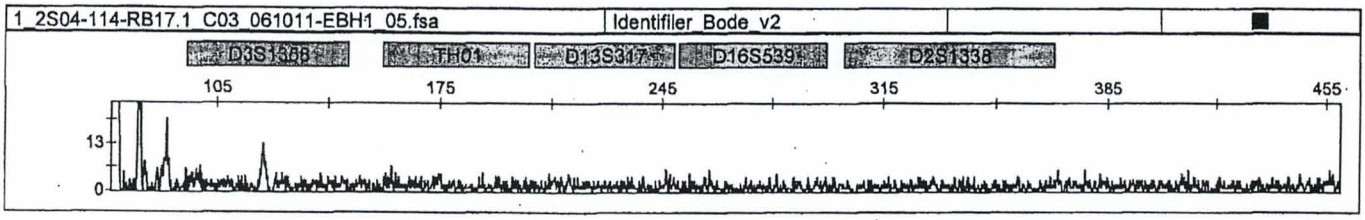
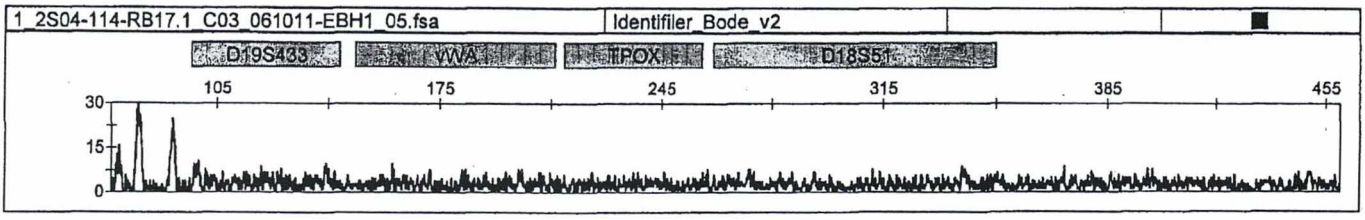


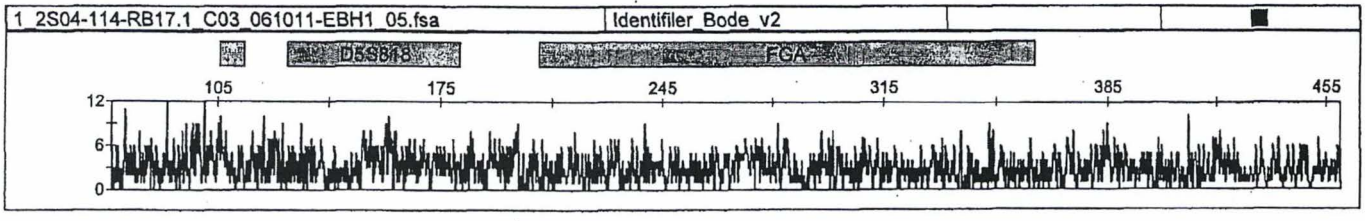
1_2S04-114-RB17.1_C03_061011-EBH1_05.fsa | Identifiler_Bode_v2



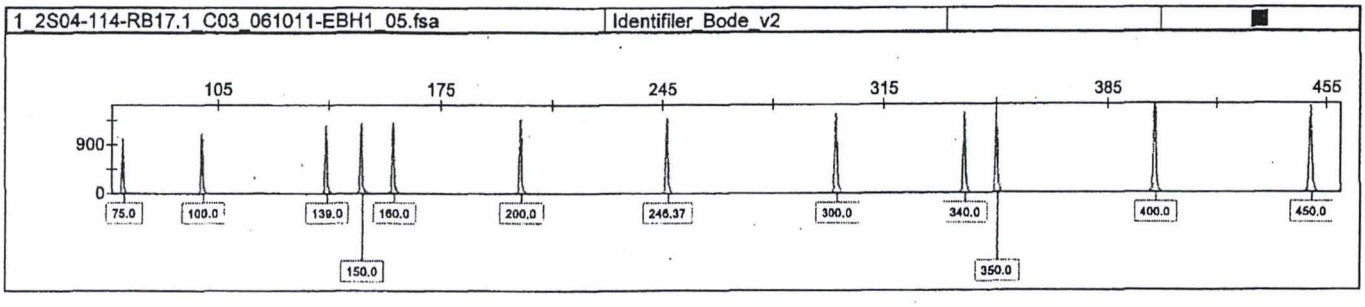
1_2S04-114-RB17.1_C03_061011-EBH1_05.fsa | Identifiler_Bode_v2



1_2S04-114-RB17.1_C03_061011-EBH1_05.fsa | Identifiler_Bode_v2



1_2S04-114-RB17.1_C03_061011-EBH1_05.fsa | Identifiler_Bode_v2



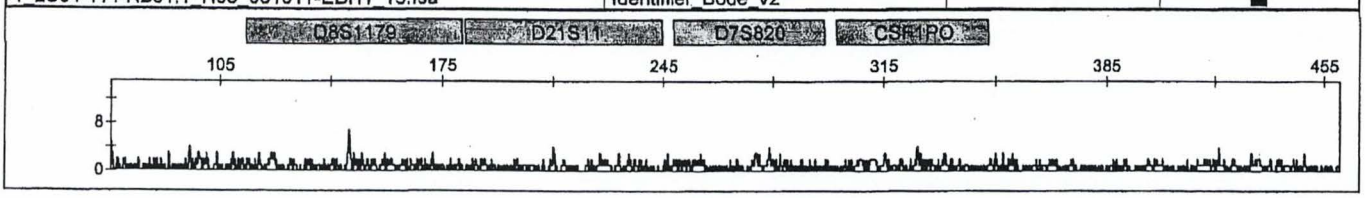
EBH 6/10/11

Applied Biosystems

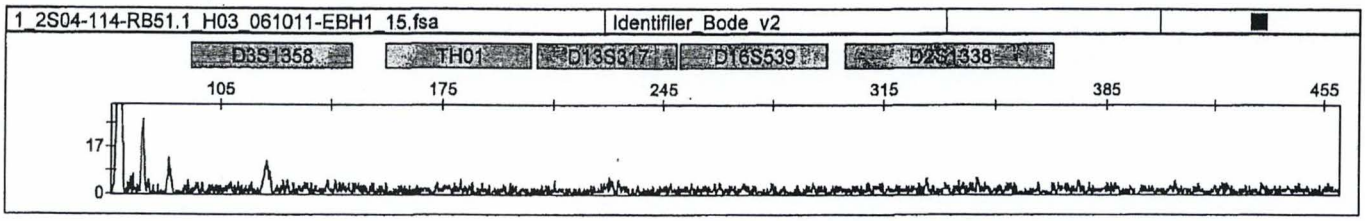
GeneMapper ID v3.2.1

GMID3_061011-EBH1_2S04-114_EBH_ID

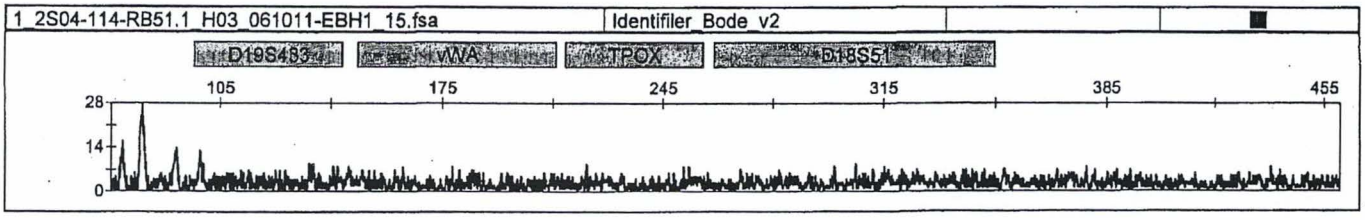
Sample File	Panel	SQO	SQ
1_2S04-114-RB51.1_H03_061011-EBH1_15.fsa	Identifiler_Bode_v2		



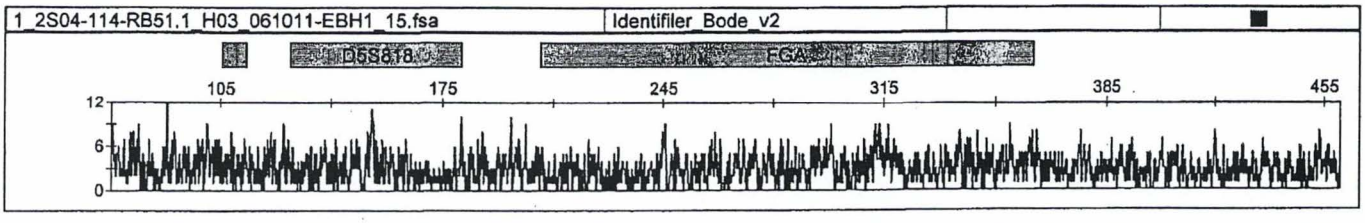
1_2S04-114-RB51.1_H03_061011-EBH1_15.fsa | Identifiler_Bode_v2



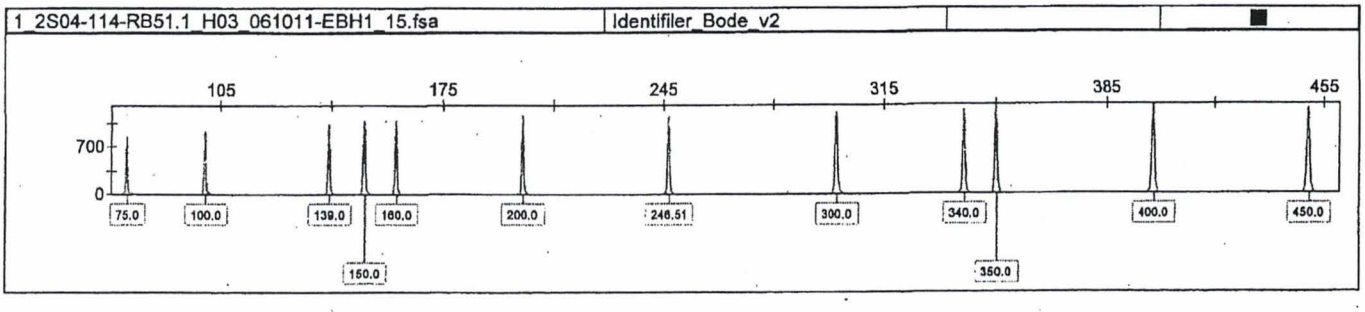
1_2S04-114-RB51.1_H03_061011-EBH1_15.fsa | Identifiler_Bode_v2



1_2S04-114-RB51.1_H03_061011-EBH1_15.fsa | Identifiler_Bode_v2

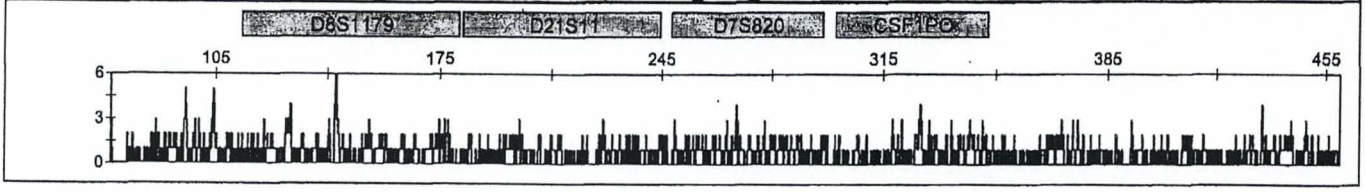


1_2S04-114-RB51.1_H03_061011-EBH1_15.fsa | Identifiler_Bode_v2

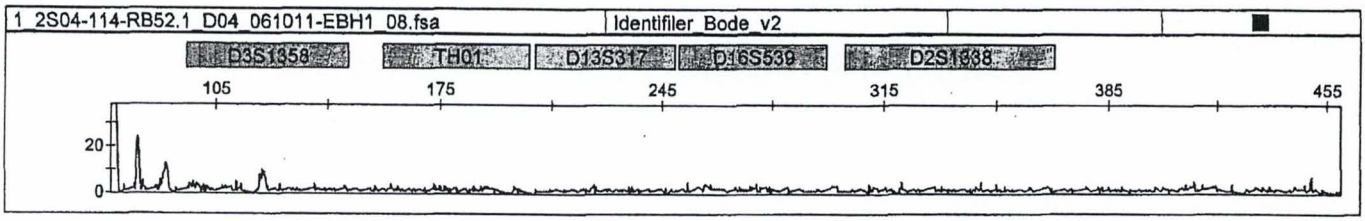


EBH 061011

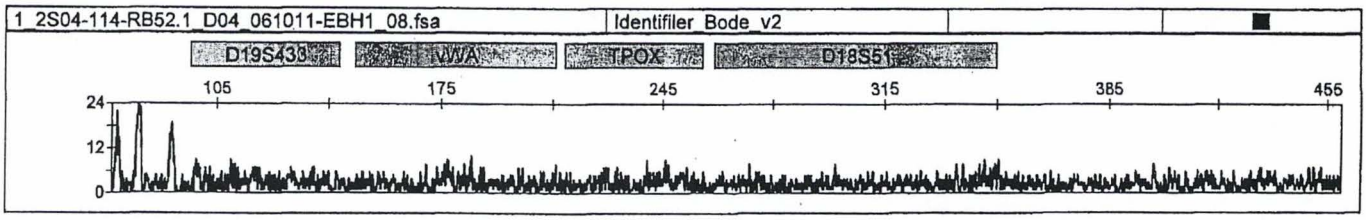
Sample File	Panel	SQO	SQ
1_2S04-114-RB52.1_D04_061011-EBH1_08.fsa	Identifiler_Bode_v2		



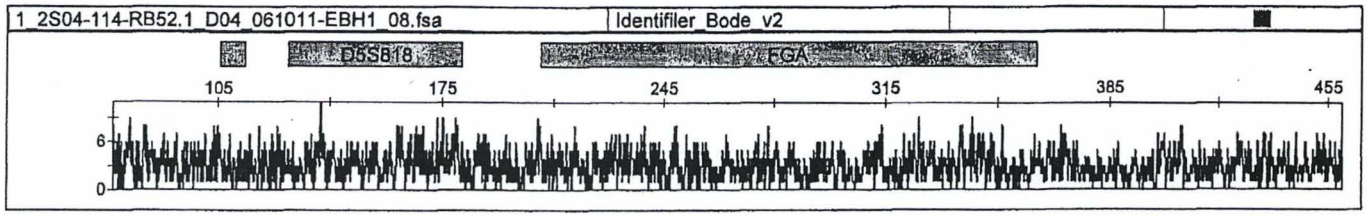
1_2S04-114-RB52.1_D04_061011-EBH1_08.fsa | Identifiler_Bode_v2



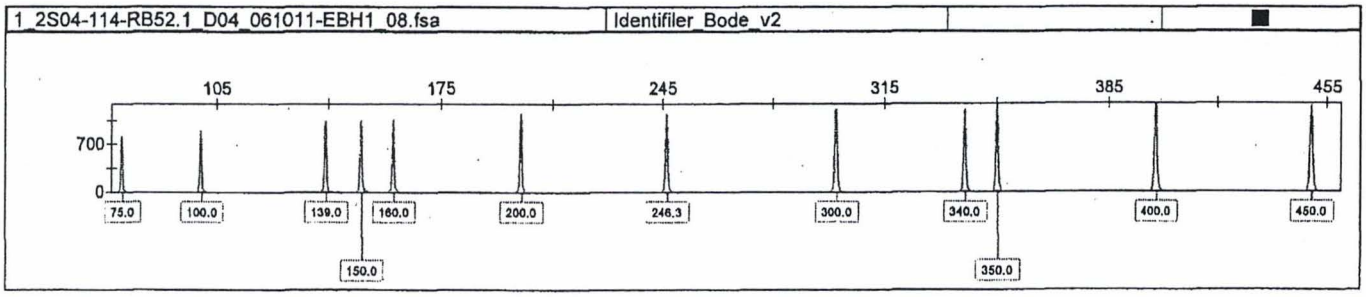
1_2S04-114-RB52.1_D04_061011-EBH1_08.fsa | Identifiler_Bode_v2



1_2S04-114-RB52.1_D04_061011-EBH1_08.fsa | Identifiler_Bode_v2



1_2S04-114-RB52.1_D04_061011-EBH1_08.fsa | Identifiler_Bode_v2



EBH 6/10/11

CE Set-up Sheet

TRAY ID: 061011-EBH3 **Amp. Tray:** 2S04-114-AMP44 reloads **Analyst:** EBH **Date:** 6/10/11

	1	2	3	4	5	6	7	8	9	10	11	12
A	2S04-114-89a1.1	Ladder_ID	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
B	2S04-114-89a2.1	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
C	2S04-114-89a1.1_2	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
D	2S04-114-89a2.1_2	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
E	2S04-114-POS44	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
F	2S04-114-POS44	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
G	Ladder_ID	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
H	Ladder_ID	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank

	Vol.(ul)/Well		No. of Rxns		Vol. Total (ul)
Formamide Lot# 11040002	10.0 ul	x	100	=	1000
GS-500LIZ Lot# 1103128	0.12 ul	x	100	=	12

Master Mix 10.0 ul
\+
Amp. Product 0.7ul

PIPETTORS LOT #S:	
Formamide:	P-118
ILS:	P-071
Formamide & ILS Mix:	P-116
Ladders:	P-075
Amp Product (3100 tray):	P-036
Amp Product (if diluted):	N/A
Diluent (for dilutions):	N/A

Machine:	3
Run #'s:	24
System:	Identifiler
Ladder Lot#:	09030116
Run Module:	Active_Run_Module_G5
Analysis Module:	75minrfu.gsp

Injected by: JGB
Date of Injection: 6/10/11

Primer Peak Verification	
Primer peaks verified for all negative samples.	
Read 1 Analyst: EBH	Date: 6/14/11
Integrity Report Evaluation	
Integrity Report Evaluation Date* :	N/A
Analyst:	N/A

Integrity performed manually
EBH 6/14/11

*If possible contamination is detected, provide case note with details for affected cases

EBH 6/10/11

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CE Set-up Sheet

TRAY ID: 061011-EBH2 **Amp. Tray:** 2S04-114-AMP44 reloads **Analyst:** EBH **Date:** 6/10/11

	1	2	3	4	5	6	7	8	9	10	11	12
A	2S04-114-33B5.1	2S04-114-POS44	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
B	2S04-114-33B5.1_2	2S04-114-POS44	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
C	2S04-114-34A8.1	Ladder_ID	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
D	2S04-114-34A8.1_2	Ladder_ID	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
E	2S04-114-89a1.1	Ladder_ID	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
F	2S04-114-89a1.1_2	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
G	2S04-114-89a2.1	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
H	2S04-114-89a2.1_2	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank

	Vol.(ul)/Well		No. of Rxns		Vol. Total (ul)
Formamide Lot# 11D4002	10.0 ul	x	100	=	1000
GS-500LIZ Lot# 1102127	0.12 ul	x	100	=	12

Master Mix 10.0 ul

\+

Amp. Product 0.7ul

PIPETTORS LOT #S:	
Formamide:	P-118
ILS:	P-071
Formamide & ILS Mix:	P-116
Ladders:	P-067
Amp Product (3100 tray):	P-007
Amp Product (if diluted):	N/A
Diluent (for dilutions):	N/A

Machine:	11
Run #'s:	2
System:	Identifiler
Ladder Lot#:	D9030116
Run Module:	Active_Run_Module_G5
Analysis Module:	75minrfu.gsp

Injected by: MEB
Date of Injection: 6/10/11

Primer Peak Verification	
Primer peaks verified for all negative samples.	
Read 1 Analyst: EBH	Date: 6/10/11
Integrity Report Evaluation	
Integrity Report Evaluation Date*:	N/A
Analyst:	N/A

Integrity performed manually EBH 6/10/11

*If possible contamination is detected, provide case note with details for affected cases

EBH 6/10/11

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CE Set-up Sheet

TRAY ID: 061011-EBH1 **Amp. Tray:** 2S04-114-AMP44 **Analyst:** EBH **Date:** 6/10/11

	1	2	3	4	5	6	7	8	9	10	11	12
A	2S04-114-33A4.1	2S04-114-34A8.1	2S04-114-35B4.1	2S04-114-106a1.1	Ladder_ID	Blank	Blank	Blank	Blank	Blank	Blank	Blank
B	2S04-114-33A5.1	2S04-114-RB14.1	2S04-114-35B7.1	2S04-114-107a1.1	Ladder_ID	Blank	Blank	Blank	Blank	Blank	Blank	Blank
C	2S04-114-RB12.1	2S04-114-34B4.1	2S04-114-RB17.1	2S04-114-109a1.1	Ladder_ID	Blank	Blank	Blank	Blank	Blank	Blank	Blank
D	2S04-114-33B4.1	2S04-114-34B7.1	2S04-114-89a1.1	2S04-114-RB52.1	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
E	2S04-114-33B5.1	2S04-114-RB15.1	2S04-114-89a2.1	2S04-114-POS44	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
F	2S04-114-RB13.1	2S04-114-35A4.1	2S04-114-100a1.1	2S04-114-NEG44	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
G	2S04-114-34A4.1	2S04-114-35A7.1	2S04-114-103a1.1	2S04-114-POS44	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
H	2S04-114-34A5.1	2S04-114-RB16.1	2S04-114-RB51.1	2S04-114-NEG44	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank

	Vol.(ul)/Well		No. of Rxns		Vol. Total (ul)
Formamide Lot# 1104062	10.0 ul	x	100	=	1000
GS-500LIZ Lot# 1102127	0.12 ul	x	100	=	12

Master Mix 10.0 ul

\+

Amp. Product 0.7ul

PIPETTORS LOT #S:	
Formamide:	P-118
ILS:	P-071
Formamide & ILS Mix:	P-116
Ladders:	P-067
Amp Product (3100 tray):	P-036
Amp Product (if diluted):	N/A
Diluent (for dilutions):	N/A

Machine:	3
Run #'s:	16-18
System:	Identifiler
Ladder Lot#:	0903016
Run Module:	Active_Run_Module_G5
Analysis Module:	75minrfu.gsp

Injected by: MEB

Date of Injection: 6/10/2011

Primer Peak Verification	
Primer peaks verified for all negative samples.	
Read 1 Analyst: EBH	**Date:** 6/10/11
Integrity Report Evaluation	
Integrity Report Evaluation Date*:	N/A
Analyst:	N/A

Integrity performed manually.
EBH 6/14/11

*If possible contamination is detected, provide case note with details for affected cases

EBH 6/10/11

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AmpF/STR Identifiler

Amplification Worksheet (25µl Volume Reaction)

See amplification notes for reagents, lot numbers, and pipettor numbers

Tray Coordinate (well)	Sample	Dilution	Master Mix (µl)	DNA/dH2O (µl/µl)	Total (µl)
A1.44	2S04-114-33A4.1	---	15	10/0	25
B1.44	2S04-114-33A5.1	---	15	10/0	25
C1.44	2S04-114-RB12.1	---	15	10/0	25
D1.44	2S04-114-33B4.1	---	15	10/0	25
E1.44	2S04-114-33B5.1	---	15	10/0	25
F1.44	2S04-114-RB13.1	---	15	10/0	25
G1.44	2S04-114-34A4.1	---	15	10/0	25
H1.44	2S04-114-34A5.1	---	15	10/0	25
A2.44	2S04-114-34A8.1	---	15	10/0	25
B2.44	2S04-114-RB14.1	---	15	10/0	25
C2.44	2S04-114-34B4.1	---	15	10/0	25
D2.44	2S04-114-34B7.1	---	15	10/0	25
E2.44	2S04-114-RB15.1	---	15	10/0	25
F2.44	2S04-114-35A4.1	---	15	10/0	25
G2.44	2S04-114-35A7.1	---	15	10/0	25
H2.44	2S04-114-RB16.1	---	15	10/0	25
A3.44	2S04-114-35B4.1	---	15	10/0	25
B3.44	2S04-114-35B7.1	---	15	10/0	25
C3.44	2S04-114-RB17.1	---	15	10/0	25
D3.44	2S04-114-89a1.1	---	15	10/0	25
E3.44	2S04-114-89a2.1	---	15	10/0	25
F3.44	2S04-114-100a1.1	---	15	10/0	25
G3.44	2S04-114-103a1.1	---	15	10/0	25
H3.44	2S04-114-RB51.1	---	15	10/0	25
A4.44	2S04-114-106a1.1	---	15	10/0	25
B4.44	2S04-114-107a1.1	---	15	10/0	25
C4.44	2S04-114-109a1.1	---	15	10/0	25
D4.44	2S04-114-RB52.1	---	15	10/0	25
E4.44	2S04-114-POS44	---	15	2/8	25
F4.44	2S04-114-NEG44	---	15	0/10	25

TC#: 28 **Program#:** ID_28CYCL **2S04-114-AMP44**
Analyst: EBH **Date:** 6/9/11
Tube Witness: JAD **Date:** 6/9/11

AMPLIFICATION NOTES:
2S04-114-AMP44

Reagent	Source	Lot #	Sample Volume (µl)	Number of Reactions	Final Volume (µl)
Water	Fisher	107828			
PCR Reaction Mix	ABI	1012774	10.5	33	346.5
Identifiler Primer Set	ABI	0909070	5.5	33	181.5
AmpliTaq Gold	ABI	N12473	0.5	33	16.5
POS 9947	BODE	D1009111WT_AD			
TE	BODE	N/A			

Pipettes Used: EBH 6/9/11

For all volumes <2 uL	A- N/A
For all volumes between 2 and 10 uL	A-089
For all volumes between 11 and 100 uL	A-078
For all volumes between 101 and 1000 uL	A-053
For master mix	A-078
For water	A-089

Document: BT00429 - Identifiler Amp (CCW WS)
Revision: 3
Effective: Friday, March 05, 2010 12:27:07 PM

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EBH 6/9/11

Vivacon Purification/Concentration of DNA Extracts

Item	Source	Lot #
Vivacon 500-30K	Sartorius	1103006VS
cRNA	BODE	011211JJ
dH_2O	Fisher	N/A
TE-4 Buffer	BODE	041311JJ

Tube #	Sample	Approximate Volume Recovered (ul)	Approximate Final Volume (ul)	Comments
3	2S04-114-33A4	17	22	
4	2S04-114-33A5	19	22	
7	2S04-114-RB12	20	22	
10	2S04-114-33B4	14	22	
11	2S04-114-33B5	15	22	
14	2S04-114-RB13	15	22	
17	2S04-114-34A4	16	22	
18	2S04-114-34A5	17	22	
21	2S04-114-34A8	18	22	
22	2S04-114-RB14	16	22	
25	2S04-114-34B4	16	22	
28	2S04-114-34B7	16	22	
29	2S04-114-RB15	16	22	
32	2S04-114-35A4	15	22	
35	2S04-114-35A7	12	22	
36	2S04-114-RB16	16	22	
39	2S04-114-35B4	16	22	
42	2S04-114-35B7	16	22	
43	2S04-114-RB17	15	22	
6	2S04-114-89a1	17	22	
7	2S04-114-89a2	17	22	
8	2S04-114-100a1	17	22	
9	2S04-114-103a1	20	22	
10	2S04-114-RB51	20	22	
11	2S04-114-106a1	17	22	
12	2S04-114-107a1	17	22	
13	2S04-114-109a1	17	22	
14	2S04-114-RB52	14	22	

Analyst: EBH **Date:** 6/9/11

Case Number: 2S04-114

Pipettes Used:

Volumes <2 uL	A-038
Volumes 2-10 uL	A-038
Volumes 11-100 uL	A-201; A-166
Volumes 101-1000 uL	A-009

EBH 6/9/11

QUANTIFILER DUO QUANT

Shipment: 2S04-114; CCB1050
Tray ID: 060911EBH-QT1

Analyst: EBH
Date: 06/09/11

Yellow: Concentration = Zero; Below limit of detection of assay.

IPC is outside of the expected range - Inhibitors may be present OR DNA yield is greater than 50ng/µl OR both. Dilute prior to amplification.

			Human Target		Male Target				
	Sample Name	Sample Type	CT	Quantity (ng/ul)	CT	Quantity (ng/ul)	IPC Ct	Male Quantity/ Human Quantity	Status
	STD 50	Standard	22.52	50	23.33	50.000	29.69	100.00%	
	STD 16.67	Standard	24.3	16.67	25.16	16.670	29.53	100.00%	
	STD 5.56	Standard	26.16	5.56	27.04	5.560	29.31	100.00%	
	STD 1.85	Standard	27.68	1.85	28.59	1.850	29.27	100.00%	
	STD 0.617	Standard	29.26	0.617	30.27	0.617	29.25	100.00%	
	STD 0.206	Standard	31.1	0.206	32.14	0.206	29.2	100.00%	
	STD 0.069	Standard	32.29	0.069	32.97	0.069	29.34	100.00%	
	STD 0.023	Standard	34.3	0.023	34.67	0.023	29.24	100.00%	
	NTC	Unknown	Undetermined	<0.023	Undetermined	<0.023	29.29	--	
						Average IPC Ct	29.30		
A1	2S04-114-89a1	Unknown	34.81	0.0157	36.27	0.00911	29.42	58.03%	INC
B1	2S04-114-89a2	Unknown	34.97	0.0141	36.14	0.00994	29.36	70.50%	INC
C1	2S04-114-100a1	Unknown	37.32	0.00297	36.36	0.00859	29.45	100%	INC
D1	2S04-114-103a1	Unknown	36.58	0.00483	37.36	0.00433	29.46	89.65%	INC
E1	2S04-114-RB51	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.31	--	NR
F1	2S04-114-106a1	Unknown	36.73	0.00439	Undetermined	<0.001	29.38	--	NR
G1	2S04-114-107a1	Unknown	35.21	0.012	36.15	0.0099	29.38	82.50%	INC
H1	2S04-114-109a1	Unknown	36.6	0.00478	37.87	0.00306	29.24	64.02%	INC
A2	2S04-114-RB52	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.15	--	NR
B2	CCB1050-0194-E03e1	Unknown	27.99	1.45	35.31	0.0175	29.2	1.21%	INC
C2	CCB1050-0194-E03f1	Unknown	32.79	0.06	36.56	0.0075	29.37	12.50%	INC
D2	CCB1050-0194-E05c1	Unknown	31.17	0.177	37.14	0.00504	29.41	2.85%	INC
E2	CCB1050-0194-E05d1	Unknown	31.99	0.102	34.55	0.0294	29.35	28.82%	
F2	CCB1050-RB14	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.34	--	NR

Shipment: 2S04-114; CCB1050
Tray ID: 060911EBH-QT1
Analyst: EBH
Date: 06/09/11

Document: BTF00242 - (3) Quantifiler Duo results (WS)
Revision: 6
Effective: Thursday, May 27, 2010 11:17:22 AM

	Male >0.023 ng/ul
INC	Male 0.001 -> 0.023 ng/ul
NEG	Male <0.001 ng/ul, Human >0.023 ng/ul
NR	Male <0.001 ng/ul, Human <0.023 ng/ul

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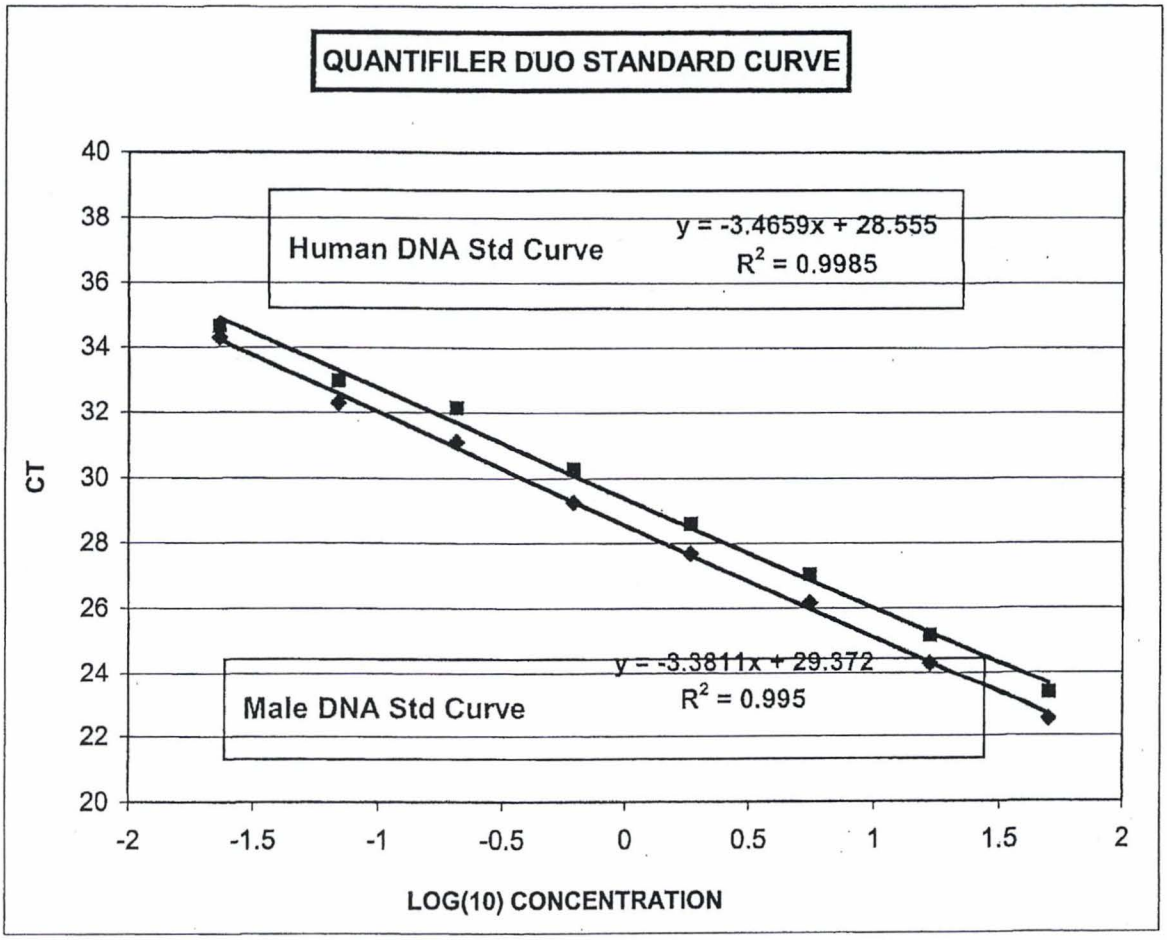
EBH 6/9/11

Note: CT values of 0.00 should be interpreted as "greater than 40 cycles."

6/9/2011

QUANTIFILER DUO QUANT

Shipment:	2S04-114; CCB1050	**Analyst:**	EBH
Tray ID:	060911EBH-QT1	**Date:**	06/09/11



Document: BTF00242 - (3) Quantifiler Duo results (WS)
Revision: 6
Effective: Thursday, May 27, 2010 11:17:22 AM

EBH 6/9/11

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6/9/2011

Quantifiler Duo Sample Sheet & Plate Set-up

Analyst: EBH Date: 6/9/2011

TRAY ID: 060911EBH-QT1

	1	2	3	4	5	6	7	8	9	10	11	12
A	2S04-114-89a1	2S04-114-RB52	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 50
B	2S04-114-89a2	CCB1050-0194-E03e1	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 16.67
C	2S04-114-100a1	CCB1050-0194-E03f1	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 5.56
D	2S04-114-103a1	CCB1050-0194-E05c1	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 1.85
E	2S04-114-RB51	CCB1050-0194-E05d1	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 0.617
F	2S04-114-106a1	CCB1050-RB14	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 0.206
G	2S04-114-107a1	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 0.069
H	2S04-114-109a1	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	NTC	STD 0.023

Quantifiler Duo PCR Reaction Mix (ABI): 1101020
Primer Mix - *Duo* (ABI): 1007015
Human DNA Standard (ABI): 1007017
DNA Dilution Buffer Lot # (ABI): 1004012
7500 Machine #: 7503

# of Wells + 10% Extra: *25*

	1	**25**	***Split in 2***
Quantifiler Duo PCR RxN Mix	*12.5*	**312.5**	**156.3**
Primer Mix	*10.5*	**262.5**	**131.3**
Master Mix	***23***		
DNA or DNA Dilution Buffer	***2***		
Total Volume	***25***		

Pipettes Used:

Volumes <2 uL	N/A
Volumes 2-10 uL	A-089
Volumes 11-100 uL	A-078
Volumes 101-1000 uL	A-053
Master mix	A-078
p10 multichannel	N/A

EBH 6/9/11

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QIAGEN EZ1 DNA Investigator (Individual Samples)

Extraction Worksheet

ITEM	SOURCE	LOT NUMBER
G2	QIAGEN	136264308
dH_2O	FISHER	107828
Proteinase K (20mg/ml)	QIAGEN	136270698
MTL (for 500uL & 1500uL lysis only)	QIAGEN	136268774
Carrier RNA (1.00 ug/uL)	BODE	011211JJ
EZ1 Reagent Cartridge	QIAGEN	139274568

Tube #	Sample	EZ1 Robot #	*Tube Witness/Date
6	2S04-114-89a1	EZ02	SAT 6/9/11
7	2S04-114-89a2	EZ02	SAT 6/9/11
8	2S04-114-100a1	EZ02	SAT 6/9/11
9	2S04-114-103a1	EZ02	SAT 6/9/11
10	2S04-114-RB51	EZ02	SAT 6/9/11
11	2S04-114-106a1	EZ01	SAT 6/9/11
12	2S04-114-107a1	EZ01	SAT 6/9/11
13	2S04-114-109a1	EZ01	SAT 6/9/11
14	2S04-114-RB52	EZ01	SAT 6/9/11

*Witness verifies correct labeling and placement of tubes prior to robotic processing.

Analyst: TV
Cryobox Name: 2S04-114

Date: 6/8/11 - 6/9/11
Case Number: 2S04-114

EZ1 Protocol: ~~1.5mL~~ 1.5mL TV 6.11.11

Lysis Volume: 1500ul
Elution Volume: 50ul

Notes: Initial incubation of G2/dH2O/proK completed on 6/8/11. Remainder of steps completed on 6/9/11. Protocol complete verified.

Pipettes Used:

Volumes <2 uL	---
Volumes 2-10 uL	---
Volumes 11-100 uL	A-122
Volumes 101-1000 uL	A-051
Volumes 1001-2000 uL	A-171

Document: BTF00253 - EZ1 Individual Samples (CW WS)
Revision: 5
Effective: Friday, March 26, 2010 10:54:02 AM

TV 6.11.11 19

Transfer of Evidence Cuttings

Case #: 2S04-114

Page 1 of 1

Tube #	Sample Name	Sample Type
1	2S04-114-89a1	1.5 ml
2	2S04-114-89a2	1.5 ml
3	2S04-114-100a1	1.5 ml
4	2S04-114-103a1	1.5 ml
5	2S04-114-RB51	1.5 ml
6	2S04-114-106a1	1.5 ml
7	2S04-114-107a1	1.5 ml
8	2S04-114-109a1	1.5 ml
9	2S04-114-RB52	1.5 ml

All evidence cuttings listed above were transferred:

From Analyst: Emily Heren
(print)
Emily Heren
(sign)

Date: 6/8/11

Time: 12:40 pm

Transfer Method (check one): ____Hand to Hand _X_ Temporary Evidence Storage
____Secure Refrigerator/Freezer (add location)

To Analyst: Teresa Vreeland
(print)
(sign)

Date: 6.8.11

Time: 3:15pm

Document: BT00059 - Transfer of Evidence Cuttings (WS)
Revision: 3
Effective: 10/29/2010 9:03:53 AM

TV 6.8.11

BODEQUANT LCN QUAN

Tray ID: LCN_070507ES
Analyst: ES
Date: ~~4/23/93~~ 7/6/07
070607ES

CASE #: 2S04-114, 2S07-030, 2S07-072, MDF0701-0002

Yellow: Concentration = Zero; Below limit of detection of assay.

Blue: IPC is outside of the expected range - Inhibitors may be present OR DNA yield is greater than 5ng/µl OR both. Dilute prior to amplification.

	Sample Name	Sample Type	CT	Quantity (ng/ul)	Quantity (pg/ul)	IPC Ct
	STD 50	Standard	12.69	50	50000	22.79
	STD 5	Standard	15.80	5	5000	20.79
	STD 0.5	Standard	19.71	0.5	500	21.22
	STD 0.05	Standard	23.02	0.05	50	21.48
	STD 0.005	Standard	26.10	0.005	5	22.00
	STD 0.0005	Standard	29.76	0.0005	0.5	21.65
	NTC	NTC	31.01	*<0.0005*	*<0.5*	21.66
					Avg IPC Ct for Stds:	21.47
A1	2S04-114-33A2	Unknown	24.94	0.0126	12.6	21.05
B1	2S04-114-33A3	Unknown	26.50	0.00439	4.39	21.42
C1	2S04-114-33A4	Unknown	31.29	<0.0005	<0.5	21.47
D1	2S04-114-33A5	Unknown	31.38	<0.0005	<0.5	21.60
E1	2S04-114-33A6	Unknown	27.19	0.00275	2.75	21.38
F1	2S04-114-33A7	Unknown	25.89	0.00659	6.59	21.44
G1	2S04-114-RB12	Unknown	32.04	<0.0005	<0.5	21.45
H1	2S04-114-33B2	Unknown	20.72	0.216	216	21.12
A2	2S04-114-33B3	Unknown	26.27	0.00511	5.11	21.35
B2	2S04-114-33B4	Unknown	31.19	<0.0005	<0.5	21.56
C2	2S04-114-33B5	Unknown	32.34	<0.0005	<0.5	21.47
D2	2S04-114-33B6	Unknown	24.45	0.0174	17.4	21.45
E2	2S04-114-33B7	Unknown	23.24	0.0395	39.5	21.39
F2	2S04-114-RB13	Unknown	31.62	<0.0005	<0.5	21.54
G2	2S04-114-34A2	Unknown	21.16	0.16	160	21.35
H2	2S04-114-34A3	Unknown	21.40	0.136	136	21.32
A3	2S04-114-34A4	Unknown	28.92	0.000857	0.857	21.24
B3	2S04-114-34A5	Unknown	29.59	0.000544	0.544	21.51
C3	2S04-114-34A6	Unknown	23.37	0.0361	36.1	21.43
D3	2S04-114-34A7	Unknown	26.23	0.00527	5.27	21.37
E3	2S04-114-34A8	Unknown	30.17	<0.0005	<0.5	21.37
F3	2S04-114-RB14	Unknown	31.15	<0.0005	<0.5	21.25
G3	2S04-114-34B2	Unknown	22.73	0.0556	55.6	21.48
H3	2S04-114-34B3	Unknown	26.06	0.0059	5.9	21.52
A4	2S04-114-34B4	Unknown	30.18	<0.0005	<0.5	21.34
B4	2S04-114-34B5	Unknown	25.26	0.0101	10.1	21.48
C4	2S04-114-34B6	Unknown	23.07	0.0441	44.1	21.19
D4	2S04-114-34B7	Unknown	31.21	<0.0005	<0.5	21.37
E4	2S04-114-RB15	Unknown	31.84	<0.0005	<0.5	21.42
F4	2S04-114-35A2	Unknown	24.24	0.0201	20.1	21.45
G4	2S04-114-35A3	Unknown	20.46	0.257	257	21.23
H4	2S04-114-35A4	Unknown	30.14	<0.0005	<0.5	21.60
A5	2S04-114-35A5	Unknown	20.52	0.246	246	21.16
B5	2S04-114-35A6	Unknown	24.08	0.0225	22.5	21.64
C5	2S04-114-35A7	Unknown	28.70	0.000997	0.997	21.42
D5	2S04-114-RB16	Unknown	32.27	<0.0005	<0.5	21.84
E5	2S04-114-35B2	Unknown	26.94	0.00326	3.26	21.56
F5	2S04-114-35B3	Unknown	26.08	0.00582	5.82	21.58

Note: CT values of 0.00 should be interpreted as "greater than 40 cycles."

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7/6/2007

BODEQUANT LCN QUAN

Case#: 2S04-114, 2S07-030, 2S07-072, MDF0701-0002

	Sample Name	Sample Type	CT	Quantity (ng/ul)	Quantity (pg/ul)	IPC Ct
G5	2S04-114-35B4	Unknown	29.78	<0.0005	<0.5	21.63
H5	2S04-114-35B5	Unknown	22.96	0.0477	47.7	21.44
A6	2S04-114-35B6	Unknown	22.08	0.0861	86.1	21.34
B6	2S04-114-35B7	Unknown	30.47	<0.0005	<0.5	21.89
C6	2S04-114-RB17	Unknown	30.61	<0.0005	<0.5	21.90
D6	2S07-030-01X1	Unknown	21.55	0.124	124	21.70
E6	2S07-030-02X1	Unknown	22.69	0.0571	57.1	21.47
F6	2S07-030-03A1	Unknown	19.01	0.685	685	21.05
G6	2S07-030-04X1	Unknown	16.45	3.84	3840	20.78
H6	2S07-030-RB1	Unknown	31.88	<0.0005	<0.5	21.58
A7	2S07-030-04A1-SF	Unknown	31.54	<0.0005	<0.5	21.47
B7	2S07-030-04B1-SF	Unknown	24.09	0.0223	22.3	21.88
C7	2S07-030-04C1-SF	Unknown	30.94	<0.0005	<0.5	21.75
D7	2S07-030-RB2-SF	Unknown	31.51	<0.0005	<0.5	21.74
E7	2S07-030-04A1-EF	Unknown	26.82	0.00352	3.52	21.61
F7	2S07-030-04B1-EF	Unknown	17.89	1.46	1460	20.89
G7	2S07-030-04C1-EF	Unknown	31.68	<0.0005	<0.5	21.64
H7	2S07-030-RB2-EF	Unknown	30.65	<0.0005	<0.5	21.59
A8	2S07-072-01A1	Unknown	20.22	0.301	301	21.47
B8	2S07-072-RB1	Unknown	31.20	<0.0005	<0.5	21.69
C8	MDF0701-0002-E01a1-SF	Unknown	23.83	0.0265	26.5	21.63
D8	MDF0701-0002-E02a1-SF	Unknown	31.60	<0.0005	<0.5	21.69
E8	MDF0701-0002-RB1-SF	Unknown	32.34	<0.0005	<0.5	21.57
F8	MDF0701-0002-E01a1-EF	Unknown	12.45	56.74	56740	22.51
G8	MDF0701-0002-E02a1-EF	Unknown	30.73	<0.0005	<0.5	21.60
H8	MDF0701-0002-RB1-EF	Unknown	31.68	<0.0005	<0.5	21.66

Note: CT values of 0.00 should be interpreted as "greater than 40 cycles."

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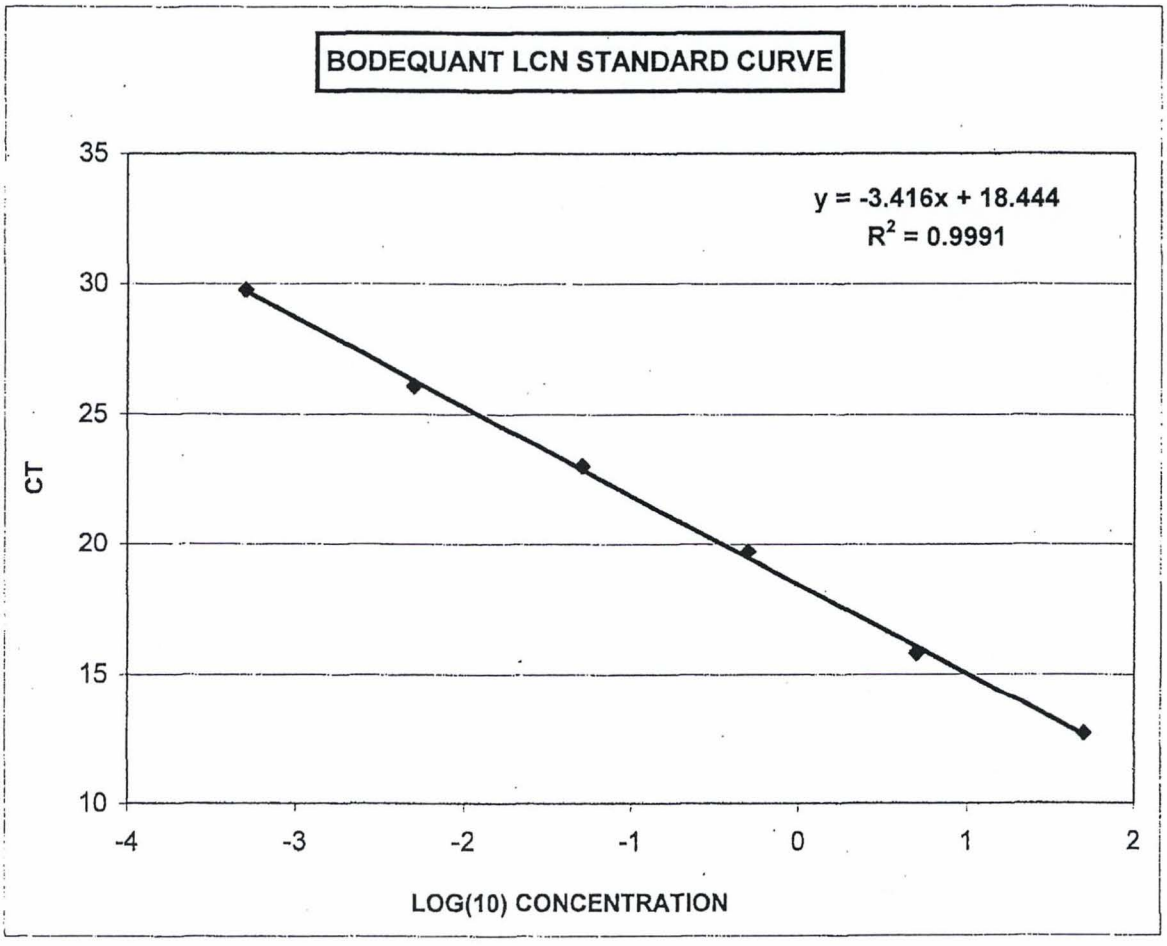
7/6/2007

BODEQUANT LCN QUANT

TRAY ID: LCN_070507ES **Analyst:** ES

CASE #: 2S04-114, 2S07-030, 2S07-072, MDF0701-0002 **Date:** ~~70607~~ 7/6/07 070607ES



070607ES

BodyQuant LCN Sample Sheet & Plate Set-up

Analyst: ES Date: 7/5/2007

Protocol: BT 00241

CASE #: 2S04-114, 2S07-030, 2S07-072, MDF0701-0002

TRAY ID: LCN_070507ES

	1	2	3	4	5	6	7	8	9	10	11	12
A	2S04-114-33A2	2S04-114-33B3	2S04-114-34A4	2S04-114-34B4	2S04-114-35A5	2S04-114-35B6	2S07-030-04A1-SF	2S07-072-01A1	BLANK	BLANK	BLANK	STD 50
B	2S04-114-33A3	2S04-114-33B4	2S04-114-34A5	2S04-114-34B5	2S04-114-35A6	2S04-114-35B7	2S07-030-04B1-SF	2S07-072-RB1	BLANK	BLANK	BLANK	STD 5
C	2S04-114-33A4	2S04-114-33B5	2S04-114-34A6	2S04-114-34B6	2S04-114-35A7	2S04-114-RB17	2S07-030-04C1-SF	MDF0701-0002-E01a1-SF	BLANK	BLANK	BLANK	STD 0.5
D	2S04-114-33A5	2S04-114-33B6	2S04-114-34A7	2S04-114-34B7	2S04-114-RB16	2S07-030-01X1	2S07-030-RB2-SF	MDF0701-0002-E02a1-SF	BLANK	BLANK	BLANK	STD 0.05
E	2S04-114-33A6	2S04-114-33B7	2S04-114-34A8	2S04-114-RB15	2S04-114-35B2	2S07-030-02X1	2S07-030-04A1-EF	MDF0701-0002-RB1-SF	BLANK	BLANK	BLANK	STD 0.005
F	2S04-114-33A7	2S04-114-RB13	2S04-114-RB14	2S04-114-35A2	2S04-114-35B3	2S07-030-03A1	2S07-030-04B1-EF	MDF0701-0002-E01a1-EF	BLANK	BLANK	BLANK	STD 0.0005
G	2S04-114-RB12	2S04-114-34A2	2S04-114-34B2	2S04-114-35A3	2S04-114-35B4	2S07-030-04X1	2S07-030-04C1-EF	MDF0701-0002-E02a1-EF	BLANK	BLANK	BLANK	NTC
H	2S04-114-33B2	2S04-114-34A3	2S04-114-34B3	2S04-114-35A4	2S04-114-35B5	2S07-030-RB1	2S07-030-RB2-EF	MDF0701-0002-RB1-EF	BLANK	BLANK	BLANK	BLANK

# of Wells + 10% Extra: 79

	1	79	Split in 2
2X QPCR mix	10	790.0	395.0
Primer/Probe Blend	0.87	68.7	34.4
IPC Template (10^{-5})	2	158.0	79.0
Water	5.13	405.3	202.6
DNA or TE	2		
Total Volume	20		

QPCR Mix Lot # (AB Gene): 1601/14

Primer/Probe Blend Lot # (BODE): 041207LMC-3

IPC Template Lot # (BODE): 030607LMC-1

dH2O Lot # (~~BODE~~ Fisher 030507WS): 066045

9947 Standards Lot # (Coriell): C2-040306

TE^{-4} Lot # (BODE): 092806L4C

7000 Machine #: 7000-2

H

070607ES

Worksheet prepared by AMJ on 070507. AMJ 7-6-07

Qiagen Isolation from Various Substrates
Procedure C: Micro Spin-Column Purification

Protocol: BTF 00224 **Analyst:** AMJ **Case #:** 2S04-114
Date: 7/5/2007

Item	Source	Lot#
Buffer ATL	Qiagen	124124854
Proteinase K (20mg/ml)	Invitrogen	1398761
Buffer AL	Qiagen	124125410
Carrier RNA	BODE	113006LMC-2
100% Ethanol	Spectrum	VT0101
QIAamp Micro Spin Column	Qiagen	127130891
Buffer AW1	BODE	070507AMJ
Buffer AW2	BODE	070507AMJ
TE^{-4} Buffer	BODE	092806LMC

Tube #	Sample Name	Comments
23	2S04-114-34B2	
24	2S04-114-34B3	
25	2S04-114-34B4	
26	2S04-114-34B5	
27	2S04-114-34B6	
28	2S04-114-34B7	
29	2S04-114-RB15	
30	2S04-114-35A2	
31	2S04-114-35A3	
32	2S04-114-35A4	
33	2S04-114-35A5	
34	2S04-114-35A6	
35	2S04-114-35A7	
36	2S04-114-RB16	
37	2S04-114-35B2	
38	2S04-114-35B3	
39	2S04-114-35B4	
40	2S04-114-35B5	
41	2S04-114-35B6	
42	2S04-114-35B7	
43	2S04-114-RB17	

Additional Comments:
Samples brought up in ~50ul TE-4 Buffer

Pipette ID Numbers:			
p2	—	p100	E8
p10	—	p200	—
p20	—	p1000	E21

Extract Storage:
CCW Fridge

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AMJ 7.6.07

Qiagen Isolation from Various Substrates
Procedure C: Micro Spin-Column Purification

Protocol: BTF 00224 **Analyst:** ES **Case #:** 2S04-114
Date: 7/5/2007

Item	Source	Lot#
Buffer ATL	Qiagen	124124854
Proteinase K (20mg/ml)	Invitrogen	1398761
Buffer AL	Qiagen	124125410
Carrier RNA	BODE	113006LMC-2
100% Ethanol	Spectrum	VT0101
QIAamp Micro Spin Column	Qiagen	127130891
Buffer AW1	BODE	070507ES
Buffer AW2	BODE	070507ES
TE^{-4} Buffer	BODE	092806LMC

Tube #	Sample Name	Comments
1	2S04-114-33A2	
2	2S04-114-33A3	
3	2S04-114-33A4	
4	2S04-114-33A5	
5	2S04-114-33A6	
6	2S04-114-33A7	
7	2S04-114-RB12	
8	2S04-114-33B2	
9	2S04-114-33B3	
10	2S04-114-33B4	
11	2S04-114-33B5	
12	2S04-114-33B6	
13	2S04-114-33B7	
14	2S04-114-RB13	
15	2S04-114-34A2	
16	2S04-114-34A3	
17	2S04-114-34A4	
18	2S04-114-34A5	
19	2S04-114-34A6	
20	2S04-114-34A7	
21	2S04-114-34A8	
22	2S04-114-RB14	

Additional Comments:

Pipette ID Numbers:			
p2	–	p100	4L
p10	–	p200	–
p20	–	p1000	LPA009

Extract Storage:
4C CCW fridge
070607ES

NOTES (optional steps to perform):
Please perform optional spin down step and retain the substrate.
Elute samples in 25ul twice for a total volume of ~50ul.

Worksheet prepared by KMD 7.5.07

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070607ES

Inventory Case Notes

Bode Technology, Inc.

Case Number: 2S04-114 Date: 6/7/11; 6/8/11 Analyst: EBH

Item: 2S04-114-89

OUTER PACKAGING: Sealed outer bag labeled in part "...E-6...(1)Black Tennis Shoe Purple Interior...".
CONTAINS: One left sneaker and one piece of white bench paper. Minimal debris on bench paper, no apparent hairs/fibers observed, not examined further at this time. Sneaker black, purple, and green in color, apparent worn condition with brown discoloration and debris throughout. Tongue labeled "CUGA TRAIL GEAR", back heel labeled "CUGA", and sole labeled "13 ½". No apparent hairs/fibers observed. Shoe received with "93-05716 E6 LS" previously written on right side of shoe and "Q18 9305716" previously written on the left side of the shoe by a non-Bode analyst. Shoe received with one black shoe lace still laced around the bottom two loop holes. No areas of visible red/brown staining.

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	QUANTITY CONSUMED
2S04-114-89	1	• 6/8/11 EBH: Wet/dry swabbed the exterior of the shoe around each of the lace loop holes and the interior purple portion of the shoe around the top loop hole. Front surface of tongue caked in heavy dirt and debris. Wet/dry swabbed areas around heavy debris. All areas were swabbed using two swabs. Cut, combined, and consumed both swabs. Sample processed as 2S04-114-89a1. Consumed ~50% of surface area sampled. • 6/8/11 EBH: Wet/dry swabbed both sides of shoe lace using two swabs. Cut, consumed, and combined both swabs. Sample processed as 2S04-114-89a2. Consumed ~50% of surface area sampled. Removed shoe lace from shoe to measure and photograph. Shoelace was ~43 inches in length and appeared to be intact (did not appear to be cut anywhere).	~50% surface area

Item: 2S04-114-100

OUTER PACKAGING: Sealed outer bag labeled in part "...E-4...1) white tennis shoe...".
CONTAINS: One right sneaker and one piece of white bench paper. Minimal debris on bench paper, no apparent hairs/fibers observed, not examined further at this time. Sneaker white and navy blue in color, apparent worn condition with brown discoloration and debris throughout. Tongue, sole, and back heel of shoe labeled "Franklin". Inside of shoe labeled "Franklin 12 ½". No apparent hairs/fibers observed. Shoe received with "93-05716 E4 LS" written on left side of shoe and "Q11 93-0571619" on the right side of shoe by non-Bode analyst. No areas of visible red/brown staining.

Inventory Case Notes

Bode Technology, Inc.

Case Number: 2S04-114 Date: 6/7/11; 6/8/11 Analyst: EBH

Item 2S04-114-100 (Con't):

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	QUANTITY CONSUMED
2S04-114-100	1	• 6/7/11 EBH: Wet/dry swabbed the exterior of the shoe along the length of the tongue and around each of the lace loop holes using two swabs. Cut, combined, and consumed swabs. Scraped the interior blue portion of the shoe around the top lace loop hole. Combined scrapings with swabs. Sample processed as 2S04-114-100a1. Consumed ~50% of surface area sampled.	~50% surface area

Item: 2S04-114-103

OUTER PACKAGING: Sealed outer bag labeled in part "...E-8...(1) Black Tennis Shoe Purple Interior...".
CONTAINS: One right sneaker and one piece of white bench paper. Minimal debris on bench paper, no apparent hairs/fibers observed, not examined further at this time. Sneaker black, purple, and green in color, apparent worn condition with brown discoloration and debris throughout. Tongue labeled "CUGA TRAIL GEAR", back heel labeled "CUGA", and sole labeled "13 ½". No apparent hairs/fibers observed. Shoe received with "93-05716 E8 LS" and "93-05716 Q7 Fe" previously written on the interior side of the tongue by a non-Bode analyst.

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	QUANTITY CONSUMED
2S04-114-103	1	• 6/7/11 EBH: Wet/dry swabbed the exterior of the shoe around each of the lace loop holes and the interior purple portion of the shoe around the top loop hole using two swabs. Cut, combined, and consumed both swabs. Scraped the front green cloth portion of the tongue. Combined scrapings with swabs. Sample processed as 2S04-114-103a1. Consumed ~50% of surface area sampled. • 6/7/11 EBH: One area of dark staining on the right side of the shoe and one area of dark staining on the sole of the shoe PH(-). Not processed further at this time.	~50% surface area

EBH 6/8/11

Inventory Case Notes

Bode Technology, Inc.

Case Number: 2S04-114 Date: 6/7/11; 6/8/11 Analyst: EBH

Item: 2S04-114-106

OUTER PACKAGING: Sealed outer bag labeled in part "...E-11...(1) White Tennis Shoe...".
CONTAINS: One left sneaker and one piece of white bench paper. Minimal debris on bench paper, no apparent hairs/fibers observed, not examined further at this time. Sneaker white and navy blue in color, apparent worn condition with brown discoloration and debris throughout. Tongue, sole, and back heel of shoe labeled "Franklin". Inside of shoe labeled "Franklin 12 ½". Tag inside shoe labeled "12 ½". No apparent hairs/fibers observed. Shoe received with "93-05716 E11 LS" and "Q31 93-0571619" written on the front of the tongue of the shoe by a non-Bode analyst.

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	QUANTITY CONSUMED
2S04-114-106	1	• 6/7/11 EBH: Wet/dry swabbed the exterior of the shoe along the length of the tongue and around each of the lace loop holes using two swabs. Cut, combined, and consumed swabs. Scraped the interior blue portion of the shoe around the top lace loop hole. Combined scrapings with swabs. Sample processed as 2S04-114-106a1. Consumed ~50% of surface area sampled. • 6/7/11 EBH: One area of dark staining on the left side of the shoe and one area of dark staining on the sole of the shoe PH(-). Not processed further at this time.	~50% surface area

Item: 2S04-114-107

OUTER PACKAGING: Unsealed outer bag labeled in part "...E-12...".
CONTAINS: Unsealed inner bag labeled in part "...E-12 (1) Black Tennis Shoe (1) Sock...".
CONTAINS: One right sneaker, one piece of white bench paper, and one white and black sock. Minimal debris on bench paper, no apparent hairs/fibers observed, not examined at this time. Sock white with a black stripe around the top, apparent worn condition with brown discoloration and debris throughout. Piece of tape attached to sock labeled "...Q-29...93-05716...". Sock not examined further at this time. Sneaker black with areas of white, red, and silver, apparent worn condition with brown discoloration and debris throughout. Tongue labeled "POWER PULSE VOIT", right side of shoe labeled "Power Pulse", and sole labeled "VOIT". Tag on interior of tongue labeled "...SIZE 3...". No apparent hairs/fibers observed. Shoe received with "Q28 93-05716" and "93-05716 E12a LS" previously written on interior side of tongue by non-Bode analyst. No visible red/brown staining.

Inventory Case Notes

Bode Technology, Inc.

Case Number: 2S04-114 Date: 6/7/11; 6/8/11 Analyst: EBH

Item 2S04-114-107 (Con't):

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	QUANTITY CONSUMED
2S04-114-107	1	• 6/7/11 EBH: Wet/dry swabbed the exterior of the shoe along the length of the tongue and around each of the lace loop holes using two swabs. Cut, combined, and consumed swabs. Scraped the interior black portion of the shoe around the top lace loop hole. Combined scrapings with swabs. Sample processed as 2S04-114-107a1. Consumed ~50% of surface area sampled.	~50% surface area

Item: 2S04-114-109

OUTER PACKAGING: Sealed bag labeled in part "...E-14...(1) Black Tennis Shoe...".
CONTAINS: One left sneaker and one piece of white bench paper. Minimal debris on bench paper, no apparent hairs/fibers observed, not examined at this time. Sneaker black with areas of white, red, and silver, apparent worn condition with brown discoloration and debris throughout. Tongue labeled "POWER PULSE VOIT", left side of shoe labeled "Power Pulse", and sole labeled "VOIT". Tag on interior of tongue labeled "...SIZE 3...". No apparent hairs/fibers observed. Shoe received with "Q33 93-05716" previously written on the right side of the shoe and "93-05716 E14 LS" previously written on the left side of the shoe by a non-Bode analyst. No visible red/brown staining.

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	QUANTITY CONSUMED
2S04-114-109	1	• 6/7/11 EBH: Wet/dry swabbed the exterior of the shoe along the length of the tongue and around each of the lace loop holes using two swabs. Cut, combined, and consumed swabs. Scraped the interior black portion of the shoe around the top lace loop hole. Combined scrapings with swabs. Sample processed as 2S04-114-109a1. Consumed ~50% of surface area sampled.	~50% surface area

8/8/11

Inventory Case Notes

Bode Technology, Inc.

Case Number: 2S04-114 Date: 6/7/11; 6/8/11 Analyst: EBH

NOTES:

See photo documentation for additional details on description of evidence.

6/7/11 EBH: Fisher DNA Grade water used for swabbing lot# 107828.

6/7/11 EBH: Phenolphthalein (PH): Phenolphthalein Kit (012611-B/Evident), Sterile Water (107828/Fisher), Blood Positive Control (+), Blood Negative Control (-).

6/8/11 EBH: Fisher DNA Grade water used for swabbing lot# 107828.

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Inventory Case Notes

Bode Technology

Case Number: 2S04-114 item 33 Date: 6-28-07 Analyst: AMJ
Evidence was received from: Evan Carney, EMS Date: 6-28-07 Time: 8:40AM
Location evidence was taken for photodocumentation and processing: Lab 145

List items of evidence:	Is evidence sealed?	Type of seal
Item 2S04-114-33 Brown paper bag "ligature from L & R wrist to L & R legs; Christopher Bryers" Contains: two "ligatures", one white and one black	Yes	evidence tape

-033A White ligature labeled "L- Leg and L- Wrist"
Contains Six knots still intact
Three knots (one in "shoelace" [-33A4] and two [-33A2, -33A3] attaching thinner string to "shoelace") near area labeled "L-leg"

and

three knots (one in "shoelace" [-33A5] and two [-33A6, -33A7] attaching thinner string to "shoelace") near area labeled "L-Wrist"

2S04-114-33A2: knot in thinner string was cut from shoelace, knot could not be untied; knot was cut into smaller pieces to expose inside of knot, and placed in 1.5ml tube; piece of thinner string hanging from knot was sealed in a coin envelope.

2S04-114-33A3: knot in thinner string was cut from shoelace, knot could not be untied; knot was cut into smaller pieces to expose inside of knot, and placed in 1.5ml tube; piece of thinner string hanging from knot was sealed in a coin envelope.

2S04-114-33A4: knot in shoelace untied and swabbed with a wet swab followed by a dry swab; consumed swabs, where swabbing was concentrated, and combined.

2S04-114-33A5: area surrounding knot marked with a black marker. Knot in shoelace untied and swabbed with a wet swab followed by a dry swab between the markings on both sides; consumed swabs, where swabbing was concentrated, and combined.

2S04-114-33A6: knot in thinner string was cut from shoelace, knot could not be untied; knot was cut into smaller pieces to expose inside of knot, and placed in 1.5ml tube; piece of thinner string hanging from knot was sealed in a coin envelope.

2S04-114-33A7: knot in thinner string was cut from shoelace, knot could not be untied; knot was cut into smaller pieces to expose inside of knot, and placed in 1.5ml tube; piece of thinner string hanging from knot was sealed in a coin envelope.

Remaining pieces of ligature 2S04-114-33A were sealed in a heat seal bag with any coin envelopes and packaged in original evidence packaging.

All evidence stored in temporary evidence room on 6-28-07 at 10:52 AM
Evidence item 2S04-114-33 was removed from temporary evidence and brought to Lab 145 on 6-28-07 at 2:27 PM

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AMJ 7.6.07

Case Number: 2S04-114 item 33 Date: 6-28-07 Analyst: AMJ

List items of evidence: Is evidence sealed? Type of seal

-033B Black ligature labeled "R-Leg and R-Wrist"
Contains Six knots still intact
Three knots (one in "shoelace" [-33B4] and two [-33B2, -33B3] attaching thinner string to "shoelace") near area labeled "R-leg"

and

three knots (one in "shoelace" [-33B5] and two [-33B6, -33B7] attaching thinner string to "shoelace") near area labeled "R-Wrist"

2S04-114-33B2: knot in thinner string was cut from shoelace, broken apart, and placed in 1.5ml tube; piece of thinner string hanging from knot was sealed in a coin envelope.

2S04-114-33B3: knot in thinner string was cut from shoelace, broken apart, and placed in 1.5ml tube; piece of thinner string hanging from knot was sealed in a coin envelope.

2S04-114-33B4: area surrounding knot marked with a silver marker. Knot in shoelace untied and swabbed with a wet swab followed by a dry swab between the markings on both sides; consumed swabs, where swabbing was concentrated, and combined.

2S04-114-33B5: area surrounding knot marked with a silver marker. Knot in shoelace untied and swabbed with a wet swab followed by a dry swab between the markings on both sides; consumed swabs, where swabbing was concentrated, and combined.

2S04-114-33B6: knot in thinner string was cut from shoelace, broken apart, and placed in 1.5ml tube; piece of thinner string hanging from knot was sealed in a coin envelope.

2S04-114-33B7: knot in thinner string was cut from shoelace, broken apart, and placed in 1.5ml tube; piece of thinner string hanging from knot was sealed in a coin envelope.

Remaining pieces of ligature 2S04-114-33B were sealed in a heat seal bag with any coin envelopes and packaged in original evidence packaging.

Additional Notes

See Powerpoint presentation of photodocumentation for additional details on description of evidence.
Sterile Water (Fisher)Lot #: 066045 used to wet swabs.
NOTE: -33A1 and -33B1 have already been assigned in this case; see inventory cases notes dated 050905 - 051005. AMJ 061911

Evidence was returned to/stored in: temporary evidence room Date: 6-28-07 Time: 3:43 PM

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AMJ 7.6.07

Inventory Case Notes

Bode Technology

Case Number: 2S04-114 item 34 Date: 6-29-07 Analyst: AMJ
Evidence was received from: Evan Carney, EMS Date: 6-28-07 Time: 8:40AM
Evidence was stored in: temporary evidence room until Date: 6-29-07 Time: 9:35AM
Location evidence was taken for photodocumentation and processing: Lab 145

List items of evidence:	Is evidence sealed?	Type of seal
Item 2S04-114-34 Brown paper bag	Yes	evidence tape

"ligature between ankles and wrist; Steve Edward Branch"
Contains: two "ligatures", one white and one black

-034A White ligature labeled "L-Leg and L-Wrist"
Contains seven knots still intact
Four knots (two [-34A4, -34A5] in "shoelace" and two [-34A2, -34A3] attaching thinner string to "shoelace") near area labeled "L-leg" and
three knots (one [-34A8] in "shoelace" and two [-34A6, -34A7] attaching thinner string to "shoelace") near area labeled "L-Wrist"

2S04-114-34A2: knot in thinner string was cut from shoelace, knot could not be untied; knot was cut into smaller pieces to expose inside of knot, and placed in 1.5ml tube.

2S04-114-34A3: knot in thinner string was cut from shoelace, knot could not be untied; knot was cut into smaller pieces to expose inside of knot, and placed in 1.5ml tube.

2S04-114-34A4: area surrounding knot marked with a black marker. Knot in shoelace untied and swabbed with a wet swab followed by a dry swab between the markings on both sides; consumed swabs, where swabbing was concentrated, and combined. Smaller piece of "shoelace" that was part of the knot was sealed in a coin envelope.

2S04-114-34A5: area surrounding knot marked with a black marker. Knot in shoelace untied and swabbed with a wet swab followed by a dry swab between the markings on both sides; consumed swabs, where swabbing was concentrated, and combined. Smaller piece of "shoelace" that was part of the knot was sealed in a coin envelope.

2S04-114-34A6: knot in thinner string was cut from shoelace, knot could not be untied; knot was cut into smaller pieces to expose inside of knot, and placed in 1.5ml tube.

2S04-114-34A7: knot in thinner string was cut from shoelace, knot could not be untied; knot was cut into smaller pieces to expose inside of knot, and placed in 1.5ml tube.

2S04-114-34A8: area surrounding knot marked with a black marker. Knot in shoelace untied and swabbed with a wet swab followed by a dry swab between the markings on both sides; consumed swabs, where swabbing was concentrated, and combined.

Remaining pieces of ligature 2S04-114-34A were sealed in a heat seal bag with any coin envelopes and packaged in original evidence packaging.

All evidence stored in temporary evidence room on 6-29-07 at 11:20 AM
Evidence item 2S04-114-33 was removed from temporary evidence and brought to Lab 145 on 6-29-07 at 12:55 PM

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Case Number: 2S04-114 item 34 Date: 6-29-07 Analyst: AMJ

List items of evidence: Is evidence sealed? Type of seal

-034B Black ligature labeled "R-Leg and R-Wrist"
Contains Six knots still intact
Three knots (one [-34B4] in "shoelace" and two [-34B2, -34B3] attaching thinner string to "shoelace") near area labeled "R-leg" and
three knots (one [-34B7] in "shoelace" and two [-34B5, -34B6] attaching thinner string to "shoelace") near area labeled "R-Wrist"

2S04-114-34B2: knot in thinner string was cut from shoelace, knot could not be untied; knot was cut into smaller pieces to expose inside of knot, and placed in 1.5ml tube.

2S04-114-34B3: knot in thinner string was cut from shoelace, knot could not be untied; knot was cut into smaller pieces to expose inside of knot, and placed in 1.5ml tube.

2S04-114-34B4: area surrounding knot marked with a silver marker. Knot in shoelace untied and swabbed with a wet swab followed by a dry swab between the markings on both sides; consumed swabs, where swabbing was concentrated, and combined.

2S04-114-34B5: knot in thinner string was cut from shoelace, knot could not be untied; knot was cut into smaller pieces to expose inside of knot, and placed in 1.5ml tube.

2S04-114-34B6: knot in thinner string was cut from shoelace, knot could not be untied; knot was cut into smaller pieces to expose inside of knot, and placed in 1.5ml tube.

2S04-114-34B7: area surrounding knot marked with a silver marker. Knot in shoelace untied and swabbed with a wet swab followed by a dry swab between the markings on both sides; consumed swabs, where swabbing was concentrated, and combined.

Remaining pieces of ligature 2S04-114-34B were sealed in a heat seal bag and packaged in original evidence packaging.

Additional Notes

See Powerpoint presentation of photodocumentation for additional details on description of evidence.
Sterile Water (Fisher)Lot #: 066045 used to wet swabs.
NOTE: -34A1 and -34B1 have already been assigned in this case; see inventory cases notes dated 050905 - 051005. tm> 061411

Evidence was returned to/stored in: temporary evidence room Date: 6-29-07 Time: 2:10 PM

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AMJ 7.6.07

Inventory Case Notes

Bode Technology

Case Number: 2S04-114 item 35 Date: 7-3-07 Analyst: AMJ
Evidence was received from: Evan Carney, EMS Date: 6-28-07 Time: 8:40AM
Evidence was stored in: temporary evidence room until Date: 7-3-07 Time: 7:54 AM
Location evidence was taken for photodocumentation and processing: Lab 145

List items of evidence:	Is evidence sealed?	Type of seal
Item 2S04-114-35 Brown paper bag "ligature from wrist to Legs L & R, Michael Moore" Contains: two "ligatures", both black	Yes	evidence tape

-035A Black ligature labeled "L-Wrist and L-Leg"
Contains: Contains Six knots still intact
Three knots (one [-35A4] in "shoelace" and two [-35A2, -35A3] attaching thinner string to "shoelace") near area labeled "L-leg" and
three knots (one [-35A7] in "shoelace" and two [-35A5, -35A6] attaching thinner string to "shoelace") near area labeled "L-Wrist"

2S04-114-35A2: knot in thinner string was cut from shoelace, knot could not be untied; knot was cut into smaller pieces to expose inside of knot, and placed in 1.5ml tube.

2S04-114-35A3: knot in thinner string was cut from shoelace, knot could not be untied; knot was cut into smaller pieces to expose inside of knot, and placed in 1.5ml tube; piece of thinner string hanging from knot was sealed in a coin envelope.

2S04-114-35A4: area surrounding knot marked with a silver marker. Knot in shoelace untied and swabbed with a wet swab followed by a dry swab between the markings on both sides; consumed swabs, where swabbing was concentrated, and combined.

2S04-114-35A5: knot in thinner string was cut from shoelace, knot could not be untied; knot was cut into smaller pieces to expose inside of knot, and placed in 1.5ml tube; piece of thinner string hanging from knot was sealed in a coin envelope.

2S04-114-35A6: knot in thinner string was cut from shoelace, knot could not be untied; knot was cut into smaller pieces to expose inside of knot, and placed in 1.5ml tube; piece of thinner string hanging from knot was sealed in a coin envelope.

2S04-114-35A7: area surrounding knot marked with a silver marker. Knot in shoelace untied and swabbed with a wet swab followed by a dry swab between the markings on both sides; consumed swabs, where swabbing was concentrated, and combined.

Remaining pieces of ligature 2S04-114-35A were sealed in a heat seal bag with any coin envelopes and packaged in original evidence packaging.

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Case Number: 2S04-114 item 35 Date: 7-3-07 Analyst: AMJ

List items of evidence: Is evidence sealed? Type of seal

-035B Black ligature labeled " R-Wrist and R-Leg"
Contains Six knots still intact
Three knots (one [-35B4] in "shoelace" and two [-35B2, -35B3] attaching thinner string to "shoelace") near area labeled "R-leg" and
three knots (one [-35B7] in "shoelace" and two [-35B5, -35B6] attaching thinner string to "shoelace") near area labeled "R-Wrist"

2S04-114-35B2: knot in thinner string was cut from shoelace, knot could not be untied; knot was cut into smaller pieces to expose inside of knot, and placed in 1.5ml tube; piece of thinner string hanging from knot was sealed in a coin envelope.

2S04-114-35B3: knot in thinner string was cut from shoelace, knot could not be untied; knot was cut into smaller pieces to expose inside of knot, and placed in 1.5ml tube; piece of thinner string hanging from knot was sealed in a coin envelope.

2S04-114-35B4: area surrounding knot marked with a silver marker. Knot in shoelace untied and swabbed with a wet swab followed by a dry swab between the markings on both sides; consumed swabs, where swabbing was concentrated, and combined.

2S04-114-35B5: knot in thinner string was cut from shoelace, knot could not be untied; knot was cut into smaller pieces to expose inside of knot, and placed in 1.5ml tube; piece of thinner string hanging from knot was sealed in a coin envelope.

2S04-114-35B6: knot in thinner string was cut from shoelace, knot could not be untied; knot was cut into smaller pieces to expose inside of knot, and placed in 1.5ml tube; piece of thinner string hanging from knot was sealed in a coin envelope.

2S04-114-35B7: area surrounding knot marked with a silver marker. Knot in shoelace untied and swabbed with a wet swab followed by a dry swab between the markings on both sides; consumed swabs, where swabbing was concentrated, and combined.

Remaining pieces of ligature 2S04-114-35B were sealed in a heat seal bag with any coin envelopes and packaged in original evidence packaging.

Additional Notes

See Powerpoint presentation of photodocumentation for additional details on description of evidence.
Sterile Water (Fisher)Lot #: 066045 used to wet swabs.
NOTE: -35A1 and -35B1 have already been assigned in this case; see inventory cases notes dated 050905 - 051005.
tms061411

Evidence was returned to/stored in: temporary evidence room Date: 7-3-07 Time: 10:30 AM

AMJ 7.6.07

Bode Technology

10430 Furnace Road, Suite 107
Lorton, VA 22079
Phone: 703-646-9740

Supplemental Forensic Case Report
June 16, 2011

To:
Stephen L. Braga
Ropes & Gray LLP
One Metro Center
700 12th St., NW, Suite 900
Washington, DC 20005

Bode Case #: 2S04-114

Partial list of evidence received on July 7, 2004, included for comparison purposes:

Bode Sample Name	Agency Sample ID	Agency Description
2S04-114-03	93-05716 FP6	Labeled as "Hair from M. Moore ligature."
2S04-114-03A		*Slide with two hairs (-03Aa and -03Ab).*
2S04-114-15	93-05718 FP8	Labeled as "Hair from C. Byers ligature."
2S04-114-18	93-05718 FP10	Labeled as "Negroid hair from white sheet." [slide with 9 hairs]
2S04-114-18A		*Hair from sheet, described as "Negroid hair frag."*
2S04-114-18B		*Hair from sheet.*
2S04-114-21	93-05716 E5	Labeled as "Hair from scout cap."
2S04-114-21		*Slide with two hairs (-21A and -21B).*
2S04-114-23	93-05716 E127 LS1-QH	Labeled as "Hair from tree stump."
2S04-114-27	93-05717 FP7	Labeled as "Dyed hair from white sheet used to cover S. Branch."

Partial list of evidence received on May 9, 2011 for possible DNA analysis:

Bode Sample Name	Agency Sample ID	Agency Description
2S04-114-81	Not Listed	Labeled as "Starbucks Coffee Cup" (Chuck King)

List of evidence received on May 26, 2011 for possible DNA analysis:

Bode Sample Name	Agency Sample ID	Agency Description
2S04-114-112	Not Listed	Labeled as "Soda Can (James Vaughn)"
2S04-114-113	Not Listed	Labeled as "Razor (Lynn Vaughn)"
2S04-114-114	Not Listed	Labeled as "Cindy Hobbs Evidence"

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Mitochondrial DNA Processing, Results and Conclusions:

The mtDNA profiles reported in this case were determined by procedures that have been validated according to standards established by the Scientific Working Group on DNA Analysis Methods (SWGDAM) and adopted as Federal Standards.

1. A mtDNA profile was obtained from samples 2S04-114-81 (Chuck King), 2S04-114-113 (Lynn Vaughn) and 2S04-114-114 (Cindy Hobbs).

   Due to inconsistent data obtained, sample 2S04-114-112 (James Vaughn), will not be reported.

2. The mtDNA profile obtained from sample 2S04-114-23 contains an insufficient number of differences from sample 2S04-114-81 (Chuck King). Therefore, Chuck King (2S04-114-81), or any maternal relative, cannot be excluded as a contributor of sample 2S04-114-23.

   The following samples are not consistent with the mtDNA profile obtained from sample 2S04-114-81 (Chuck King):

   - 2S04-114-03Aa
   - 2S04-114-15
   - 2S04-114-18A
   - 2S04-114-18B
   - 2S04-114-21B
   - 2S04-114-27

   Therefore, Chuck King (2S04-114-81), or any maternal relative, can be excluded as a contributor of the above listed samples.

3. The mtDNA profiles obtained from the following samples are not consistent with the mtDNA profiles obtained from samples 2S04-114-113 (Lynn Vaughn) and 2S04-114-114 (Cindy Hobbs):

   - 2S04-114-03Aa
   - 2S04-114-15
   - 2S04-114-18A
   - 2S04-114-18B
   - 2S04-114-21B
   - 2S04-114-23
   - 2S04-114-27

   Therefore, Lynn Vaughn (2S04-114-113) and Cindy Hobbs (2S04-114-114), or any maternal relatives, can be excluded as a contributor of the above listed samples.

See **Tables 1 and 2** for a summary of the mtDNA profiles reported.

Notes:

1. The DNA extracts and submitted evidence will be retained temporarily by Bode Technology until review of the data is completed, at which time the evidence and extracts will be returned to the submitting agency.
2. Mitochondrial DNA (mtDNA) is found in sub-cellular organelles called mitochondria. A specific, non-coding region of the mitochondrial genome called the D-loop, or hyper-variable control region, is known to have variability within the human population. Multiple copies of this region of mtDNA are generated using the polymerase chain reaction (PCR). The base composition, or sequence, is then determined using automated DNA sequencing.
3. A supplemental mtDNA report was issued due to the submission of additional evidence. Please refer to reports dated: June 13, 2011, May 23, 2011, May 11, 2011, March 25, 2011, January 25, 2011, June 4, 2008, April 10, 2008, March 7, 2008, September 27, 2007, January 2, 2007, and December 30, 2005 for complete lists of items received/tested.

Report submitted by,

Adrienne Barranco

Adrienne Barranco, M.S.
DNA Analyst I

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Table 1: Analysis of Mitochondrial DNA

	2S04-114-81 (Chuck King)	2S04-114-113 (Lynn Vaughn)	2S04-114-114 (Cindy Hobbs)
HVI Reported Range	16024-16388	16024-16379	16024-16388
Polymorphisms	16209 C	16126 C 16294 T 16296 T 16304 C	16069 T 16126 C 16319 A
HVII Reported Range	65-360	49-359	49-361
Polymorphisms	263 G 293 C 315.1 C	73 G 263 G 309.1 C 315.1 C	73 G 185 N (A/G)* 228 A 263 G 295 T 315.1 C

* Possible heteroplasmy, see notation "d" below

Table 2: Results Previously Reported on December 30, 2005:

	2S04-114-03Aa	2S04-114-15	2S04-114-18A	2S04-114-18B	2S04-114-21B	2S04-114-23	2S04-114-27
HVI Reported Range	15998-16390	15998-16390	16998-16390	15998-16390	16210-16390	16009-16390	15998-16390
Polymorphisms	16221 T	16093 C 16192 T 16256 T 16262 T 16270 T	16129 A 16183 D 16189 A 16215 G 16223 T 16278 T 16294 T 16311 C 16360 T	16069 T 16126 C 16145 A 16172 C 16222 T 16261 T	16223 T 16278 T 16362 C	Anderson	16261 T
HVII Reported Range	35-361	35-361	35-361	35-361	N/A	35-361	49-361
Polymorphisms	263 G 309.1 C 315.1 C	73 G 263 G 315.1 C	73 G 151 T 152 C 182 T 186 A 189 C 247 A 263 G 315.1 C 316 A	73 G 242 T 263 G 295 T 315.1 C	Not Reported	263 G 309.1 C 315.1 C	263 G 309.1 C 315.1 C

JLF 6/20/11 105 102

The following notations may apply:

a. Transition or transversion polymorphisms as compared to a standard sequence (Anderson, et al. 1981. *Nature* 290:457-465) are designated by the appropriate letter (base).

b. A deletion is designated by a "D."

c. An insertion is designated a ".1" for a one base insertion, and a ".2" for a two base insertion.

Note: Polycytosine stretches are often difficult to interpret. A possible cause may be the presence of a mixture of length variants in the mtDNA of an individual. A predominant length species is often apparent; however, the frequency of a particular length species cannot be determined accurately and may vary between maternal relatives. The sequence reported for Hypervariable Region 1 represents the first 10 cytosines observed, beginning at position 16184. The sequence reported for Hypervariable Region 2 represents the number of confirmed cytosines present in the predominant base sequence. When no predominant base sequence is observed, the insertions that could not be confirmed are designated by a "N."

d. Heteroplasmy is a situation where two base peaks are observed at the same position. This indicates the presence of two different mitotypes. Heteroplasmies are common in the human population and can vary from tissue to tissue, with hair samples demonstrating greater heteroplasmic potential than other tissues such as blood and/or buccal samples. Since heteroplasmies do not always occur with the same frequency from generation to generation, and from tissue sample to tissue sample, the presence or absence of a heteroplasmy does not constitute an exclusion. An inclusion is warranted as long as the sample being compared has either peak, or both peaks, at the corresponding position/s.

JLF 6/22/11 104 ~~101~~

Bode Technology™

INVOICE

Client:
Ropes and Gray
Attn: Stephen Braga
One Metro Center, 700 12th St.
NW, Suite 900
Washington, DC 20005

Invoice Date: 6/17/2011

Invoice #: Bill14914
Net Terms: 30 Days

PO Number:

Invoice Grand Total: $ 12,410.00

Requester: Stephen Braga
Phone: 202-508-4655
Fax:
email:

Bode Project #.: 2S04-114

Agency Case No.:

Line Item Number	Quantity	Item / Part Number	Description	Unit Price	Sales Amount
0001	1	mtDNA	Unmounted Hair, Bone, Teeth, Other Evidence	$ 5,900.00	$ 5,900.00
0002	3	mtDNA	Blood/Buccal	$ 2,900.00	$ 8,700.00
			Rush Order Discount 15%		**$ (2,190.00)**
				TOTAL AMOUNT DUE	**$ 12,410.00**

Remit To:

The Bode Technology Group, Inc.
c/o GlobalOptions, Inc
Dept. AT 952056
Atlanta, GA 31192

Bode TIN: 54-1750293

Bank Information:

Silicon Valley Bank
Santa Clara, CA 95054
ABA# 121140399
Credit to: GlobalOptions, Inc.
Account # 3300418500

10430 Furnace Road, Suite 107
Lorton, VA 22079

1.866.BODE.4.ID
www.bodetech.com

tel. 703-646-9740
fax. 703-646-9741

103
105
JLF
6/22/11

Bode Technology™

10430 Furnace Road
Suite 107
Lorton, VA 22079

June 17, 2011
RE: Bode Case # 2S04-114

Stephen L. Braga
Ropes & Gray LLP
One Metro Center
700 12th St., NW, Suite 900
Washington, DC 20005

Dear Mr. Braga:

Enclosed you will find the mtDNA case report for Bode Case # 2S04-114 (samples 81, 112, 113 and 114) and a copy of the associated invoice.

Please let us know if you have any questions or concerns.

Best Regards,

Adrienne Barranco

Adrienne Barranco
DNA Analyst I
Bode Technology
adrienne.barranco@bodetech.com
703-646-9812

JLF 6/22/11 102 106

Detailed Results

Detailed Results | Notifications

Tracking no.: 797219298077 Select time format: 12H | 24H E-mail notifications

Delivered

Initiated Picked up In transit Delivered

Delivered
Signed for by: T.TOLBERT

Shipment Dates	Destination
Ship date Jun 17, 2011	WASHINGTON, DC
Delivery date Jun 20, 2011 9:43 AM	Signature Proof of Delivery

Shipment Options

Help

Hold at FedEx Location
Hold at FedEx Location service is not available for this shipment.

Shipment Facts

Help

Service type	Priority Envelope	Delivered to	Mailroom
Weight	0.5 lbs/.2 kg	Reference	2S04-114

Shipment Travel History

Help

Select time zone: Local Scan Time

All shipment travel activity is displayed in local time for the location

Date/Time	Activity	Location	Details
Jun 20, 2011 9:43 AM	Delivered	WASHINGTON, DC	
Jun 20, 2011 7:38 AM	On FedEx vehicle for delivery	WASHINGTON, DC	
Jun 18, 2011 12:26 PM	At local FedEx facility	WASHINGTON, DC	
Jun 18, 2011 12:24 PM	At local FedEx facility	WASHINGTON, DC	
Jun 18, 2011 11:24 AM	Delivery exception	WASHINGTON, DC	Customer not available or business closed
Jun 18, 2011 9:42 AM	On FedEx vehicle for delivery	WASHINGTON, DC	
Jun 18, 2011 9:28 AM	At local FedEx facility	WASHINGTON, DC	
Jun 17, 2011 9:25 PM	Left FedEx origin facility	ALEXANDRIA, VA	
Jun 17, 2011 5:47 PM	Picked up	WOODBRIDGE, VA	Tendered at FedEx Office
Jun 17, 2011 2:45 PM	Shipment information sent to FedEx		

Won't be around for delivery?
Have us hold the shipment for convenient pickup.
Learn more ▸

FedEx Advanced Tracking:
The ultimate in tracking visibility.
Watch demo ▸

© FedEx 1995- 2011

JLF 6/22/11 101

Bode Technology

Review Form: Complete Case File

Shipment or Case #: 2S04-114 mtDNA (-81, -112, -113, -114)

Case File Documentation	Core Forms and Controls	Data and Report
Technical Review		
- Case submission form or submitted manifest complete - Client paperwork complete - Client communication documented* - Chain of custody (COC) completed and correct - Project guidelines followed* - Inventory sheet accurate and consistent with COC - Photodocumentation of all evidence complete* - Permission to consume documented* - Case notes complete and accurate - All pages have case or shipment #, date, initials	- Lab worksheets complete - Sample numbering correct throughout - Controls gave appropriate results : Allelic ladders Positive control(s) Negative controls(s) - Electropherograms documented properly - Internal lane standard verified - Two independent analyses performed and edits consistent - Index accurate* - Correct core forms and controls included for case+	- Electropherograms documented properly - Internal lane standard verified - Two independent analyses performed and edits consistent - Index accurate* - Allele table included and accurate* - Results accurate - Conclusions accurate* - Statistics provided* - Statistic calculations correct*
Administrative Review		
- COC accurate - Core forms and controls review form included+	- Case notes accurate* - Positive control correct	- Report editorially accurate and includes: case identifier, evidence examined, methodology, loci or kit, results and/or conclusions, interpretative statement, date issued, disposition of evidence, signature of person accepting responsibility

**if applicable, + For case files supplemented with controls and core forms*

Name and Title: [signature] Supervisor HTD — Tech & Admin 6/17/11 — ☒ Date-Type of review

Name and Title: Sharon Wentz DNA Analyst I — Admin 6/17/11 — ☑ Date- Type of review

Name and Title — ☐ Date- Type of review

Name and Title — ☐ Date- Bode Search including Staff DNA Search*

Self review: Adrienne Barranco 6/17/11

CHAIN OF CUSTODY

The Bode Technology Group, Inc.

Case Number: 2S04-114-80 to 82 **Agency ID Number:**

Submitting Agency Information

Name Ropes & Gray LLP
Address 700 12th Street, NW
Suite 900
Washington, DC 20005
Contact/Attorney Stephen L. Braga
Additional Authorized Contacts

Victim
Suspect

Phone Number (202) 508-4655
Fax Number (202) 383-9821
stephen.braga@ropesgray.com

Custody Record

Method of Delivery to Bode Fed Ex
Condition Good (Sealed)
Date Delivered 5/9/2011 Time: 9:51 AM
Delivered By Fed Ex TRK # 8758 1611 8521
Delivered To Ben Bever Signature

Date	Item No.	Released by (print) / (sign)	Received by (print) / (sign)	Purpose of change:
5/9/2011 Time 9:55 AM	80 to 82	Ben Bever	Maggie Redmond, for EMS / M. Redmond	Accessioning/Storage
Date 5/17/11 Time 12:45pm	Item No. 81	Released by (print) Maggie Redmond, for EMS / (sign) M. Redmond	Received by (print) Emily Herren / (sign) Emily Herren	Purpose of change: analysis
Date 5/18/11 Time 2:19pm	Item No. 81	Released by (print) Emily Herren / (sign) Emily Herren	Received by (print) Rachel Wortman, for EMS / (sign)	Purpose of change: storage
Date 5/27/11 Time 9:04Am	Item No. 81	Released by (print) Rachel Wortman, for EMS / (sign)	Received by (print) Emily Herren / (sign) Emily Herren	Purpose of change: Analysis
Date	Item No.	Released by (print) / (sign)	Sent via: / Tracking No.	Purpose of change: FINAL DISPOSITION
Time				

Evidence Inventory

Bode Case #	Agency Item ID	Agency Description
2S04-114-80		off brand root beer can
2S04-114-81		~~cup~~ Starbucks coffee cup MK 6/17/11
2S04-114-82		plastic beverage container

Note: Evidence sent by Jessica Goldstein
1239 26th St.
Santa Monica, CA 90404

Storage of Evidence: Secure evidence room

AMB 6/16/11

CHAIN OF CUSTODY

The Bode Technology Group, Inc.

Case Number: 2504-114-80 to 82 Agency Item ID Number:

Date	Item No.	Released by (print)	Received by (print)	Purpose of change:
6/16/11	81	Emily Herren	Rachel Woltman, forens	storage
Time 2:49PM		(sign) Emily Herren	(sign)	
Date	Item No.	Released by (print)	Received by (print)	Purpose of change:
Time		(sign)	(sign)	
Date	Item No.	Released by (print)	Received by (print)	Purpose of change:
Time		(sign)	(sign)	
Date	Item No.	Released by (print)	Received by (print)	Purpose of change:
Time		(sign)	(sign)	
Date	Item No.	Released by (print)	Received by (print)	Purpose of change:
Time		(sign)	(sign)	
Date	Item No.	Released by (print)	Received by (print)	Purpose of change:
Time		(sign)	(sign)	
Date	Item No.	Released by (print)	Received by (print)	Purpose of change:
Time		(sign)	(sign)	
Date	Item No.	Released by (print)	Received by (print)	Purpose of change:
Time		(sign)	(sign)	
Date	Item No.	Released by (print)	Received by (print)	Purpose of change:
Time		(sign)	(sign)	
Date	Item No.	Released by (print)	Received by (print)	Purpose of change:
Time		(sign)	(sign)	
Date	Item No.	Released by (print)	Received by (print)	Purpose of change:
Time		(sign)	(sign)	
Date	Item No.	Released by (print)	Received by (print)	Purpose of change:
Time		(sign)	(sign)	
Date	Item No.	Released by (print)	Received by (print)	Purpose of change:
Time		(sign)	(sign)	
Date	Item No.	Released by (print)	Received by (print)	Purpose of change:
Time		(sign)	(sign)	
Date	Item No.	Released by (print)	Received by (print)	Purpose of change:
Time		(sign)	(sign)	
Date	Item No.	Released by (print)	Received by (print)	Purpose of change:
Time		(sign)	(sign)	

AB 6/16/11

Case Submission Form

Bode Technology
Part of Global Options Group

Bode Case No (To be filled out by Bode): 2504 – 114

In order to process your DNA casework efficiently, this form must be filled out and sent along with the evidence. Prior to submitting a case, please call Customer Services 866-BODE-4-ID (866-263-3443).

Submitting Agency Reference/Case No: Ropes + Gray LLP

The Bode Technology Group
10430 Furnace Rd. Suite 107
Lorton, VA 22079
Phone: 703-646-9740
Fax: 703-646-9742
www.bodetech.com

Case Background:

The Starbucks coffee cup, identified as Item Number 81 in Emily Herren's May 16 e-mail to me, is believed to contain the DNA of Chuck Kling. Please DNA test, and compare to all unknown profiles in case.

Specify platform (AB/Hitachi), kit (Co/Pro+, ID, PP16, PP16BIO, PPY, YFiler, miniFiler), and software (GS/GT, GMID) preferences. If no preference, check box for Analyst Discretion

☒ Analyst Discretion

List Evidence Items* (If needed, use Page 3 to include additional items or case information) Note: Descriptions may be reflected in Chain of Custody and Report	Please check the appropriate boxes for Pre-Screening and DNA Testing Requested	Permission to Consume (if necessary)
Starbucks Coffee Cup	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☒ STR ☒ miniSTR ☐ Y-STR ☐ mtDNA	☒ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No

☐ Check if additional evidence items or testing instructions are listed on Page 3

* When submitting extracts, the reagent blanks must also be included. Please be sure to include the following information: Total Human Quant, Total Y Quant, Volume Remaining, and Extraction Control Names associated with samples.

If STR data is obtained, will CODIS entry or search be requested? ☐ Yes ☒ No

(NOTE: Private Forensic DNA laboratories do not have access to enter or search samples in CODIS. If "yes" is marked, Bode will contact the appropriate CODIS laboratory Technical Leader prior to initiation of this case. Please be aware that this may increase the turnaround time.

I hereby certify that the information provided on this Case Submission Form is accurate to the best of my knowledge. I understand that I will be charged for services according to the fee schedule that I have received.

Print Name STEPHEN L. BRAGA Signature [signature]

Please submit this completed form with the evidence. All evidence items must be shipped using a traceable carrier (i.e. FedEx, UPS, DHL, Priority Mail). Overnight shipping is recommended. The evidence

ATTN: EVIDENCE DEPARTMENT AMJ 05/23/11
Bode Technology
10430 Furnace Rd. Suite 107 AUB 6/16/11
Lorton, VA 22079

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Case Submission Form

Bode Technology
Part of GlobalOptions Group

Bode Case No (To be filled out by Bode): 2504-114

The Bode Technology Group
10430 Furnace Rd. Suite 107
Lorton, VA 22079
Phone: 703-646-9740
Fax: 703-646-9742
www.bodetech.com

In order to process your DNA casework efficiently, this form must be filled out and sent along with the evidence. Prior to submitting a case, please call Customer Services 866-BODE-4-ID (866-263-3443).

Submitting Agency: ROPES + GRAY LLP Date: 5/17/11

Name: STEPHEN L. BRAGA Phone Number: 202-508-4655

Select the type of Submission:

☐ Initial Evidence Submission ☒ Additional Evidence Submission (Please fill in Bode Case number at the top of the page)

Select the type of Service:

☐ Standard Service - Our standard service provides complete analysis of your samples when rush services are not required.

☒ Rush Service - This is the fastest service offered. Please contact Customer Service for turnaround time (Additional charge per sample).

☒ 5 business days ☐ 10 business days ☐ 15 business days

Promotion Code: _____

Authorized Point(s) of Contact:

Name:	STEPHEN L. BRAGA	Name:	
Agency:	ROPES + GRAY LLP	Agency;	
Title:	PARTNER	Title:	
Phone Number:	202-508-4655	Phone Number:	
Fax Number:	202-383-9821	Fax Number:	
Cell Phone/Pager:	617-304-7124	Cell Phone/Pager:	
Email Address:	stephen.braga@ropesgray.com	Email Address:	

Mailing Address (Where The Report Should be Sent):

Name:	SAME AS ABOVE
Agency:	
Address:	
City/State/Zip:	
Phone Number:	
Fax Number:	
Email Address:	

Billing Address:

Name:	SAME AS ABOVE
Agency:	
Address:	
City/State/Zip:	
Phone Number:	
Fax Number:	
Email Address:	
Purchase Order #	

Evidence Return Address:

Name:	
Agency:	
Address:	
City/State/Zip:	
Phone Number:	
Email Address:	

Select type of Evidence Return:

☐ Evidence should be returned following delivery of the case report.

☒ Evidence should be returned upon request from the Authorized Point of Contact(s).

AMJ 05.22.11 AMB 6/16/11 27

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Support | Locations | English
FedEx Ship Track Manage Learn FedEx Office
Search fedex.com Search

Detailed Results

Printer-Friendly Get Link Help
Enter tracking number

Detailed Results | Notifications

Tracking no.: 875816118521 Select time format: 12H | 24H E-mail notifications

Delivered

Initiated → Picked up → In transit → Delivered

Delivered
Signed for by: B.BEVER

Shipment Dates	Destination
Ship date ⓘ May 7, 2011	Signature Proof of Delivery ⓘ
Delivery date ⓘ May 9, 2011 9:51 AM	

Shipment Options

Help

Hold at FedEx Location
Hold at FedEx Location service is not available for this shipment.

Shipment Facts

Help

Service type	Priority Overnight	Delivered to	Shipping/Receiving
Weight	2.0 lbs./.9 kg		

Shipment Travel History

Help

Select time zone: Local Scan Time

All shipment travel activity is displayed in local time for the location

Date/Time	Activity	Location	Details
May 9, 2011 9:51 AM	Delivered		
May 9, 2011 7:13 AM	On FedEx vehicle for delivery	ALEXANDRIA, VA	
May 9, 2011 6:39 AM	At local FedEx facility	ALEXANDRIA, VA	
May 9, 2011 3:55 AM	At destination sort facility	DULLES, VA	
May 8, 2011 3:39 PM	Departed FedEx location	MEMPHIS, TN	
May 7, 2011 8:35 PM	Arrived at FedEx location	MEMPHIS, TN	
May 7, 2011 8:15 PM	Left FedEx origin facility	MEMPHIS, TN	
May 7, 2011 2:14 PM	Picked up	MEMPHIS, TN	

Won't be around for delivery?
Have us hold the shipment for convenient pickup.
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FedEx Advanced Tracking:
The ultimate in tracking visibility.
Watch demo ▸

FedEx
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United States - English

Customer Focus
New Customer Center
Small Business Center
Service Guide
Customer Support
My FedEx Rewards

Company Information
About FedEx
Careers
Investor Relations

Featured Services
FedEx SameDay
FedEx Home Delivery
Healthcare Solutions
Online Retail Solutions
Packaging Services
Ancillary Clearance Services

Other Resources
Compatible Solutions Program
Developer Resource Center
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FedEx Express
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FedEx Custom Critical
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2504-114 ALB 6/17/11

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Emily Herren

From: Braga, Stephen [Stephen.Braga@ropesgray.com]
Sent: Thursday, May 26, 2011 2:46 PM
To: Emily Herren
Cc: Amy Jeanguenat
Subject: FW: Attached Image
Attachments: 0927_001.pdf

Emily,

Here is a Case Submission Form for the new evidence Bode should have received today from Holly Tunkel. This is an expedited analysis request, seeking comparison of these DNA profiles against any of the unknown profiles in this case.

Thanks,

Steve

Stephen L. Braga
ROPES & GRAY LLP
T +1 202 508 4655 | F +1 202 383 9821
One Metro Center, 700 12th Street, NW, Suite 900
Washington, DC 20005-3948
Stephen.Braga@ropesgray.com
www.ropesgray.com

Circular 230 Disclosure (R&G): To ensure compliance with Treasury Department regulations, we inform you that any U.S. tax advice contained in this communication (including any attachments) was not intended or written to be used, and cannot be used, for the purpose of avoiding U.S. tax-related penalties or promoting, marketing or recommending to another party any tax-related matters addressed herein.

This message (including attachments) is privileged and confidential. If you are not the intended recipient, please delete it without further distribution and reply to the sender that you have received the message in error.

From: PWA9-DIGI-LIB-1@ropesgray.com [mailto:PWA9-DIGI-LIB-1@ropesgray.com]
Sent: Thursday, May 26, 2011 2:29 PM
To: Braga, Stephen
Subject: Attached Image

2504-114 EBH 5/27/11

CHAIN OF CUSTODY

The Bode Technology Group, Inc.

Case Number: 2S04-114-112 and 113 **Agency ID Number:**

Submitting Agency Information

Name Ropes & Gray LLP
Address 700 12th Street, NW
Suite 900
Washington, DC 20005
Contact/Attorney Stephen L. Braga
Additional Authorized Contacts

Victim
Suspect

Phone Number (202) 508-4655
Fax Number (202) 383-9821
stephen.braga@ropesgray.com

Custody Record

Method of Delivery to Bode Fed Ex
Date Delivered 5/26/2011 Time: 10:21 AM
Delivered By Fed Ex
Delivered To Carmen Pozo

Condition Good (Sealed)
TRK # 8757 0009 9781
Signature [signature]

Date / Time	Item No.	Released by (print) / (sign)	Received by (print) / (sign)	Purpose of change:
5/26/2011 10:24 AM	112 & 113	Carmen Pozo / [signature]	Maggie Redmond, for EMS / M. Redmond	Accessioning/Storage
5/27/11 9:04AM	112 + 113	Rachel Wortman, for EMS / [signature]	Emily Herren / Emily Herren	Analysis
6/16/11 2:49PM	112 + 113	Emily Herren / Emily Herren	Rachel Wortman, for EMS / [signature]	Storage
Date / Time	Item No.	Released by (print) / (sign)	Received by (print) / (sign)	Purpose of change:
Date / Time	Item No.	Released by (print) / (sign)	Sent via: / Tracking No.	Purpose of change: FINAL DISPOSITION

Evidence Inventory

Bode Case #	Agency Item ID	Agency Description
2S04-114-112		Labeled as "Soda Can (James Vaughn)"
2S04-114-113		Labeled as "Razor (Lynn Vaughn)"

Note: Evidence sent by Holly Tunkel

Storage of Evidence: Secure evidence room

ALB 6/16/11

Case Submission Form

Bode Technology
Part of GlobalOptions Group

Bode Case No (To be filled out by Bode): 2504 - 114

The Bode Technology Group
10430 Furnace Rd. Suite 107
Lorton, VA 22079
Phone: 703-646-9740
Fax: 703-646-9742
www.bodetech.com

In order to process your DNA casework efficiently, this form must be filled out and sent along with the evidence. Prior to submitting a case, please call Customer Services 866-BODE-4-ID (866-263-3443).

Submitting Agency: ROPES + GRAY LLP Date: 5/26/11

Name: STEPHEN L. BRAGA Phone Number: 202-508-4655

Select the type of Submission:

☐ Initial Evidence Submission ☒ Additional Evidence Submission (Please fill in Bode Case number at the top of the page)

Select the type of Service:

☐ Standard Service - Our standard service provides complete analysis of your samples when rush services are not required.

☒ Rush Service - This is the fastest service offered. Please contact Customer Service for turnaround time (Additional charge per sample).

Promotion Code: _____

☒ 5 business days ☐ 10 business days ☐ 15 business days

Authorized Point(s) of Contact:

Name:	STEPHEN L. BRAGA	Name:	
Agency:	ROPES + GRAY LLP	Agency:	
Title:	PARTNER	Title:	
Phone Number:	202-508-4655	Phone Number:	
Fax Number:	202-383-9821	Fax Number:	
Cell Phone/Pager:	617-304-7124	Cell Phone/Pager:	
Email Address:	stephen.braga@ropesgray.com	Email Address:	

Mailing Address (Where The Report Should be Sent):

Name:	SAME AS ABOVE
Agency:	
Address:	
City/State/Zip:	
Phone Number:	
Fax Number:	
Email Address:	

Billing Address:

Name:	SAME AS ABOVE
Agency:	
Address:	
City/State/Zip:	
Phone Number:	
Fax Number:	
Email Address:	
Purchase Order #	

Evidence Return Address:

Name:	
Agency:	
Address:	
City/State/Zip:	
Phone Number:	
Email Address:	

Select type of Evidence Return:

☐ Evidence should be returned following delivery of the case report.

☒ Evidence should be returned upon request from the Authorized Point of Contact(s).

ERH 5/27/11

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Case Submission Form

Bode Technology
Part of GlobalOptions Group

Bode Case No (To be filled out by Bode): 2504-114

In order to process your DNA casework efficiently, this form must be filled out and sent along with the evidence. Prior to submitting a case, please call Customer Services 866-BODE-4-ID (866-263-3443).

The Bode Technology Group
10430 Furnace Rd. Suite 107
Lorton, VA 22079
Phone: 703-646-9740
Fax: 703-646-9742
www.bodetech.com

Submitting Agency Reference/Case No: _____

Case Background:

These two new items of evidence received at Bode on 5/26/11 need to be tested for mitochondrial DNA, which should then be compared to all unknown profiles for other evidence in the case.

Specify platform (AB/Hitachi), kit (Co/Pro+, ID, PP16, PP16BIO, PPY, YFiler, minIFiler), and software (GS/GT, GMID) preferences. If no preference, check box for Analyst Discretion

☒ Analyst Discretion

List Evidence Items* (If needed, use Page 3 to include additional items or case information) Note: Descriptions may be reflected in Chain of Custody and Report	Please check the appropriate boxes for Pre-Screening and DNA Testing Requested	Permission to Consume (If necessary)
Soda Can (James Vaughn)	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☒ mtDNA	☒ Yes ☐ No
Razor (Lynn Vaughn)	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☒ mtDNA	☒ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No

☐ Check if additional evidence items or testing instructions are listed on Page 3

* When submitting extracts, the reagent blanks must also be included. Please be sure to include the following information: Total Human Quant, Total Y Quant, Volume Remaining, and Extraction Control Names associated with samples.

If STR data is obtained, will CODIS entry or search be requested? ☐ Yes ☒ No

(NOTE: Private Forensic DNA laboratories do not have access to enter or search samples in CODIS. If "yes" is marked, Bode will contact the appropriate CODIS laboratory Technical Leader prior to initiation of this case. Please be aware that this may increase the turnaround time.

I hereby certify that the information provided on this Case Submission Form is accurate to the best of my knowledge. I understand that I will be charged for services according to the fee schedule that I have received.

Print Name STEPHEN L. BRAGA Signature _____

Please submit this completed form with the evidence. All evidence items must be shipped using a traceable carrier (i.e. FedEx, UPS, DHL, Priority Mail). Overnight shipping is recommended. The evidence should be shipped to:

ATTN: EVIDENCE DEPARTMENT
Bode Technology
10430 Furnace Rd, Suite 107
Lorton, VA 22079

EBH 5/27/11

91

Print page | Close

FedEx

Detailed Results

Tracking no.: 875700099781 Select time format: 12H

Delivered

Delivered
Signed for by: C.POZOS

Shipment Dates

Ship date May 25, 2011
Delivery date May 26, 2011 10:21 AM

Destination

Signature Proof of Delivery

Shipment Options

Hold at FedEx Location
Hold at FedEx Location service is not available for this shipment.

Shipment Facts

Service type	Priority Box	Delivered to	Shipping/Receiving
Weight	2.0 lbs/.9 kg		

Shipment Travel History

Select time zone: Local Scan Time

All shipment travel activity is displayed in local time for the location

Date/Time	Activity	Location	Details
May 26, 2011 10:21 AM	**Delivered**		
May 26, 2011 8:12 AM	On FedEx vehicle for delivery	ALEXANDRIA, VA	
May 26, 2011 7:42 AM	At local FedEx facility	ALEXANDRIA, VA	
May 26, 2011 5:42 AM	At dest sort facility	DULLES, VA	
May 26, 2011 3:09 AM	Departed FedEx location	MEMPHIS, TN	
May 26, 2011 12:48 AM	Arrived at FedEx location	MEMPHIS, TN	
May 26, 2011 12:20 AM	Left FedEx origin facility	CORDOVA, TN	
May 25, 2011 1:07 PM	Picked up	MEMPHIS, TN	Tendered at FedEx Kinko's, now FedEx Office

2504-114 EBN 5727111

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Emily Herren

From: Braga, Stephen [Stephen.Braga@ropesgray.com]
Sent: Wednesday, May 25, 2011 3:51 PM
To: Emily Herren
Cc: Amy Jeanguenat
Subject: Expedited Bode Sample 2SO4-114-81

Emily,

Per my conversation with Amy a short while ago, can you process this Starbucks Coffee Cup sample to determine if it is suitable for mitochondrial DNA testing and let me know?

Thanks,

Steve

Stephen L. Braga
ROPES & GRAY LLP
T +1 202 508 4655 | F +1 202 383 9821
One Metro Center, 700 12th Street, NW, Suite 900
Washington, DC 20005-3948
Stephen.Braga@ropesgray.com
www.ropesgray.com

Circular 230 Disclosure (R&G): To ensure compliance with Treasury Department regulations, we inform you that any U.S. tax advice contained in this communication (including any attachments) was not intended or written to be used, and cannot be used, for the purpose of avoiding U.S. tax-related penalties or promoting, marketing or recommending to another party any tax-related matters addressed herein.

This message (including attachments) is privileged and confidential. If you are not the intended recipient, please delete it without further distribution and reply to the sender that you have received the message in error.

2SO4-114 EBN 5127111

Emily Herren

From: Braga, Stephen [Stephen.Braga@ropesgray.com]
Sent: Thursday, May 26, 2011 3:32 PM
To: Emily Herren
Cc: Amy Jeanguenat
Subject: FW: Attached Image
Attachments: 0931_001.pdf

Emily,

Here is a Case Submission Form for the new evidence Bode should have received today from Tom Fedor in California. This is another expedited analysis request, seeking comparison of these DNA profiles against any of the unknown profiles in the case as well as against the existing Terry Hobbs profile to see what points of familial comparison might exist.

Thanks,

Steve

Stephen L. Braga
ROPES & GRAY LLP
T +1 202 508 4655 | F +1 202 383 9821
One Metro Center, 700 12th Street, NW, Suite 900
Washington, DC 20005-3948
Stephen.Braga@ropesgray.com
www.ropesgray.com

Circular 230 Disclosure (R&G): To ensure compliance with Treasury Department regulations, we inform you that any U.S. tax advice contained in this communication (including any attachments) was not intended or written to be used, and cannot be used, for the purpose of avoiding U.S. tax-related penalties or promoting, marketing or recommending to another party any tax-related matters addressed herein.

This message (including attachments) is privileged and confidential. If you are not the intended recipient, please delete it without further distribution and reply to the sender that you have received the message in error.

From: PWA9-DIGI-LIB-1@ropesgray.com [mailto:PWA9-DIGI-LIB-1@ropesgray.com]
Sent: Thursday, May 26, 2011 3:31 PM
To: Braga, Stephen
Subject: Attached Image

2S04-114 EBN 5127111

CHAIN OF CUSTODY

The Bode Technology Group, Inc.

Case Number: 2S04-114-114 **Agency ID Number:**

Submitting Agency Information

Name Ropes & Gray LLP
Address 700 12th Street, NW
Suite 900
Washington, DC 20005
Contact/Attorney Stephen L. Braga
Additional Authorized Contacts

Victim
Suspect

Phone Number (202) 508-4655
Fax Number (202) 383-9821
stephen.braga@ropesgray.com

Custody Record

Method of Delivery to Bode Fed Ex
Condition Good (Sealed)
Date Delivered 5/26/2011 Time: 10:21 AM
Delivered By Fed Ex
TRK # 8704 9111 2662
Delivered To Carmen Pozo
Signature Carmen Pozo

Date	Item No.	Released by (print)	Received by	Purpose of change:
5/26/2011		Carmen Pozo	Maggie Redmond, for EMS	
Time 10:24 AM	114	(sign) Carmen Pozo	(sign) M. Redmond	Accessioning/Storage
Date 5/27/11	Item No.	Released by (print) Rachel Wortman, for EMS	Received by (print) Emily Heren	Purpose of change:
Time 9:04AM	114	(sign)	(sign) Emily Heren	Analysis
Date 6/10/11	Item No.	Released by (print) Emily Heren	Received by (print) Rachel Wortman, for EMS	Purpose of change:
Time 2:49PM	114	(sign) Emily Heren	(sign)	storage
Date	Item No.	Released by (print)	Received by (print)	Purpose of change:
Time		(sign)	(sign)	
Date	Item No.	Released by (print)	Sent via:	Purpose of change:
Time		(sign)	Tracking No.	FINAL DISPOSITION

Evidence Inventory

Bode Case #	Agency Item ID	Agency Description
2S04-114-114		Labeled as "Cindy Hobbs Evidence"

Note: Evidence sent by Serological Research Institute
3053 Research Drive
Richmond, CA 94806

Storage of Evidence: Secure evidence room

ALB 6/16/11

Case Submission Form

Bode Technology
Part of GlobalOptions Group

The Bode Technology Group
10430 Furnace Rd. Suite 107
Lorton, VA 22079
Phone: 703-646-9740
Fax: 703-646-9742
www.bodetech.com

Bode Case No (To be filled out by Bode): 2504 - 114

In order to process your DNA casework efficiently, this form must be filled out and sent along with the evidence. Prior to submitting a case, please call Customer Services 866-BODE-4-ID (866-263-3443).

Submitting Agency: ROPES + GRAY LLP **Date:** 5/26/11

Name: STEPHEN L. BRAGA **Phone Number:** 202-508-4655

Select the type of Submission:

☐ Initial Evidence Submission ☒ Additional Evidence Submission (Please fill in Bode Case number at the top of the page)

Select the type of Service:

☐ Standard Service - Our standard service provides complete analysis of your samples when rush services are not required.

☒ Rush Service - This is the fastest service offered. Please contact Customer Service for turnaround time (Additional charge per sample).

Promotion Code: _____

☒ 5 business days ☐ 10 business days ☐ 15 business days

Authorized Point(s) of Contact:

Name:	STEPHEN L. BRAGA	Name:	
Agency:	ROPES + GRAY LLP	Agency:	
Title:	PARTNER	Title:	
Phone Number:	202-508-4655	Phone Number:	
Fax Number:	202-383-9821	Fax Number:	
Cell Phone/Pager:	617-304-7124	Cell Phone/Pager:	
Email Address:	stephen.braga@ropesgray.com	Email Address:	

Mailing Address (Where The Report Should be Sent):

Name:	SAME AS ABOVE
Agency:	
Address:	
City/State/Zip:	
Phone Number:	
Fax Number:	
Email Address:	

Billing Address:

Name:	SAME AS ABOVE
Agency:	
Address:	
City/State/Zip:	
Phone Number:	
Fax Number:	
Email Address:	
Purchase Order #	

Evidence Return Address:

Name:	
Agency:	
Address:	
City/State/Zip:	
Phone Number:	
Email Address:	

Select type of Evidence Return:

☐ Evidence should be returned following delivery of the case report.

☒ Evidence should be returned upon request from the Authorized Point of Contact(s).

ALB 6/16/11

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Case Submission Form

Bode Technology
Part of GlobalOptions Group

Bode Case No (To be filled out by Bode): 2504-114

In order to process your DNA casework efficiently, this form must be filled out and sent along with the evidence. Prior to submitting a case, please call Customer Services 866-BODE-4-ID (866-263-3443).

Submitting Agency Reference/Case No: _____

The Bode Technology Group
10430 Furnace Rd, Suite 107
Lorton, VA 22079
Phone: 703-646-9740
Fax: 703-646-9742
www.bodetech.com

Case Background:

These new items of evidence received at Bode from Tom Fedor need to be tested for mitochondrial DNA, which should then be compared to (1) all unknown profiles in this case and (2) the known Terry Hobbs profile.

Specify platform (AB/Hitachi), kit (Co/Pro+, ID, PP16, PP16BIO, PPY, YFiler, miniFiler), and software (GS/GT, GMID) preferences. If no preference, check box for Analyst Discretion

☒ Analyst Discretion

List Evidence Items* (If needed, use Page 3 to include additional items or case information) Note: Descriptions may be reflected in Chain of Custody and Report	Please check the appropriate boxes for Pre-Screening and DNA Testing Requested	Permission to Consume (if necessary)
Cindy Hobbs Evidence	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☒ mtDNA	☒ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No

☐ Check if additional evidence items or testing instructions are listed on Page 3

* When submitting extracts, the reagent blanks must also be included. Please be sure to include the following information: Total Human Quant, Total Y Quant, Volume Remaining, and Extraction Control Names associated with samples.

If STR data is obtained, will CODIS entry or search be requested? ☐ Yes ☒ No

(NOTE: Private Forensic DNA laboratories do not have access to enter or search samples in CODIS. If "yes" is marked, Bode will contact the appropriate CODIS laboratory Technical Leader prior to initiation of this case. Please be aware that this may increase the turnaround time.

I hereby certify that the information provided on this Case Submission Form is accurate to the best of my knowledge. I understand that I will be charged for services according to the fee schedule that I have received.

Print Name STEPHEN L. BRAGA Signature _____

Please submit this completed form with the evidence. All evidence items must be shipped using a traceable carrier (i.e. FedEx, UPS, DHL, Priority Mail). Overnight shipping is recommended. The evidence should be shipped to:

ATTN: EVIDENCE DEPARTMENT
Bode Technology
10430 Furnace Rd. Suite 107
Lorton, VA 22079

ALB 6/16/11

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SERI

SEROLOGICAL RESEARCH INSTITUTE

Bode Technology
Evidence Department
14030 Furnace Rd., Suite 107
Lorton, VA 20079

Re: Damien Echols, SERI Case No. M'6882'06, Your Case No. 2S04-114

Enclosed please find two cigarette butts and a hair sample (our Item Nos. 16, 17 and 18, respectively), which I understand pertain to a person named Cindy Hobbs.

Sincerely,

Thomas Fedor
Forensic Serologist IV

cc: Donald M. Horgan

SERI1/CaseFiles/M'6882'06/BodeTechnologyLtr.

2S04-114 ALB 6/16/11

3053 RESEARCH DRIVE • RICHMOND, CA 94806 • (510) 223-7374 (SERI) • FAX (510) 222-8887

84

SEROLOGICAL RESEARCH INSTITUTE
3053 Research Drive
Richmond, CA 94806
(510) 223-7374 (SERI) FAX: (510) 222-8887

SERI CASE NO. **M'6882'06**
AGENCY CASE NO.- 1993-WVI-05716

EVIDENCE RECEIPT AND STORAGE

AGENCY: Riordan & Horgan
ADDRESS: 523 Octavia Street
SUBMITTER: Donald M. Horgon

PHONE: (415) 431-3472
CITY: San Francisco
STATE: CA **ZIP:** 94102

ITEM	DESCRIPTION	LOCATION	HANDLING RECORDS DATE	ID	DATE	ID	DATE	ID	DATE	ID
16	Cigarette Butt 1	3A	11224	—						
17	Cigarette Butt 2	3A	↓	↓						
18	Single Hair	3A	↓	↓						

IN/OUT	ITEMS	VIA	TO/FROM	BY	DATE
IN	16 → 18	FedEx 7939 2447 7798	Donald Horgan	Adam Brett	
OUT	16+18	FedEx 8704 9111 2662	Bode Tech.	Adam Brett	
IN	16-18	Fed Ex 8704 9111 2662	Serological Research Institute	M. Redmond (Bodg)	5/26/11

2504-114 AUB 6/16/11

Print page | Close

FedEx

Detailed Results

Tracking no.: 870491112662 Select time format: 12H

Delivered

Delivered
Signed for by: C.POZOS

Shipment Dates

Ship date May 25, 2011
Delivery date May 26, 2011 10:21 AM

Destination

Signature Proof of Delivery

Shipment Options

Hold at FedEx Location
Hold at FedEx Location service is not available for this shipment.

Shipment Facts

Service type	Standard Overnight	Delivered to	Shipping/Receiving
Weight	1.0 lbs/.5 kg	Reference	M6882 06

Shipment Travel History

Select time zone: Local Scan Time

All shipment travel activity is displayed in local time for the location

Date/Time	Activity	Location	Details
May 26, 2011 10:21 AM	**Delivered**		
May 26, 2011 8:12 AM	On FedEx vehicle for delivery	ALEXANDRIA, VA	
May 26, 2011 7:54 AM	At local FedEx facility	ALEXANDRIA, VA	
May 26, 2011 6:27 AM	At dest sort facility	DULLES, VA	
May 26, 2011 5:18 AM	Departed FedEx location	INDIANAPOLIS, IN	
May 26, 2011 2:25 AM	Arrived at FedEx location	INDIANAPOLIS, IN	
May 25, 2011 7:34 PM	Departed FedEx location	OAKLAND, CA	
May 25, 2011 6:10 PM	Left FedEx origin facility	EMERYVILLE, CA	
May 25, 2011 4:12 PM	Picked up	EMERYVILLE, CA	

2504-114 AUB 6/16/11

82

Date: June 6, 2011
Project Name: 2S04-114.SPF
Contig Name: 2S04-114-81a2
Compare Consensus to Reference ANDERSONCR
Comparison Range [16024..16569 1..577]

Sequence Name	Comparison Range Coverage
2S04-114-81a2	[16024..16390 35..369]

Position		ANDERSONCR	2S04-114-81a2	Number of Variants
Coverage Range		[16024..16569 1..577]		Incomplete
16,209	T	C	1	
263	A	G	1	
293	T	C	1	
315.1	:	C	1	
Total Differences			4	

Confirmed Range: 16024-16388, 65-360

ALB 6/15/11

81

Date: June 15, 2011
Project Name: 2S04-114_ARB.SPF
Contig Name: 2S04-114-81a2_ARB
Compare Consensus to Reference ANDERSONCR
Comparison Range [16024..16569 1..577]

Sequence Name Comparison Range Coverage
2S04-114-81a2_ARB [16024..16390 35..369]

Position		ANDERSONCR	2S04-114-81a2_ARB	Number of Variants
Coverage Range		[16024..16569 1..577] Incomplete		
16,209	T	C	1	
263	A	G	1	
293	T	C	1	
315.1	:	C	1	
Total Differences			4	

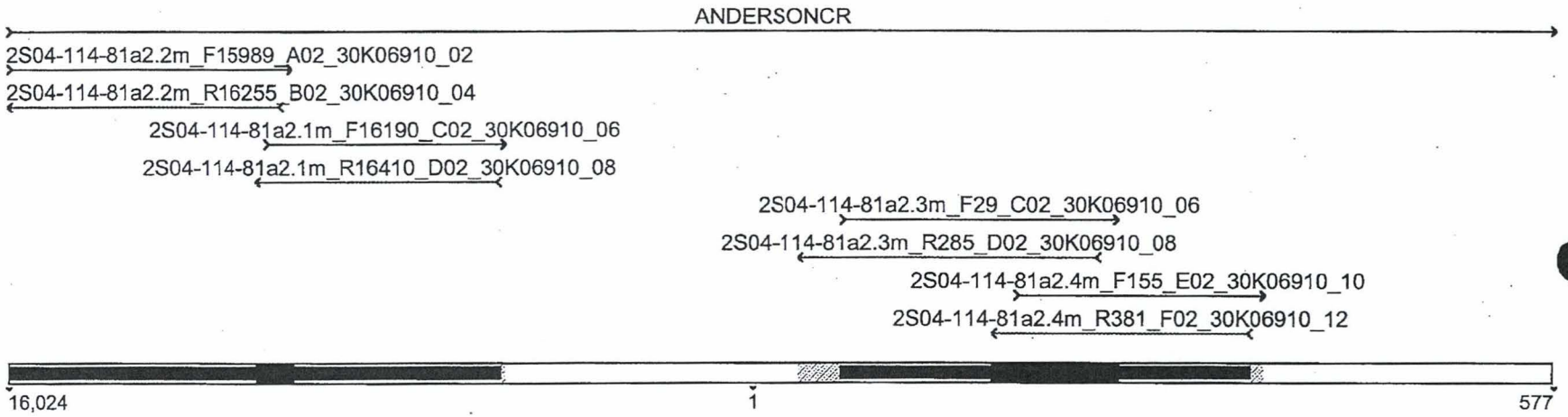
Confirmed Range: 16024-16389;64-361

A 6/15/11

ARB 06/15/11

80

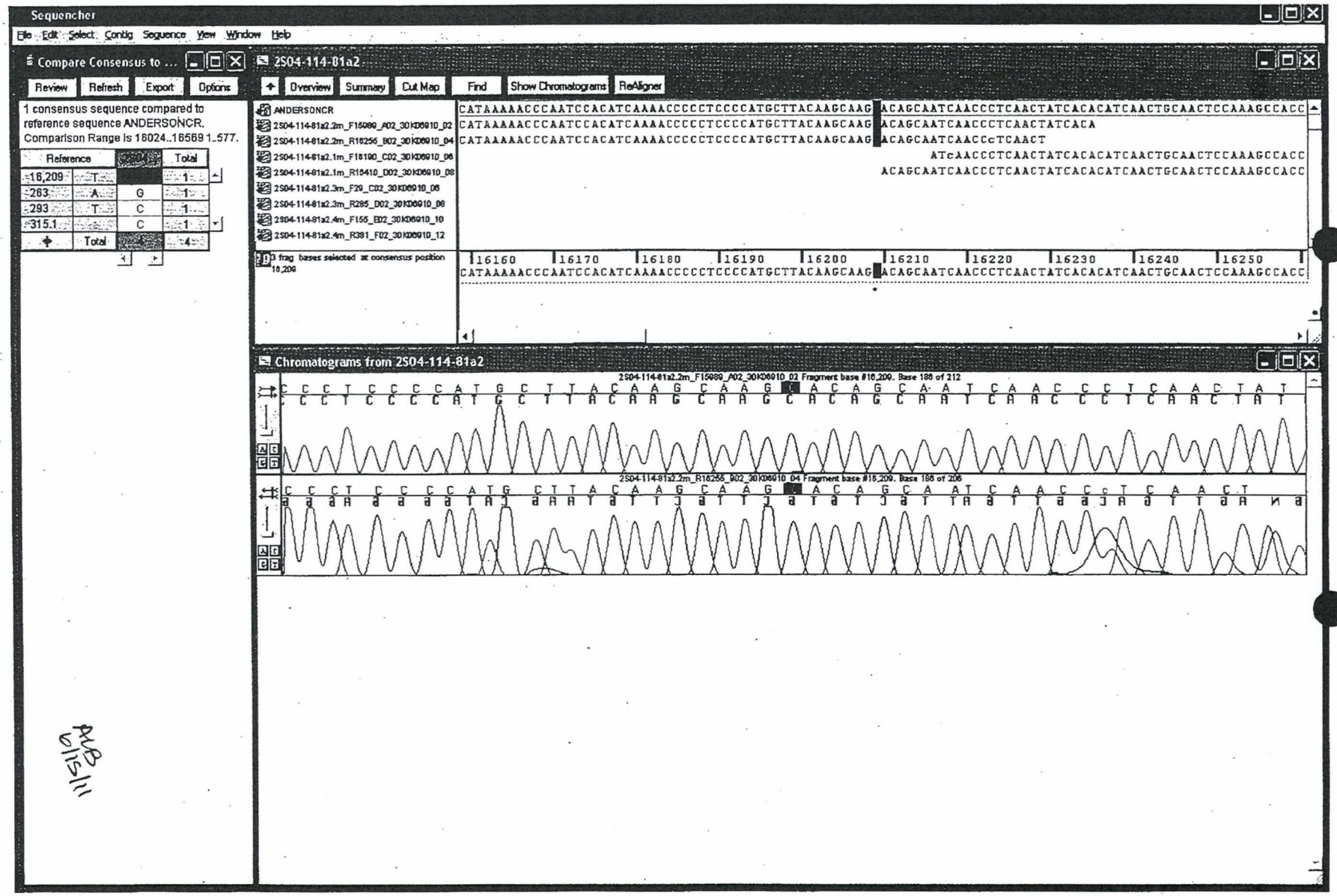
2S04-114-81a2
Sequencher(tm) "2S04-114.SPF"



ANB 6/15/11

79

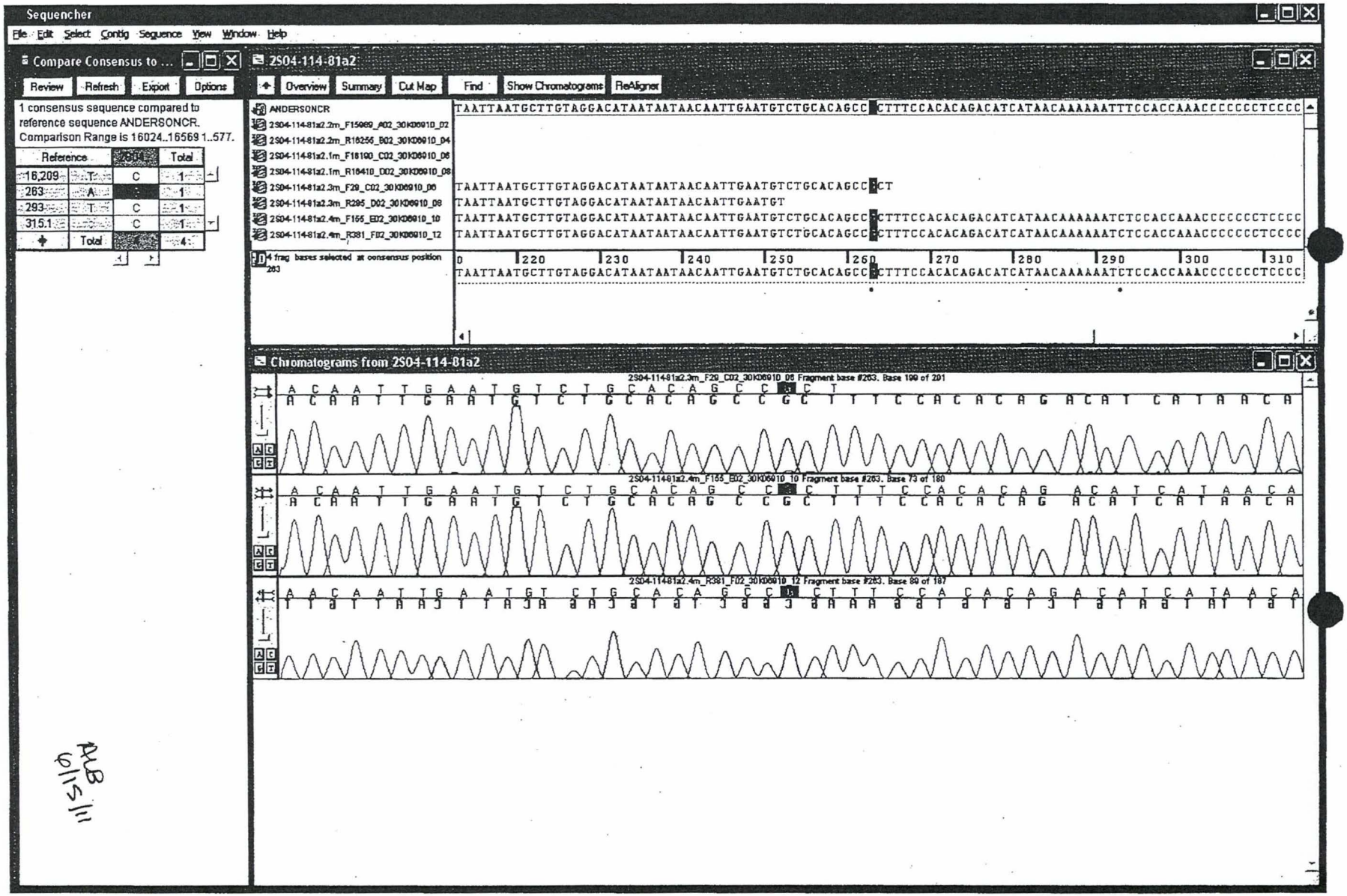
2S04-114-81a2
6/6/11 ALB



ALB 6/15/11

2L

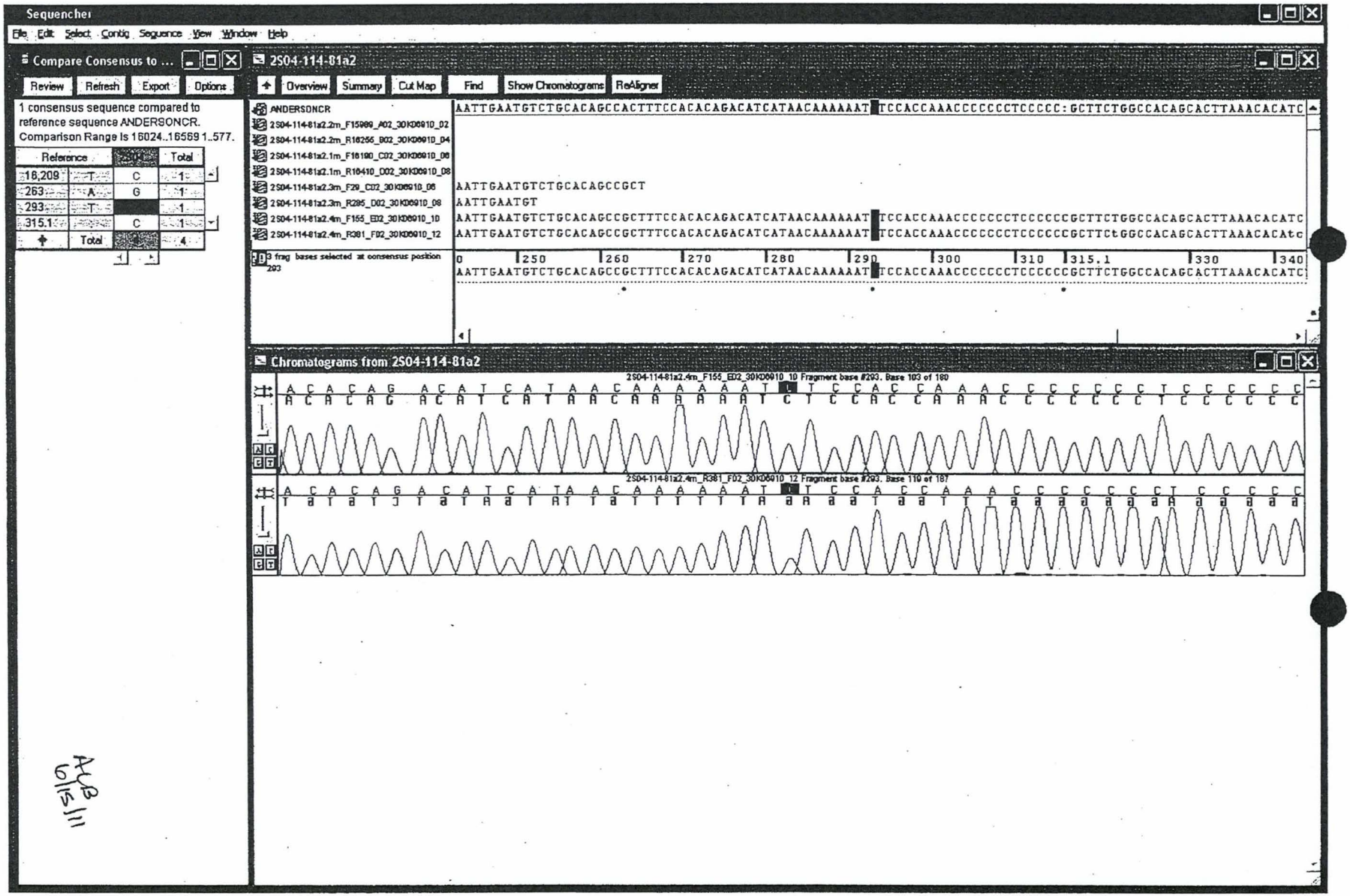
2S04-114-81a2
6/6/11 ALB



ALB 6/15/11

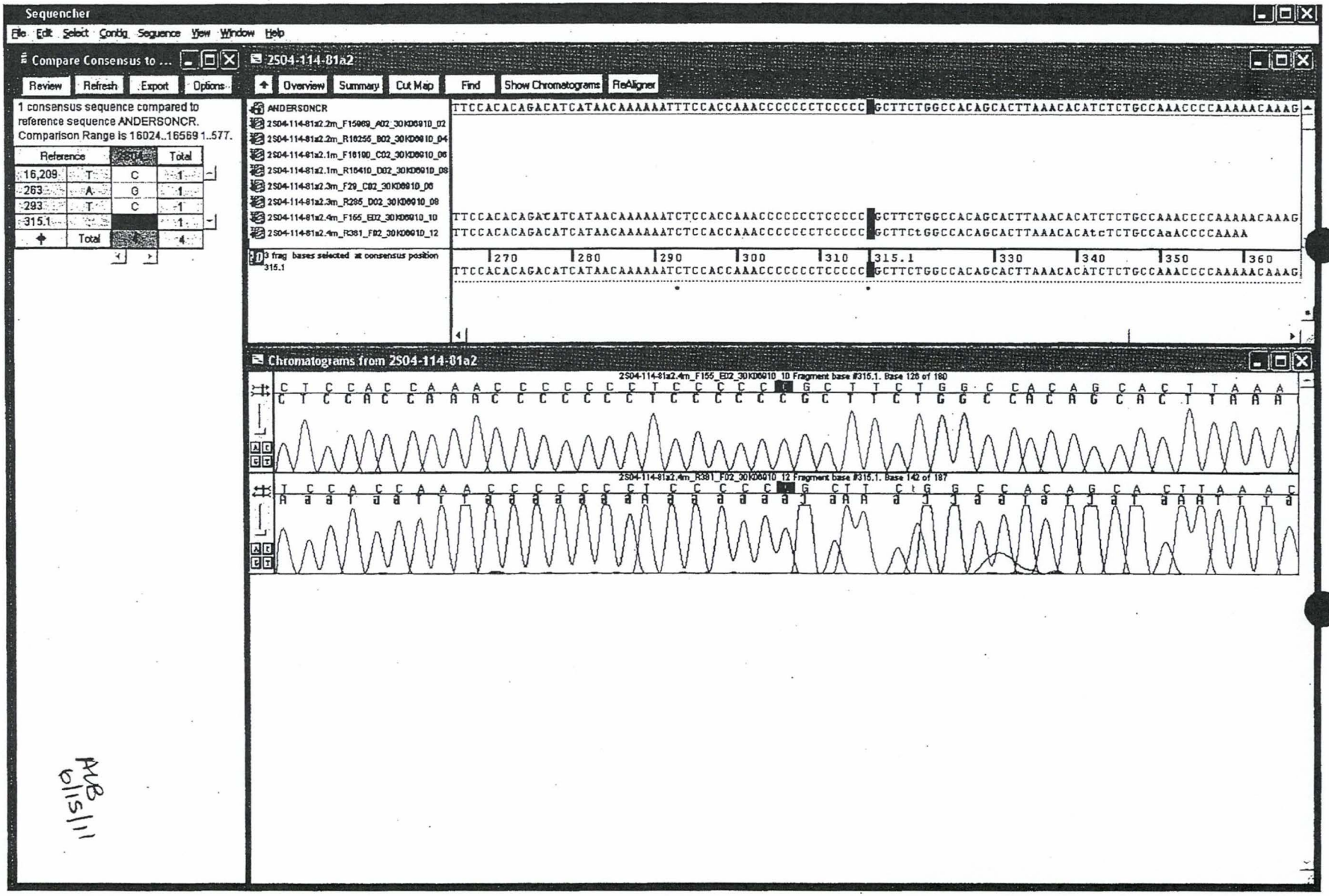
LL

2S04-114-81a2
6/6/11 ALB



ALB 6/15/11

2S04-114-81a2
6/6/11 ALB



ALB
6/15/11

75

Date: June 17, 2011
Project Name: 2S04-114_ALB.SPF
Contig Name: 2S04-114-112a1
Compare Consensus to Reference ANDERSONCR
Comparison Range [16024..16569 1..577]

Sequence Name	Comparison Range Coverage
2S04-114-112a1	[16024..16390 37..254]

Position		ANDERSONCR	2S04-114-112a1	Number of Variants
Coverage Range		[16024..16569 1..577]	Incomplete	
16,294	C	N	1	
16,296	C	N	1	
16,304	T	N	1	
16,311	T	N	1	
73	A	G	1	
Total Differences			5	

Data not reported due to disconcordance between amplifications (disconcordant positions designated by "N").

ALB 6/17/11

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2S04-114-112a1_ARB.txt

Date: June 17, 2011
Project Name: 2S04-114_ARB.SPF
Contig Name: 2S04-114-112a1_ARB
Compare Consensus to Reference ANDERSONCR
Comparison Range [16024..16569 1..577]

Sequence Name	Comparison Range Coverage
2S04-114-112a1_ARB	[16024..16390 35..249]

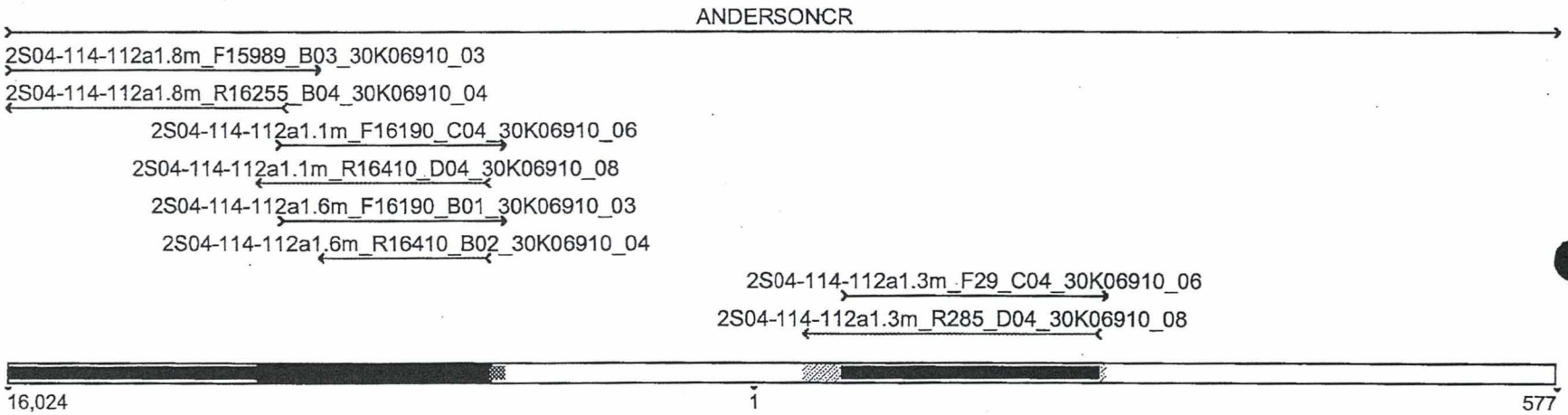
Position		ANDERSONCR	2S04-114-112a1_ARB	Number of Variants
Coverage Range		[16024..16569 1..577]	Incomplete	
16,294	C	N	1	
16,296	C	N	1	
16,304	T	N	1	
16,311	T	N	1	
73	A	G	1	
228	G	N	1	
Total Differences			6	

Data Not Reported Due to Disconcordance Between Amplifications

MB Oct 11

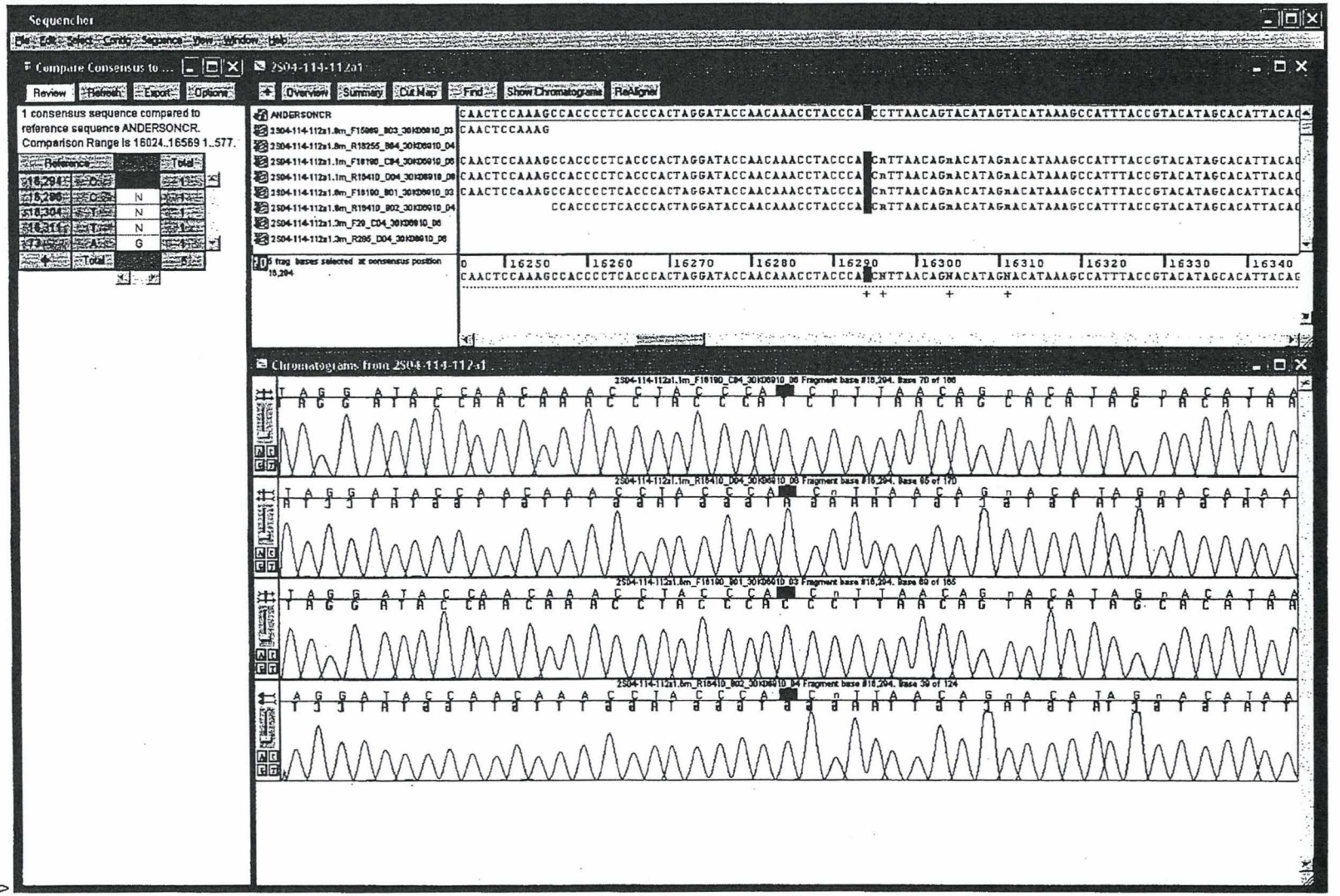
73

2S04-114-112a1
Sequencher(tm) "2S04-114_ALB.SPF"



Friday, June 17, 2011 Page 1 of 1

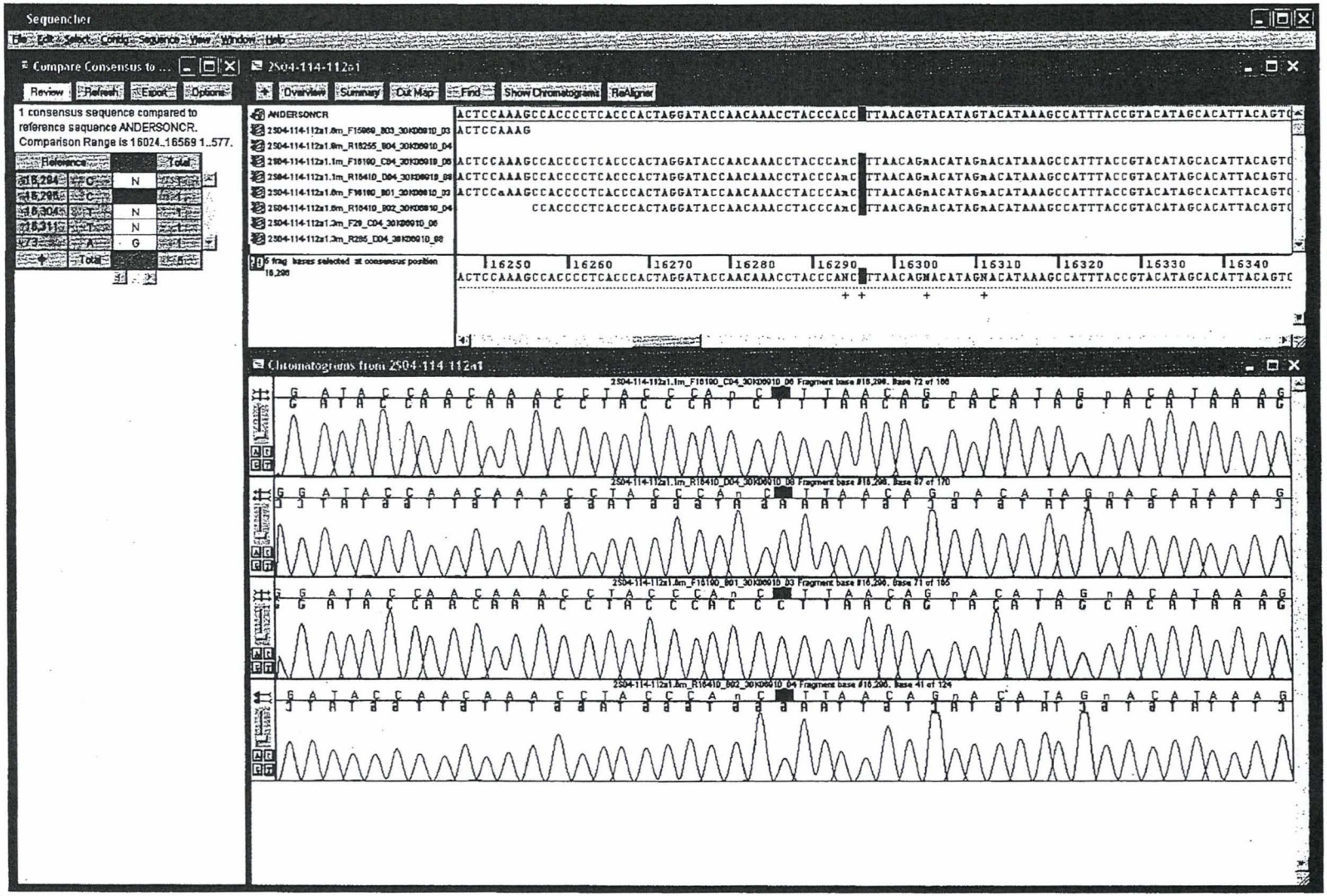
2S04-114-112a1
6/16/11 ALB



ALB 6/17/11

71

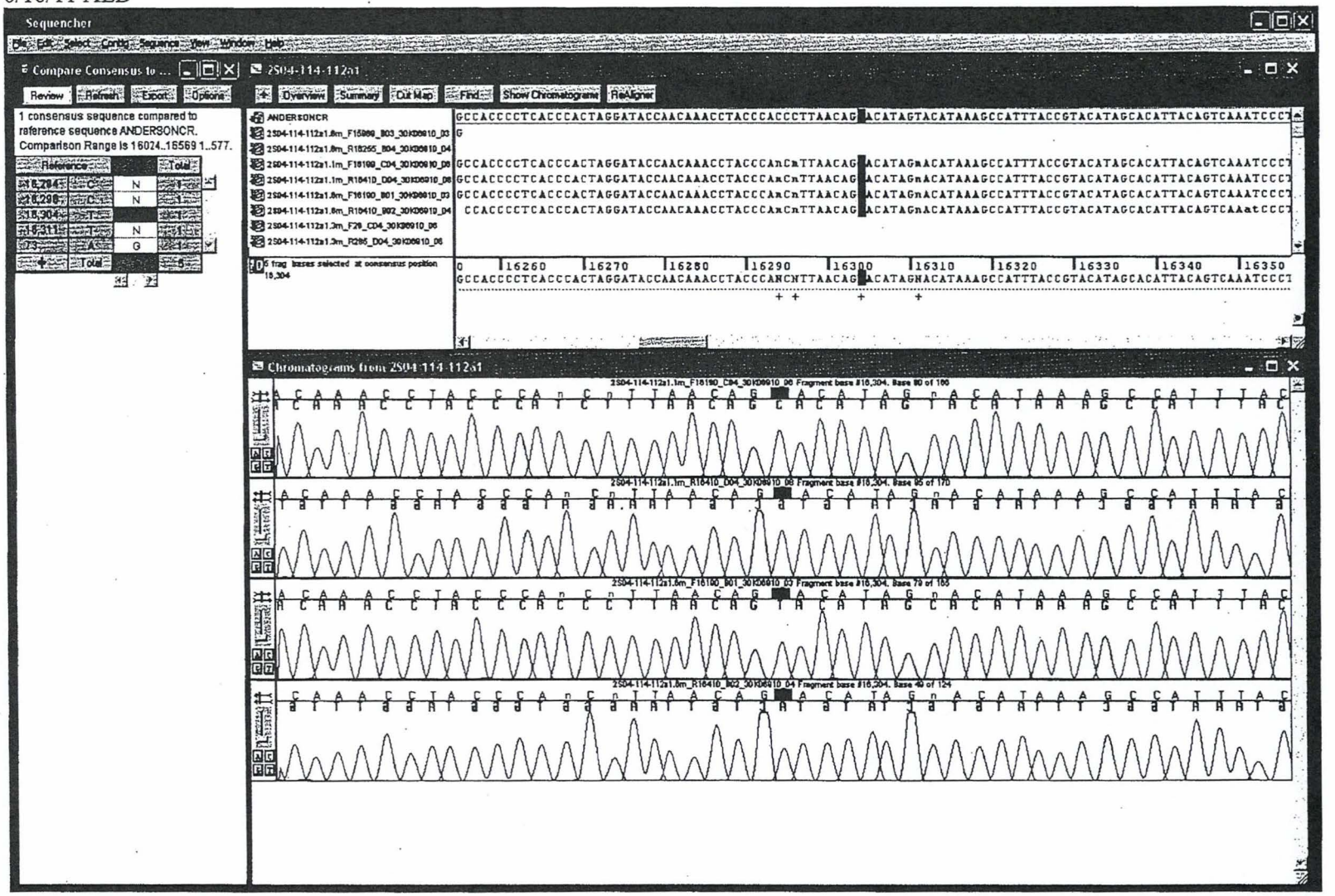
2S04-114-112a1
6/16/11 ALB



ALB
6/17/11

70.

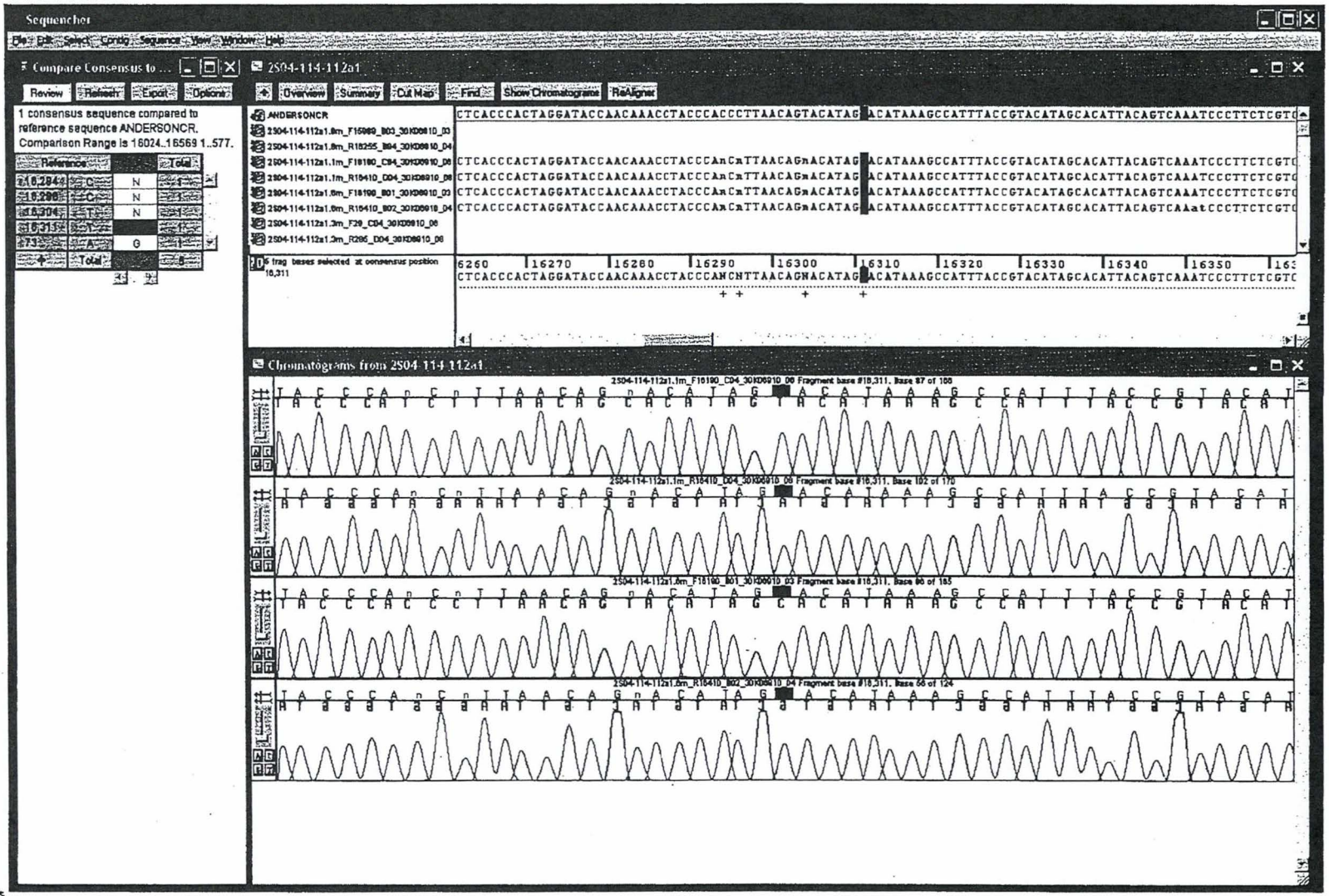
2S04-114-112a1
6/16/11 ALB



ALB
6/17/11

69

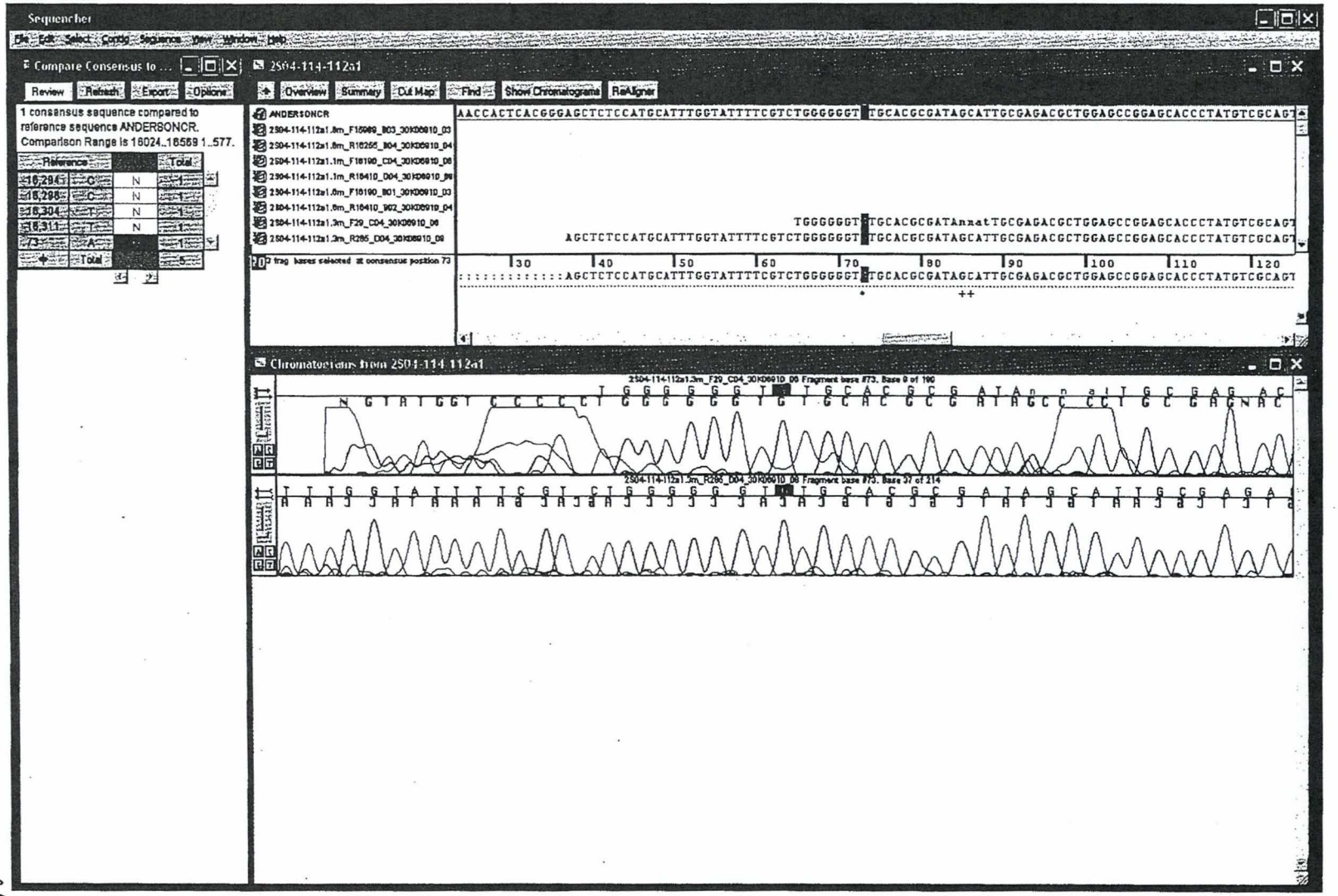
2S04-114-112a1
6/16/11 ALB



AJB 6/17/11

68

2S04-114-112a1
6/16/11 ALB



ALB 6/17/11

67

Date: June 15, 2011
Project Name: 2S04-114_ALB.SPF
Contig Name: 2S04-114-113a1
Compare Consensus to Reference ANDERSONCR
Comparison Range [16024..16569 1..577]

Sequence Name	Comparison Range Coverage
2S04-114-113a1	[16024..16390 35..361]

Position		ANDERSONCR	2S04-114-113a1	Number of Variants
Coverage Range		[16024..16569 1..577]		Incomplete
16,126	T	C	1	
16,294	C	T	1	
16,296	C	T	1	
16,304	T	C	1	
73	A	G	1	
263	A	G	1	
309.1	:	C	1	
315.1	:	C	1	
Total Differences			8	

Confirmed Range: 16024-16379, 49-360

ALB
6/15/11

66

Date: June 15, 2011
Project Name: 2S04-114_ARB.SPF
Contig Name: 2S04-114-113a1_ARB
Compare Consensus to Reference ANDERSONCR
Comparison Range [16024..16569 1..577]

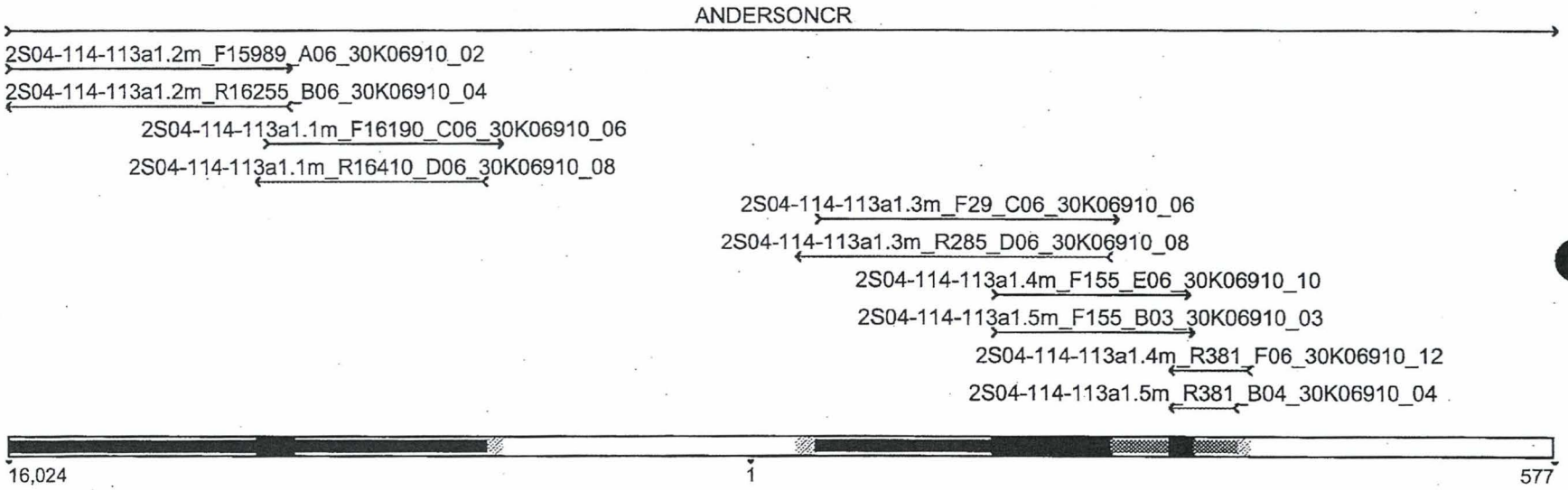
Sequence Name	Comparison Range Coverage
2S04-114-113a1_ARB	[16024..16390 35..360]

Position	ANDERSONCR	2S04-114-113a1_ARB	Number of Variants
Coverage Range	[16024..16569 1..577]	Incomplete	
16,126	T	C	1
16,294	C	T	1
16,296	C	T	1
16,304	T	C	1
73	A	G	1
263	A	G	1
309.1	:	C	1
315.1	:	C	1
Total Differences		8	

Confirmed Range: 16024-16390;49-359

ARB 06/15/11

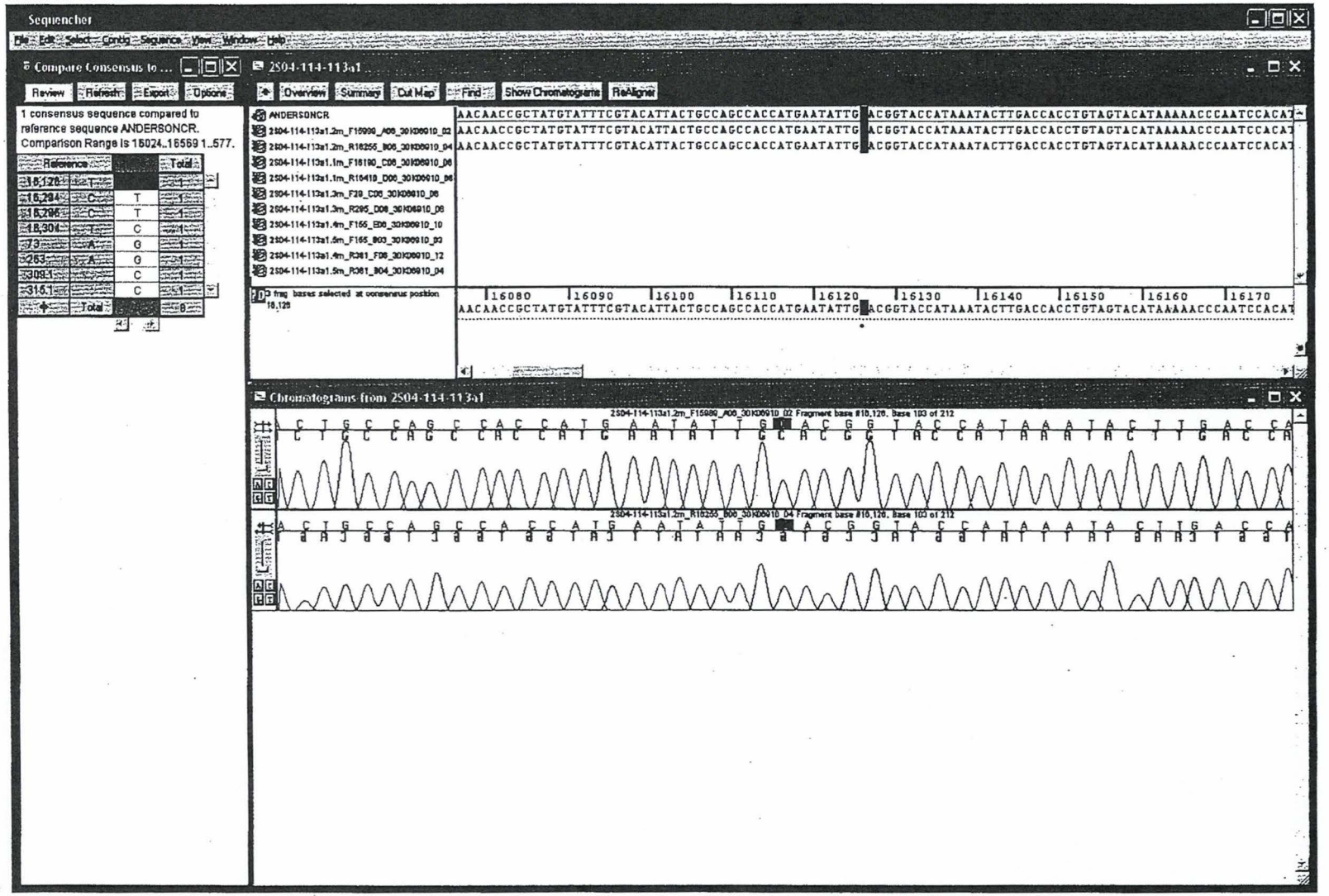
2S04-114-113a1
Sequencher(tm) "2S04-114.SPF"



6/8/11

04

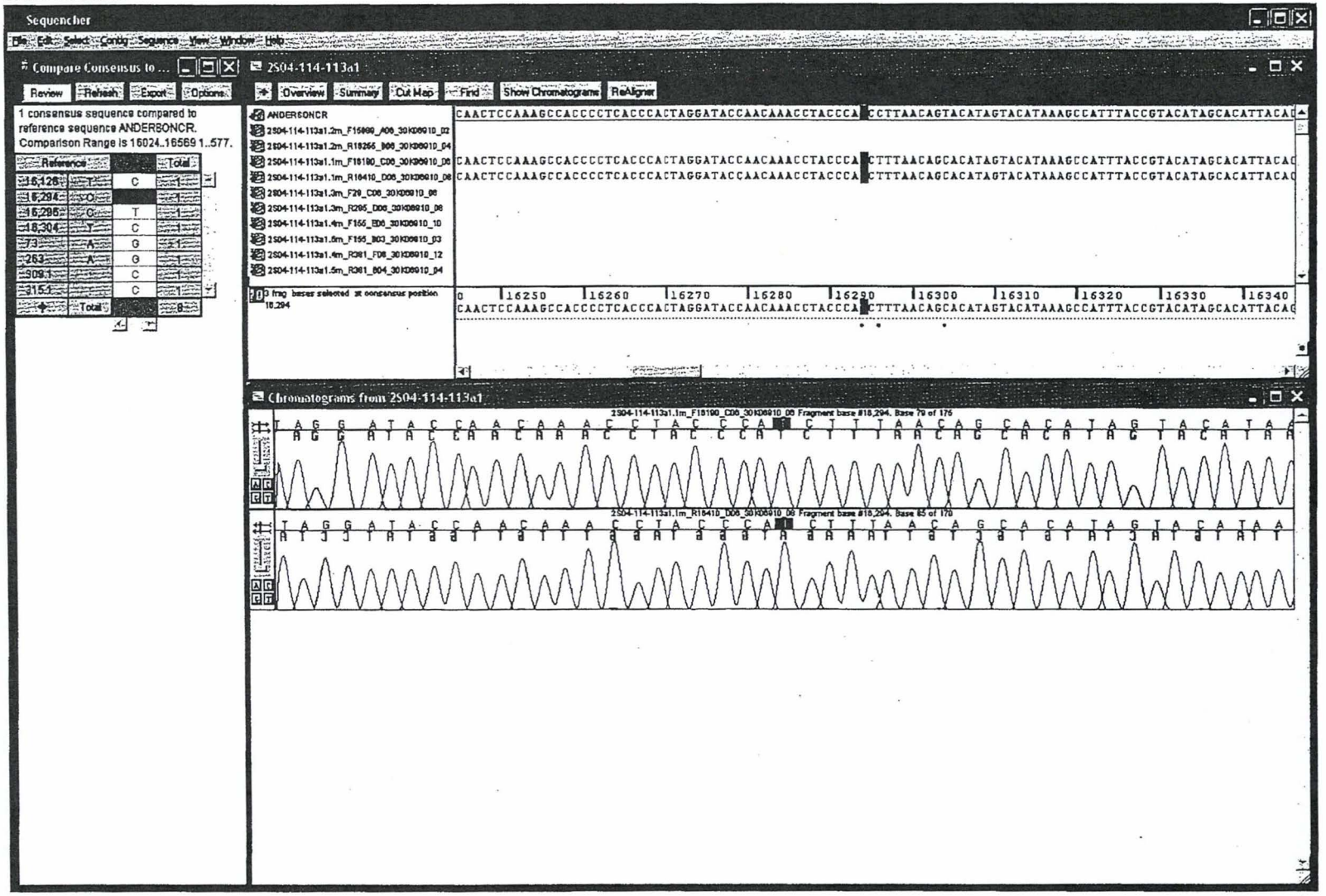
2S04-114-113a1
6/15/11 ALB



ALB 6/15/11

63

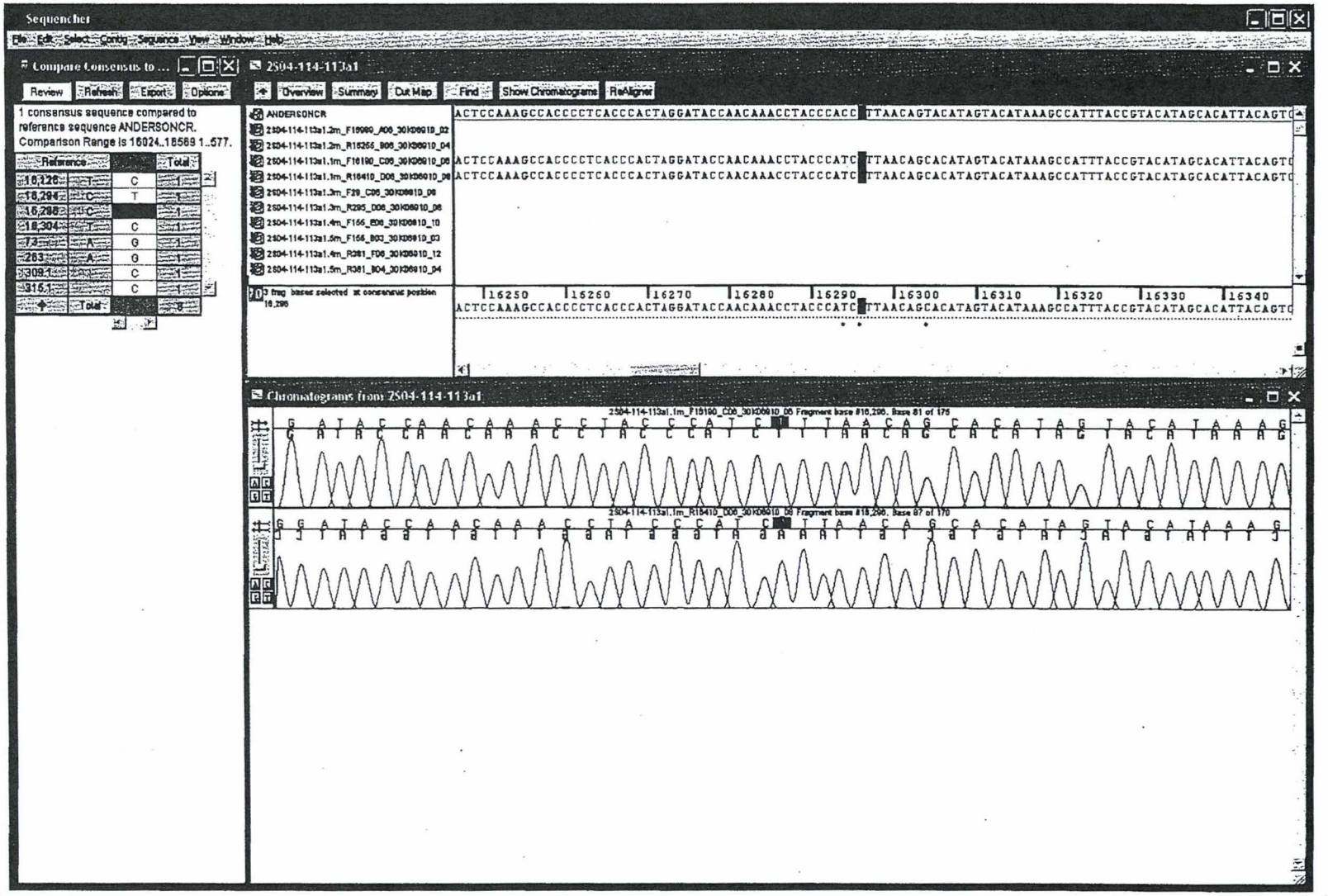
2S04-114-113a1
6/15/11 ALB



ALB 6/15/11

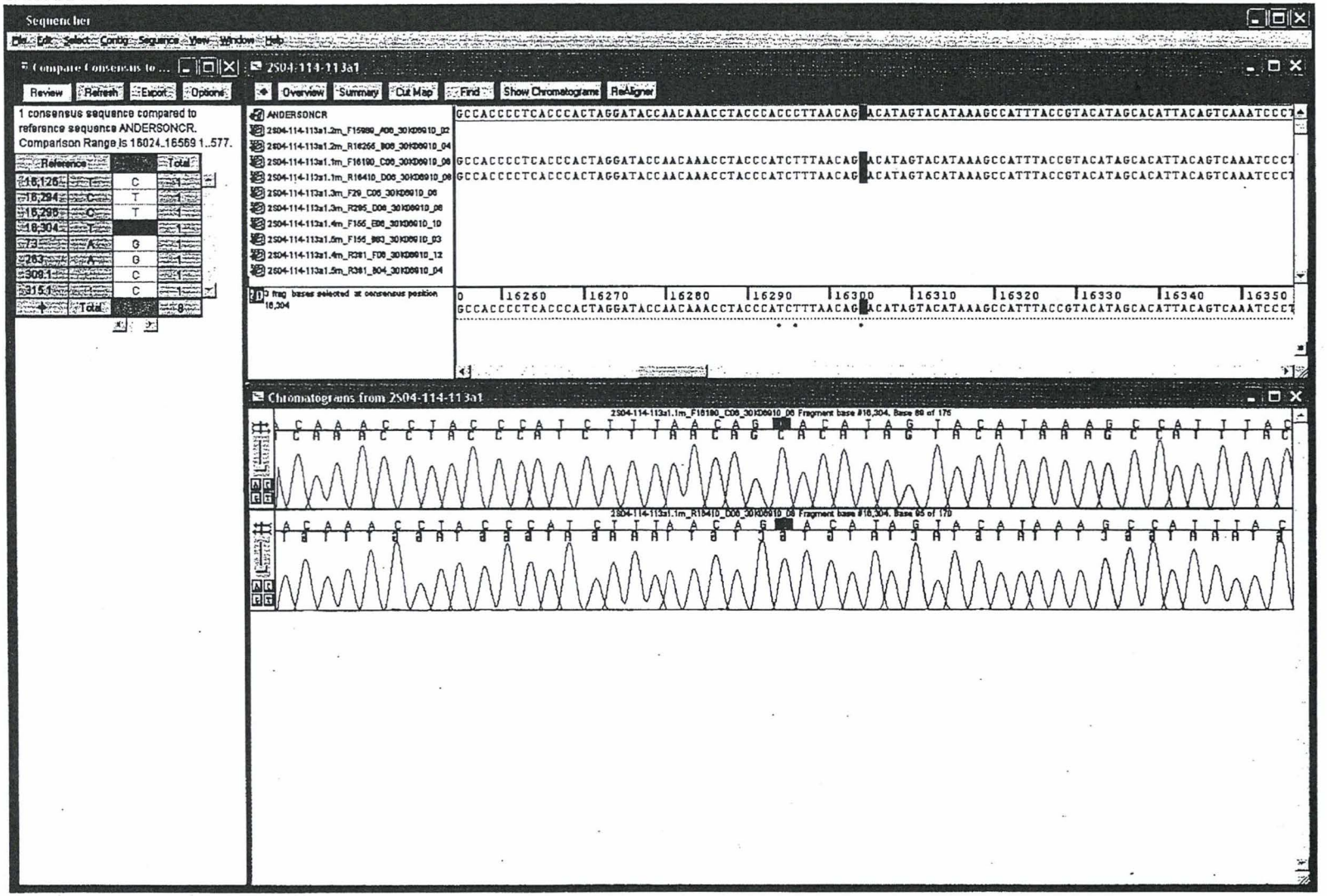
62

2S04-114-113a1
6/15/11 ALB



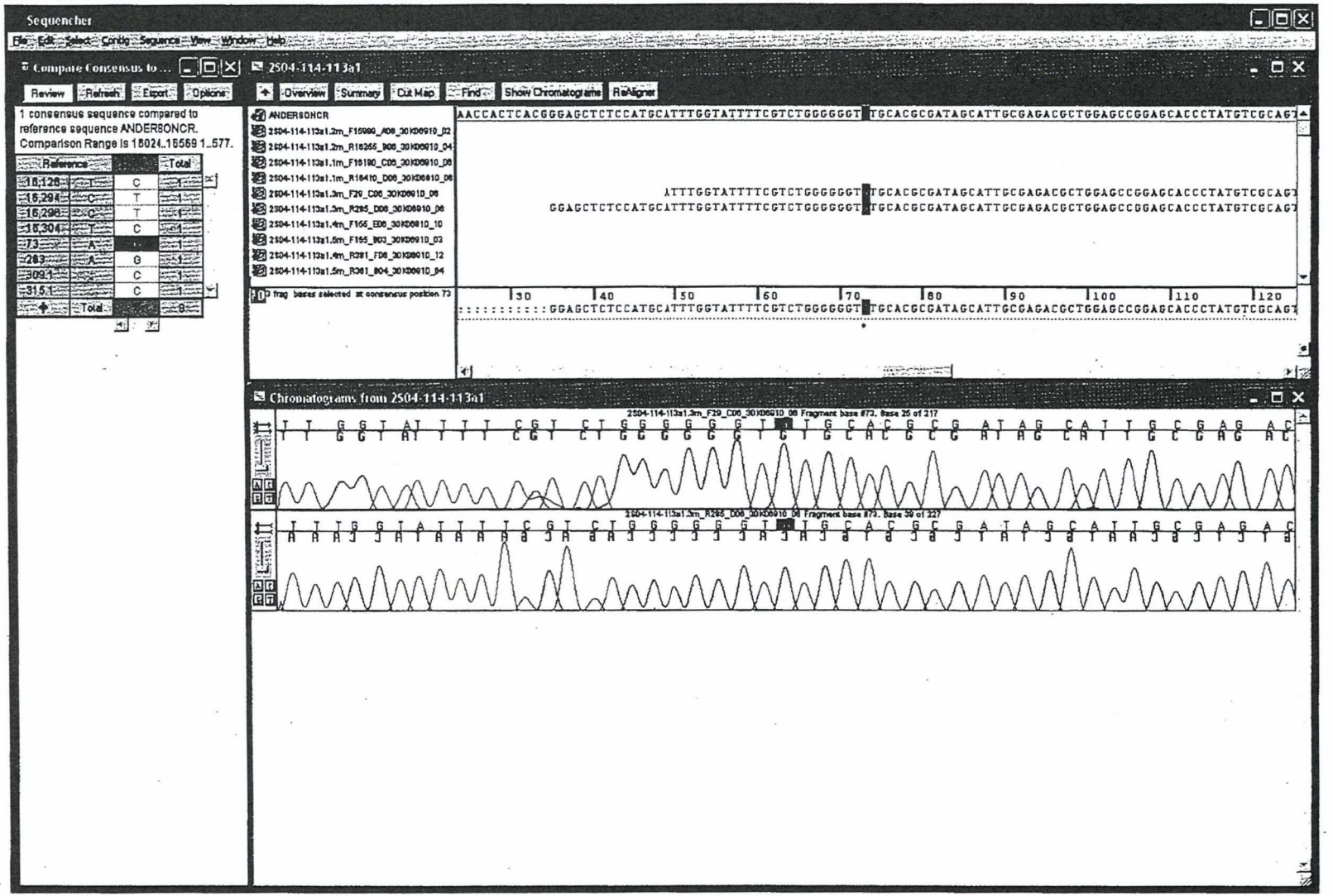
ALB 6/15/11

2S04-114-113a1
6/15/11 ALB



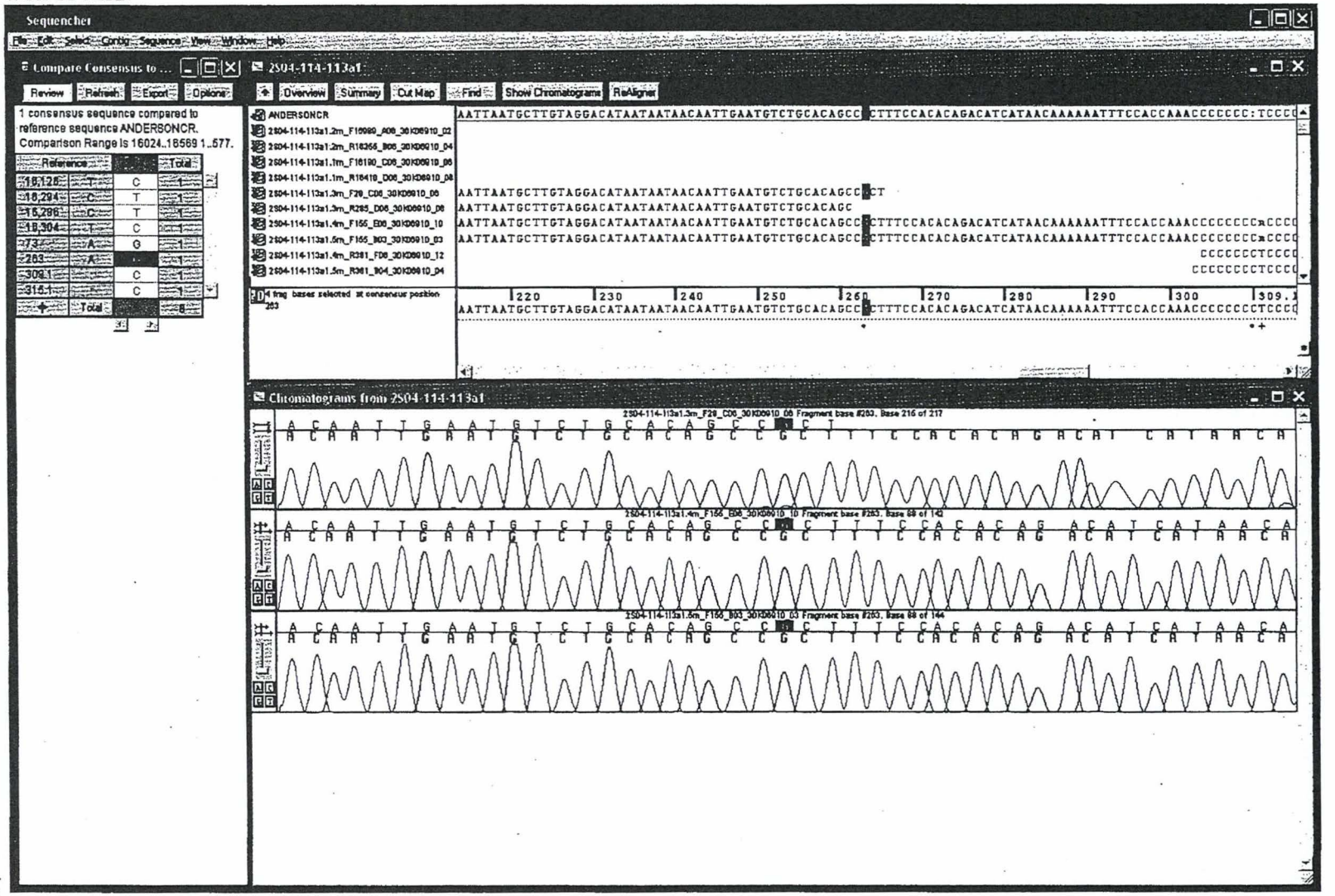
ALB 6/15/11

2S04-114-113a1
6/15/11 ALB



AJB 6/15/11

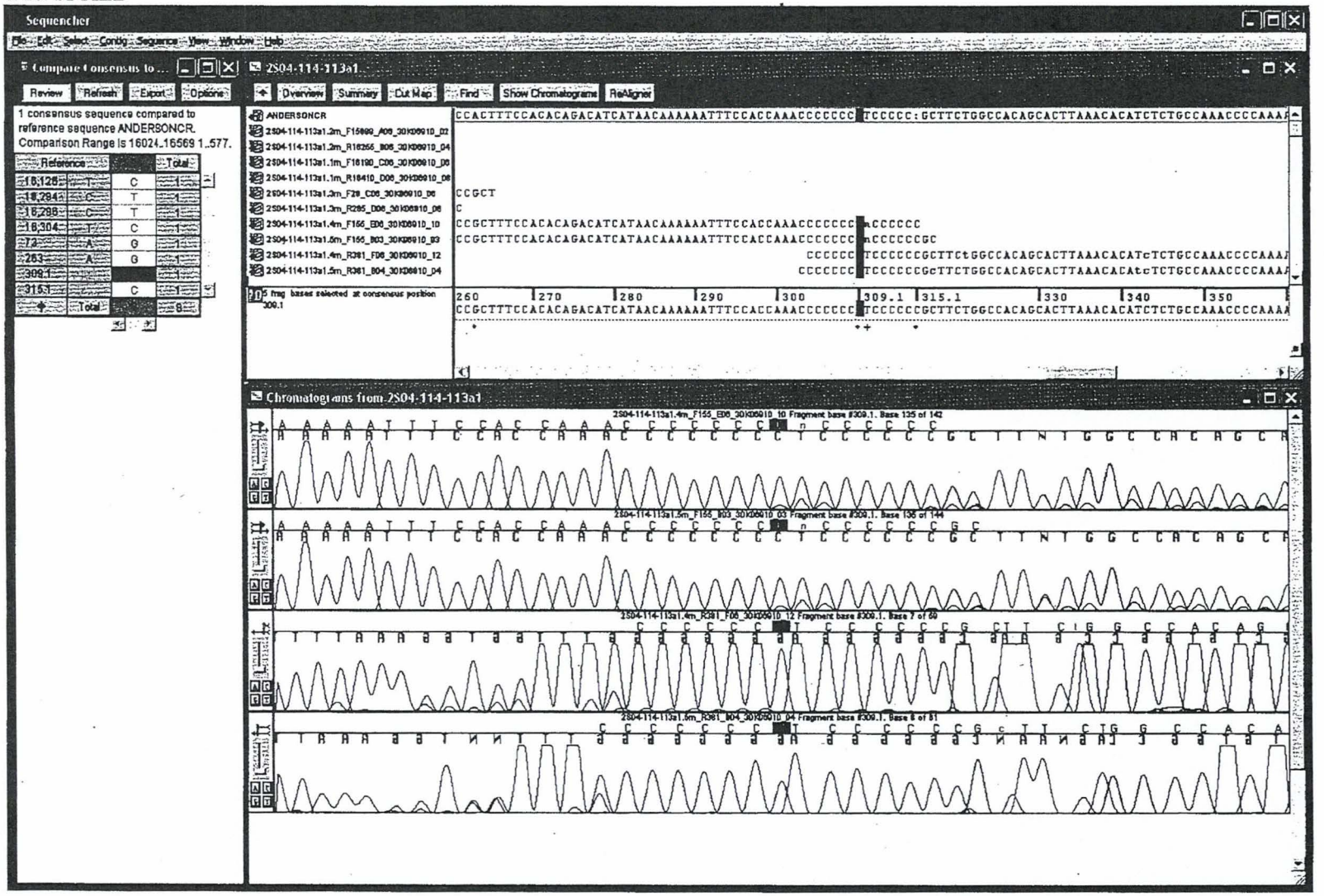
2S04-114-113a1
6/15/11 ALB



ALB 6/15/11

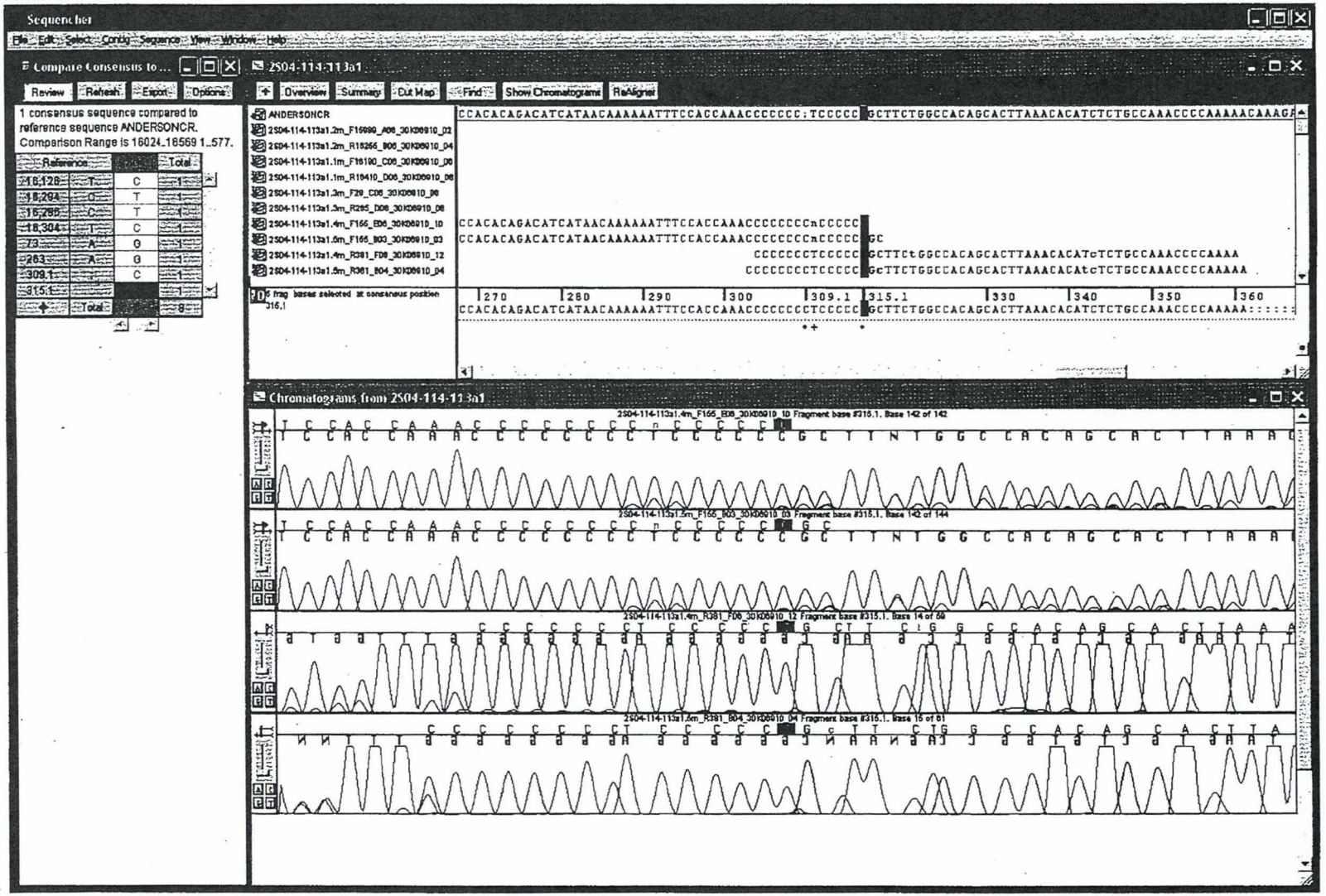
82

2S04-114-113a1
6/15/11 ALB



LS 6/15/11 ALB

2S04-114-113a1
6/15/11 ALB



ALB 6/15/11

56

Date: June 7, 2011
Project Name: 2S04-114.SPF
Contig Name: 2S04-114-114a1
Compare Consensus to Reference ANDERSONCR
Comparison Range [16024..16569 1..577]

Sequence Name	Comparison Range Coverage
2S04-114-114a1	[16024..16390 36..369]

Position		ANDERSONCR	2S04-114-114a1	Number of Variants
Coverage Range		[16024..16569 1..577]		Incomplete
16,069	C	T	1	
16,126	T	C	1	
16,319	G	A	1	
73	A	G	1	
185	G	N	1	(A/G Heteroplasmy)
228	G	A	1	
263	A	G	1	
295	C	T	1	
315.1	:	C	1	
Total Differences			9	

Confirmed Range: 16024-16388, 49-361

ALB 6/15/11

55

Date: June 15, 2011
Project Name: 2S04-114_ARB.SPF
Contig Name: 2S04-114-114a1_ARB
Compare Consensus to Reference ANDERSONCR
Comparison Range [16024..16569 1..577]

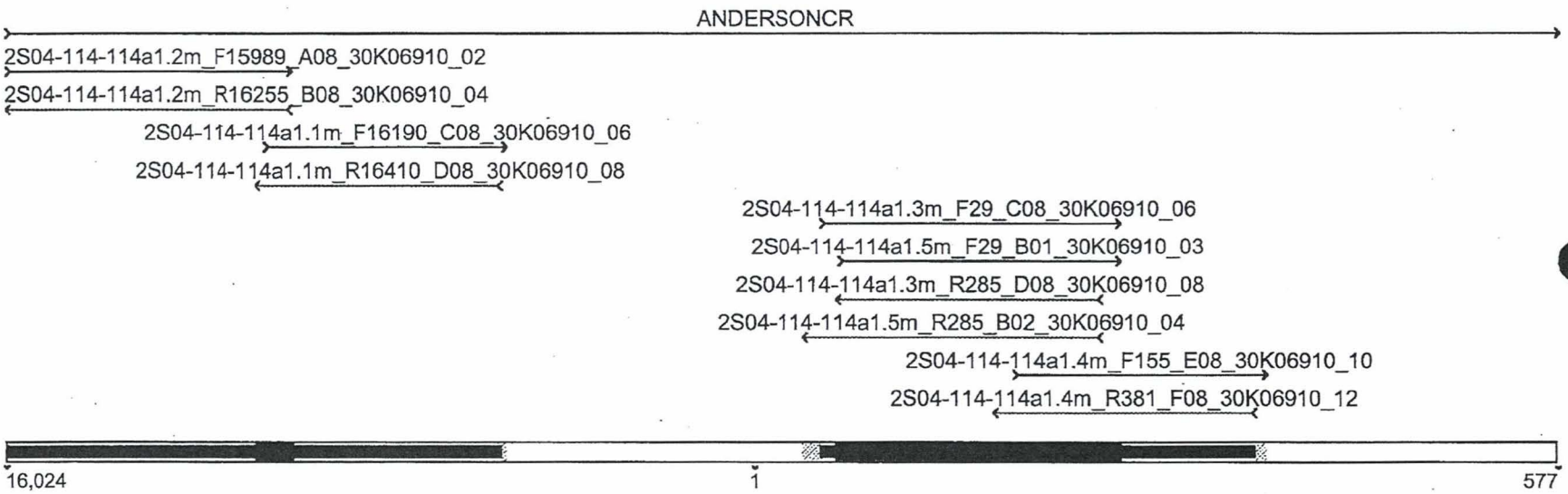
Sequence Name Comparison Range Coverage
2S04-114-114a1_ARB [16024..16390 35..369]

Position Coverage	Range	ANDERSONCR [16024..16569 1..577]	2S04-114-114a1_ARB Incomplete	Number of Variants
16,069	C	T	1	
16,126	T	C	1	
16,319	G	A	1	
73	A	G	1	
185	G	N	1	[A/G Heteroplasmy]
228	G	A	1	
263	A	G	1	
295	C	T	1	
315.1	:	C	1	
Total Differences			9	

Confirmed Range: 16024-16390;35-361

DRB 06/15/11

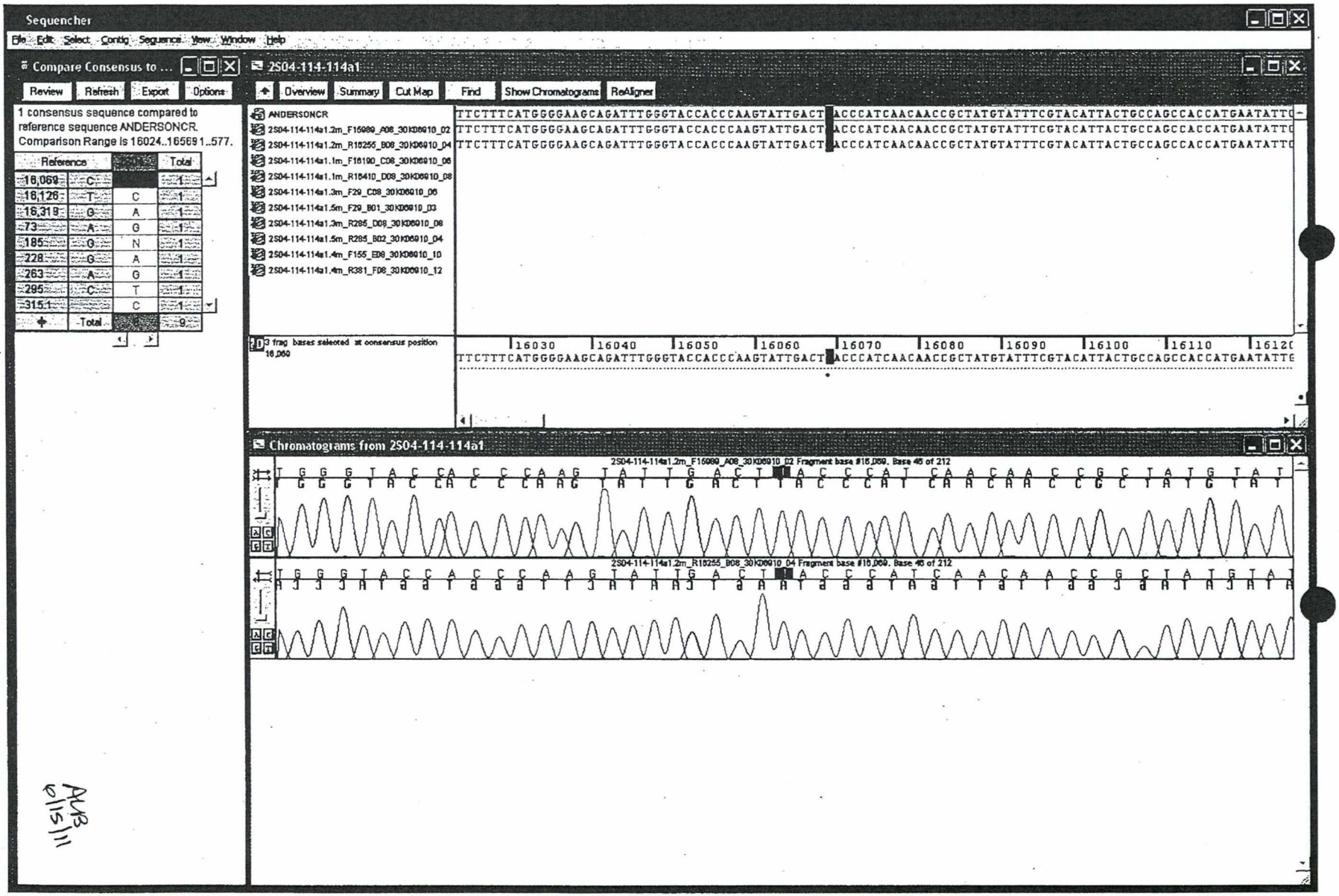
2S04-114-114a1
Sequencher(tm) "2S04-114.SPF"



AMB 6/15/11

53

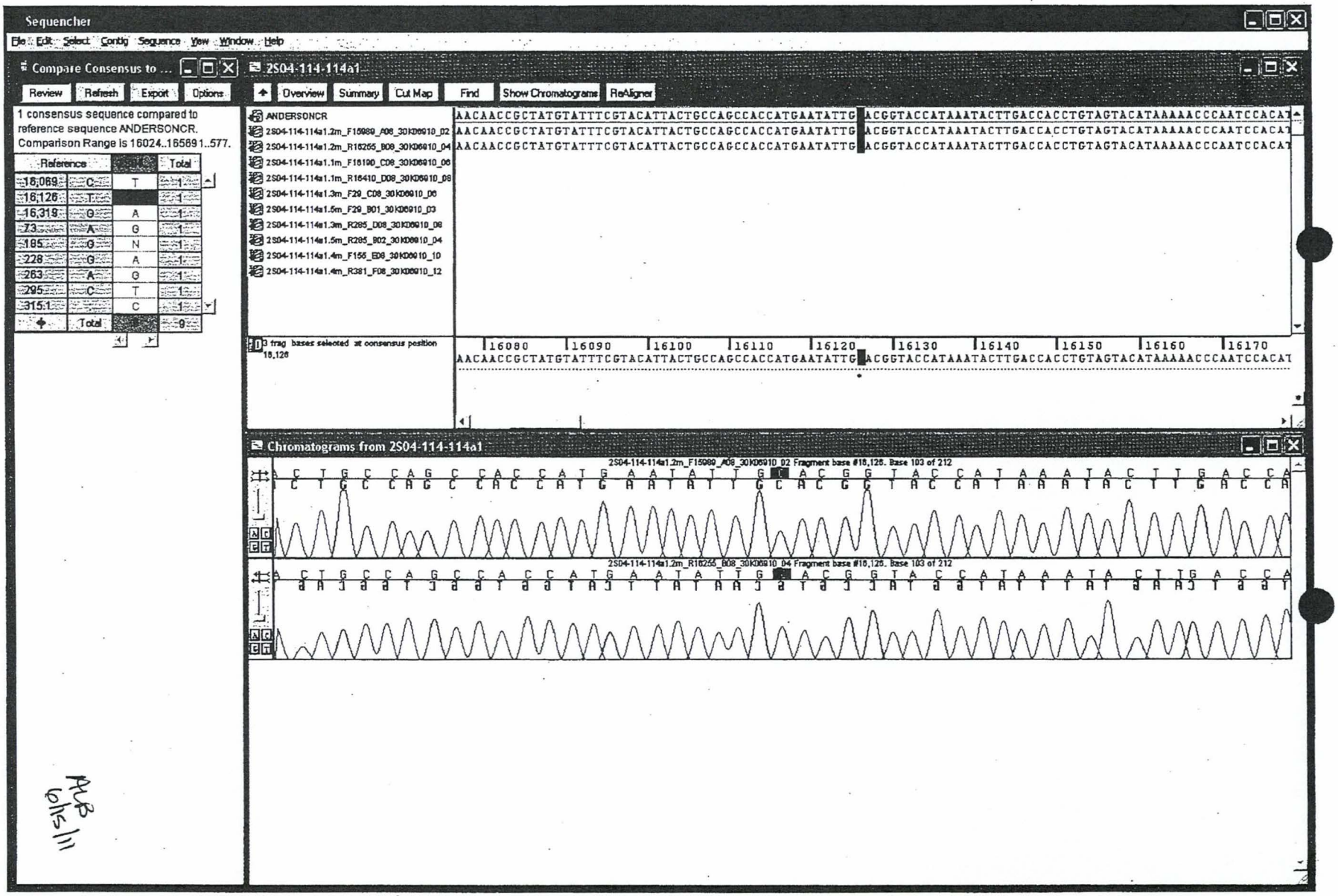
2S04-114-114a1
6/7/11 ALB



AMB 6/15/11

52

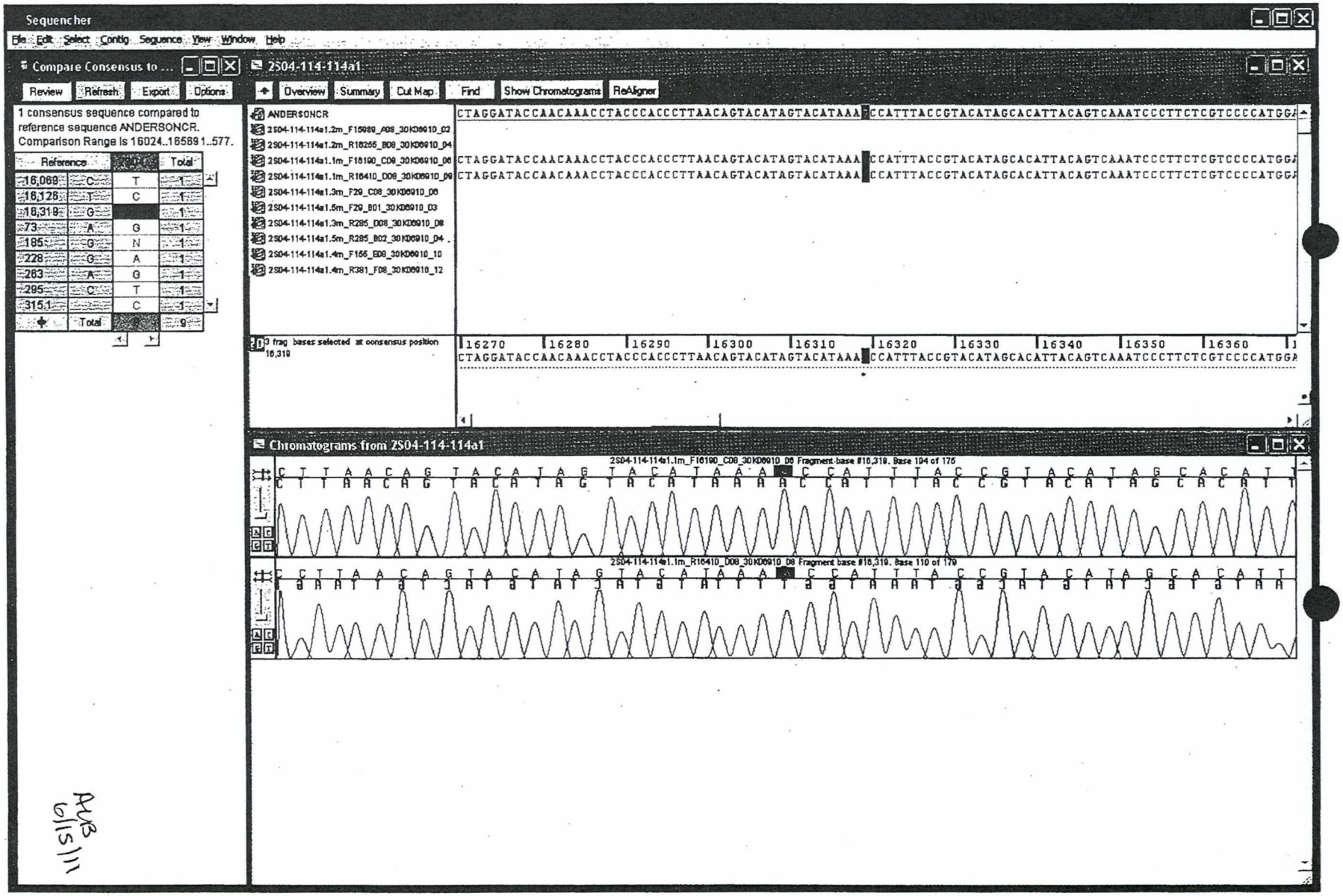
2S04-114-114a1
6/7/11 ALB



ALB 6/15/11

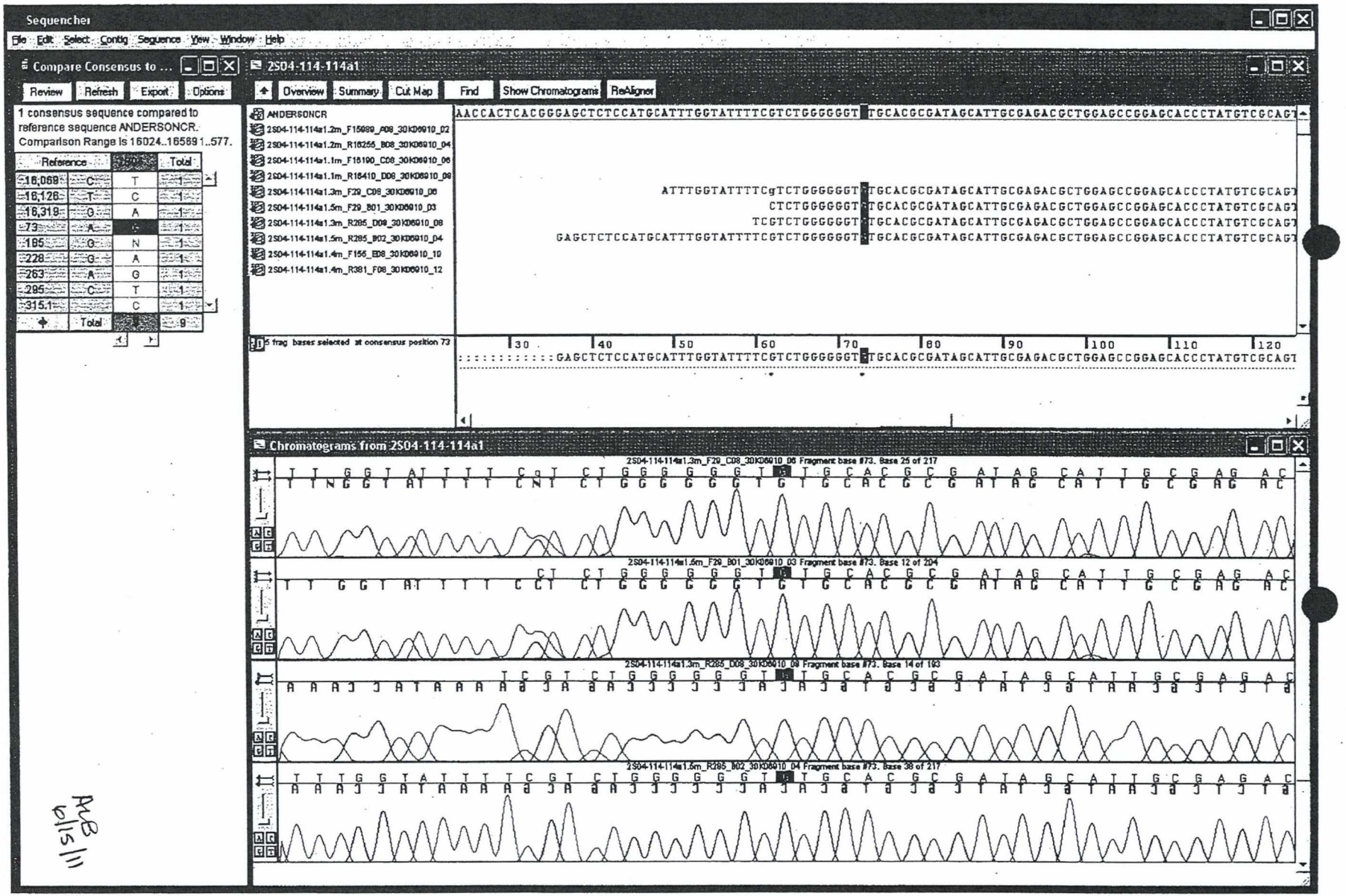
15

2S04-114-114a1
6/7/11 ALB



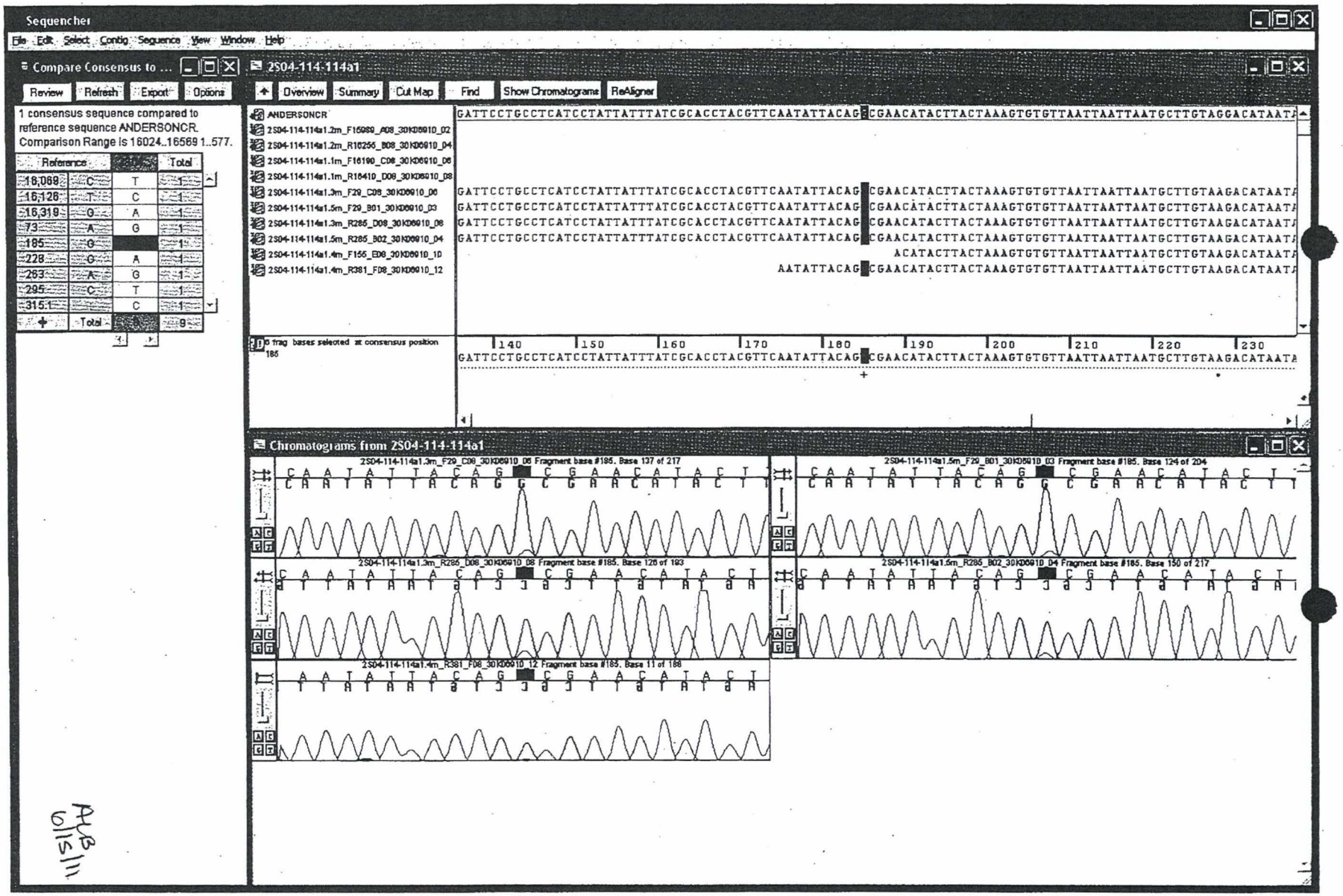
AVB 6/15/11

2S04-114-114a1
6/7/11 ALB



ALB
6/15/11

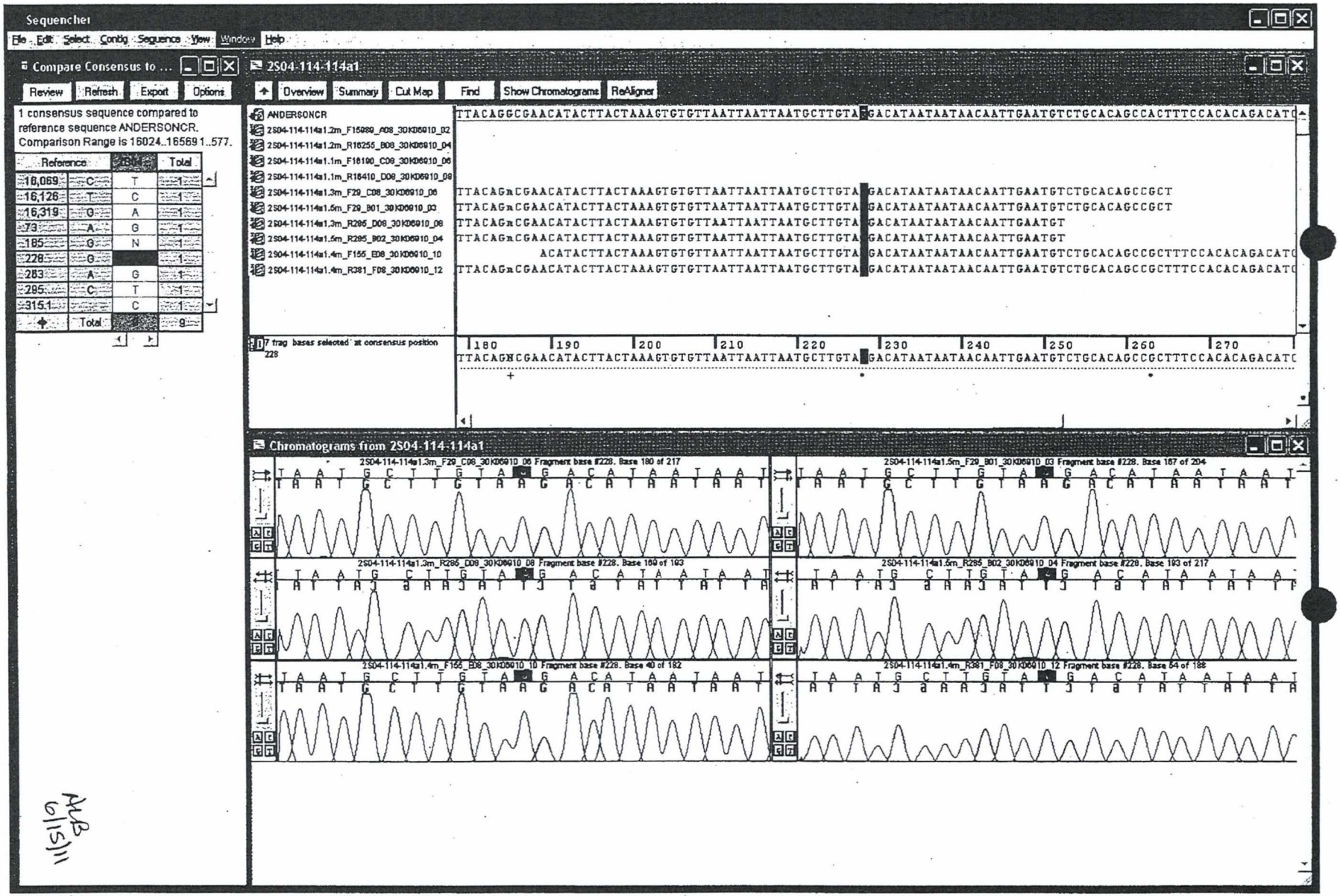
2S04-114-114a1
6/7/11 ALB



ALB 6/15/11

48

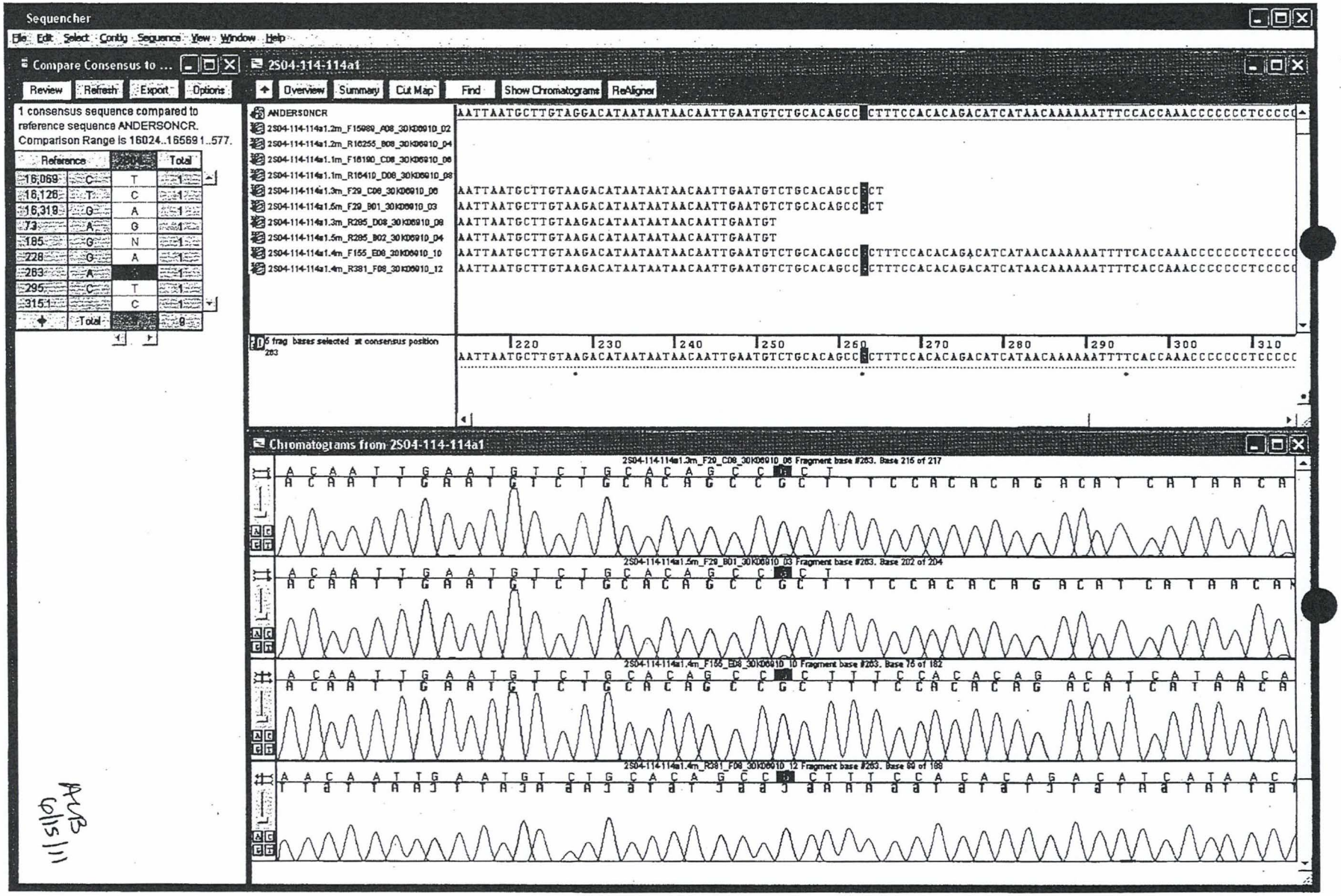
2S04-114-114a1
6/7/11 ALB



ALB 6/15/11

47

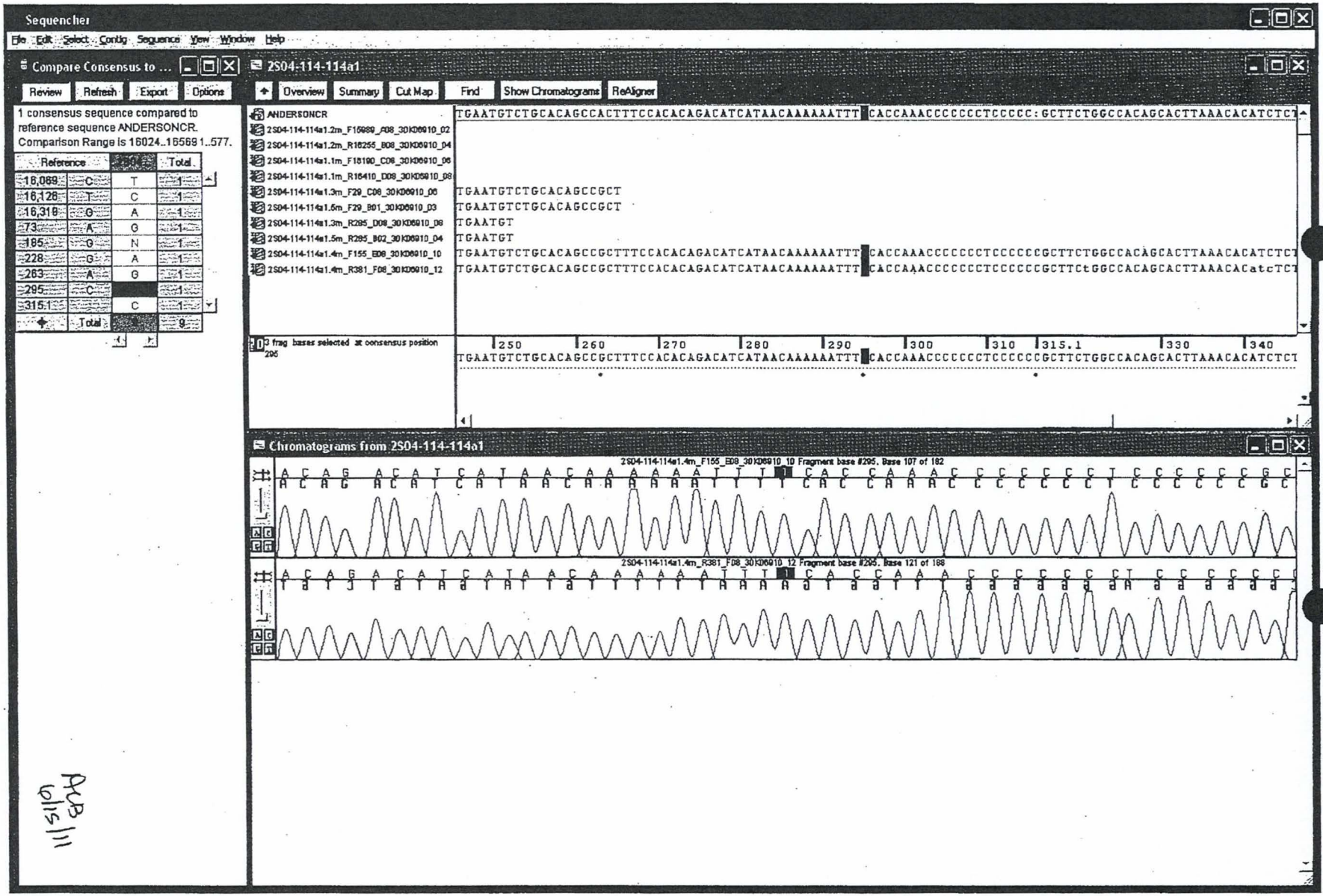
2S04-114-114a1
6/7/11 ALB



ALB 6/15/11

46

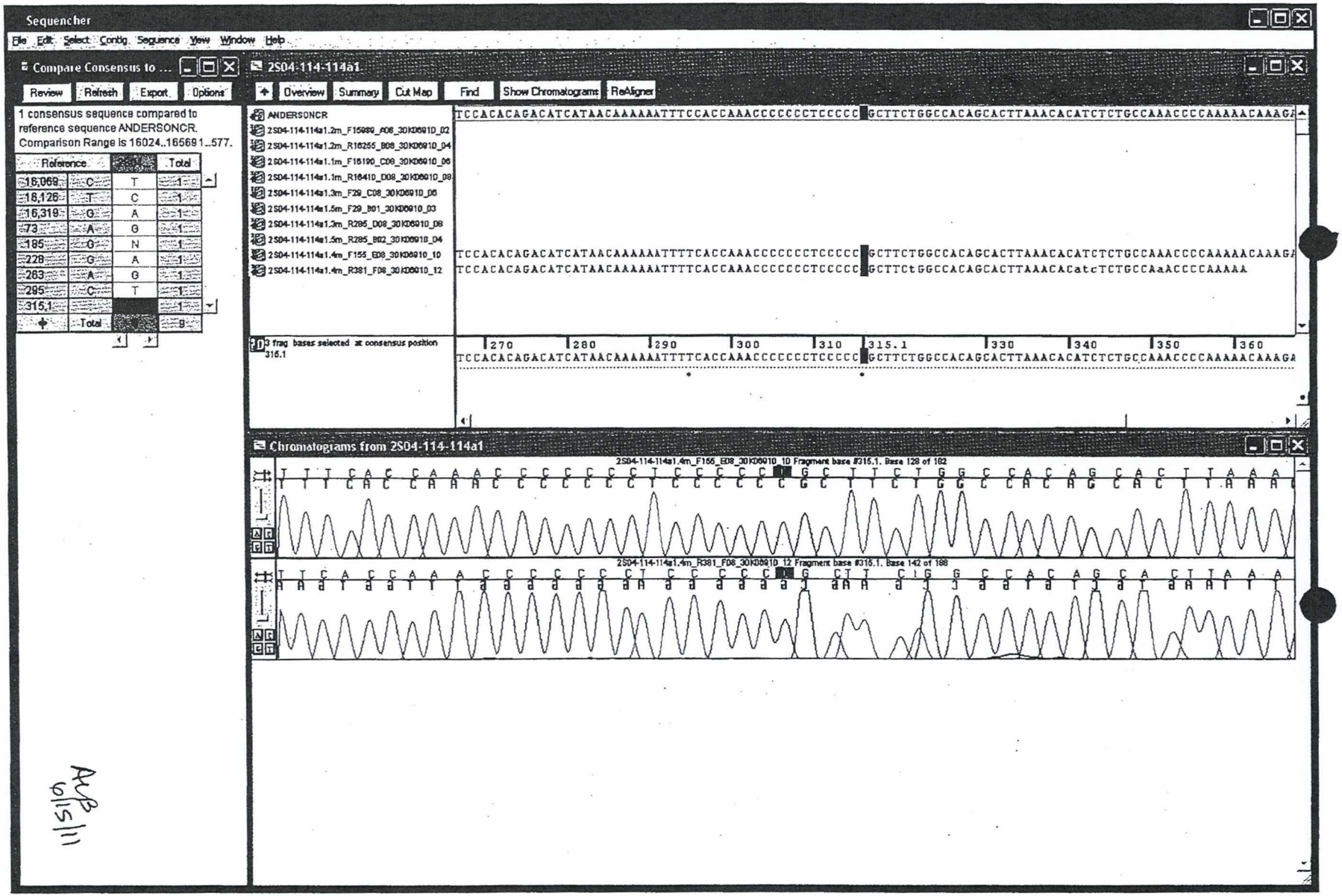
2S04-114-114a1
6/7/11 ALB



ALB
6/15/11

45

2S04-114-114a1
6/7/11 ALB



ALB
6/15/11

44

2S04-114-POS (1m-4m, 6m-9m)_ALB.txt

Date: June 17, 2011
Project Name: 2S04-114_ALB.SPF
Contig Name: 2S04-114-POS (1m-4m, 6m-9m)
Compare Consensus to Reference ANDERSONCR
Comparison Range [16024..16569 1..577]

Sequence Name Comparison Range Coverage
2S04-114-POS (1m-4m, 6m-9m) [16024..16390 35..369]

Position		ANDERSONCR	2S04-114-POS (1m-4m, 6m-9m)	Number of Variants
Coverage Range		[16024..16569 1..577]	Incomplete	
16,069	C	T	1	
16,193	C	T	1	
16,278	C	T	1	
16,362	T	C	1	
73	A	G	1	
150	C	T	1	
152	T	C	1	
263	A	G	1	
295	C	T	1	
315.1	:	C	1	
Total Differences			10	

ALB 6/17/11

43

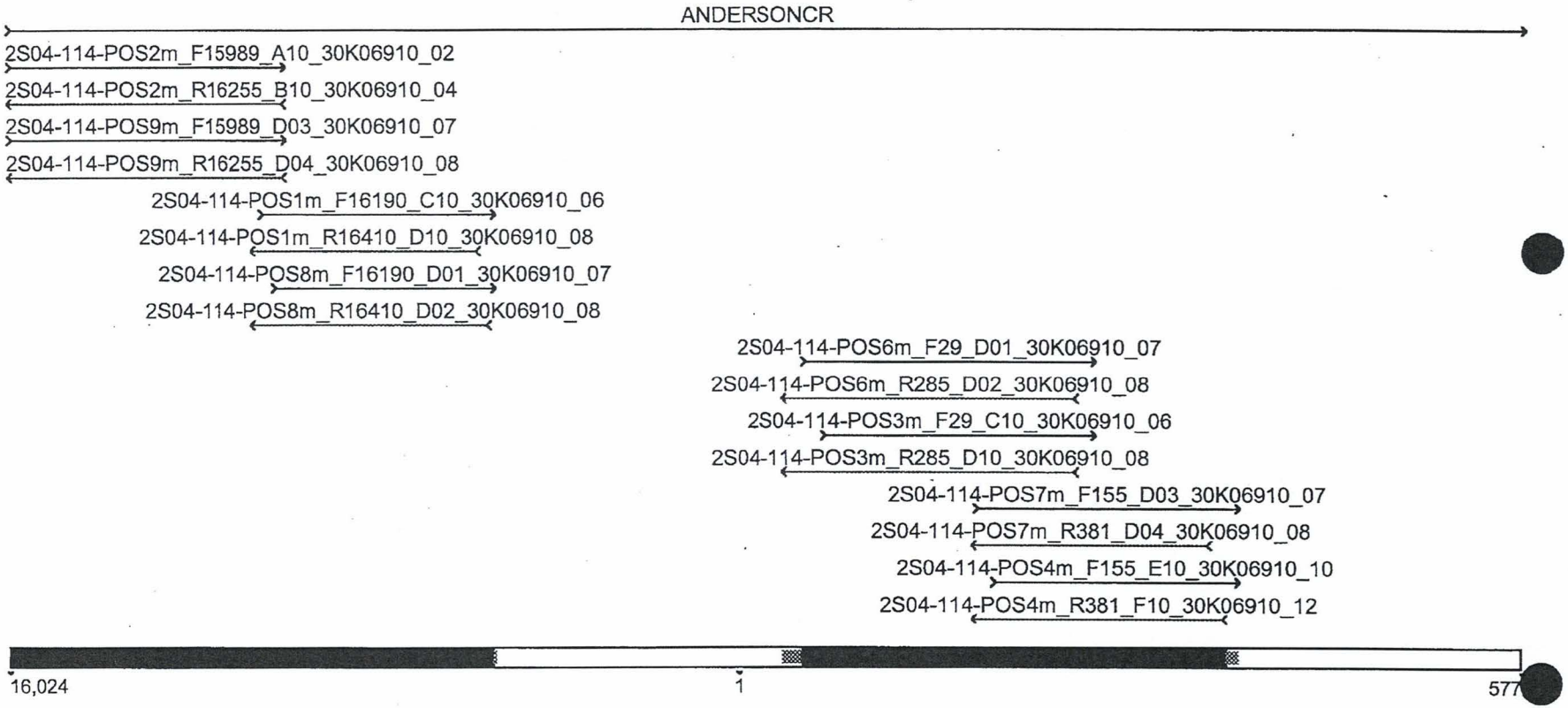
Date: June 17, 2011
Project Name: 2S04-114_ARB.SPF
Contig Name: 2S04-114-POS (1m-4m, 6m-9m)_ARB
Compare Consensus to Reference ANDERSONCR
Comparison Range [16024..16569 1..577]

Sequence Name Comparison Range Coverage
2S04-114-POS (1m-4m, 6m-9m)_ARB [16024..16391 35..369]

Position Coverage	Range	ANDERSONCR [16024..16569 1..577]	2S04-114-POS (1m-4m, 6m-9m)_ARB Incomplete	Number of Variants
16,069	C	T		1
16,193	C	T		1
16,278	C	T		1
16,362	T	C		1
73	A	G		1
150	C	T		1
152	T	C		1
263	A	G		1
295	C	T		1
315.1	:	C		1
Total Differences				10

DRB 06/17/11

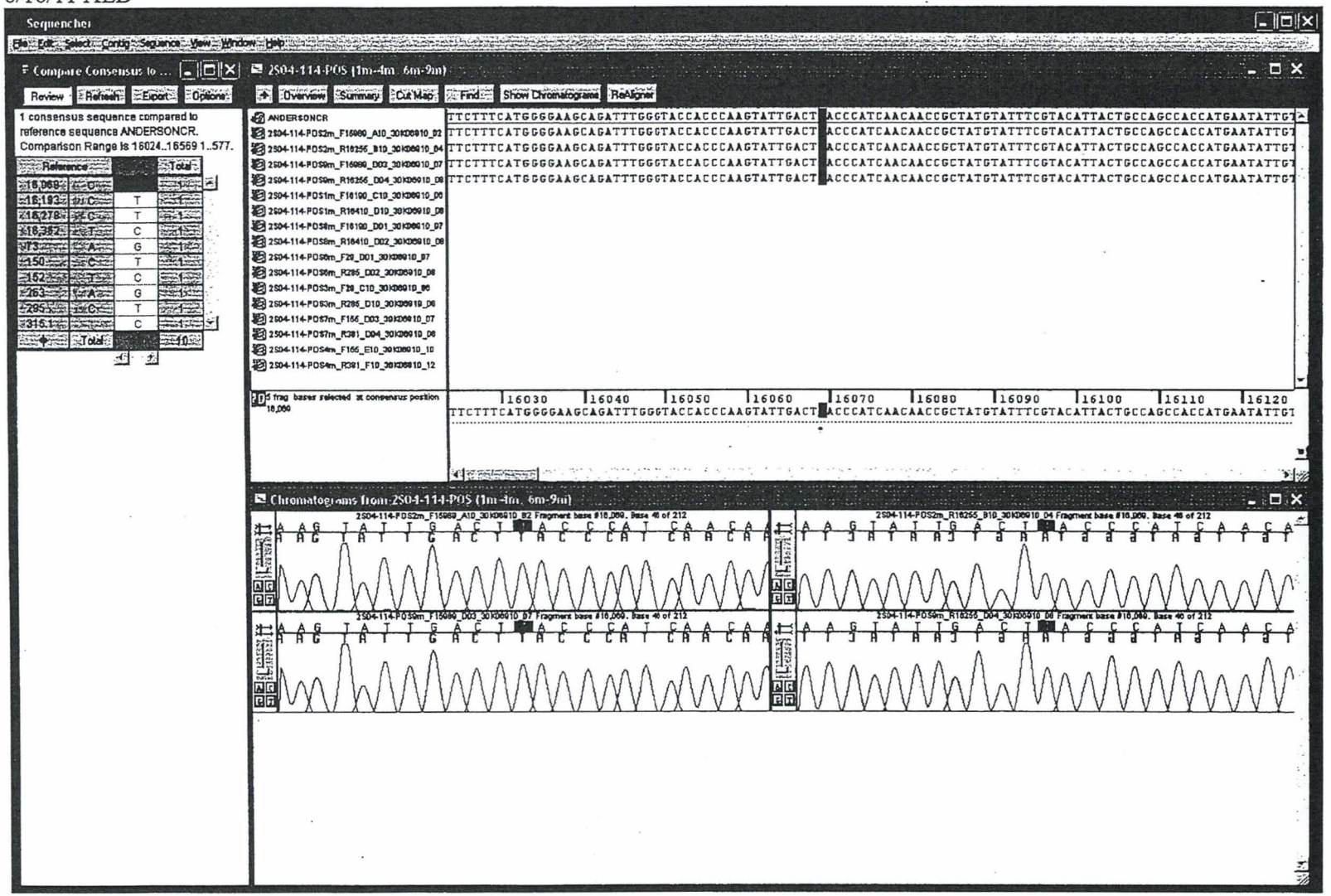
2S04-114-POS (1m-4m, 6m-9m)
Sequencher(tm) "2S04-114_ALB.SPF"



ALB
6/17/11

41

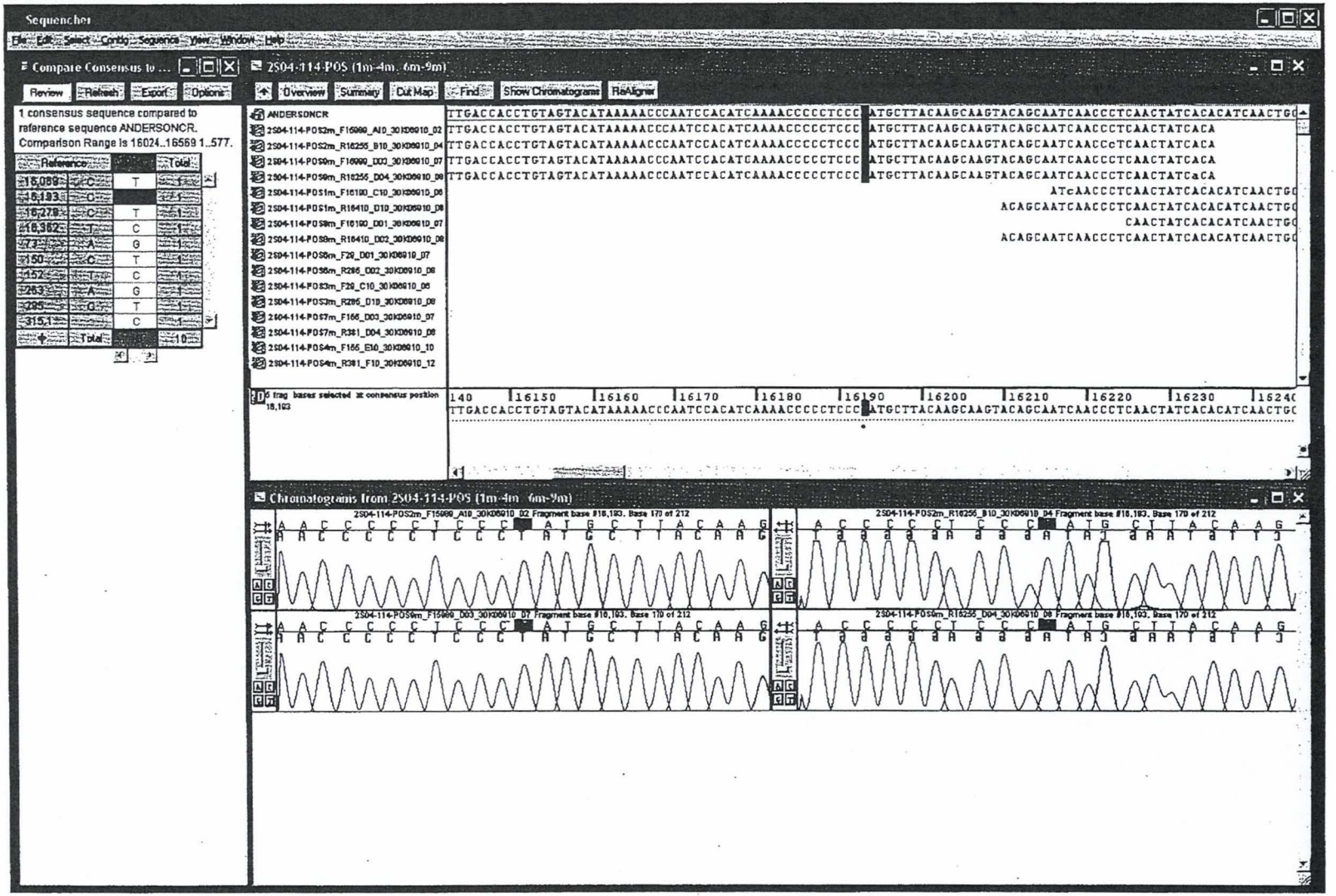
2S04-114-POS (Amp1m-4m, 6m-9m)
6/16/11 ALB



ALB
6/17/11

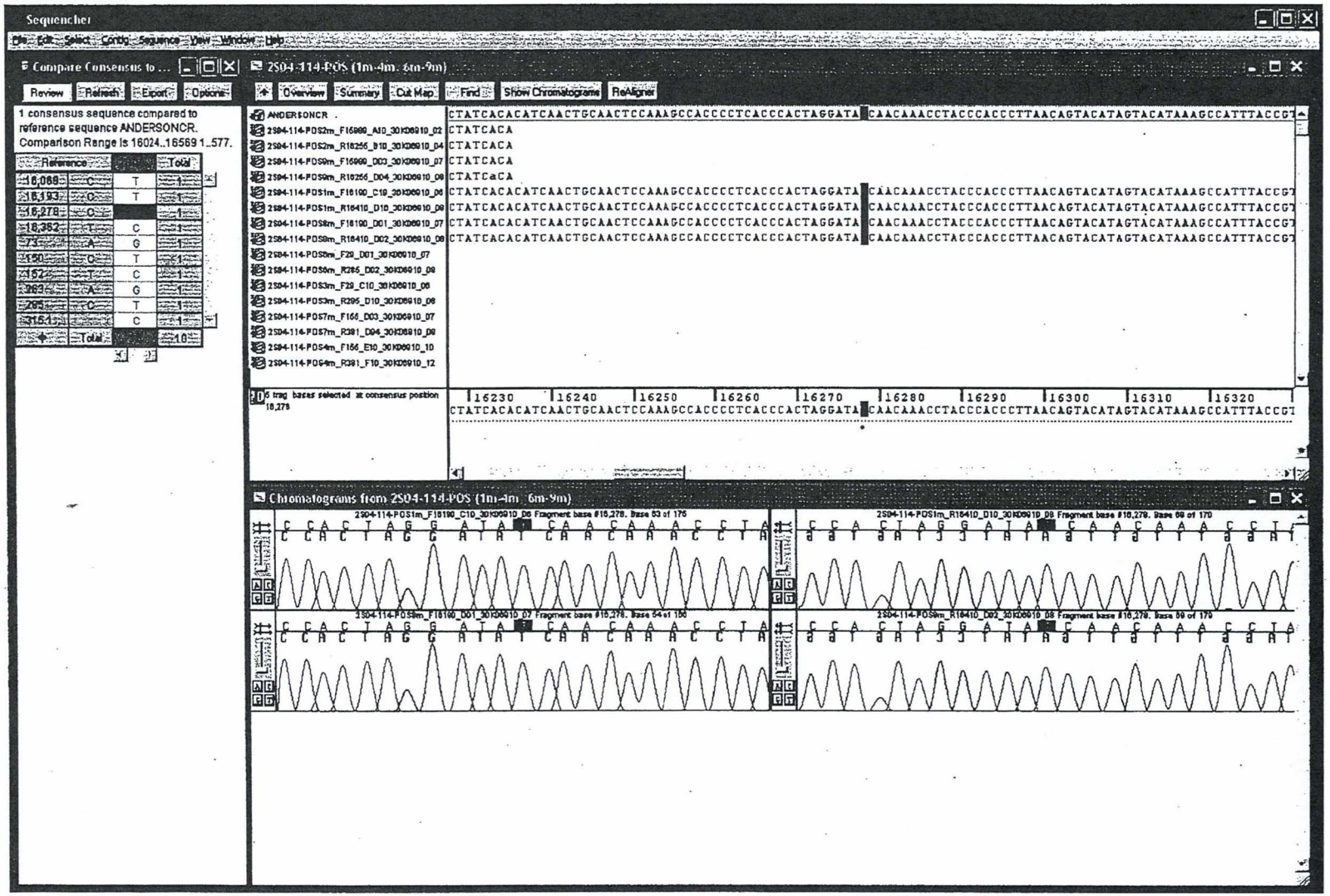
40

2S04-114-POS (Amp1m-4m, 6m-9m)
6/16/11 ALB



ALB 6/16/11

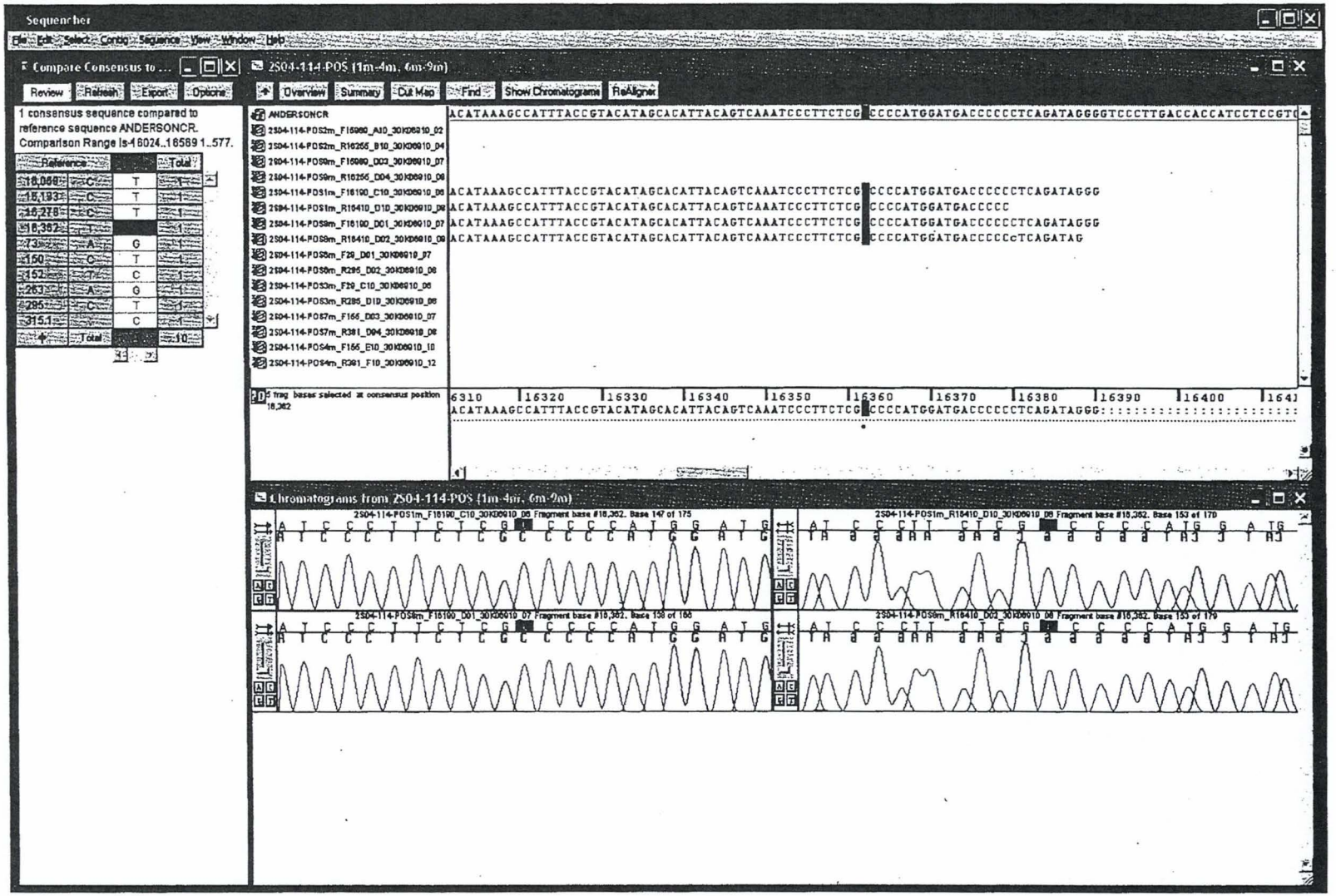
2S04-114-POS (Amp1m-4m, 6m-9m)
6/16/11 ALB



AJB 6/17/11

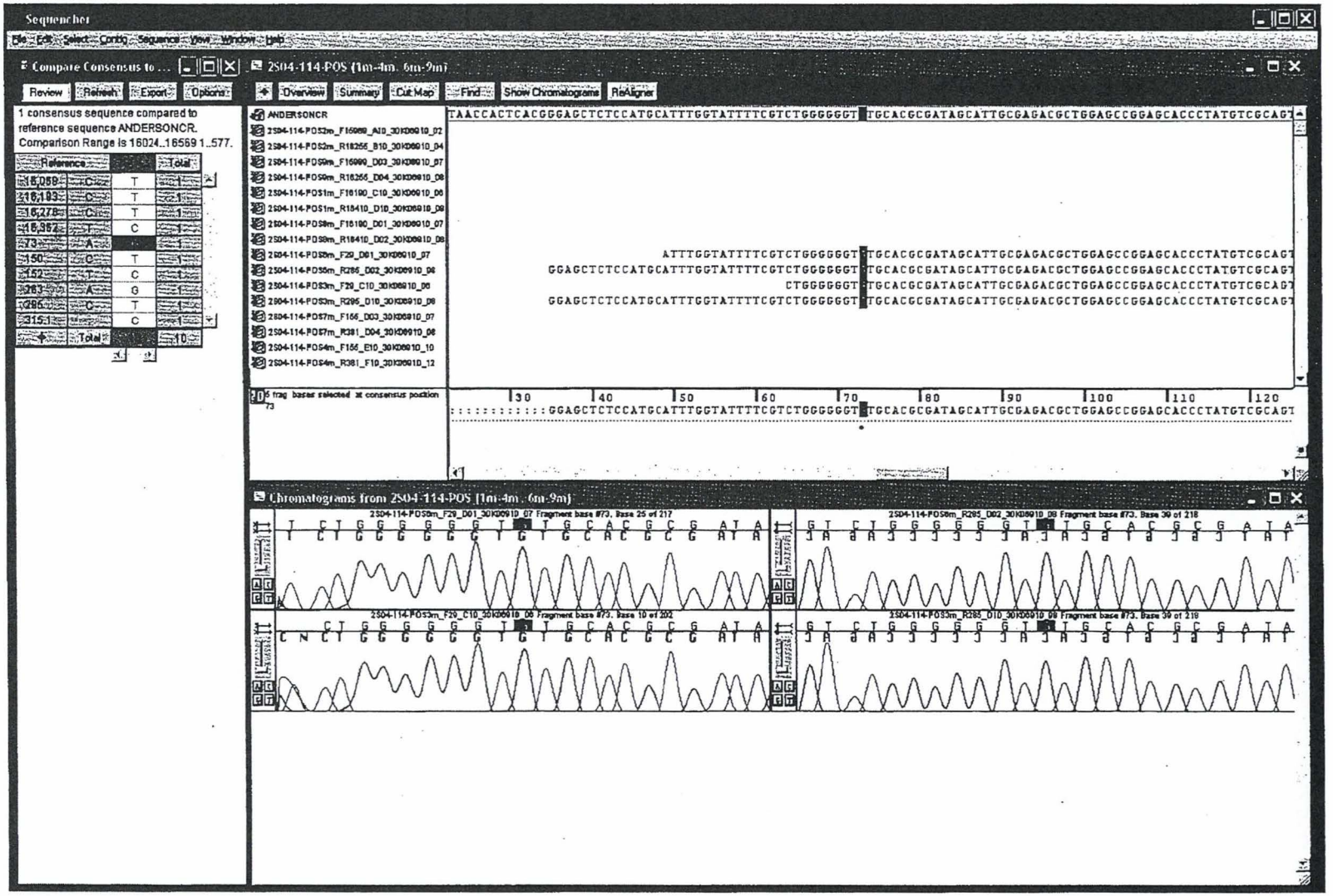
38

2S04-114-POS (Amp1m-4m, 6m-9m)
6/16/11 ALB



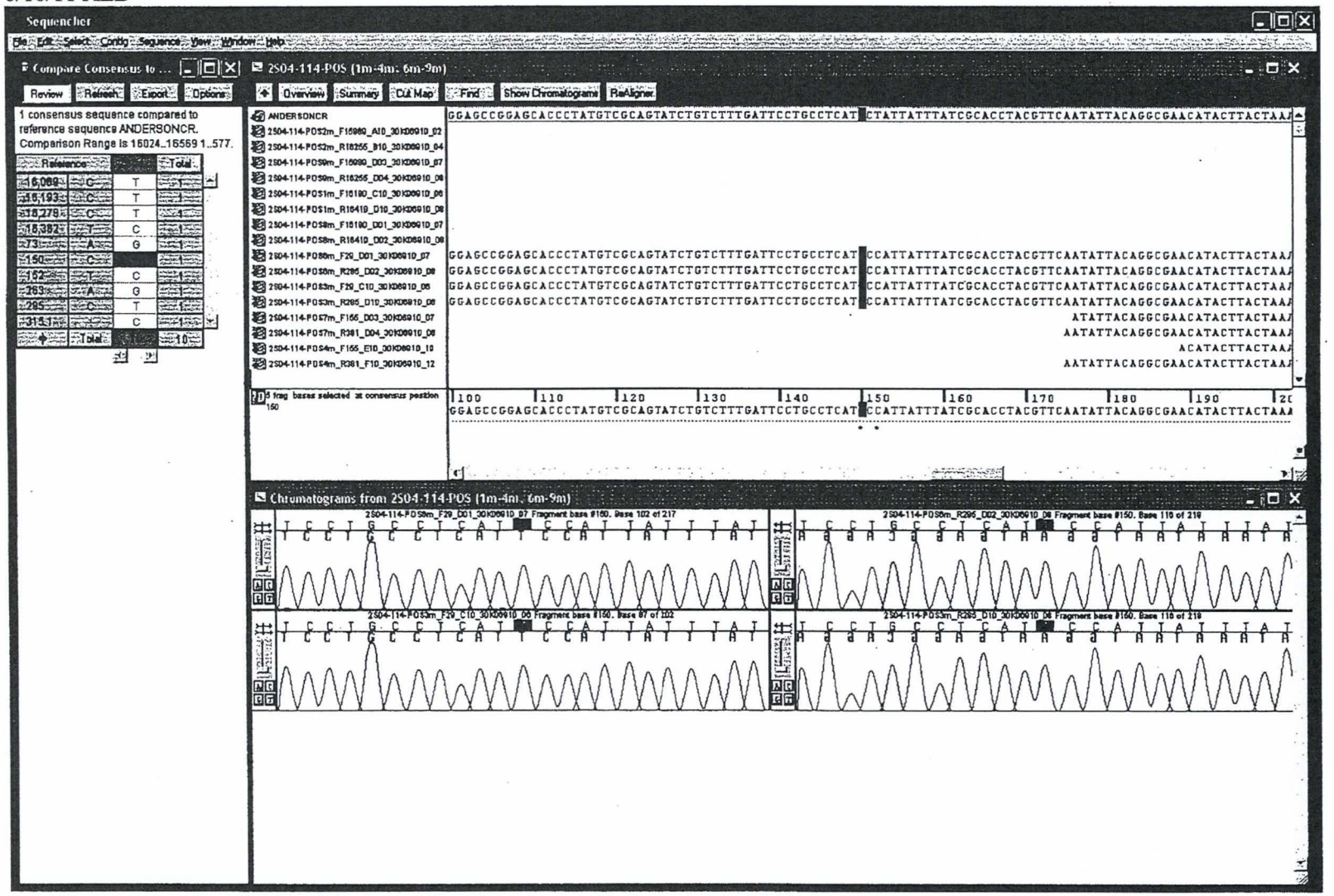
ALB 6/17/11

2S04-114-POS (Amp1m-4m, 6m-9m)
6/16/11 ALB



AAB 6/17/11

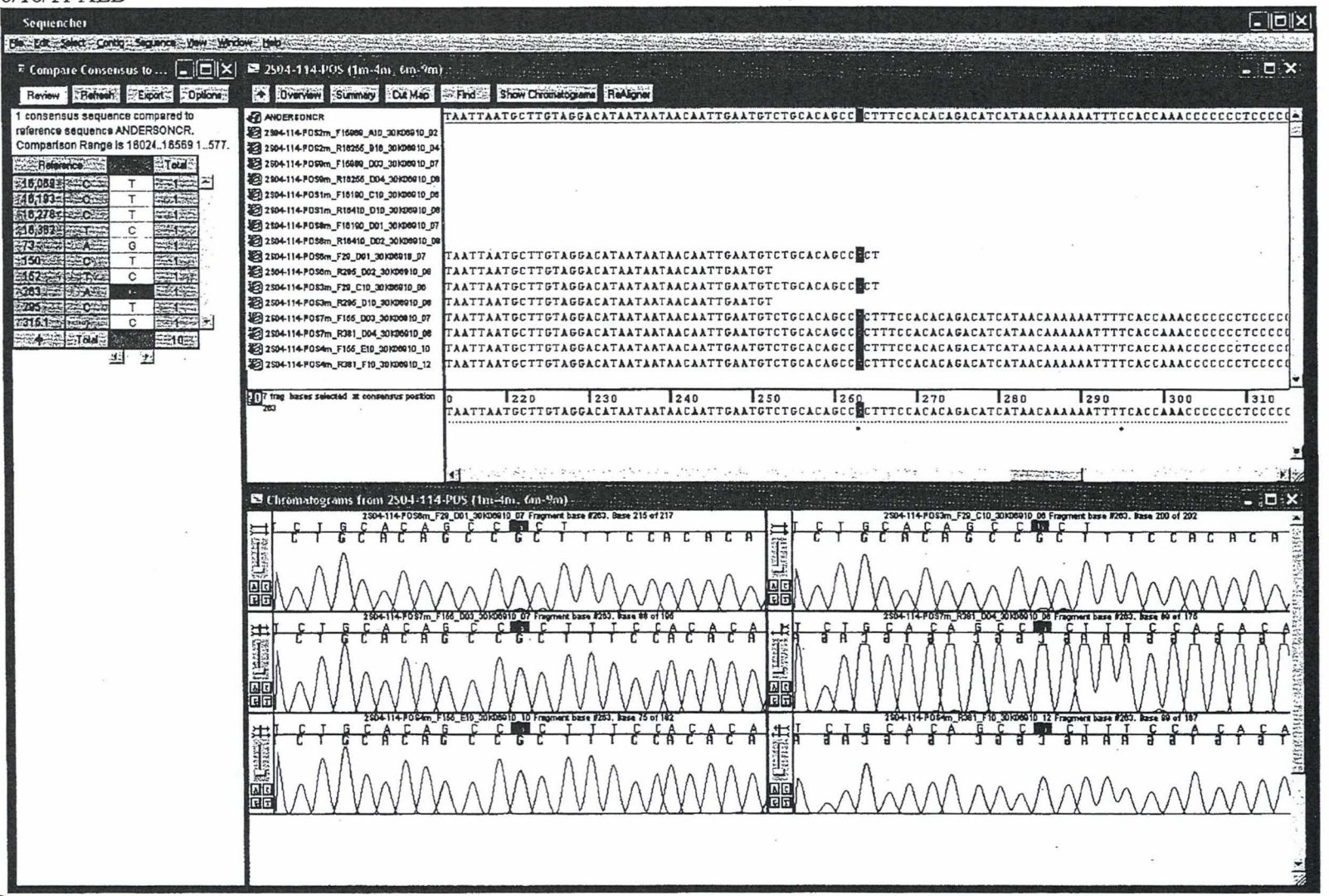
2S04-114-POS (Amp1m-4m, 6m-9m)
6/16/11 ALB



ALB
6/17/11

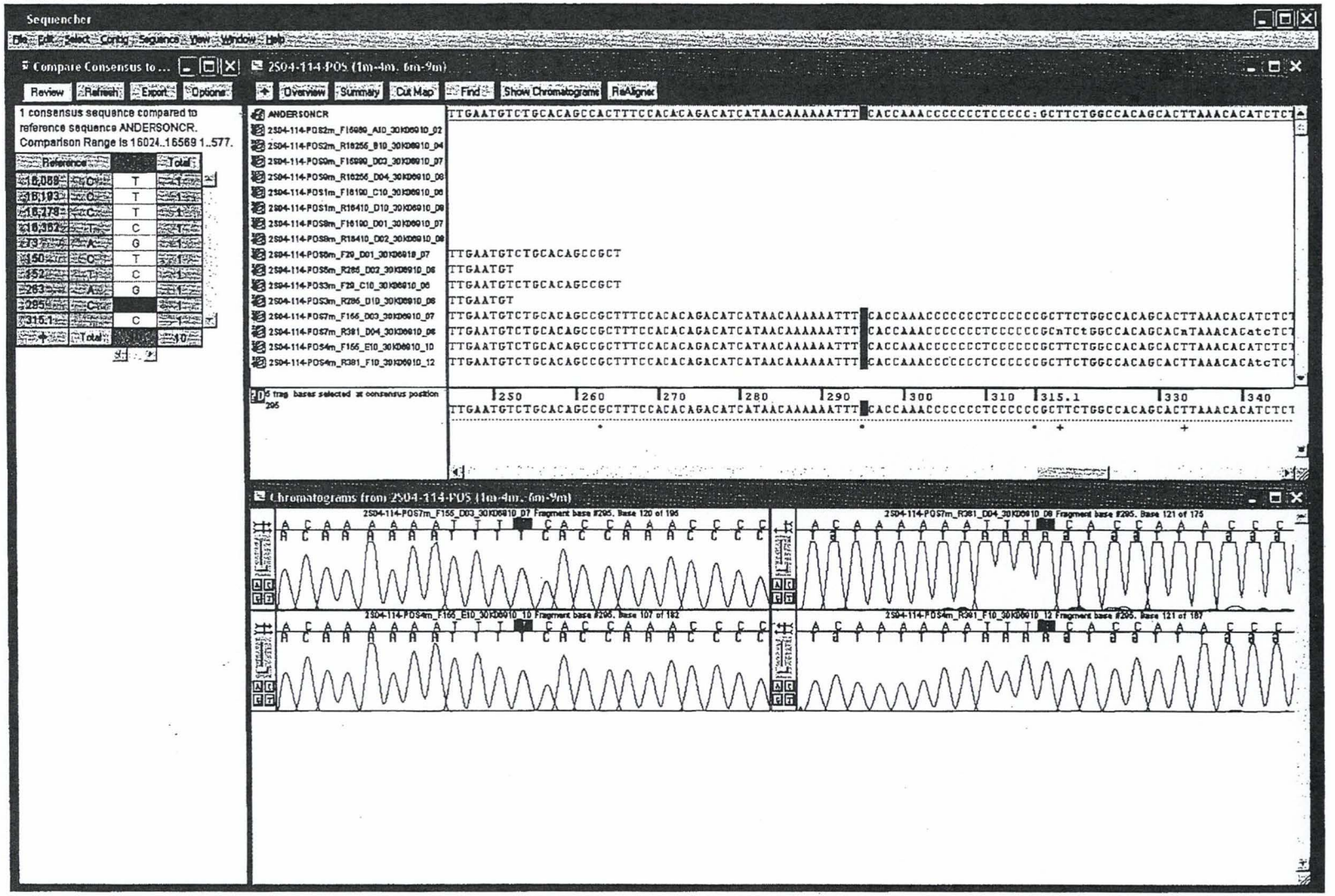
35

2S04-114-POS (Amp1m-4m, 6m-9m)
6/16/11 ALB



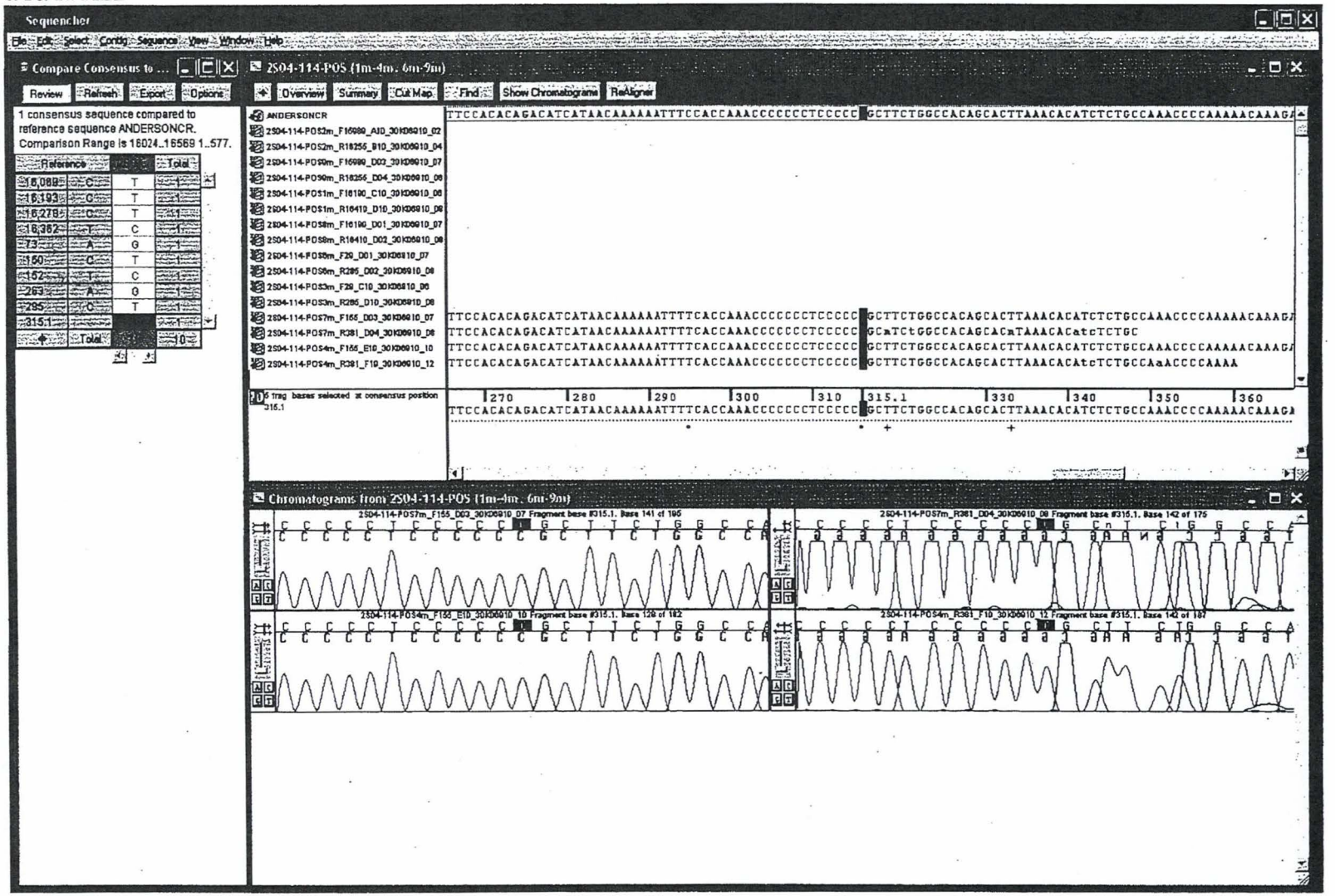
AB 6/17/11

2S04-114-POS (Amp1m-4m, 6m-9m)
6/16/11 ALB



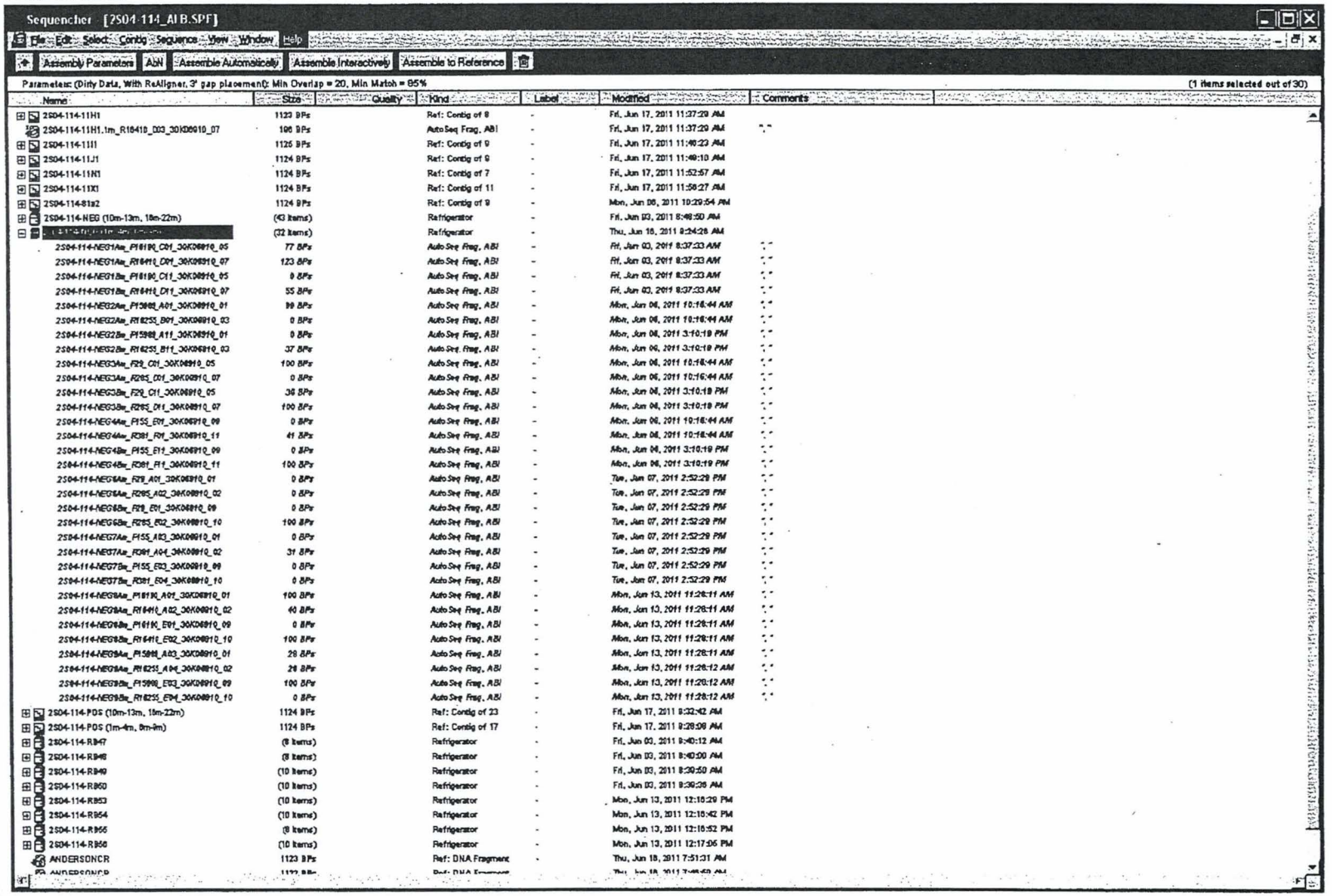
ALB 6/16/11

2S04-114-POS (Amp1m-4m, 6m-9m)
6/16/11 ALB



ALB 6/16/11

2S04-114-NEG (Amp1m-4m, 6m-9m)
6/16/11 ALB



ALB 6/17/11

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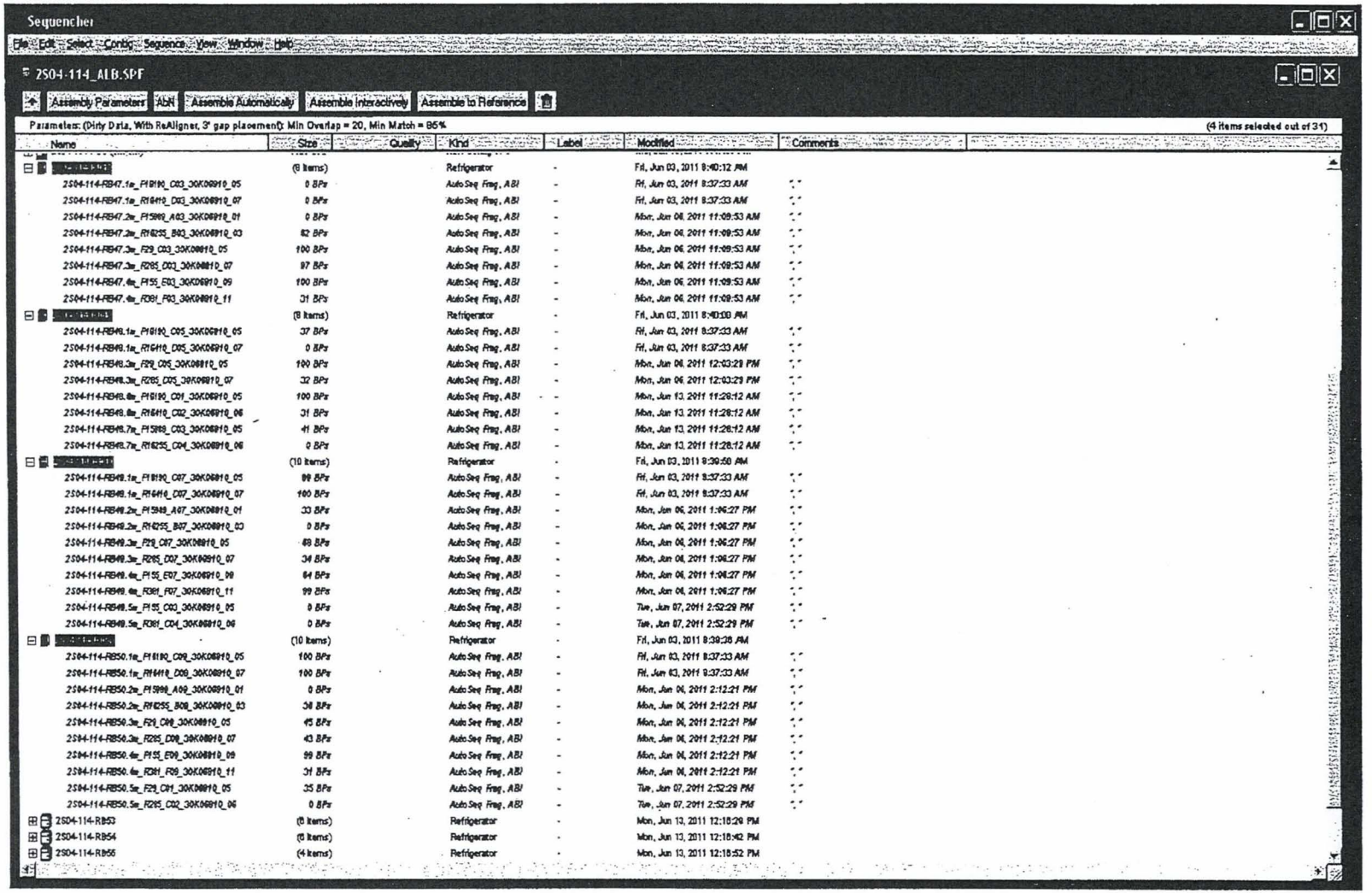
2S04-114-Unassembled RBs
6/16/11 ALB



ALB 6/17/11

30

Case Notes

Case Number: 2S04-114 Date: 6/2/11 Analyst: ALB

Notes:

1. 2S04-114-SEQ14

Samples 2S04-114-81a2, 2S04-114-112a1, 2S04-114-113a1 and 2S04-114-114a1 were amplified in primer set 2 and should have been sequenced in primer set 2; however, on worksheet, 2S04-114-SEQ14, the samples were inadvertently sequenced with all four primer sets. The data produced for primer set 2 was good and will be reported; however, the data for primer sets 1, 3 and 4 will not be used.

ALB 6/15/11

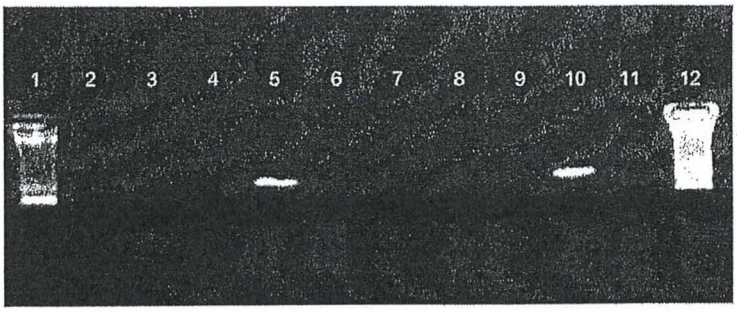
Agarose Gel Electrophoresis
2% Gel

Date: 6/10/11
Analyst: ALB
Case Number: 2S04-114
Amp #: Amp14m-15m

Gel Lot#: 060811SLB
Running Buffer-1X TBE Lot # (Bode): 052411AK
Ladder Lot# (Invitrogen): 867335
6X Gel Loading Dye Lot# (Bode): 060311ALB

Parameters
Voltage (V): 150
Run Time (mins): 25

Pipettes:
P-113 / P-062 / P-103



Lane	Sample
1	Ladder
2	2S04-114-NEG14Am
3	2S04-114-112a1.9m
4	2S04-114-RB48.8m
5	2S04-114-POS14m
6	2S04-114-NEG14Bm
7	2S04-114-NEG15Am
8	2S04-114-112a1.10m
9	2S04-114-RB48.9m
10	2S04-114-POS15m
11	2S04-114-NEG15Bm
12	Ladder

ALB 6/15/11

mtDNA Amplification & Exo-SAP-IT

Amplification Worksheet (50µl Volume Reaction)

Page 1 of 1

2S04-114-AMP 14m-15m

mtDNA Amplfiication				
Reagent	**Reagent Lot #**	**Per Sample (µl)**	**# Rxns/ PS**	**Total Vol/PS (µl)**
Water (Fisher)	1031016	ALB 6/10/11 38 34	6	ALB 6/10/11 210 204
10X PCR Buffer (AB)	N05290	5	6	30
10 mM dNTP (Roche)	11874920	1	6	6
20 mg/ml BSA (Roche)	13465436	1	6	6
FWD Primer (Bode)	See Below	2	6	12
RVS Primer (bode)	See Below	2	6	12
AmpliTaq Gold (AB)	N17041	ALB 6/10/11 ~~2~~	6	ALB 6/10/11 ~~12~~
10ng/ul HL-60 (Bode)	042711CC			
TE-4 Buffer (Bode)	041311JJ			
POS 200pg/uL (Bode)	061011 ALB			

Primer Set (Bode)	Forward	Primer Lot #	Reverse	Primer Lot #
PSI	F15978	N/A	R16255	N/A
PSII	F16190	021711SLB	R16410	021711SLB
PSIII	F15	082410SLB	R285	051011SLB
PSIV	F155	N/A	R389	N/A

Exo-SAP-IT & MitoQT				
MitoQT			**Exo-SAP-IT**	
Reagent	**Reagent Lot #**		**Exo-SAP-IT**	**6.0 µl**
Stock 9947 (Coriell)	NA		**Sample**	**33.0 µl**
dH2O (Bode)	NA		**Lot # (UBS):**	41329397 ALB 6/17/11
TE-4 Buffer (Bode)	NA		**TC:**	26
PicoGreen (Invitrogen)	NA		**Program:**	~~EXO-SAP~~ Not performed

Tray Coordinate	Sample	Master Mix (µl)	Sample (µl)	Primer Set
A1.14m	2S04-114-NEG14Am	47	3	PSII
A2.14m	2S04-114-112a1.9m	47	3	PSII
A3.14m	2S04-114-RB48.8m	47	3	PSII
A4.14m	2S04-114-POS14m	47	1 + 2uL dH20	PSII
A5.14m	2S04-114-NEG14Bm	47	3	PSII
B1.15m	2S04-114-NEG15Am	47	3	PSIII
B2.15m	2S04-114-112a1.10m	47	3	PSIII
B3.15m	2S04-114-RB48.9m	47	3	PSIII
B4.15m	2S04-114-POS15m	47	1 + 2uL dH20	PSIII
B5.15m	2S04-114-NEG15Bm	47	3	PSIII

TC#: 26 **Program#:** PS1-4 **Tube Witness:** 6-10-11
Analyst: ALB **Date:** 6/10/11
Case Number(s): 2S04-114

Pipettors	Lot #
<2 uL	M-003
2 -10 uL	M-003
11 - 100 uL	M-005
101 - 1000 uL	M-008
master mix	M-005
water	M-008, M-003

Document: BTF00304 - PS 1-4 Amp Rows (MITO WS)
Revision: 3
Effective:

ALB 6/15/11

mtDNA Gel Filtration, 3100 Sequencing & Capillary Load Sheet

Seq Date: 6/8/2011
Analyst: ALB
3100 Seq Tray ID: 060811-ALB

	1	2	3	4	5	6	7	8	9	10	11	12
A	2S04-114-NEG8Am_F16190	2S04-114-NEG8Am_R16410	2S04-114-NEG9Am_F15989	2S04-114-NEG9Am_R16255								
B	2S04-114-112a1.6m_F16190	2S04-114-112a1.6m_R16410	2S04-114-112a1.8m_F15989	2S04-114-112a1.8m_R16255								
C	2S04-114-RB48.6m_F16190	2S04-114-RB48.6m_R16410	2S04-114-RB48.7m_F15989	2S04-114-RB48.7m_R16255								
D	2S04-114-POS8m_F16190	2S04-114-POS8m_R16410	2S04-114-POS9m_F15989	2S04-114-POS9m_R16255								
E	2S04-114-NEG8Bm_F16190	2S04-114-NEG8Bm_R16410	2S04-114-NEG9Bm_F15989	2S04-114-NEG9Bm_R16255								
F												
G												
H												

Gel Filtration Cartridge (Edge Biosystems): 157793

Hi-Di Formamide (AB): N/A
(20.0 ul per well)

Document: BTF00318 - CE Load Sheet COL (MITO WS)

3100 Machine ID:	3100-1 (*3100workstation*)
POP6 Lot # (AB):	1011164
1X 3100 Running Buffer (AB):	060811NSB
Run Module:	RapidSeq36_POP6DefaultModule
Run #s:	2173-2174
Pipettor #s:	P-060

ALB 6/15/11

26

Cycle Sequencing

Amplification Worksheet (20µl Volume Reaction)

2S04-114-SEQ17

Reagent	Reagent Lot #	Per Sample (µl)	# Rxns/ Primer	Total Vol/Primer (µl)
Big Dye (AB)	1011056M	2.0	6	12.0 ✓
5X Sequencing Buffer (AB)	1007127	6.0	6	36.0 ✓
Primer (Bode)	See Below	1.0	6	6.0 ✓

Reagent	Reagent Lot #	Per Positive Control (µl)
dH2O (Fisher)	103106	9.0
Big Dye (AB)	N/A	2.0
5X Sequencing Buffer (AB)	N/A	6.0
M13 Primer (AB)	N/A	1.0
pGEM (AB)	N/A	2.0

Primer Set (Bode)	Forward	Primer Lot #	Reverse	Primer Lot #
PSI	F15989	011811LNM	R16255	082410SLB
PSII	F16190	021711SLB	R16410	010311LNM
PSIII	F29	N/A	R285	N/A
PSIV	F155	N/A	R381	N/A

Tray Coordinate	Sample	Master Mix (µl)	Sample/dH2O (11 µl)	Primer
A1	2S04-114-NEG8Am_F16190	9	1/10	F16190
A2	2S04-114-112a1.6m_F16190	9	11/0 ALB 6/17/11	F16190
A3	2S04-114-RB48.6m_F16190	9	11/0 ALB 6/17/11	F16190
A4	2S04-114-POS8m_F16190	9	1/10	F16190
A5	2S04-114-NEG8Bm_F16190	9	1/10	F16190
B1	2S04-114-NEG8Am_R16410	9	1/10	R16410
B2	2S04-114-112a1.6m_R16410	9	11/0 ALB 6/17/11	R16410
B3	2S04-114-RB48.6m_R16410	9	11/0 ALB 6/17/11	R16410
B4	2S04-114-POS8m_R16410	9	1/10	R16410
B5	2S04-114-NEG8Bm_R16410	9	1/10	R16410
C1	2S04-114-NEG9Am_F15989	9	1/10	F15989
C2	2S04-114-112a1.8m_F15989	9	11/0 ALB 6/17/11	F15989
C3	2S04-114-RB48.7m_F15989	9	11/0 ALB 6/17/11	F15989
C4	2S04-114-POS9m_F15989	9	1/10	F15989
C5	2S04-114-NEG9Bm_F15989	9	1/10	F15989
D1	2S04-114-NEG9Am_R16255	9	1/10	R16255
D2	2S04-114-112a1.8m_R16255	9	11/0 ALB 6/17/11	R16255
D3	2S04-114-RB48.7m_R16255	9	11/0 ALB 6/17/11	R16255
D4	2S04-114-POS9m_R16255	9	1/10	R16255
D5	2S04-114-NEG9Bm_R16255	9	1/10	R16255

TC#: 20 Program#: CycSeq
Analyst: ALB Date: 6/8/11
Case Number(s): 2S04-114

Pipettors	Lot #
<2 uL	P-016
2 -10 uL	P-016
11 - 100 uL	P-070
101 - 1000 uL	N/A
master mix	P-016
water	P-103

Document: BTF00320 - Cycle Sequence Amp ROWS (MITO WS)
Revision: 3
Effective:

ALB 6/15/11

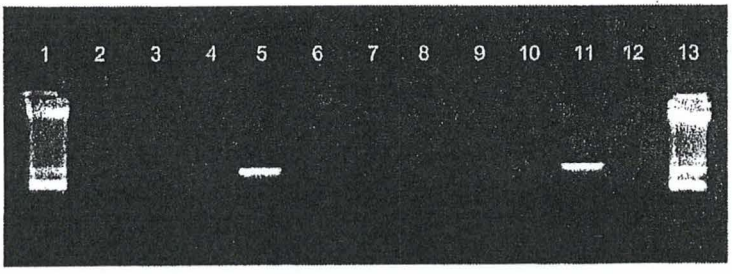
Agarose Gel Electrophoresis
2% Gel

Date: 6/8/11
Analyst: ALB
Case Number: 2S04-114
Amp #: Amp8m-9m

Gel Lot#: 060711ALB
Running Buffer-1X TBE Lot # (Bode): 052411AK
Ladder Lot# (Invitrogen): 867335
6X Gel Loading Dye Lot# (Bode): 060311ALB

Parameters
Voltage (V): 150
Run Time (mins): 25

Pipettes:
P-113 / P-062 / P-103



* Faint bands visualized by analyst 6/8/11 ALB

Lane	Sample
1	Ladder
2	2S04-114-NEG8Am
3	2S04-114-112a1.6m
4	2S04-114-RB48.6m
5	2S04-114-POS8m
6	2S04-114-NEG8Bm
7	2S04-114-NEG9Am
8	2S04-114-112a1.7m
9	2S04-114-112a1.8m
10	2S04-114-RB48.7m
11	2S04-114-POS9m
12	2S04-114-NEG9Bm
13	Ladder

ALB 6/15/11

mtDNA Amplification & Exo-SAP-IT

Amplification Worksheet (50µl Volume Reaction)

2S04-114-AMP8m-9m

mtDNA Amplification				
Reagent (Amp 8m)	**Reagent Lot #**	**Per Sample (µl)**	**# Rxns/ PS**	**Total Vol/PS (µl)**
Water (Fisher)	097050	35	6	210 ✓
10X PCR Buffer (AB)	N05290	5	6	30 ✓
10 mM dNTP (Roche)	11874920	1	6	6 ✓
20 mg/ml BSA (Roche)	13465436	1	6	6 ✓
FWD Primer (Bode)	See Below	2	6	12 ✓
RVS Primer (bode)	See Below	2	6	12 ✓
AmpliTaq Gold (AB)	N17041	1	6	6 ✓
Reagent (Amp 9m)	**Reagent Lot #**	**Per Sample (µl)**	**# Rxns/ PS**	**Total Vol/PS (µl)**
Water (Fisher)	097050	34 ALB 6/15/11	~~8~~ 7 ALB 6/15/11	~~204~~ ✓ 238
10X PCR Buffer (AB)	N05290	5 ALB 6/15/11	~~8~~ 7 ALB 6/15/11	~~30~~ ✓ 35
10 mM dNTP (Roche)	11874920	1 ALB 6/15/11	~~8~~ 7 ALB 6/15/11	~~8~~ ✓ 7
20 mg/ml BSA (Roche)	13465436	1 ALB 6/15/11	~~8~~ 7 ALB 6/15/11	~~8~~ ✓ 7
FWD Primer (Bode)	See Below	2 ALB 6/15/11	~~8~~ 7 ALB 6/15/11	~~12~~ ✓ 14
RVS Primer (bode)	See Below	2 ALB 6/15/11	~~8~~ 7 ALB 6/15/11	~~12~~ ✓ 14
AmpliTaq Gold (AB)	N17041	2 ALB 6/15/11	~~8~~ 7 ALB 6/15/11	~~12~~ ✓ 14
10ng/ul HL-60 (Bode)	042711CC			
TE-4 Buffer (Bode)	041311JJ			
POS 200pg/uL (Bode)	060711ALB			

Primer Set (Bode)	Forward	Primer Lot #	Reverse	Primer Lot #
PSI	F15978	022411SLB	R16255	062410SLB
PSII	F16190	021711SLB	R16410	021711SLB
PSIII	F15	N/A	R285	N/A
PSIV	F155	N/A	R389	N/A

Exo-SAP-IT & MitoQT			
MitoQT		**Exo-SAP-IT**	
Reagent	**Reagent Lot #**	**Exo-SAP-IT**	**6.0 µl**
Stock 9947 (Coriell)	NA	**Sample**	**33.0 µl**
dH2O (Bode)	NA	**Lot # (UBS):**	41329371
TE-4 Buffer (Bode)	NA	**TC:**	28
PicoGreen (Invitrogen)	NA	**Program:**	Exo-SAP

Tray Coordinate	Sample	Master Mix (µl)	Sample (µl)	Primer Set
A1.8m	2S04-114-NEG8Am	47	3	PSII
A2.8m	2S04-114-112a1.6m	47	3	PSII
A3.8m	2S04-114-RB48.6m	47	3	PSII
A4.8m	2S04-114-POS8m	47	1+2uL dH20	PSII
A5.8m	2S04-114-NEG8Bm	47	3	PSII
B1.9m	2S04-114-NEG9Am	47	3	PSI
B2.9m	2S04-114-112a1.7m	47	1+2uL dH20	PSI
B3.9m	2S04-114-112a1.8m	47	3	PSI
B4.9m	2S04-114-RB48.7m	47	3	PSI
B5.9m	2S04-114-POS9m	47	1+2uL dH20	PSI
B6.9m	2S04-114-NEG9Bm	47	3	PSI

TC#: 24 Program#: PS1-4 Tube Witness: ARB 060711

Analyst: ALB Date: 6/7/11

Case Number(s): 2S04-114

Pipettors	Lot #
<2 uL	M-003
2 -10 uL	M-003
11 - 100 uL	M-005
101 - 1000 uL	M-008
master mix	M-005
water	M-008, M-003

ALB 6/15/11

mtDNA Gel Filtration, 3100 Sequencing & Capillary Load Sheet

Seq Date: 6/7/2011
Analyst: ALB
3100 Seq Tray ID: 060711-ALB

	1	2	3	4	5	6	7	8	9	10	11	12
A	2S04-114-NEG6Am_F29	2S04-114-NEG6Am_R285	2S04-114-NEG7Am_F155	2S04-114-NEG7Am_R381								
B	2S04-114-114a1.5m_F29	2S04-114-114a1.5m_R285	2S04-114-113a1.5m_F155	2S04-114-113a1.5m_R381								
C	2S04-114-RB50.5m_F29	2S04-114-RB50.5m_R285	2S04-114-RB49.5m_F155	2S04-114-RB49.5m_R381								
D	2S04-114-POS6m_F29	2S04-114-POS6m_R285	2S04-114-POS7m_F155	2S04-114-POS7m_R381								
E	2S04-114-NEG6Bm_F29	2S04-114-NEG6Bm_R285	2S04-114-NEG7Bm_F155	2S04-114-NEG7Bm_R381								
F												
G												
H												

Gel Filtration Cartridge (Edge Biosystems): 157793

HI-Di Formamide (AB): N/A
(20.0 ul per well)

Document: BTF00318 - CE Load Sheet COL (MITO WS)

3100 Machine ID:	3100-1 (*3100workstation*)
POP6 Lot # (AB):	1101164
1X 3100 Running Buffer (AB):	060711AK1
Run Module:	RapidSeq36_POP6DefaultModule
Run #s:	2156-2157
Pipettor #s:	P-060

ALB 6/15/11

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Cycle Sequencing

Amplification Worksheet (20µl Volume Reaction)

2S04-114-SEQ16

Reagent	Reagent Lot #	Per Sample (µl)	# Rxns/ Primer	Total Vol/Primer (µl)
Big Dye (AB)	10110516M	2.0	6	12.0 ✓
5X Sequencing Buffer (AB)	1007127	6.0	6	36.0 ✓
Primer (Bode)	See Below	1.0	6	6.0 ✓

Reagent	Reagent Lot #	Per Positive Control (µl)
dH2O (Fisher)	103106	9.0
Big Dye (AB)	N/A	2.0
5X Sequencing Buffer (AB)	N/A	6.0
M13 Primer (AB)	N/A	1.0
pGEM (AB)	N/A	2.0

Primer Set (Bode)	Forward	Primer Lot #	Reverse	Primer Lot #
PSI	F15989	N/A	R16255	N/A
PSII	F16190	N/A	R16410	N/A
PSIII	F29	01181LNM	R285	082410SLB
PSIV	F155	04051LNM	R381	022411SLB

Tray Coordinate	Sample	Master Mix (µl)	Sample/dH2O (11 µl)	Primer
A1	2S04-114-NEG6Am_F29	9	1/10	F29
A2	2S04-114-114a1.5m_F29	9	1/10	F29
A3	2S04-114-RB50.5m_F29	9	1/10	F29
A4	2S04-114-POS6m_F29	9	1/10	F29
A5	2S04-114-NEG6Bm_F29	9	1/10	F29
B1	2S04-114-NEG6Am_R285	9	1/10	R285
B2	2S04-114-114a1.5m_R285	9	1/10	R285
B3	2S04-114-RB50.5m_R285	9	1/10	R285
B4	2S04-114-POS6m_R285	9	1/10	R285
B5	2S04-114-NEG6Bm_R285	9	1/10	R285
C1	2S04-114-NEG7Am_F155	9	1/10	F155
C2	2S04-114-113a1.5m_F155	9	1/10	F155
C3	2S04-114-RB49.5m_F155	9	1/10	F155
C4	2S04-114-POS7m_F155	9	1/10	F155
C5	2S04-114-NEG7Bm_F155	9	1/10	F155
D1	2S04-114-NEG7Am_R381	9	1/10	R381
D2	2S04-114-113a1.5m_R381	9	1/10	R381
D3	2S04-114-RB49.5m_R381	9	1/10	R381
D4	2S04-114-POS7m_R381	9	1/10	R381
D5	2S04-114-NEG7Bm_R381	9	1/10	R381

TC#: 24
Analyst: ALB
Case Number(s): 2S04-114

Program#: CycSeq
Date: 6/7/11

Pipettors	Lot #
<2 uL	P-103
2 -10 uL	P-016
11 - 100 uL	P-070
101 - 1000 uL	N/A
master mix	P-016
water	P-103

Document: BTF00320 - Cycle Sequence Amp ROWS (MITO WS)
Revision: 3
Effective:

ALB 6/15/11

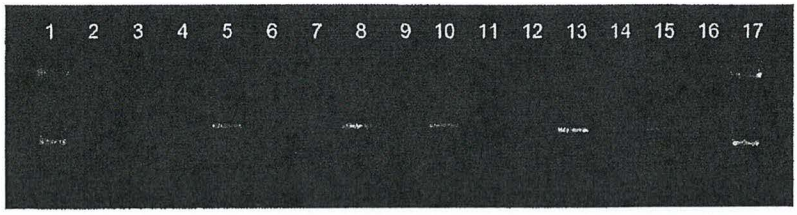
Agarose Gel Electrophoresis
2% Gel

Date: 6/7/11
Analyst: ALB
Case Number: 2S04-114
Amp #: Amp5m-7m

Gel Lot#: 060311JLF
Running Buffer-1X TBE Lot # (Bode): 052411AK
Ladder Lot# (Invitrogen): 867335
6X Gel Loading Dye Lot# (Bode): 060311ALB

Parameters
Voltage (V): 150
Run Time (mins): 25

Pipettes:
P-113 / P-062 / P-103



Lane	Sample
1	Ladder
2	2S04-114-NEG5Am
3	2S04-114-112a1.5m
4	2S04-114-RB48.5m
5	2S04-114-POS5m
6	2S04-114-NEG5Bm
7	2S04-114-NEG6Am
8	2S04-114-114a1.5m
9	2S04-114-RB50.5m
10	2S04-114-POS6m
11	2S04-114-NEG6Bm
12	2S04-114-NEG7Am
13	2S04-114-113a1.5m
14	2S04-114-RB49.5m
15	2S04-114-POS7m
16	2S04-114-NEG7Bm
17	Ladder

ALB 6/15/11

mtDNA Amplification & Exo-SAP-IT

Amplification Worksheet (50µl Volume Reaction)

2S04-114-AMP5m-7m

mtDNA Amplification				
Reagent (Row A)	**Reagent Lot #**	**Per Sample (µl)**	**# Rxns/ PS**	**Total Vol/PS (µl)**
Water (Fisher)	097050	32	6	192
10X PCR Buffer (AB)	N05290	5	6	30
10 mM dNTP (Roche)	11874920	1	6	6
20 mg/ml BSA (Roche)	13465436	1	6	6
FWD Primer (Bode)	See Below	2	6	12
RVS Primer (bode)	See Below	2	6	12
AmpliTaq Gold (AB)	N17041	1	6	6
Reagent (Rows B-C)	**Reagent Lot #**	**Per Sample (µl)**	**# Rxns/ PS**	**Total Vol/PS (µl)**
Water (Fisher)	097050	35	6	210
10X PCR Buffer (AB)	N05290	5	6	30
10 mM dNTP (Roche)	11874920	1	6	6
20 mg/ml BSA (Roche)	13465436	1	6	6
FWD Primer (Bode)	See Below	2	6	12
RVS Primer (bode)	See Below	2	6	12
AmpliTaq Gold (AB)	N17041	1	6	6

10ng/ul HL-60 (Bode)	042711CC
TE-4 Buffer (Bode)	041311JJ
POS 200pg/uL (Bode)	060611ALB

Primer Set (Bode)	Forward	Primer Lot #	Reverse	Primer Lot #
PSI	F15978	N/A	R16255	N/A
PSII	F16190	N/A	R16410	N/A
PSIII	F15	082410SLB	R285	051011SLB
PSIV	F155	082410SLB	R389	082410SLB

Exo-SAP-IT & MitoQT

MitoQT	
Reagent	**Reagent Lot #**
Stock 9947 (Coriell)	N/A
dH2O (Bode)	N/A
TE-4 Buffer (Bode)	N/A
PicoGreen (Invitrogen)	N/A

Exo-SAP-IT	
Exo-SAP-IT	6.0 µl
Sample	33.0 µl
Lot # (UBS):	41329437
TC:	24
Program:	Exo-SAP

Tray Coordinate	Sample	Master Mix (µl)	Sample (µl)	Primer Set
A1.5m	2S04-114-NEG5Am	44	6	PSIII
A2.5m	2S04-114-112a1.5m	44	6	PSIII
A3.5m	2S04-114-RB48.5m	44	6	PSIII
A4.5m	2S04-114-POS5m	44	1 + 5dH20	PSIII
A5.5m	2S04-114-NEG5Bm	44	6	PSIII
B1.6m	2S04-114-NEG6Am	47	3	PSIII
B2.6m	2S04-114-114a1.5m	47	3	PSIII
B3.6m	2S04-114-RB50.5m	47	3	PSIII
B4.6m	2S04-114-POS6m	47	1 + 2dH20	PSIII
B5.6m	2S04-114-NEG6Bm	47	3	PSIII
C1.7m	2S04-114-NEG7Am	47	3	PSIV
C2.7m	2S04-114-113a1.5m	47	3	PSIV
C3.7m	2S04-114-RB49.5m	47	3	PSIV
C4.7m	2S04-114-POS7m	47	1 + 2dH20	PSIV
C5.7m	2S04-114-NEG7Bm	47	3	PSIV

TC#: 28 Program#: PS1-4
Analyst: ALB Date: 6/6/11
Case Number(s): 2S04-114

Tube Witness:
JLF 6/6/11

Pipettors	Lot #
<2 uL	M-003
2 -10 uL	M-003
11 - 100 uL	M-005
101 - 1000 uL	M-008
master mix	M-005
water	M-008, M-003

Document: BTF00304 - PS 1-4 Amp Rows (MITO WS)
Revision: 3
Effective:

ALB 6/15/11

mtDNA Gel Filtration, 3100 Sequencing & Capillary Load Sheet

Date: 6/6/2011
Analyst: ALB
3100 Seq Tray ID: 060611-ALB

	1	2	3	4	5	6	7	8	9	10	11	12
A	2S04-114-NEG2Am_F15989	2S04-114-81a2.2m_F15989	2S04-114-RB47.2m_F15989			2S04-114-113a1.2m_F15989	2S04-114-RB49.2m_F15989	2S04-114-114a1.2m_F15989	2S04-114-RB50.2m_F15989	2S04-114-POS2m_F15989	2S04-114-NEG2Bm_F15989	
B	2S04-114-NEG2Am_R16255	2S04-114-81a2.2m_R16255	2S04-114-RB47.2m_R16255			2S04-114-113a1.2m_R16255	2S04-114-RB49.2m_R16255	2S04-114-114a1.2m_R16255	2S04-114-RB50.2m_R16255	2S04-114-POS2m_R16255	2S04-114-NEG2Bm_R16255	
C	2S04-114-NEG3Am_F29	2S04-114-81a2.3m_F29	2S04-114-RB47.3m_F29	2S04-114-112a1.3m_F29	2S04-114-RB48.3m_F29	2S04-114-113a1.3m_F29	2S04-114-RB49.3m_F29	2S04-114-114a1.3m_F29	2S04-114-RB50.3m_F29	2S04-114-POS3m_F29	2S04-114-NEG3Bm_F29	
D	2S04-114-NEG3Am_R285	2S04-114-81a2.3m_R285	2S04-114-RB47.3m_R285	2S04-114-112a1.3m_R285	2S04-114-RB48.3m_R285	2S04-114-113a1.3m_R285	2S04-114-RB49.3m_R285	2S04-114-114a1.3m_R285	2S04-114-RB50.3m_R285	2S04-114-POS3m_R285	2S04-114-NEG3Bm_R285	
E	2S04-114-NEG4Am_F155	2S04-114-81a2.4m_F155	2S04-114-RB47.4m_F155			2S04-114-113a1.4m_F155	2S04-114-RB49.4m_F155	2S04-114-114a1.4m_F155	2S04-114-RB50.4m_F155	2S04-114-POS4m_F155	2S04-114-NEG4Bm_F155	
F	2S04-114-NEG4Am_R381	2S04-114-81a2.4m_R381	2S04-114-RB47.4m_R381			2S04-114-113a1.4m_R381	2S04-114-RB49.4m_R381	2S04-114-114a1.4m_R381	2S04-114-RB50.4m_R381	2S04-114-POS4m_R381	2S04-114-NEG4Bm_R381	
G												
H												

Gel Filtration Cartridge (Edge Biosystems): 157793

Hi-Di Formamide (AB): N/A
(20.0 ul per well)

3100 Machine ID:	3100-1 (*3100workstation*)
POP6 Lot # (AB):	1101164
1X 3100 Running Buffer (AB):	060611AK1
Run Module:	RapidSeq36_POP6DefaultModule
Run #s:	2136- 2141
Pipettor #s:	P-060

Document: BTF00318 - CE Load Sheet ROWS (MITO WS)
Revision: 2
Effective: Monday, March 17, 2008 11:12:01 AM

ALB 6/6/11

8

Cycle Sequencing

Amplification Worksheet (20µl Volume Reaction)

2S04-114-SEQ15

Reagent	Reagent Lot #	Per Sample (µl)	# Rxns/ Primer	Total Vol/Primer (µl)
Big Dye (AB)	10110561M	2.0	12	24.0
5X Sequencing Buffer (AB)	1007127	6.0	12	72.0
Primer (Bode)	See Below	1.0	12	12.0

Reagent	Reagent Lot #	Per Positive Control (µl)
dH2O (Fisher)	103106	9.0
Big Dye (AB)	N/A	2.0
5X Sequencing Buffer (AB)	N/A	6.0
M13 Primer (AB)	N/A	1.0
pGEM (AB)	N/A	2.0

Primer Set (Bode)	Forward	Primer Lot #	Reverse	Primer Lot #
PSI	F15989	0118111LNM	R16255	08241051LB
PSII	F16190	N/A	R16410	N/A
PSIII	F29	0118111LNM	R285	08241051LB
PSIV	F155	08241051LB	R381	02241151LB

Tray Coordinate	Sample	Master Mix (µl)	Sample/dH2O (11 µl)	Primer
A1	2S04-114-NEG2Am_F15989	9	1/10	F15989
A2	2S04-114-81a2.2m_F15989	9	1/10	F15989
A3	2S04-114-RB47.2m_F15989	9	1/10	F15989
A4				
A5				
A6	2S04-114-113a1.2m_F15989	9	1/10	F15989
A7	2S04-114-RB49.2m_F15989	9	1/10	F15989
A8	2S04-114-114a1.2m_F15989	9	1/10	F15989
A9	2S04-114-RB50.2m_F15989	9	1/10	F15989
A10	2S04-114-POS2m_F15989	9	1/10	F15989
A11	2S04-114-NEG2Bm_F15989	9	1/10	F15989
B1	2S04-114-NEG2Am_R16255	9	1/10	R16255
B2	2S04-114-81a2.2m_R16255	9	1/10	R16255
B3	2S04-114-RB47.2m_R16255	9	1/10	R16255
B4				
B5				
B6	2S04-114-113a1.2m_R16255	9	1/10	R16255
B7	2S04-114-RB49.2m_R16255	9	1/10	R16255
B8	2S04-114-114a1.2m_R16255	9	1/10	R16255
B9	2S04-114-RB50.2m_R16255	9	1/10	R16255
B10	2S04-114-POS2m_R16255	9	1/10	R16255
B11	2S04-114-NEG2Bm_R16255	9	1/10	R16255
C1	2S04-114-NEG3Am_F29	9	1/10	F29
C2	2S04-114-81a2.3m_F29	9	1/10	F29
C3	2S04-114-RB47.3m_F29	9	1/10	F29
C4	2S04-114-112a1.3m_F29	9	11/0 ALB 6/17/11	F29
C5	2S04-114-RB48.3m_F29	9	11/0 ALB 6/17/11	F29
C6	2S04-114-113a1.3m_F29	9	1/10	F29
C7	2S04-114-RB49.3m_F29	9	1/10	F29
C8	2S04-114-114a1.3m_F29	9	1/10	F29
C9	2S04-114-RB50.3m_F29	9	1/10	F29
C10	2S04-114-POS3m_F29	9	1/10	F29
C11	2S04-114-NEG3Bm_F29	9	1/10	F29

TC#: 16
Analyst: ALB
Case Number(s): 2S04-114

Program#: CycSeq
Date: 6/3/11

Pipettors	Lot #
<2 uL	P-103
2 -10 uL	P-016
11 - 100 uL	P-057
101 - 1000 uL	N/A
master mix	P-016
water	P-103

Document: BTF00320 - Cycle Sequence Amp ROWS (MITO WS)
Revision: 3
Effective:

ALB 6/15/11

Cycle Sequencing

Amplification Worksheet (20µl Volume Reaction)

2S04-114-SEQ15

Tray Coordinate	Sample	Master Mix (µl)	Sample/dH2O (µl)	Primer
D1	2S04-114-NEG3Am_R285	9	1/10	R285
D2	2S04-114-81a2.3m_R285	9	1/10	R285
D3	2S04-114-RB47.3m_R285	9	1/10	R285
D4	2S04-114-112a1.3m_R285	9	1/0 ALB 6/17/11	R285
D5	2S04-114-RB48.3m_R285	9	1/0 ALB 6/17/11	R285
D6	2S04-114-113a1.3m_R285	9	1/10	R285
D7	2S04-114-RB49.3m_R285	9	1/10	R285
D8	2S04-114-114a1.3m_R285	9	1/10	R285
D9	2S04-114-RB50.3m_R285	9	1/10	R285
D10	2S04-114-POS3m_R285	9	1/10	R285
D11	2S04-114-NEG3Bm_R285	9	1/10	R285
E1	2S04-114-NEG4Am_F155	9	1/10	F155
E2	2S04-114-81a2.4m_F155	9	1/10	F155
E3	2S04-114-RB47.4m_F155	9	1/10	F155
E4				
E5				
E6	2S04-114-113a1.4m_F155	9	1/10	F155
E7	2S04-114-RB49.4m_F155	9	1/10	F155
E8	2S04-114-114a1.4m_F155	9	1/10	F155
E9	2S04-114-RB50.4m_F155	9	1/10	F155
E10	2S04-114-POS4m_F155	9	1/10	F155
E11	2S04-114-NEG4Bm_F155	9	1/10	F155
F1	2S04-114-NEG4Am_R381	9	1/10	R381
F2	2S04-114-81a2.4m_R381	9	1/10	R381
F3	2S04-114-RB47.4m_R381	9	1/10	R381
F4				
F5				
F6	2S04-114-113a1.4m_R381	9	1/10	R381
F7	2S04-114-RB49.4m_R381	9	1/10	R381
F8	2S04-114-114a1.4m_R381	9	1/10	R381
F9	2S04-114-RB50.4m_R381	9	1/10	R381
F10	2S04-114-POS4m_R381	9	1/10	R381
F11	2S04-114-NEG4Bm_R381	9	1/10	R381

Analyst: ALB **Date: 6/3/11**
Case Number(s): 2S04-114

Document: BTF00320 - Cycle Sequence Amp ROWS (MITO WS)
Revision: 3
Effective:

ALB 6/15/11

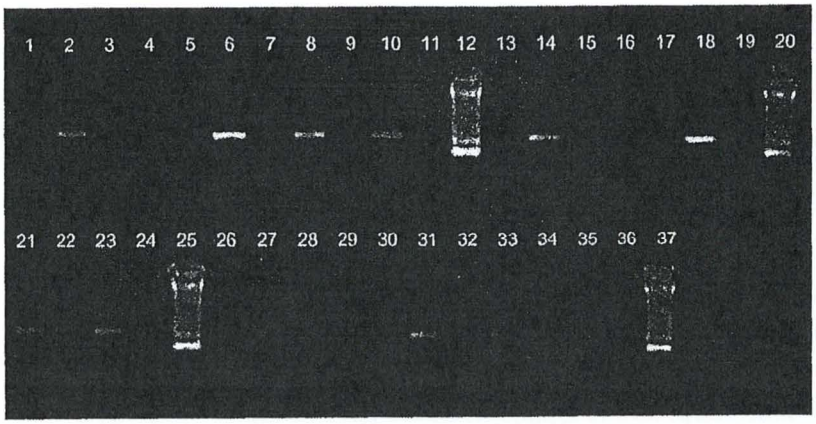
Agarose Gel Electrophoresis
2% Gel

Date: 6/3/11
Analyst: ALB
Case Number: 2S04-114
Amp #: Amp2m-4m

Gel Lot#: 060311JLF
Running Buffer-1X TBE Lot # (Bode): 052411AK
Ladder Lot# (Invitrogen): 867335
6X Gel Loading Dye Lot# (Bode): 060311ALB

Parameters
Voltage (V): 150
Run Time (mins): 25

Pipettes:
P-113 / P-062



* Faint band visualized on gel 6/3/11 ALB

Lane	Sample
1	2S04-114-NEG2Am
2	2S04-114-81a2.2m
3	2S04-114-RB47.2m
4	2S04-114-112a1.2m
5	2S04-114-RB48.2m
6	2S04-114-113a1.2m
7	2S04-114-RB49.2m
8	2S04-114-114a1.2m
9	2S04-114-RB50.2m
10	2S04-114-POS2m
11	2S04-114-NEG2Bm
12	Ladder
13	2S04-114-NEG3Am
14	2S04-114-81a2.3m
15	2S04-114-RB47.3m
16	2S04-114-112a1.3m
17	2S04-114-RB48.3m
18	2S04-114-113a1.3m
19	2S04-114-RB49.3m
20	Ladder

Lane	Sample
21	2S04-114-114a1.3m
22	2S04-114-RB50.3m
23	2S04-114-POS3m
24	2S04-114-NEG3Bm
25	Ladder
26	2S04-114-NEG4Am
27	2S04-114-81a2.4m
28	2S04-114-RB47.4m
29	2S04-114-112a1.4m
30	2S04-114-RB48.4m
31	2S04-114-113a1.4m
32	2S04-114-RB49.4m
33	2S04-114-114a1.4m
34	2S04-114-RB50.4m
35	2S04-114-POS4m
36	2S04-114-NEG4Bm
37	Ladder

ALB 6/15/11

mtDNA Amplification & Exo-SAP-IT

Amplification Worksheet (50µl Volume Reaction)

2S04-114-AMP2m-4m

mtDNA Amplification				
Reagent	Reagent Lot #	Per Sample (µl)	# Rxns/ PS	Total Vol/PS (µl)
Water (Fisher)	097050	35	12	420
10X PCR Buffer (AB)	ND5290	5	12	60
10 mM dNTP (Roche)	11874920	1	12	12
20 mg/ml BSA (Roche)	13465436	1	12	12
FWD Primer (Bode)	See Below	2	12	24
RVS Primer (bode)	See Below	2	12	24
AmpliTaq Gold (AB)	N17041	1	12	12

10ng/ul HL-60 (Bode)	042711CC
TE-4 Buffer (Bode)	041311JJ
POS 200pg/uL (Bode)	060311ALB

Primer Set (Bode)	Forward	Primer Lot #	Reverse	Primer Lot #
PSI	F15978	022411SLB	R16255	051011SLB
PSII	F16190	N/A	R16410	N/A
PSIII	F15	082410SLB	R285	051011SLB
PSIV	F155	082410SLB	R389	082410SLB

Exo-SAP-IT & MitoQT				
MitoQT			Exo-SAP-IT	
Reagent	Reagent Lot #		Exo-SAP-IT	6.0 µl
Stock 9947 (Corlell)	N/A		Sample	33.0 µl
dH2O (Bode)	N/A		Lot # (UBS):	4132937
TE-4 Buffer (Bode)	N/A		TC:	26
PicoGreen (Invitrogen)	N/A		Program:	EXO-SAP

Tray Coordinate	Sample	Master Mix (µl)	Sample (µl)	Primer Set
A1.2m	2S04-114-NEG2Am	47	3	PSI
A2.2m	2S04-114-81a2.2m	47	3	PSI
A3.2m	2S04-114-RB47.2m	47	3	PSI
A4.2m	2S04-114-112a1.2m	47	3	PSI
A5.2m	2S04-114-RB48.2m	47	3	PSI
A6.2m	2S04-114-113a1.2m	47	3	PSI
A7.2m	2S04-114-RB49.2m	47	3	PSI
A8.2m	2S04-114-114a1.2m	47	3	PSI
A9.2m	2S04-114-RB50.2m	47	3	PSI
A10.2m	2S04-114-POS2m	47	1+2dH20	PSI
A11.2m	2S04-114-NEG2Bm	47	3	PSI
B1.3m	2S04-114-NEG3Am	47	3	PSIII
B2.3m	2S04-114-81a2.3m	47	3	PSIII
B3.3m	2S04-114-RB47.3m	47	3	PSIII
B4.3m	2S04-114-112a1.3m	47	3	PSIII
B5.3m	2S04-114-RB48.3m	47	3	PSIII
B6.3m	2S04-114-113a1.3m	47	3	PSIII
B7.3m	2S04-114-RB49.3m	47	3	PSIII
B8.3m	2S04-114-114a1.3m	47	3	PSIII
B9.3m	2S04-114-RB50.3m	47	3	PSIII
B10.3m	2S04-114-POS3m	47	1+2dH20	PSIII
B11.3m	2S04-114-NEG3Bm	47	3	PSIII
C1.4m	2S04-114-NEG4Am	47	3	PSIV
C2.4m	2S04-114-81a2.4m	47	3	PSIV
C3.4m	2S04-114-RB47.4m	47	3	PSIV
C4.4m	2S04-114-112a1.4m	47	3	PSIV
C5.4m	2S04-114-RB48.4m	47	3	PSIV
C6.4m	2S04-114-113a1.4m	47	3	PSIV
C7.4m	2S04-114-RB49.4m	47	3	PSIV
C8.4m	2S04-114-114a1.4m	47	3	PSIV
C9.4m	2S04-114-RB50.4m	47	3	PSIV
C10.4m	2S04-114-POS4m	47	1+2dH20	PSIV
C11.4m	2S04-114-NEG4Bm	47	3	PSIV

TC#: 24 Program#: PS1-4 Tube Witness: JJ 6-3-11

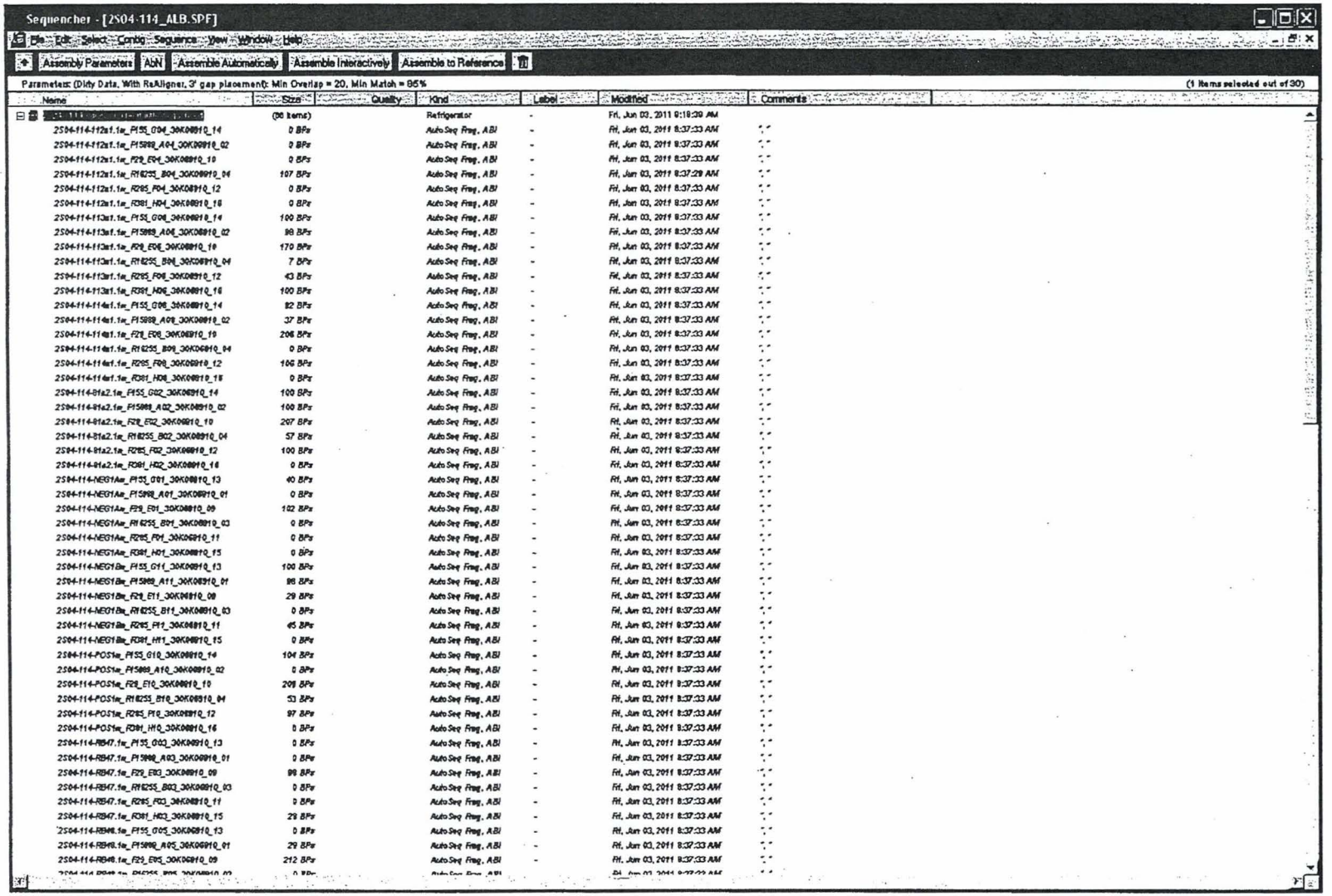
Analyst: ALB Date: 6/3/11

Case Number(s): 2S04-114

Pipettors	Lot #
<2 uL	M-003
2 -10 uL	M-003
11 - 100 uL	M-005
101 - 1000 uL	M-008
master mix	M-005
water	M-008, M-003

ALB 6/15/11

2S04-114-Regions Inadvertantly Sequenced
6/17/11 ALB



ALB 6/17/11

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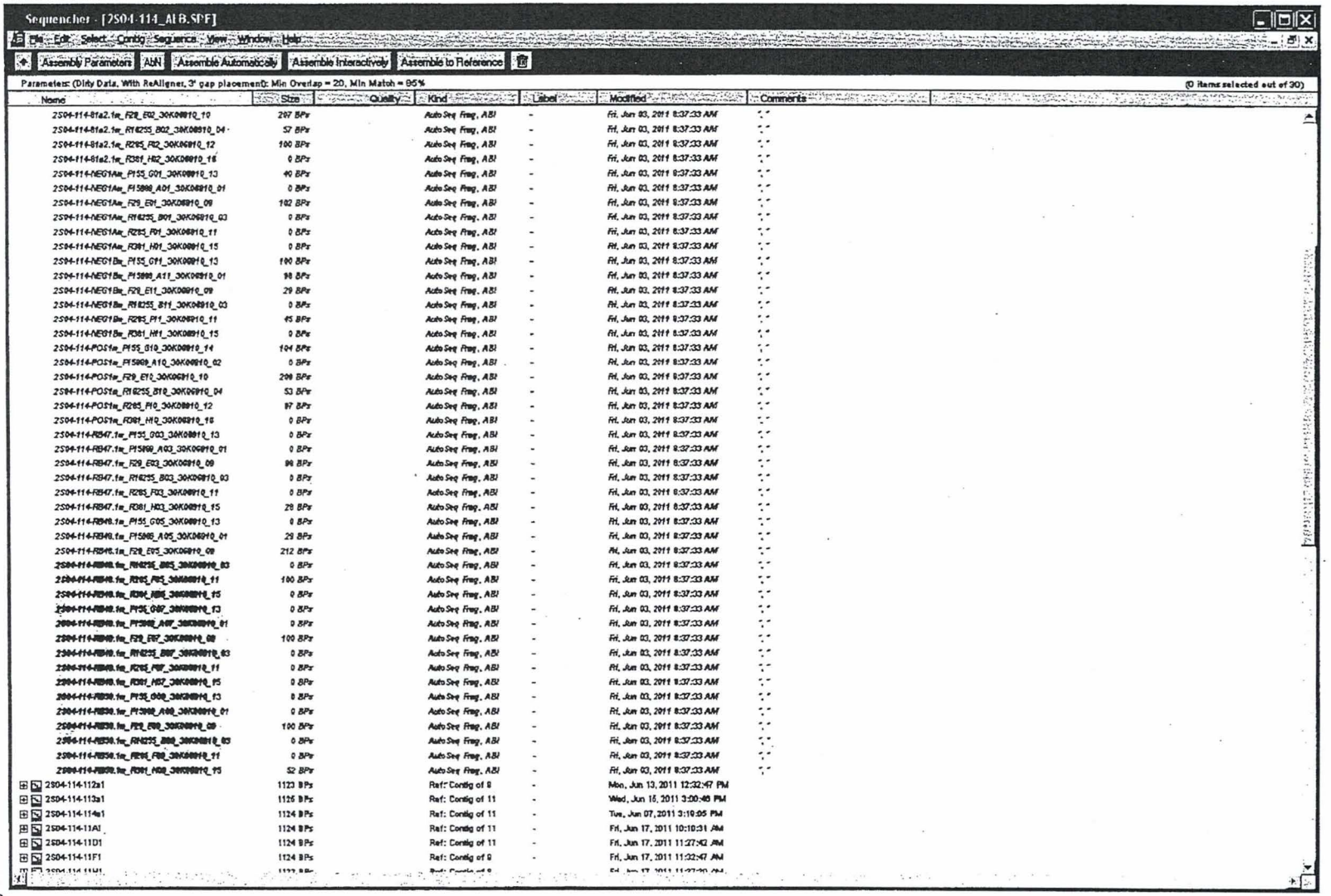
2S04-114-Regions Inadvertantly Sequenced (continued)
6/17/11 ALB



ALB 6/17/11

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mtDNA Gel Filtration, 3100 Sequencing & Capillary Load Sheet

Date: 6/2/2011
Analyst: ALB
3100 Seq Tray ID: 060211-ALB

	1	2	3	4	5	6	7	8	9	10	11	12
A	2S04-114-NEG1Am_F15989	2S04-114-81a2.1m_F15989	2S04-114-RB47.1m_F15989	2S04-114-112a1.1m_F15989	2S04-114-RB48.1m_F15989	2S04-114-113a1.1m_F15989	2S04-114-RB49.1m_F15989	2S04-114-114a1.1m_F15989	2S04-114-RB50.1m_F15989	2S04-114-POS1m_F15989	2S04-114-NEG1Bm_F15989	
B	2S04-114-NEG1Am_R16255	2S04-114-81a2.1m_R16255	2S04-114-RB47.1m_R16255	2S04-114-112a1.1m_R16255	2S04-114-RB48.1m_R16255	2S04-114-113a1.1m_R16255	2S04-114-RB49.1m_R16255	2S04-114-114a1.1m_R16255	2S04-114-RB50.1m_R16255	2S04-114-POS1m_R16255	2S04-114-NEG1Bm_R16255	
C	2S04-114-NEG1Am_F16190	2S04-114-81a2.1m_F16190	2S04-114-RB47.1m_F16190	2S04-114-112a1.1m_F16190	2S04-114-RB48.1m_F16190	2S04-114-113a1.1m_F16190	2S04-114-RB49.1m_F16190	2S04-114-114a1.1m_F16190	2S04-114-RB50.1m_F16190	2S04-114-POS1m_F16190	2S04-114-NEG1Bm_F16190	
D	2S04-114-NEG1Am_R16410	2S04-114-81a2.1m_R16410	2S04-114-RB47.1m_R16410	2S04-114-112a1.1m_R16410	2S04-114-RB48.1m_R16410	2S04-114-113a1.1m_R16410	2S04-114-RB49.1m_R16410	2S04-114-114a1.1m_R16410	2S04-114-RB50.1m_R16410	2S04-114-POS1m_R16410	2S04-114-NEG1Bm_R16410	
E	2S04-114-NEG1Am_F29	2S04-114-81a2.1m_F29	2S04-114-RB47.1m_F29	2S04-114-112a1.1m_F29	2S04-114-RB48.1m_F29	2S04-114-113a1.1m_F29	2S04-114-RB49.1m_F29	2S04-114-114a1.1m_F29	2S04-114-RB50.1m_F29	2S04-114-POS1m_F29	2S04-114-NEG1Bm_F29	
F	2S04-114-NEG1Am_R285	2S04-114-81a2.1m_R285	2S04-114-RB47.1m_R285	2S04-114-112a1.1m_R285	2S04-114-RB48.1m_R285	2S04-114-113a1.1m_R285	2S04-114-RB49.1m_R285	2S04-114-114a1.1m_R285	2S04-114-RB50.1m_R285	2S04-114-POS1m_R285	2S04-114-NEG1Bm_R285	
G	2S04-114-NEG1Am_F155	2S04-114-81a2.1m_F155	2S04-114-RB47.1m_F155	2S04-114-112a1.1m_F155	2S04-114-RB48.1m_F155	2S04-114-113a1.1m_F155	2S04-114-RB49.1m_F155	2S04-114-114a1.1m_F155	2S04-114-RB50.1m_F155	2S04-114-POS1m_F155	2S04-114-NEG1Bm_F155	
H	2S04-114-NEG1Am_R381	2S04-114-81a2.1m_R381	2S04-114-RB47.1m_R381	2S04-114-112a1.1m_R381	2S04-114-RB48.1m_R381	2S04-114-113a1.1m_R381	2S04-114-RB49.1m_R381	2S04-114-114a1.1m_R381	2S04-114-RB50.1m_R381	2S04-114-POS1m_R381	2S04-114-NEG1Bm_R381	

Gel Filtration Cartridge (Edge Biosystems): 157793

Hi-Di Formamide (AB): N/A
(20.0 ul per well)

3100 Machine ID:	3100-1 (*3100workstation*)
POP6 Lot # (AB):	1101164
1X 3100 Running Buffer (AB):	060111NSB
Run Module:	RapidSeq36_POP6DefaultModule
Run #s:	2126 - 2131
Pipettor #s:	P-123

Document: BTF00318 - CE Load Sheet ROWS (MITO WS)
Revision: 2
Effective: Monday, March 17, 2008 11:12:01 AM

* Rows A, B, E, F, G & H not used - regions inadvertently sequenced... see Case Note #1

6.2.11 ALB 11/15/11

Cycle Sequencing

Amplification Worksheet (20µl Volume Reaction)

2S04-114-~~SEQ1~~ ALB 6/2/11 SEQ14

Reagent	Reagent Lot #	Per Sample (µl)	# Rxns/ Primer	Total Vol/Primer (µl)
Big Dye (AB)	1011051OM	2.0	12	24.0 ✓
5X Sequencing Buffer (AB)	1007127	6.0	12	72.0 ✓
Primer (Bode)	See Below	1.0	12	12.0 ✓

Reagent	Reagent Lot #	Per Positive Control (µl)
dH2O (Fisher)	103106	9.0
Big Dye (AB)	N/A	2.0
5X Sequencing Buffer (AB)	N/A	6.0
M13 Primer (AB)	N/A	1.0
pGEM (AB)	N/A	2.0

Primer Set (Bode)	Forward	Primer Lot #	Reverse	Primer Lot #
PSI	F15989	0118111NM	R16255	0824105LB
PSII	F16190	0217115LB	R16410	0103111NM
PSIII	F29	0118111NM	R285	0824105LB
PSIV	F155	0824105LB	R381	0224115LB

Tray Coordinate	Sample	Master Mix (µl)	Sample/dH2O (11 µl)	Primer
A1	2S04-114-NEG1Am_F15989	9	1/10	F15989
A2	2S04-114-81a2.1m_F15989	9	1/10	F15989
A3	2S04-114-RB47.1m_F15989	9	1/10	F15989
A4	2S04-114-112a1.1m_F15989	9	1/10	F15989
A5	2S04-114-RB48.1m_F15989	9	1/10	F15989
A6	2S04-114-113a1.1m_F15989	9	1/10	F15989
A7	2S04-114-RB49.1m_F15989	9	1/10	F15989
A8	2S04-114-114a1.1m_F15989	9	1/10	F15989
A9	2S04-114-RB50.1m_F15989	9	1/10	F15989
A10	2S04-114-POS1m_F15989	9	1/10	F15989
A11	2S04-114-NEG1Bm_F15989	9	1/10	F15989
B1	2S04-114-NEG1Am_R16255	9	1/10	R16255
B2	2S04-114-81a2.1m_R16255	9	1/10	R16255
B3	2S04-114-RB47.1m_R16255	9	1/10	R16255
B4	2S04-114-112a1.1m_R16255	9	1/10	R16255
B5	2S04-114-RB48.1m_R16255	9	1/10	R16255
B6	2S04-114-113a1.1m_R16255	9	1/10	R16255
B7	2S04-114-RB49.1m_R16255	9	1/10	R16255
B8	2S04-114-114a1.1m_R16255	9	1/10	R16255
B9	2S04-114-RB50.1m_R16255	9	1/10	R16255
B10	2S04-114-POS1m_R16255	9	1/10	R16255
B11	2S04-114-NEG1Bm_R16255	9	1/10	R16255
C1	2S04-114-NEG1Am_F16190	9	1/10	F16190
C2	2S04-114-81a2.1m_F16190	9	1/10	F16190
C3	2S04-114-RB47.1m_F16190	9	1/10	F16190
C4	2S04-114-112a1.1m_F16190	9	1/10	F16190
C5	2S04-114-RB48.1m_F16190	9	1/10	F16190
C6	2S04-114-113a1.1m_F16190	9	1/10	F16190
C7	2S04-114-RB49.1m_F16190	9	1/10	F16190
C8	2S04-114-114a1.1m_F16190	9	1/10	F16190
C9	2S04-114-RB50.1m_F16190	9	1/10	F16190
C10	2S04-114-POS1m_F16190	9	1/10	F16190
C11	2S04-114-NEG1Bm_F16190	9	1/10	F16190

TC#: 21
Analyst: ALB
Case Number(s): 2S04-114

Program#: CycSeq
Date: 6/2/11

Pipettors	Lot #
<2 uL	P-103
2 -10 uL	P-103, P-016
11 - 100 uL	P-070
101 - 1000 uL	N/A
master mix	P-016
water	P-103

* See case Note #1

ALB 6/15/11

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Cycle Sequencing

Amplification Worksheet (20µl Volume Reaction)

ALB 6/2/11

2S04-114-~~SEQ1~~ SEQ14

Tray Coordinate	Sample	Master Mix (µl)	Sample/dH2O (µl)	Primer
D1	2S04-114-NEG1Am_R16410	9	1/10	R16410
D2	2S04-114-81a2.1m_R16410	9	1/10	R16410
D3	2S04-114-RB47.1m_R16410	9	1/10	R16410
D4	2S04-114-112a1.1m_R16410	9	1/10	R16410
D5	2S04-114-RB48.1m_R16410	9	1/10	R16410
D6	2S04-114-113a1.1m_R16410	9	1/10	R16410
D7	2S04-114-RB49.1m_R16410	9	1/10	R16410
D8	2S04-114-114a1.1m_R16410	9	1/10	R16410
D9	2S04-114-RB50.1m_R16410	9	1/10	R16410
D10	2S04-114-POS1m_R16410	9	1/10	R16410
D11	2S04-114-NEG1Bm_R16410	9	1/10	R16410
E1	2S04-114-NEG1Am_F29	9	1/10	F29
E2	2S04-114-81a2.1m_F29	9	1/10	F29
E3	2S04-114-RB47.1m_F29	9	1/10	F29
E4	2S04-114-112a1.1m_F29	9	1/10	F29
E5	2S04-114-RB48.1m_F29	9	1/10	F29
E6	2S04-114-113a1.1m_F29	9	1/10	F29
E7	2S04-114-RB49.1m_F29	9	1/10	F29
E8	2S04-114-114a1.1m_F29	9	1/10	F29
E9	2S04-114-RB50.1m_F29	9	1/10	F29
E10	2S04-114-POS1m_F29	9	1/10	F29
E11	2S04-114-NEG1Bm_F29	9	1/10	F29
F1	2S04-114-NEG1Am_R285	9	1/10	R285
F2	2S04-114-81a2.1m_R285	9	1/10	R285
F3	2S04-114-RB47.1m_R285	9	1/10	R285
F4	2S04-114-112a1.1m_R285	9	1/10	R285
F5	2S04-114-RB48.1m_R285	9	1/10	R285
F6	2S04-114-113a1.1m_R285	9	1/10	R285
F7	2S04-114-RB49.1m_R285	9	1/10	R285
F8	2S04-114-114a1.1m_R285	9	1/10	R285
F9	2S04-114-RB50.1m_R285	9	1/10	R285
F10	2S04-114-POS1m_R285	9	1/10	R285
F11	2S04-114-NEG1Bm_R285	9	1/10	R285
G1	2S04-114-NEG1Am_F155	9	1/10	F155
G2	2S04-114-81a2.1m_F155	9	1/10	F155
G3	2S04-114-RB47.1m_F155	9	1/10	F155
G4	2S04-114-112a1.1m_F155	9	1/10	F155
G5	2S04-114-RB48.1m_F155	9	1/10	F155
G6	2S04-114-113a1.1m_F155	9	1/10	F155
G7	2S04-114-RB49.1m_F155	9	1/10	F155
G8	2S04-114-114a1.1m_F155	9	1/10	F155
G9	2S04-114-RB50.1m_F155	9	1/10	F155
G10	2S04-114-POS1m_F155	9	1/10	F155
G11	2S04-114-NEG1Bm_F155	9	1/10	F155
H1	2S04-114-NEG1Am_R381	9	1/10	R381
H2	2S04-114-81a2.1m_R381	9	1/10	R381
H3	2S04-114-RB47.1m_R381	9	1/10	R381
H4	2S04-114-112a1.1m_R381	9	1/10	R381
H5	2S04-114-RB48.1m_R381	9	1/10	R381
H6	2S04-114-113a1.1m_R381	9	1/10	R381
H7	2S04-114-RB49.1m_R381	9	1/10	R381
H8	2S04-114-114a1.1m_R381	9	1/10	R381
H9	2S04-114-RB50.1m_R381	9	1/10	R381
H10	2S04-114-POS1m_R381	9	1/10	R381
H11	2S04-114-NEG1Bm_R381	9	1/10	R381

Analyst: ALB **Date: 6/2/11**
Case Number(s): 2S04-114

Document: BTF00320 - Cycle Sequence Amp ROWS (MITO WS)
Revision: 3
Effective:

ALB 6/15/11

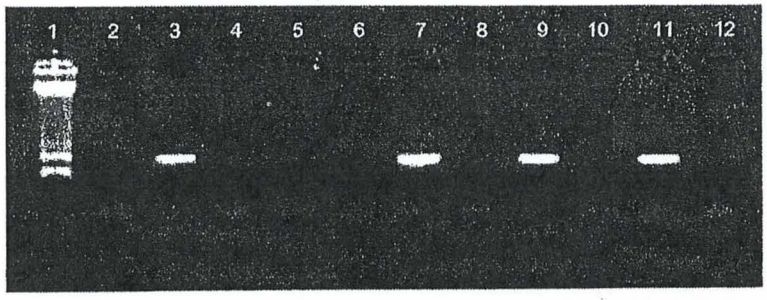
Agarose Gel Electrophoresis
2% Gel

Date: 6/2/11
Analyst: ALB
Case Number: 2S04-114
Amp #: Amp1m

Gel Lot#: 052311ARB
Running Buffer-1X TBE Lot # (Bode): 052411AK
Ladder Lot# (Invitrogen): 867335
6X Gel Loading Dye Lot# (Bode): 051011CC

Parameters
Voltage (V): 150
Run Time (mins): 25

Pipettes:
P-113 / P-112



Lane	Sample
1	Ladder
2	2S04-114-NEG1Am
3	2S04-114-81a2.1m
4	2S04-114-RB47.1m
5	2S04-114-112a1.1m
6	2S04-114-RB48.1m
7	2S04-114-113a1.1m
8	2S04-114-RB49.1m
9	2S04-114-114a1.1m
10	2S04-114-RB50.1m
11	2S04-114-POS1m
12	2S04-114-NEG1Bm

ALB 6/15/11

mtDNA Amplification & Exo-SAP-IT

Amplification Worksheet (50µl Volume Reaction)

2S04-114-AMP1m

mtDNA Amplification				
Reagent	**Reagent Lot #**	**Per Sample (µl)**	**# Rxns/ PS**	**Total Vol/PS (µl)**
Water (Fisher)	097050	35	12	420 ✓
10X PCR Buffer (AB)	N05290	5	12	60 ✓
10 mM dNTP (Roche)	11874920	1	12	12 ✓
20 mg/ml BSA (Roche)	13416436	1	12	12 ✓
FWD Primer (Bode)	See Below	2	12	24 ✓
RVS Primer (bode)	See Below	2	12	24 ✓
AmpliTaq Gold (AB)	N17041	1	12	12 ✓

10ng/ul HL-60 (Bode)	042711CC
TE-4 Buffer (Bode)	041311JJ
POS 200pg/uL (Bode)	060211ALB

Primer Set (Bode)	Forward	Primer Lot #	Reverse	Primer Lot #
PSI	F15978	N/A	R16255	N/A
PSII	F16190	021711SLB	R16410	021711SLB
PSIII	F15	N/A	R285	N/A
PSIV	F155	N/A	R389	N/A

Exo-SAP-IT & MitoQT	
MitoQT	
Reagent	**Reagent Lot #**
Stock 9947 (Coriell)	NA
dH2O (Bode)	NA
TE-4 Buffer (Bode)	NA
PicoGreen (Invitrogen)	NA

Exo-SAP-IT	
Exo-SAP-IT	6.0 µl
Sample	33.0 µl
Lot # (UBS):	4132937
TC:	21
Program:	Exo-SAP

Tray Coordinate	Sample	Master Mix (µl)	Sample (µl)	Primer Set
A1.1m	2S04-114-NEG1Am	47	3	PSII
A2.1m	2S04-114-81a2.1m	47	3	PSII
A3.1m	2S04-114-RB47.1m	47	3	PSII
A4.1m	2S04-114-112a1.1m	47	3	PSII
A5.1m	2S04-114-RB48.1m	47	3	PSII
A6.1m	2S04-114-113a1.1m	47	3	PSII
A7.1m	2S04-114-RB49.1m	47	3	PSII
A8.1m	2S04-114-114a1.1m	47	3	PSII
A9.1m	2S04-114-RB50.1m	47	3	PSII
A10.1m	2S04-114-POS1m	47	1+2dH20	PSII
A11.1m	2S04-114-NEG1Bm	47	3	PSII

TC#: 15 Program#: PS1-4

Analyst: ALB Date: 6/2/11

Case Number(s): 2S04-114

Tube Witness: ALB 060211

Pipettors	Lot #
<2 uL	M-003
2 -10 uL	M-003
11 - 100 uL	M-005
101 - 1000 uL	M-008
master mix	M-005
water	M-008, M-003

ALB 6/15/11

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QIAGEN: Procedure C

Extraction Worksheet

2S04-114-RB47 thru RB49

ITEM	SOURCE	LOT NUMBER
ATL	QIAGEN	136253857
Proteinase K (20mg/ml)	QIAGEN	136233014
AL	QIAGEN	136237841
Carrier RNA	BODE	081910JJ
100% Ethanol	SPECTRUM	ZR3007
QIAamp Spin Column	QIAGEN	136259037
AW1	BODE	030711LNM
AW2	BODE	030711LNM
TE Buffer	BODE	041311JJ

Tube #	Sample	Comments
1	2S04-114-81a2	
2	2S04-114-RB47	
3	2S04-114-112a1	
4	2S04-114-RB48	
5	2S04-114-113a1	
6	2S04-114-RB49	

Analyst: ALB
Cryobox Name: ALB

Date: 6/1/11
Case Number: 2S04-114

Notes:

Pipettes Used:

Volumes <2 uL	M-002
Volumes 2-10 uL	N/A
Volumes 11-100 uL	M-006
Volumes 101-1000 uL	M-009

ALB 6/15/11

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QIAGEN Micro Spin-Column Purification (Hair)

Extraction Worksheet

2S04-114-RB50

ITEM	SOURCE	LOT NUMBER
Tergazyme Wash		
5% Terg-A-Zyme	BODE	060111ALB
100% EtOH	SPECTRUM	ZR3007
Sterile H20	FISHER	103106
ATL	QIAGEN	136253857
Proteinase K (20mg/ml)	QIAGEN	136233014
1M DTT	BODE	011311JJ
AL	QIAGEN	136237841
Carrier RNA	BODE	081910JJ
QIAamp Spin Column	QIAGEN	136259037
AW1	BODE	030711LNM
AW2	BODE	030711LNM
TE Buffer	BODE	041311JJ

Tube #	Sample	Comments
1	2S04-114-114a1	
2	2S04-114-RB50	

Analyst: ALB

Date: 6/1/11

Case Number: 2S04-114

Pipettors	ID #s
<2 uL	M-002
2 - 10 uL	N/A
11 - 100 uL	M-006
101 - 1000 uL	M-009

Document: BTF00224 - Qiagen Procedure D Hair (MITO WS)
Revision: 3
Effective: Friday, April 25, 2008 1:16:05 PM

ALB 6/15/11

Transfer of Evidence Cuttings

Case #: 2S04-114

Tube #	Sample Name	Sample Type
1	2S04-114-81a2	mito ref
2	2S04-114-RB47	mito ref
3	2S04-114-112a1	mito ref
4	2S04-114-RB48	mito ref
5	2S04-114-113a1	mito ref
6	2S04-114-RB49	mito ref
7	2S04-114-114a1	mito ref
8	2S04-114-RB50	mito ref

All evidence cuttings listed above were transferred:

From Analyst: Emily Herren
(print)
Emily Herren
(sign)

Date: 5/31/11

Time: 2:45 pm

Transfer Method (check one): ____Hand to Hand _X_Temporary Evidence Storage
____Secure Refrigerator/Freezer (add location) _____

To Analyst: Adrienne Barranco
(print)
Adrienn Barranco
(sign)

Date: 6/1/11

Time: ~1:30pm

Document: BT00059 - Transfer of Evidence Cuttings (WS)
Revision: 3
Effective: 10/29/2010 9:03:53 AM

AB 6/15/11

Inventory Case Notes

Bode Technology, Inc.

Case Number: 2S04-114-112 to -114 Date: 5/27/11 Analyst: EBH

OUTER PACKAGING: Clear unsealed ziplock bag labeled "James Vaughn".
CONTAINS: One green aluminum can labeled in part "...Big K CITRUS DROP...". No visible staining on can.

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	QUANTITY CONSUMED
2S04-114-112	1	• 5/27/11 EBH: Wet/dry swabbed the rim of the can in front of the opening and along the opening using two swabs. Cut, consumed, and combined swabs. Sample processed as 2S04-114-112a1. Consumed ~50% of surface area sampled.	~50% of surface area sampled

OUTER PACKAGING: Clear unsealed ziplock bag labeled "LYNN VAUGHN".
CONTAINS: One unsealed unlabeled smaller ziplock bag containing one black and blue electric razor. Front of razor labeled "PHILLIPS NORELCO". No visible staining on razor.

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	QUANTITY CONSUMED
2S04-114-113	1	• 5/27/11 EBH: Wet/dry swabbed the three circular razor heads on the top of the electric razor using two swabs. Cut, consumed, and combined swabs. Sample processed as 2S04-114-113a1. Consumed ~50% of surface area sampled.	~50% of surface area sampled

AEB 6/7/11

Document: BTF00245 - Inventory Notes w/out Serology (CCW WS)
Revision: 2
Effective: Wednesday, January 30, 2008 2:06:20 PM

EBH 6/10/11 3

Inventory Case Notes

Bode Technology, Inc.

Case Number: 2S04-114-112 to -114 Date: 5/27/11 Analyst: EBH

OUTER PACKAGING: Sealed white envelope labeled "3 samples".
CONTAINS: One unsealed ziplock bag labeled "...1...CINDY HOBBS CIG...", one unsealed ziplock bag labeled "...2...CINDY HOBB'S CIG...", and one unsealed ziplock bag labeled "...3...CINDY HOBBS Hair...". Bags previously labeled "1" and "2" (cigarette samples) not examined at this time.

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	QUANTITY CONSUMED
2S04-114-114	1	• 5/27/11 EBH: Bag labeled "...3...CINDY HOBBS Hair..." contained one tissue wrapped around a large clump of apparent hairs. Apparent hairs light brown to blonde in color. Removed one apparent hair from clump, ~40 cm in length. Cut ~4.0 cm from apparent root end. Sample processed as 2S04-114-114a1. Consumed apparent root end and ~10% of hair. Remainder of hair repackaged with the evidence on a post-it note.	~10% of hair including apparent root end

NOTES:

See photo documentation for additional details on description of evidence.

5/27/11 EBH: Fisher DNA Grade water used for swabbing lot# 107828.

AMB 6/17/11

Document: BTF00245 - Inventory Notes w/out Serology (CCW WS)
Revision: 2
Effective: Wednesday, January 30, 2008 2:06:20 PM

EBH 6/16/11 2

Inventory Case Notes

Bode Technology, Inc.

Case Number: 2S04-114 Date: 5/17/11 Analyst: EBH

OUTER PACKAGING: Clear plastic bag labeled in part "...Specimen #4...Chuck King...", sealed with clear tape and a non-Bode analyst's initials.

CONTAINS: Inner clear plastic bag, unlabeled and unsealed, containing one white paper cup with a green piece of cardboard around it. Cup and cardboard labeled "STARBUCKS".

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	QUANTITY CONSUMED
2S04-114-81	1	• 5/17/11 EBH: Brown staining on the inside and around the rim of the cup. Wet/dry swabbed the inner and outer rim of the cup ~1cm down from the edge on both sides using two swabs. Cut and combined swabs. Sample processed as 2S04-114-81a1. Consumed ~50% of surface area sampled. • 5/27/11 EBH: Wet/dry swabbed the inner and outer rim of the cup ~2cm down from the edge on both sides using two swabs. Cut, consumed, and combined swabs. Sample processed as 2S04-114-81a2. Consumed remainder of surface area sampled.	~100% of surface area sampled

NOTES:

See photo documentation for additional details on description of evidence.

5/17/11 EBH: Fisher DNA Grade water used for swabbing lot# 107828.

5/27/11 EBH: Fisher DNA Grade water used for swabbing lot# 107828.

Document: BTF00245 - Inventory Notes w/out Serology (CCW WS)
Revision: 2
Effective: Wednesday, January 30, 2008 2:06:20 PM

EBH 5/17/11 1

Bode Technology

10430 Furnace Road, Suite 107
Lorton, VA 22079
Phone: 703-646-9740

Supplemental Forensic Case Report
July 14, 2011

To:
Stephen Braga
Ropes and Gray LLP
700 12th Street, NW Suite 900
Washington, DC 20005

Bode Case #: 2S04-114

Partial list of evidence received on May 12, 2011 for possible DNA analysis:

Bode Sample Name	Agency Sample ID	Agency Description
2S04-114-83	E-132	Labeled as "Wooden slats"
2S04-114-83a1, -83a3		*Smaller piece of wood (~21 inches)*
2S04-114-83b1, -83b3		*Larger piece of wood (~35 inches)*
2S04-114-84	E-019	Labeled as "Rope"
2S04-114-85	E-130	Labeled as "Hook"
2S04-114-85a1, -85a3		*Green handle side*
2S04-114-85a2, -85a4		*Metal hook side*
2S04-114-86	E-130	Labeled as "Doral Cigarette Pack"
2S04-114-87	Not Listed	Labeled as "Sheet"
2S04-114-88	Not Listed	Labeled as "Sheet"

Partial list of evidence received on May 24, 2011 for possible DNA analysis:

Bode Sample Name	Agency Sample ID	Agency Description
2S04-114-97	E-01	Labeled as "Blue Boy Scout Shirt"
2S04-114-98	E-02	Labeled as "White Polka Dot Shirt"
2S04-114-98a1		*Exterior front bottom edge of shirt*
2S04-114-98a2		*Exterior shoulder areas*
2S04-114-99	E-03	Labeled as "Blue Pants"
2S04-114-99a1		*Exterior edge of both pant legs*
2S04-114-99a2		*Exterior front waistband*
2S04-114-101	E-05	Labeled as "Cub Scout Cap"
2S04-114-102	E-07	Labeled as "Blue jeans/blue wallet"
2S04-114-102a1		*Exterior edge of both pant legs*
2S04-114-102a2		*Exterior front waistband*
2S04-114-102b1		*Exterior of wallet*
2S04-114-104	E-09	Labeled as "Striped Shirt"
2S04-114-104a1		*Exterior front bottom edge of shirt*
2S04-114-104a2		*Exterior shoulder areas*
2S04-114-105	E-10	Labeled as "Child's underwear"
2S04-114-108	E-13	Labeled as "Blue jeans"
2S04-114-108a1		*Exterior edge of both pant legs*
2S04-114-108a2		*Exterior front waistband*
2S04-114-110	E-01	Pair Blue Jeans/striped shirt
2S04-114-111	E-01	Pair Pants/Pull over shirt

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Forensic Biology Results:

1. Sample 2S04-114-84 contained one apparent human hair that is not suitable for nuclear DNA analysis but may be suitable for mitochondrial DNA analysis.

2. Sample 2S04-114-102 contained one apparent human hair that is not suitable for nuclear DNA analysis but may be suitable for mitochondrial DNA analysis.

DNA Processing, Results, and Conclusions:

The evidence was processed for DNA typing by analysis of the 13 CODIS Short Tandem Repeat loci, the D2S1338 locus, the D19S433 locus, and the Amelogenin locus using the Applied Biosystems AmpFlSTR Identifiler kit. Appropriate positive and negative controls were used concurrently throughout the analysis. The DNA profiles reported in this case were determined by procedures that have been validated according to standards established by the Scientific Working Group on DNA Analysis Methods (SWGDAM) and adopted as Federal Standards.

1. An allele was obtained from sample 2S04-114-98a2 at the D8S1179 locus. Due to the limited data obtained, no conclusions can be made on the allele present in sample 2S04-114-98a2.

2. No DNA profile was obtained from the following samples: 2S04-114-83a3, 2S04-114-83b3, 2S04-114-84a2, 2S04-114-85a3, 2S04-114-85a4, 2S04-114-86a1, 2S04-114-97a1, 2S04-114-98a1, 2S04-114-99a1, 2S04-114-99a2, 2S04-114-101a1, 2S04-114-102a1, 2S04-114-102a2, 2S04-114-102b1, 2S04-114-104a1, 2S04-114-104a2, 2S04-114-105a1, 2S04-114-108a1, and 2S04-114-108a2.

See **Table 1** for summary of alleles reported for each sample.

Notes:

1. Any reference to body fluids in evidence descriptions are based on the written descriptions of the samples by the submitting agency.
2. The DNA extracts and submitted evidence will be retained at Bode until return is authorized by the client.
3. Items 2S04-114-87, 2S04-114-88, 2S04-114-110, and 2S04-114-111 were inventoried but not examined further at this time.
4. Items 2S04-114-83a and 2S04-114-83b were extracted two times (-83a1/-83a3 and -83b1/-83b3). Data from the second extraction (-83a3 and -83b3) were reported.
5. Items 2S04-114-84 and 2S04-114-85 were extracted two times (-84a1/-84a2; -85a1/-85a3; and -85a2/-85a4). Data from the second extraction (-84a2, -85a3, and -85a4) were reported.
6. A supplemental STR case report was issued due to a submission of additional evidence. Please refer to reports dated: June 14, 2011, May 23, 2011, May 11, 2011, March 25, 2011, January 25, 2011, June 4, 2008, April 10, 2008, March 7, 2008, September 27, 2007, January 2, 2007, and December 30, 2005 for complete lists of items received/tested for STRs.

Report submitted by,

Emily Herren

Emily Herren, MFS
Forensic Biology/DNA Analyst I

Table 1: Analysis of Short Tandem Repeat Loci

Locus	2S04-114-83a3	2S04-114-83b3	2S04-114-84a2	2S04-114-85a3	2S04-114-85a4	2S04-114-86a1
D8S1179	No Results	No Results	No Results	No Results	No Results	No Results
D21S11	No Results	No Results	No Results	No Results	No Results	No Results
D7S820	No Results	No Results	No Results	No Results	No Results	No Results
CSF1PO	No Results	No Results	No Results	No Results	No Results	No Results
D3S1358	No Results	No Results	No Results	No Results	No Results	No Results
TH01	No Results	No Results	No Results	No Results	No Results	No Results
D13S317	No Results	No Results	No Results	No Results	No Results	No Results
D16S539	No Results	No Results	No Results	No Results	No Results	No Results
D2S1338	No Results	No Results	No Results	No Results	No Results	No Results
D19S433	No Results	No Results	No Results	No Results	No Results	No Results
vWA	No Results	No Results	No Results	No Results	No Results	No Results
TPOX	No Results	No Results	No Results	No Results	No Results	No Results
D18S51	No Results	No Results	No Results	No Results	No Results	No Results
Amel.	No Results	No Results	No Results	No Results	No Results	No Results
D5S818	No Results	No Results	No Results	No Results	No Results	No Results
FGA	No Results	No Results	No Results	No Results	No Results	No Results

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Table 1: Analysis of Short Tandem Repeat Loci (Continued)

Locus	2S04-114-97a1	2S04-114-98a1	2S04-114-98a2	2S04-114-99a1	2S04-114-99a2	2S04-114-101a1	2S04-114-102a1
D8S1179	No Results	No Results	13, ---	No Results	No Results	No Results	No Results
D21S11	No Results	No Results	No Results	No Results	No Results	No Results	No Results
D7S820	No Results	No Results	No Results	No Results	No Results	No Results	No Results
CSF1PO	No Results	No Results	No Results	No Results	No Results	No Results	No Results
D3S1358	No Results	No Results	No Results	No Results	No Results	No Results	No Results
TH01	No Results	No Results	No Results	No Results	No Results	No Results	No Results
D13S317	No Results	No Results	No Results	No Results	No Results	No Results	No Results
D16S539	No Results	No Results	No Results	No Results	No Results	No Results	No Results
D2S1338	No Results	No Results	No Results	No Results	No Results	No Results	No Results
D19S433	No Results	No Results	No Results	No Results	No Results	No Results	No Results
vWA	No Results	No Results	No Results	No Results	No Results	No Results	No Results
TPOX	No Results	No Results	No Results	No Results	No Results	No Results	No Results
D18S51	No Results	No Results	No Results	No Results	No Results	No Results	No Results
Amel.	No Results	No Results	No Results	No Results	No Results	No Results	No Results
D5S818	No Results	No Results	No Results	No Results	No Results	No Results	No Results
FGA	No Results	No Results	No Results	No Results	No Results	No Results	No Results

Key: --- = possible additional alleles

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Table 1: Analysis of Short Tandem Repeat Loci (Continued)

Locus	2S04-114-102a2	2S04-114-102b1	2S04-114-104a1	2S04-114-104a2	2S04-114-105a1	2S04-114-108a1	2S04-114-108a2
D8S1179	No Results	No Results	No Results	No Results	No Results	No Results	No Results
D21S11	No Results	No Results	No Results	No Results	No Results	No Results	No Results
D7S820	No Results	No Results	No Results	No Results	No Results	No Results	No Results
CSF1PO	No Results	No Results	No Results	No Results	No Results	No Results	No Results
D3S1358	No Results	No Results	No Results	No Results	No Results	No Results	No Results
TH01	No Results	No Results	No Results	No Results	No Results	No Results	No Results
D13S317	No Results	No Results	No Results	No Results	No Results	No Results	No Results
D16S539	No Results	No Results	No Results	No Results	No Results	No Results	No Results
D2S1338	No Results	No Results	No Results	No Results	No Results	No Results	No Results
D19S433	No Results	No Results	No Results	No Results	No Results	No Results	No Results
vWA	No Results	No Results	No Results	No Results	No Results	No Results	No Results
TPOX	No Results	No Results	No Results	No Results	No Results	No Results	No Results
D18S51	No Results	No Results	No Results	No Results	No Results	No Results	No Results
Amel.	No Results	No Results	No Results	No Results	No Results	No Results	No Results
D5S818	No Results	No Results	No Results	No Results	No Results	No Results	No Results
FGA	No Results	No Results	No Results	No Results	No Results	No Results	No Results

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Bode Technology™

INVOICE

Client:
Ropes and Gray
Attn: Stephen Braga
One Metro Center, 700 12th St.
NW, Suite 900
Washington, DC 20005

Invoice Date: **7/13/2011**

Invoice #: **Bill15007A**
Net Terms: **30 Days**

PO Number:

Invoice Grand Total: **$ 19,125.00**

Requester: Stephen Braga
Phone: 202-508-4655
Fax:
email:

Bode Project #.: **2S04-114**

Agency Case No.: **1993-WVS-05716** **93-05-0666**

Line Item Number	Quantity	Item / Part Number	Description	Unit Price	Sales Amount
0001	2	Pre	Pre-Screening Small Items	$ 300.00	$ 600.00
0002	20	STR	Analysis of evidence items (excluding skeletal remains)	$ 1,095.00	$ 21,900.00
			Discount 15%		**$ (3,375.00)**
				TOTAL AMOUNT DUE	**$ 19,125.00**

Remit To:

The Bode Technology Group, Inc.
c/o GlobalOptions, Inc
Dept. AT 952056
Atlanta, GA 31192

Bode TIN: 54-1750293

Bank Information:

Silicon Valley Bank
Santa Clara, CA 95054
ABA# 121140399
Credit to: GlobalOptions, Inc.
Account # 3300418500

10430 Furnace Road, Suite 107
Lorton, VA 22079

1.866.BODE.4.ID
www.bodetech.com

tel. 703-646-9740
fax. 703-646-9741

EBN 7/15/11

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Bode Technology

Review Form: Complete Case File

Shipment or Case #: 2S04-114-83 to -88, -97 to -99, -101, -102-, 104, -105, -108, -110, -111

Case File Documentation	Core Forms and Controls	Data and Report
Technical Review		
- Case submission form or submitted manifest complete - Client paperwork complete - Client communication documented* - Chain of custody (COC) completed and correct - Project guidelines followed* - Inventory sheet accurate and consistent with COC - Photodocumentation of all evidence complete* - Permission to consume documented* - Case notes complete and accurate - All pages have case or shipment #, date, initials	- Lab worksheets complete - Sample numbering correct throughout - Controls gave appropriate results : Allelic ladders Positive control(s) Negative controls(s) - Electropherograms documented properly - Internal lane standard verified - Two independent analyses performed and edits consistent - Index accurate* - Correct core forms and controls included for case+	- Electropherograms documented properly - Internal lane standard verified - Two independent analyses performed and edits consistent - Index accurate* - Allele table included and accurate* - Results accurate - Conclusions accurate* - Statistics provided* - Statistic calculations correct*
Administrative Review		
- COC accurate - Core forms and controls review form included+	- Case notes accurate* - Positive control correct	- Report editorially accurate and includes: case identifier, evidence examined, methodology, loci or kit, results and/or conclusions, interpretative statement, date issued, disposition of evidence, signature of person accepting responsibility

**if applicable, + For case files supplemented with controls and core forms*

Teresa Vreeland, supervisor — 7.10.11 Sero
Name and Title — ☑ Date-Type of review

Amy [illegible] Technical leader — 07.11.11 STR-tech/admin
Name and Title 07/14/11 STR tech, admin AM 07/14/11 — ☑ Date- Type of review

Amanda Bortolussi, DNA Analyst I — 7/15/11 Admin
Name and Title — ☒ Date- Type of review

Name and Title — ☐ Date- Bode Search including Staff DNA Search*

Self Review: EBH 7/7/11

Emily Herren

From: TrackingUpdates@fedex.com
Sent: Monday, July 18, 2011 1:50 PM
To: Emily Herren
Subject: FedEx Shipment 794976234017 Delivered

This tracking update has been requested by:

Company Name:	Bode Technology
Name:	Bode Technology
E-mail:	emily.herren@bodetech.com

Our records indicate that the following shipment has been delivered:

Reference:	2S04-114
Ship (P/U) date:	Jul 15, 2011
Delivery date:	Jul 18, 2011 1:38 PM
Sign for by:	.JENSON
Delivery location:	WASHINGTON, DC
Delivered to:	Receptionist/Front Desk
Service type:	FedEx Standard Overnight
Packaging type:	FedEx Envelope
Number of pieces:	1
Weight:	0.50 lb.
Special handling/Services:	Deliver Weekday
Tracking number:	794976234017

Shipper Information	Recipient Information
Bode Technology	Stephen L. Braga
Bode Technology	Ropes & Gray LLP
10430 Furnace Road	700 12TH ST NW STE 900
Suite 107	ONE METRO CENTER
Lorton	WASHINGTON
VA	DC
US	US
22079	20005

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All weights are estimated.

To track the latest status of your shipment, click on the tracking number above, or visit us at fedex.com.

This tracking update has been sent to you by FedEx on the behalf of the Requestor noted above. FedEx does not validate the authenticity of the requestor and does not validate, guarantee or warrant the authenticity of the request, the requestor's message, or the accuracy of this tracking update. For tracking results and fedex.com's terms of use, go to fedex.com.

Thank you for your business.

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7/18/2011

EBH 7/18/11

Emily Herren

From: Braga, Stephen [Stephen.Braga@ropesgray.com]
Sent: Monday, July 18, 2011 1:24 PM
To: Emily Herren
Subject: RE: 2S04-114 STR report

Many thanks

Stephen L. Braga
ROPES & GRAY LLP
T +1 202 508 4655 | F +1 202 383 9821
One Metro Center, 700 12th Street, NW, Suite 900
Washington, DC 20005-3948
Stephen.Braga@ropesgray.com
www.ropesgray.com

From: Emily Herren [mailto:Emily.Herren@bodetech.com]
Sent: Monday, July 18, 2011 1:23 PM
To: Braga, Stephen
Subject: RE: 2S04-114 STR report

Hi Mr. Braga,

1) Yes. The hair mentioned in the forensic biology results of the STR report is the same hair that was processed as -102c in the mito report.
2) The other hair referenced in the forensic biology results of the STR report (-84b) is referenced in conclusion #11 in the mito report.

Let me know if you need further explanation or clarification. Either myself or Adrienne will try to help you. Thanks!

Emily

From: Braga, Stephen [mailto:Stephen.Braga@ropesgray.com]
Sent: Monday, July 18, 2011 9:15 AM
To: Emily Herren
Cc: Teresa Vreeland; Amy Jeanguenat
Subject: Re: 2S04-114 STR report

Emily,

I have two quick question with respect to the two hairs that your report references as being unfit for nuclear DNA analysis but possible candidates for mito analysis.

1) In other documentation associated with Friday's reports, I see references to 2S04-114-102c having been analyzed for a mito profile. Is this the blue pants/blue wallet hair referenced in your report, indicating that the recommended mito analysis has already been done for that hair?

2) By contrast, in other documentation associated with Friday's reports, I do not see any mito profile references to 2S04-114-84b - the hair from the rope. What is the status of this hair for a mito analysis?

Thanks,

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2S04-114 EBH 7118711

7/18/2011

Steve

Stephen L. Braga
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From: Emily Herren [mailto:Emily.Herren@bodetech.com]
Sent: Friday, July 15, 2011 09:51 AM
To: Braga, Stephen
Cc: Teresa Vreeland <Teresa.Vreeland@bodetech.com>; Amy Jeanguenat <Amy.Jeanguenat@bodetech.com>
Subject: 2S04-114 STR report

Hi Mr. Braga,

Please find attached an electronic copy of the cover letter, report, and invoice for the final STR report (the clothing and misc items). You should receive the hard copies via FedEx on Monday. Please let us know if there is anything else we can do for you.

Have a good weekend,

Emily Herren
Forensic Biology Analyst/DNA Analyst
Bode Technology
10430 Furnace Rd, Suite 107
Lorton, VA 22079

Emily.Herren@bodetech.com
Phone (703)646-9801

2S04-114 EBN 711811 171

Case Notes

Case Number: 2S04-114 Date: 7/14/11 Analyst: EBH

Notes: Reagent blank 2S04-114-RB65.1 from 2S04-114-AMP45 contained a foreign profile that could not be attributed to samples in case 2S04-114 or to Bode staff. This result was reproduced in reagent blank 2S04-114-RB65.2 from 2S04-114-AMP46. The following samples associated with these reagent blanks were not reported:

2S04-114-84a1.1
2S04-114-84a1.2
2S04-114-85a1.1
2S04-114-85a1.2
2S04-114-85a2.1
2S04-114-85a2.2

The following samples were re-extracted with reagent blank 2S04-114-RB72:

2S04-114-84a2
2S04-114-85a3
2S04-114-85a4

Data from 2S04-114-RB72 were clean and associated data were reportable.

In addition, the unattributable profile was compared against all sample data. Due to the limited data obtained it was inconclusive if the profile was low level (10-35 RFU) in the following samples:

2S04-114-83a1
2S04-114-83b1

These samples were also re-extracted. Data from the second extraction were reported:

2S04-114-83a3
2S04-114-83b3

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EBH 7/15/11

Document: BT00070 - Case Notes
Revision: 3
Effective: 11/19/2010 4:29:59 PM

Emily Herren

From: Braga, Stephen [Stephen.Braga@ropesgray.com]
Sent: Friday, July 15, 2011 11:05 AM
To: Emily Herren
Subject: Re: 2S04-114 STR report

Thx

Stephen L. Braga
ROPES & GRAY LLP
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One Metro Center, 700 12th Street, NW, Suite 900
Washington, DC 20005-3948
Stephen.Braga@ropesgray.com
www.ropesgray.com

From: Emily Herren [mailto:Emily.Herren@bodetech.com]
Sent: Friday, July 15, 2011 11:03 AM
To: Braga, Stephen
Cc: Teresa Vreeland <Teresa.Vreeland@bodetech.com>; Amy Jeanguenat <Amy.Jeanguenat@bodetech.com>
Subject: RE: 2S04-114 STR report

Yes. All of the mito analysis will be submitted in a separate report.

From: Braga, Stephen [mailto:Stephen.Braga@ropesgray.com]
Sent: Fri 7/15/2011 10:03 AM
To: Emily Herren
Cc: Teresa Vreeland; Amy Jeanguenat
Subject: Re: 2S04-114 STR report

Thanks, Emily. So I gather that I will be receiving an additional report re the multiple hair(s) analyses later today?

Steve

Stephen L. Braga
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2S04-114 SBN 7/18/11

From: Emily Herren [mailto:Emily.Herren@bodetech.com]
Sent: Friday, July 15, 2011 09:51 AM
To: Braga, Stephen
Cc: Teresa Vreeland <Teresa.Vreeland@bodetech.com>; Amy Jeanguenat <Amy.Jeanguenat@bodetech.com>
Subject: 2S04-114 STR report

Hi Mr. Braga,

Please find attached an electronic copy of the cover letter, report, and invoice for the final STR report (the clothing and misc items). You should receive the hard copies via FedEx on Monday. Please let us know if there is anything else we can do for you.

Have a good weekend,

Emily Herren
Forensic Biology Analyst/DNA Analyst
Bode Technology
10430 Furnace Rd, Suite 107
Lorton, VA 22079

Emily.Herren@bodetech.com
Phone (703)646-9801

2S04-114 EBH 7/18/11

Teresa Vreeland

From: Braga, Stephen [Stephen.Braga@ropesgray.com]
Sent: Tuesday, June 28, 2011 10:03 AM
To: Teresa Vreeland
Subject: Re: 2S04-114

Just mito.

Thanks for catching that, Teresa.

Also, could you have someone e-mail an informal breakdown of the mito profile already done for the Moore ligature hair? No hurry.

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From: Teresa Vreeland [mailto:Teresa.Vreeland@bodetech.com]
Sent: Tuesday, June 28, 2011 10:00 AM
To: Braga, Stephen
Subject: 2S04-114

Hi Mr. Braga,
I was going through the newest CSF you faxed last week and in the case background section you request that the reference blood sample be tested for mtDNA. In the boxes checked next to the sample you checked both STR and mtDNA. Would you like this sample processed for both STRs and mtDNA or just mtDNA?

Thank you,
Teresa

2S04-114 EBH 7/7/11

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Emily Herren

From: Teresa Vreeland
Sent: Friday, June 24, 2011 10:59 AM
To: Braga, Stephen; Emily Herren
Subject: RE: 2S04-114

Mr. Braga,
Thank you for your quick responses to Emily's questions.

Once I got your email I checked the incoming faxes and I did receive the new CSF. I see that you would like both STR and mtDNA testing completed for this standard. We will begin this testing and also the hairs that Emily recovered mentioned below.

Thank you,
Teresa

From: Braga, Stephen [mailto:Stephen.Braga@ropesgray.com]
Sent: Friday, June 24, 2011 10:43 AM
To: Emily Herren
Cc: Teresa Vreeland
Subject: Re: 2S04-114

Emily,

Great work finding the hairs. Yes, please test them.

No need to test the Chadwick and Witners items; not sure why they sent those to you.

Finally, no STR processing required for the covert references.

Thanks,

Steve

PS - Teresa, did you get the new CSF this morning for the James Martin blood sample?

Stephen L. Braga
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2S04-114 EBH 6/24/11

1100

error.

From: Emily Herren [mailto:Emily.Herren@bodetech.com]
Sent: Friday, June 24, 2011 10:23 AM
To: Braga, Stephen
Cc: Teresa Vreeland <Teresa.Vreeland@bodetech.com>
Subject: 2S04-114

Hi Mr. Braga,

I have gone through the clothing and the misc. items and sampled everything. In doing so I found two hairs. One was found in the packaging with the rope and hook and the other was found with item E-7 "Blue Jeans and Wallet". I examined both of these hairs and neither of them are suitable for nuclear DNA analysis. They are both very small, but would you like us to try mitochondrial analysis on them?

We also have the clothing (pants and shirt) of Gary Chadwick and Johny Witners. The packages are labeled "E-1 Clothing Items (1) Pair Blue Jeans (1) Striped Shirt Received from Gary Chacwick Transient" and "E-1 Clothing 1 pair pants 1 pull over shirt from transient Johny Witners". Would you like any testing done on these items?

And lastly, have you decided if you would like any of the covert references processed for STRs?

I am sure you have been very busy, but with the approaching deadline for all testing, we need the answers to these questions as soon as you can get back to us so we have time to get everything completed.

Let us know if you have any questions or if there is anything else we can do to help. Thanks!

Emily

2S04-114 EBN 6624111

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Bode Item #	Agency Item #	Item	case submission form received	evid/ref
1	93-05716 FP2	Left hand nail scrapings from M. Moore - No Further testing	yes	evidence
2	93-05716 FP3	Right hand nail scrapings from M. Moore - No Further testing	yes	evidence
6	93- 05717 FP3	Left hand nail scrapings from S. Branch - No Further testing	yes	evidence
7	93- 05717 FP4	Right hand nail scrapings from S. Branch - No Further testing	yes	evidence
11	93-05718 FP3	Hair found on C. Byers's body - Process for mito & possible STRs (8 hairs total)	yes	evidence
12	93-05718 FP4	Left hand nail scrapings from C. Byers - No Further testing	yes	evidence
13	93-05718 FP5	Right hand nail scrapings from C. Byers - No Further testing	yes	evidence
14	93-05718 FP6	Hair from lower body of C. Byers - No Further testing	yes	evidence
33	93-05716 FP8 L1	Ligature between L-leg and L-wrist and R-wrist [Byers] - No Further testing	yes	evidence
34	93-05717 FP6 L2	Ligature between ankles and wrist, L-leg, L-wrist, R-leg, R-wrist [Branch] - No Further testing	yes	evidence
35	93-05717 FP6 L3	Ligature, L-leg, L-wrist, R-leg, R-wrist [Moore] - No Further testing	yes	evidence
76	Item #1	Fork from George Taylor's lunch - Process for mito	yes	reference
77	Not Listed	pair of gloves - Do Not Process	no	evidence?
78	Not Listed	pair of gloves - Do Not Process	no	evidence?
79	Not Listed	large Corona beer bottle - Do Not Process	no	reference
80	Not Listed	off brand root beer can - Do Not Process	no	reference
81	Not Listed	Starbucks cup - processing for mito only	yes: rush	reference
82	Not Listed	plastic beverage container - Do Not Process	no	reference
83	E-132	Wooden slats - see 6/8/11 meeting notes for processing plan	yes	evidence
84	E-019	Rope - see 6/8/11 meeting notes for processing plan	yes	evidence
85	E-130	Hook - see 6/8/11 meeting notes for processing plan	yes	evidence
86	E-130	Doral Cigarette Pack - see 6/8/11 meeting notes for processing plan	yes	evidence
87	Not Listed	Sheet - Do Not Process	yes	evidence
88	Not Listed	Sheet - Do Not Process	yes	evidence
89	E-006	Black Tennis Shoe and Lace - see 6/8/11 meeting notes for processing plan	yes	evidence
90	93-05716 E159	Hair of T. Hobbs - Process for mito	no	reference
91	93-05716 E56	Known Head Hair Samples [James Martin] - Do Not Process	no	reference
92	93-05716 BR11a	Known Head Hair Samples [Roy Todd Moore] - Do Not Process	no	reference
93	93-05716 E155	Known Head Hair Samples [Melissa Byers] - Do Not Process	no	reference
94	93-05716 E156	Known Head Hair Samples [Steve Branch] - Do Not Process	no	reference
95	93-05716 E162	Known Head Hair Samples [Pamela Hobbs] - Do Not Process	no	reference
96	93-05716 E163	Known Head Hair Samples [Diana Moore] - Do Not Process	no	reference
not assigned		razor - Do Not Process	no	evidence?
not assigned		razor - Do Not Process	no	evidence?
97	E-01	Blue Boy Scout Shirt - see 6/8/11 meeting notes for processing plan	yes	evidence
98	E-02	White Polka Dot Shirt - see 6/8/11 meeting notes for processing plan	yes	evidence
99	E-03	Blue Pants - see 6/8/11 meeting notes for processing plan	yes	evidence
100	E-04	White Tennis Shoe - see 6/8/11 meeting notes for processing plan	yes	evidence
101	E-05	Cub Scout Cap - see 6/8/11 meeting notes for processing plan	yes	evidence
102	E-07	Blue jeans/blue wallet - see 6/8/11 meeting notes for processing plan	yes	evidence
103	E-08	Black/Purple Tennis Shoe - see 6/8/11 meeting notes for processing plan	yes	evidence
104	E-09	Striped Shirt - see 6/8/11 meeting notes for processing plan	yes	evidence
105	E-10	Child's underwear - see 6/8/11 meeting notes for processing plan	yes	evidence
106	E-11	White Tennis Shoe - see 6/8/11 meeting notes for processing plan	yes	evidence
107	E-12	Black Tennis Shoe/Sock - see 6/8/11 meeting notes for processing plan	yes	evidence
108	E-13	Blue jeans - see 6/8/11 meeting notes for processing plan	yes	evidence
109	E-14	Black Tennis Shoe - see 6/8/11 meeting notes for processing plan	yes	evidence
110	E-01	Pair Blue Jeans/striped shirt - see 6/8/11 meeting notes for processing plan	no	evidence
111	E-01	Pair Pants/Pull over shirt - see 6/8/11 meeting notes for processing plan	no	evidence
112	Not Listed	Soda can - James Vaughn - processing for mito only	yes: rush	reference
113	Not Listed	Razor - Lynn Vaughn - processing for mito only	yes: rush	reference
114	Not Listed	Cindy Hobbs Evidence - processing for mito only	yes: rush	reference

		NEW SAMPLES - ARRIVED 6/9/11			Technology requested on CSF
3	93-05716 FP6	Hair from M. Moore ligature - Previously tested for mito	yes	evidence	mito
4	93-05716 FP6-Q39	Possible tissue from ligature from M. Moore - Not yet tested by Bode	yes	evidence	STR
8	93-05717 FP5	Two dark Caucasian hairs from S. Branch - Previously tested for mito	yes	evidence	mito
9	93-05717 FP6	Hair from ligature from S. Branch (skin, tissue hair from ligature) - Hair will be tested for mito	yes	evidence	mito
15	93-05718 FP8	Hair from C. Byers ligature - Previously tested for mito	yes	evidence	mito
16	93-05718 Q4	Possible tissue from C. Byers ligature (skin, tissue, hair from ligature) - Not yet tested by Bode	yes	evidence	STR
17	93-05718 FP9	Hair from perineum of C. Byers ligature - Hair will be tested for mito	yes	evidence	mito
20	93-05716 E3	Hair from E3 - Previously tested for mito	yes	evidence	mito
21	93-05716 E5	Hair from scout cap - Previously tested for mito	yes	evidence	mito
23	93-05716 E127 LS1-QH	Hair from tree stump - Previously tested for mito	yes	evidence	mito
27	93-05717 FP7	Dyed hair from white sheet used to cover S. Branch - Previously tested for mito	yes	evidence	mito
115	K35	Dried known blood sample Roy Moore (CSF lists this sample as from Todd Moore) - Not yet tested by Bode	yes	evidence	mito
116	93-05716 FP5	Shaved head hair M. Moore - Not yet tested by Bode	yes	evidence	mito
117	93-15716 FP7	Combed head hair M. Moore - Do Not Process	yes	evidence	mito
118	93-0517 FP1	Head hair combings S. Branch - Do Not Process	yes	evidence	mito
119	93-05717 FP5	Shaved head hair S. Branch - Not yet tested by Bode	yes	evidence	mito
120	93-05718 FP1	Combed head hair C. Byers - Do Not Process	yes	evidence	mito
121	93-05718 FP7	Shaved head hair C. Byers - Not yet tested by Bode	yes	evidence	mito

Samples in red are samples that will be processed
Samples highlighted in yellow are rush mito references
Samples in gray are ones that do NOT need to be processed

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Meeting with Mr. Braga at Bode 6/8/11 attended by: Teresa Vreeland, Emily Herren, Amy Jeanguenat, Sarah Bettinger, and Adrienne Barranco

-10 hairs will be tested for mito [Bode sample #'s: 2S04-114-11A, -11D, -11H, -11J, -11F, -11I, -11N, -11X, -17, and -09. 8 of these hairs have apparent roots and may be suitable for nuclear DNA; these samples will be extracted for mito and will be quantified to determine if any nuclear DNA is present. Based on quantification samples will either be recommended for STR testing and/or mtDNA testing. Permission to consume the hairs if needed was granted.

-The clothing items (pants, shoes, and shirts) will be screened for possible blood and touch. It was discussed that it is unlikely to develop a profile due to the condition of the items when recovered (ie under water). If DNA results are obtained, we cannot be sure that the results are probative results from the scene.

- -The shoes were sampled where the laces may have been removed from the shoes. The shoe containing the lace was sampled similarly and the lace was also sampled for touch DNA. The sock submitted with Bode # 107 will not be tested.
- -The pants will be sampled according to how they were believed to have been removed. The inside out pants will be sampled from the top waist band region. The pants that are inside right will be sampled from the ankle regions. If all pants are turned inside out or inside right, they will all be sampled from both the waistband and the ankles.
- -The shirts will be sampled where they may have been touch to be removed. We will determine the best area to sample once we have opened the shirts and determined the most logical area(s) to sample.

-The ligatures have been tested previously. Extract remains from previous testing. Extracts from the ligature knots, not the tag knots, will be taken forward for STR processing (13 samples total).

-For all touch DNA items, we will NOT stop processing at quantification regardless of the result. All samples will be taken forward.

-Cub scout hat and Child's underwear (may have been recovered in a tree) will be processed for touch DNA where they may have been removed.

-Miscellaneous items (Wooden slats, rope, hook and Doral cigarette pack) will be sampled randomly in an attempt to recover touch DNA. Samples may not be related to the crime and are a lower priority than the clothing and mito testing.

-Want all new results compared to all suspect and victim reference standards.

-We will issue reports as we have completed data (we will not wait until all testing is completed to issue a report).

-We have measured the black shoe laces and have provided the lengths to Mr. Braga along with photographs of the white shoe soles.

-I have also attached an updated spreadsheet of the items in-house and which ones will be processed. The list on the bottom is the newest items that arrived after Mr. Braga's visit. 2 items we have already discussed testing (Bode items 9 & 17). We have also discussed not testing the combed head hairs from the victims.

- -We also do not recommend testing the shaved head hairs (Bode #s 116, 119, 121)
- -For the possible tissue from ligatures (Bode #s 4 & 16), we feel that these items will be overwhelmed with the victim's DNA and will most likely not yield probative results.

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-For the known blood sample from Moore (Roy or Todd) – this can be processed for mito as requested. The package is labeled as from Roy Moore, but the case submission form lists this item as from Todd Moore, do you know which of these descriptions is correct?

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2904-114 EBH 01/25/11

Emily Herren

From: Braga, Stephen [Stephen.Braga@ropesgray.com]
Sent: Wednesday, June 15, 2011 2:55 PM
To: Teresa Vreeland
Cc: Amy Jeanguenat; Emily Herren; Sarah Bettinger; Adrienne Barranco; Natalie Morgan
Subject: RE: 2S04-114 testing

Teresa,

The memo looks fine and I agree with it. A couple of clarifications and/or answers:

- No need to screen the possible clothing items for blood, just touch.
- With reference to the ligatures being taken forward for STR processing, as discussed, if there is DNA we ultimately want mito results too wherever possible for comparative purposes.
- His name if Roy Todd Moore.

The spreadsheet looks fine as well, subject to a couple of questions/clarifications:

- Can you tell me (again possibly) why no further testing is recommended on Bode 14 (hair from lower body of C. Byers?
- On 6/9/11, I sent in a CSF form for Bode 90.
- Bode 115 should be in red for processing.

Thanks,

Steve

Stephen L. Braga
ROPES & GRAY LLP
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From: Teresa Vreeland [mailto:Teresa.Vreeland@bodetech.com]
Sent: Tuesday, June 14, 2011 2:51 PM
To: Braga, Stephen
Cc: Amy Jeanguenat; Emily Herren; Sarah Bettinger; Adrienne Barranco; Natalie Morgan
Subject: 2S04-114 testing

Hello Mr. Braga,
I have attached a word document to summarize our meeting on June 8th as well as capture our planned

2S04-114 EBN 6/25/11

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testing for the items at Bode. I have also attached an updated spreadsheet of the items at Bode. Both attachments also include information regarding the newest items that arrived at Bode on June 9th. If you could, please review both of these attachments at your convenience and let me know if I have missed anything.

Also, we have made a few recommendations for testing in regards to the newest items that have arrived. These recommendations are included in the final bullet of the word document. If you could please review this portion and get back with us, if you agree or disagree, so that we are able to begin any testing on these items if necessary.

Please let me know if you have any questions/concerns,

Teresa Vreeland
Customized Casework Supervisor
Bode Technology
10430 Furnace Rd., Suite 107
Lorton, VA 22079
703-646-9757
Teresa.vreeland@bodetech.com

2304-114 EBN 6/25/11 1600

Emily Herren

From: Braga, Stephen [Stephen.Braga@ropesgray.com]
Sent: Tuesday, May 31, 2011 4:25 PM
To: Emily Herren
Cc: Teresa Vreeland; Sarah Bettinger; Amy Jeanguenat
Subject: Re: 2S04-114

Thanks for the note Emily, and yes June 8 at 10 is still good. I will see you then.

Other responses below, correlated to your paragraph numbers:

1. Understood and correct

2. 74 and 57 are not presently important comparisons so you can stop them. 49 remains an item to be compared.

3. Yes, these are important profiles to continue comparisons with.

4. Understood. Skin cell testing would be great, as well as fluids. All of these items were underwater if that influences your approavh to them.

5. Understood as topic for discussion at our meeting. Have you previously determined - by appearance and/or measurement -whether any of the ligatures were cut, and if so which ones?

6. We will need all of these additional hairs tested, and you have permission to consume the samples if necessary in doing so.

7. We don't have 8-10 weeks. Under the Court's scheduling order, we are only going to have 4-6 weeks so can you think about a strategy - and include it in your price quote - for how we can get this done within that time period?

8. Understood, and no problem.

Best,

Steve

Stephen L. Braga
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2S04-114 EBN 6/25/11

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From: Emily Herren [mailto:Emily.Herren@bodetech.com]
Sent: Tuesday, May 31, 2011 12:50 PM
To: Braga, Stephen
Cc: Teresa Vreeland <Teresa.Vreeland@bodetech.com>; Sarah Bettinger <Sarah.Bettinger@bodetech.com>; Amy Jeanguenat <Amy.Jeanguenat@bodetech.com>
Subject: 2S04-114

Hi Mr. Braga,

We sat down and went over the testing that we have in front of us for 2S04-114.

June 8th at 10am works for us if you are still available to come to Bode to meet and discuss the case.

1. Rush references:

   We can attempt to test the reference items that have been sent for mito. Since the samples are not direct references they might not be ideal for mtDNA testing. If we start processing them and deem them unsuitable for mito analysis (if the items show a presence of a mixture they can not be used for comparison purposes) then we will stop. For mito processing the fastest turn around time we can provide will be four weeks. The only items that you want processed with the fastest turn around time are the Starbucks coffee cup (item 81), the soda can from James Vaughn (item 112), the razor from Lynn Vaughn (item 113), and the Cindy Hobbs evidence (item 114). Is this correct?

2. Foreign STR profiles:

   From the data that has been generated for the case so far, we have three items that produced mixture profiles that references can be compared to: "right hand glove found in truck" (item 74), "two swabs from side of washer near sink in kitchen" (item 57), and "knife handle" (item 49). We wanted to bring these items to your attention to make sure they are probative items in the case that you want us to continue comparing references to.

3. Foreign mito profiles:

   The foreign mito profiles that we have include: "hair from ligature" (item 3Aa), "hair from ligature" (item 15), "hair from sheet" (item 18A/B), "hair from scout cap" (item 21B), "hair from tree stump" (item 23), and "hair from sheet" (item 27). Again, we wanted to make sure these are probative items in the case that you would like us to continue comparing references to.

4. Testing of the victim's pants and shoes

   In testing for biological material, would you like for Bode to test the pants and shoes for possible skin cells or would you like these items screened for possible fluids? Also, were any of these items recovered underwater? If so, touch DNA (possible skin cell) sampling will be difficult to recover. If any DNA results are obtained from these samples it is possible the DNA may not be from the original crime scene. For the shoes, we will photograph them and determine the brand of shoes if possible and have this information available to you for our June 8th meeting.

5. Testing of the Ligatures

   The majority of the testing you requested for these ligatures has previously been completed by Bode. We can go over these items in more depth on the 8th and determine if there is any further testing possible for these items.

6. Remaining hairs for possible STR/mito typing

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We have looked through our past reports/testing and have noted 11 hairs that are suitable for additional testing (STR and/or mtDNA). There are a couple of additional hairs that we are looking into more. For most of these hairs we would need permission to consume.

7. TAT

For the covert reference samples submitted for mito testing, we can complete this testing in 4 weeks. For the items listed above, due to the bulk of the samples and the different types of testing, we would need 8-10 weeks to complete the testing.

8. Pricing

Due to the volume of the requested testing we will be writing up a quote and will need to arrange pre-payment for some of the testing.

Please let us know if you have any questions. Thanks!

Emily Herren
Forensic Biology Analyst/DNA Analyst
Bode Technology
10430 Furnace Rd, Suite 107
Lorton, VA 22079

Emily.Herren@bodetech.com
Phone (703)646-9801

2304-114 EBSH 6/25/11

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Emily Herren

From: Braga, Stephen [Stephen.Braga@ropesgray.com]
Sent: Tuesday, May 31, 2011 10:58 AM
To: Amy Jeanguenat; Emily Herren
Subject: Re: Case # 2S04-114

Amy and Emily,

A clarification and a couple of additions to the special instructions below:

- With respect to the ligatures, the white shoe laces do not need to be measured, only the black ones. As a result, the knots on the white shoe laces do not need to be completely untied for measuring, only the black ones do. On the white shoe laces, you can still listen the knots to test for DNA within.

- with respect to the blue wallet in E-07, please focus on "touch" DNA

Thanks,

Steve

Stephen L. Braga
ROPES & GRAY LLP
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www.ropesgray.com

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From: Braga, Stephen
Sent: Thursday, May 26, 2011 05:51 PM
To: 'Amy Jeanguenat' <Amy.Jeanguenat@bodetech.com>; 'Emily Herren' <Emily.Herren@bodetech.com>
Subject: Case # 2S04-114

Amy and Emily,

Per my conversation with Amy yesterday, I write to address a few special points of note with regard to certain of the items I have now had delivered to Bode for testing.

- You have received the victims' pants from the West Memphis Police Department ("WMPD"). These should be identified as E-03, E-07 and E-013. These pants all need to be tested for any biological material. In addition, two of these pairs of pants should already be turned inside out,

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as they were found by the police; on those "inside out" pants, we would like you to pay particular attention to testing the waistbands of the pants where they might have been grabbed and pulled down from. With respect to the pair of pants which is not "inside out," we would like you to pay particular attention to testing the bottoms of the legs where those pants might have been grabbed and pulled down from.

- You have received the victims' tennis shoes/sneakers from the WMPD. These should be identified as E-04, E-06, E-08, E-011, E-012 and E-014. It appears that E-04 and E-011 go together as a pair, as do E-06 and E-08, and as do E-012 and E-014. The first thing we need to do is identify what kinds of sneakers these are, if possible. The second thing we need to do is to photograph the tongues and the soles of the sneakers. The third thing we need to do is remove the lace remaining in E-06, measure its length and determine, if possible, whether it has been cut in half or whether it remains intact and uncut. The fourth thing we need to do is to test that lace for any biological material. The fifth thing we need to do is to test all of the sneakers for any biological material; with respect to all of the sneakers without laces (everyone except E-06), we would like you to pay particular attention to testing the uppermost eyelet areas where the laces might have been grabbed and pulled out of.

- You have received the ligatures from the Arkansas State Crime Lab ("ASCL"). These should be identified as FP6-5716 (ligatures Moore), FP6-5717 (ligatures Branch) and FP6-5718 (ligatures Byers). There should be two ligatures under each number. The first thing we need to do is identify the colors of the ligatures (e.g, black, white or black and white). The second thing we need to do is to photograph the knots in the ligatures. The third thing we need to do is to loosen the knots to test for any biological material within the knots. The fourth thing we need to do is to untie the knots and measure the full lengths of each of the ligatures and determine, if possible, whether any of them have been cut in half or whether they all remain intact and uncut. The fifth thing we need to do is to test the remainder of the ligatures for any biological material.

- Finally, for now (although I'm sure there will be additional special instructions to come in the weeks ahead), we are focusing at present on trying to identify the sources of the various as yet unidentified hairs recovered from the crime scene and the victims. As a result, it seems that mitochondrial analysis will be our best opportunity to try to match those hairs, so wherever possible we would now like you to perform that analysis. For example, in the past you recommended that mitochondrial analysis be attempted to test 93-05717 FP6 (hair from the ligature from S Branch), we would now like that to be done. Also, in the past, there were a number of hairs which were not tested for various reasons, we now want every hair to be tested to the extent that they can be. So at bottom, at this juncture, anything that has not previously been tested should be tested and anything that was previously tested in only a limited capacity (i.e. STR) should now be tested in any additionally available capacities as well (i.e. mtDNA) if in your judgment it makes sense to try to do so.

Of course, at the end of the day, we are looking to your expertise to guide us toward the most reliable and accurate manner of testing possible. So if you have any questions about any of the points above, or have any other alternative approaches to recommend, please do not hesitate to contact me directly.

Lastly, as suggested by Amy yesterday, I think it would be a good idea for me to meet you at Bode to view the various items of evidence in your possession in one of your conference rooms, and to review the outstanding testing issues with you. Would 10:00 AM on June 8 work?

Thanks,

Steve

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CHAIN OF CUSTODY

The Bode Technology Group, Inc.

Case Number: 2S04-114-97 to 111 **Agency ID Number:**

Submitting Agency Information

Name: Ropes & Gray LLP
Address: 700 12th Street, NW
Suite 900
Washington, DC 20005
Contact/Attorney: Stephen L. Braga
Additional Authorized Contacts:

Victim:
Suspect:

Phone Number: (202) 508-4655
Fax Number: (202) 383-9821
stephen.braga@ropesgray.com

Custody Record

Method of Delivery to Bode: Fed Ex
Condition: Good (Sealed)
Date Delivered: 5/24/2011 Time: 10:07 AM
Delivered By: Fed Ex
TRK #: 8726 4096 5194
Delivered To: Ben Bever
Signature:

Date	Item No.	Released by (print)	Received by (print)	Purpose of change:
5/24/2011 Time 10:10 AM	97 to 111	Ben Bever (sign)	Maggie Redmond, for EMS (sign) M. Redmond	Accessioning/Storage
6/3/11 Time 8:14am	97 to 111	Maggie Redmond, for EMS (sign) M. Redmond	Emily Herren (sign) Emily Herren	analysis
6/9/11 Time 10:15am	100, 103, 106, 107, 109	Emily Herren (sign) Emily Herren	Maggie Redmond, for EMS (sign) M. Redmond	storage
6/27/11 Time 2:54 PM	97 to 99, 101, 102, 104, 105, 108, 111	Emily Herren (sign) Emily Herren	Rachel Wadman, for EMS (sign)	storage
Date	Item No.	Released by (print)	Sent via:	Purpose of change:
Time		(sign)	Tracking No.	FINAL DISPOSITION

Evidence Inventory

Bode Case #	Agency Item ID	Agency Description
2S04-114-97	E-01	Labeled as "Blue Boy Scout Shirt"
2S04-114-98	E-02	Labeled as "White Polka Dot Shirt"
2S04-114-99	E-03	Labeled as "Blue Pants"
2S04-114-100	E-04	Labeled as "White Tennis Shoe"
2S04-114-101	E-05	Labeled as "Cub Scout Cap"
2S04-114-102	E-07	Labeled as "Blue jeans/blue wallet"
2S04-114-103	E-08	Labeled as "Black/Purple Tennis Shoe"
2S04-114-104	E-09	Labeled as "Striped Shirt"
2S04-114-105	E-10	Labeled as "Child's underwear"
2S04-114-106	E-11	Labeled as "White Tennis Shoe"
2S04-114-107	E-12	Labeled as "Black Tennis Shoe/Sock"

Note: Evidence sent by West Memphis Police Department

Storage of Evidence: Secure evidence room

2S04-114 EBH 6/27/11

Evidence Inventory Continued

Bode Number	Agency Item ID	Agency Description
2S04-114-108	E-13	Labeled as "Blue jeans"
2S04-114-109	E-14	Labeled as "Black Tennis Shoe"
2S04-114-110	E-01	Pair Blue Jeans/striped shirt
2S04-114-111	E-01	Pair Pants/Pull over shirt

2S04-114 EBH 6/25/11

Print page | Close

FedEx

Detailed Results

Tracking no.: 872640965194 Select time format: 12H

Delivered

Delivered
Signed for by: B.BEVER

Shipment Dates	Destination
Ship date May 23, 2011	Signature Proof of Delivery
Delivery date May 24, 2011 10:07 AM	

Shipment Options

Hold at FedEx Location
Hold at FedEx Location service is not available for this shipment.

Shipment Facts

Service type	Priority Overnight	Delivered to	Shipping/Receiving
Weight	19.0 lbs/8.6 kg		

Shipment Travel History

Select time zone: Local Scan Time

All shipment travel activity is displayed in local time for the location

Date/Time	Activity	Location	Details
May 24, 2011 10:07 AM	Delivered		
May 24, 2011 7:23 AM	On FedEx vehicle for delivery	ALEXANDRIA, VA	
May 24, 2011 7:18 AM	At local FedEx facility	ALEXANDRIA, VA	
May 24, 2011 5:26 AM	At dest sort facility	DULLES, VA	
May 24, 2011 2:47 AM	Departed FedEx location	MEMPHIS, TN	
May 23, 2011 10:42 PM	Arrived at FedEx location	MEMPHIS, TN	
May 23, 2011 10:15 PM	Left FedEx origin facility	CORDOVA, TN	
May 23, 2011 1:08 PM	Picked up	CORDOVA, TN	

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Case Submission Form

Bode Technology
Part of GlobalOptions Group

Bode Case No (To be filled out by Bode): 2504 - 114

In order to process your DNA casework efficiently, this form must be filled out and sent along with the evidence. Prior to submitting a case, please call Customer Services 866-BODE-4-ID (866-263-3443).

The Bode Technology Group
10430 Furnace Rd. Suite 107
Lorton, VA 22079
Phone: 703-646-9740
Fax: 703-646-9742
www.bodetech.com

Submitting Agency: ROPES + GRAY LLP Date: 6/9/11

Name: Stephen L. Braga Phone Number: 202-508-4655

Select the type of Submission:

☐ Initial Evidence Submission ☒ Additional Evidence Submission (Please fill in Bode Case number at the top of the page)

Select the type of Service:

☒ Standard Service - Our standard service provides complete analysis of your samples when rush services are not required.

☐ Rush Service - This is the fastest service offered. Please contact Customer Service for turnaround time (Additional charge per sample).

☐ 5 business days ☐ 10 business days ☐ 15 business days

Promotion Code: _____

Authorized Point(s) of Contact:

Name:	STEPHEN L. BRAGA	Name:	
Agency:	ROPES + GRAY LLP	Agency:	
Title:	PARTNER	Title:	
Phone Number:	202-508-4655	Phone Number:	
Fax Number:	202-383-9821	Fax Number:	
Cell Phone/Pager:	617-304-7124	Cell Phone/Pager:	
Email Address:	stephen.braga@ropesgray.com	Email Address:	

Mailing Address (Where The Report Should be Sent):

Name: Same as above
Agency:
Address:
City/State/Zip:
Phone Number:
Fax Number:
Email Address:

Billing Address:

Name: Same as above
Agency:
Address:
City/State/Zip:
Phone Number:
Fax Number:
Email Address:
Purchase Order #

Evidence Return Address:

Name:
Agency:
Address:
City/State/Zip:
Phone Number:
Email Address:

Select type of Evidence Return:

☐ Evidence should be returned following delivery of the case report.

☒ Evidence should be returned upon request from the Authorized Point of Contact(s).

2504-114 EBN 6/25/11 151

Case Submission Form

Bode Technology
Part of GlobalOptions Group

Bode Case No (To be filled out by Bode): 2504 – 114

In order to process your DNA casework efficiently, this form must be filled out and sent along with the evidence. Prior to submitting a case, please call Customer Services 866-BODE-4-ID (866-263-3443).

The Bode Technology Group
10430 Furnace Rd. Suite 107
Lorton, VA 22079
Phone: 703-646-9740
Fax: 703-646-9742
www.bodetech.com

Submitting Agency Reference/Case No: ROPES + GRAY LLP

Case Background:

The first three items are already at Bode. The fourth (K-35) will be received this week from the Arkansas State Crime Lab. Please process all for mito profiles to compare to known and unknown profiles in case.

Specify platform (AB/Hitachi), kit (Co/Pro+, ID, PP16, PP16BIO, PPY, YFiler, miniFiler), and software (GS/GT, GMID) preferences. If no preference, check box for Analyst Discretion

☒ Analyst Discretion

List Evidence Items* (If needed, use Page 3 to include additional items or case information) Note: Descriptions may be reflected in Chain of Custody and Report	Please check the appropriate boxes for Pre-Screening and DNA Testing Requested	Permission to Consume (if necessary)
93-05716 E159 (Bode 90)	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☒ mtDNA	☒ Yes ☐ No
E-01 (Bode 110)	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☒ mtDNA	☐ Yes ☐ No
E-01 (Bode 111)	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☒ mtDNA	☐ Yes ☐ No
K-35 (Dried Blood Sample for Todd Moore)	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☒ mtDNA	☒ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No

☐ Check if additional evidence items or testing instructions are listed on Page 3

* When submitting extracts, the reagent blanks must also be included. Please be sure to include the following information: Total Human Quant, Total Y Quant, Volume Remaining, and Extraction Control Names associated with samples.

If STR data is obtained, will CODIS entry or search be requested? ☐ Yes ☒ No

(NOTE: Private Forensic DNA laboratories do not have access to enter or search samples in CODIS. If "yes" is marked, Bode will contact the appropriate CODIS laboratory Technical Leader prior to initiation of this case. Please be aware that this may increase the turnaround time.

I hereby certify that the information provided on this Case Submission Form is accurate to the best of my knowledge. I understand that I will be charged for services according to the fee schedule that I have received.

Print Name STEPHEN L. BRAGA Signature

Please submit this completed form with the evidence. All evidence items must be shipped using a traceable carrier (i.e. FedEx, UPS, DHL, Priority Mail). Overnight shipping is recommended. The evidence should be shipped to:

ATTN: EVIDENCE DEPARTMENT
Bode Technology
10430 Furnace Rd. Suite 107
Lorton, VA 22079

150

2504-114 EBN 6/25/11

BOSTON HARBOR HOTEL

AT ROWES WHARF

To: EMILY HERREN	From: STEPHEN L. BRAGA Business Center / ROPES + GRAY
Fax: 703-646-9742	Pages: 4
Phone: 703-646-9740	Date: 5/22/11
Re: CASE # 2504-114	Fax: 1 617 330 9450
	Phone: 1 617 439 7000 Ext 4500

Emily,

Can you please e-mail me Monday to confirm receipt of this Case Submission Form, as well as the one I sent on 5/17? Thanks,

Steve

PS - The evidence covered by this new form should be arriving at Bode by Federal Express on Monday.

2504-114 EBN 5723111

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05/22/2011 08:33 6173303450 BOSTON HARBOR HOTEL PAGE 01/04

Case Submission Form

Bode Technology
Part of GlobalOptions Group

Bode Case No (To be filled out by Bode): 2504-114

In order to process your DNA casework efficiently, this form must be filled out and sent along with the evidence. Prior to submitting a case, please call Customer Services 866-BODE-4-ID (866-263-3443).

The Bode Technology Group
10430 Furnace Rd. Suite 107
Lorton, VA 22079
Phone: 703-646-9740
Fax: 703-646-9742
www.bodetech.com

Submitting Agency: ROPES + GRAY LLP Date: 5/22/11

Name: STEPHEN L. BRAGA Phone Number: 202-508-4655

Select the type of Submission:

☐ Initial Evidence Submission ☒ Additional Evidence Submission (Please fill in Bode Case number at the top of the page)

Select the type of Service:

☒ Standard Service - Our standard service provides complete analysis of your samples when rush services are not required.

☐ Rush Service - This is the fastest service offered. Please contact Customer Service for turnaround time (Additional charge per sample).

☐ 5 business days ☐ 10 business days ☐ 15 business days

Promotion Code: _____

Authorized Point(s) of Contact:

Name:	STEPHEN L. BRAGA	Name:	
Agency:	ROPES + GRAY LLP	Agency:	
Title:	PARTNER	Title:	
Phone Number:	202-508-4655	Phone Number:	
Fax Number:	202-383-9821	Fax Number:	
Cell Phone/Pager:	617-304-7124	Cell Phone/Pager:	
Email Address:	stephen.braga@ropesgray.com	Email Address:	

Mailing Address (Where The Report Should be Sent):

Name:	SAME AS ABOVE
Agency:	
Address:	
City/State/Zip:	
Phone Number:	
Fax Number:	
Email Address:	

Billing Address:

Name:	SAME AS ABOVE
Agency:	
Address:	
City/State/Zip:	
Phone Number:	
Fax Number:	
Email Address:	
Purchase Order #	

Evidence Return Address:

Name:	
Agency:	
Address:	
City/State/Zip:	
Phone Number:	
Email Address:	

Select type of Evidence Return:

☐ Evidence should be returned following delivery of the case report.

☒ Evidence should be returned upon request from the Authorized Point of Contact(s).

2504-114 EBN 5/23/11

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05/22/2011 08:33 6173303450 BOSTON HARBOR HOTEL PAGE 02/04

Case Submission Form

Bode Technology
Part of GlobalOptions Group

Bode Case No (To be filled out by Bode): 2504 – 114

In order to process your DNA casework efficiently, this form must be filled out and sent along with the evidence. Prior to submitting a case, please call Customer Services 866-BODE-4-ID (866-263-3443).

Submitting Agency Reference/Case No: ROPES + GRAY LLP

The Bode Technology Group
10430 Furnace Rd. Suite 107
Lorton, VA 22079
Phone: 703-646-9740
Fax: 703-646-9742
www.bodetech.com

Case Background:

These are 13 items of original case evidence from the west Memphis Police Department. They need to be thoroughly examined for biological material, which – if any exists – should then be DNA tested and compared to all profiles in the case. Use your testing discretion.

Specify platform (AB/Hitachi), kit (Co/Pro+, ID, PP16, PP16BIO, PPY, YFiler, miniFiler), and software (GS/GT, GMID) preferences. If no preference, check box for Analyst Discretion

☒ Analyst Discretion

List Evidence Items* (If needed, use Page 3 to include additional items or case information) Note: Descriptions may be reflected in Chain of Custody and Report	Please check the appropriate boxes for Pre-Screening and DNA Testing Requested	Permission to Consume (if necessary)
E-01 (Blue Boy Scout Shirt)	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
E-02 (White Polka Dot Shirt)	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
E-03 (Blue Pants)	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
E-04 (White Tennis Shoe)	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
E-05 (Cub Scout Cap)	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No

☒ Check if additional evidence items or testing instructions are listed on Page 3

* When submitting extracts, the reagent blanks must also be included. Please be sure to include the following information: Total Human Quant, Total Y Quant, Volume Remaining, and Extraction Control Names associated with samples.

If STR data is obtained, will CODIS entry or search be requested? ☐ Yes ☒ No

(NOTE: Private Forensic DNA laboratories do not have access to enter or search samples in CODIS. If "yes" is marked, Bode will contact the appropriate CODIS laboratory Technical Leader prior to initiation of this case. Please be aware that this may increase the turnaround time.

I hereby certify that the information provided on this Case Submission Form is accurate to the best of my knowledge. I understand that I will be charged for services according to the fee schedule that I have received.

Print Name STEPHEN L. BRAGA Signature

Please submit this completed form with the evidence. All evidence items must be shipped using a traceable carrier (i.e. FedEx, UPS, DHL, Priority Mail). Overnight shipping is recommended. The evidence should be shipped to:

ATTN: EVIDENCE DEPARTMENT
Bode Technology
10430 Furnace Rd. Suite 107
Lorton, VA 22079

2504-114 ERH 5/23/11

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05/22/2011 08:33 6173303450 BOSTON HARBOR HOTEL PAGE 03/04

Case Submission Form

Bode Technology
Part of GlobalOptions Group

Bode Case No (To be filled out by Bode): 2504 - 114

In order to process your DNA casework efficiently, this form must be filled out and sent along with the evidence. Prior to submitting a case, please call Customer Services 866-BODE-4-ID (866-263-3443).

The Bode Technology Group
10430 Furnace Rd. Suite 107
Lorton, VA 22079
Phone: 703-646-9740
Fax: 703-646-9742
www.bodetech.com

Additional Evidence Items* Note: Descriptions may be reflected in Chain of Custody and Report	Please check the appropriate boxes for Pre-Screening and DNA Testing Requested	Permission to Consume (if necessary)
E-07 (Blue jeans / blue wallet)	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
E-08 (Black / Purple Tennis Shoe)	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
E-09 (Stained Shirt)	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
E-10 (Child's underwear)	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
E-11 (White Tennis Shoe)	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
E-12 (Black Tennis Shoe / Sock)	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
E-13 (Blue jeans)	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
E-14 (Black Tennis Shoe)	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No

*When submitting extracts, the reagent blanks must also be included. Please be sure to include the following information: Total Human Quant, Total Y Quant, Volume Remaining, and Extraction Control Names associated with samples.

Additional Case Information:

In addition to the DNA testing described above, I need to view the tennis shoes (E-04, E-08, E-11, E-12, E-14 - and E-06 previously submitted). Please contact me to discuss how best to accomodate such viewing - photographs might work. Thx/Steve

2504-114 EBH 5/23/11

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05/22/2011 08:33 6173303450 BOSTON HARBOR HOTEL PAGE 04/04

CHAIN OF CUSTODY

The Bode Technology Group, Inc.

Case Number: 2S04-114-83 **Agency ID Number:**

Submitting Agency Information

Name Ropes & Gray LLP
Address 700 12th Street, NW
Suite 900
Washington, DC 20005
Contact/Attorney Stephen L. Braga
Additional Authorized Contacts

Victim
Suspect

Phone Number (202) 508-4655
Fax Number (202) 383-9821
stephen.braga@ropesgray.com

Custody Record

Method of Delivery to Bode Fed Ex
Date Delivered 5/12/2011 Time: 10:23 AM
Delivered By Fed Ex
Delivered To Brandon Jones

Condition Good (Sealed)
TRK # 8625 4677 9605
Signature

Date	Item No.	Released by (print) / (sign)	Received by (print) / (sign)	Purpose of change:
5/12/2011 Time 10:27 AM	83	Brandon Jones	Rachel Wortman, for EMS	Accessioning/Storage
Date 5/18/11 Time 2:15PM	Item No. 83	Released by (print) Rachel Wortman, for EMS	Received by (print) Emily Herren	Purpose of change: Analysis
Date 6/22/11 Time 2:54PM	Item No. 83	Released by (print) Emily Herren	Received by (print) Rachel Wortman, for EMS	Purpose of change: Storage
Date 7/12/11 Time 11:00AM	Item No. 83	Released by (print) Rachel Wortman, for EMS	Received by (print) Emily Herren	Purpose of change: analysis
Date	Item No.	Released by (print)	Sent via:	Purpose of change:
Time		(sign)	Tracking No.	**FINAL DISPOSITION**

Evidence Inventory

Bode Case #	Agency Item ID	Agency Description
2S04-114-83	E-132	Labeled as "Wooden slats"

Note: Evidence sent by the West Memphis Police Department
626 W. Broadway
West Memphis, AR 72301

Storage of Evidence: Secure evidence room

2S04-114 ERH 7/12/11

CHAIN OF CUSTODY

The Bode Technology Group, Inc.

Case Number: 2504-114-83 Agency Item ID Number:

Date / Time	Item No.	Released by (print) / (sign)	Received by (print) / (sign)	Purpose of change:
07/12/11 / 2:16PM	83	Emily Herren / Emily Herren	ASHLEY KIMPLE, FOR EBH / Ashley Kimple	storage

CHAIN OF CUSTODY

The Bode Technology Group, Inc.

Case Number: 2S04-114-84 to 89 **Agency ID Number:**

Submitting Agency Information

Name Ropes & Gray LLP
Address 700 12th Street, NW
Suite 900
Washington, DC 20005
Contact/Attorney Stephen L. Braga
Additional Authorized Contacts

Victim
Suspect

Phone Number (202) 508-4655
Fax Number (202) 383-9821
stephen.braga@ropesgray.com

Custody Record

Method of Delivery to Bode Fed Ex
Date Delivered 5/12/2011 Time: 10:23 AM
Delivered By Fed Ex
Delivered To Brandon Jones

Condition Good (Sealed)
TRK # 8625 4677 9605
Signature

Date	Item No.	Released by (print) / (sign)	Received by (print) / (sign)	Purpose of change:
5/12/2011 Time 10:27 AM	84 to 89	Brandon Jones	Rachel Wortman, for EMS	Accessioning/Storage
5/18/11 2:15pm	84 to 89	Rachel Wortman, for EMS	Emily Herren	Analysis
6/9/11 10:15am	89	Emily Herren	Maggie Redmond, for EMS	Storage
6/15/11 2:00pm	89	Rachel Wortman, for EMS	FedEx 7948 6606 3127 6	sent TO Forensic Science Consultants
Date Time	Item No.	Released by (print) / (sign)	Sent via: / Tracking No.	Purpose of change: FINAL DISPOSITION

Evidence Inventory

Bode Case #	Agency Item ID	Agency Description
2S04-114-84	E-019	Labeled as "Rope"
2S04-114-85	E-130	Labeled as "Hook"
2S04-114-86	E-130	Labeled as "Doral Cigarette Pack"
2S04-114-87		Labeled as "Sheet"
2S04-114-88		Labeled as "Sheet"
2S04-114-89	E-006	Labeled as "Black Tennis Shoe and Lace"

Note: Evidence sent by the West Memphis Police Department
626 W. Broadway
West Memphis, AR 72301

Storage of Evidence: Secure evidence room

2S04-114 EBH 6/27/11

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CHAIN OF CUSTODY

The Bode Technology Group, Inc.

Case Number: 2504-114-84 to 89

Agency Item ID Number:

Date / Time	Item No.	Released by (print) / (sign)	Received by (print) / (sign)	Purpose of change:
6/27/11 2:54 PM	84 to 88	Emily Herren	Rachel Coltman, for EMS	storage
06/28/11 9:46am	84, 85	ASHLEY KIMPLE for EMS	Emily Herren	Analysis
06/28/11 3:28pm	84, 85	Emily Herren	ASHLEY KIMPLE for EMS	storage

2504-114 EBN 716111

Print page | Close

FedEx

Detailed Results

This shipment is part of a multiple-piece shipment

Master tracking no. 862546779605

Total pieces 2
Total shipment weight 14.0 lbs/6.4 kg

View all associated shipments

Tracking no.: 862546779605 Select time format: **12H**

Delivered

Delivered
Signed for by: B.JONES

Shipment Dates

Ship date May 11, 2011
Delivery date May 12, 2011 10:23 AM

Destination

Signature Proof of Delivery

Shipment Options

Hold at FedEx Location
Hold at FedEx Location service is not available for this shipment.

Shipment Facts

Service type	Priority Overnight	Delivered to	Shipping/Receiving
Weight	7.0 lbs/3.2 kg		
Total Shipment Weight	14.0 lbs/6.4 kg		

Shipment Travel History

Select time zone: Local Scan Time

All shipment travel activity is displayed in local time for the location

Date/Time	Activity	Location	Details
May 12, 2011 10:23 AM	**Delivered**		
May 12, 2011 7:54 AM	On FedEx vehicle for delivery	ALEXANDRIA, VA	
May 12, 2011 7:18 AM	At local FedEx facility	ALEXANDRIA, VA	
May 12, 2011 5:19 AM	At dest sort facility	DULLES, VA	
May 12, 2011 2:41 AM	Departed FedEx location	MEMPHIS, TN	
May 11, 2011 10:50 PM	Arrived at FedEx location	MEMPHIS, TN	
May 11, 2011 10:25 PM	Left FedEx origin facility	CORDOVA, TN	
May 11, 2011 11:30 AM	Picked up	CORDOVA, TN	

2504-114 EBN 6125711

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Case Submission Form

Bode Technology
Part of GlobalOptions Group

Bode Case No (To be filled out by Bode): 2504 – 114

In order to process your DNA casework efficiently, this form must be filled out and sent along with the evidence. Prior to submitting a case, please call Customer Services 866-BODE-4-ID (866-263-3443).

The Bode Technology Group
10430 Furnace Rd. Suite 107
Lorton, VA 22079
Phone: 703-646-9740
Fax: 703-646-9742
www.bodetech.com

Submitting Agency: Ropes + Gray LLP Date: 5/13/11

Name: Stephen L. Braga Phone Number: 202-508-4655

Select the type of Submission:

☐ Initial Evidence Submission ☒ Additional Evidence Submission (Please fill in Bode Case number at the top of the page)

Select the type of Service:

☒ Standard Service - Our standard service provides complete analysis of your samples when rush services are not required.

☐ Rush Service - This is the fastest service offered. Please contact Customer Service for turnaround time (Additional charge per sample).

Promotion Code: _____

☐ 5 business days ☐ 10 business days ☐ 15 business days

Authorized Point(s) of Contact:

Name:	STEPHEN L. BRAGA	Name:	
Agency:	ROPES + GRAY LLP	Agency:	
Title:	PARTNER	Title:	
Phone Number:	202-508-4655	Phone Number:	
Fax Number:	202-383-9821	Fax Number:	
Cell Phone/Pager:	617-304-7124	Cell Phone/Pager:	
Email Address:	stephen.braga@ropesgray.com	Email Address:	

Mailing Address (Where The Report Should be Sent):

Name:	Same as above
Agency:	
Address:	
City/State/Zip:	
Phone Number:	
Fax Number:	
Email Address:	

Billing Address:

Name:	Same as above
Agency:	
Address:	
City/State/Zip:	
Phone Number:	
Fax Number:	
Email Address:	
Purchase Order #	

Evidence Return Address:

Name:	
Agency:	
Address:	
City/State/Zip:	
Phone Number:	
Email Address:	

Select type of Evidence Return:

☐ Evidence should be returned following delivery of the case report.

☒ Evidence should be returned upon request from the Authorized Point of Contact(s).

2504-114 EBH 6/25/11

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Case Submission Form

Bode Technology
Part of GlobalOptions Group

Bode Case No (To be filled out by Bode): 2504 – 114

In order to process your DNA casework efficiently, this form must be filled out and sent along with the evidence. Prior to submitting a case, please call Customer Services 866-BODE-4-ID (866-263-3443).

The Bode Technology Group
10430 Furnace Rd. Suite 107
Lorton, VA 22079
Phone: 703-646-9740
Fax: 703-646-9742
www.bodetech.com

Submitting Agency Reference/Case No: _____

Case Background:

The six items listed below from the West Memphis Police Department need to be DNA-tested and compared to all existing profiles in this case. Use your discretion to perform best tests available.

Specify platform (AB/Hitachi), kit (Co/Pro+, ID, PP16, PP16BIO, PPY, YFiler, miniFiler), and software (GS/GT, GMID) preferences. If no preference, check box for Analyst Discretion

☒ Analyst Discretion

List Evidence Items* (If needed, use Page 3 to include additional items or case information) Note: Descriptions may be reflected in Chain of Custody and Report	Please check the appropriate boxes for Pre-Screening and DNA Testing Requested	Permission to Consume (if necessary)
E-019 Rope + Hook	Pre-Screen: ☒ Blood ☐ Semen ☒ Saliva ☒ Hair DNA Testing: ☒ STR ☒ miniSTR ☐ Y-STR ☐ mtDNA	☒ Yes ☐ No
E-130 Doral Cigarette Pack	Pre-Screen: ☒ Blood ☐ Semen ☒ Saliva ☒ Hair DNA Testing: ☒ STR ☒ miniSTR ☐ Y-STR ☐ mtDNA	☒ Yes ☐ No
E-132 Wooden slats	Pre-Screen: ☒ Blood ☐ Semen ☒ Saliva ☒ Hair DNA Testing: ☒ STR ☒ miniSTR ☐ Y-STR ☐ mtDNA	☒ Yes ☐ No
Sheet from Box 9	Pre-Screen: ☒ Blood ☐ Semen ☒ Saliva ☒ Hair DNA Testing: ☒ STR ☒ miniSTR ☐ Y-STR ☐ mtDNA	☒ Yes ☐ No
Sheet from Box D	Pre-Screen: ☒ Blood ☐ Semen ☒ Saliva ☒ Hair DNA Testing: ☒ STR ☒ miniSTR ☐ Y-STR ☐ mtDNA	☒ Yes ☐ No

☒ Check if additional evidence items or testing instructions are listed on Page 3

* When submitting extracts, the reagent blanks must also be included. Please be sure to include the following information: Total Human Quant, Total Y Quant, Volume Remaining, and Extraction Control Names associated with samples.

If STR data is obtained, will CODIS entry or search be requested? ☐ Yes ☒ No

(NOTE: Private Forensic DNA laboratories do not have access to enter or search samples in CODIS. If "yes" is marked, Bode will contact the appropriate CODIS laboratory Technical Leader prior to initiation of this case. Please be aware that this may increase the turnaround time.

I hereby certify that the information provided on this Case Submission Form is accurate to the best of my knowledge. I understand that I will be charged for services according to the fee schedule that I have received.

Print Name STEPHEN L. BRAGA Signature _____

Please submit this completed form with the evidence. All evidence items must be shipped using a traceable carrier (i.e. FedEx, UPS, DHL, Priority Mail). Overnight shipping is recommended. The evidence should be shipped to:

ATTN: EVIDENCE DEPARTMENT
Bode Technology
10430 Furnace Rd. Suite 107
Lorton, VA 22079

2504-114 EBH 6/25/11

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Case Submission Form

Bode Technology
Part of GlobalOptions Group

Bode Case No (To be filled out by Bode): 2504 – 114

In order to process your DNA casework efficiently, this form must be filled out and sent along with the evidence. Prior to submitting a case, please call Customer Services 866-BODE-4-ID (866-263-3443).

The Bode Technology Group
10430 Furnace Rd. Suite 107
Lorton, VA 22079
Phone: 703-646-9740
Fax: 703-646-9742
www.bodetech.com

Additional Evidence Items* Note: Descriptions may be reflected in Chain of Custody and Report	Please check the appropriate boxes for Pre-Screening and DNA Testing Requested	Permission to Consume (If necessary)
* E-006 Black Tennis Shoe + Lace	Pre-Screen: ☒ Blood ☐ Semen ☒ Saliva ☒ Hair DNA Testing: ☒ STR ☒ miniSTR ☐ Y-STR ☐ mtDNA	☒ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No

* When submitting extracts, the reagent blanks must also be included. Please be sure to include the following information: Total Human Quant, Total Y Quant, Volume Remaining, and Extraction Control Names associated with samples.

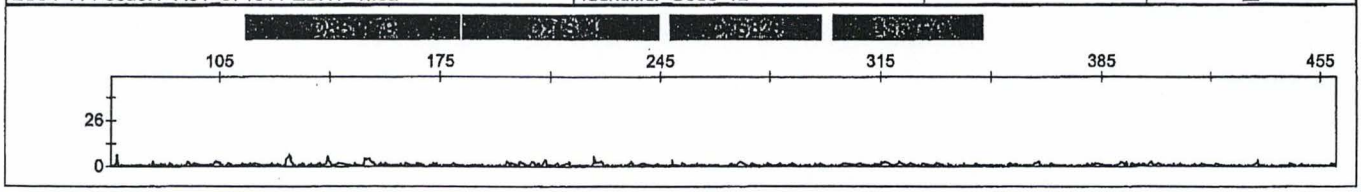
Additional Case Information: SPECIAL INSTRUCTIONS

(1) Both the Black and Purple Tennis Shoe, and the Shoe Lace, Need to Be DNA-Tested

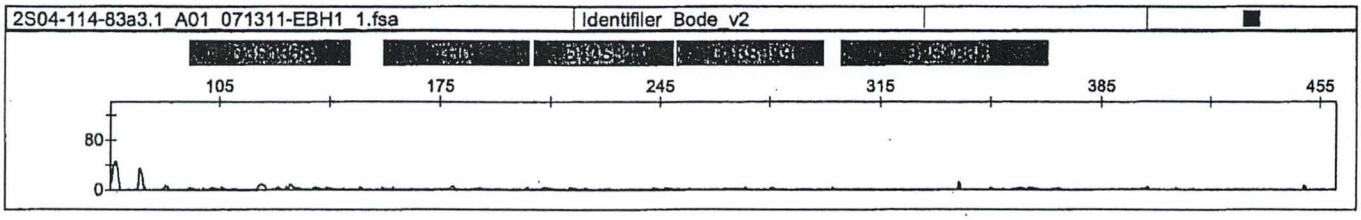
(2) When you remove the shoe lace for testing, can you also (a) measure the length of the shoe lace and (b) examine whether either end of the lace appears to have been cut with a knife.

2504-114 EBN 6/25/11

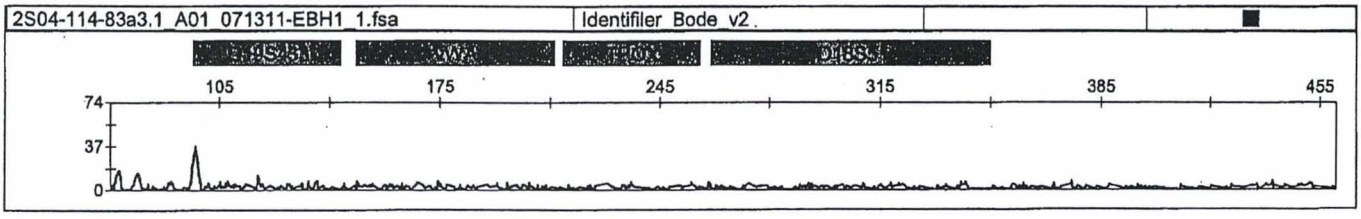
Sample File	Panel	SQO	SQ
2S04-114-83a3.1_A01_071311-EBH1_1.fsa	Identifiler_Bode_v2		



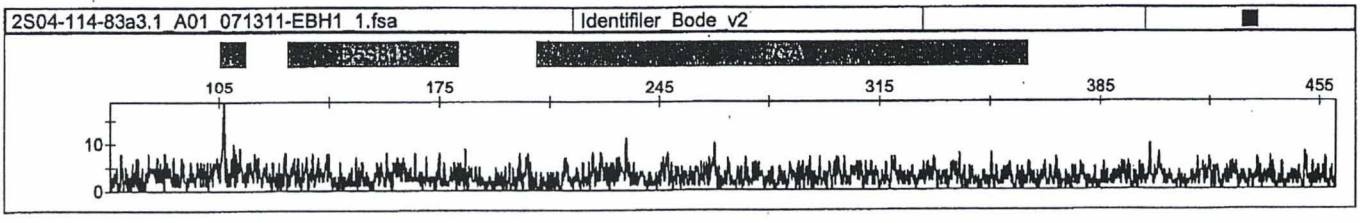
2S04-114-83a3.1_A01_071311-EBH1_1.fsa | Identifiler_Bode_v2



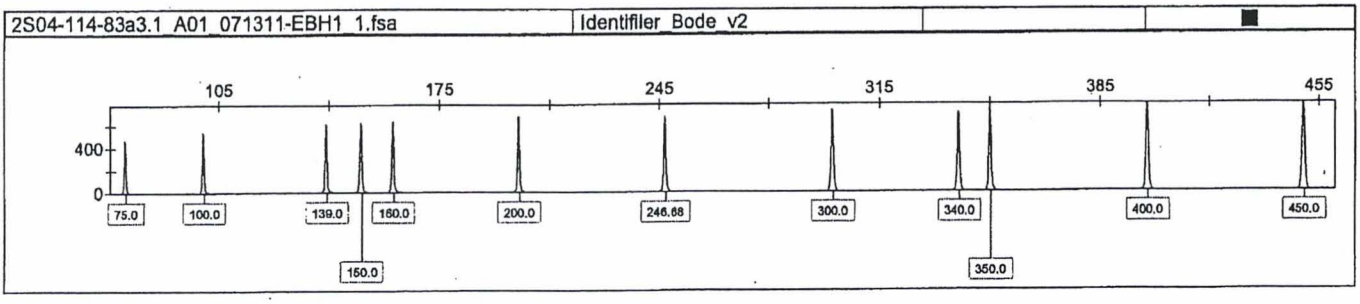
2S04-114-83a3.1_A01_071311-EBH1_1.fsa | Identifiler_Bode_v2



2S04-114-83a3.1_A01_071311-EBH1_1.fsa | Identifiler_Bode_v2



2S04-114-83a3.1_A01_071311-EBH1_1.fsa | Identifiler_Bode_v2



Qt = 0.002607 ng/ul
sample was microconned.
EBH 7/14/11

EBH 7/14/11

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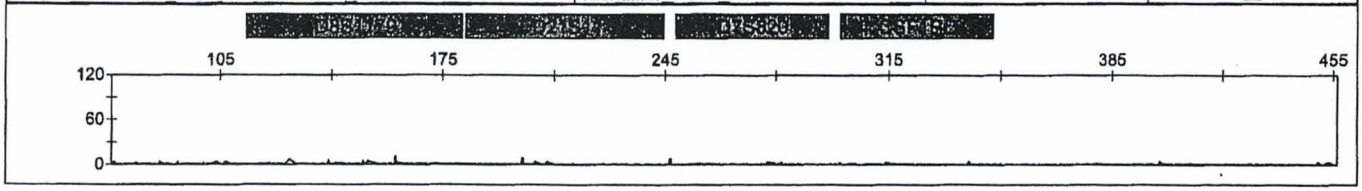
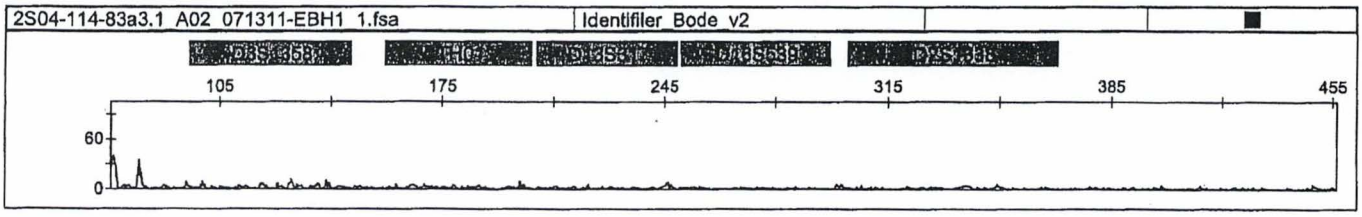
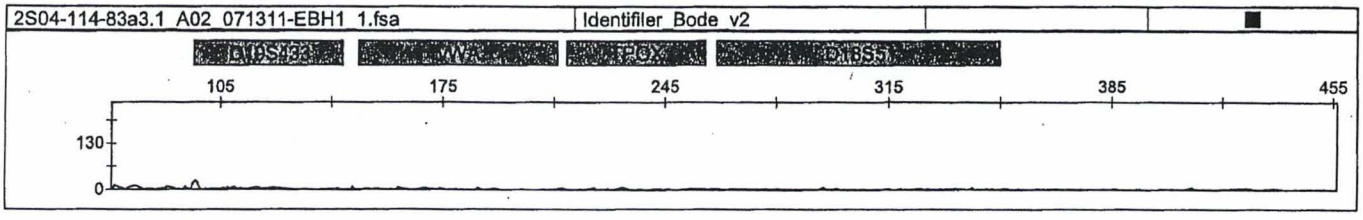
Sample File	Panel	SQO	SQ
2S04-114-83a3.1_A02_071311-EBH1_1.fsa	Identifiler_Bode_v2		



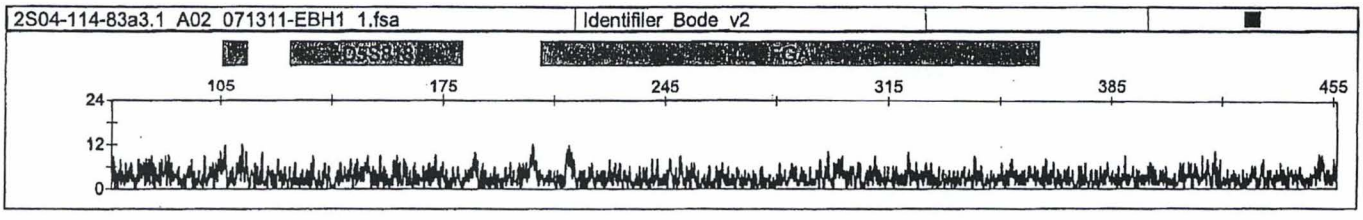
2S04-114-83a3.1_A02_071311-EBH1_1.fsa | Identifiler_Bode_v2



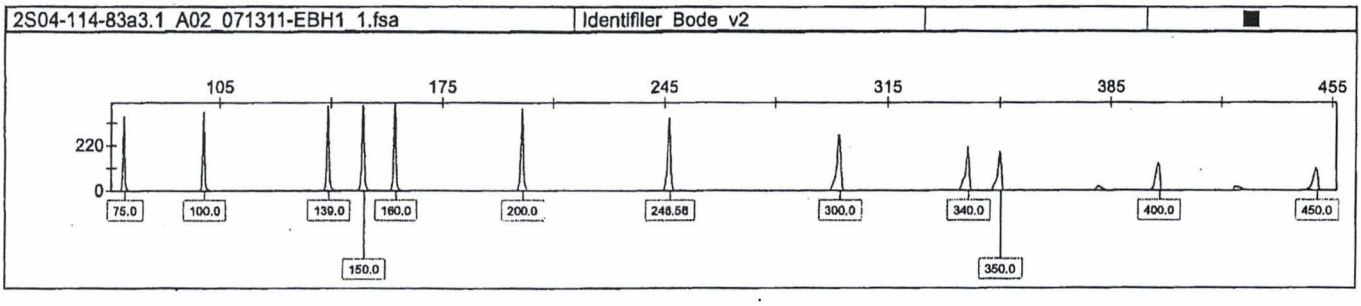
2S04-114-83a3.1_A02_071311-EBH1_1.fsa | Identifiler_Bode_v2



2S04-114-83a3.1_A02_071311-EBH1_1.fsa | Identifiler_Bode_v2



2S04-114-83a3.1_A02_071311-EBH1_1.fsa | Identifiler_Bode_v2



EBN 7/14/11

Applied Biosystems
GeneMapper ID v3.2.1

GMID14_062711-EBH1_2S04-114_EBH_ID

Sample File	Panel	SQO	SQ
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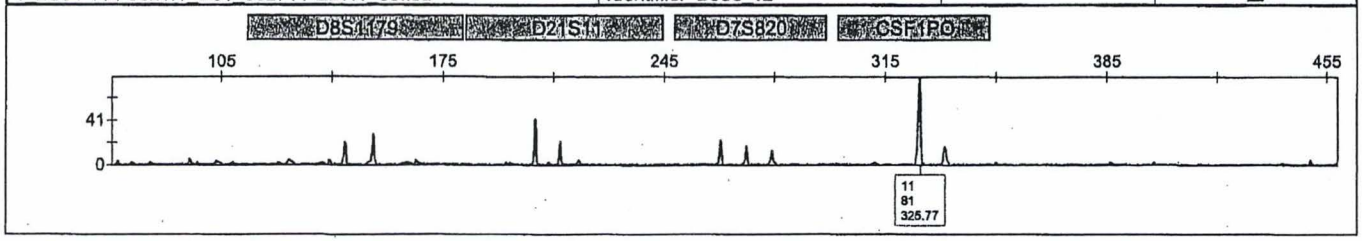
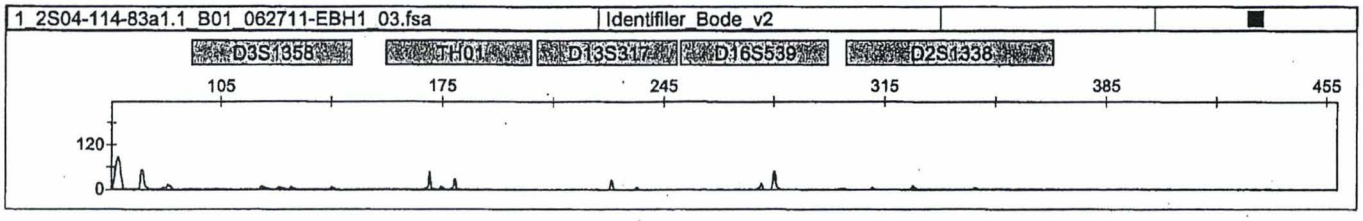
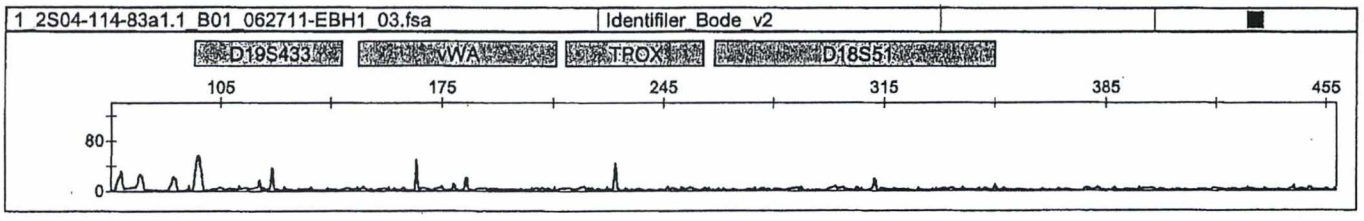


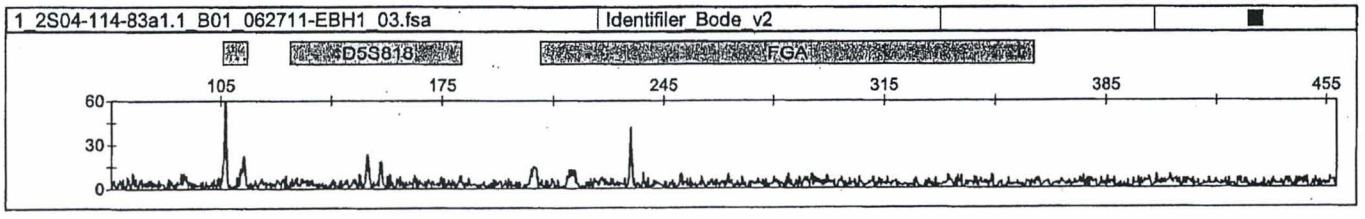
1_2S04-114-83a1.1_B01_062711-EBH1_03.fsa | Identifiler_Bode_v2



1_2S04-114-83a1.1_B01_062711-EBH1_03.fsa | Identifiler_Bode_v2



1_2S04-114-83a1.1_B01_062711-EBH1_03.fsa | Identifiler_Bode_v2



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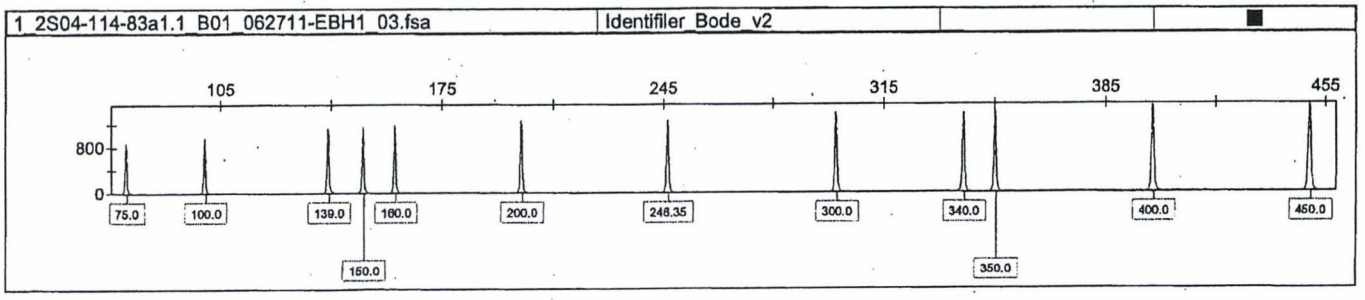

Qt < 0.001 ng/ul

Sample was vivaconned.
EBH 7/6/11

Sample not reported. See casenote.
EBH 7/15/11

EBH 6/27/11

Applied Biosystems
GeneMapper ID v3.2.1

GMID14_062711-EBH1_2S04-114_EBH_ID

Sample File	Panel	SQO	SQ
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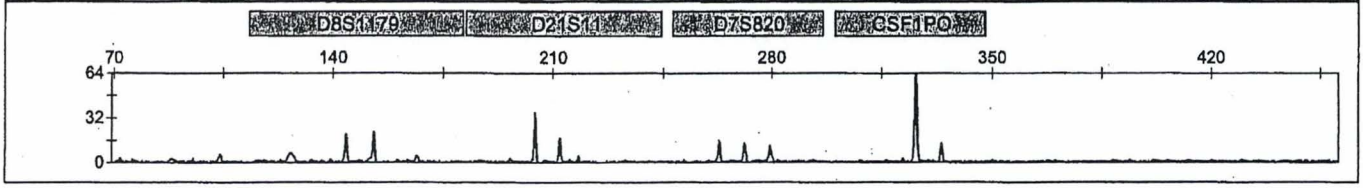

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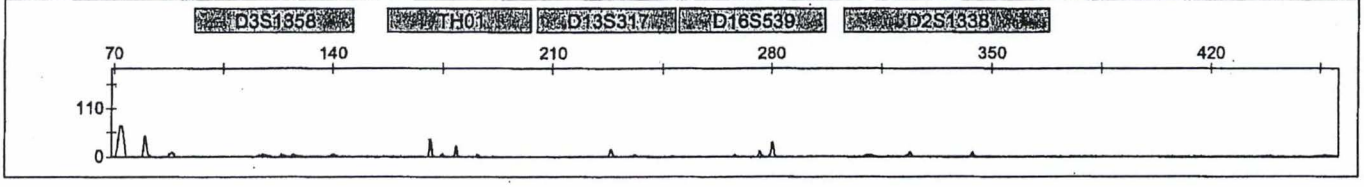
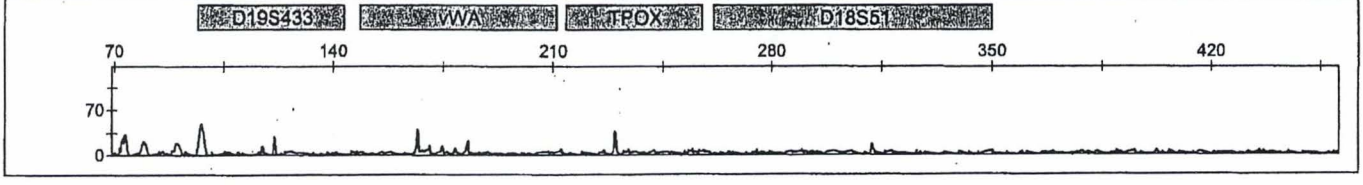
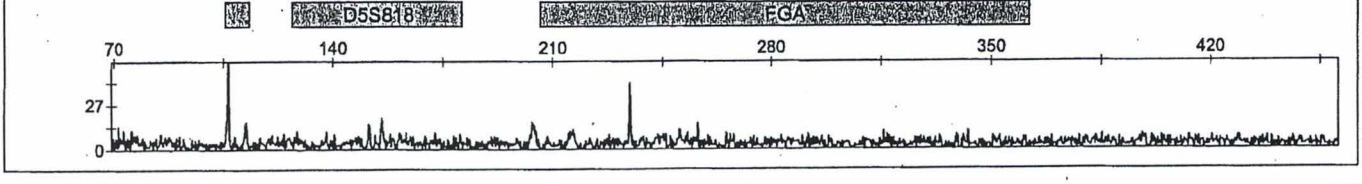


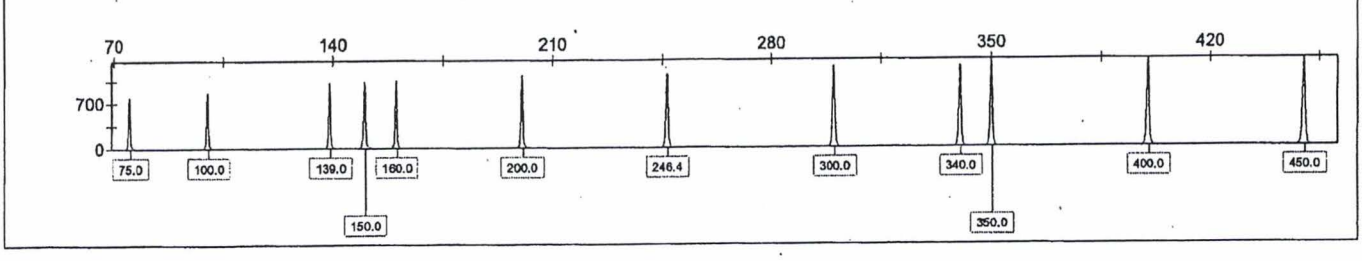
1_2S04-114-83a1.1_A01_062711-EBH1_01.fsa | Identifiler_Bode_v2



1_2S04-114-83a1.1_A01_062711-EBH1_01.fsa | Identifiler_Bode_v2



1_2S04-114-83a1.1_A01_062711-EBH1_01.fsa | Identifiler_Bode_v2



sample not reported.
see casenote. EBH 7115711

EBH 6/27/11

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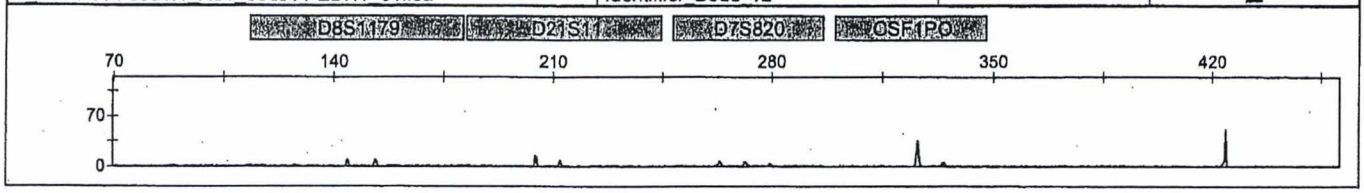
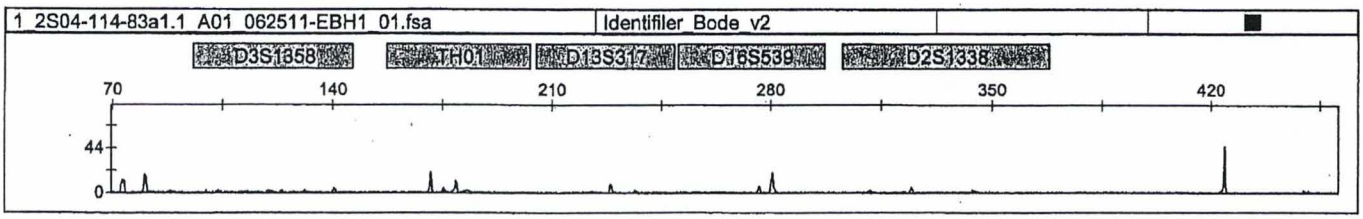
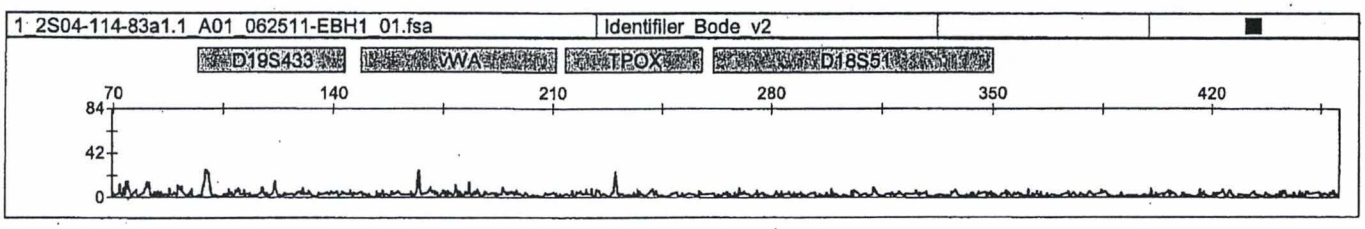
Sample File	Panel	SQO	SQ
1_2S04-114-83a1.1_A01_062511-EBH1_01.fsa	Identifiler_Bode_v2		



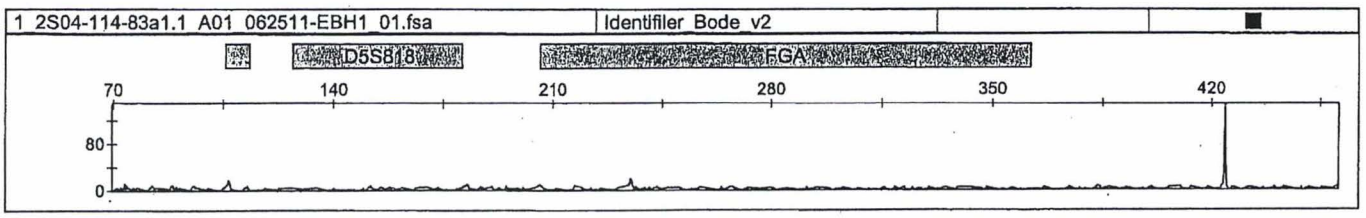
1_2S04-114-83a1.1_A01_062511-EBH1_01.fsa | Identifiler_Bode_v2



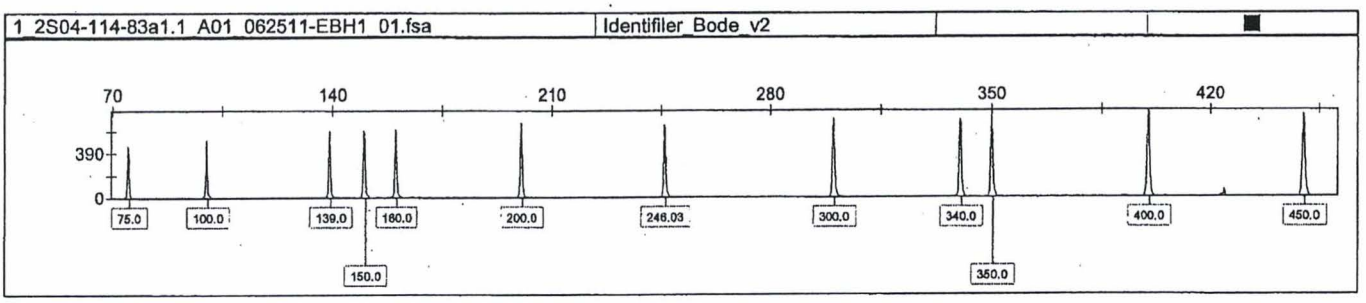
1_2S04-114-83a1.1_A01_062511-EBH1_01.fsa | Identifiler_Bode_v2



1_2S04-114-83a1.1_A01_062511-EBH1_01.fsa | Identifiler_Bode_v2



1_2S04-114-83a1.1_A01_062511-EBH1_01.fsa | Identifiler_Bode_v2



Sample not reported.
See casenote. EBH 7/15/11

EBH 6/27/11

Applied Biosystems
GeneMapper ID v3.2.1

GMID13_071311-EBH1_2S04-114_EBH_ID

Sample File	Panel	SQO	SQ
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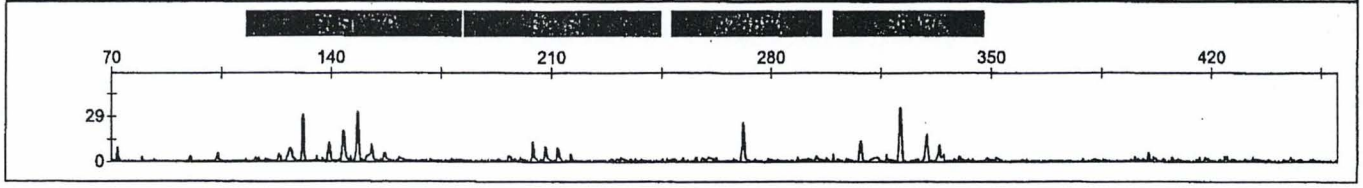
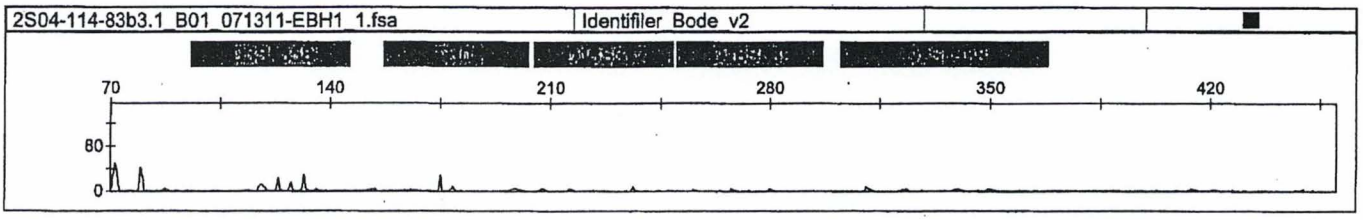
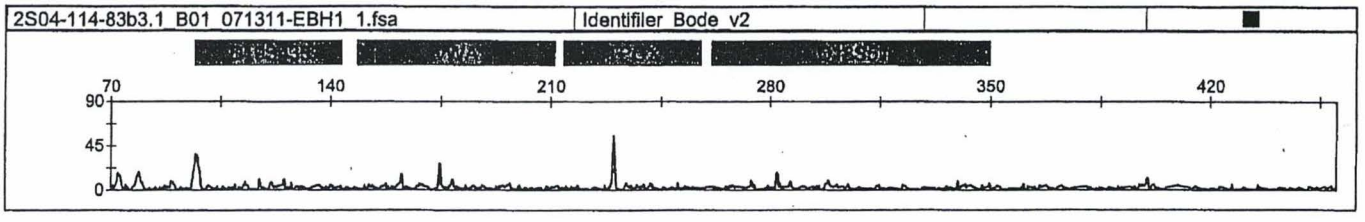


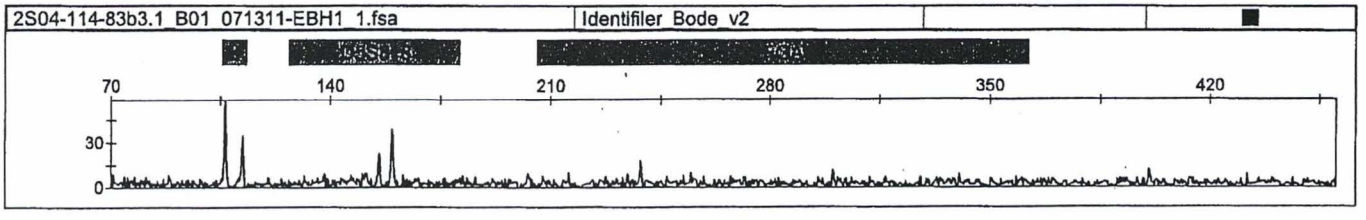
2S04-114-83b3.1_B01_071311-EBH1_1.fsa | Identifiler_Bode_v2



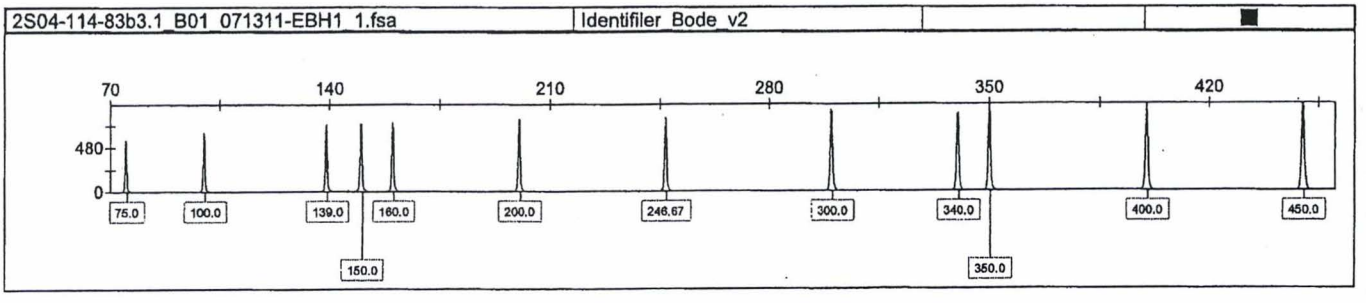
2S04-114-83b3.1_B01_071311-EBH1_1.fsa | Identifiler_Bode_v2



2S04-114-83b3.1_B01_071311-EBH1_1.fsa | Identifiler_Bode_v2



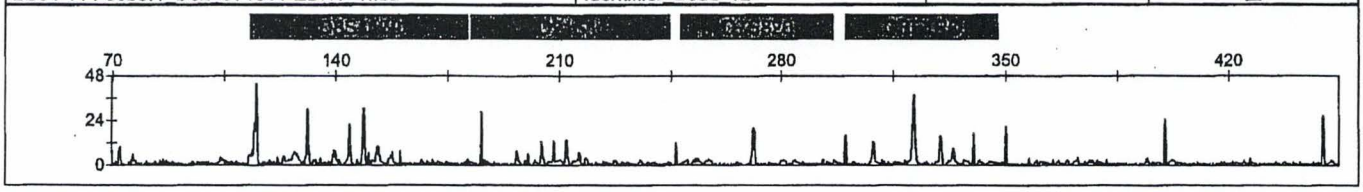
2S04-114-83b3.1_B01_071311-EBH1_1.fsa | Identifiler_Bode_v2



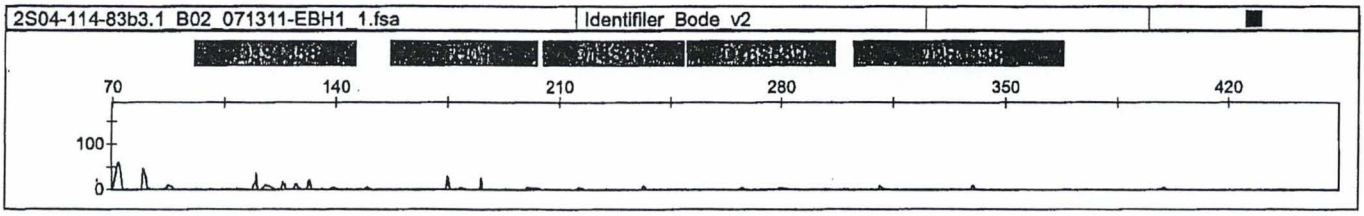
Qt= 0.00151 ng/ul
sample was microconned.
EBH 7/14/11

EBH 7/14/11

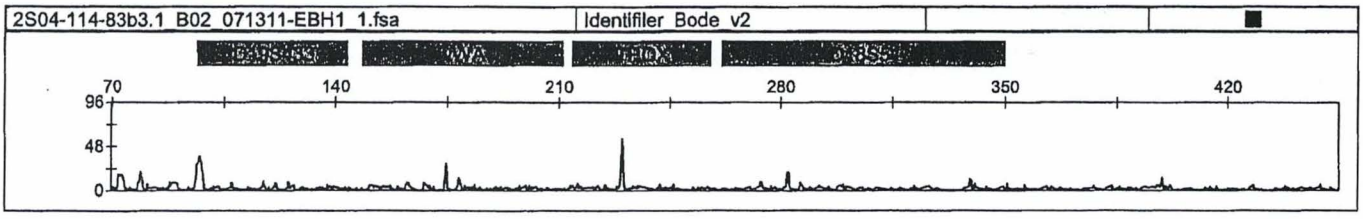
Sample File	Panel	SQO	SQ
2S04-114-83b3.1_B02_071311-EBH1_1.fsa	Identifiler_Bode_v2		



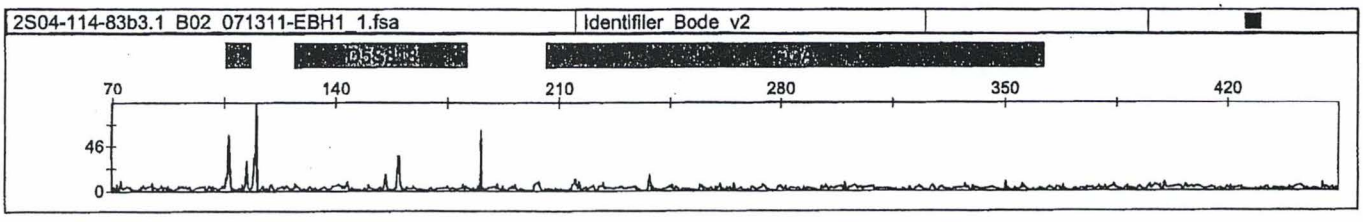
2S04-114-83b3.1_B02_071311-EBH1_1.fsa | Identifiler_Bode_v2



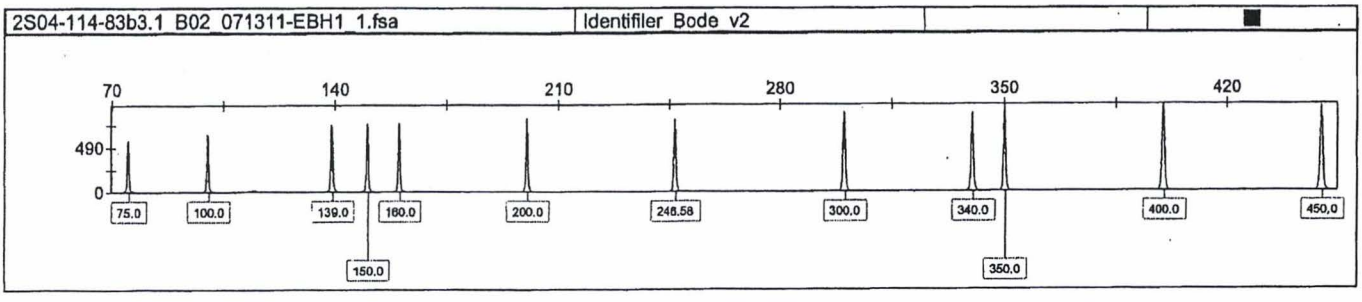
2S04-114-83b3.1_B02_071311-EBH1_1.fsa | Identifiler_Bode_v2



2S04-114-83b3.1_B02_071311-EBH1_1.fsa | Identifiler_Bode_v2



2S04-114-83b3.1_B02_071311-EBH1_1.fsa | Identifiler_Bode_v2



EBH 7/14/11

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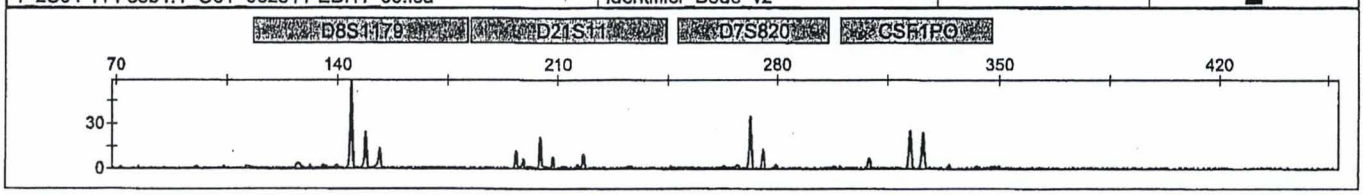
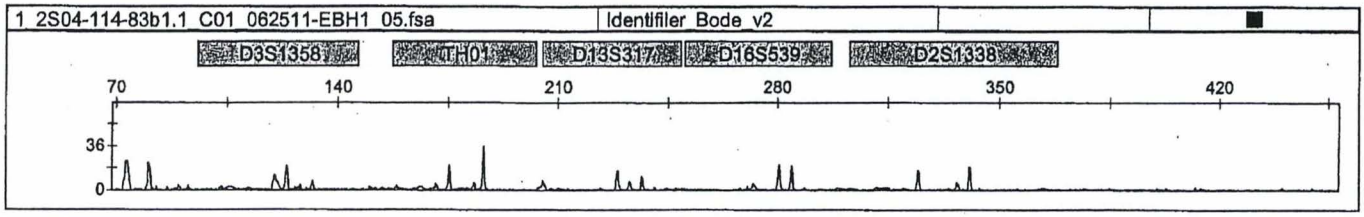
Applied Biosystems
GeneMapper ID v3.2.1

GMID11_062511-EBH1_2S04-114_EBH_ID

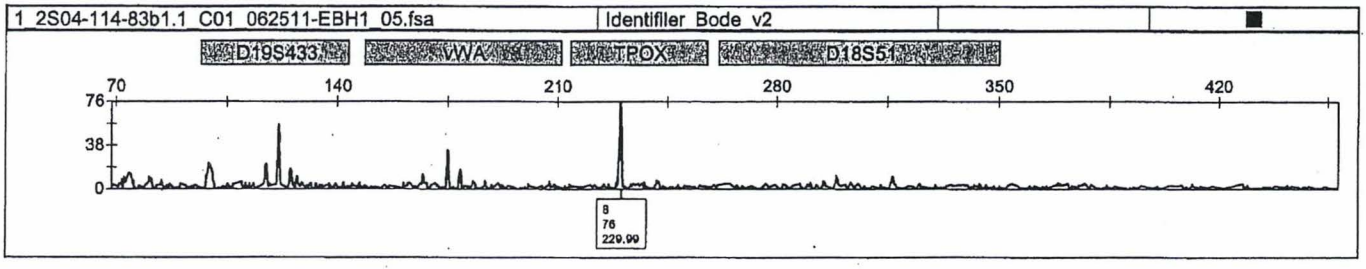
Sample File	Panel	SQO	SQ
1_2S04-114-83b1.1_C01_062511-EBH1_05.fsa	Identifiler_Bode_v2		



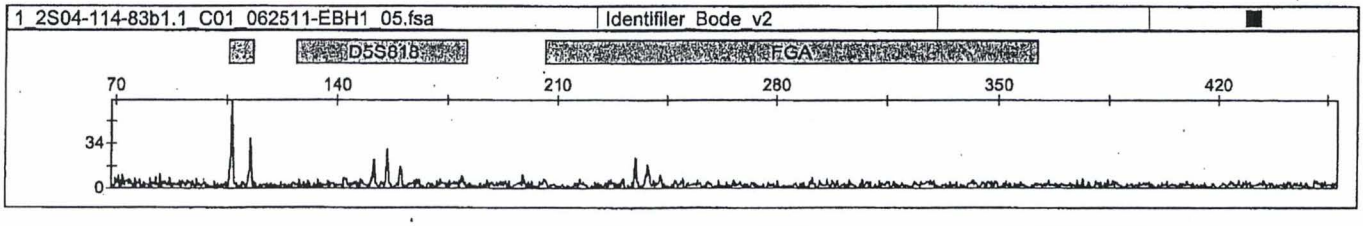
1_2S04-114-83b1.1_C01_062511-EBH1_05.fsa	Identifiler_Bode_v2		



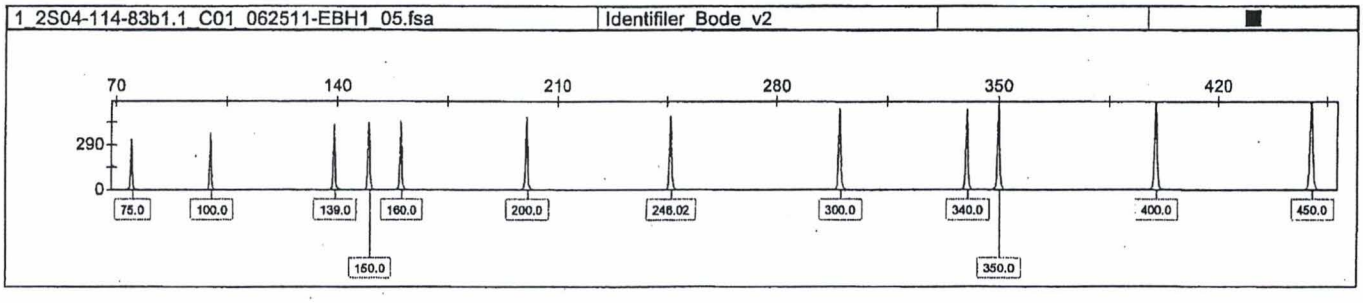
1_2S04-114-83b1.1_C01_062511-EBH1_05.fsa	Identifiler_Bode_v2		



1_2S04-114-83b1.1_C01_062511-EBH1_05.fsa	Identifiler_Bode_v2		



1_2S04-114-83b1.1_C01_062511-EBH1_05.fsa	Identifiler_Bode_v2		



@t= 0.00321 ng/ul
sample was vivaconned. EBH 6/27/11

Sample not reported. See case note.
EBH 7/15/11

EBH 6/27/11

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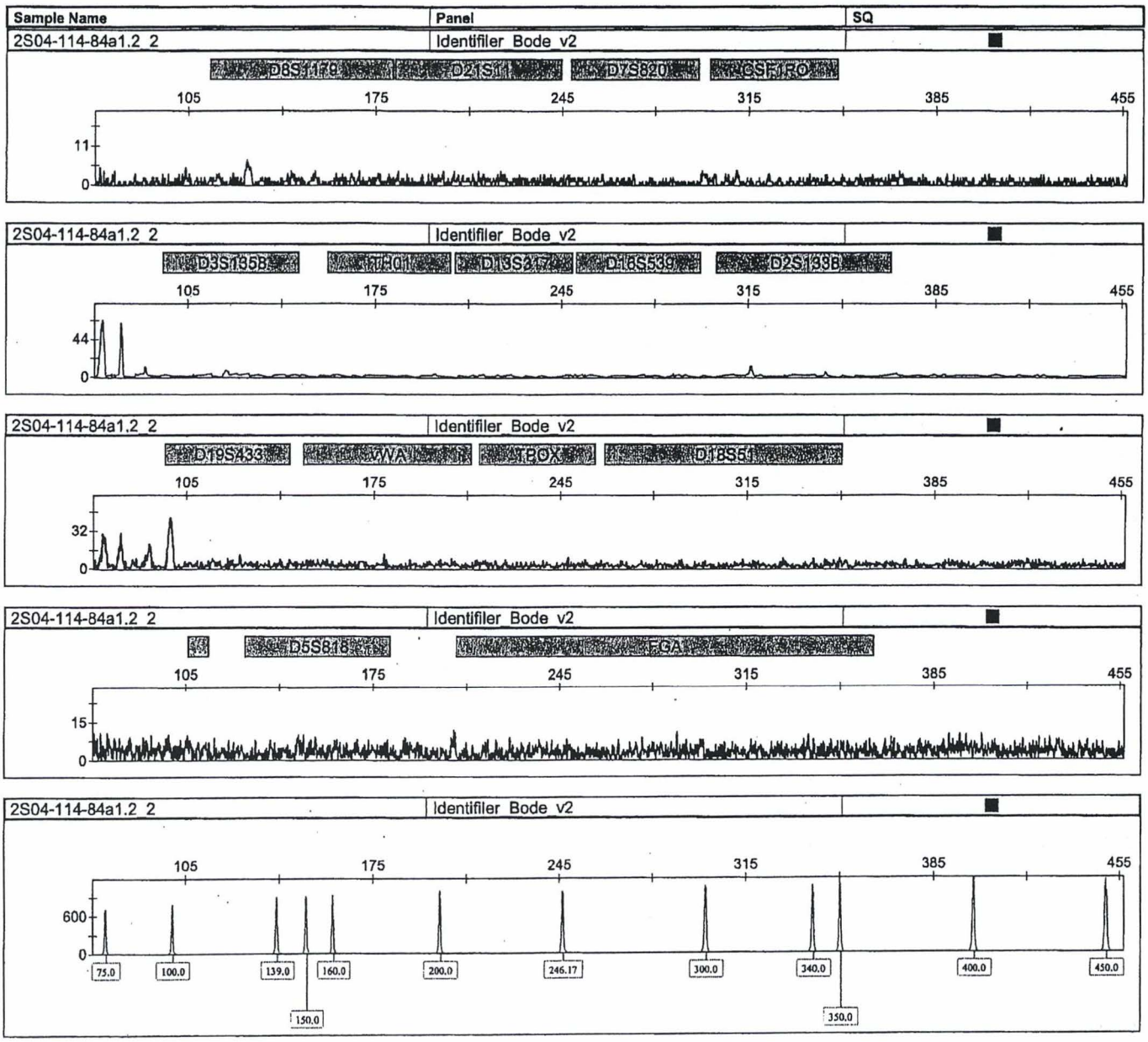
Applied Biosystems
GeneMapper ID v3.2.1

GMID14_062811-EBH1_2S04-114_EBH_ID



Sample not reported.
See case note. EBH 7/6/11

EBH 6/28/11

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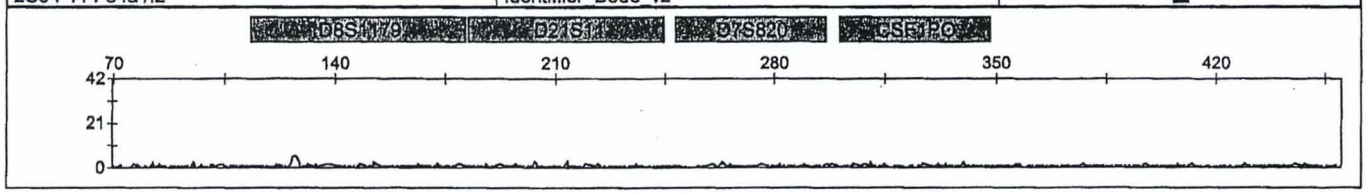
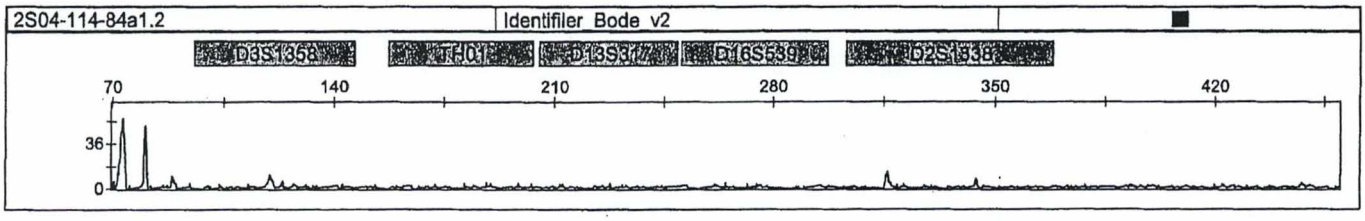
Applied Biosystems
GeneMapper ID v3.2.1

GMID14_062811-EBH1_2S04-114_EBH_ID

Sample Name	Panel	SQ
2S04-114-84a1.2	Identifiler_Bode_v2	



2S04-114-84a1.2	Identifiler_Bode_v2	



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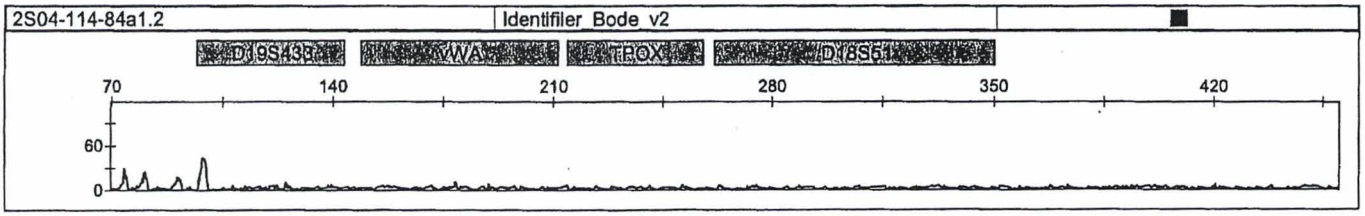

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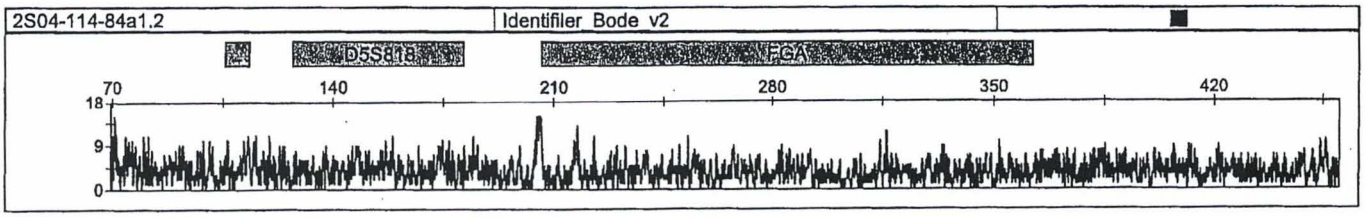

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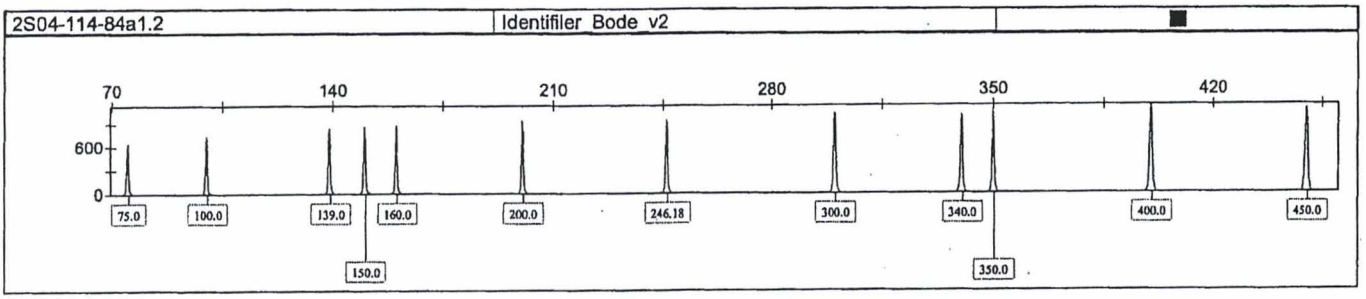

Sample not reported.
See case note. EBH 7/6/11

EBH 6/28/11
128

Applied Biosystems
GeneMapper ID v3.2.1

GMID11_062511-EBH1_2S04-114_EBH_ID

Sample File	Panel	SQO	SQ
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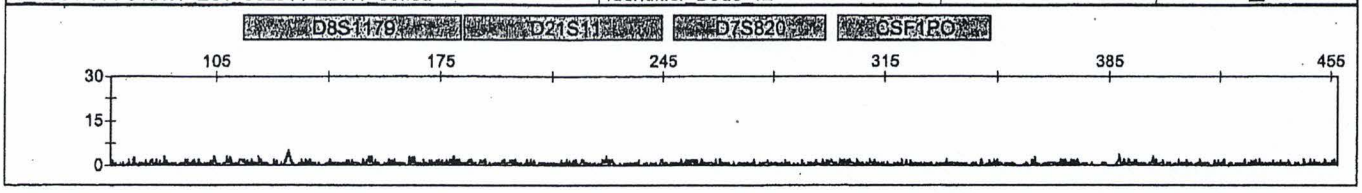
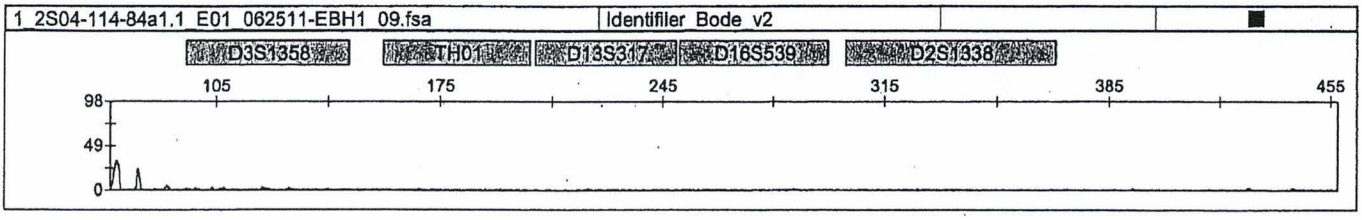
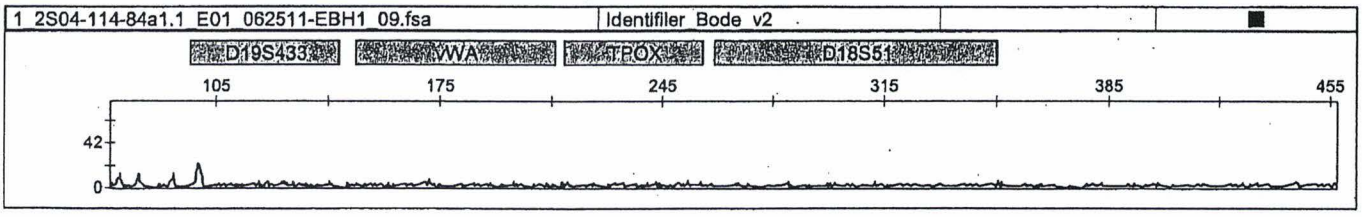


1_2S04-114-84a1.1_E01_062511-EBH1_09.fsa | Identifiler_Bode_v2



1_2S04-114-84a1.1_E01_062511-EBH1_09.fsa | Identifiler_Bode_v2



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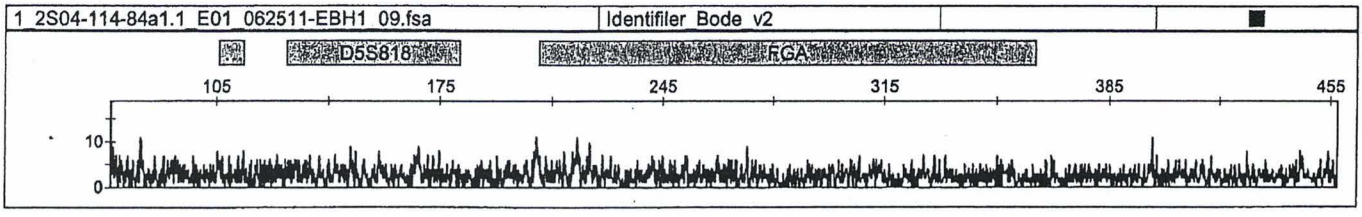

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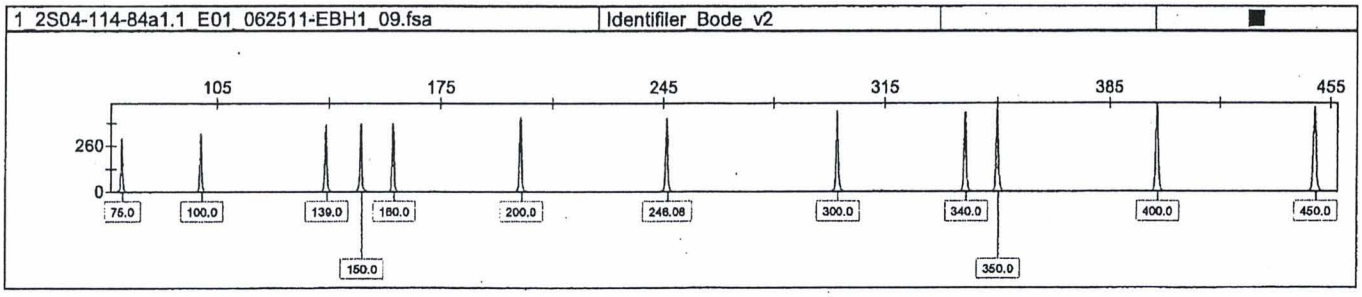

@t <0.001 rglu

Sample was Vivaconned.
EBH 6/27/11

Sample not reported.
See casenote. EBH 7/6/11

EBH 6/27/11

Applied Biosystems
GeneMapper ID v3.2.1

GMID14_070611-EBH1_2S04-114_EBH_ID

Sample File	Panel	SQO	SQ
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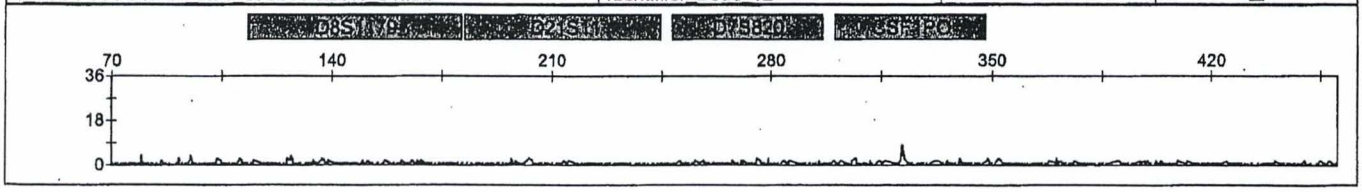
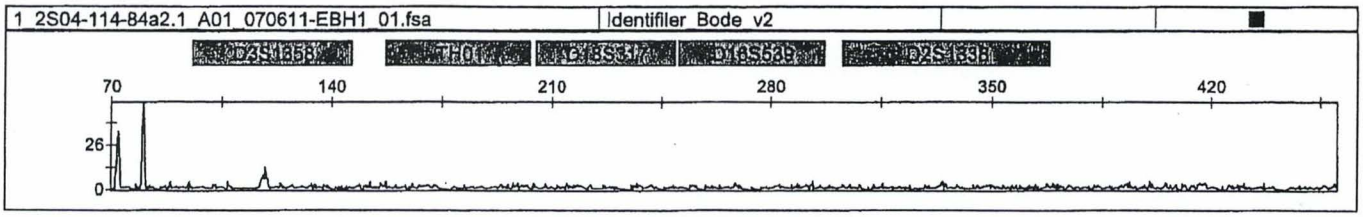
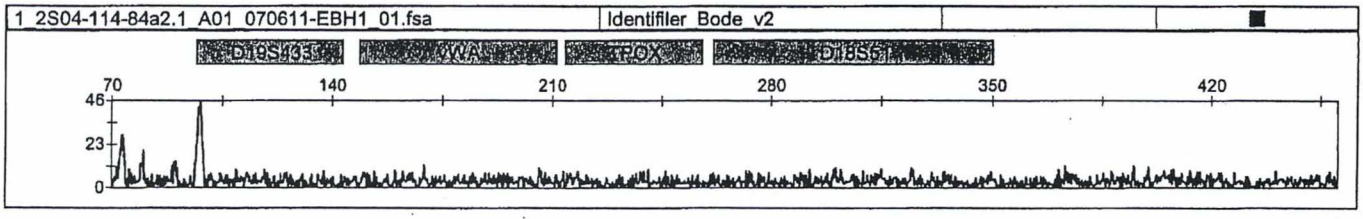


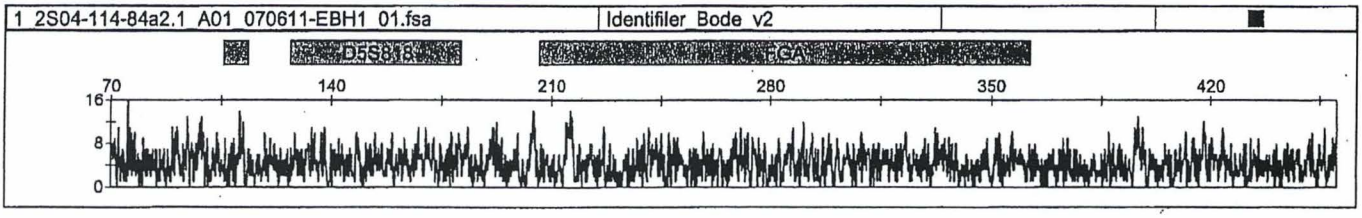
1_2S04-114-84a2.1_A01_070611-EBH1_01.fsa | Identifiler_Bode_v2



1_2S04-114-84a2.1_A01_070611-EBH1_01.fsa | Identifiler_Bode_v2



1_2S04-114-84a2.1_A01_070611-EBH1_01.fsa | Identifiler_Bode_v2



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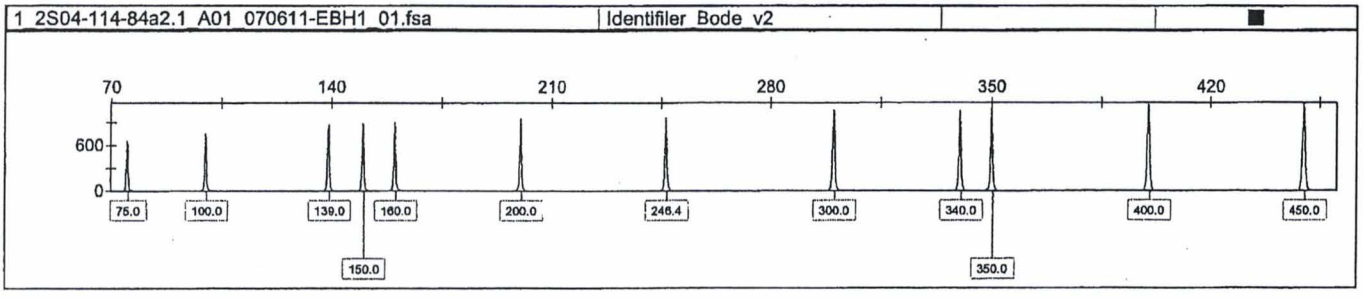

Qt <0.001 ng/ul
Sample was vivaconned.
EBH 7/6/11

EBH 7/6/11
126

Sample File	Panel	SQO	SQ
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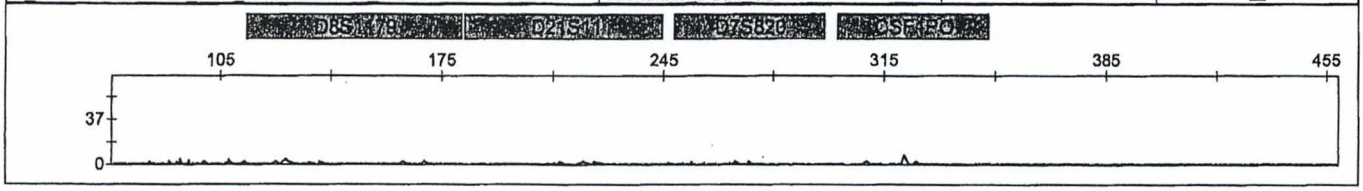
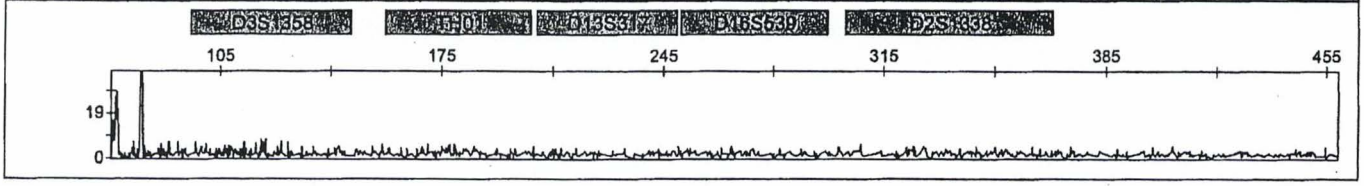


1_2S04-114-84a2.1_A02_070611-EBH1_02.fsa | Identifiler_Bode_v2



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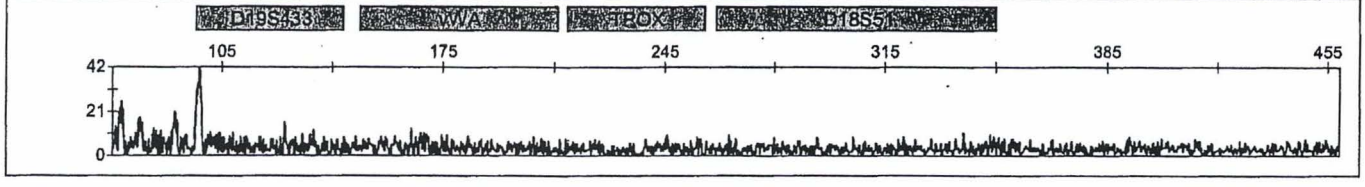
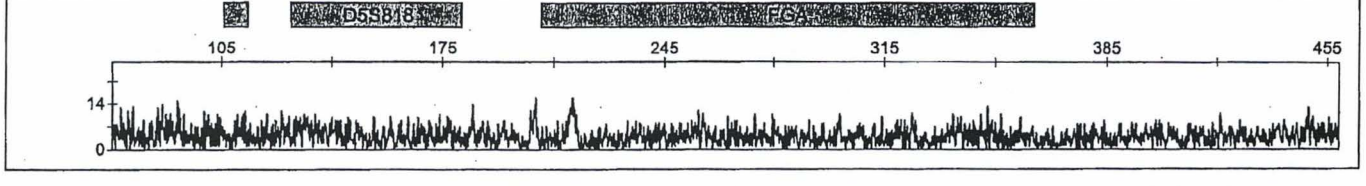


1_2S04-114-84a2.1_A02_070611-EBH1_02.fsa | Identifiler_Bode_v2



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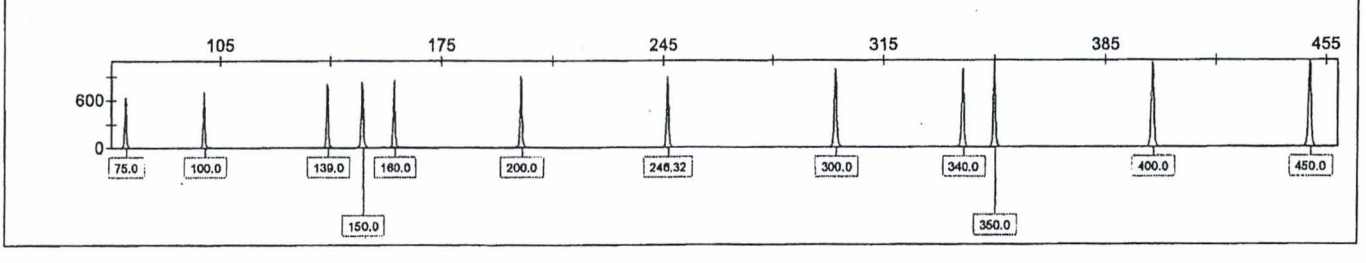

EBH 7/6/11

Sample Name	Panel	SQ
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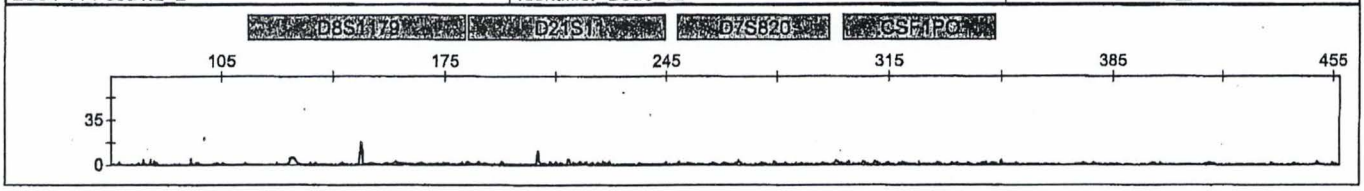
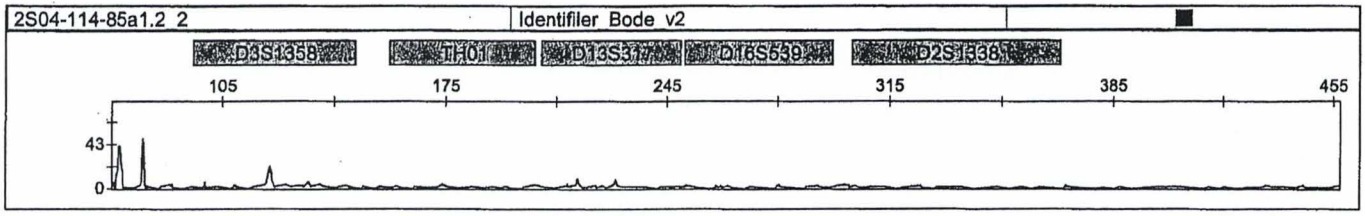
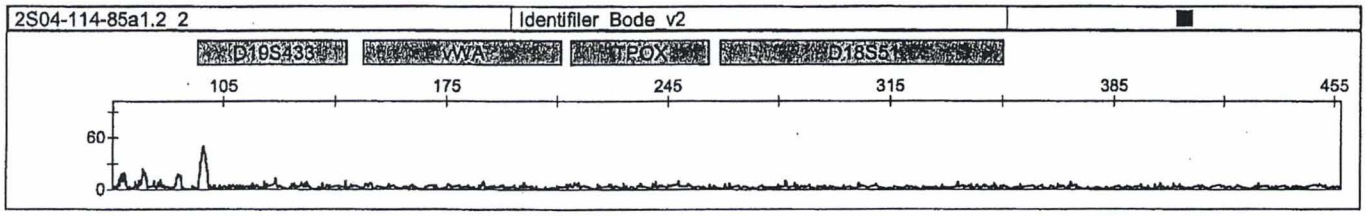


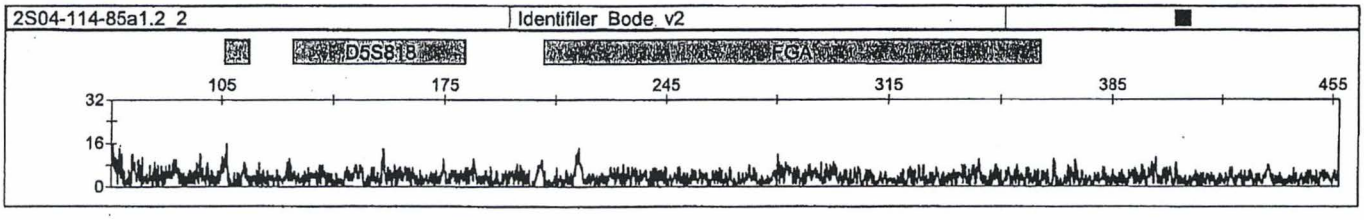
2S04-114-85a1.2_2	Identifiler_Bode_v2	



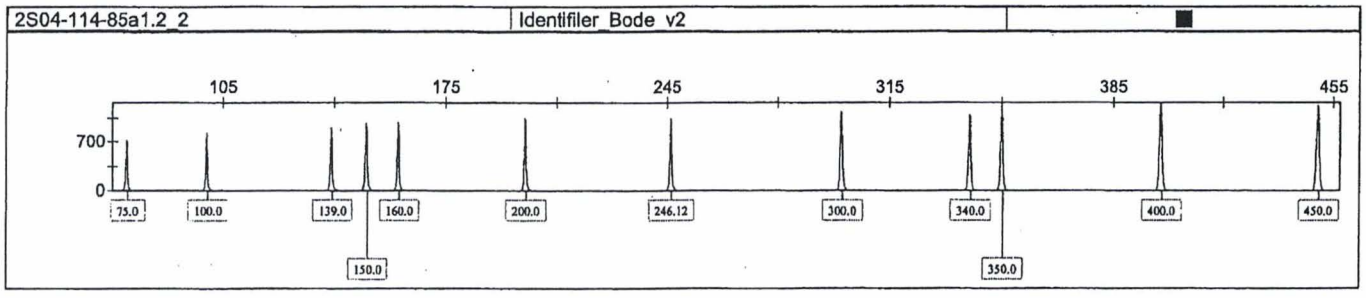
2S04-114-85a1.2_2	Identifiler_Bode_v2	



2S04-114-85a1.2_2	Identifiler_Bode_v2	



2S04-114-85a1.2_2	Identifiler_Bode_v2	



Sample not reported.
See case note
EBH 7/6/11

EBH 6/28/11
124

Applied Biosystems
GeneMapper ID v3.2.1

GMID14_062811-EBH1_2S04-114_EBH_ID

Sample Name	Panel	SQ
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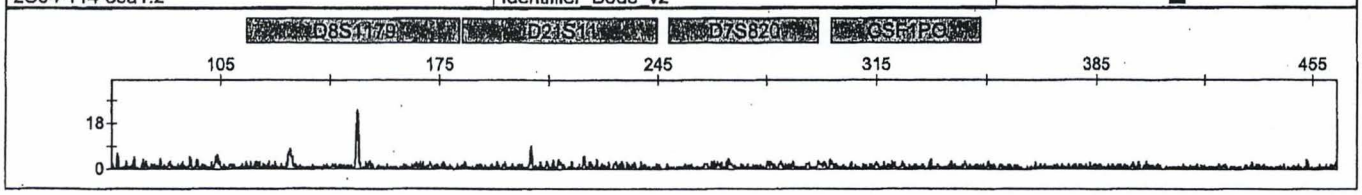
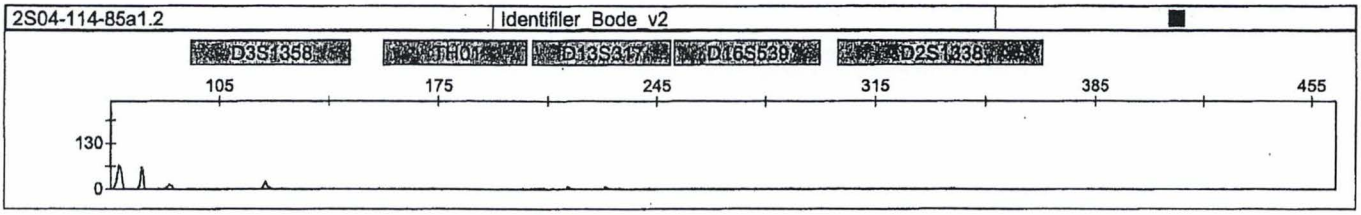
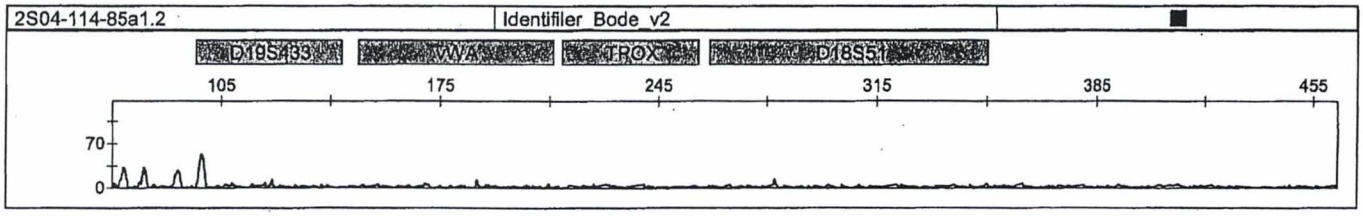


2S04-114-85a1.2	Identifiler_Bode_v2	



2S04-114-85a1.2	Identifiler_Bode_v2	



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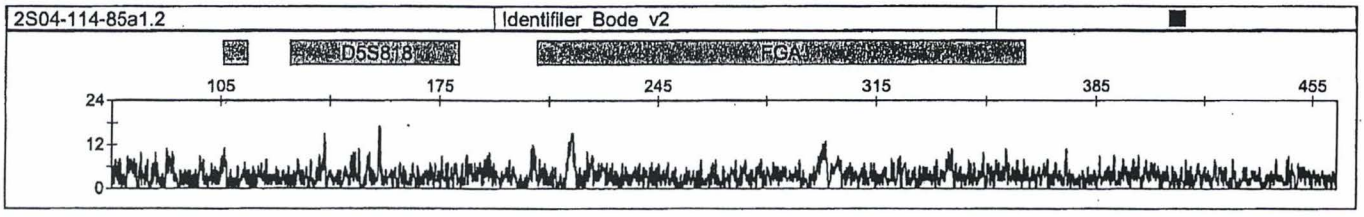

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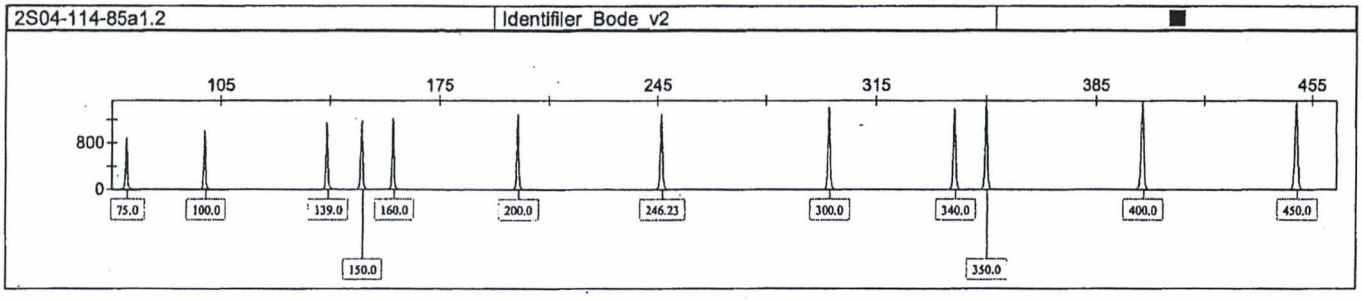

Sample not reported.
See casenote. EBH 7/6/11

EBH 6/28/11

123

Applied Biosystems
GeneMapper ID v3.2.1

GMID11_062511-EBH1_2S04-114_EBH_ID

Sample File	Panel	SQO	SQ
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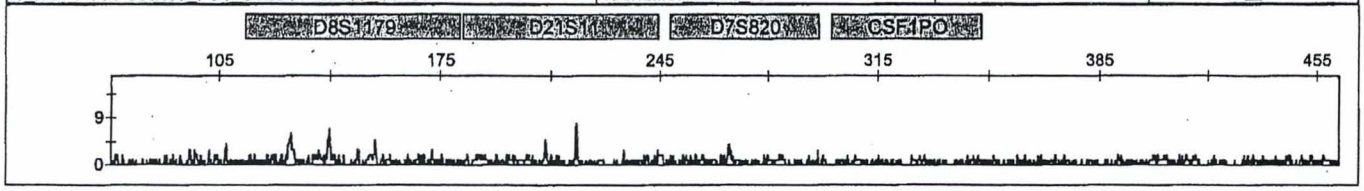
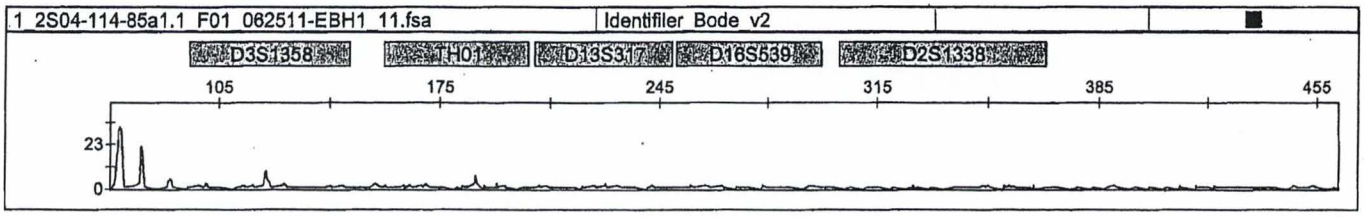


1_2S04-114-85a1.1_F01_062511-EBH1_11.fsa | Identifiler_Bode_v2



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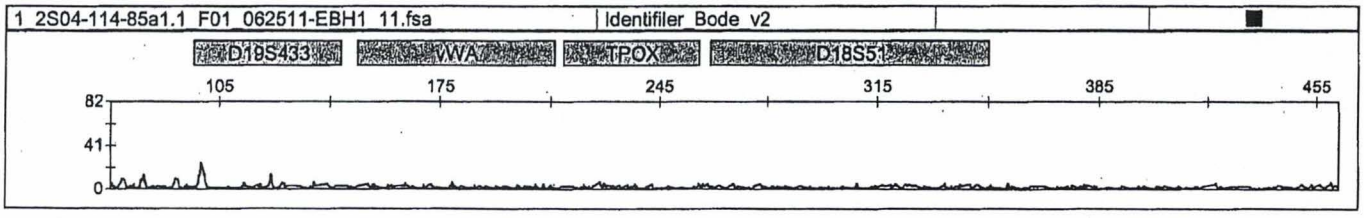

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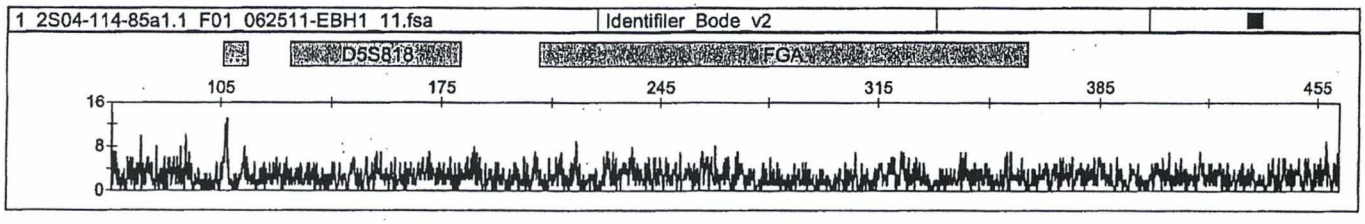

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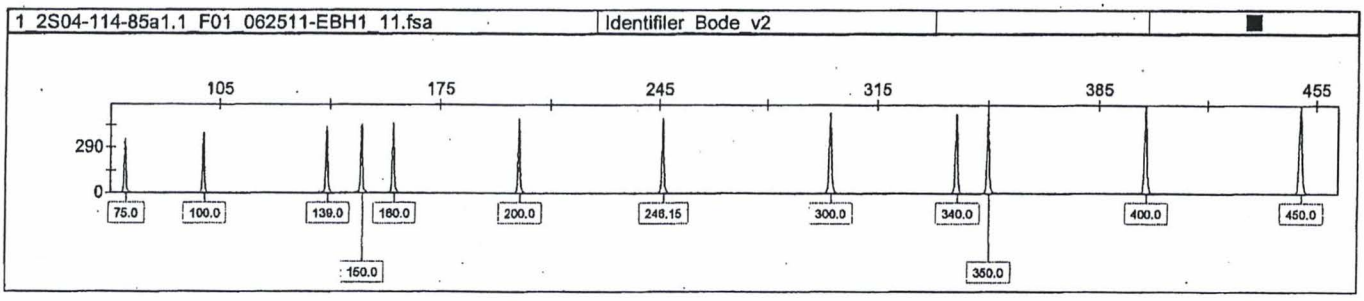

Qt < 0.001 ng/ul

Sample was vivaconned.
EBH 6/27/11

Sample not reported.
See casenote.
EBH 7/6/11

EBH 6/27/11

Mon Jun 27,2011 10:22AM, EDT

Printed by: gmid

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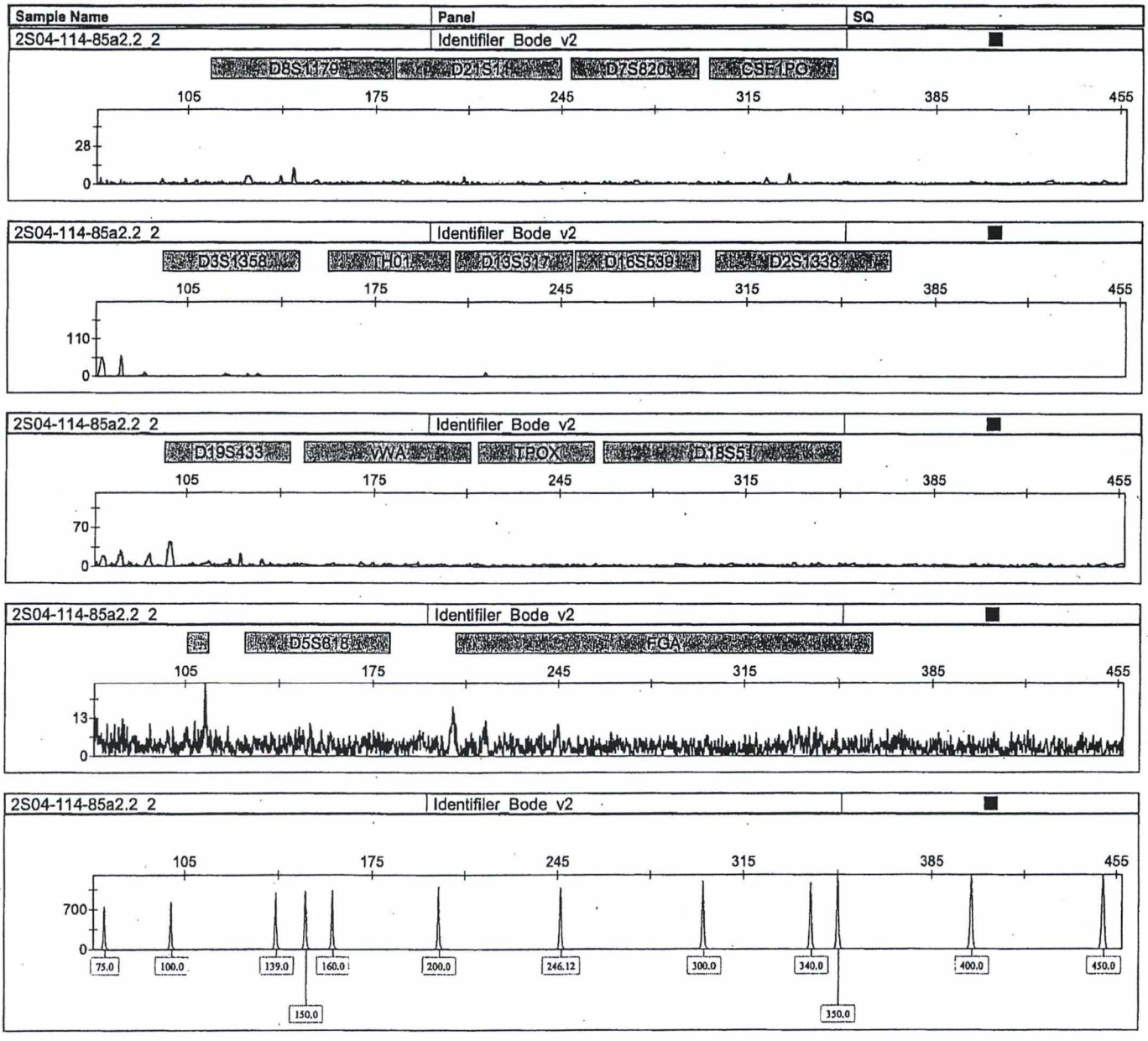
Applied Biosystems
GeneMapper ID v3.2.1

GMID14_062811-EBH1_2S04-114_EBH_ID



Sample not reported.
See casenote.
EBH 7/6/11

EBH 6/28/11

(2)

Applied Biosystems

GeneMapper ID v3.2.1

GMID14_062811-EBH1_2S04-114_EBH_ID

Sample Name	Panel	SQ
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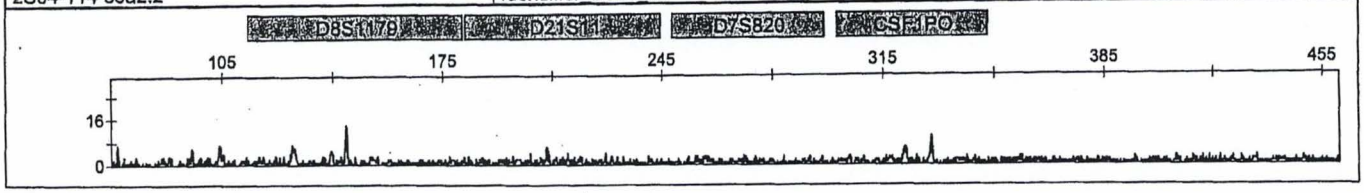
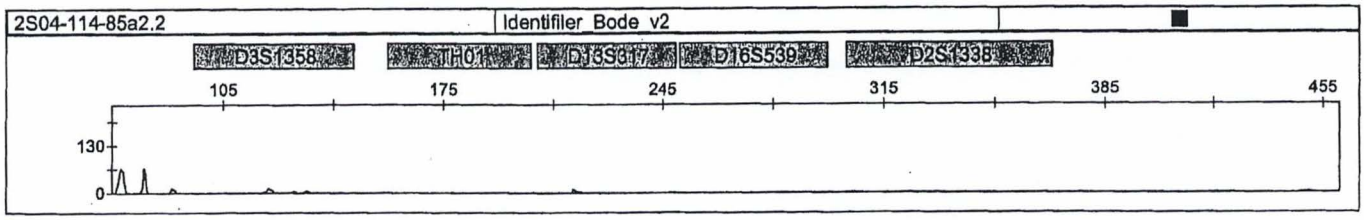
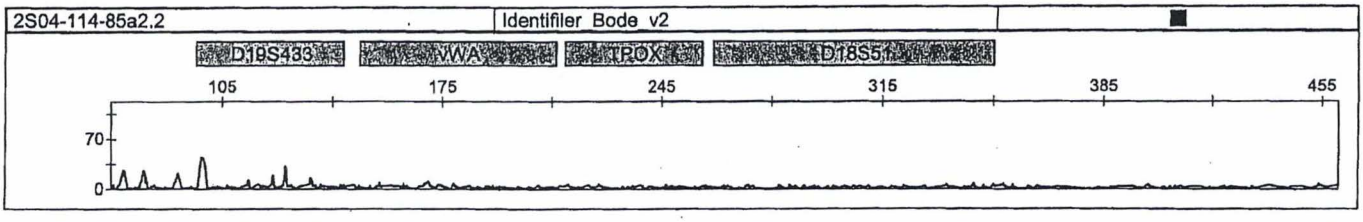


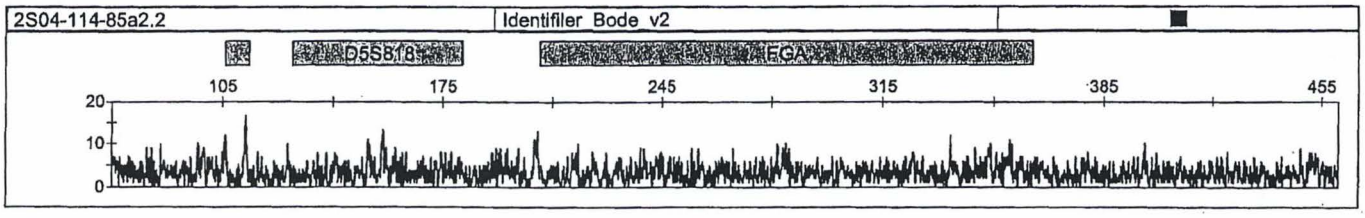
2S04-114-85a2.2	Identifiler_Bode_v2	



2S04-114-85a2.2	Identifiler_Bode_v2	



2S04-114-85a2.2	Identifiler_Bode_v2	



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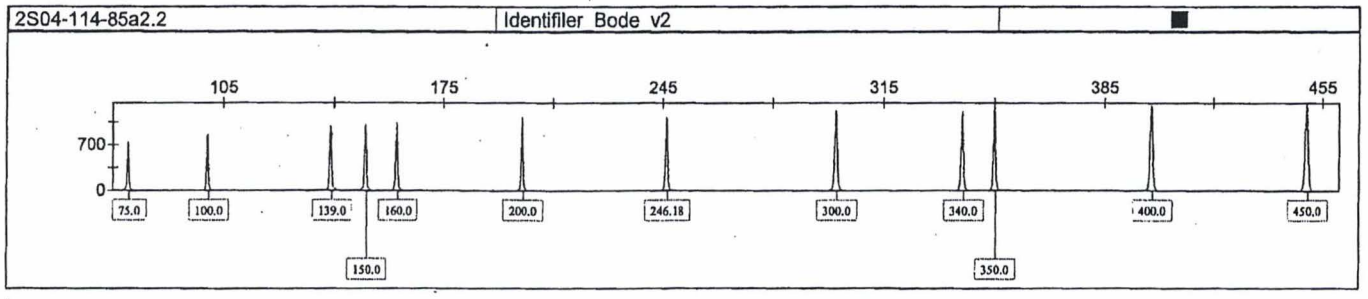


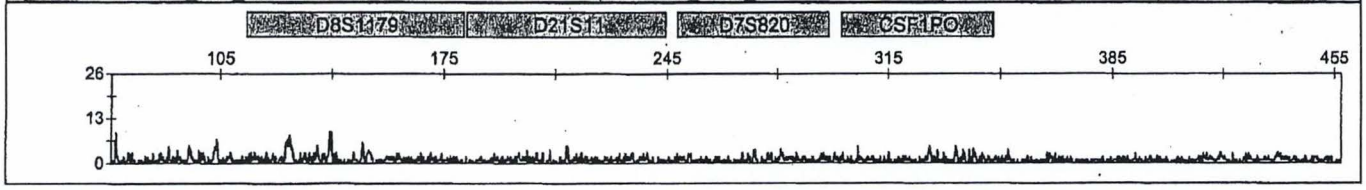
Sample not reported.
See casenote. EBH 7/6/11

EBH 6/28/11

Applied Biosystems
GeneMapper ID v3.2.1

GMID14_062711-EBH1_2S04-114_EBH_ID

Sample File	Panel	SQO	SQ
1_2S04-114-85a2.1_C01_062711-EBH1_05.fsa	Identifiler_Bode_v2		



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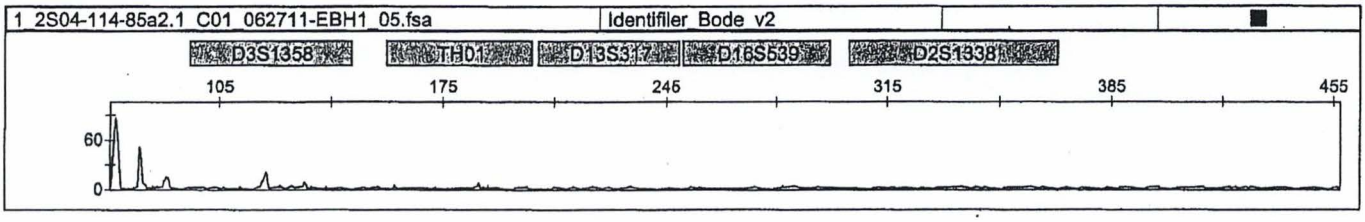
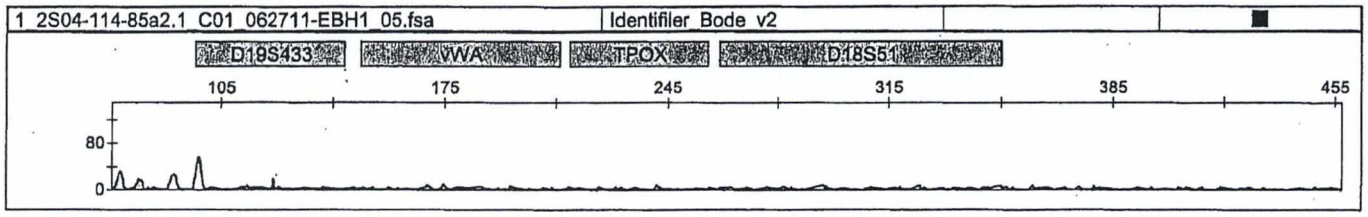
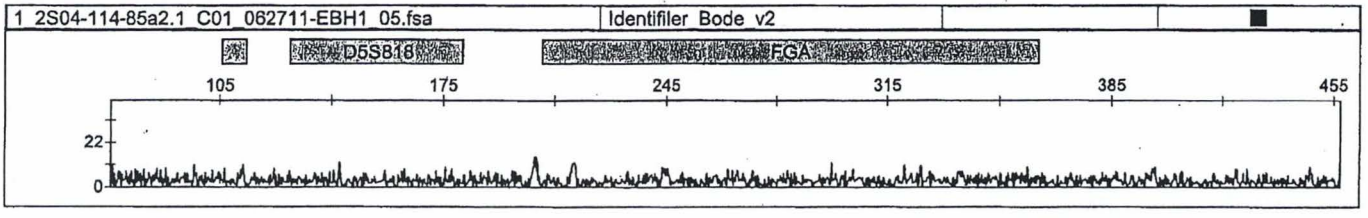


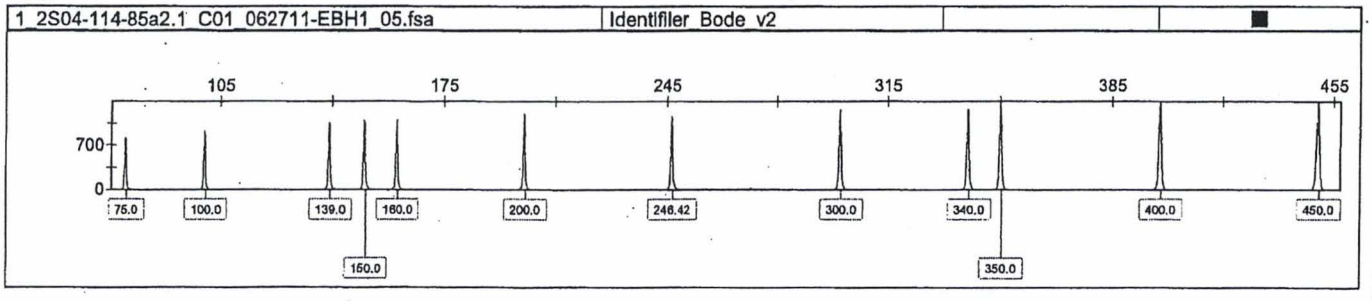
1_2S04-114-85a2.1_C01_062711-EBH1_05.fsa | Identifiler_Bode_v2



1_2S04-114-85a2.1_C01_062711-EBH1_05.fsa | Identifiler_Bode_v2



1_2S04-114-85a2.1_C01_062711-EBH1_05.fsa | Identifiler_Bode_v2



Sample not reported.
See casenote. EBH 7/6/11

EBH 6/27/11

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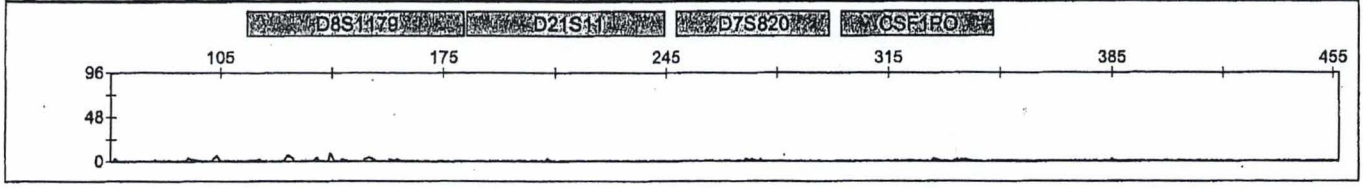
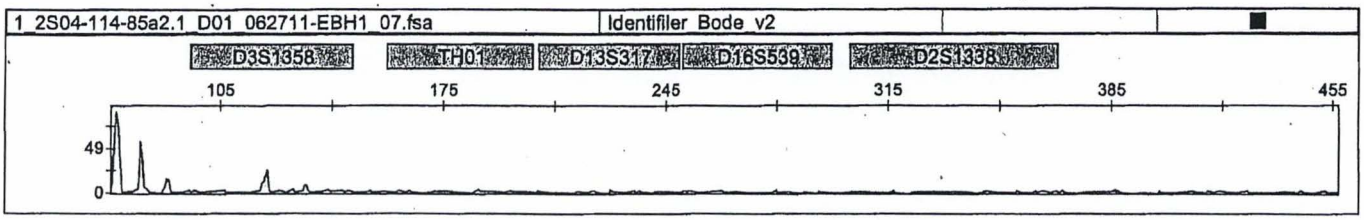
Applied Biosystems
GeneMapper ID v3.2.1

GMID14_062711-EBH1_2S04-114_EBH_ID

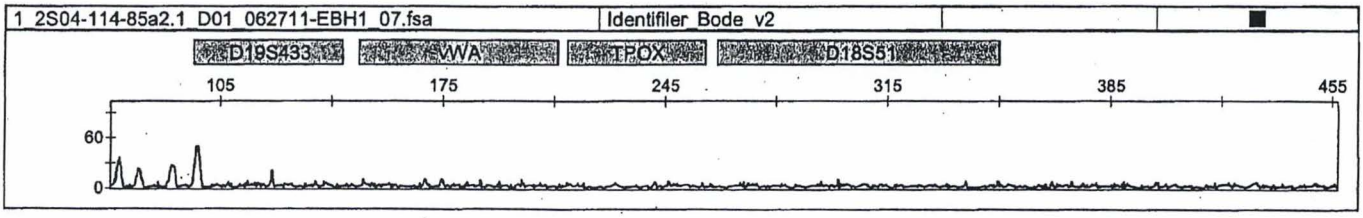
Sample File	Panel	SQO	SQ
1_2S04-114-85a2.1_D01_062711-EBH1_07.fsa	Identifiler_Bode_v2		



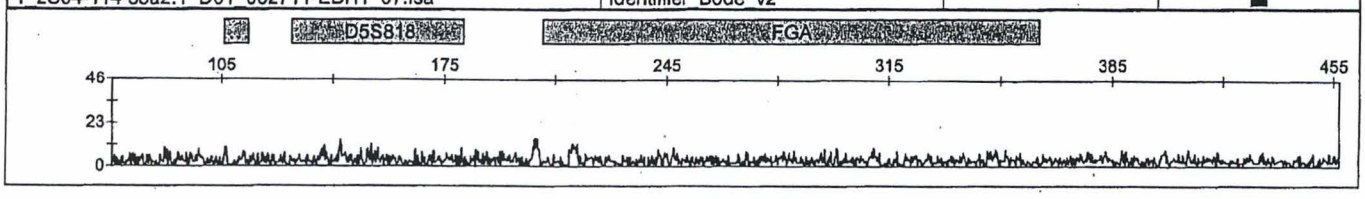
1_2S04-114-85a2.1_D01_062711-EBH1_07.fsa | Identifiler_Bode_v2



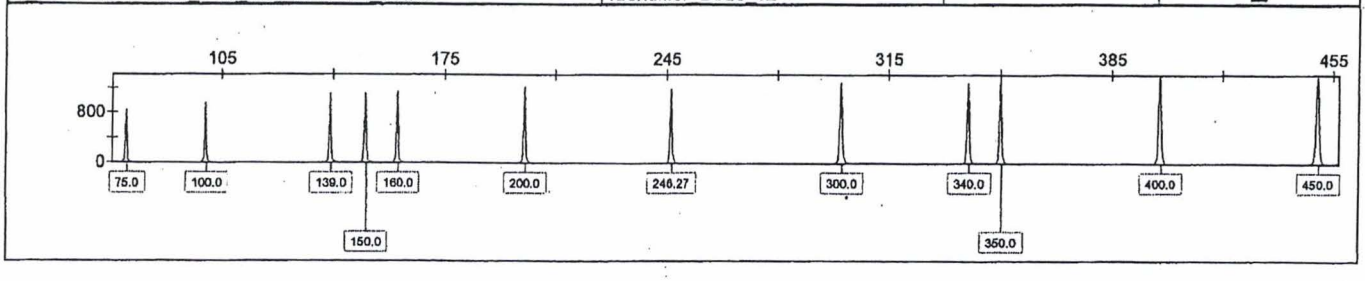
1_2S04-114-85a2.1_D01_062711-EBH1_07.fsa | Identifiler_Bode_v2



1_2S04-114-85a2.1_D01_062711-EBH1_07.fsa | Identifiler_Bode_v2



1_2S04-114-85a2.1_D01_062711-EBH1_07.fsa | Identifiler_Bode_v2



Sample not reported.
See casenote. EBH 7/6/11

EBH 6/27/11

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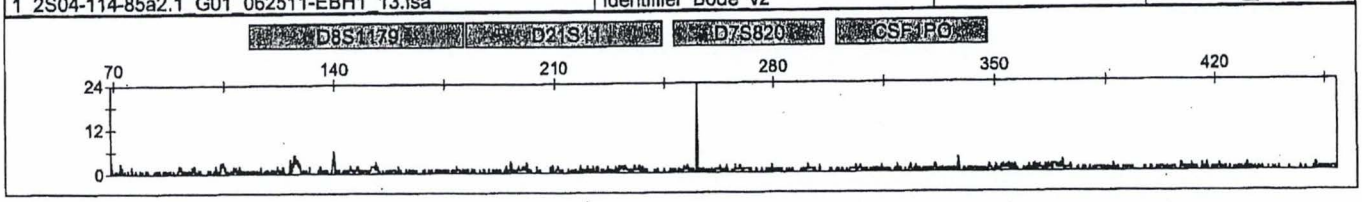
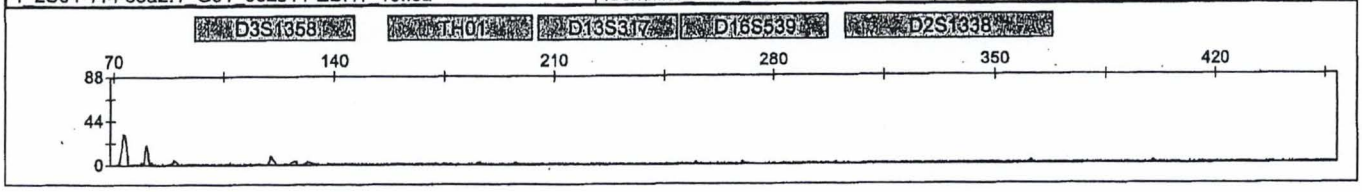
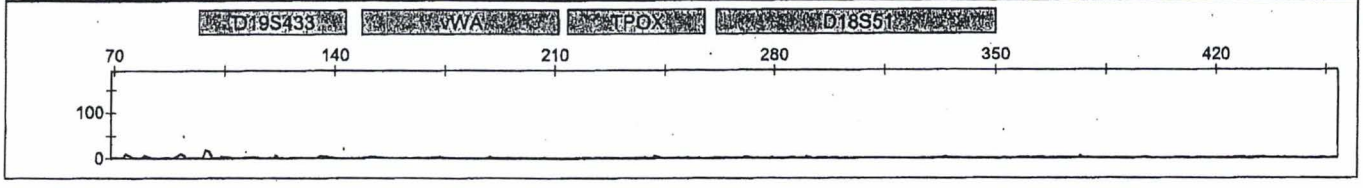
Sample File	Panel	SQO	SQ
1_2S04-114-85a2.1_G01_062511-EBH1_13.fsa	Identifiler_Bode_v2		



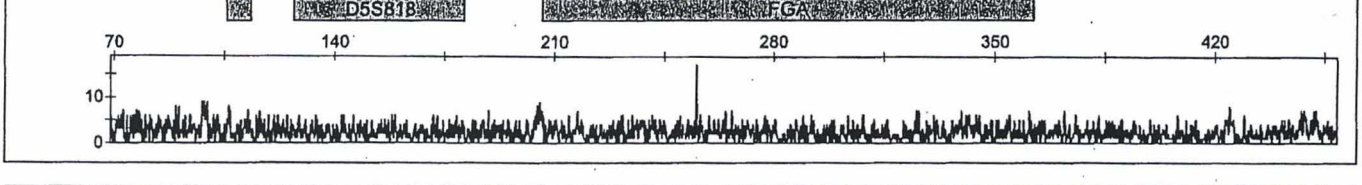
1_2S04-114-85a2.1_G01_062511-EBH1_13.fsa | Identifiler_Bode_v2



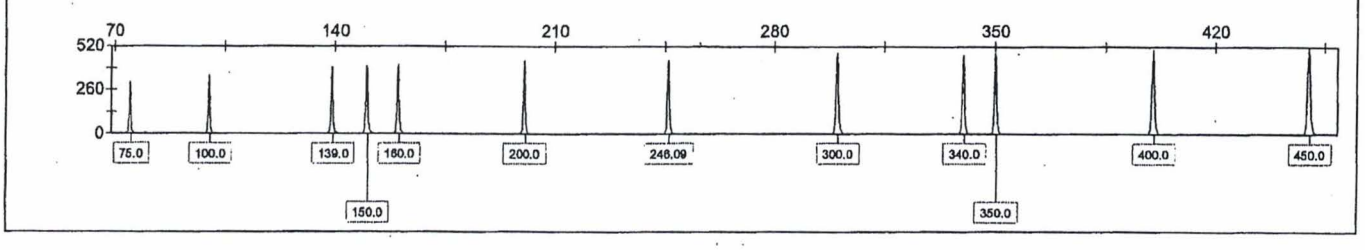
1_2S04-114-85a2.1_G01_062511-EBH1_13.fsa | Identifiler_Bode_v2



1_2S04-114-85a2.1_G01_062511-EBH1_13.fsa | Identifiler_Bode_v2



1_2S04-114-85a2.1_G01_062511-EBH1_13.fsa | Identifiler_Bode_v2



Sample not reported.
See casenote. EBH 7/6/11

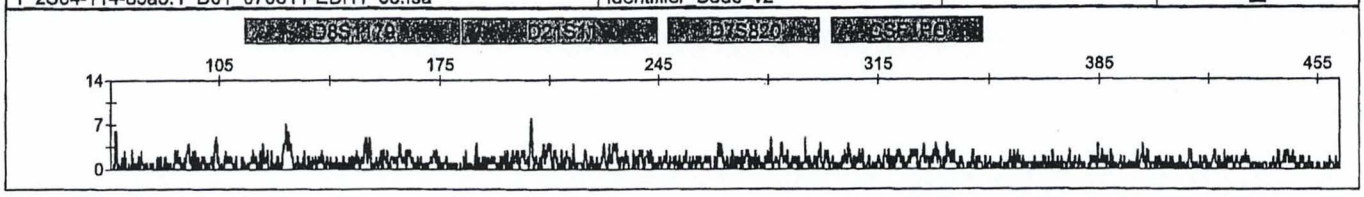
EBH 6/27/11
117

Applied Biosystems

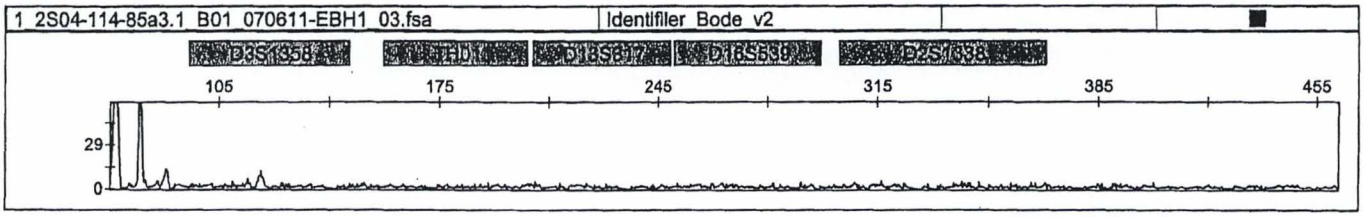
GeneMapper ID v3.2.1

GMID14_070611-EBH1_2S04-114_EBH_ID

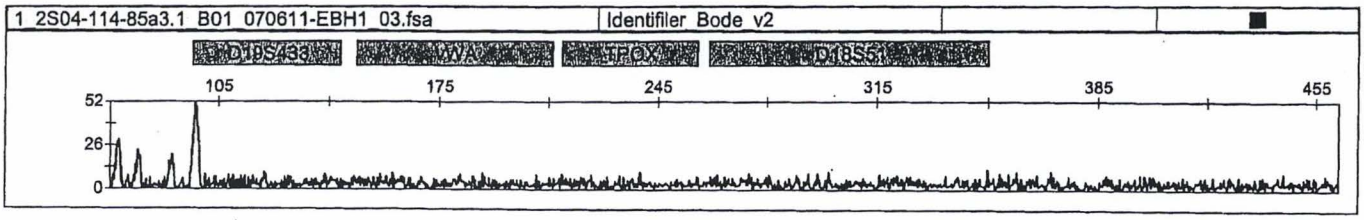
Sample File	Panel	SQO	SQ
1_2S04-114-85a3.1_B01_070611-EBH1_03.fsa	Identifiler_Bode_v2		



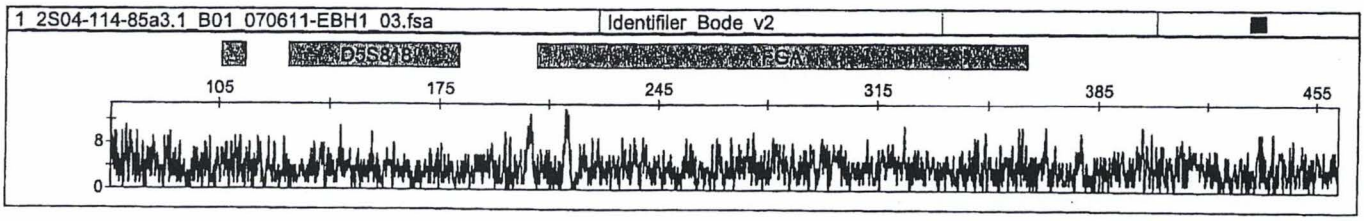
1_2S04-114-85a3.1_B01_070611-EBH1_03.fsa | Identifiler_Bode_v2



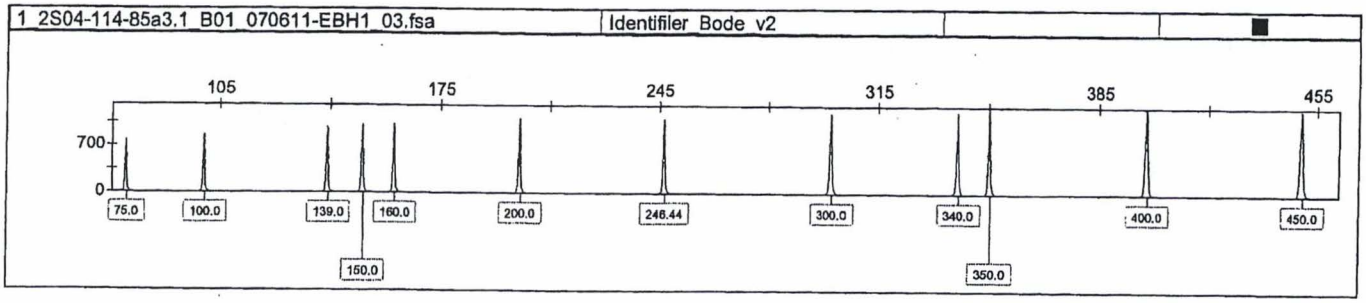
1_2S04-114-85a3.1_B01_070611-EBH1_03.fsa | Identifiler_Bode_v2



1_2S04-114-85a3.1_B01_070611-EBH1_03.fsa | Identifiler_Bode_v2



1_2S04-114-85a3.1_B01_070611-EBH1_03.fsa | Identifiler_Bode_v2



Ct < 0.001 ng/ul

Sample was vivaconned.

EBH 7/16/11

EBH 7/16/11

WP

Sample File	Panel	SQO	SQ
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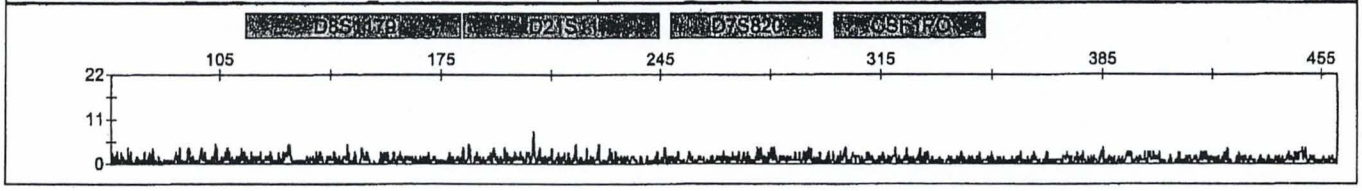
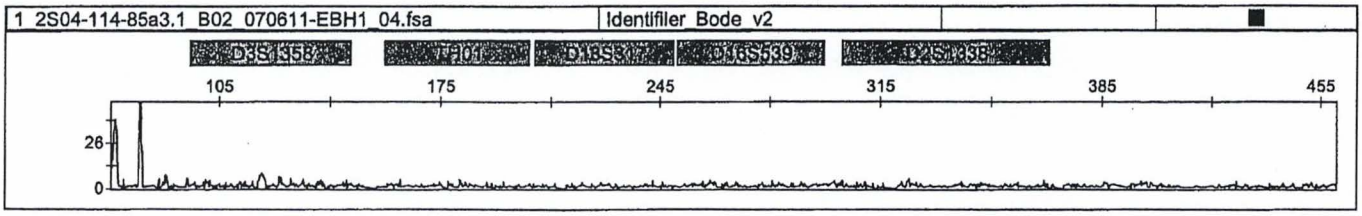
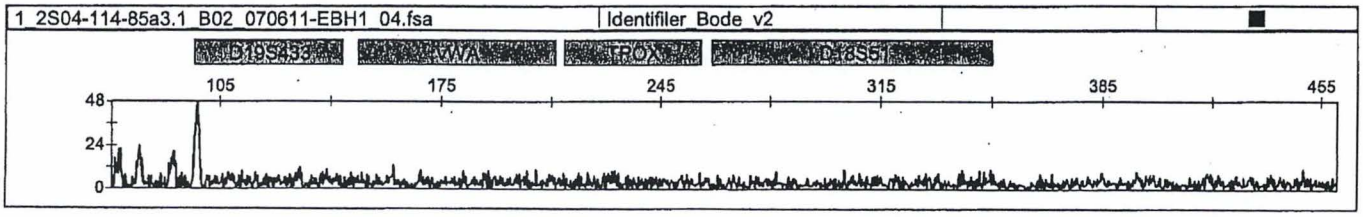


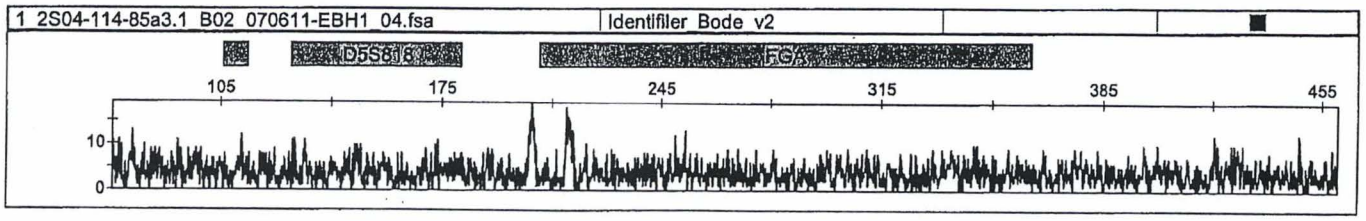
1_2S04-114-85a3.1_B02_070611-EBH1_04.fsa | Identifiler_Bode_v2



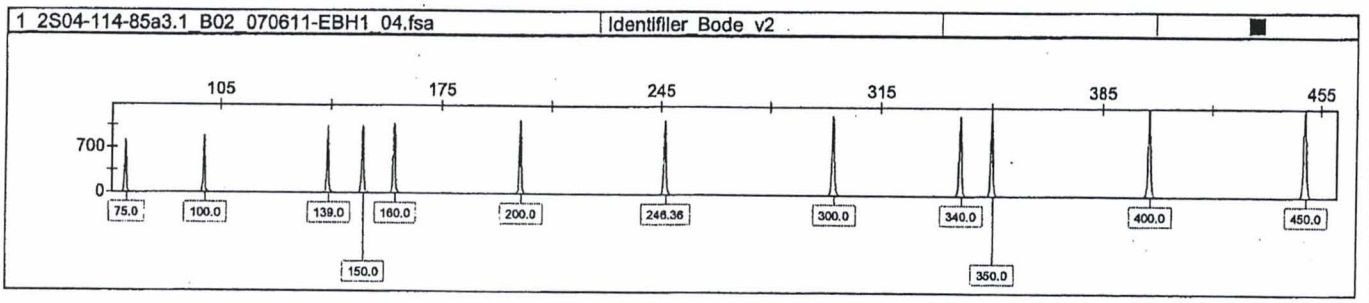
1_2S04-114-85a3.1_B02_070611-EBH1_04.fsa | Identifiler_Bode_v2



1_2S04-114-85a3.1_B02_070611-EBH1_04.fsa | Identifiler_Bode_v2



1_2S04-114-85a3.1_B02_070611-EBH1_04.fsa | Identifiler_Bode_v2

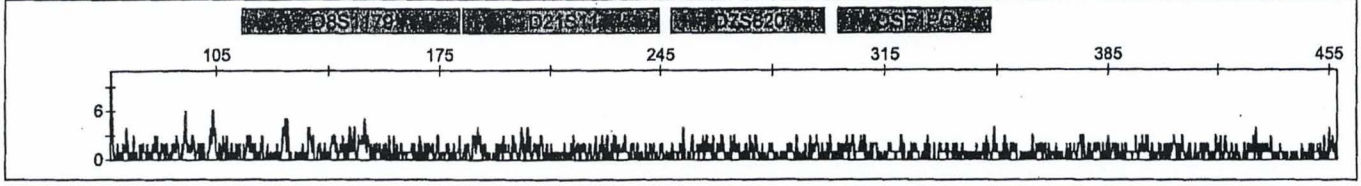


EBH 7/6/11
115

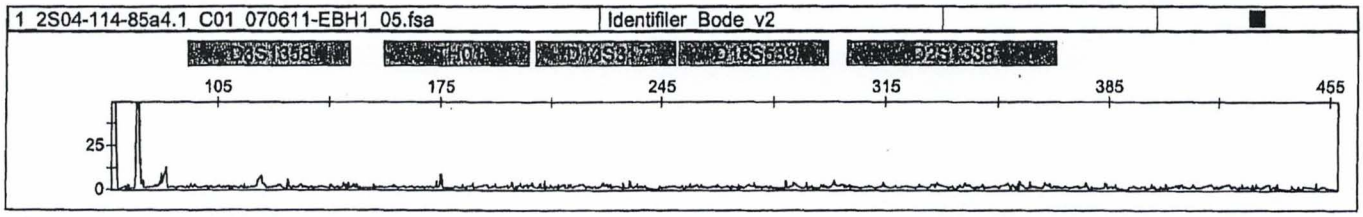
Applied Biosystems
GeneMapper ID v3.2.1

GMID14_070611-EBH1_2S04-114_EBH_ID

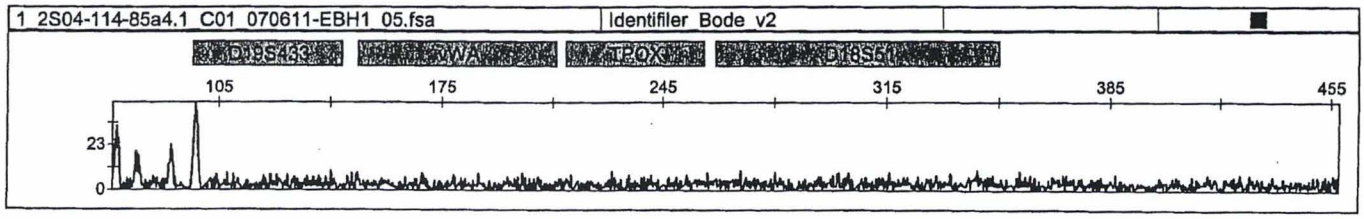
Sample File	Panel	SQO	SQ
1_2S04-114-85a4.1_C01_070611-EBH1_05.fsa	Identifiler_Bode_v2		



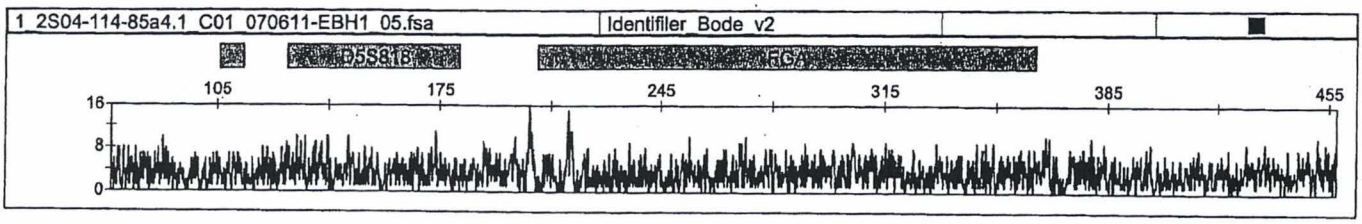
1_2S04-114-85a4.1_C01_070611-EBH1_05.fsa | Identifiler_Bode_v2



1_2S04-114-85a4.1_C01_070611-EBH1_05.fsa | Identifiler_Bode_v2



1_2S04-114-85a4.1_C01_070611-EBH1_05.fsa | Identifiler_Bode_v2



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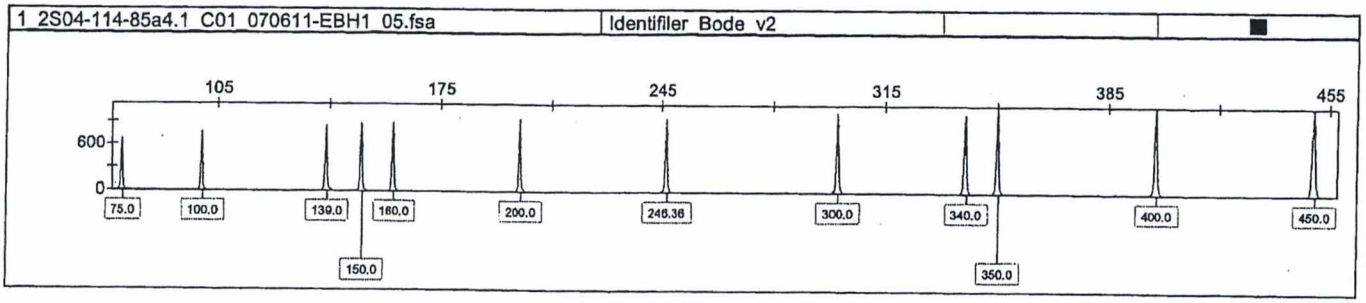

Qt <0.001 ng/ul
sample was nvaconned.
EBH 7/6/11

EBH 7/6/11
114

Sample File	Panel	SQO	SQ
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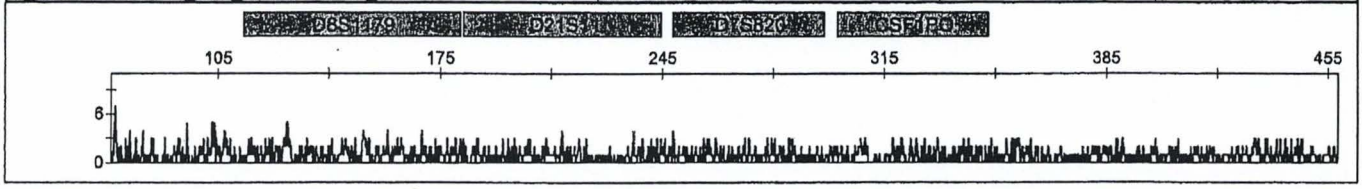
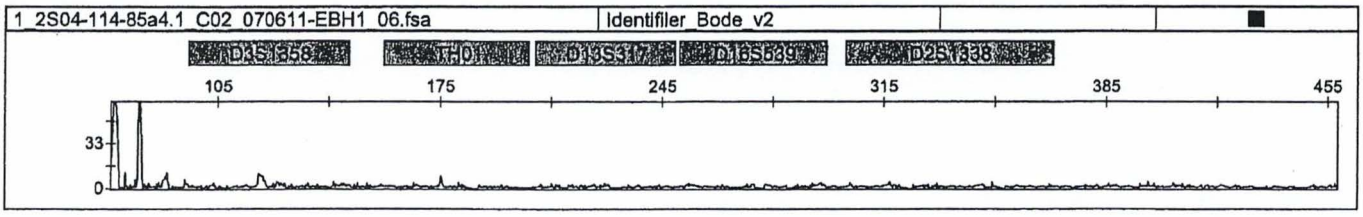
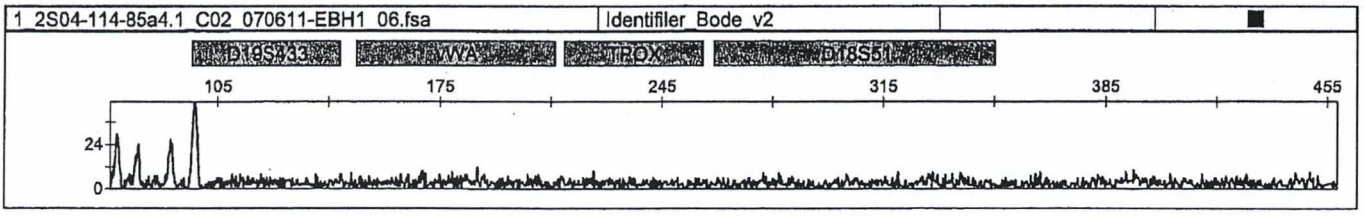


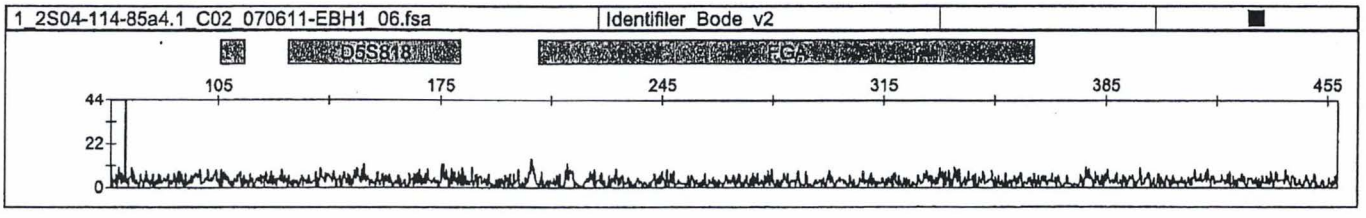
1_2S04-114-85a4.1_C02_070611-EBH1_06.fsa | Identifiler_Bode_v2



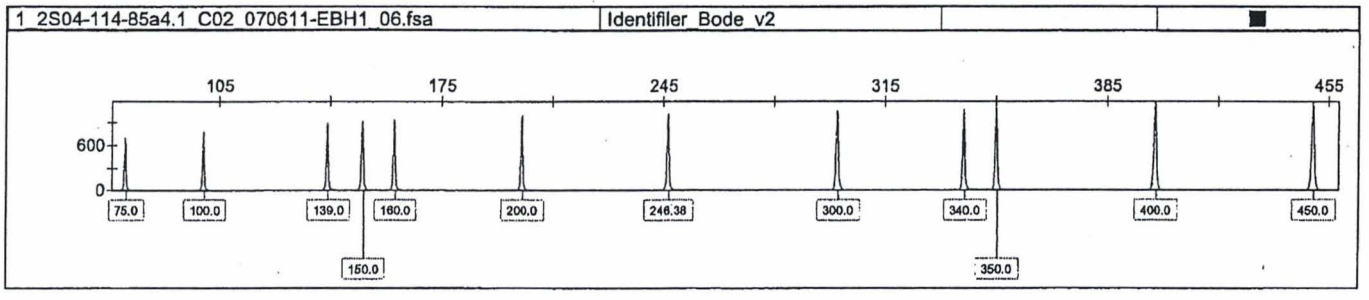
1_2S04-114-85a4.1_C02_070611-EBH1_06.fsa | Identifiler_Bode_v2



1_2S04-114-85a4.1_C02_070611-EBH1_06.fsa | Identifiler_Bode_v2

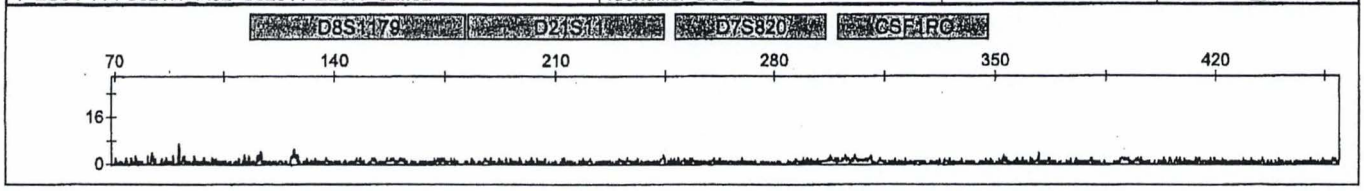


1_2S04-114-85a4.1_C02_070611-EBH1_06.fsa | Identifiler_Bode_v2

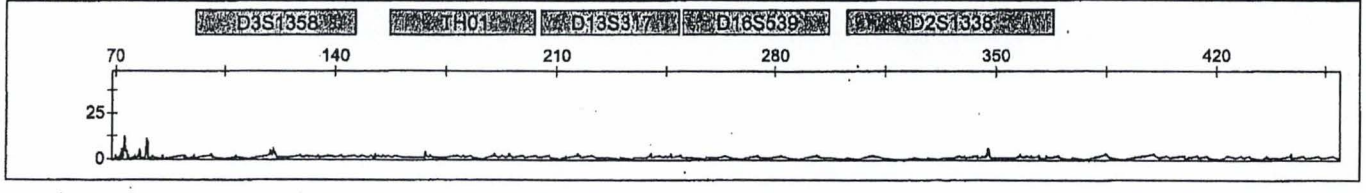


EBH-7116111
113

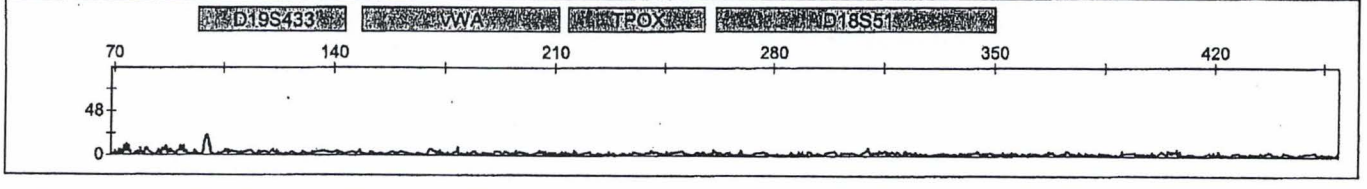
Sample File	Panel	SQO	SQ
1_2S04-114-86a1.1_A02_062511-EBH1_02.fsa	Identifiler_Bode_v2		



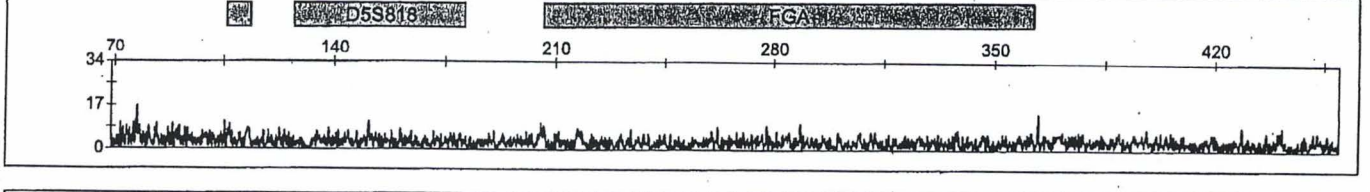
1_2S04-114-86a1.1_A02_062511-EBH1_02.fsa | Identifiler_Bode_v2



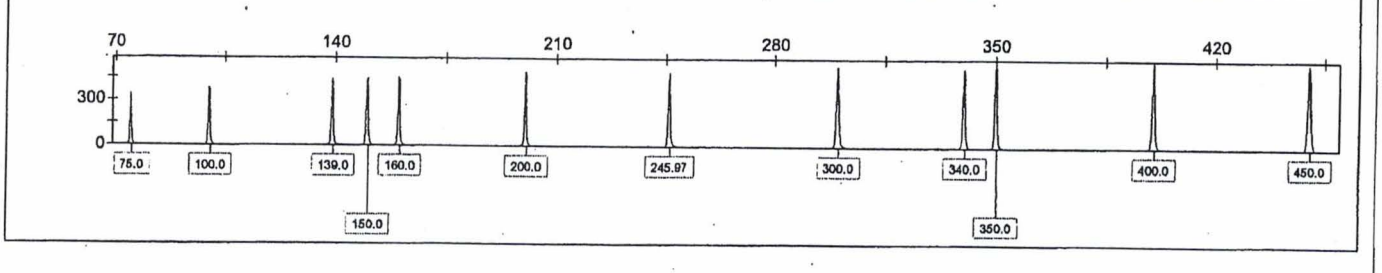
1_2S04-114-86a1.1_A02_062511-EBH1_02.fsa | Identifiler_Bode_v2



1_2S04-114-86a1.1_A02_062511-EBH1_02.fsa | Identifiler_Bode_v2



1_2S04-114-86a1.1_A02_062511-EBH1_02.fsa | Identifiler_Bode_v2



@t <0.001 ng/ul
Sample was vivaconned.
EBH 6/27/11

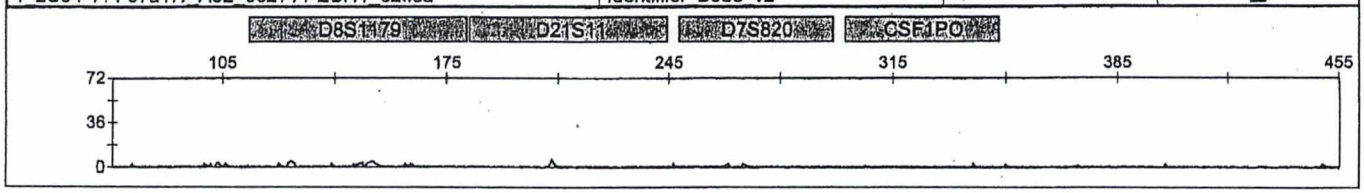
EBH 6/27/11
1/2

Applied Biosystems

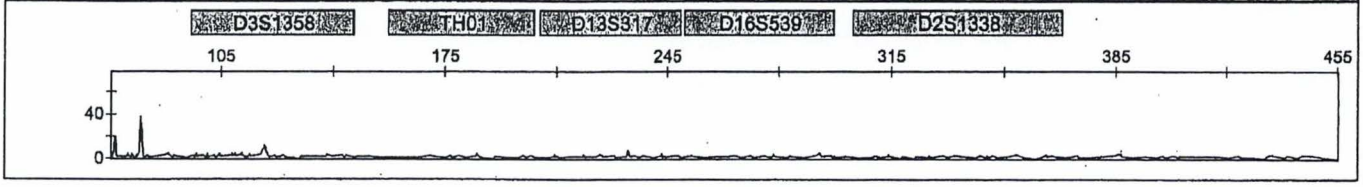
GeneMapper ID v3.2.1

GMID14_062711-EBH1_2S04-114_EBH_ID

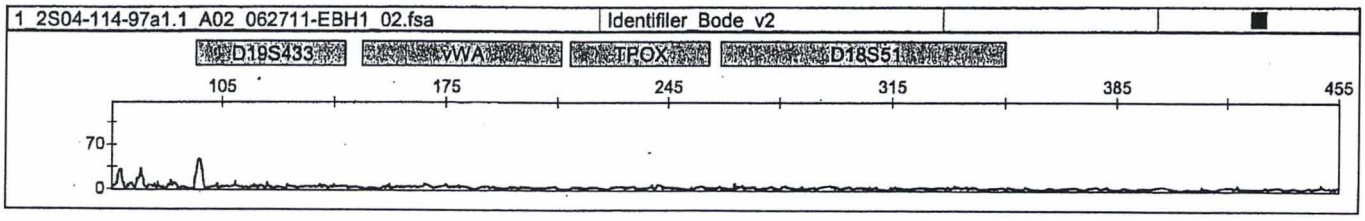
Sample File	Panel	SQO	SQ
1_2S04-114-97a1.1_A02_062711-EBH1_02.fsa	Identifiler_Bode_v2		



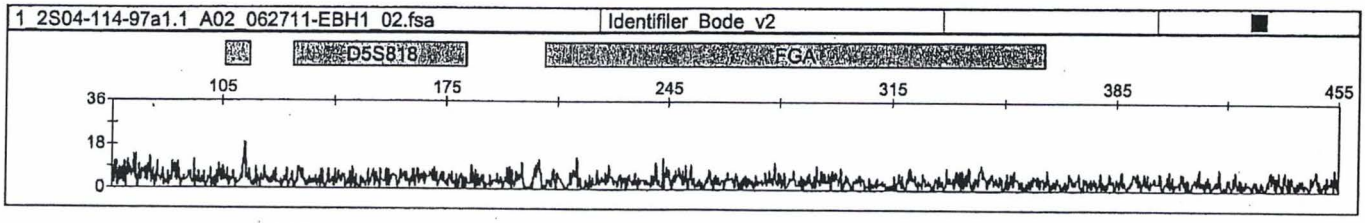
1_2S04-114-97a1.1_A02_062711-EBH1_02.fsa	Identifiler_Bode_v2		



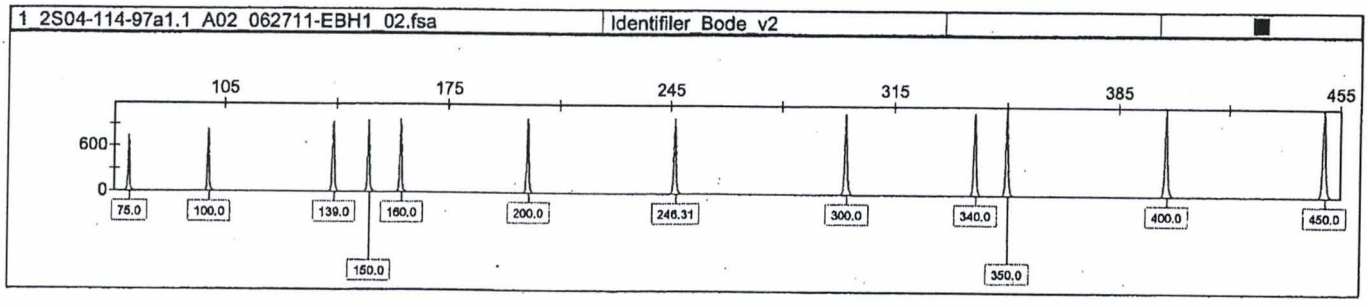
1_2S04-114-97a1.1_A02_062711-EBH1_02.fsa	Identifiler_Bode_v2		



1_2S04-114-97a1.1_A02_062711-EBH1_02.fsa	Identifiler_Bode_v2		



1_2S04-114-97a1.1_A02_062711-EBH1_02.fsa	Identifiler_Bode_v2		



Qt <0.001 ng/ul

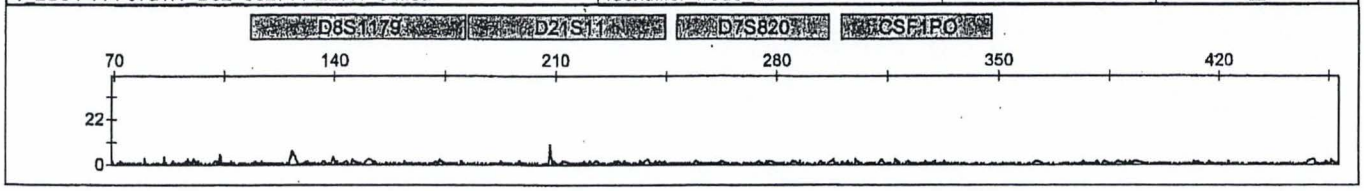
sample was vivaconned.

EBH 7/7/11

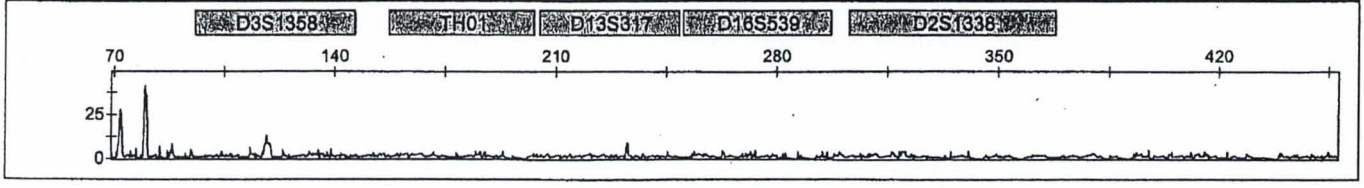
EBH 6/27/11

111

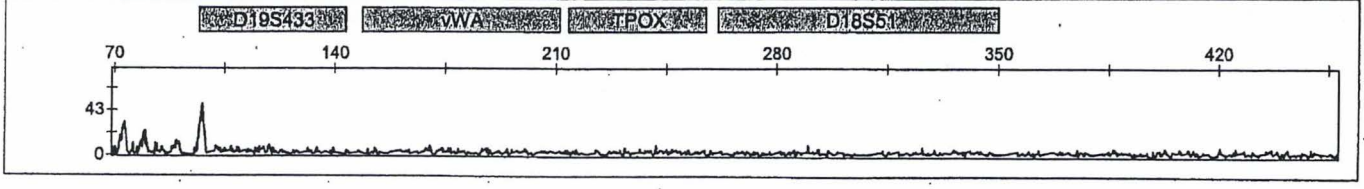
Sample File	Panel	SQO	SQ
1_2S04-114-97a1.1_B02_062711-EBH1_04.fsa	Identifiler_Bode_v2		



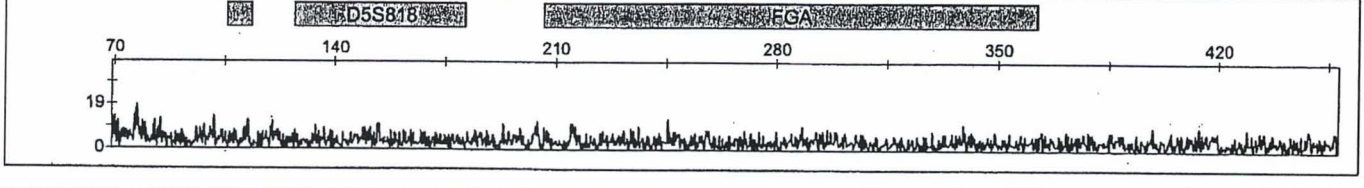
1_2S04-114-97a1.1_B02_062711-EBH1_04.fsa | Identifiler_Bode_v2



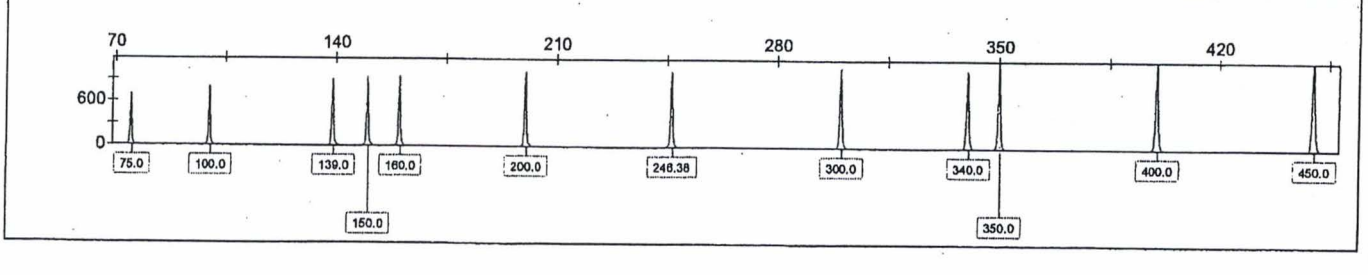
1_2S04-114-97a1.1_B02_062711-EBH1_04.fsa | Identifiler_Bode_v2



1_2S04-114-97a1.1_B02_062711-EBH1_04.fsa | Identifiler_Bode_v2



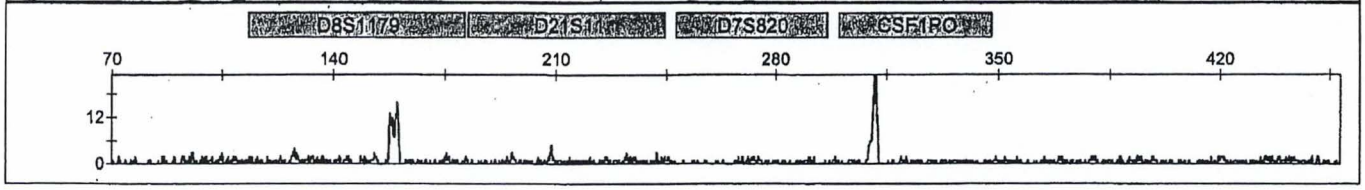
1_2S04-114-97a1.1_B02_062711-EBH1_04.fsa | Identifiler_Bode_v2



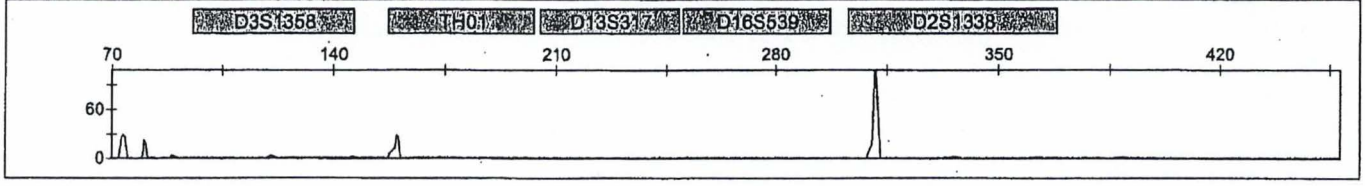
EBH 6/27/11

110

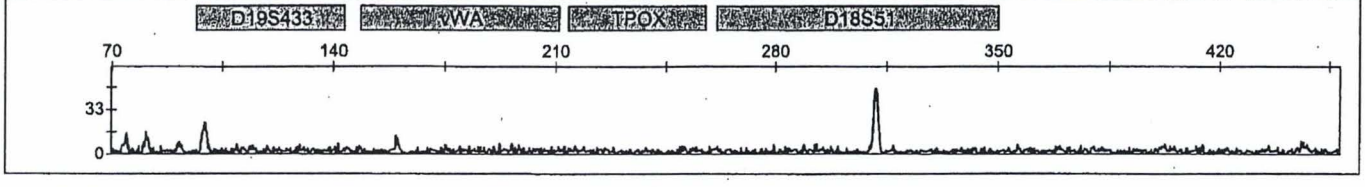
Sample File	Panel	SQO	SQ
1_2S04-114-97a1.1_C02_062511-EBH1_06.fsa	Identifiler_Bode_v2		



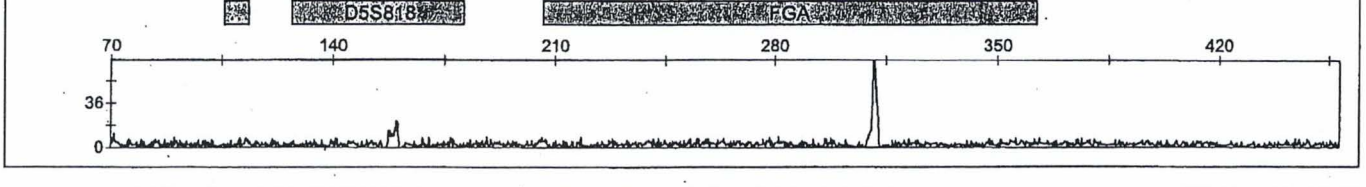
1_2S04-114-97a1.1_C02_062511-EBH1_06.fsa | Identifiler_Bode_v2



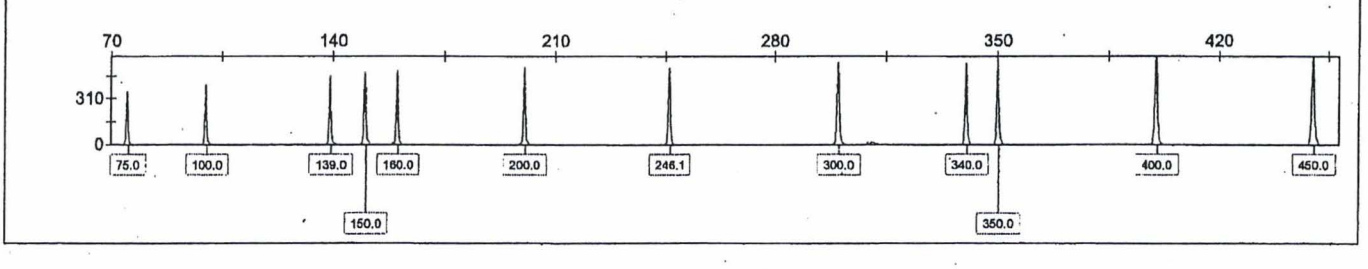
1_2S04-114-97a1.1_C02_062511-EBH1_06.fsa | Identifiler_Bode_v2



1_2S04-114-97a1.1_C02_062511-EBH1_06.fsa | Identifiler_Bode_v2



1_2S04-114-97a1.1_C02_062511-EBH1_06.fsa | Identifiler_Bode_v2



EBH 6/27/11

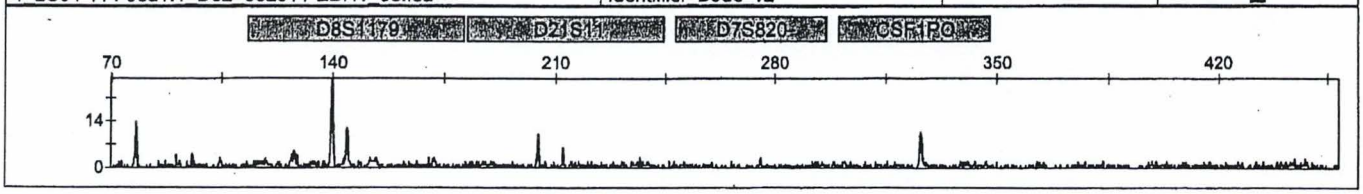
109

Applied Biosystems

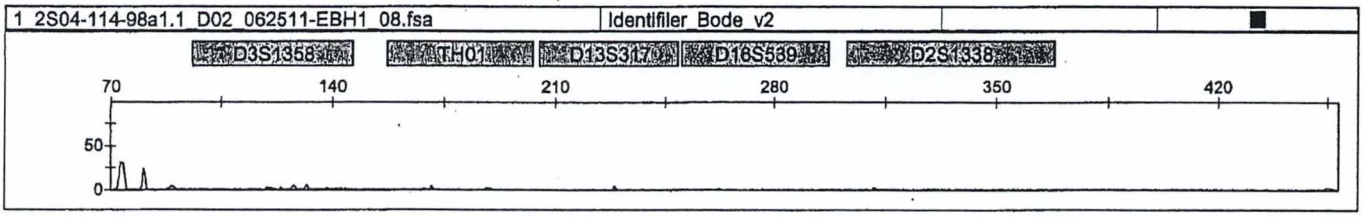
GeneMapper ID v3.2.1

GMID11_062511-EBH1_2S04-114_EBH_ID

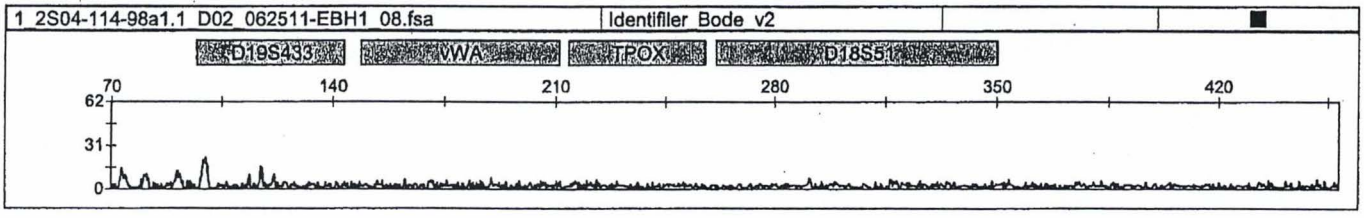
Sample File	Panel	SQO	SQ
1_2S04-114-98a1.1_D02_062511-EBH1_08.fsa	Identifiler_Bode_v2		



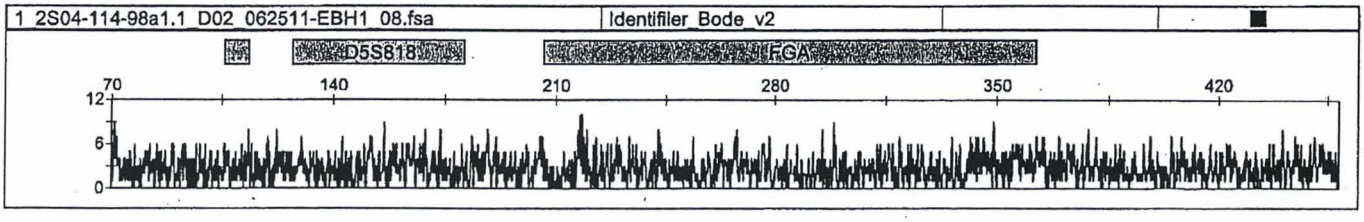
1_2S04-114-98a1.1_D02_062511-EBH1_08.fsa | Identifiler_Bode_v2



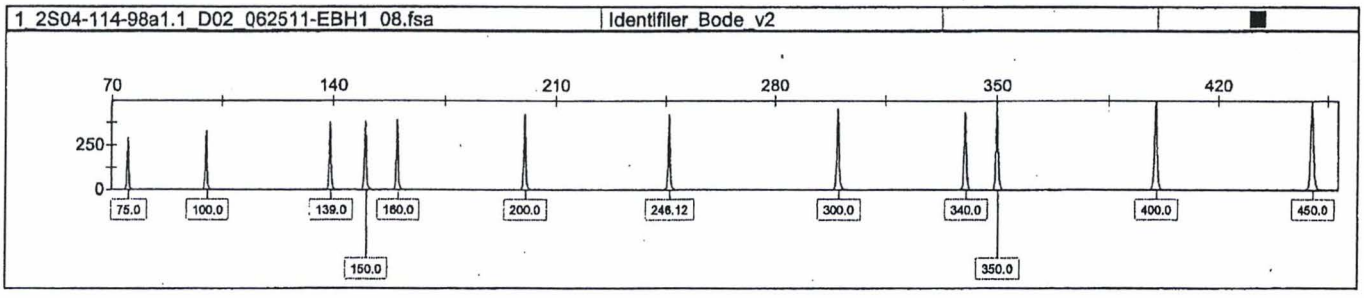
1_2S04-114-98a1.1_D02_062511-EBH1_08.fsa | Identifiler_Bode_v2



1_2S04-114-98a1.1_D02_062511-EBH1_08.fsa | Identifiler_Bode_v2



1_2S04-114-98a1.1_D02_062511-EBH1_08.fsa | Identifiler_Bode_v2



Qt = 0.0017 ng/ul

Sample was vivaconned.

EBH 6/27/11

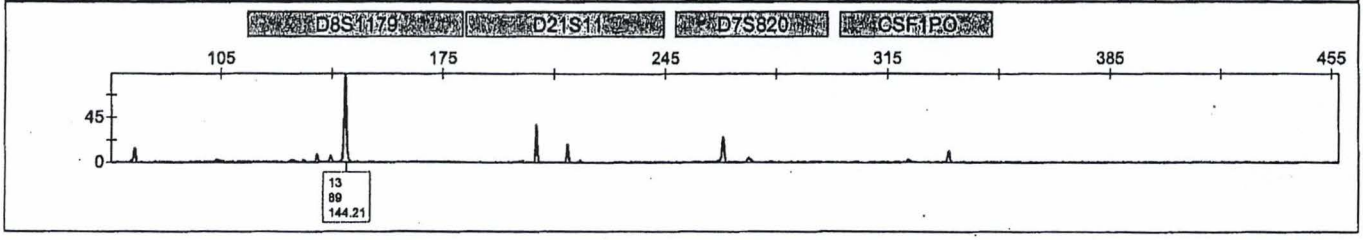
EBH 6/27/11

108

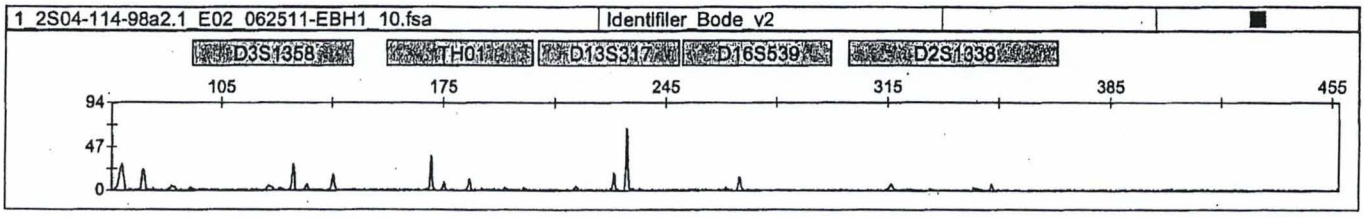
Applied Biosystems
GeneMapper ID v3.2.1

GMID11_062511-EBH1_2S04-114_EBH_ID

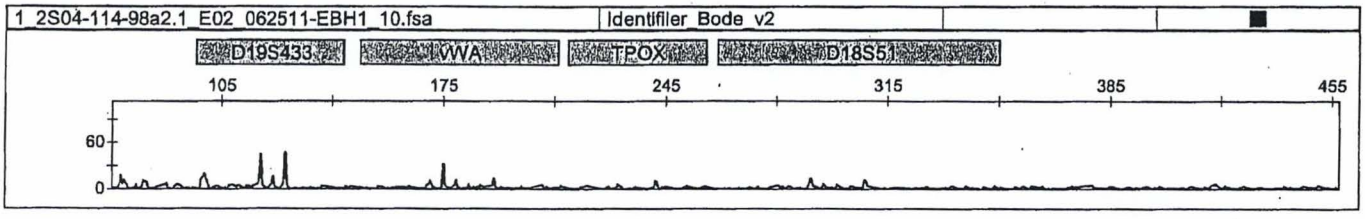
Sample File	Panel	SQO	SQ
1_2S04-114-98a2.1_E02_062511-EBH1_10.fsa	Identifiler_Bode_v2		



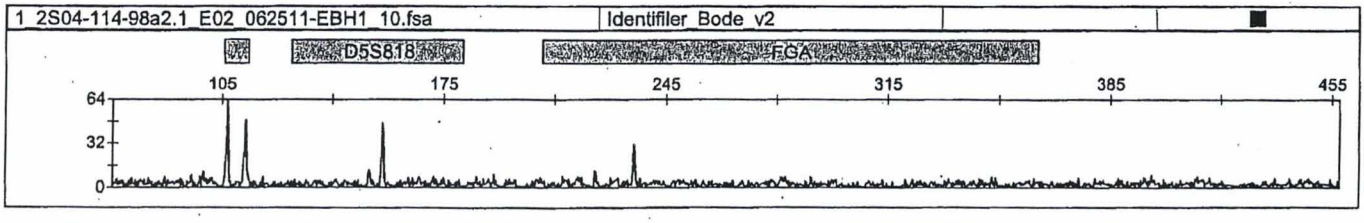
1_2S04-114-98a2.1_E02_062511-EBH1_10.fsa	Identifiler_Bode_v2		



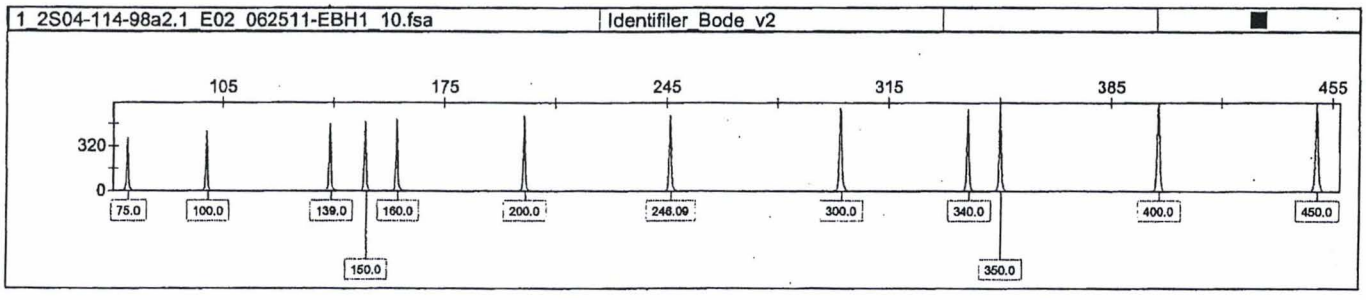
1_2S04-114-98a2.1_E02_062511-EBH1_10.fsa	Identifiler_Bode_v2		



1_2S04-114-98a2.1_E02_062511-EBH1_10.fsa	Identifiler_Bode_v2		



1_2S04-114-98a2.1_E02_062511-EBH1_10.fsa	Identifiler_Bode_v2		

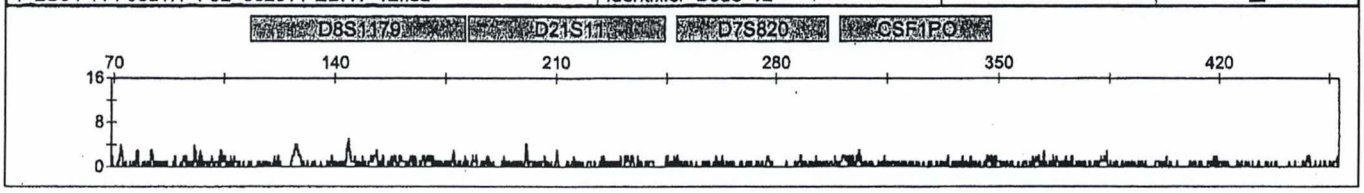


QT <0.001 ng/ul

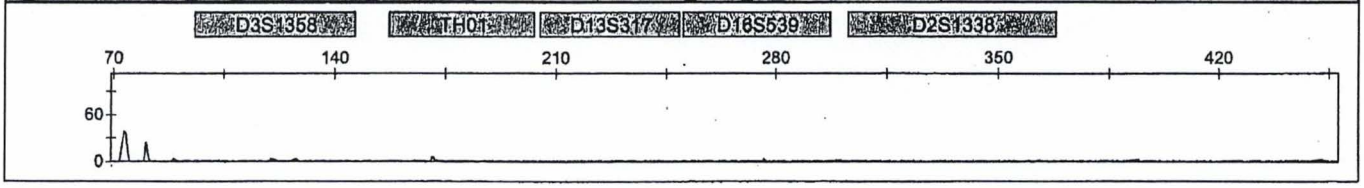
Sample was vivaconned.
EBH 6/27/11

EBH 6/27/11
107

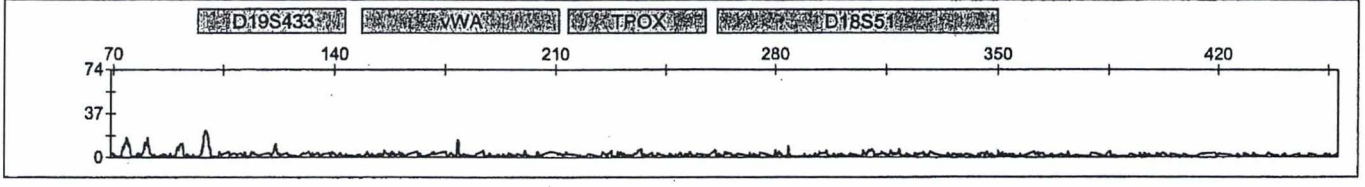
Sample File	Panel	SQO	SQ
1_2S04-114-99a1.1_F02_062511-EBH1_12.fsa	Identifiler_Bode_v2		



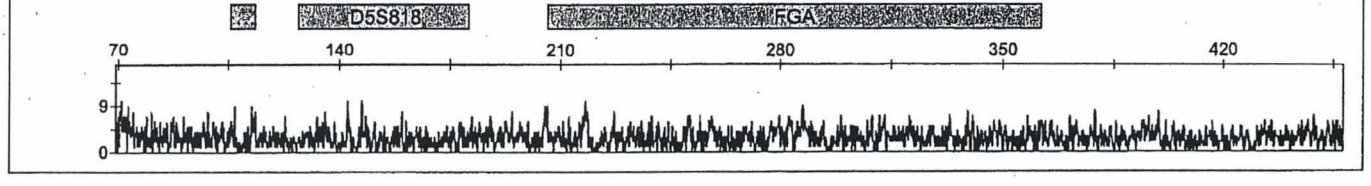
1_2S04-114-99a1.1_F02_062511-EBH1_12.fsa | Identifiler_Bode_v2



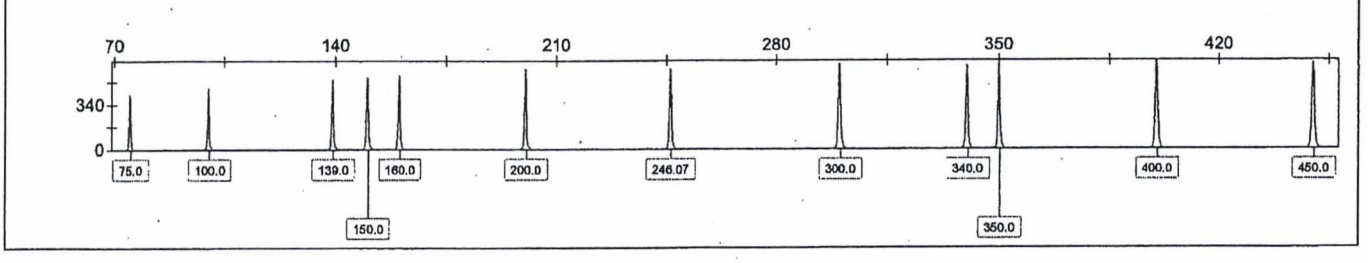
1_2S04-114-99a1.1_F02_062511-EBH1_12.fsa | Identifiler_Bode_v2



1_2S04-114-99a1.1_F02_062511-EBH1_12.fsa | Identifiler_Bode_v2



1_2S04-114-99a1.1_F02_062511-EBH1_12.fsa | Identifiler_Bode_v2



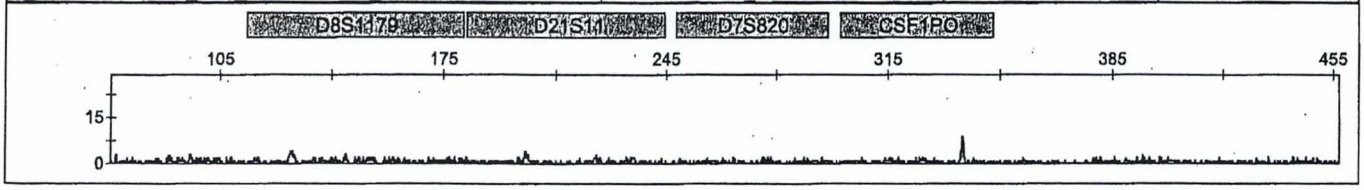
QT <0.001 ng/ul
Sample was vivaconned.
EBH 6/27/11

EBH 6/27/11
100

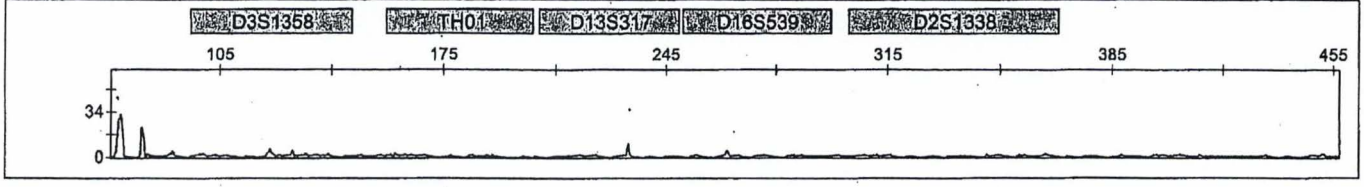
Applied Biosystems
GeneMapper ID v3.2.1

GMID11_062511-EBH1_2S04-114_EBH_ID

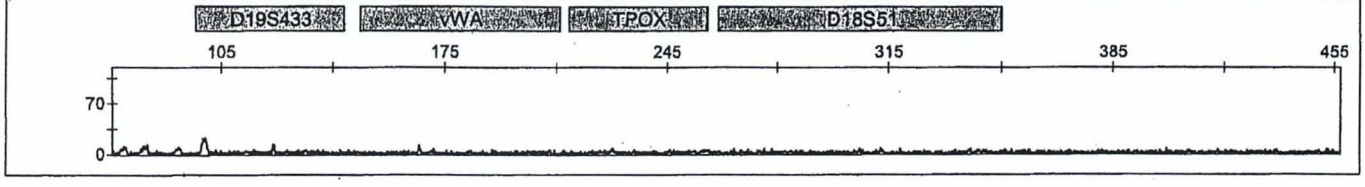
Sample File	Panel	SQO	SQ
1_2S04-114-99a2.1_G02_062511-EBH1_14.fsa	Identifiler_Bode_v2		



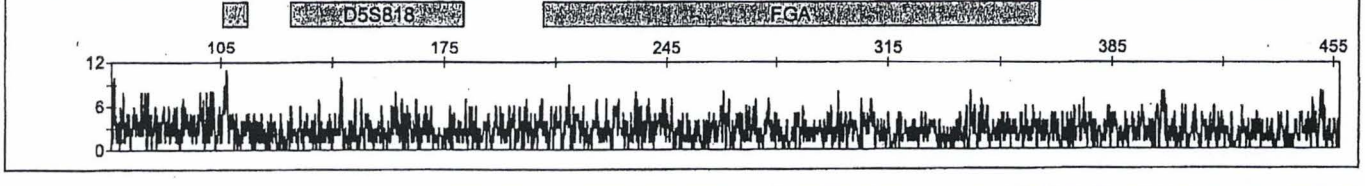
1_2S04-114-99a2.1_G02_062511-EBH1_14.fsa | Identifiler_Bode_v2



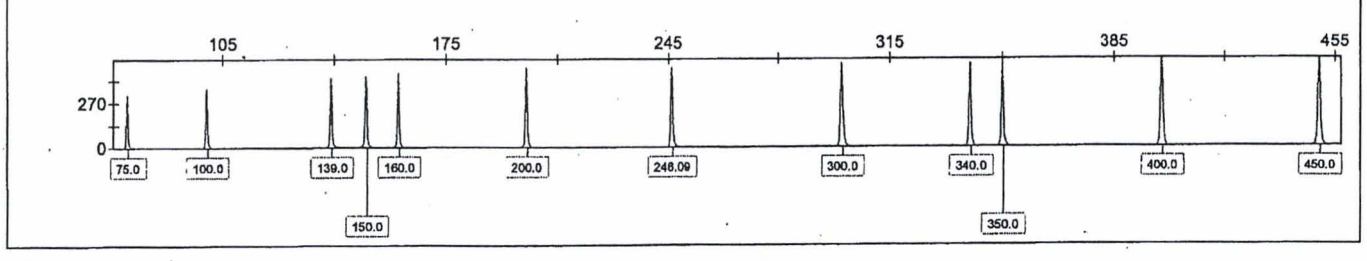
1_2S04-114-99a2.1_G02_062511-EBH1_14.fsa | Identifiler_Bode_v2



1_2S04-114-99a2.1_G02_062511-EBH1_14.fsa | Identifiler_Bode_v2

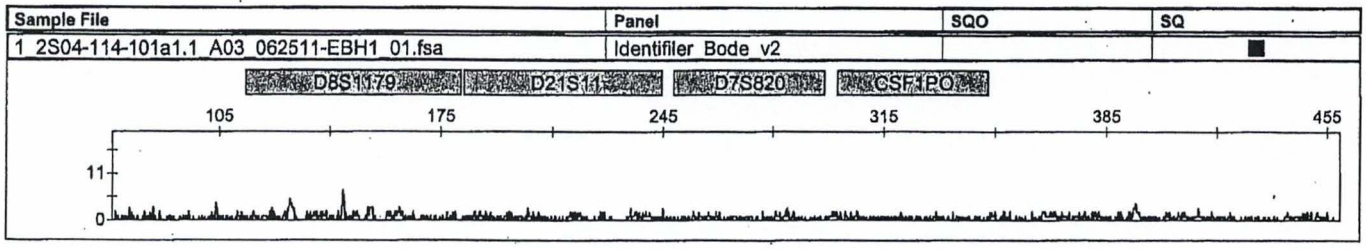


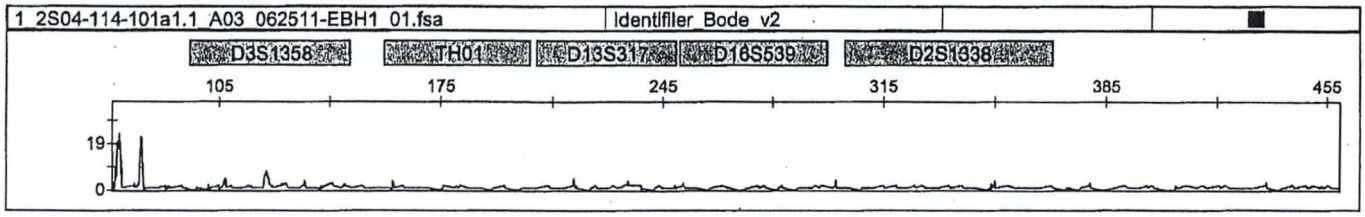
1_2S04-114-99a2.1_G02_062511-EBH1_14.fsa | Identifiler_Bode_v2

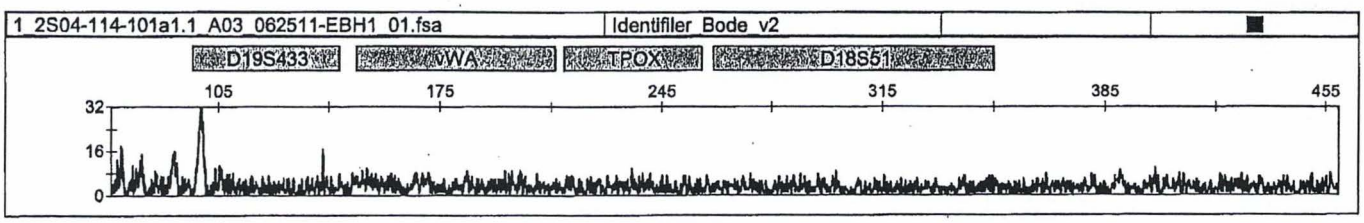


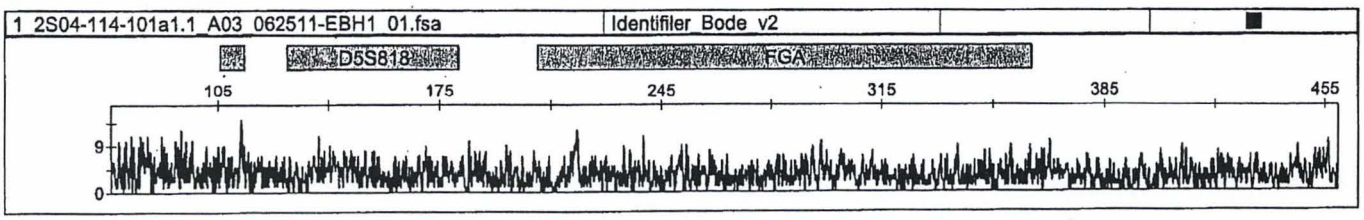
Qt < 0.001 ng/ul
sample was vivaconned.
EBH 6/27/11

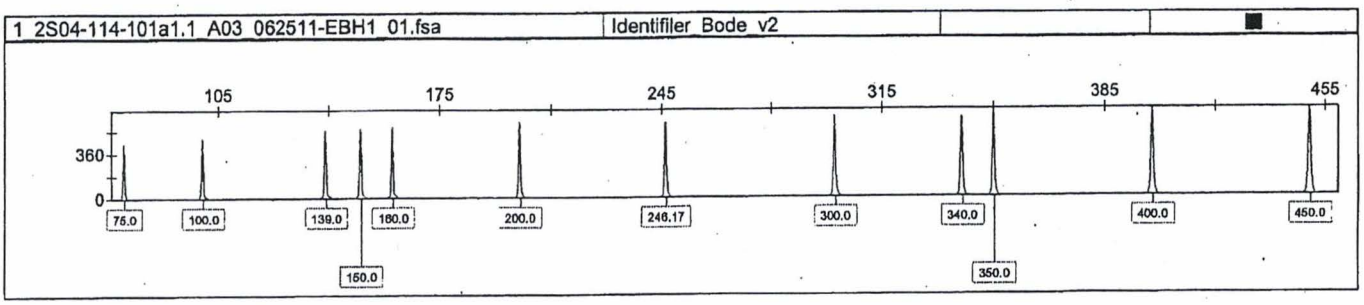
EBH 6/27/11
105











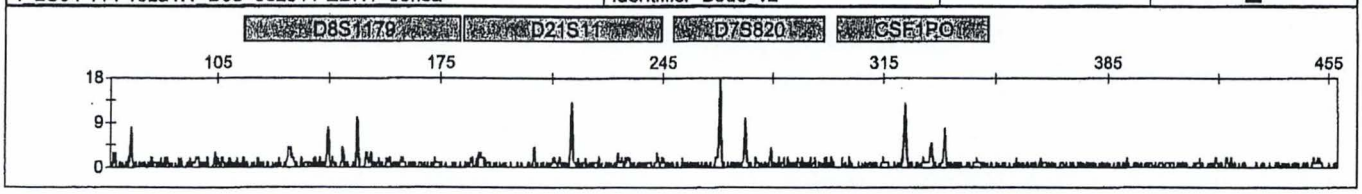
Qt = 0.00173 ng/ul

Sample was vivaconned.

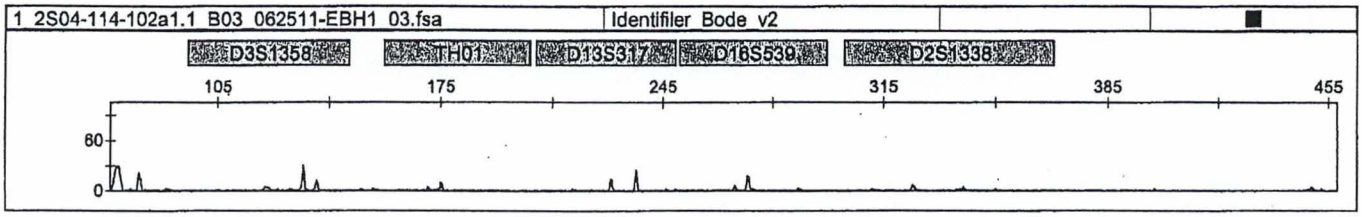
EBH 6/27/11

EBH 6/27/11 104

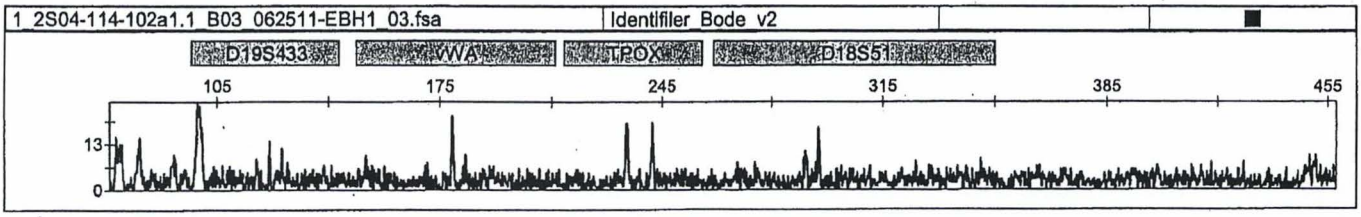
Sample File	Panel	SQO	SQ
1_2S04-114-102a1.1_B03_062511-EBH1_03.fsa	Identifiler_Bode_v2		



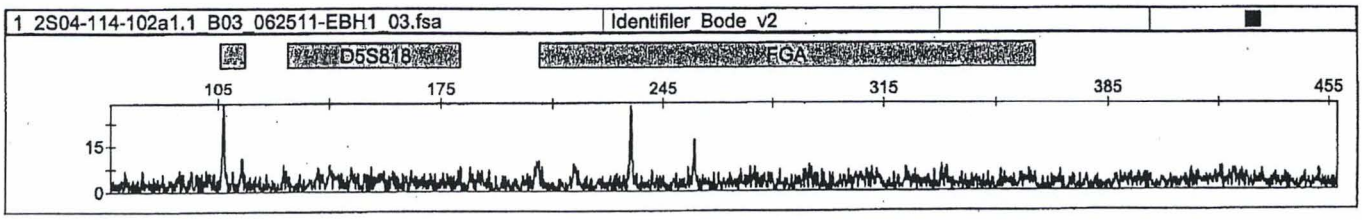
1_2S04-114-102a1.1_B03_062511-EBH1_03.fsa | Identifiler_Bode_v2



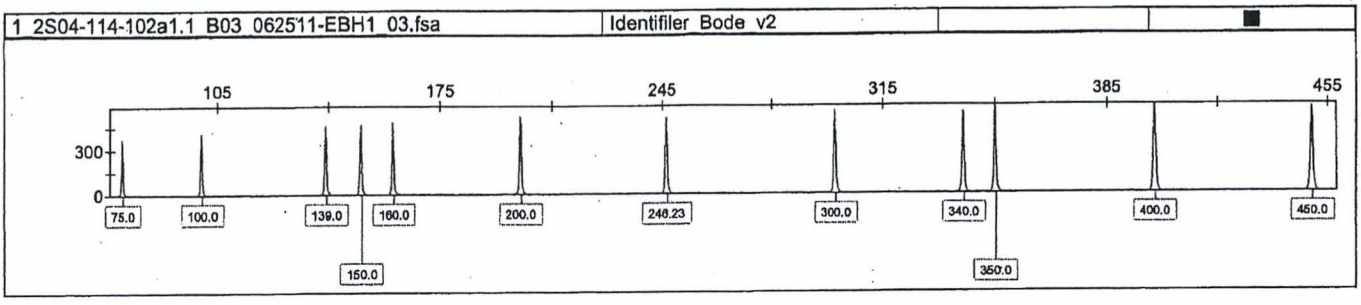
1_2S04-114-102a1.1_B03_062511-EBH1_03.fsa | Identifiler_Bode_v2



1_2S04-114-102a1.1_B03_062511-EBH1_03.fsa | Identifiler_Bode_v2



1_2S04-114-102a1.1_B03_062511-EBH1_03.fsa | Identifiler_Bode_v2



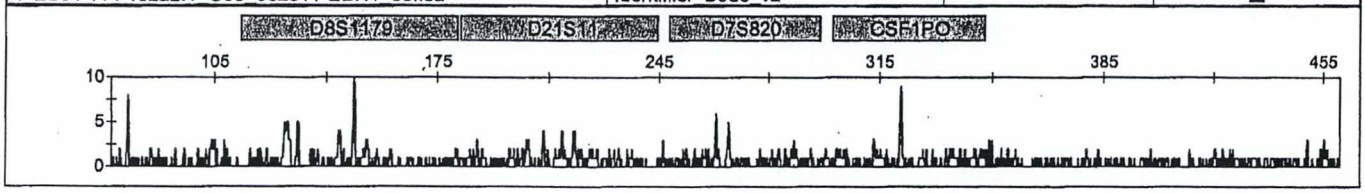
Qt = 0.00327 ng/ul

sample was vivaconned.

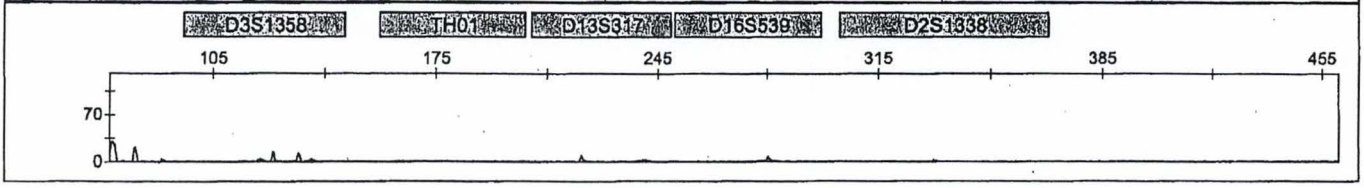
EBH 6/27/11

EBH 6/27/11 103

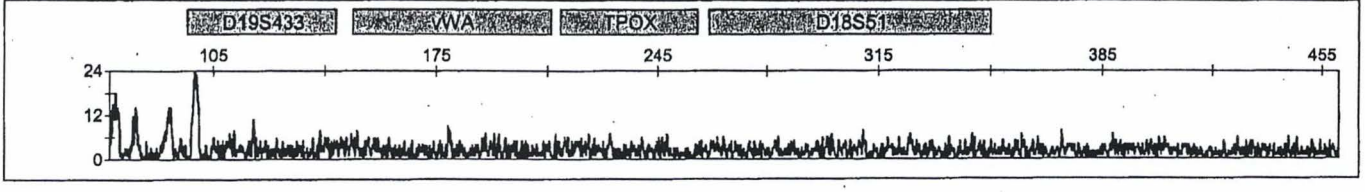
Sample File	Panel	SQO	SQ
1_2S04-114-102a2.1_C03_062511-EBH1_05.fsa	Identifiler_Bode_v2		



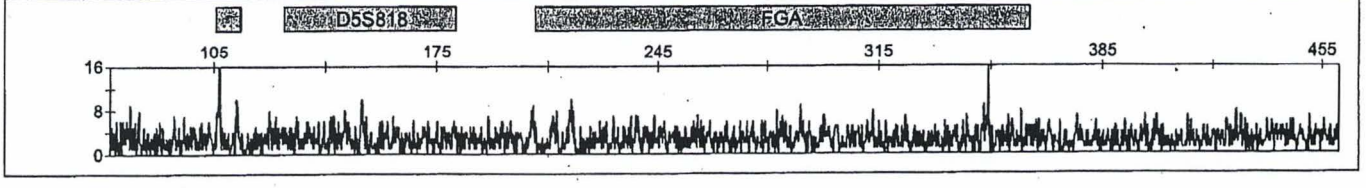
1_2S04-114-102a2.1_C03_062511-EBH1_05.fsa | Identifiler_Bode_v2



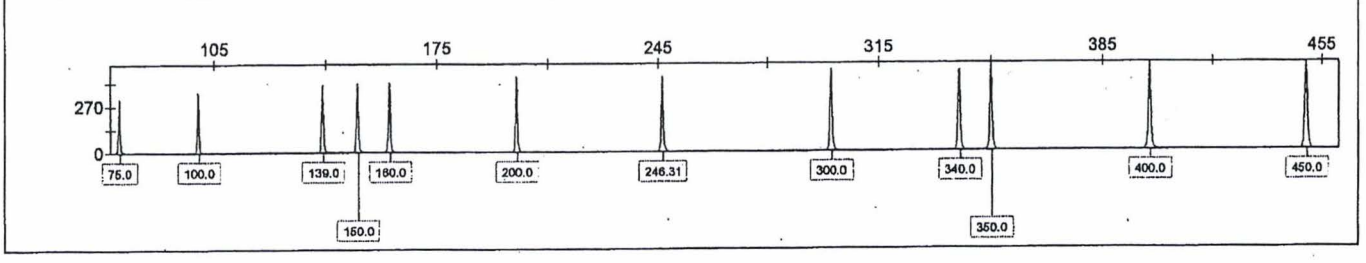
1_2S04-114-102a2.1_C03_062511-EBH1_05.fsa | Identifiler_Bode_v2



1_2S04-114-102a2.1_C03_062511-EBH1_05.fsa | Identifiler_Bode_v2



1_2S04-114-102a2.1_C03_062511-EBH1_05.fsa | Identifiler_Bode_v2



Qt <0.001 ng/ul

Sample was vivaconned.

EBH 6/27/11

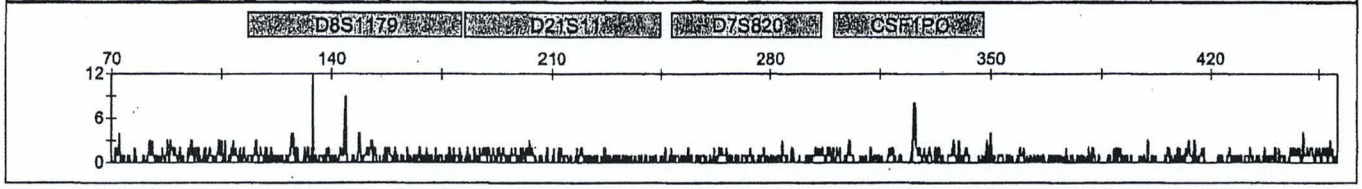
EBH 6/27/11

102

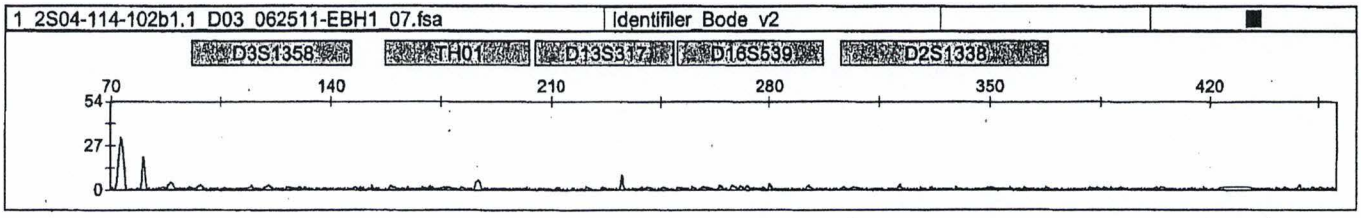
Applied Biosystems
GeneMapper ID v3.2.1

GMID11_062511-EBH1_2S04-114_EBH_ID

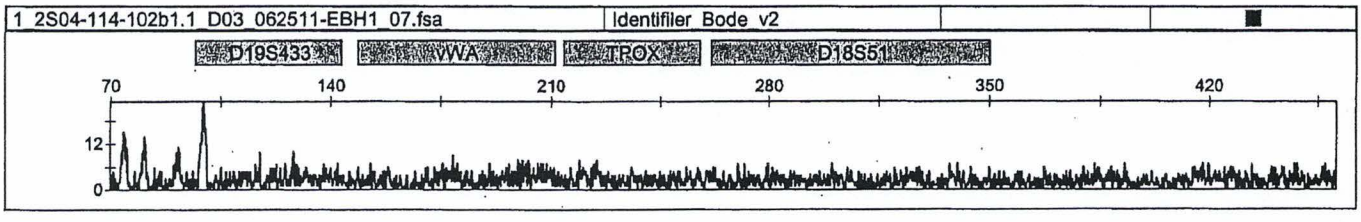
Sample File	Panel	SQO	SQ
1_2S04-114-102b1.1_D03_062511-EBH1_07.fsa	Identifiler_Bode_v2		



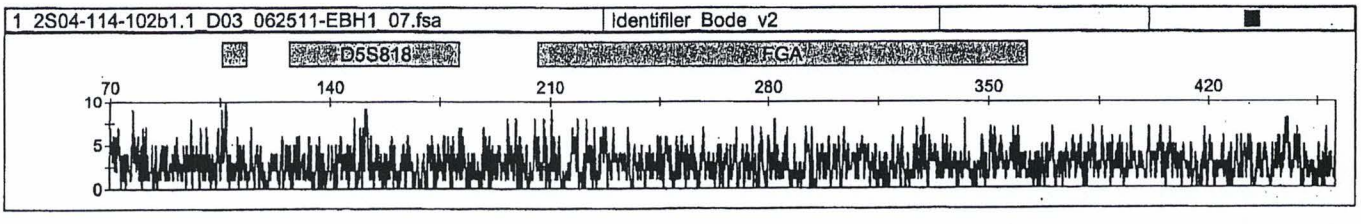
1_2S04-114-102b1.1_D03_062511-EBH1_07.fsa | Identifiler_Bode_v2



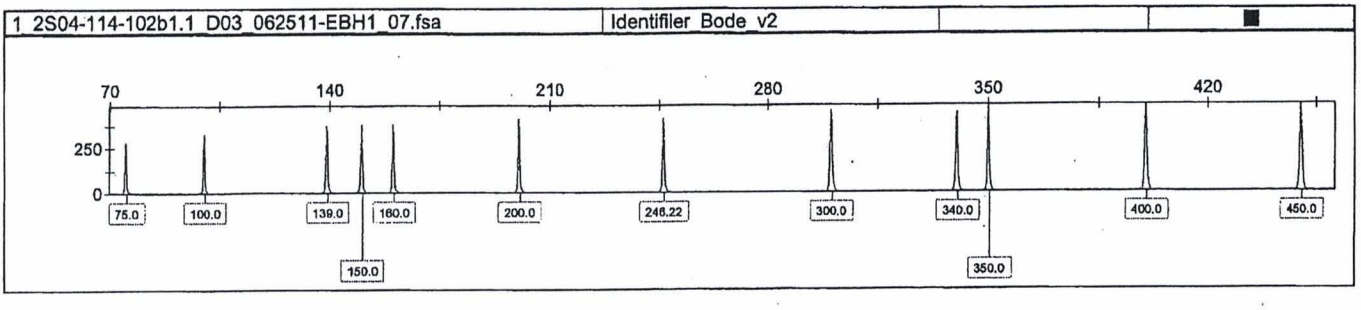
1_2S04-114-102b1.1_D03_062511-EBH1_07.fsa | Identifiler_Bode_v2



1_2S04-114-102b1.1_D03_062511-EBH1_07.fsa | Identifiler_Bode_v2



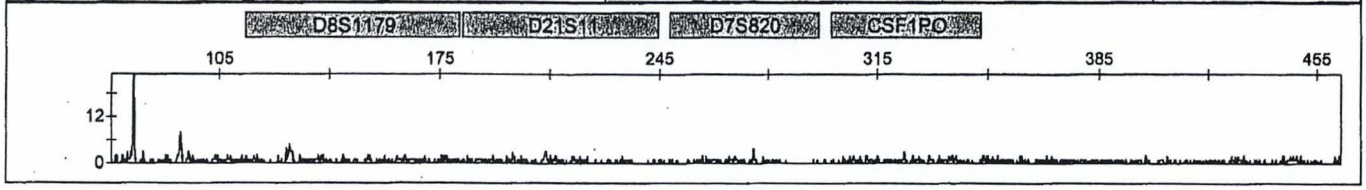
1_2S04-114-102b1.1_D03_062511-EBH1_07.fsa | Identifiler_Bode_v2



Qt <0.001 ng/ul
Sample was vivaconned.
EBH 6/27/11

101
EBH 6/27/11

Sample File	Panel	SQO	SQ
1_2S04-114-104a1.1_F03_062511-EBH1_11.fsa	Identifiler_Bode_v2		



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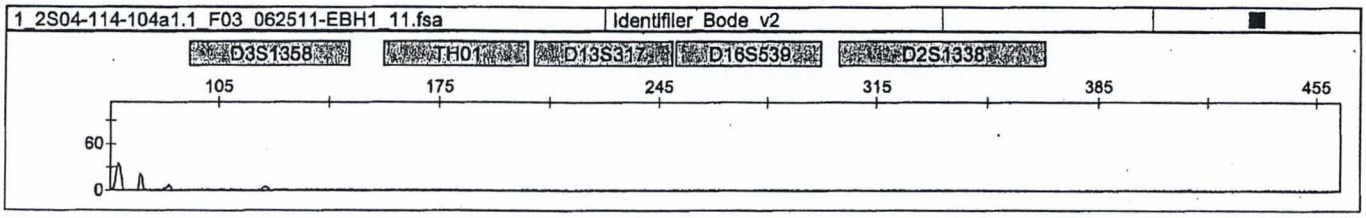
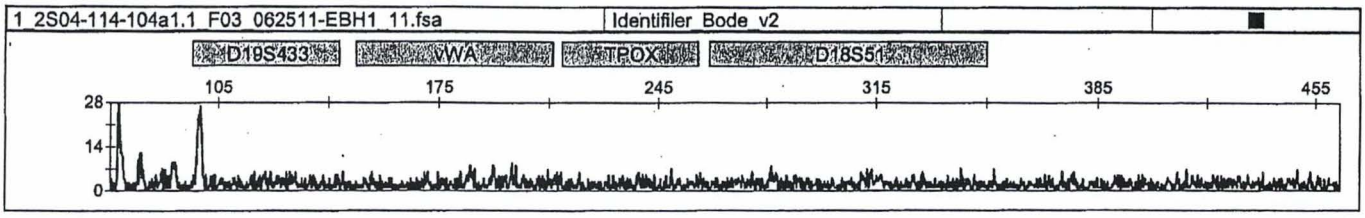
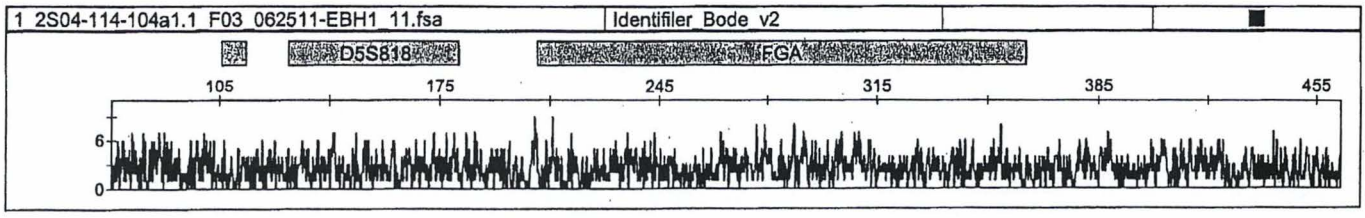


1_2S04-114-104a1.1_F03_062511-EBH1_11.fsa | Identifiler_Bode_v2



1_2S04-114-104a1.1_F03_062511-EBH1_11.fsa | Identifiler_Bode_v2



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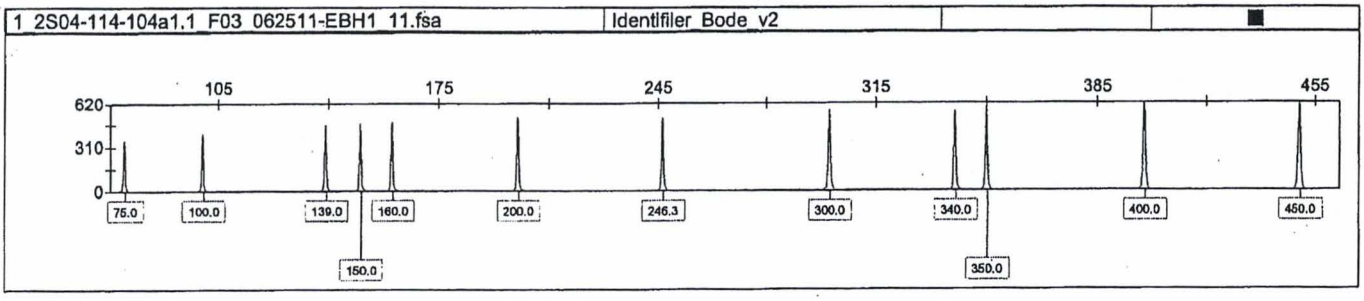

Qt <0.001 ng/ul
sample was vivaconned.
EBH 6/27/11

100
EBH 6/27/11

Applied Biosystems
GeneMapper ID v3.2.1

GMID11_062511-EBH1_2S04-114_EBH_ID

Sample File	Panel	SQO	SQ
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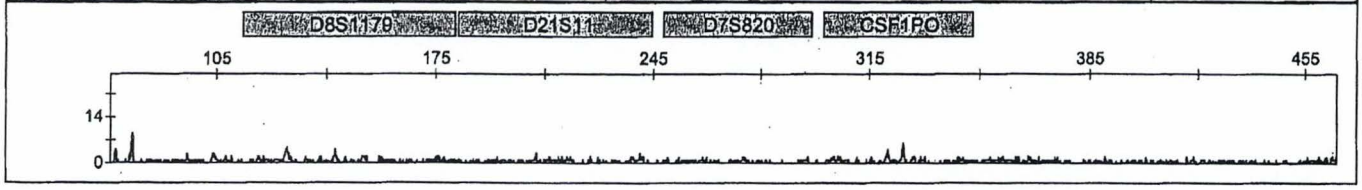
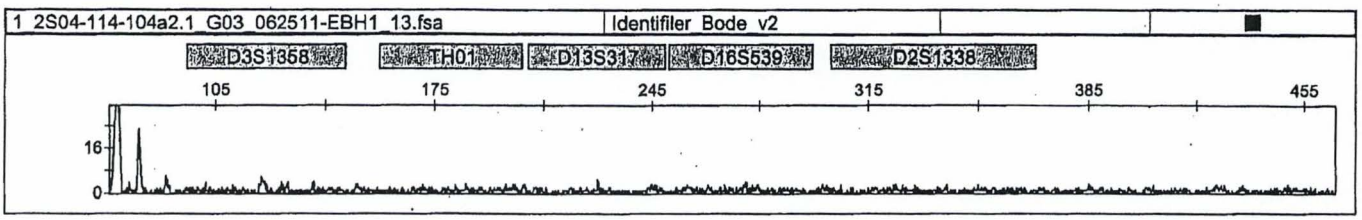
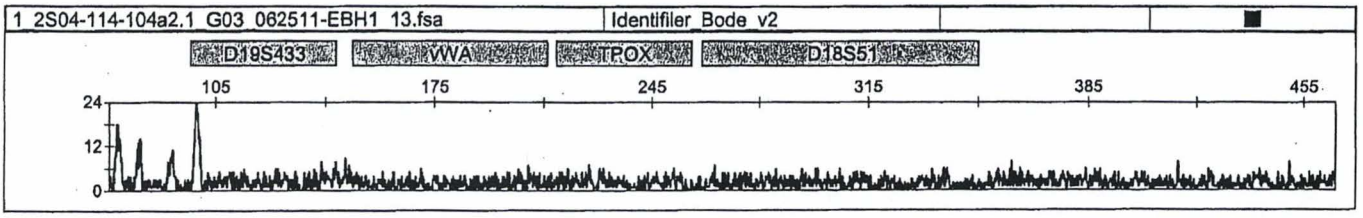


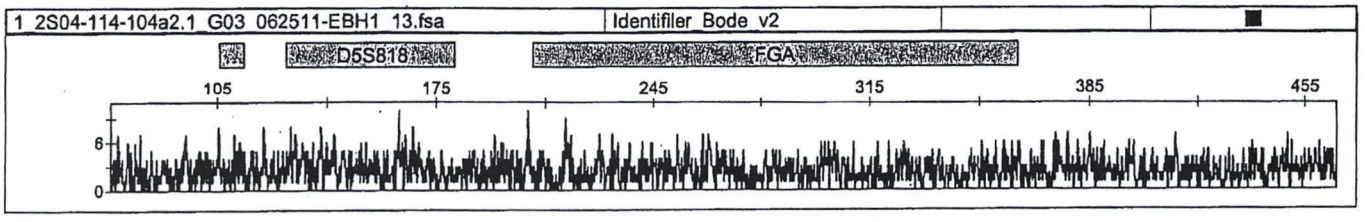
1_2S04-114-104a2.1_G03_062511-EBH1_13.fsa | Identifiler_Bode_v2



1_2S04-114-104a2.1_G03_062511-EBH1_13.fsa | Identifiler_Bode_v2



1_2S04-114-104a2.1_G03_062511-EBH1_13.fsa | Identifiler_Bode_v2



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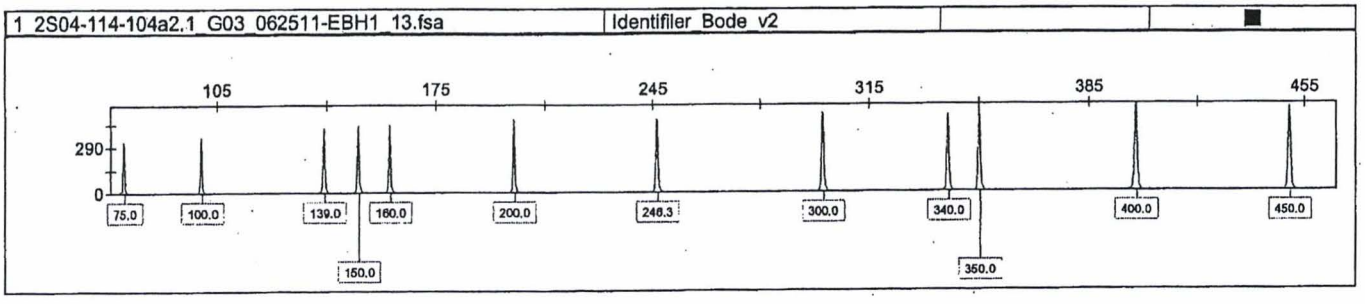


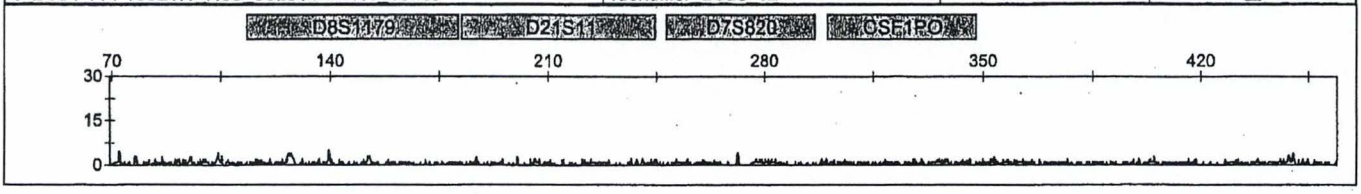
Qt <0.001 ng/ul
Sample was vivaconned.
EBH 6/27/11

99
EBH 6/27/11

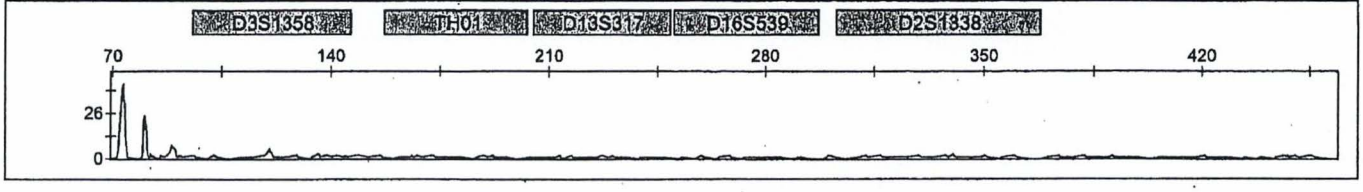
Applied Biosystems
GeneMapper ID v3.2.1

GMID11_062511-EBH1_2S04-114_EBH_ID

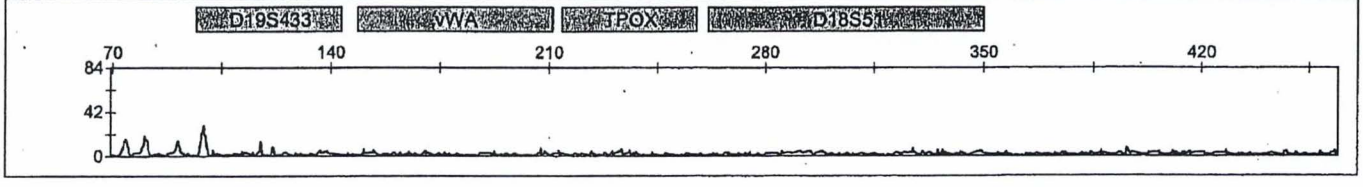
Sample File	Panel	SQO	SQ
1_2S04-114-105a1.1_H03_062511-EBH1_15.fsa	Identifiler_Bode_v2		



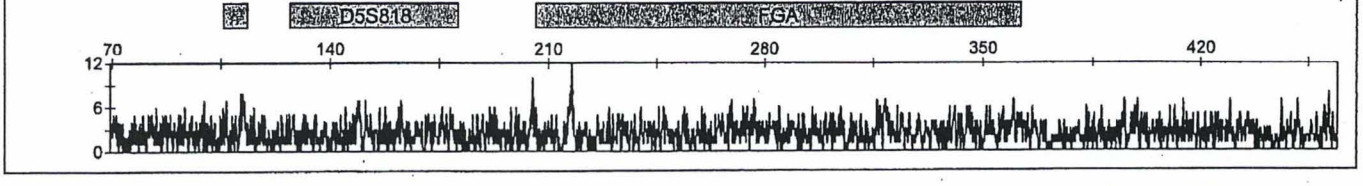
1_2S04-114-105a1.1_H03_062511-EBH1_15.fsa | Identifiler_Bode_v2



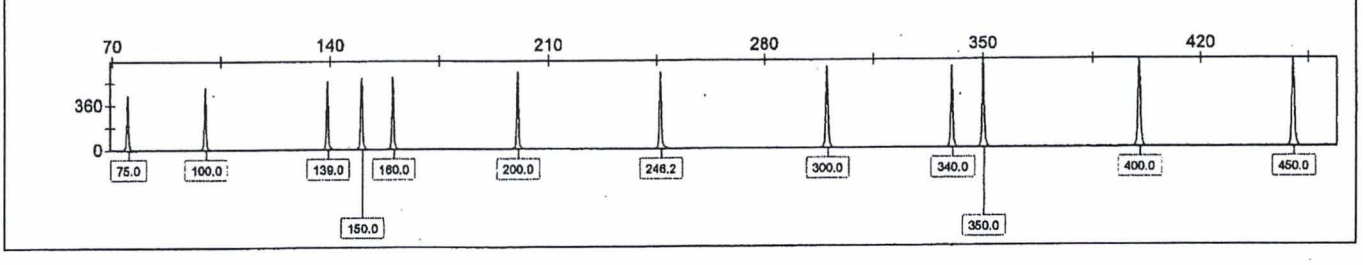
1_2S04-114-105a1.1_H03_062511-EBH1_15.fsa | Identifiler_Bode_v2



1_2S04-114-105a1.1_H03_062511-EBH1_15.fsa | Identifiler_Bode_v2



1_2S04-114-105a1.1_H03_062511-EBH1_15.fsa | Identifiler_Bode_v2



Qt <0.001 ng/ul

Sample was vivaconned.

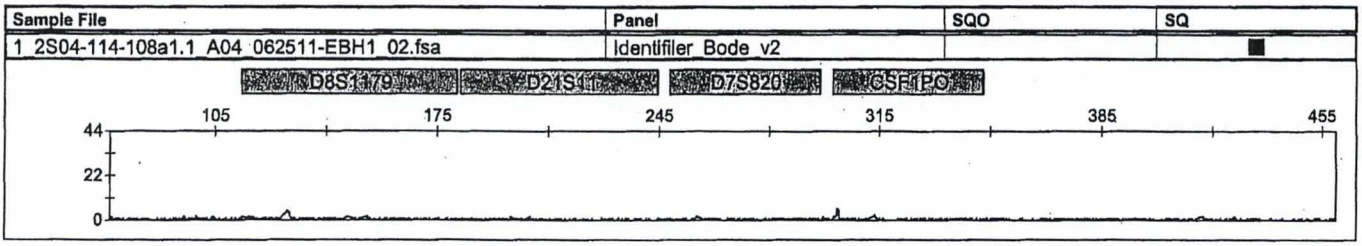
EBH 6/27/11

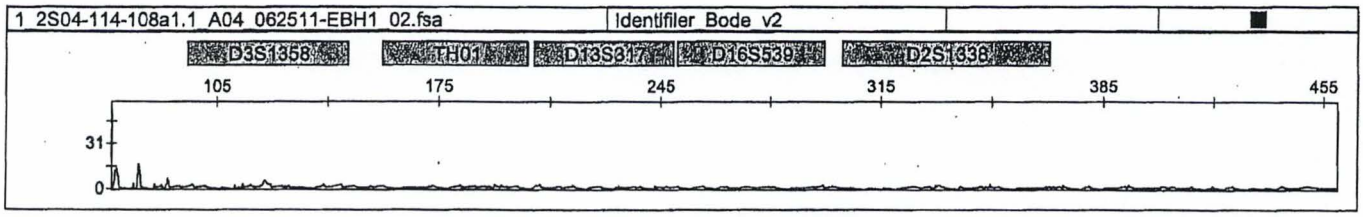
98

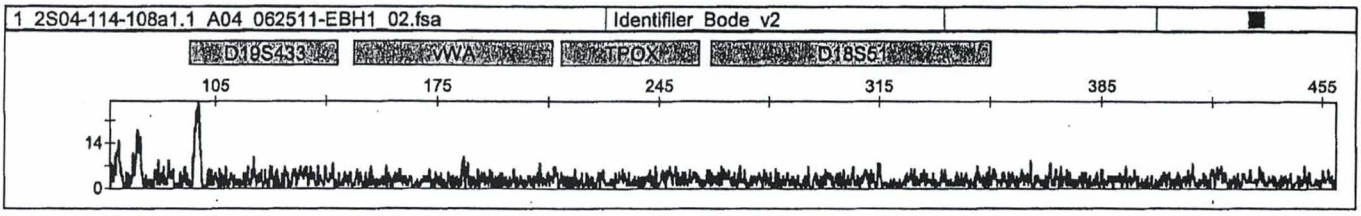
EBH 6/27/11

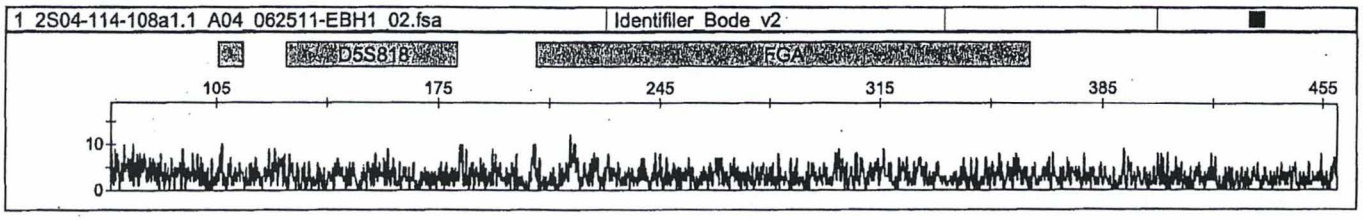
Applied Biosystems
GeneMapper ID v3.2.1

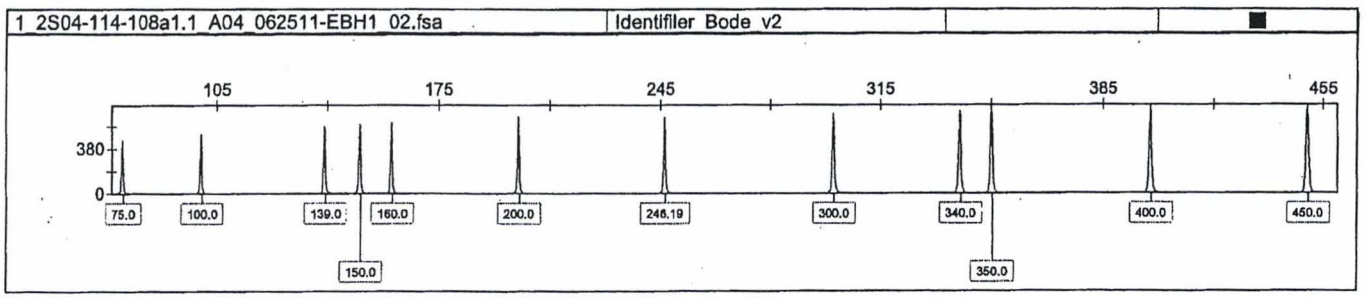
GMID11_062511-EBH1_2S04-114_EBH_ID











Qt<0.001 ng/ul
sample was vivaconned.
EBH 6/27/11

97

EBH 6/27/11

Applied Biosystems
GeneMapper ID v3.2.1

GMID11_062511-EBH1_2S04-114_EBH_ID

Sample File	Panel	SQO	SQ
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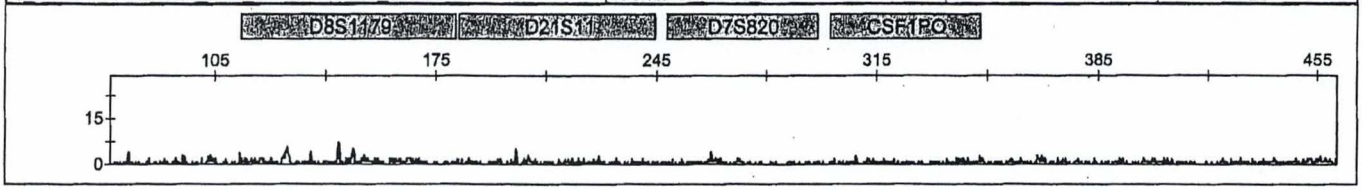
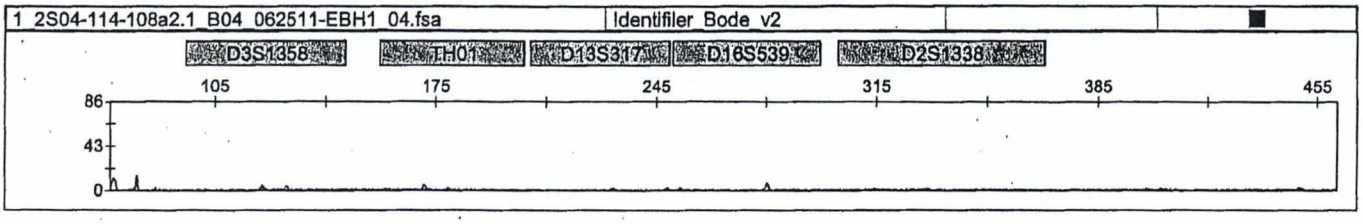
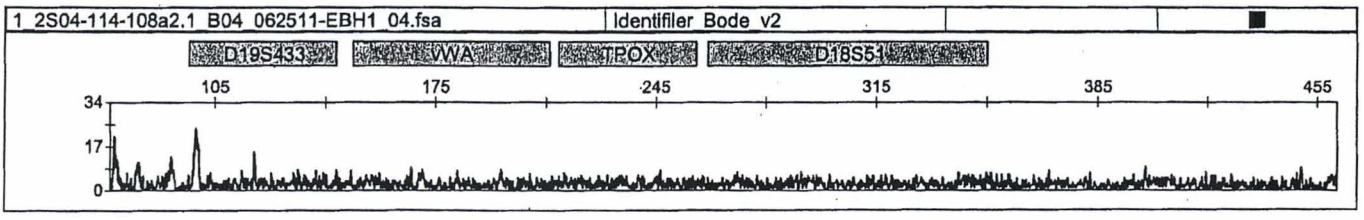


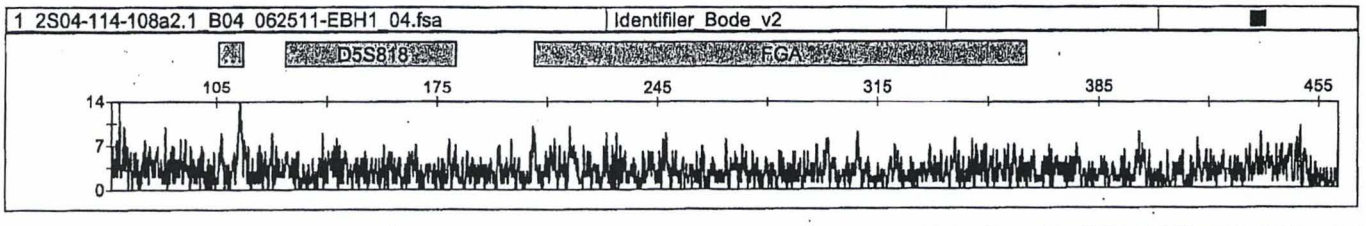
1_2S04-114-108a2.1_B04_062511-EBH1_04.fsa | Identifiler_Bode_v2



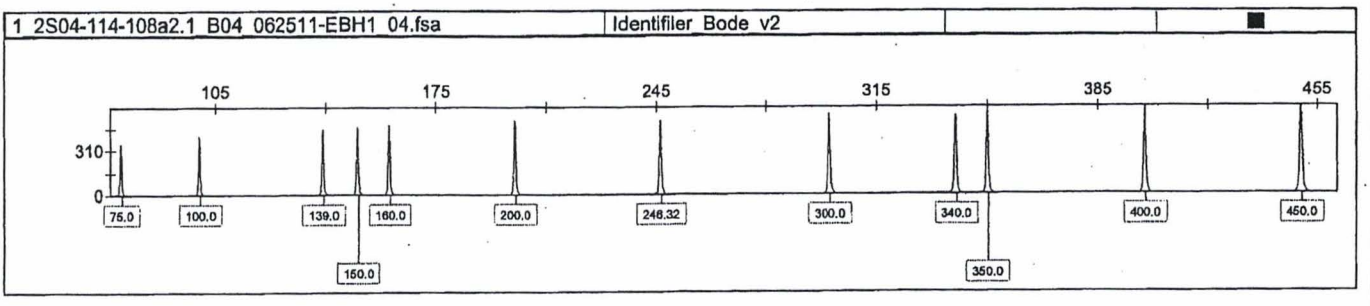
1_2S04-114-108a2.1_B04_062511-EBH1_04.fsa | Identifiler_Bode_v2



1_2S04-114-108a2.1_B04_062511-EBH1_04.fsa | Identifiler_Bode_v2



1_2S04-114-108a2.1_B04_062511-EBH1_04.fsa | Identifiler_Bode_v2



Qt < 0.001 ng/ul

Sample was vivaconned.

EBH 6/27/11

96

EBH 6/27/11

CE GMID Editing Sheet – ID

Tray ID: 071311-EBH1
Analyst: EBH
GMID Panel: Identifiler_Bode_v2

Shipment or Case #:. 2504-114
Date: 7/14/11

Well	Edit: Locus, Base pair size - reason
	NO edits

Editing Key

20%: 20% filter applied (after confirming no mixtures)

-A: -A/Split peaks

AUT: single allele below minimum threshold

Artifact (non-specific)

D/I: Degraded and/or Inhibited

Dye artifact

Elevated BL: Labels placed on elevated baseline(s)

FC: Failed capillary

ILS<MIN: ILS below minimum rfu threshold

IA: Imbalanced Alleles

LOR: Loss of resolution

Matrix Issue

OL: Off ladder allele

Other: provide explanation in text box (currently using this for FDLE alleles btw. 75-99 rfu)

PU: Pullup

RFU<MIN: sample rfu below minimum threshold

RFU>MAX: sample rfu above maximum threshold

Shoulder: Shoulder peak

Sizing: incorrect sizing (eg: migration issue)

Spikes

Stutter (n-4 if other record)

9947 Positive Control Well Numbers Checked Against Known: D01, D02					
D8S1179: 13,13	D21S11: 30,30	D7S820: 10,11	CSF1PO: 10,12		
D3S1358: 14,15	TH01: 8,9.3	D13S317: 11,11	D16S539: 11,12	D2S1338: 19,23	
D19S433: 14,15	vWA: 17,18	TPOX: 8,8	D18S51: 15,19		
AMEL: X,X	D5S818: 11,11	FGA: 23,24			

95

EBH 7/14/11

EBH 7/14/11

CE GMID Editing Sheet – ID

Tray ID: 071311-EBHI
Analyst: AMB
GMID Panel: Identifiler_Bode_v2

Shipment or Case #: 2504-114
Date: 7/14/11

Well	Edit: Locus, Base pair size - reason
	No Edits

Editing Key

20%: 20% filter applied (after confirming no mixtures)

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AUT: single allele below minimum threshold

Artifact (non-specific)

D/I: Degraded and/or Inhibited

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FC: Failed capillary

ILS<MIN: ILS below minimum rfu threshold

IA: Imbalanced Alleles

LOR: Loss of resolution

Matrix Issue

OL: Off ladder allele

Other: provide explanation in text box (currently using this for FDLE alleles btw. 75-99 rfu)

PU: Pullup

RFU<MIN: sample rfu below minimum threshold

RFU>MAX: sample rfu above maximum threshold

Shoulder: Shoulder peak

Sizing: incorrect sizing (eg: migration issue)

Spikes

Stutter (n-4 if other record)

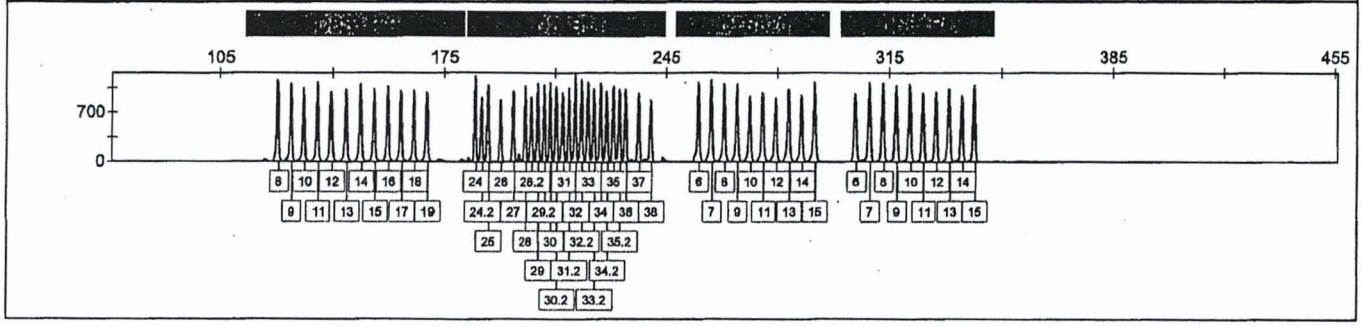
9947 Positive Control

Well Numbers Checked Against Known: D01, D02

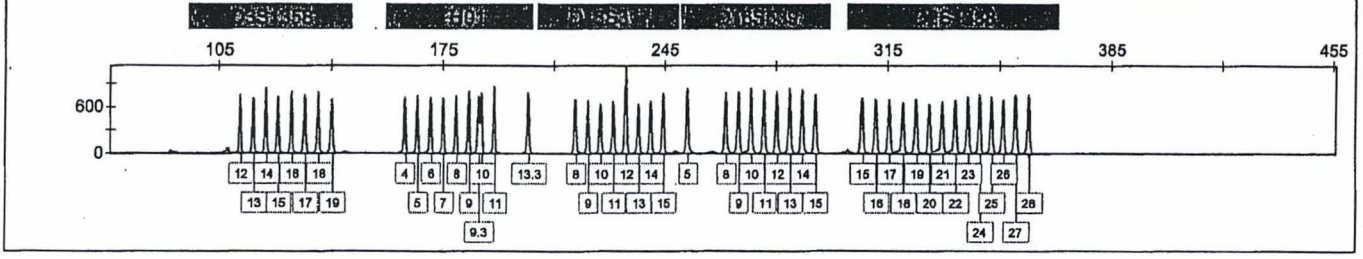
D8S1179: 13,13	D21S11: 30,30	D7S820: 10,11	CSF1PO: 10,12		
D3S1358: 14,15	TH01: 8, 9.3	D13S317: 11,11	D16S539: 11,12	D2S1338: 19,23	
D19S433: 14,15	vWA: 17,18	TPOX: 8,8	D18S51: 15,19		
AMEL: X,X	D5S818: 11,11	FGA: 23,24			

AMB
7/14/11

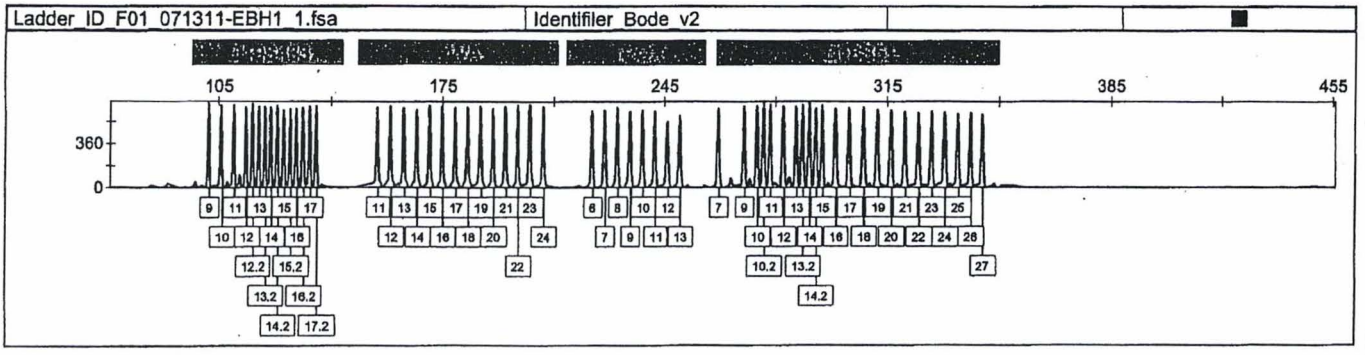
Sample File	Panel	SQO	SQ
Ladder_ID_F01_071311-EBH1_1.fsa	Identifiler_Bode_v2		



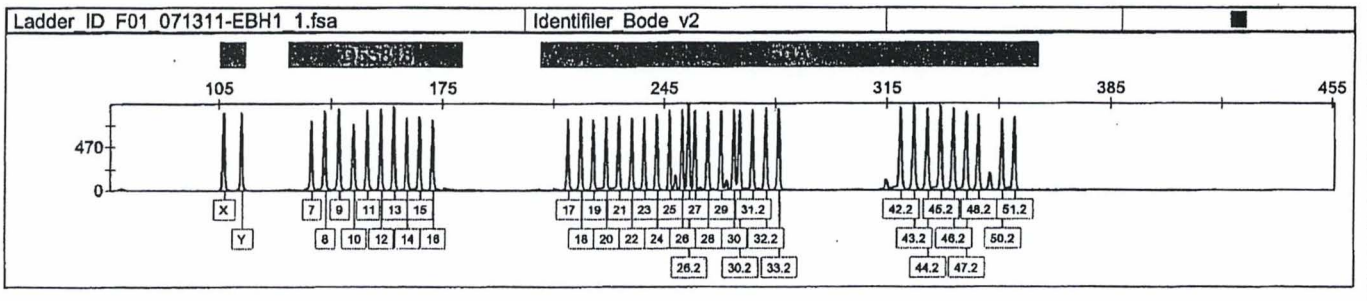
Ladder_ID_F01_071311-EBH1_1.fsa	Identifiler_Bode_v2



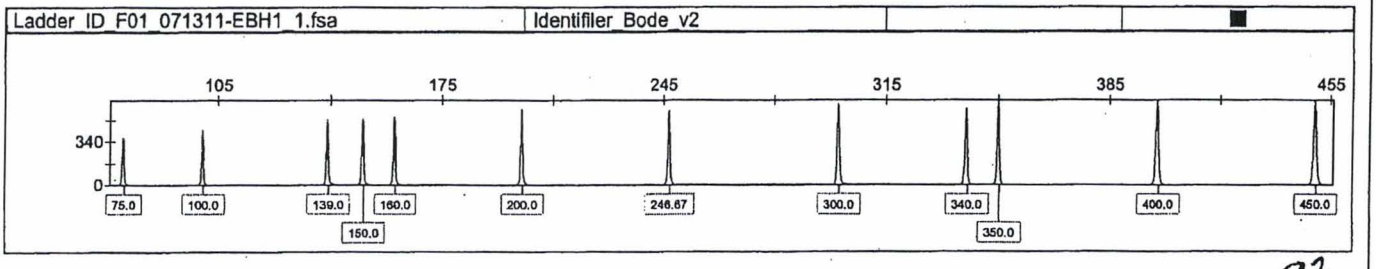
Ladder_ID_F01_071311-EBH1_1.fsa	Identifiler_Bode_v2



Ladder_ID_F01_071311-EBH1_1.fsa	Identifiler_Bode_v2



Ladder_ID_F01_071311-EBH1_1.fsa	Identifiler_Bode_v2



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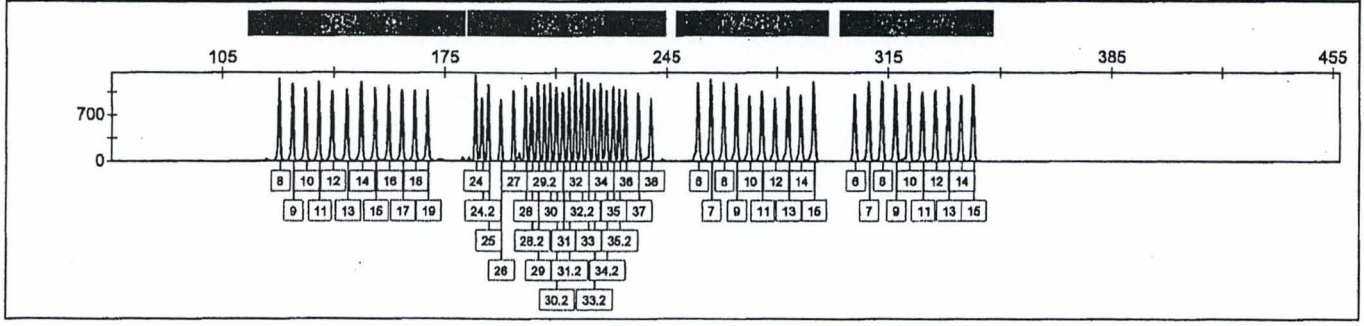
Applied Biosystems

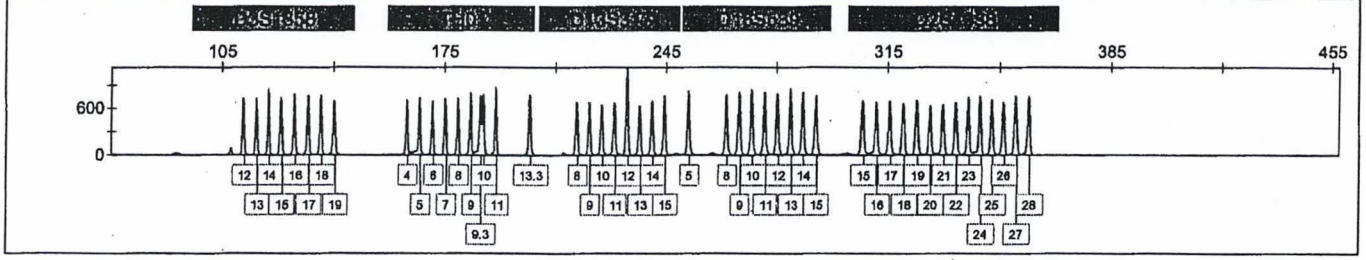
GeneMapper ID v3.2.1

GMID13_071311-EBH1_2S04-114_EBH_ID

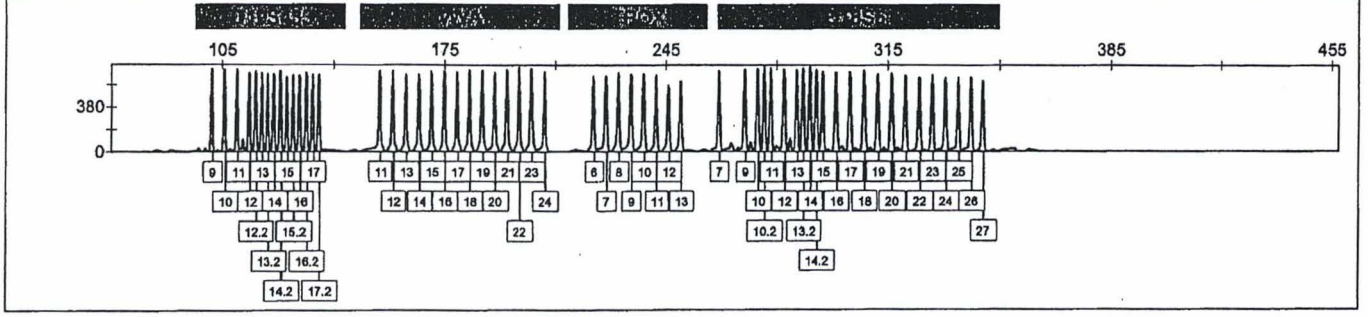
Sample File	Panel	SQO	SQ
Ladder_ID_G01_071311-EBH1_1.fsa	Identifiler_Bode_v2		



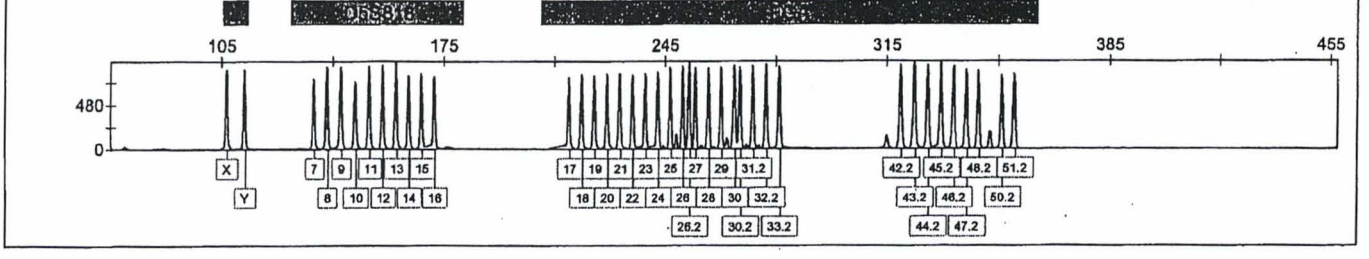
Ladder_ID_G01_071311-EBH1_1.fsa | Identifiler_Bode_v2



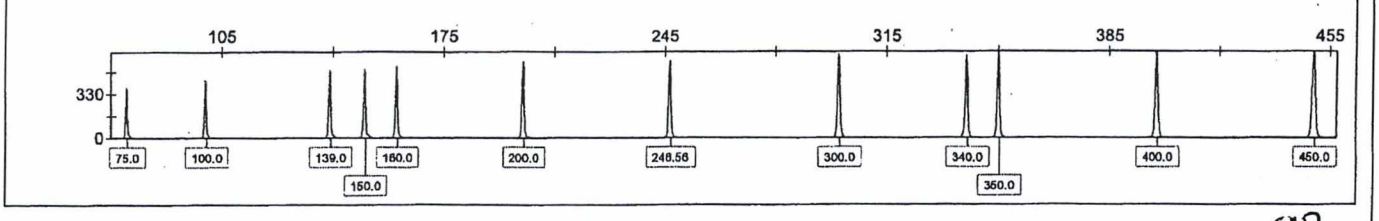
Ladder_ID_G01_071311-EBH1_1.fsa | Identifiler_Bode_v2



Ladder_ID_G01_071311-EBH1_1.fsa | Identifiler_Bode_v2



Ladder_ID_G01_071311-EBH1_1.fsa | Identifiler_Bode_v2



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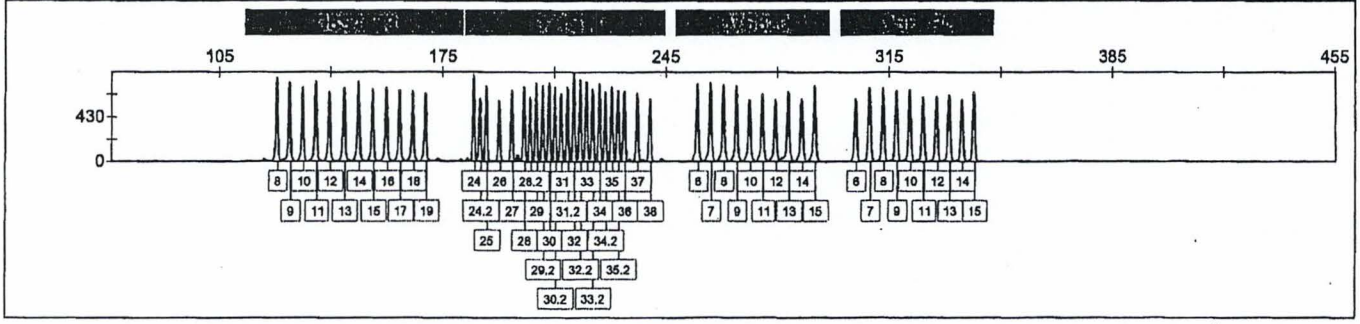
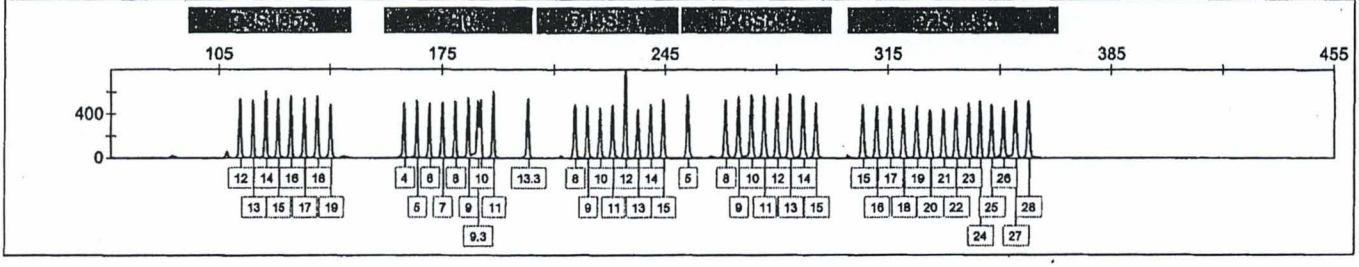
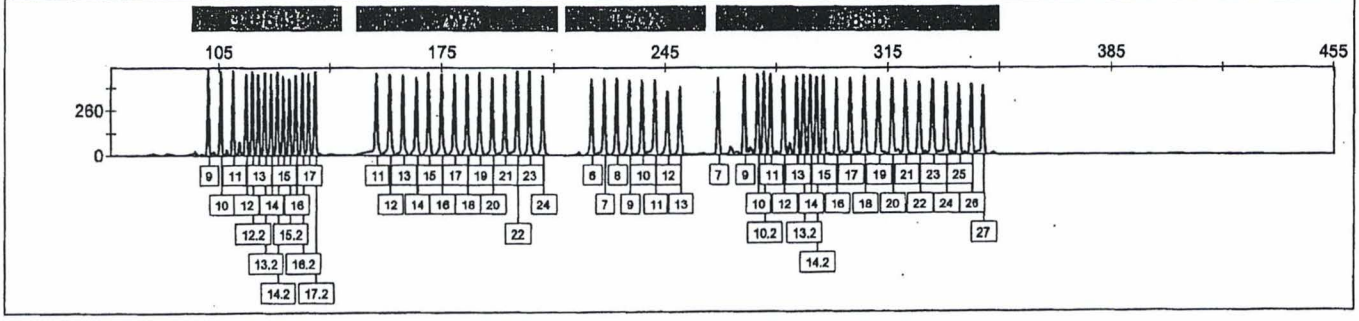
Sample File	Panel	SQO	SQ
Ladder_ID_H01_071311-EBH1_1.fsa	Identifiler_Bode_v2		



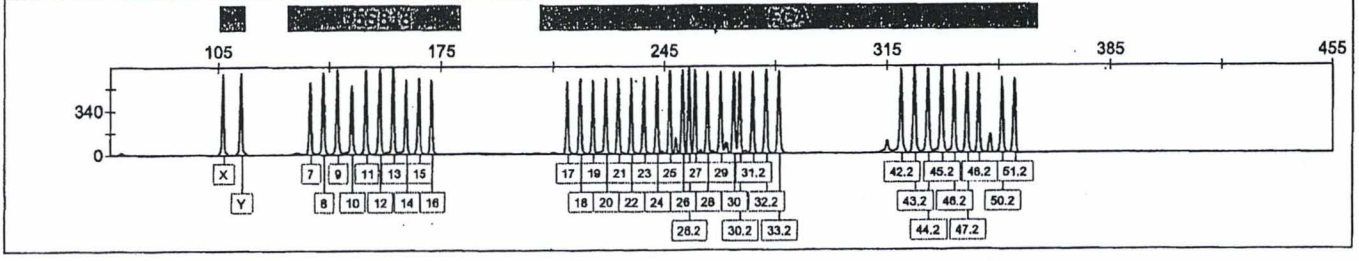
Ladder_ID_H01_071311-EBH1_1.fsa	Identifiler_Bode_v2		



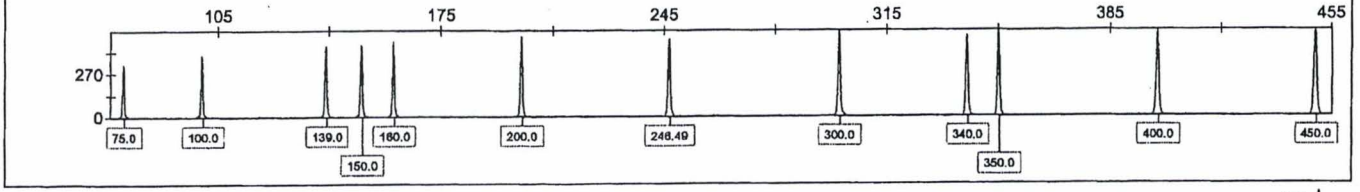
Ladder_ID_H01_071311-EBH1_1.fsa	Identifiler_Bode_v2		



Ladder_ID_H01_071311-EBH1_1.fsa	Identifiler_Bode_v2		



Ladder_ID_H01_071311-EBH1_1.fsa	Identifiler_Bode_v2		



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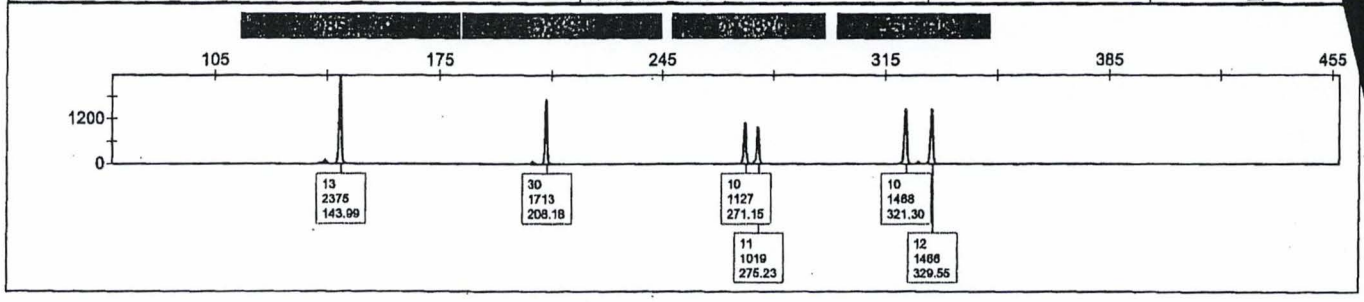
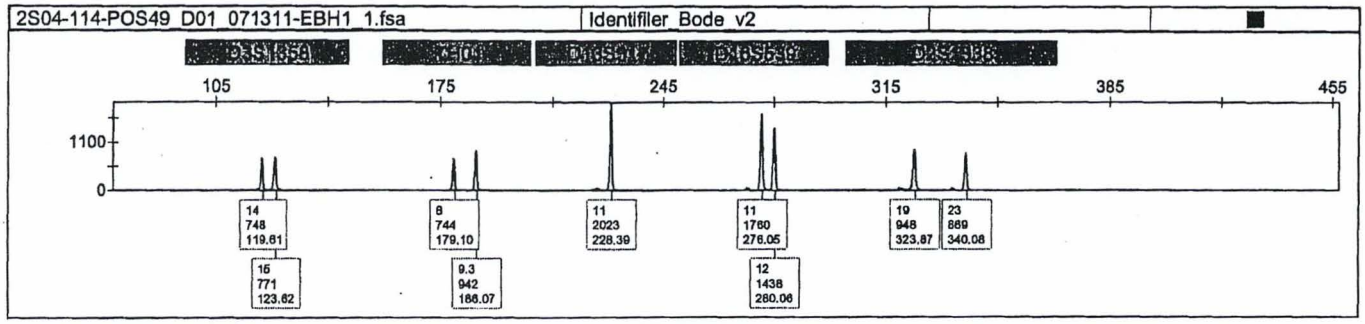
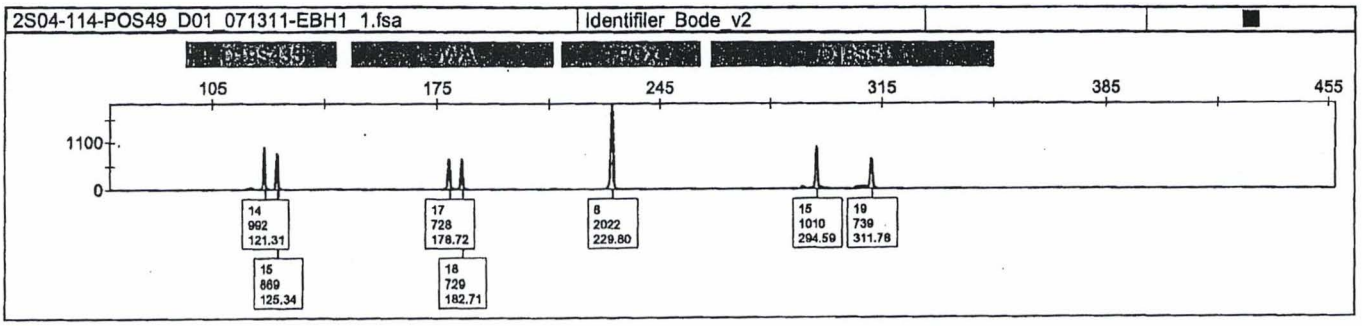
Sample File	Panel	SQO	SQ
2S04-114-POS49_D01_071311-EBH1_1.fsa	Identifiler_Bode_v2		



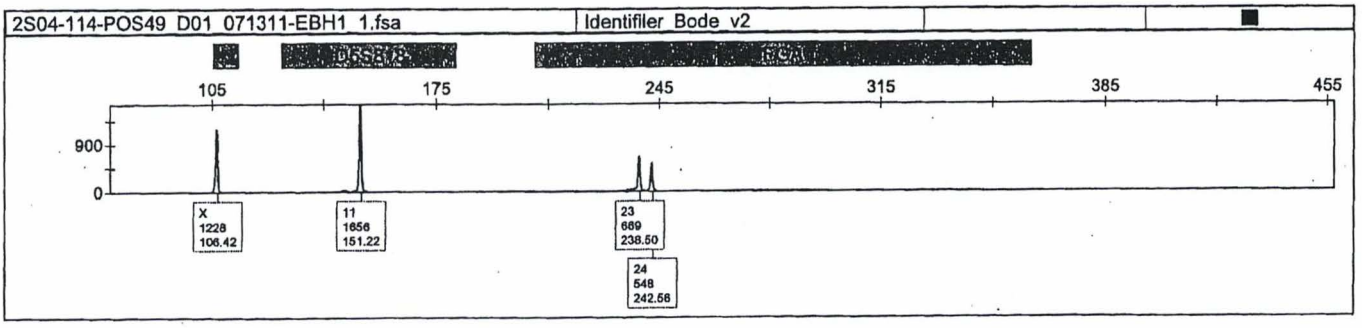
2S04-114-POS49_D01_071311-EBH1_1.fsa | Identifiler_Bode_v2



2S04-114-POS49_D01_071311-EBH1_1.fsa | Identifiler_Bode_v2



2S04-114-POS49_D01_071311-EBH1_1.fsa | Identifiler_Bode_v2



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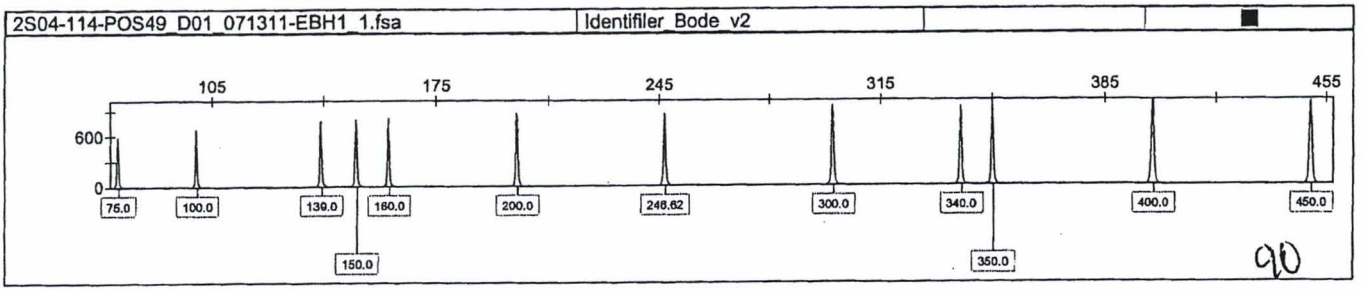

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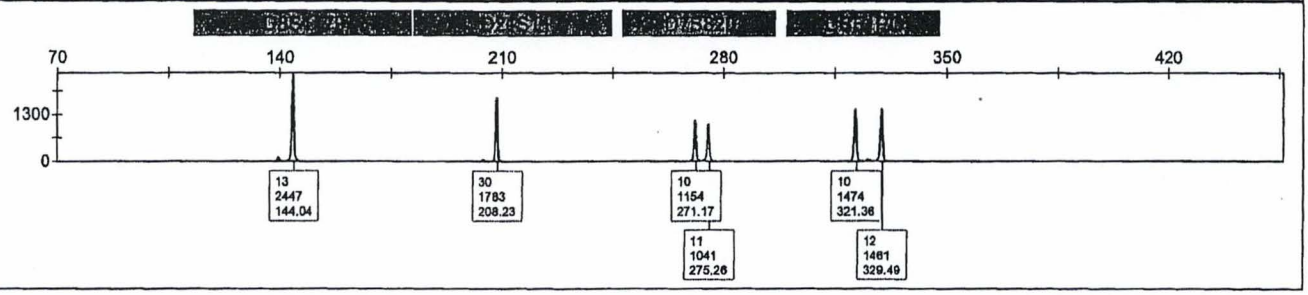
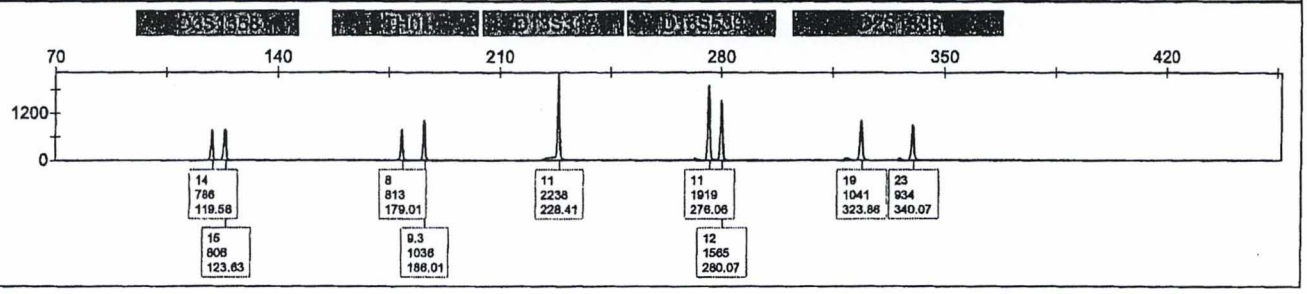
Sample File	Panel	SQO	SQ
2S04-114-POS49_D02_071311-EBH1_1.fsa	Identifiler_Bode_v2		



2S04-114-POS49_D02_071311-EBH1_1.fsa | Identifiler_Bode_v2



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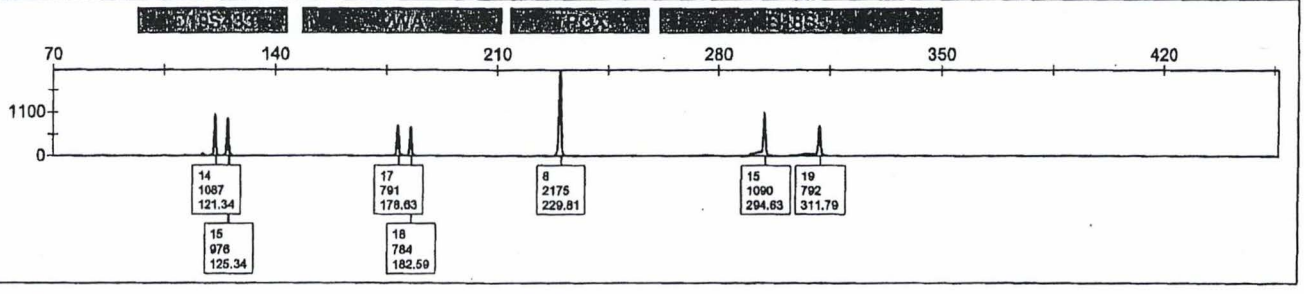

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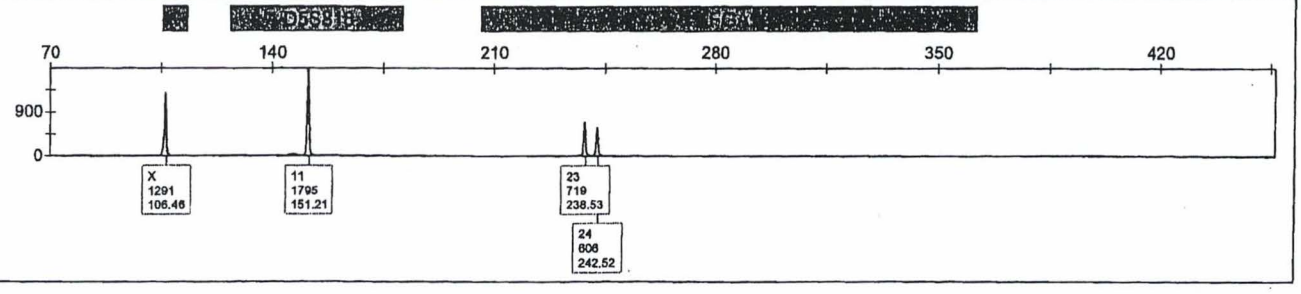

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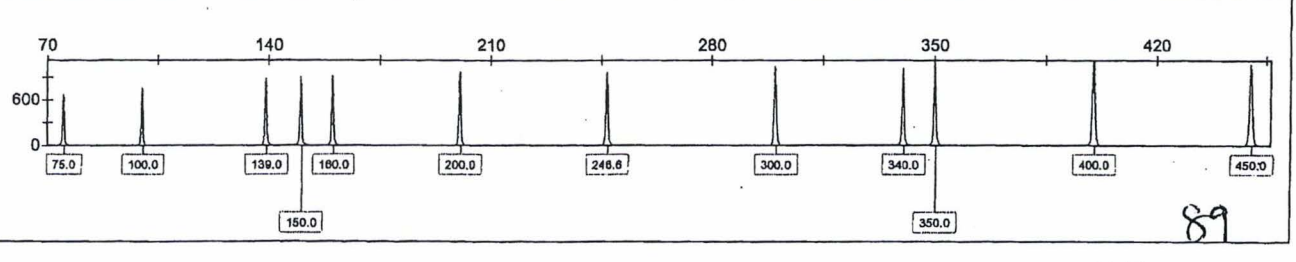

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Applied Biosystems
GeneMapper ID v3.2.1

GMID13_071311-EBH1_2S04-114_EBH_ID

Sample File	Panel	SQO	SQ
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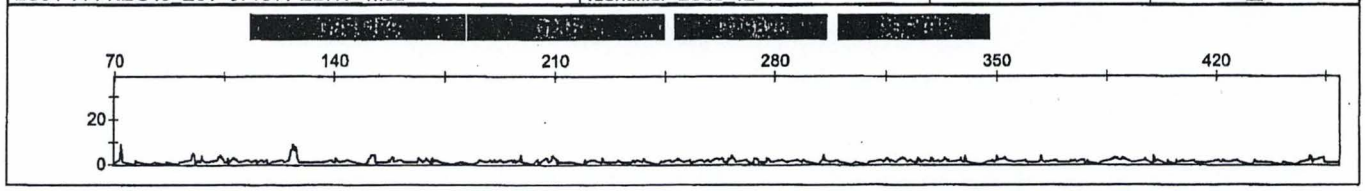

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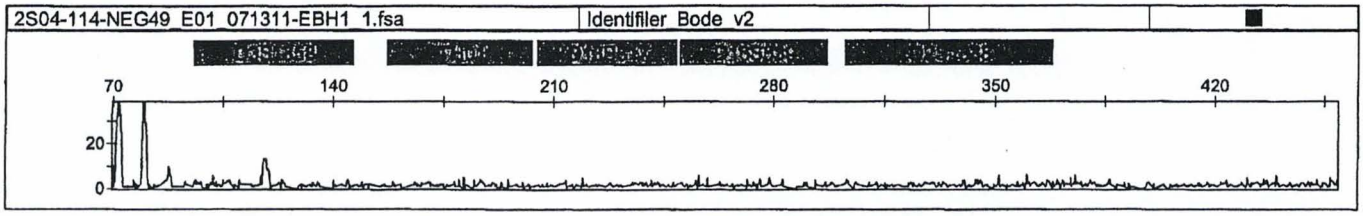
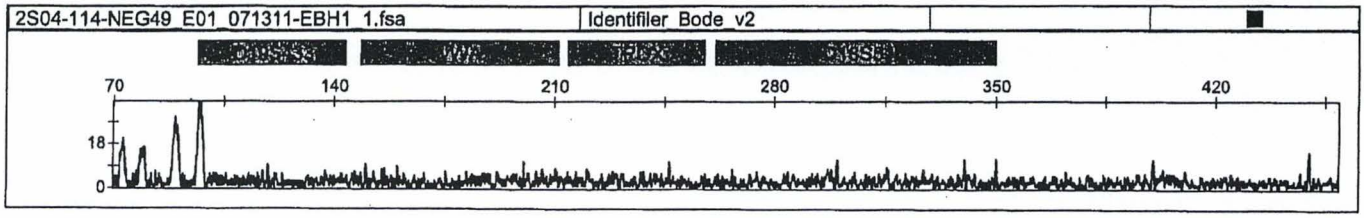


2S04-114-NEG49_E01_071311-EBH1_1.fsa | Identifiler_Bode_v2



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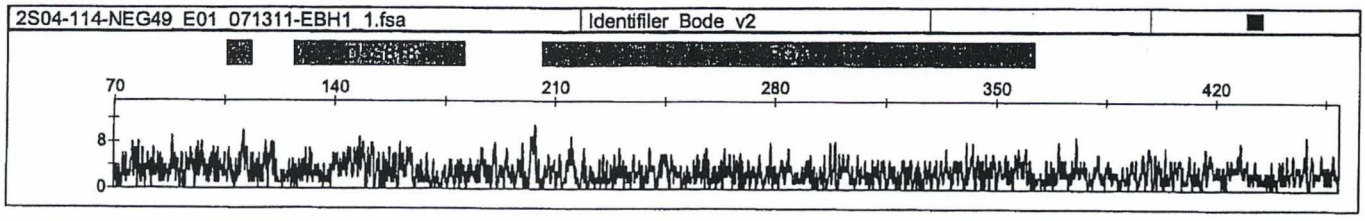
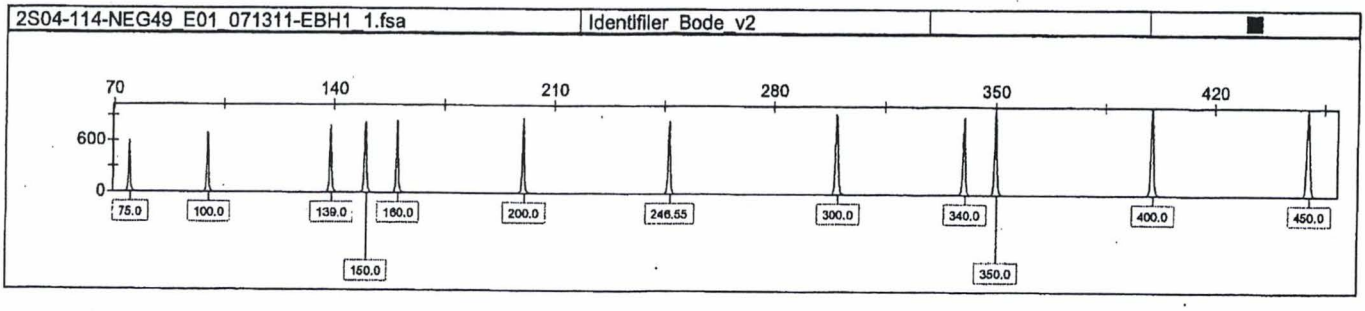


2S04-114-NEG49_E01_071311-EBH1_1.fsa | Identifiler_Bode_v2



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Sample File	Panel	SQO	SQ
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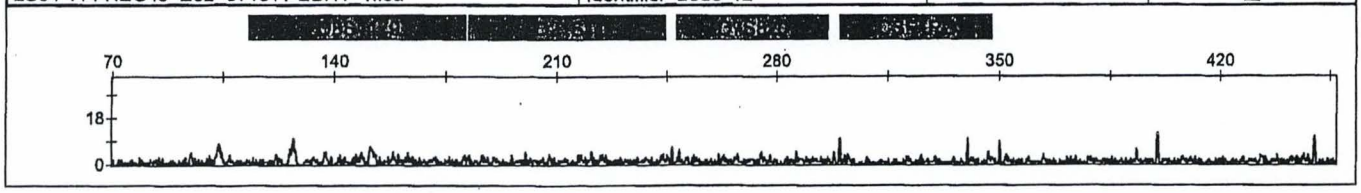
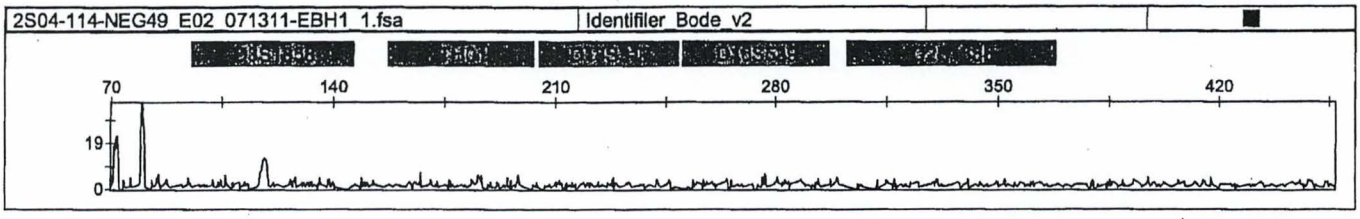
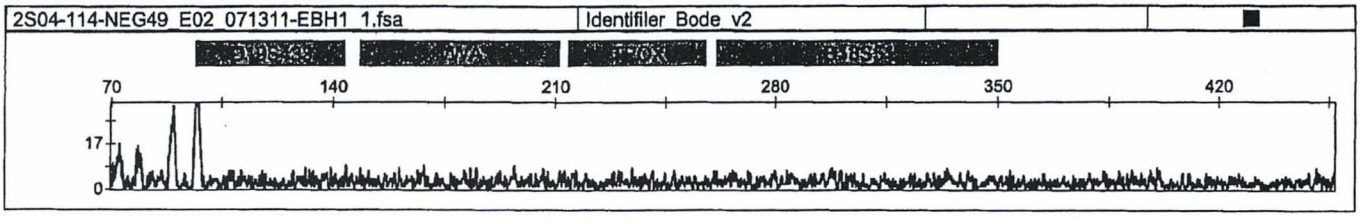


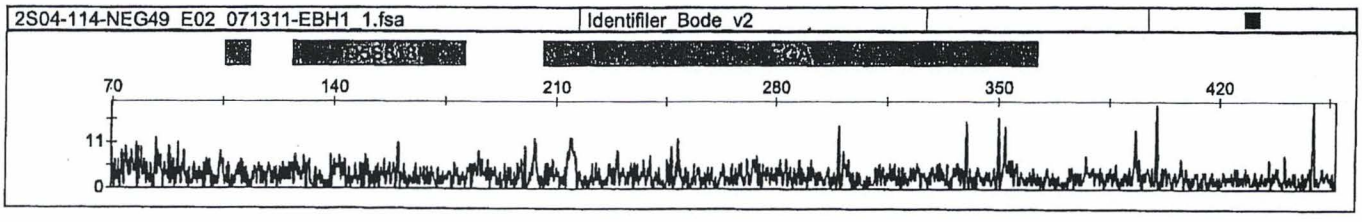
2S04-114-NEG49_E02_071311-EBH1_1.fsa | Identifiler_Bode_v2



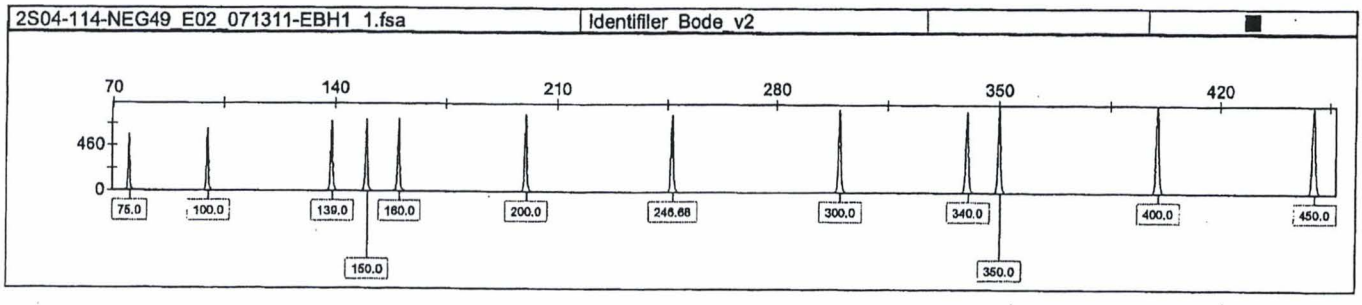
2S04-114-NEG49_E02_071311-EBH1_1.fsa | Identifiler_Bode_v2



2S04-114-NEG49_E02_071311-EBH1_1.fsa | Identifiler_Bode_v2



2S04-114-NEG49_E02_071311-EBH1_1.fsa | Identifiler_Bode_v2



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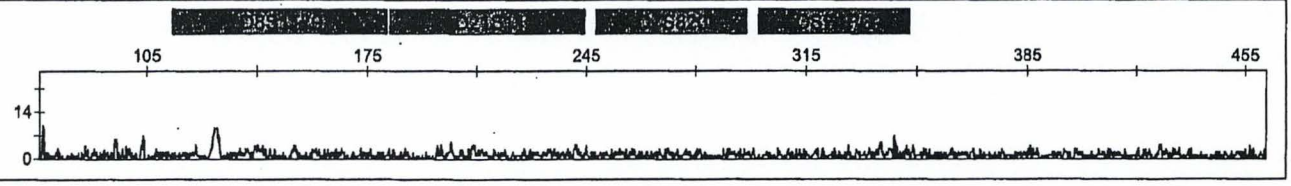
Applied Biosystems

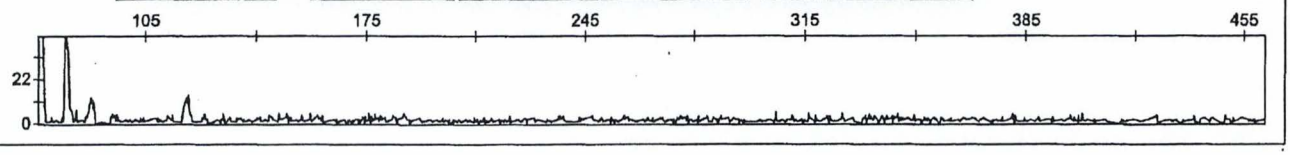
GeneMapper ID v3.2.1

GMID13_071311-EBH1_2S04-114_EBH_ID

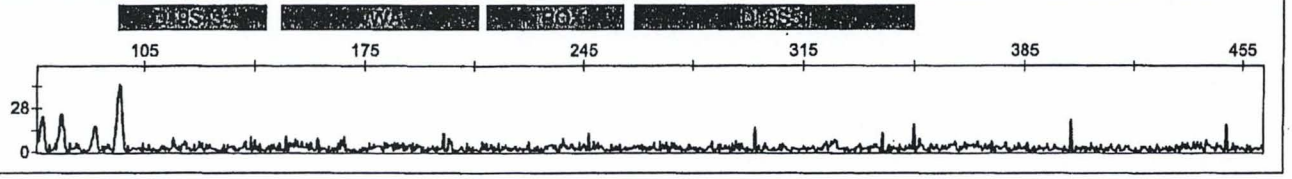
Sample File	Panel	SQO	SQ
2S04-114-RB76.1_C01_071311-EBH1_1.fsa	Identifiler_Bode_v2		



2S04-114-RB76.1_C01_071311-EBH1_1.fsa	Identifiler_Bode_v2		



2S04-114-RB76.1_C01_071311-EBH1_1.fsa	Identifiler_Bode_v2		



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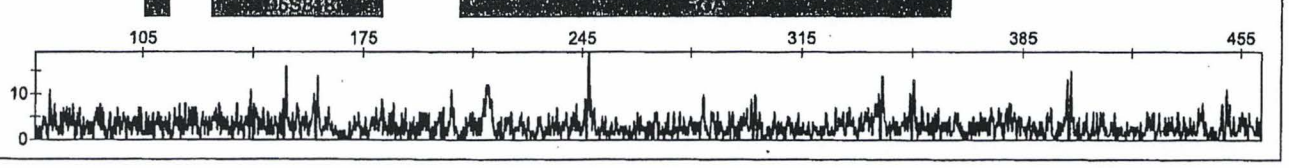

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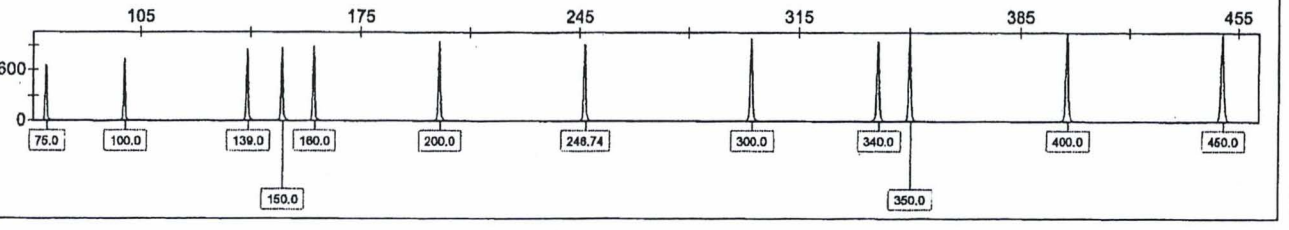

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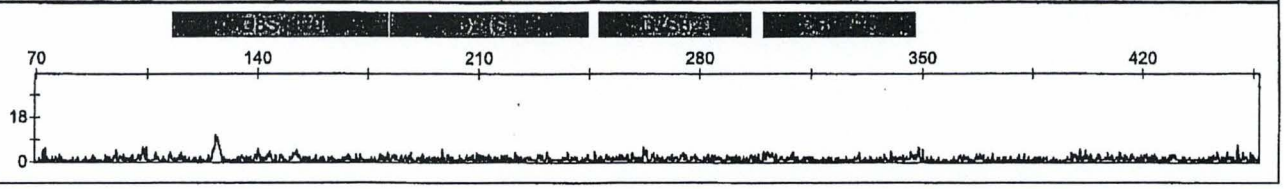
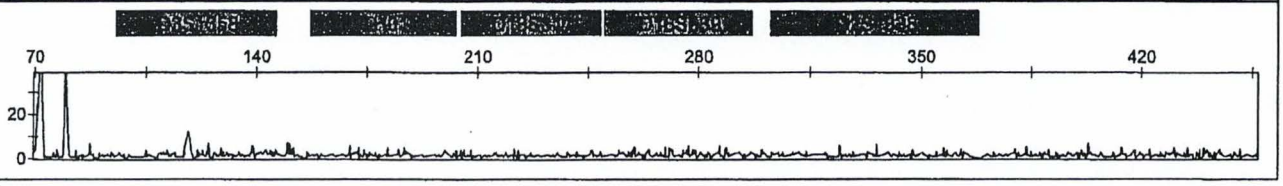
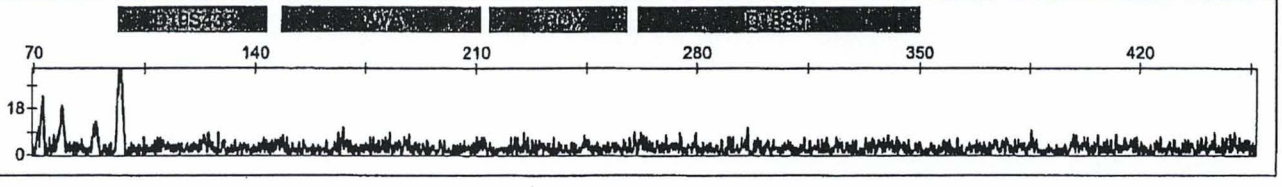
Sample File	Panel	SQO	SQ
2S04-114-RB76.1_C02_071311-EBH1_1.fsa	Identifiler_Bode_v2		



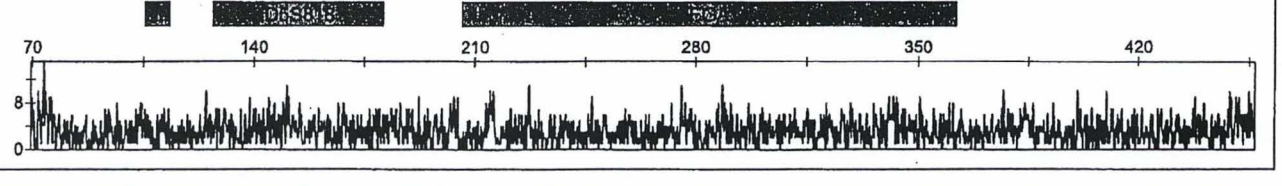
2S04-114-RB76.1_C02_071311-EBH1_1.fsa | Identifiler_Bode_v2



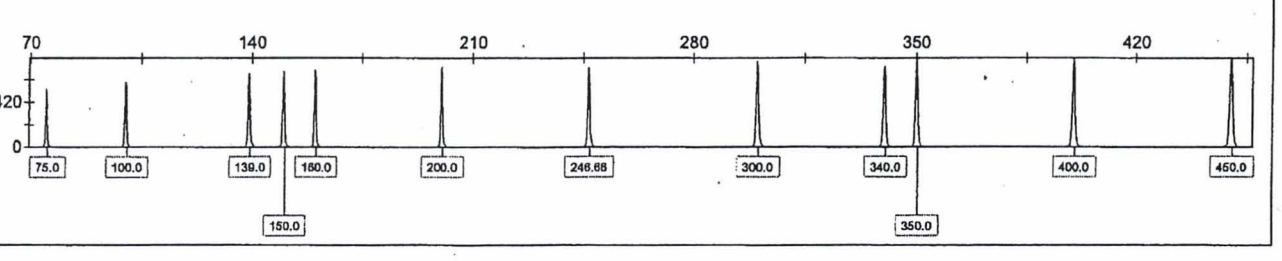
2S04-114-RB76.1_C02_071311-EBH1_1.fsa | Identifiler_Bode_v2



2S04-114-RB76.1_C02_071311-EBH1_1.fsa | Identifiler_Bode_v2



2S04-114-RB76.1_C02_071311-EBH1_1.fsa | Identifiler_Bode_v2



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EBH 7/14/11

CE GMID Editing Sheet – ID

Tray ID: 070611-E8H1
Analyst: ADa
GMID Panel: Identifiler_Bode_v2

Shipment or Case #: 2504-114
Date: 7-6-11

Well	Edit: Locus, Base pair size - reason
F1	spikes

Editing Key

20%, 20% filter applied (after confirming no mixtures)

-A, -A/Split peaks

AUT: single allele below minimum threshold

Artifact (non-specific)

D/I: Degraded and/or Inhibited

Dye artifact

Elevated BL: Labels placed on elevated baseline(s)

FC: Failed capillary

ILS<MIN: ILS below minimum rfu threshold

IA: Imbalanced Alleles

LOR: Loss of resolution

Matrix Issue

OL: Off ladder allele

Other: provide explanation in text box (currently using this for FDLE alleles btw 75-99 rfu)

PU: Pullup

RFU<MIN: sample rfu below minimum threshold

RFU>MAX: sample rfu above maximum threshold

Shoulder: Shoulder peak

Sizing: incorrect sizing (eg: migration issue)

Spikes

Stutter (n-4 if other record)

9947 Positive Control Well Numbers Checked Against Known: E1, E2					
D8S1179: 13,13	D21S11: 30,30	D7S820: 10,11	CSF1PO: 10,12		
D3S1358: 14,15	TH01: 8,9.3	D13S317: 11,11	D16S539: 11,12	D2S1338: 19,23	
D19S433: 14,15	vWA: 17,18	TPOX: 8,8	D18S51: 15,19		
AMEL: X,X	D5S818: 11,11	FGA: 23,24			

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ADa 7-6-11

CE GMID Editing Sheet – ID

Tray ID: 070611-EBH1
Analyst: EBH
GMID Panel: Identifiler_Bode_v2

Shipment or Case #: 2504-114
Date: 7/6/11

Well	Edit: Locus, Base pair size - reason
F01	Spike

Editing Key

20%: 20% filter applied (after confirming no mixtures)

-A: -A/Split peaks

AUT: single allele below minimum threshold

Artifact (non-specific)

D/I: Degraded and/or Inhibited

Dye artifact

Elevated BL: Labels placed on elevated baseline(s)

FC: Failed capillary

ILS<MIN: ILS below minimum rfu threshold

IA: Imbalanced Alleles

LOR: Loss of resolution

Matrix Issue

OL: Off ladder allele

Other: provide explanation in text box (currently using this for FDLE alleles btw. 75-99 rfu)

PU: Pullup

RFU<MIN: sample rfu below minimum threshold

RFU>MAX: sample rfu above maximum threshold

Shoulder: Shoulder peak

Sizing: Incorrect sizing (eg: migration issue)

Spikes

Stutter (n-4 if other record)

9947 Positive Control

Well Numbers Checked Against Known: E01, E02

D8S1179: 13,13	D21S11: 30,30	D7S820: 10,11	CSF1PO: 10,12		
D3S1358: 14,15	TH01: 8,9.3	D13S317: 11,11	D16S539: 11,12	D2S1338: 19,23	
D19S433: 14,15	vWA: 17,18	TPOX: 8,8	D18S51: 15,19		
AMEL: X,X	D5S818: 11,11	FGA: 23,24			

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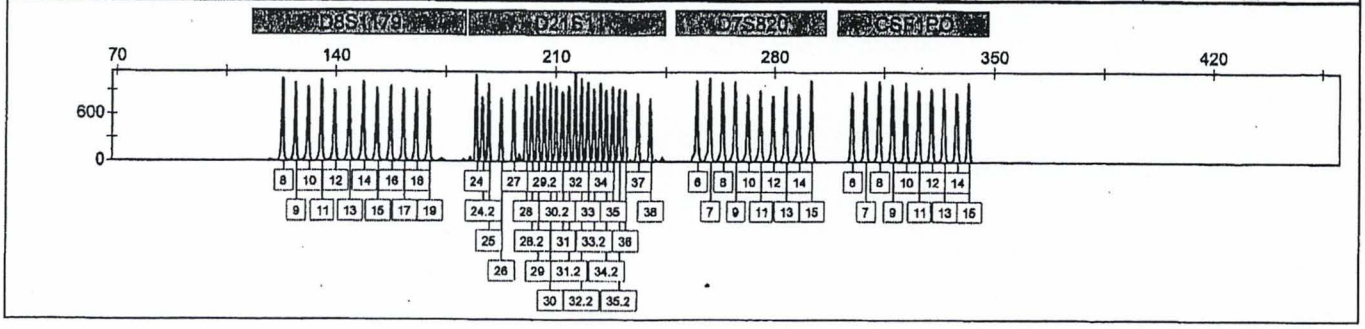
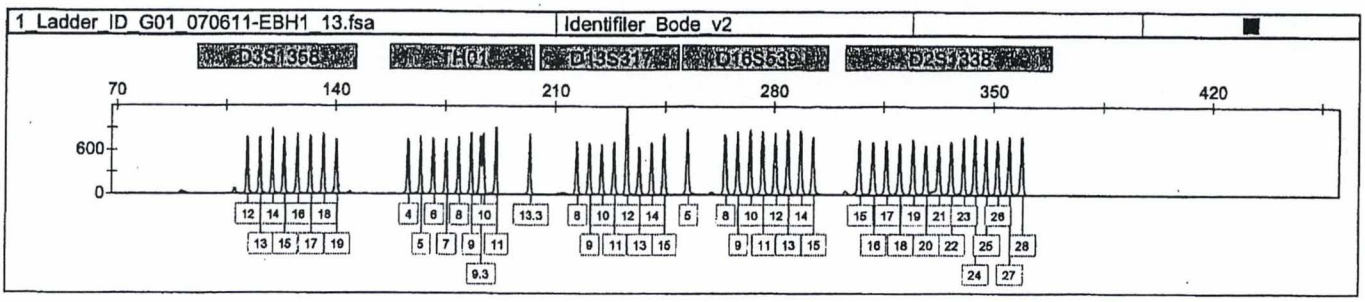
Applied Biosystems
GeneMapper ID v3.2.1

GMID14_070611-EBH1_2S04-114_EBH_ID

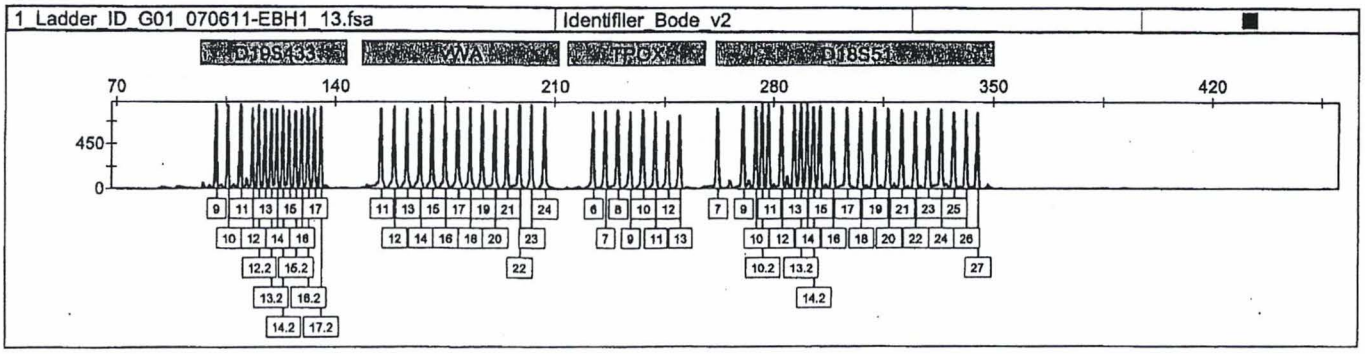
Sample File	Panel	SQO	SQ
1_Ladder_ID_G01_070611-EBH1_13.fsa	Identifiler_Bode_v2		



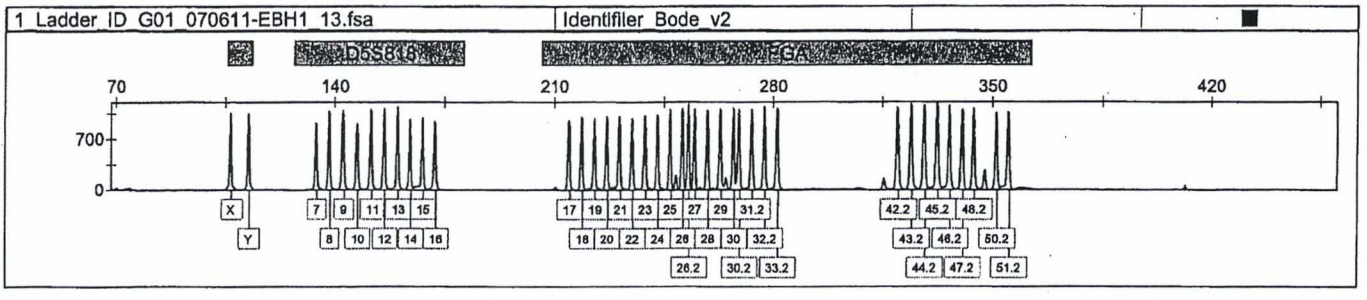
1_Ladder_ID_G01_070611-EBH1_13.fsa | Identifiler_Bode_v2



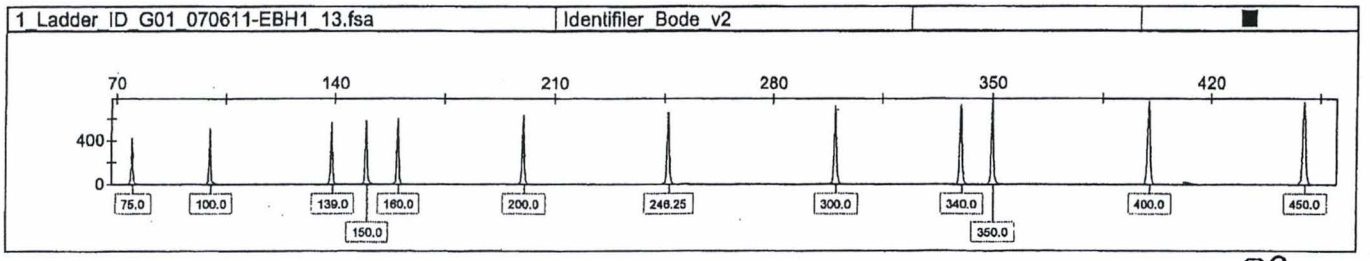
1_Ladder_ID_G01_070611-EBH1_13.fsa | Identifiler_Bode_v2



1_Ladder_ID_G01_070611-EBH1_13.fsa | Identifiler_Bode_v2



1_Ladder_ID_G01_070611-EBH1_13.fsa | Identifiler_Bode_v2



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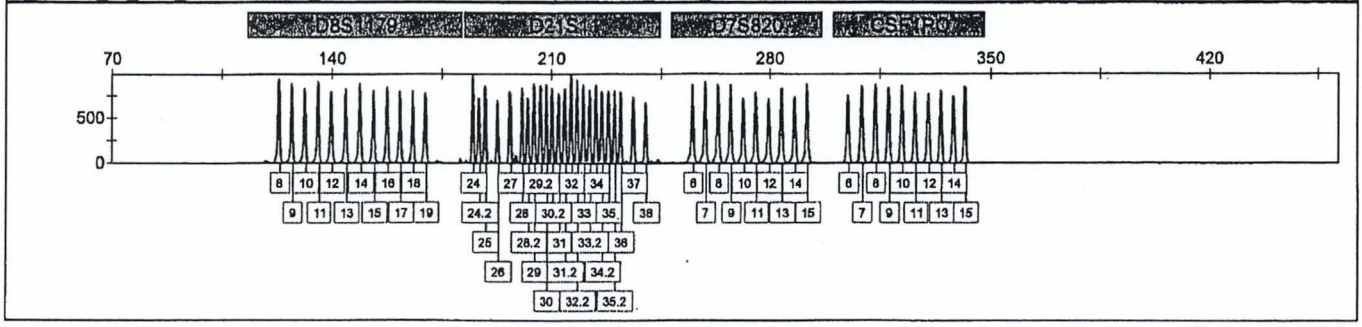
Applied Biosystems

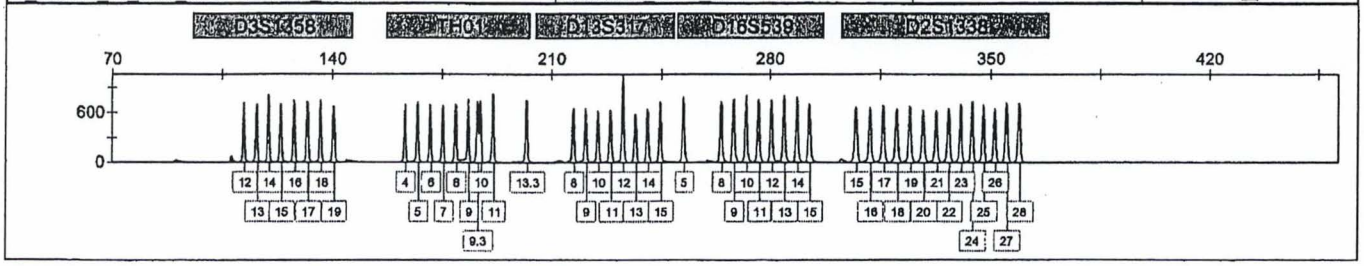
GeneMapper ID v3.2.1

GMID14_070611-EBH1_2S04-114_EBH_ID

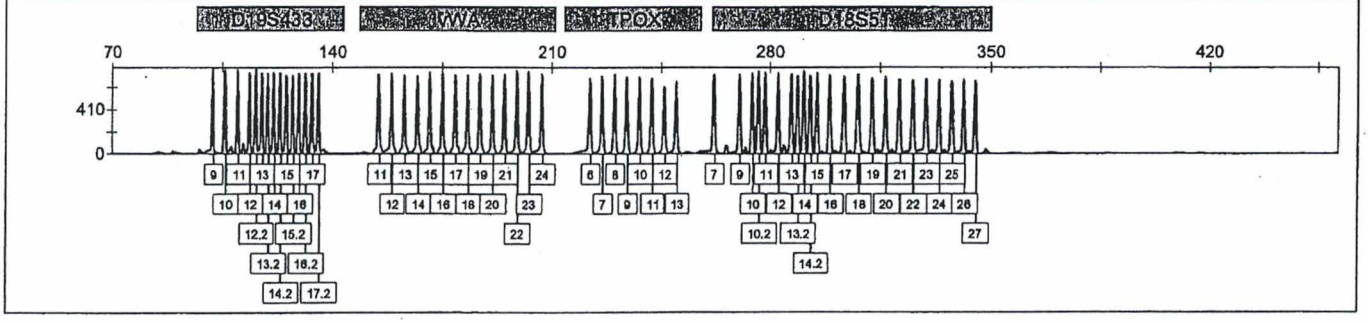
Sample File	Panel	SQO	SQ
1 Ladder ID G02 070611-EBH1 14.fsa	Identifiler Bode v2		



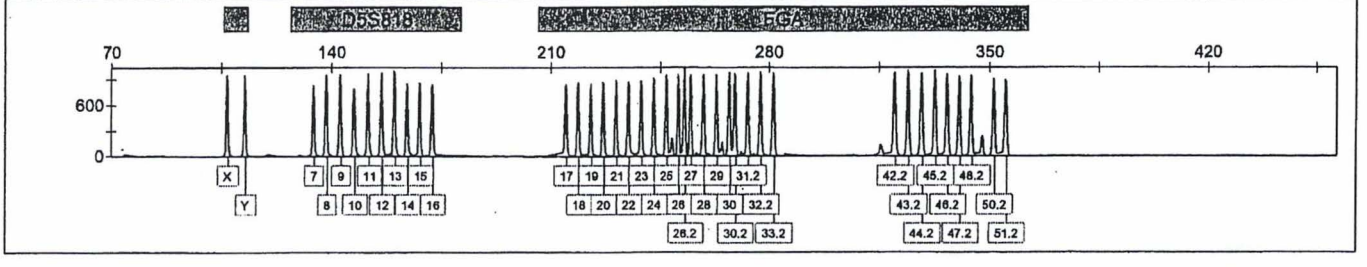
1 Ladder ID G02 070611-EBH1 14.fsa	Identifiler Bode v2		



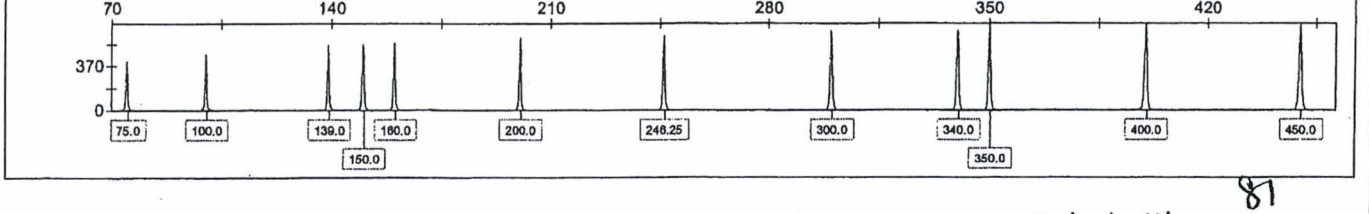
1 Ladder ID G02 070611-EBH1 14.fsa	Identifiler Bode v2		



1 Ladder ID G02 070611-EBH1 14.fsa	Identifiler Bode v2		



1 Ladder ID G02 070611-EBH1 14.fsa	Identifiler Bode v2		



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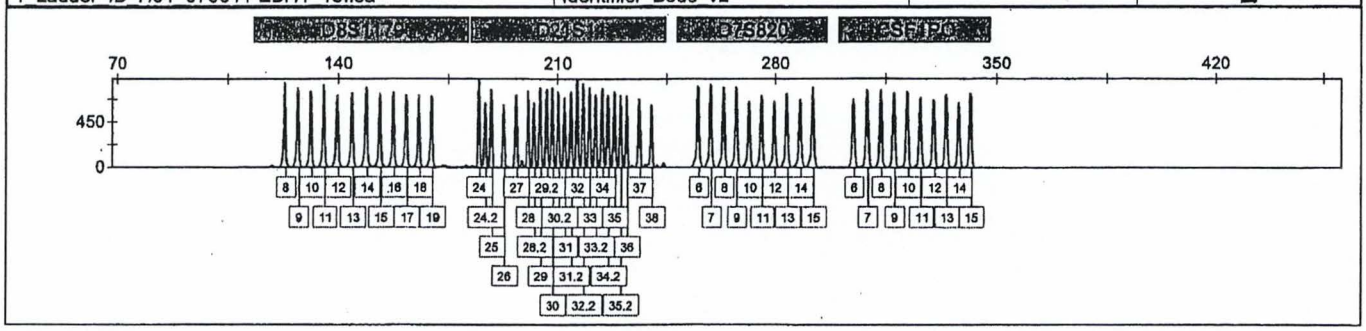
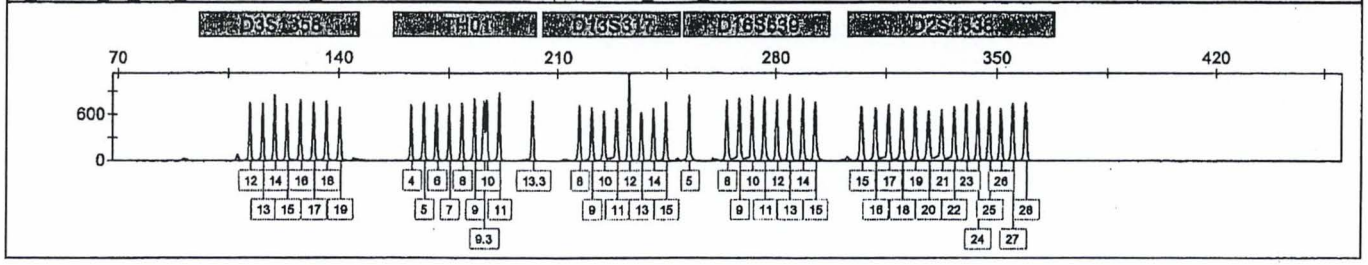
Applied Biosystems
GeneMapper ID v3.2.1

GMID14_070611-EBH1_2S04-114_EBH_ID

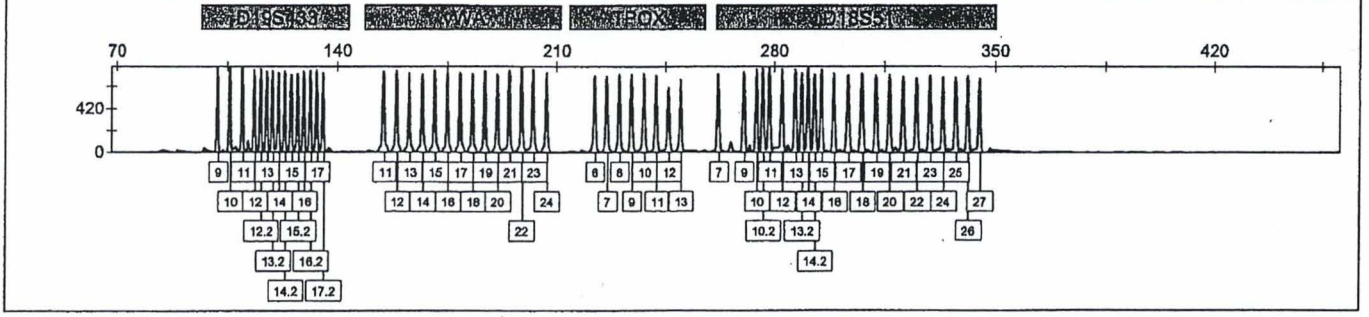
Sample File	Panel	SQO	SQ
1_Ladder_ID_H01_070611-EBH1_15.fsa	Identifiler_Bode_v2		



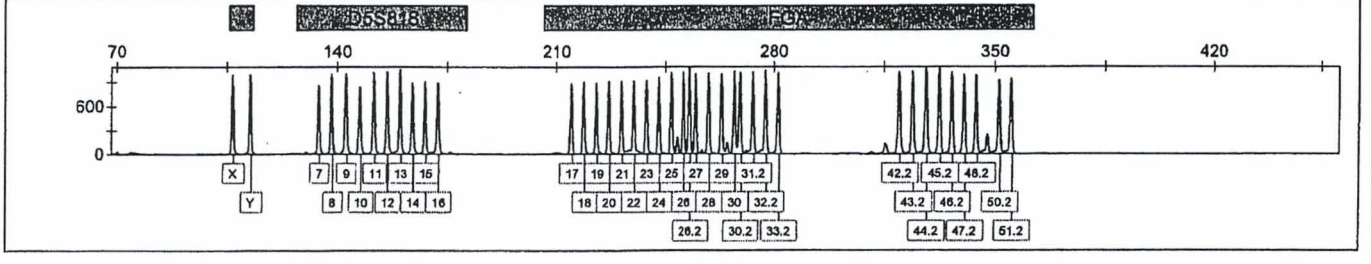
1_Ladder_ID_H01_070611-EBH1_15.fsa	Identifiler_Bode_v2		



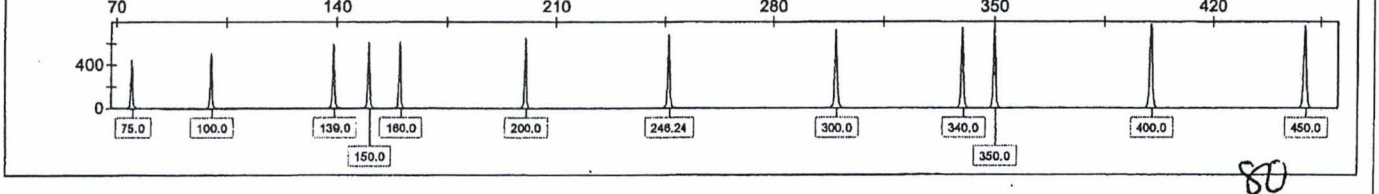
1_Ladder_ID_H01_070611-EBH1_15.fsa	Identifiler_Bode_v2		



1_Ladder_ID_H01_070611-EBH1_15.fsa	Identifiler_Bode_v2		



1_Ladder_ID_H01_070611-EBH1_15.fsa	Identifiler_Bode_v2		



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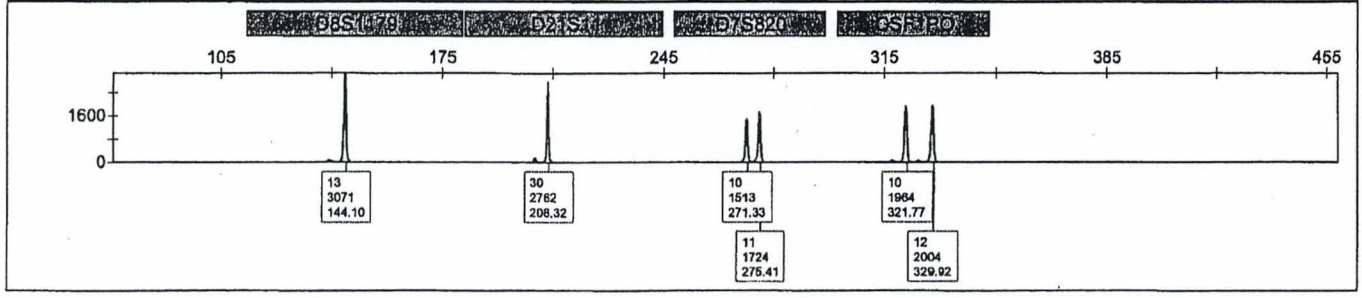
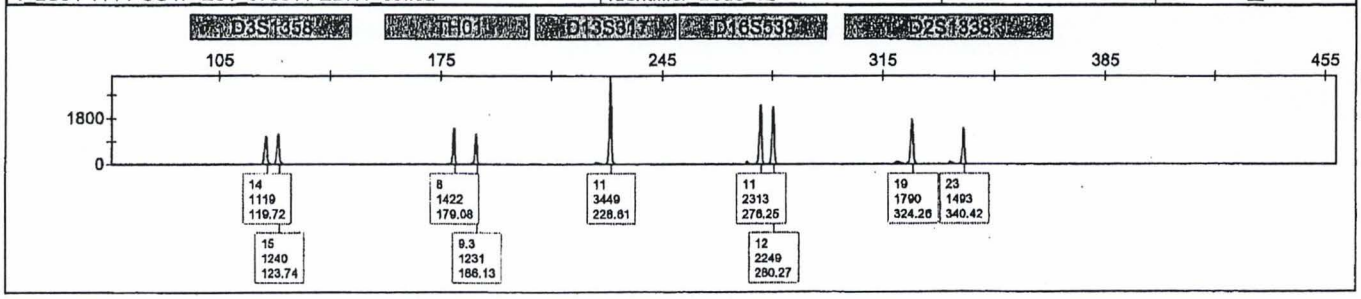
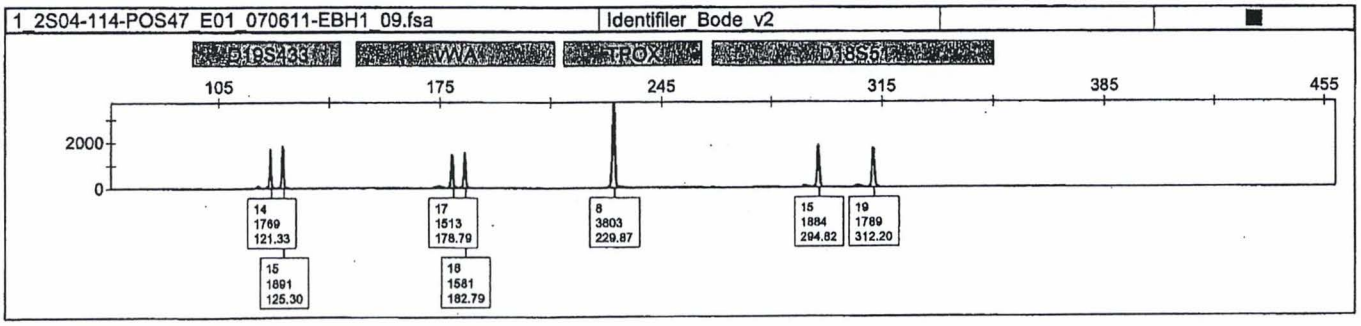
Sample File	Panel	SQO	SQ
1_2S04-114-POS47_E01_070611-EBH1_09.fsa	Identifiler_Bode_v2		



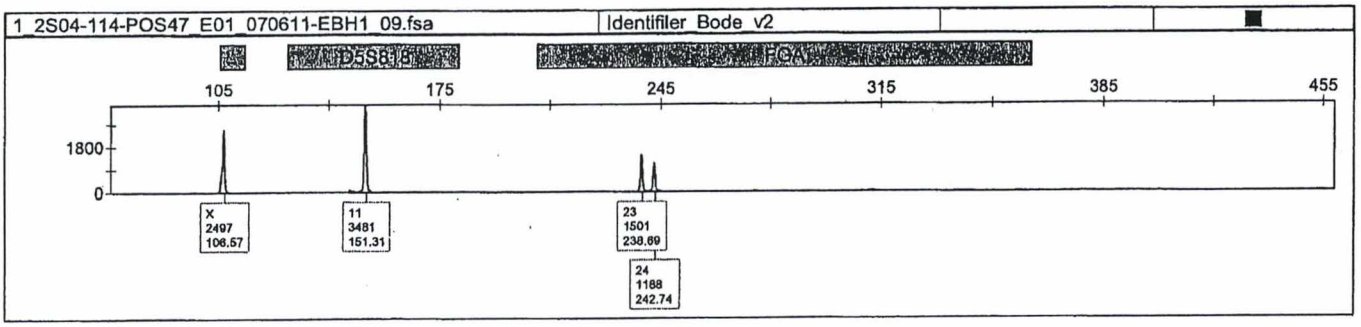
1_2S04-114-POS47_E01_070611-EBH1_09.fsa | Identifiler_Bode_v2



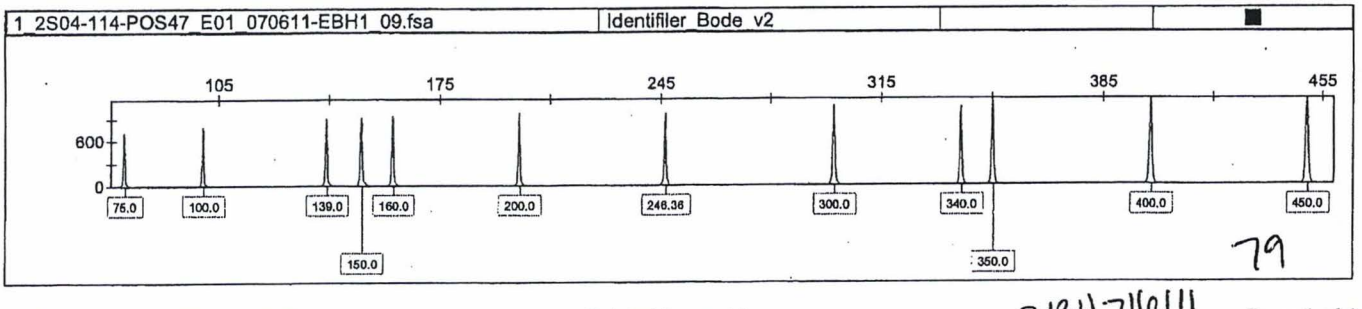
1_2S04-114-POS47_E01_070611-EBH1_09.fsa | Identifiler_Bode_v2



1_2S04-114-POS47_E01_070611-EBH1_09.fsa | Identifiler_Bode_v2



1_2S04-114-POS47_E01_070611-EBH1_09.fsa | Identifiler_Bode_v2



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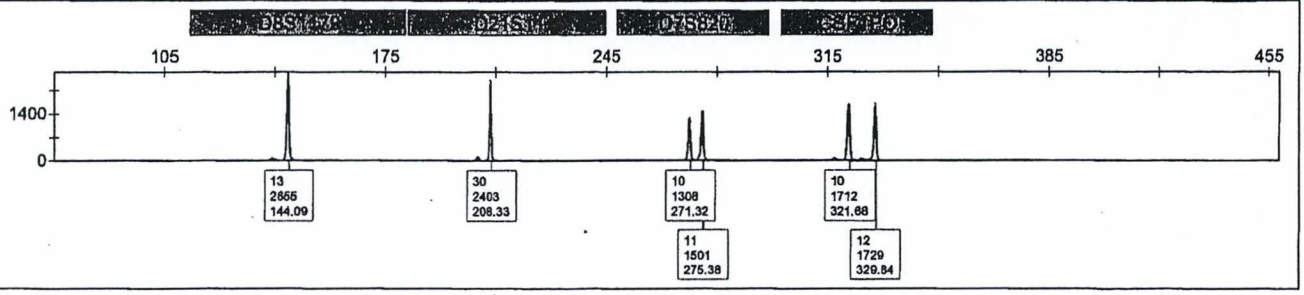
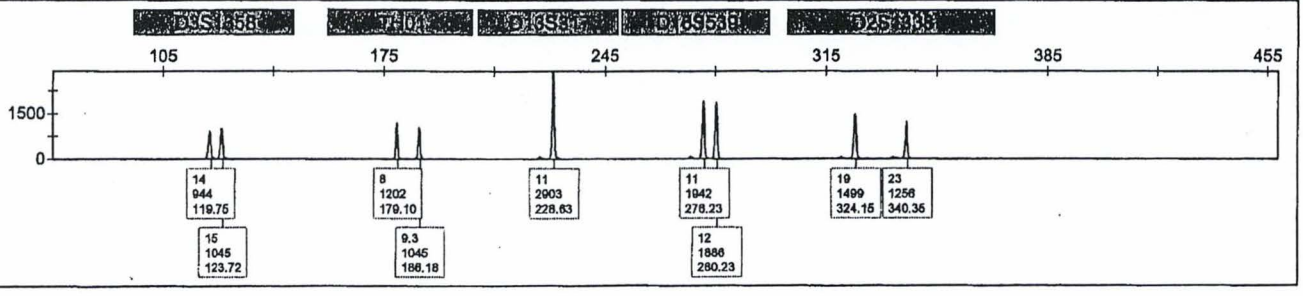
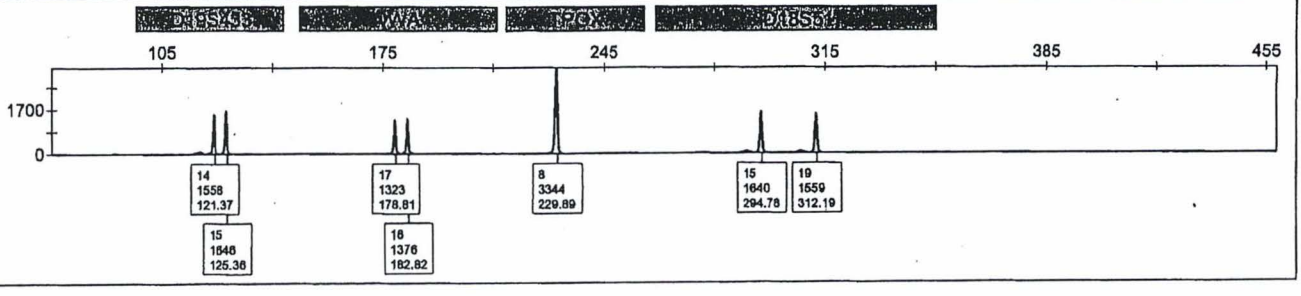
Sample File	Panel	SQO	SQ
1_2S04-114-POS47_E02_070611-EBH1_10.fsa	Identifiler_Bode_v2		



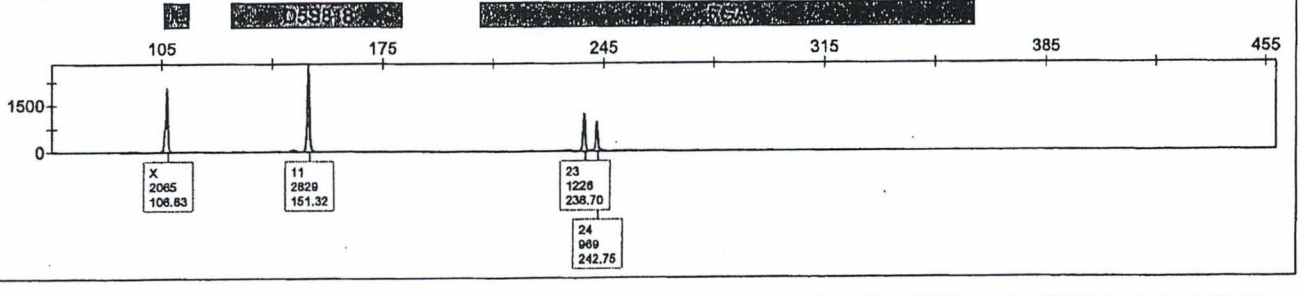
1_2S04-114-POS47_E02_070611-EBH1_10.fsa | Identifiler_Bode_v2



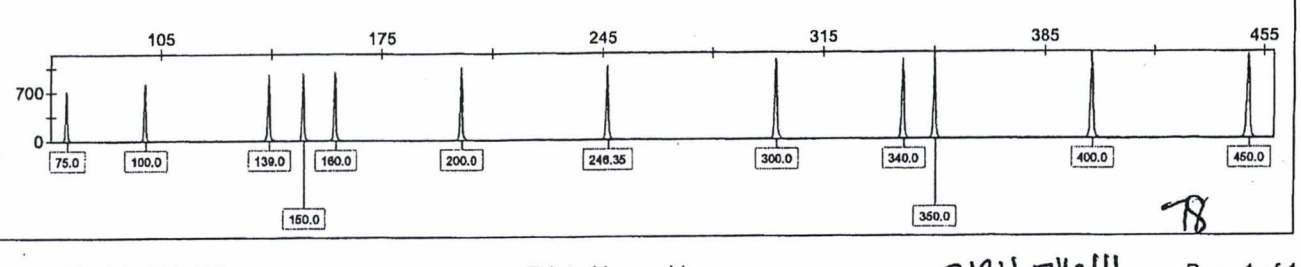
1_2S04-114-POS47_E02_070611-EBH1_10.fsa | Identifiler_Bode_v2



1_2S04-114-POS47_E02_070611-EBH1_10.fsa | Identifiler_Bode_v2



1_2S04-114-POS47_E02_070611-EBH1_10.fsa | Identifiler_Bode_v2



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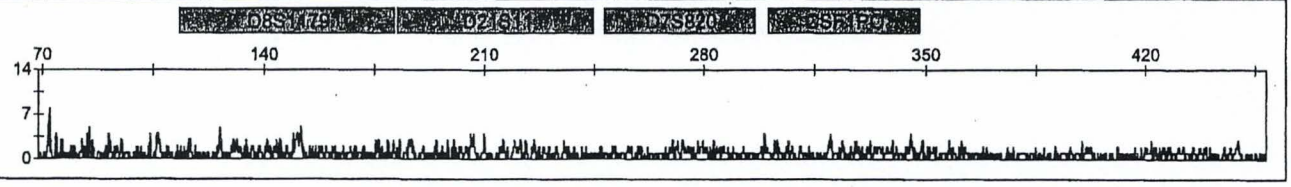
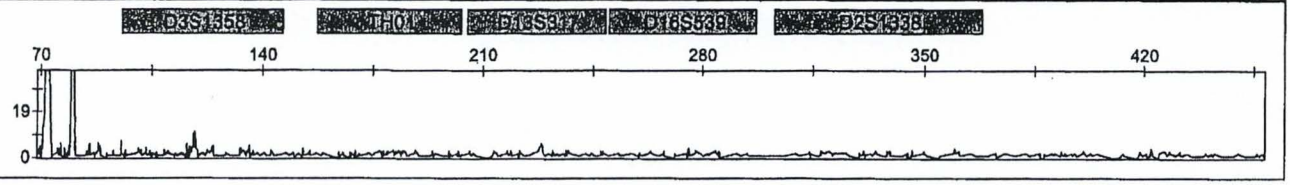
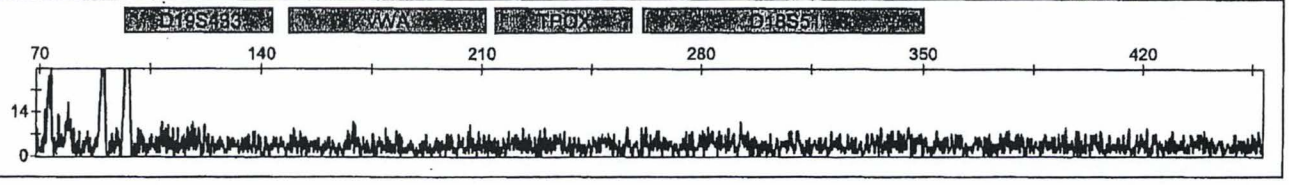
Sample File	Panel	SQO	SQ
1_2S04-114-NEG47_F02_070611-EBH1_12.fsa	Identifiler_Bode_v2		



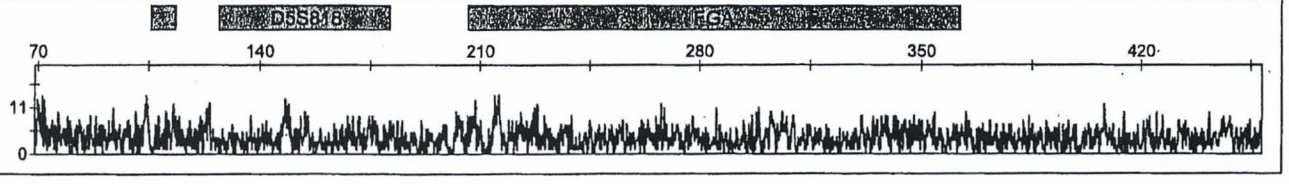
1_2S04-114-NEG47_F02_070611-EBH1_12.fsa | Identifiler_Bode_v2



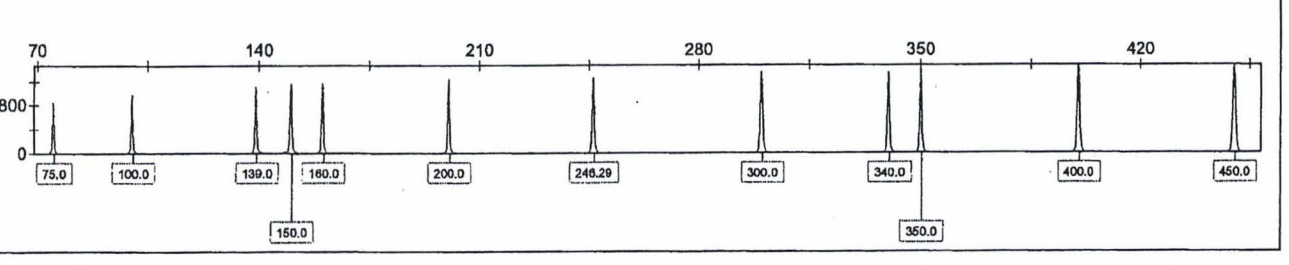
1_2S04-114-NEG47_F02_070611-EBH1_12.fsa | Identifiler_Bode_v2



1_2S04-114-NEG47_F02_070611-EBH1_12.fsa | Identifiler_Bode_v2



1_2S04-114-NEG47_F02_070611-EBH1_12.fsa | Identifiler_Bode_v2



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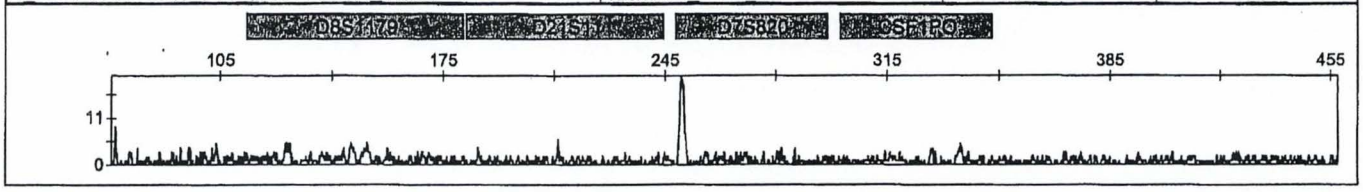
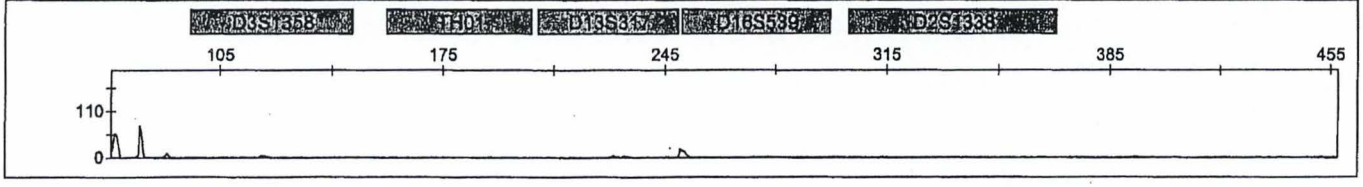
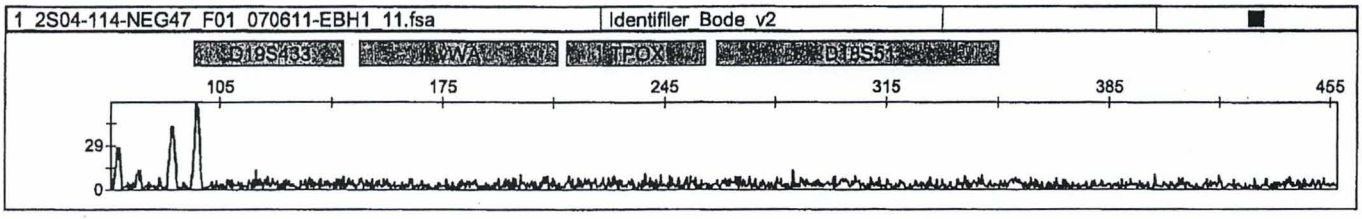
Sample File	Panel	SQO	SQ
1_2S04-114-NEG47_F01_070611-EBH1_11.fsa	Identifiler_Bode_v2		



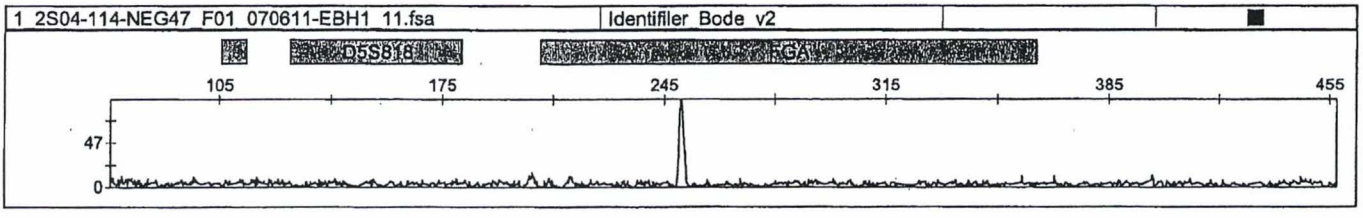
1_2S04-114-NEG47_F01_070611-EBH1_11.fsa | Identifiler_Bode_v2



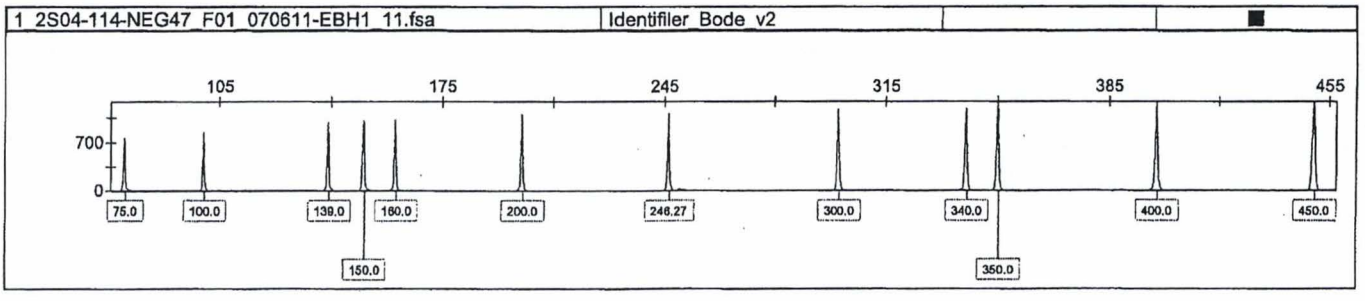
1_2S04-114-NEG47_F01_070611-EBH1_11.fsa | Identifiler_Bode_v2



1_2S04-114-NEG47_F01_070611-EBH1_11.fsa | Identifiler_Bode_v2



1_2S04-114-NEG47_F01_070611-EBH1_11.fsa | Identifiler_Bode_v2



See well F02 for duplicate load.
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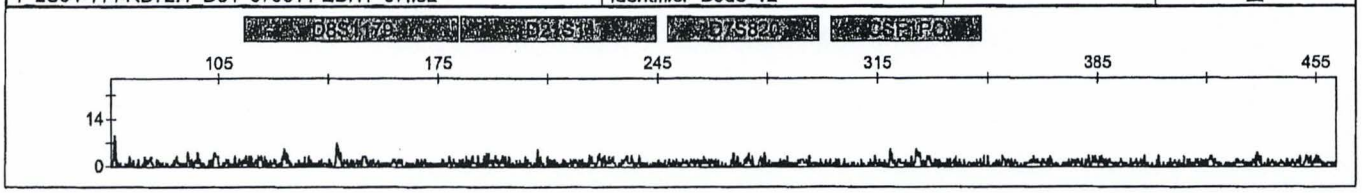
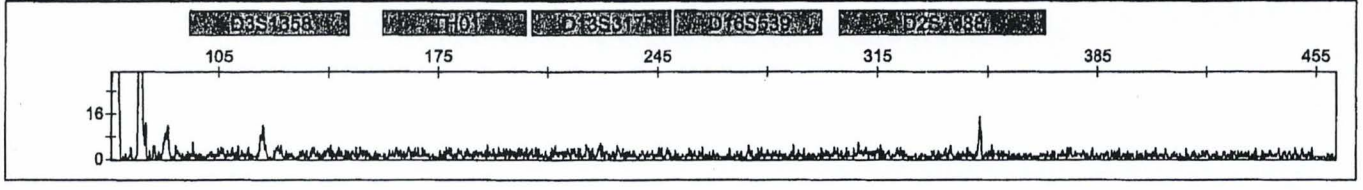
EBH 7/6/11

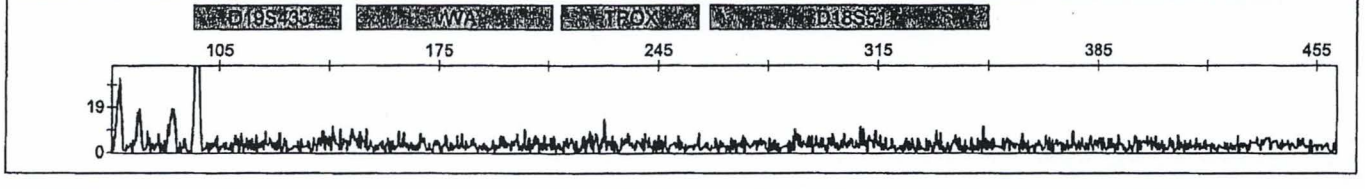
Sample File	Panel	SQO	SQ
1_2S04-114-RB72.1_D01_070611-EBH1_07.fsa	Identifiler_Bode_v2		



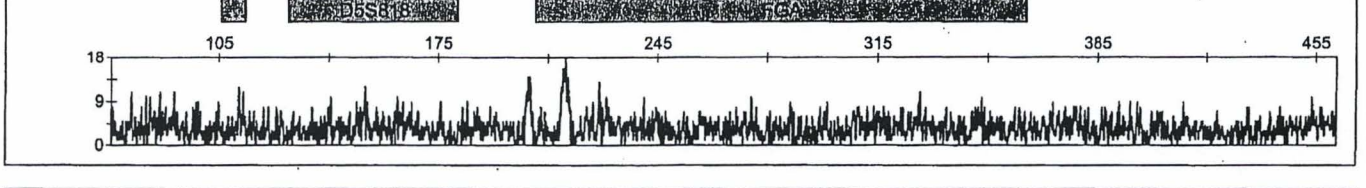
1_2S04-114-RB72.1_D01_070611-EBH1_07.fsa | Identifiler_Bode_v2



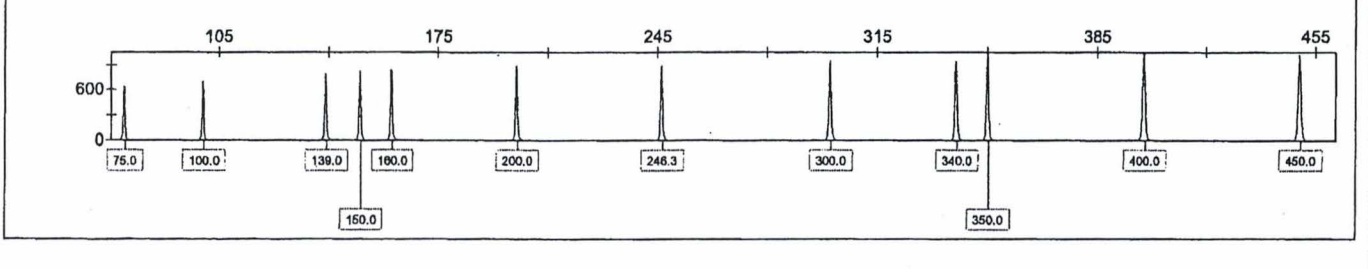
1_2S04-114-RB72.1_D01_070611-EBH1_07.fsa | Identifiler_Bode_v2



1_2S04-114-RB72.1_D01_070611-EBH1_07.fsa | Identifiler_Bode_v2



1_2S04-114-RB72.1_D01_070611-EBH1_07.fsa | Identifiler_Bode_v2



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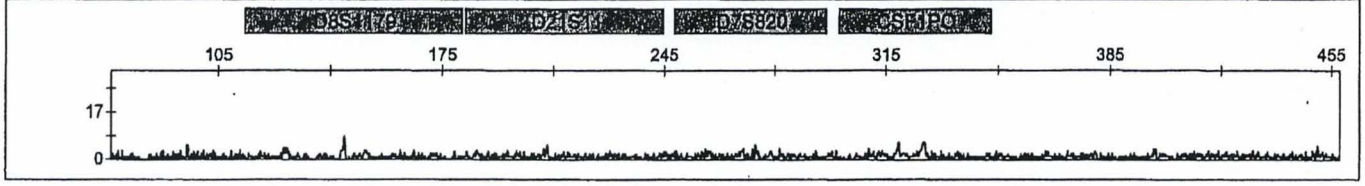
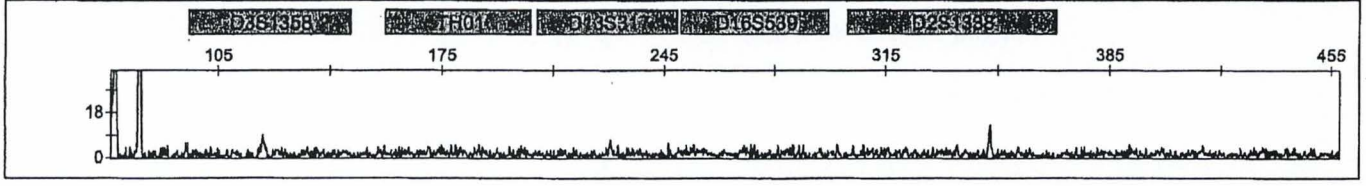
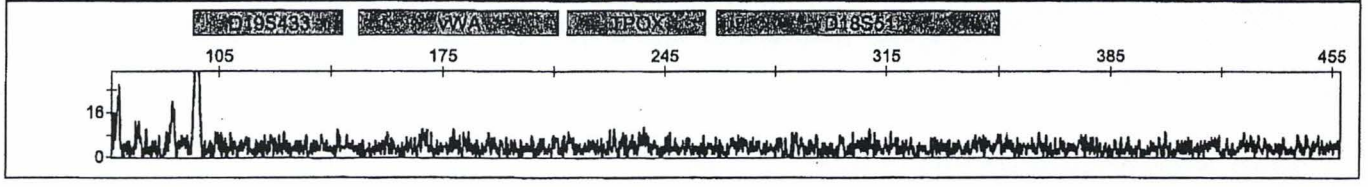
Sample File	Panel	SQO	SQ
1_2S04-114-RB72.1_D02_070611-EBH1_08.fsa	Identifiler_Bode_v2		



1_2S04-114-RB72.1_D02_070611-EBH1_08.fsa | Identifiler_Bode_v2



1_2S04-114-RB72.1_D02_070611-EBH1_08.fsa | Identifiler_Bode_v2



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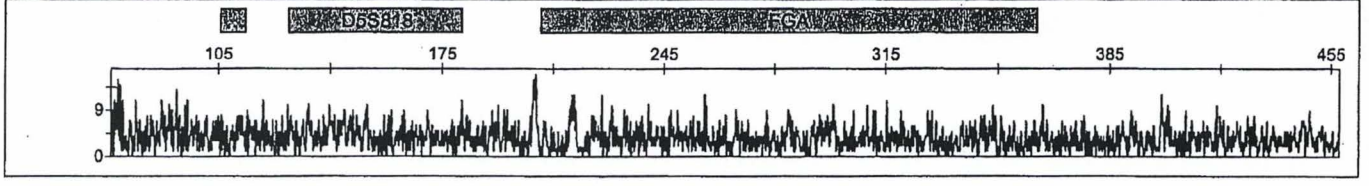

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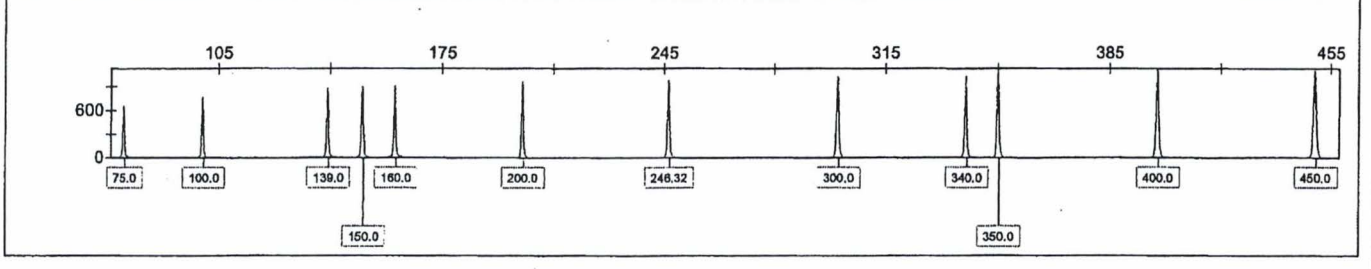


EBH 7/6/11 7.4

CE GMID Editing Sheet – ID

Tray ID: 062811-EBH1
Analyst: ASC
GMID Panel: Identifiler_Bode_v2

Shipment or Case #: 2504-114
Date: 7-6-11

Well	Edit: Locus, Base pair size - reason
D1	See casenote
D2	See casenote

Editing Key

20%: 20% filter applied (after confirming no mixtures)

-A: -A/Split peaks

AUT: single allele below minimum threshold

Artifact (non-specific)

D/I: Degraded and/or Inhibited

Dye artifact

Elevated BL: Labels placed on elevated baseline(s)

FC: Failed capillary

ILS<MIN: ILS below minimum rfu threshold

IA: Imbalanced Alleles

LOR: Loss of resolution

Matrix Issue

OL: Off ladder allele

Other: provide explanation in text box (currently using this for FDLE alleles btw. 75-99 rfu)

PU: Pullup

RFU<MIN: sample rfu below minimum threshold

RFU>MAX: sample rfu above maximum threshold

Shoulder: Shoulder peak

Sizing: incorrect sizing (eg: migration issue)

Spikes

Stutter (n-4 if other record)

9947 Positive Control Well Numbers Checked Against Known: E2, E1					
D8S1179: 13,13	D21S11: 30,30	D7S820: 10,11	CSF1PO: 10,12		
D3S1358: 14,15	TH01: 8,9.3	D13S317: 11,11	D16S539: 11,12	D2S1338: 19,23	
D19S433: 14,15	vWA: 17,18	TPOX: 8,8	D18S51: 15,19		
AMEL: X,X	D5S818: 11,11	FGA: 23,24			

ASC 7-6-11

CE GMID Editing Sheet – ID

Tray ID: 062811-EBH1
Analyst: EBH
GMID Panel: Identifiler_Bode_v2

Shipment or Case #: 2504-114
Date: 6/28/11

Well	Edit: Locus, Base pair size - reason
D02	See casenote
D01	See casenote

Editing Key

20%: 20% filter applied (after confirming no mixtures)

-A: -A/Split peaks

AUT: single allele below minimum threshold

Artifact (non-specific)

D/I: Degraded and/or Inhibited

Dye artifact

Elevated BL: Labels placed on elevated baseline(s)

FC: Failed capillary

ILS<MIN: ILS below minimum rfu threshold

IA: Imbalanced Alleles

LOR: Loss of resolution

Matrix Issue

OL: Off ladder allele

Other: provide explanation in text box (currently using this for FDLE alleles btw. 75-99 rfu)

PU: Pullup

RFU<MIN: sample rfu below minimum threshold

RFU>MAX: sample rfu above maximum threshold

Shoulder: Shoulder peak

Sizing: incorrect sizing (eg: migration issue)

Spikes

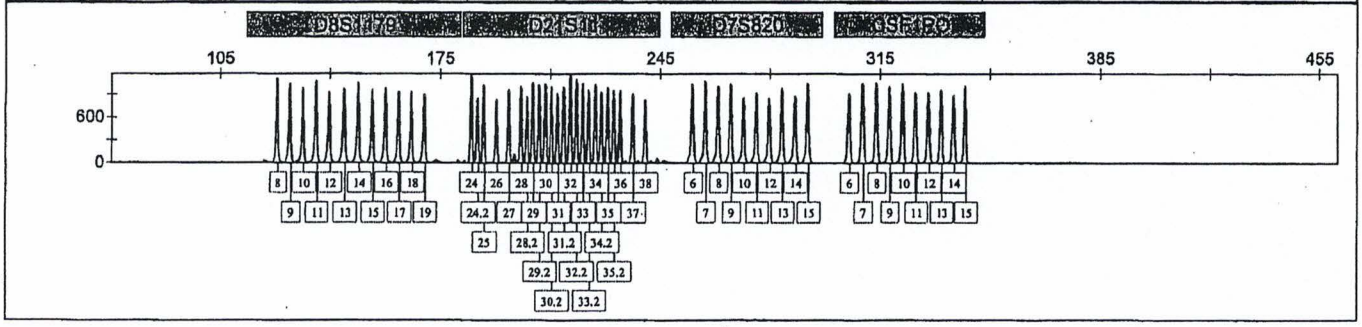
Stutter (n-4 if other record)

9947 Positive Control						
Well Numbers Checked Against Known: E01, E02						
D8S1179: 13,13	D21S11: 30,30	D7S820: 10,11	CSF1PO: 10,12			
D3S1358: 14,15	TH01: 8,9.3	D13S317: 11,11	D16S539: 11,12	D2S1338: 19,23		
D19S433: 14,15	vWA: 17,18	TPOX: 8,8	D18S51: 15,19			
AMEL: X,X	D5S818: 11,11	FGA: 23,24				

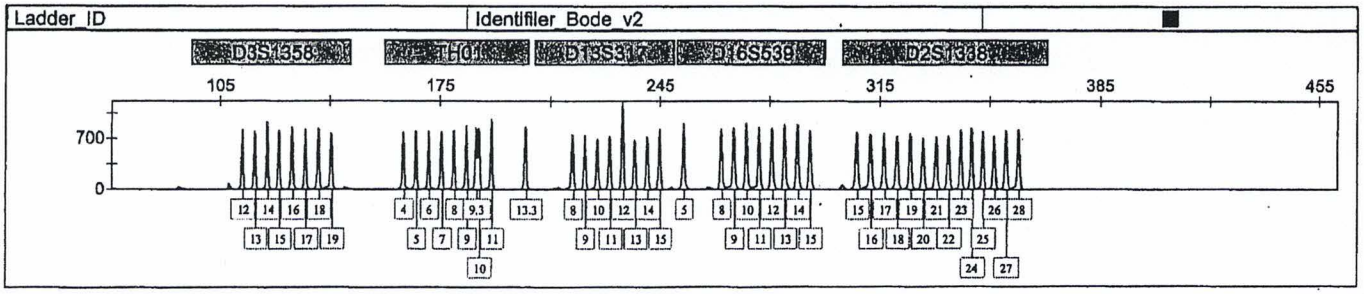
TL

EBH
6/28/11

Sample Name	Panel	SQ
Ladder_ID	Identifiler_Bode_v2	



Ladder_ID	Identifiler_Bode_v2



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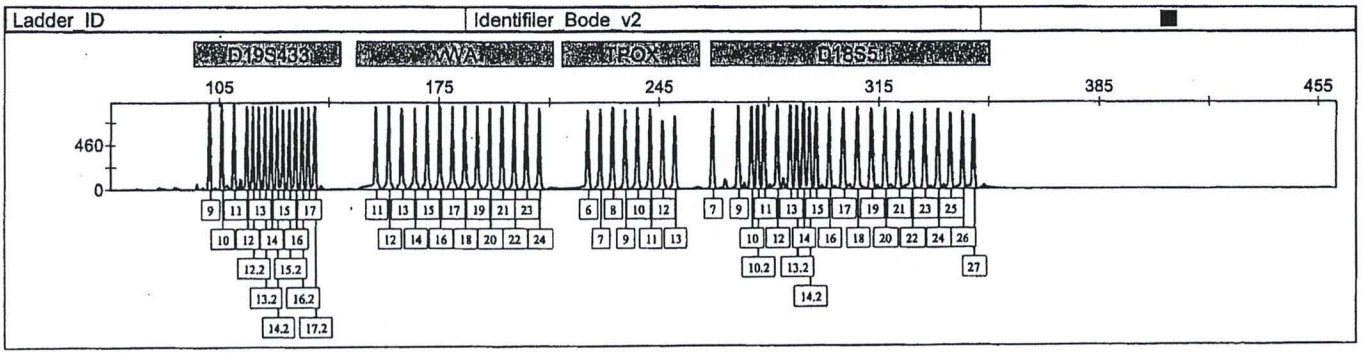
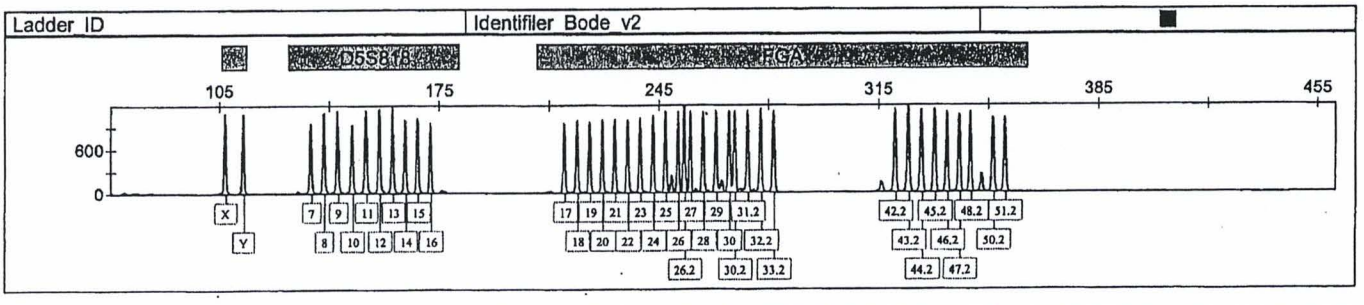


Ladder_ID	Identifiler_Bode_v2



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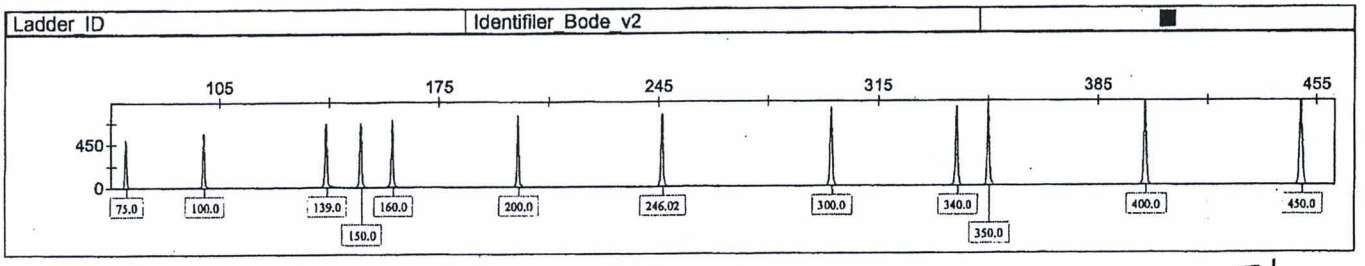
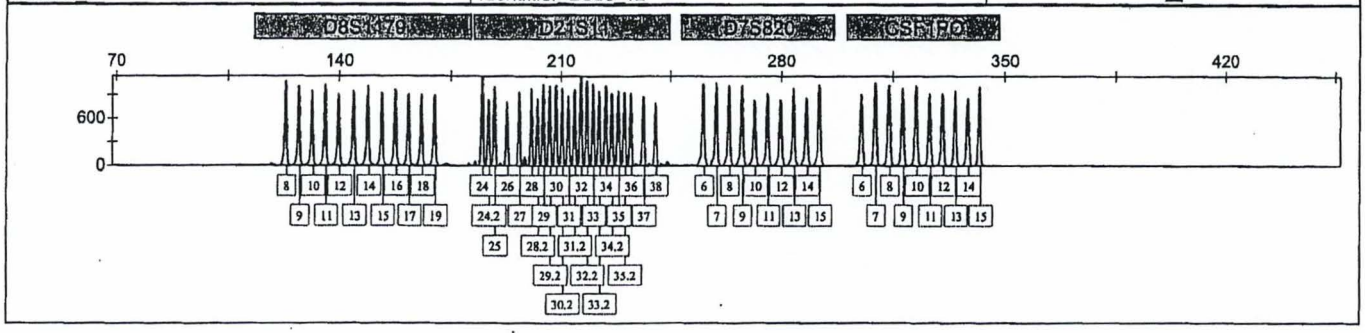


Applied Biosystems

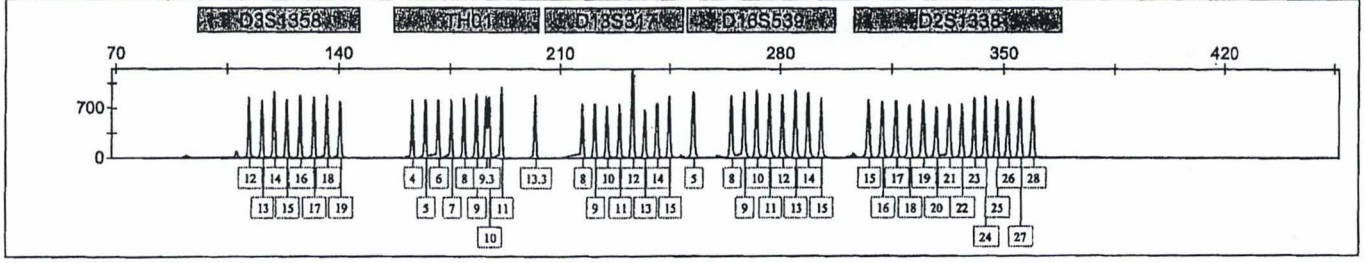
GeneMapper ID v3.2.1

GMID14_062811-EBH1_2S04-114_EBH_ID

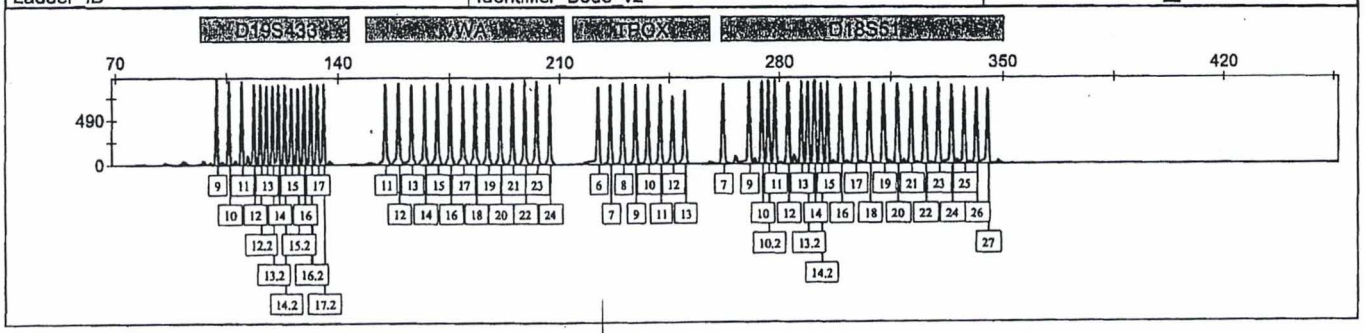
Sample Name	Panel	SQ
Ladder_ID	Identifiler_Bode_v2	



Ladder_ID | Identifiler_Bode_v2



Ladder_ID | Identifiler_Bode_v2



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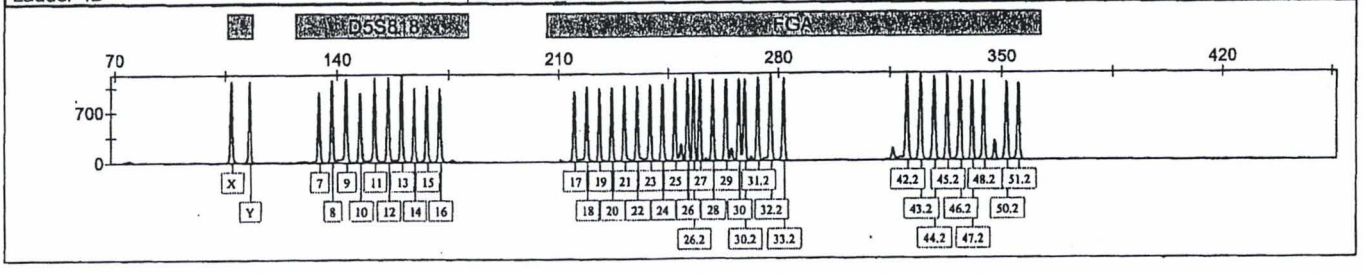
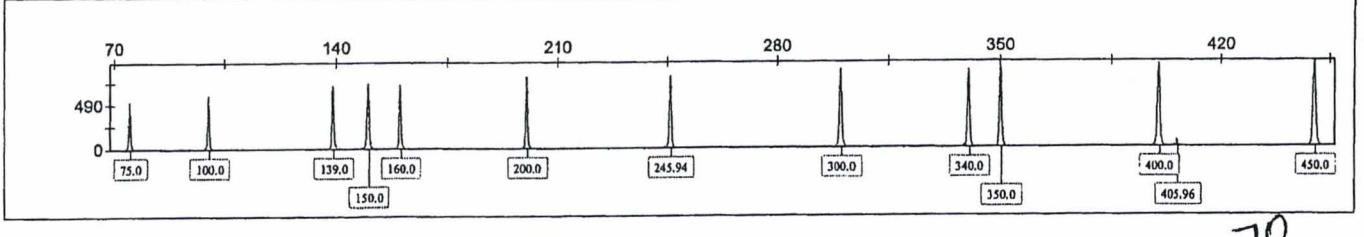


Ladder_ID | Identifiler_Bode_v2



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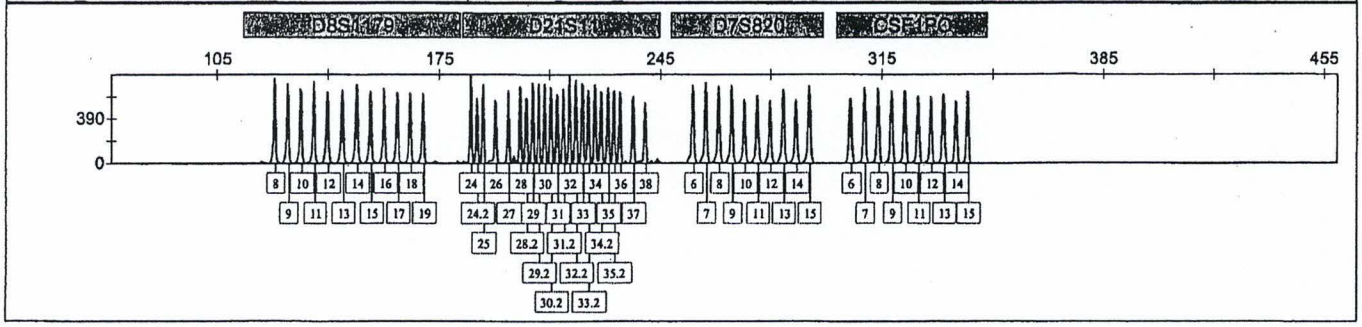
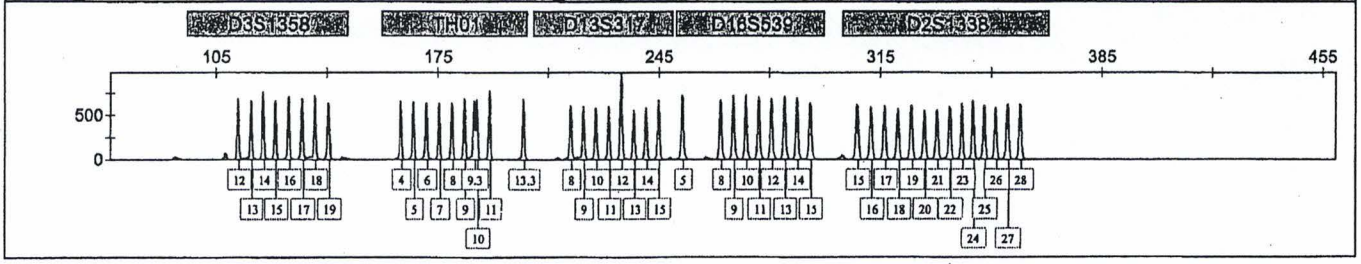
EBH 6/28/11

Sample Name	Panel	SQ
Ladder_ID	Identifiler_Bode_v2	



Ladder_ID	Identifiler_Bode_v2	



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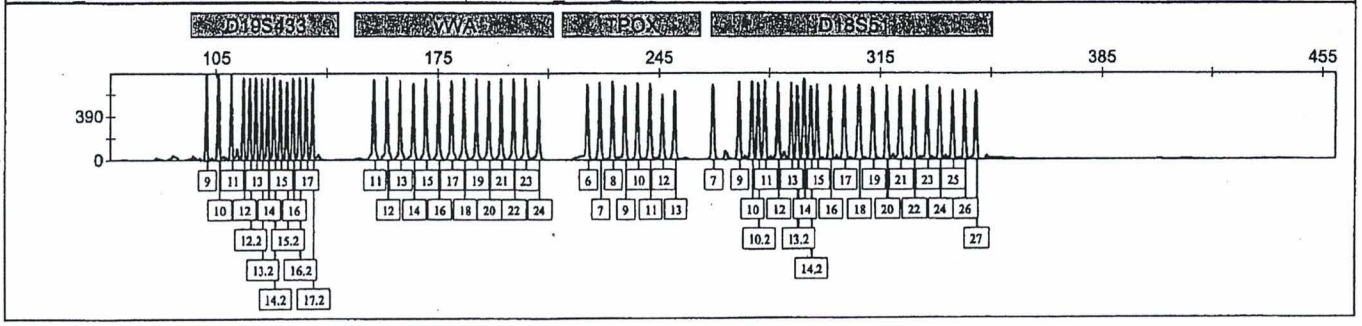
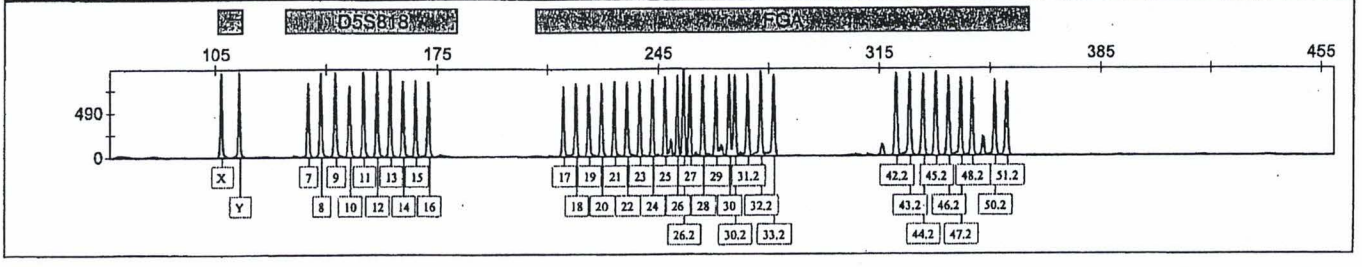


Ladder_ID	Identifiler_Bode_v2	



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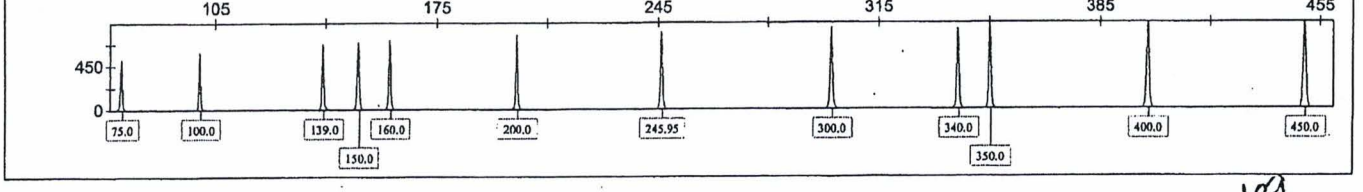
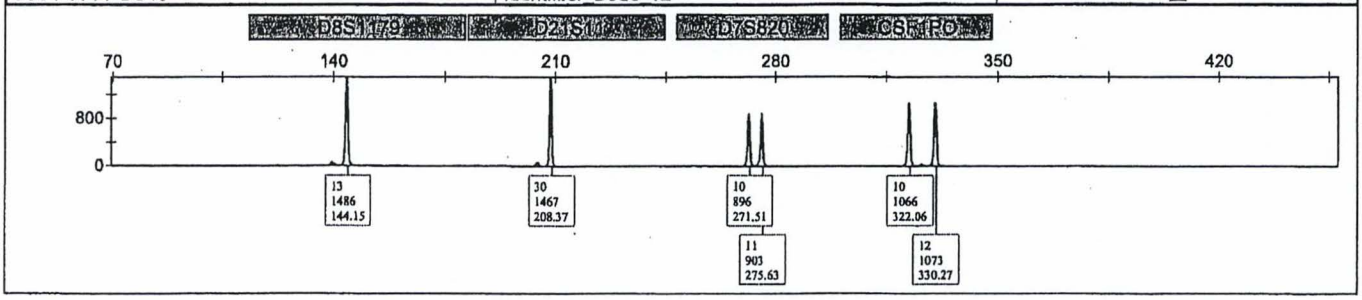


EBH 6/28/11

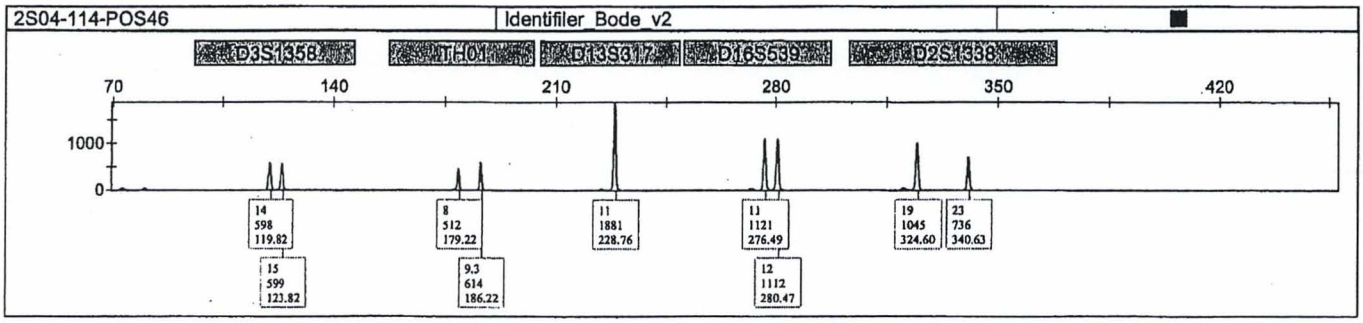
Applied Biosystems
GeneMapper ID v3.2.1

GMID14_062811-EBH1_2S04-114_EBH_ID

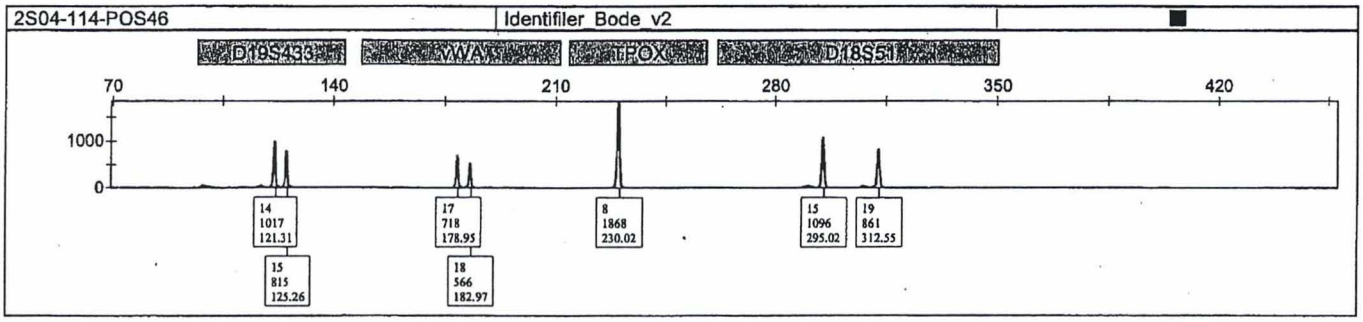
Sample Name	Panel	SQ
2S04-114-POS46	Identifiler_Bode_v2	



2S04-114-POS46	Identifiler_Bode_v2	



2S04-114-POS46	Identifiler_Bode_v2	



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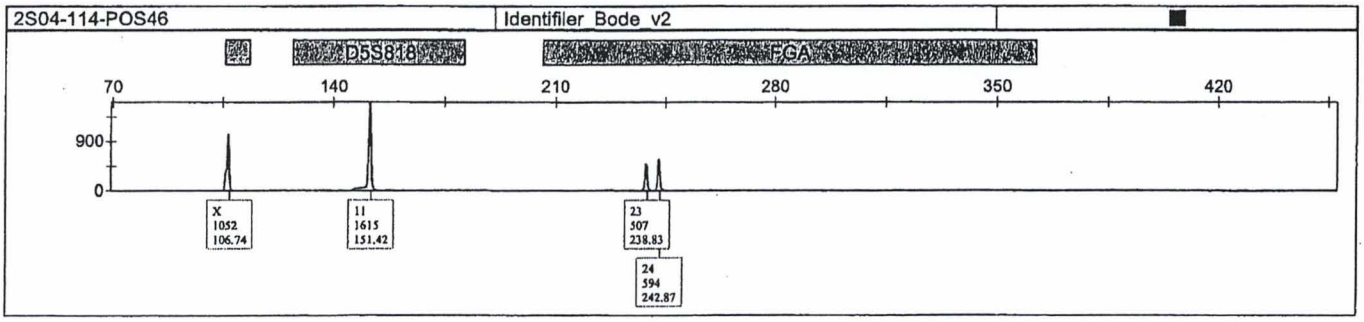

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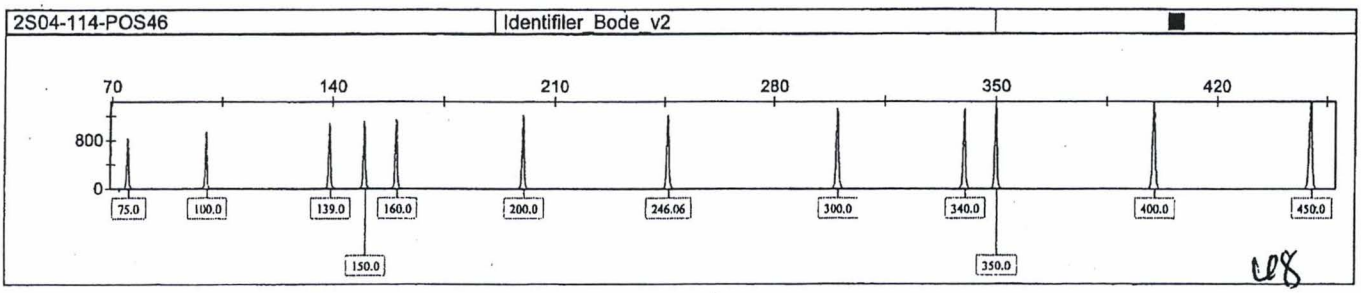
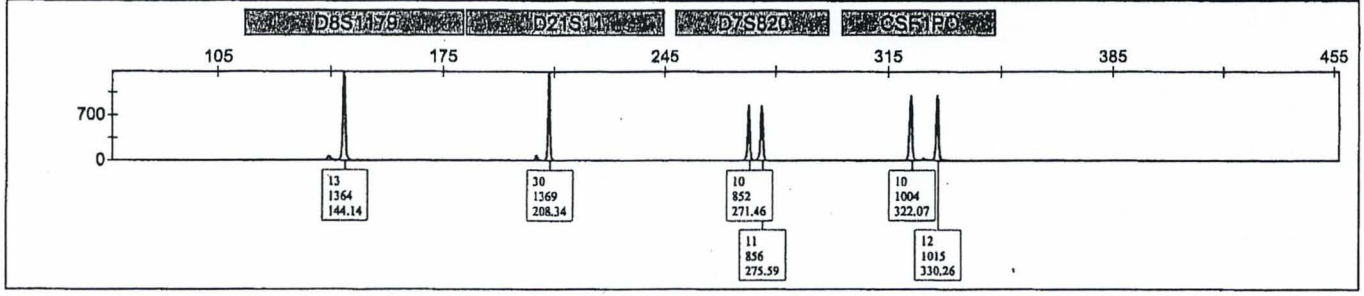


Applied Biosystems

GeneMapper ID v3.2.1

GMID14_062811-EBH1_2S04-114_EBH_ID

Sample Name	Panel	SQ
2S04-114-POS46	Identifiler_Bode_v2	



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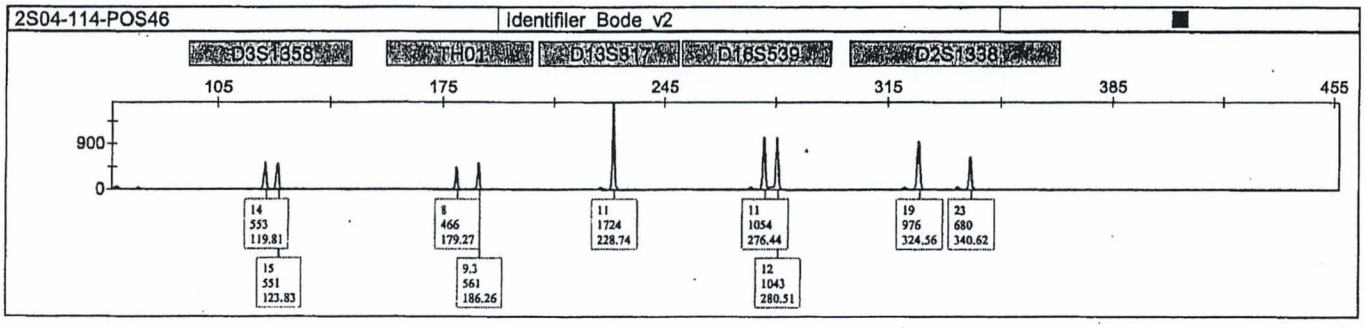

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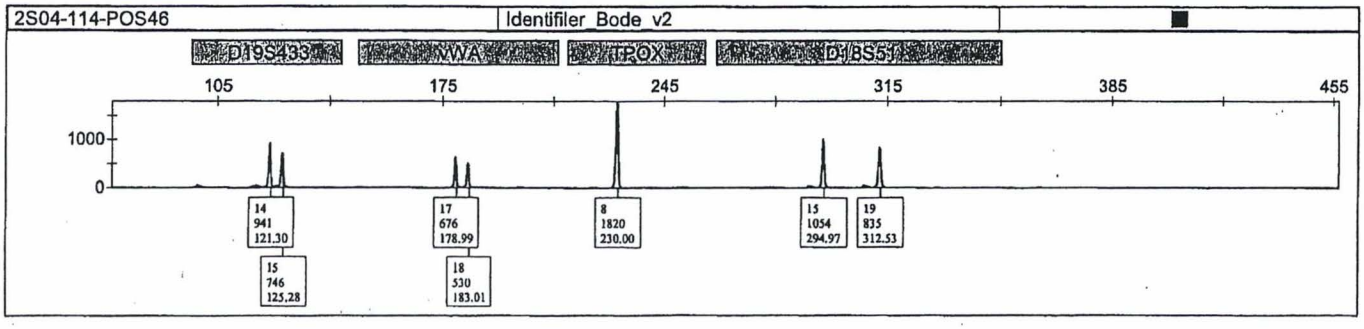

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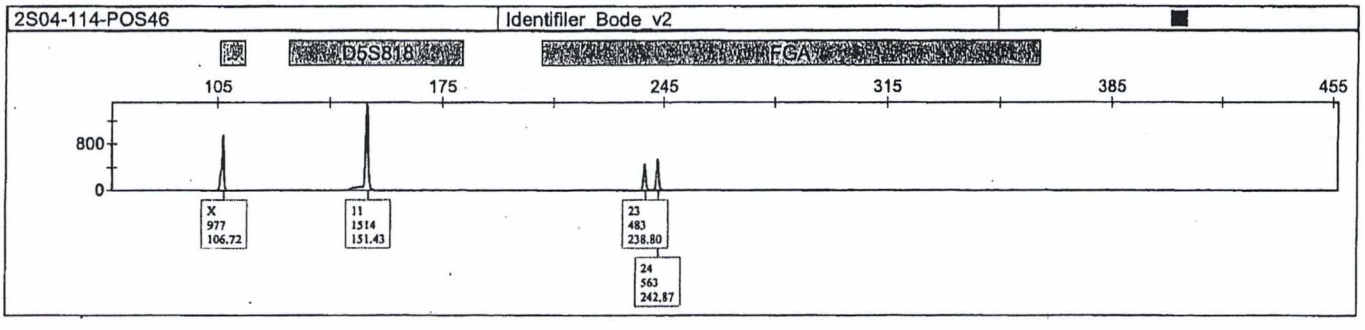

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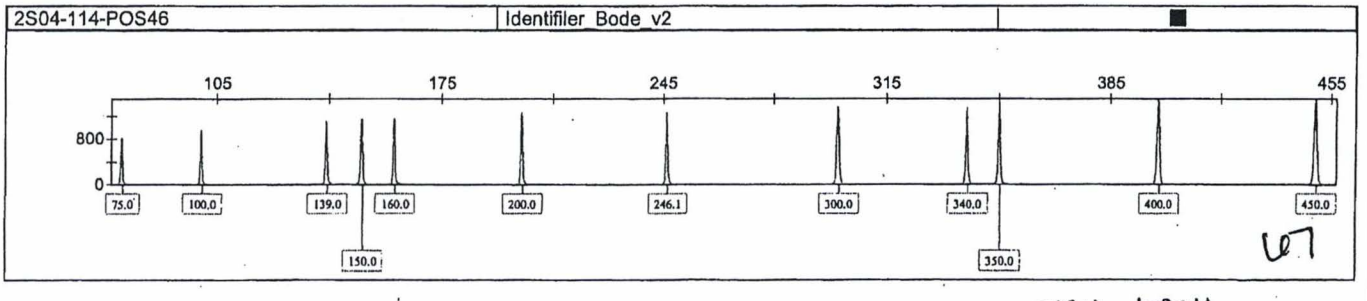

Sample Name	Panel	SQ
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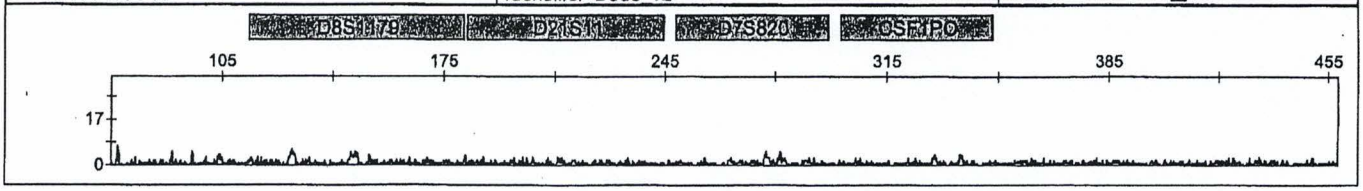

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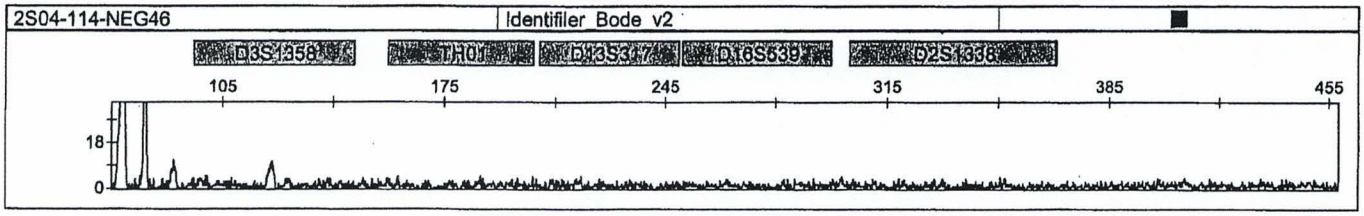

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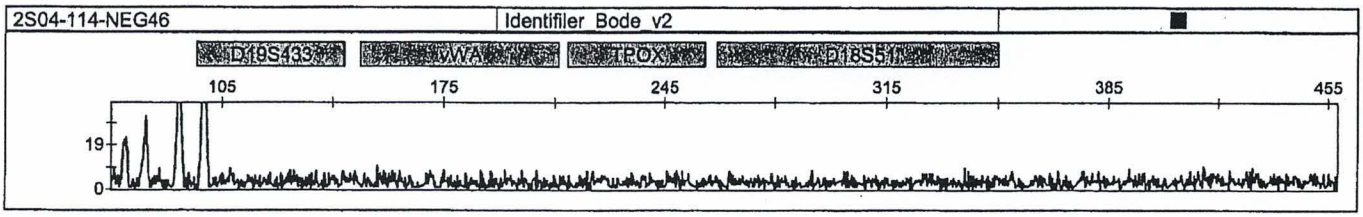

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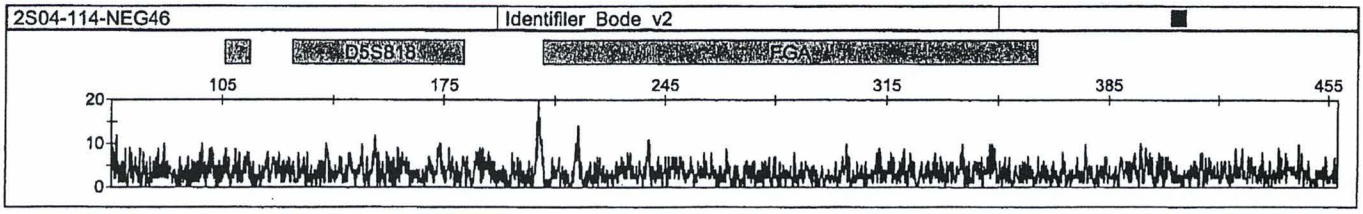

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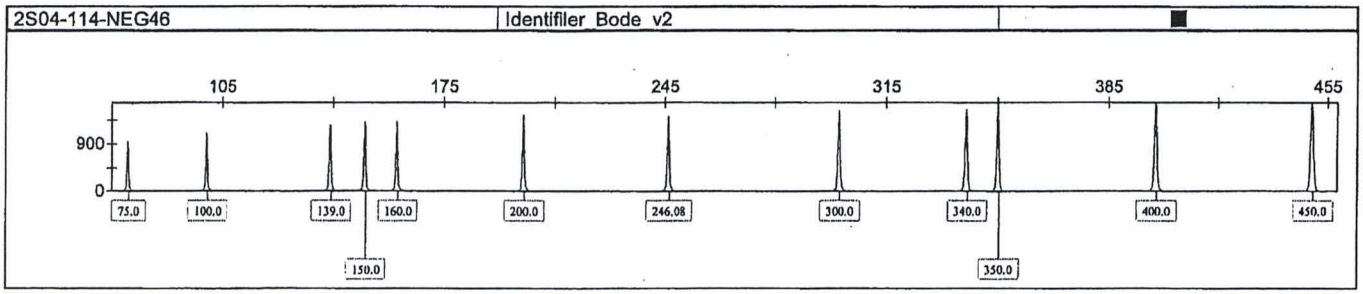
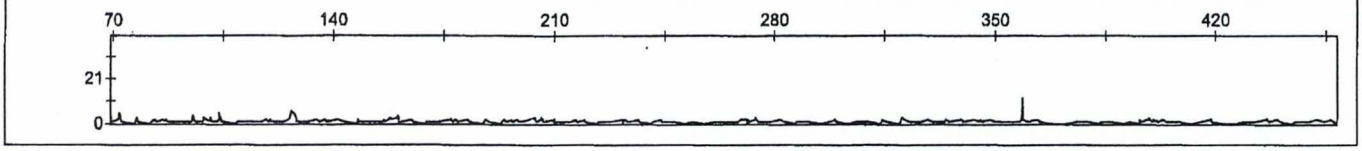


Applied Biosystems

GeneMapper ID v3.2.1

GMID14_062811-EBH1_2S04-114_EBH_ID

Sample Name	Panel	SQ
2S04-114-NEG46	Identifiler_Bode_v2	



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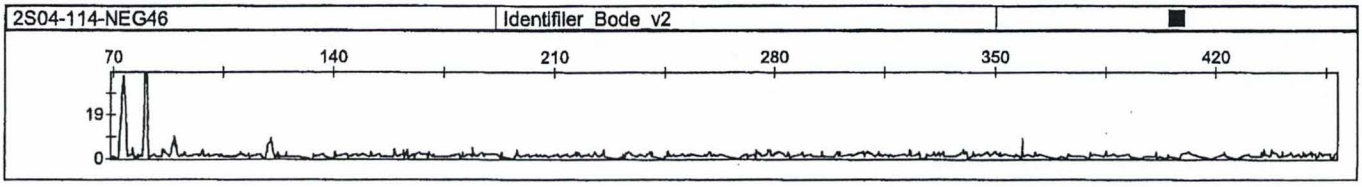

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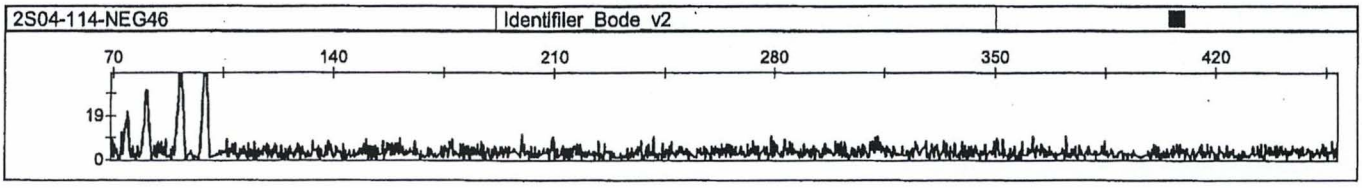

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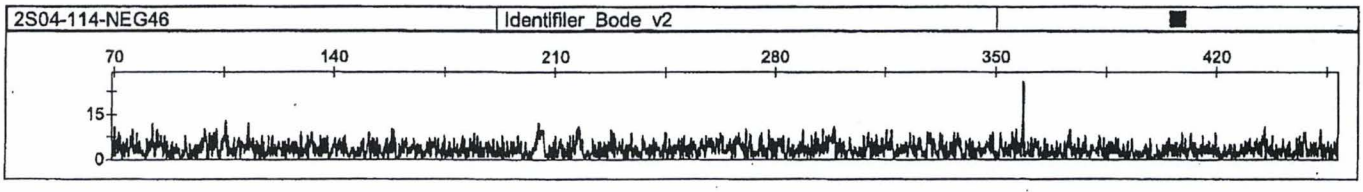

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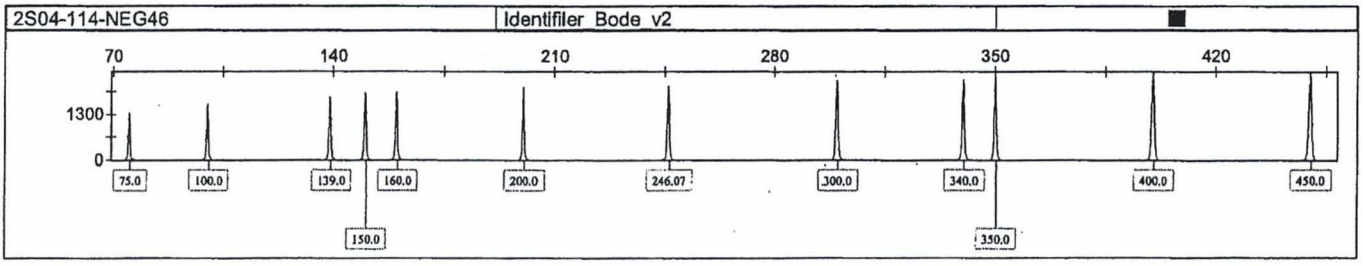

05

EBH 6/28/11

Applied Biosystems
GeneMapper ID v3.2.1

GMID14_062811-EBH1_2S04-114_EBH_ID

Sample Name	Panel	SQ
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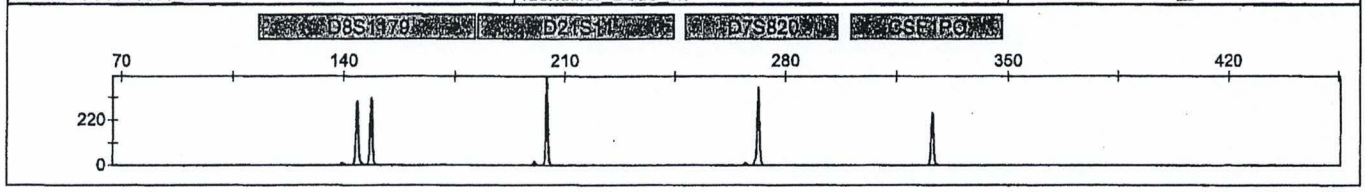

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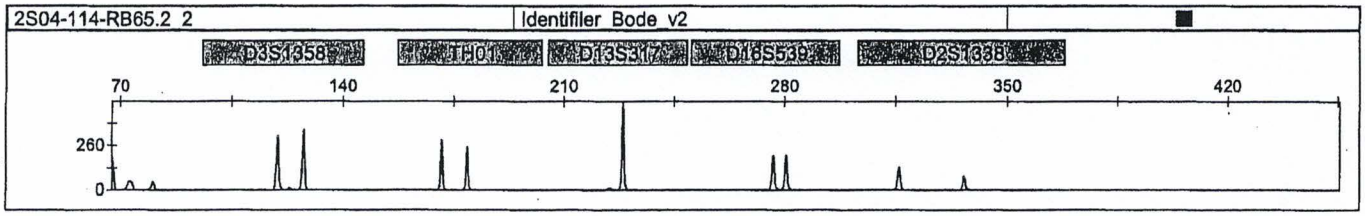

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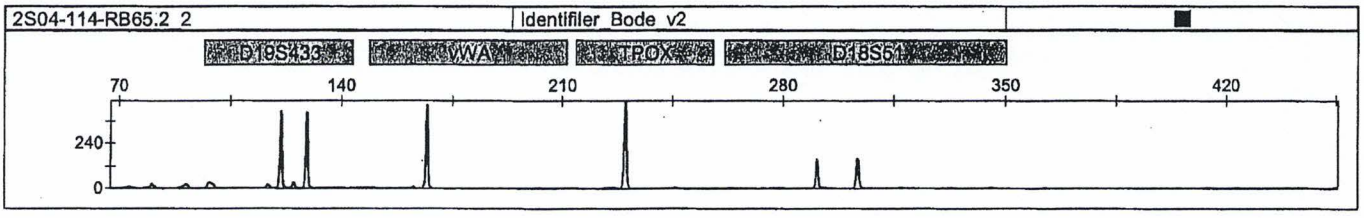

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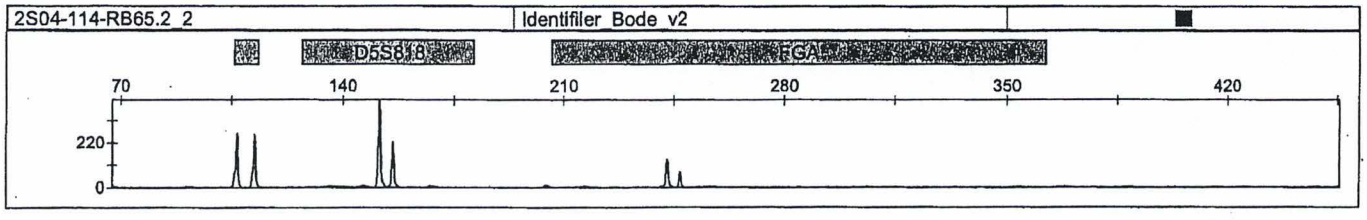
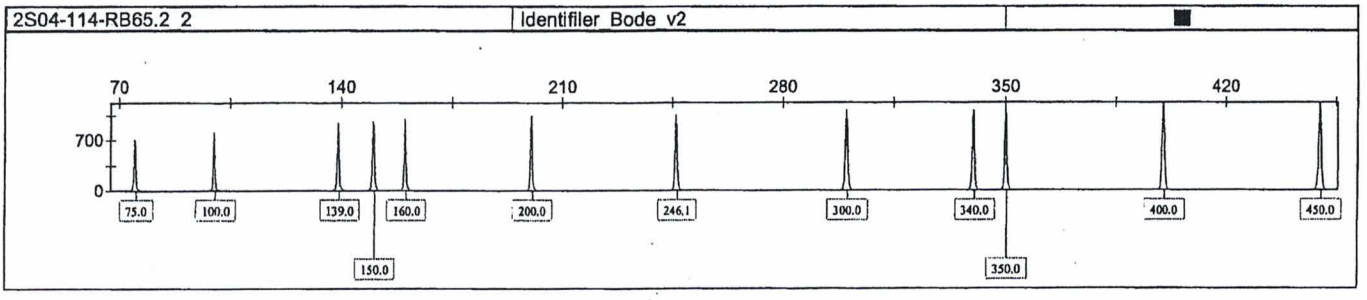


2S04-114-RB65.2_2 | Identifiler_Bode_v2



See casenote

EBH 7/6/11

EBH 6/28/11

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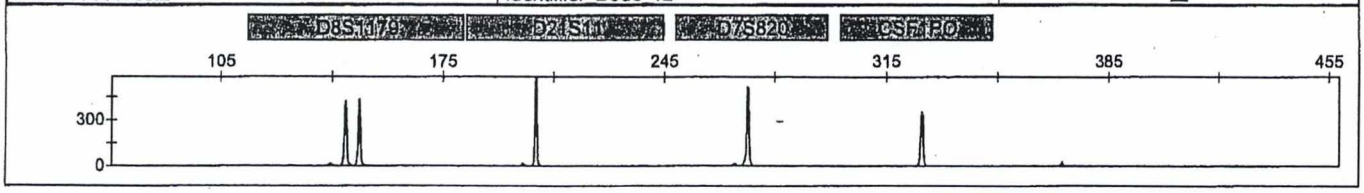
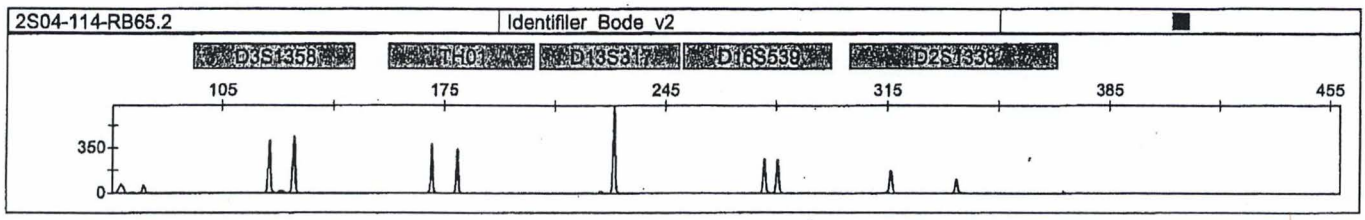
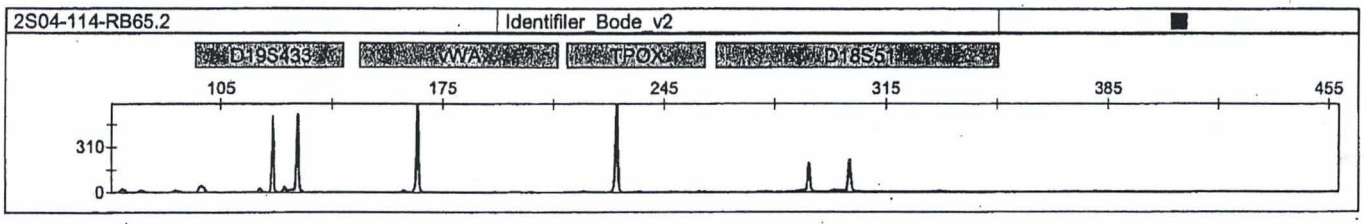
Sample Name	Panel	SQ
2S04-114-RB65.2	Identifiler_Bode_v2	



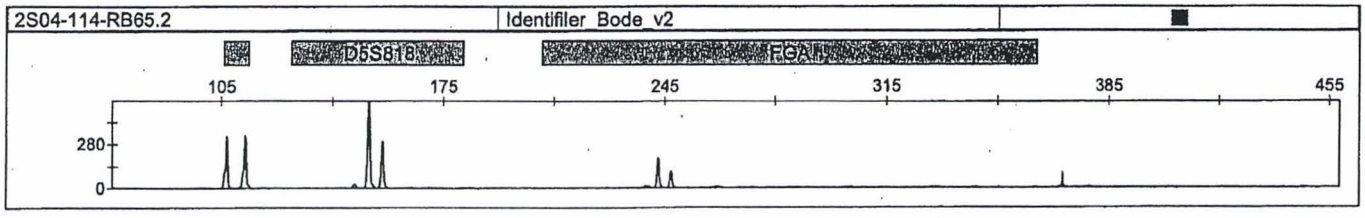
2S04-114-RB65.2	Identifiler_Bode_v2	



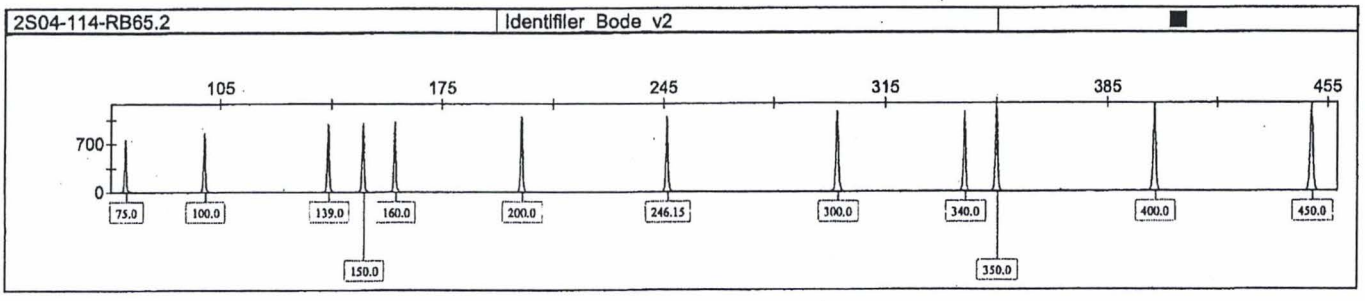
2S04-114-RB65.2	Identifiler_Bode_v2	



2S04-114-RB65.2	Identifiler_Bode_v2	



2S04-114-RB65.2	Identifiler_Bode_v2	



See casenote

EBH 7/6/11

L03

EBH 6/28/11

CE GMID Editing Sheet – ID

Tray ID: 062711-EB#1
Analyst: ASC
GMID Panel: Identifiler_Bode_v2

Shipment or Case #: 2504114
Date: 7/6-11

Well	Edit: Locus, Base pair size - reason
H2	ILS LMIN
E1	see casenote
F1	see casenote

Editing Key

20%: 20% filter applied (after confirming no mixtures)

-A, -A/Split peaks

AUT: single allele below minimum threshold

Artifact (non-specific)

D/I Degraded and/or Inhibited

Dye artifact

Elevated BL. Labels placed on elevated baseline(s)

FC: Failed capillary

ILS<MIN: ILS below minimum rfu threshold

IA: Imbalanced Alleles

LOR: Loss of resolution

Matrix Issue

OL: Off ladder allele

Other: provide explanation in text box (currently using this for FDLE alleles btw 75-99 rfu)

PU: Pullup

RFU<MIN: sample rfu below minimum threshold

RFU>MAX sample rfu above maximum threshold

Shoulder Shoulder peak

Sizing incorrect sizing (eg: migration issue)

Spikes

Stutter (n-4 if other record)

9947 Positive Control
Well Numbers Checked Against Known: E2, F2

D8S1179: 13,13	D21S11: 30,30	D7S820: 10,11	CSF1PO: 10,12		
D3S1358: 14,15	TH01: 8,9.3	D13S317: 11,11	D16S539: 11,12	D2S1338: 19,23	
D19S433: 14,15	vWA: 17,18	TPOX: 8,8	D18S51: 15,19		
AMEL: X,X	D5S818: 11,11	FGA: 23,24			

02

ASC 7/6-11

CE GMID Editing Sheet – ID

Tray ID: 062711-EBH1
Analyst: EBH
GMID Panel: Identifiler_Bode_v2

Shipment or Case #: 2304-114
Date: 6/27/11

Well	Edit: Locus, Base pair size - reason
H02	ISL<MIN
E01	See casenote
F01	See casenote

Editing Key

20%: 20% filter applied (after confirming no mixtures)

-A: -A/Split peaks

AUT: single allele below minimum threshold

Artifact (non-specific)

D/I: Degraded and/or Inhibited

Dye artifact

Elevated BL: Labels placed on elevated baseline(s)

FC: Failed capillary

ILS<MIN: ILS below minimum rfu threshold

IA: Imbalanced Alleles

LOR: Loss of resolution

Matrix Issue

OL: Off ladder allele

Other: provide explanation in text box (currently using this for FDLE alleles btw. 75-99 rfu)

PU: Pullup

RFU<MIN: sample rfu below minimum threshold

RFU>MAX: sample rfu above maximum threshold

Shoulder: Shoulder peak

Sizing: incorrect sizing (eg: migration issue)

Spikes

Stutter (n-4 if other record)

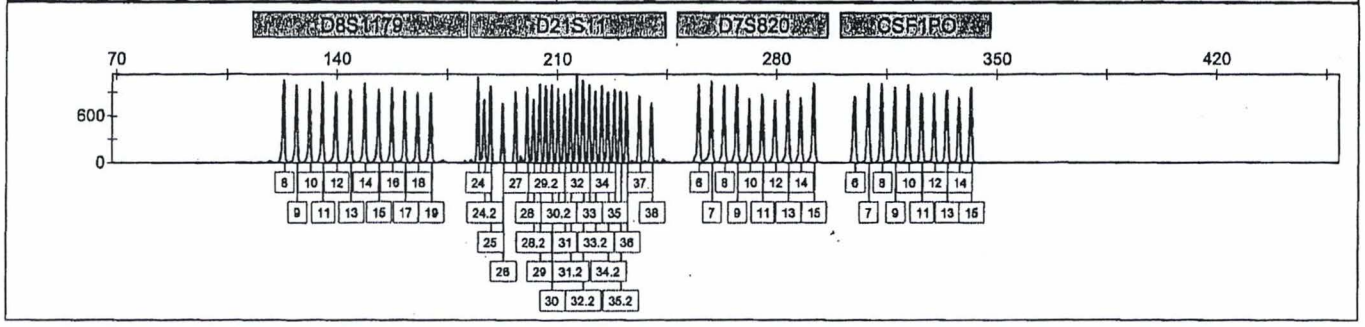
9947 Positive Control

Well Numbers Checked Against Known: E02, F02

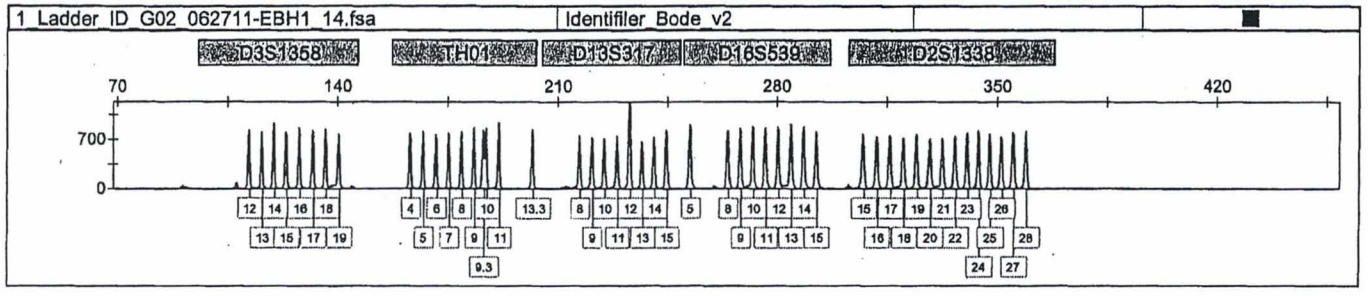
D8S1179: 13,13	D21S11: 30,30	D7S820: 10,11	CSF1PO: 10,12		
D3S1358: 14,15	TH01: 8,9.3	D13S317: 11,11	D16S539: 11,12	D2S1338: 19,23	
D19S433: 14,15	vWA: 17,18	TPOX: 8,8	D18S51: 15,19		
AMEL: X,X	D5S818: 11,11	FGA: 23,24			

EBH 6/27/11 01

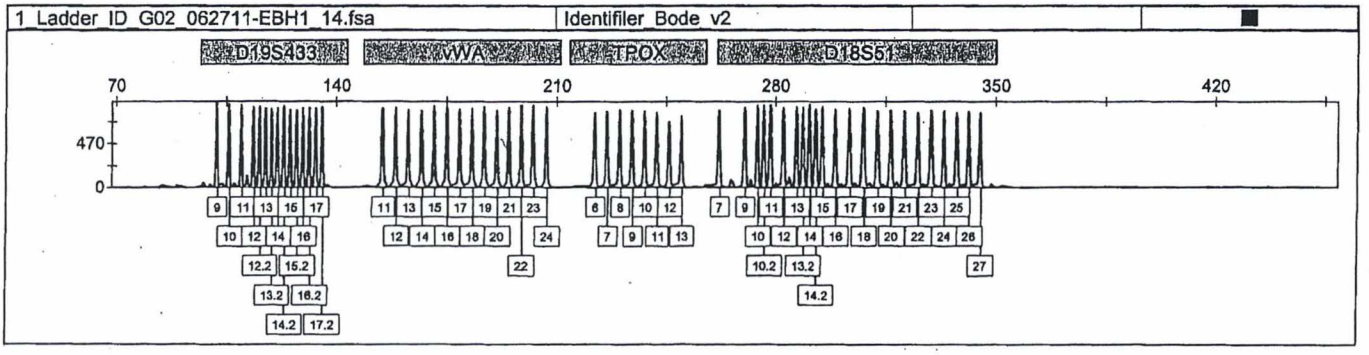
Sample File	Panel	SQO	SQ
1_Ladder_ID_G02_062711-EBH1_14.fsa	Identifiler_Bode_v2		



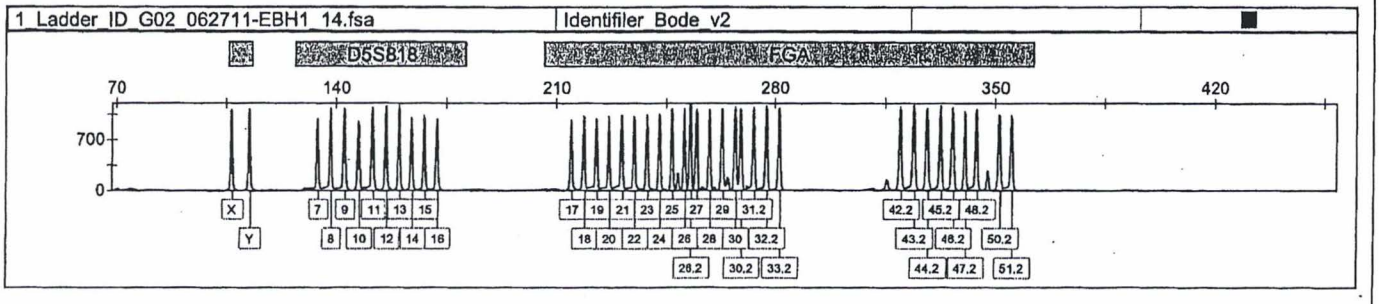
1_Ladder_ID_G02_062711-EBH1_14.fsa | Identifiler_Bode_v2



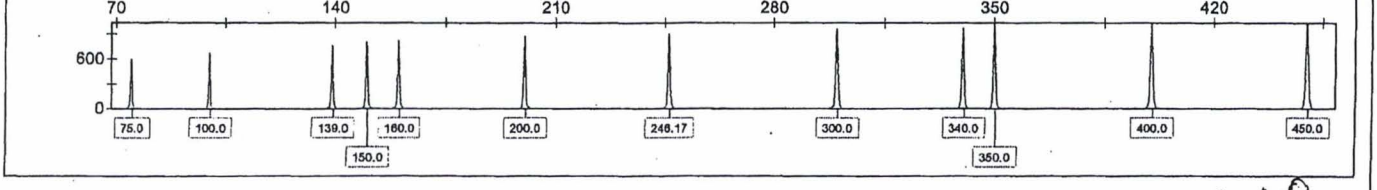
1_Ladder_ID_G02_062711-EBH1_14.fsa | Identifiler_Bode_v2



1_Ladder_ID_G02_062711-EBH1_14.fsa | Identifiler_Bode_v2



1_Ladder_ID_G02_062711-EBH1_14.fsa | Identifiler_Bode_v2



EBH 6/27/11 LO

Sample File	Panel	SQO	SQ
1_Ladder_ID_H02_062711-EBH1_16.fsa	Identifiler_Bode_v2	X	■

No Sizing Data: 1_Ladder_ID_H02_062711-EBH1_16.fsa

1_Ladder_ID_H02_062711-EBH1_16.fsa	Identifiler_Bode_v2	X	■

No Sizing Data: 1_Ladder_ID_H02_062711-EBH1_16.fsa

1_Ladder_ID_H02_062711-EBH1_16.fsa	Identifiler_Bode_v2	X	■

No Sizing Data: 1_Ladder_ID_H02_062711-EBH1_16.fsa

1_Ladder_ID_H02_062711-EBH1_16.fsa	Identifiler_Bode_v2	X	■

No Sizing Data: 1_Ladder_ID_H02_062711-EBH1_16.fsa

1_Ladder_ID_H02_062711-EBH1_16.fsa	Identifiler_Bode_v2	X	■

No Sizing Data: 1_Ladder_ID_H02_062711-EBH1_16.fsa

EBH 062711

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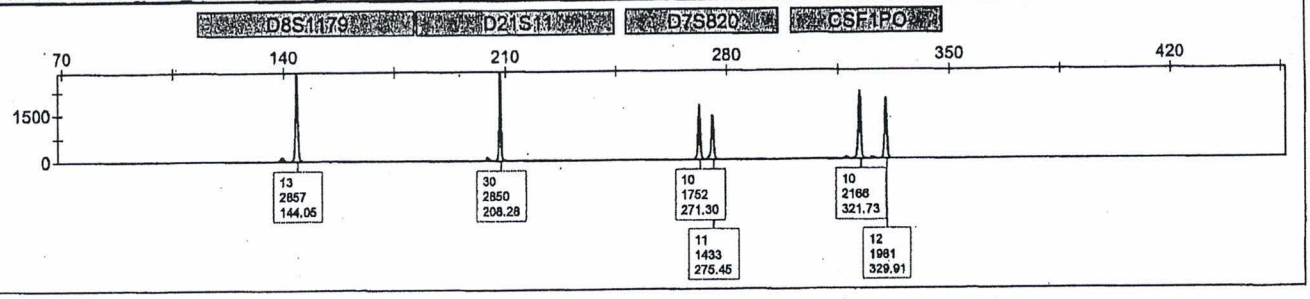
Applied Biosystems

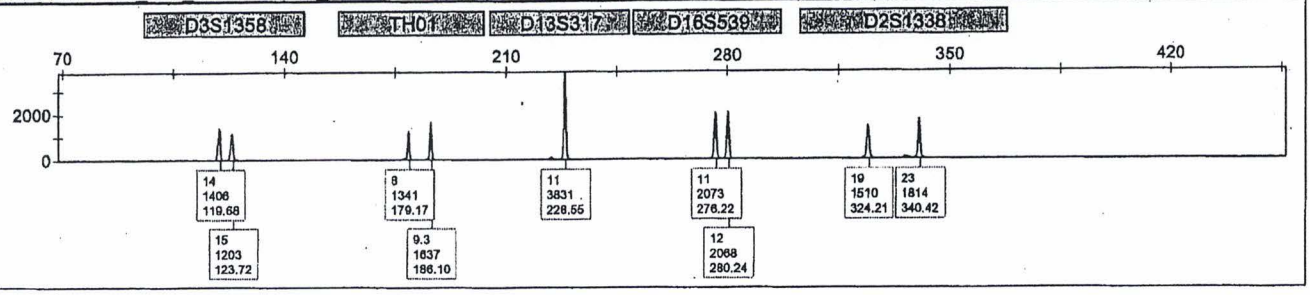
GeneMapper ID v3.2.1

GMID14_062711-EBH1_2S04-114_EBH_ID

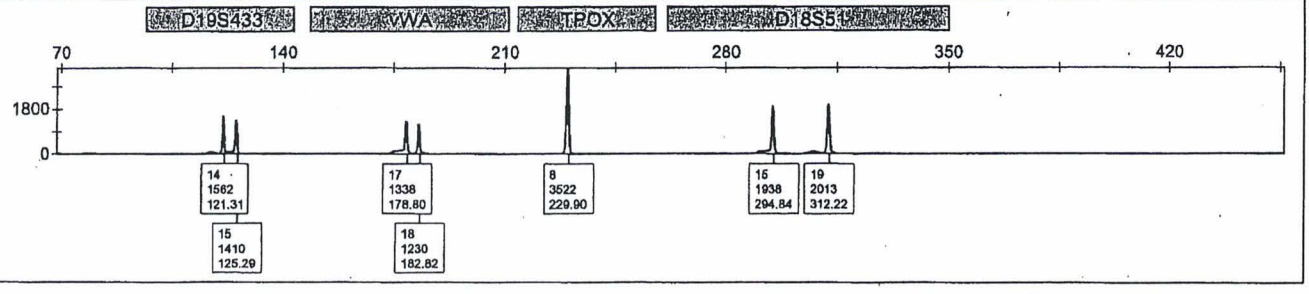
Sample File	Panel	SQO	SQ
1_2S04-114-POS45_E02_062711-EBH1_10.fsa	Identifiler_Bode_v2		



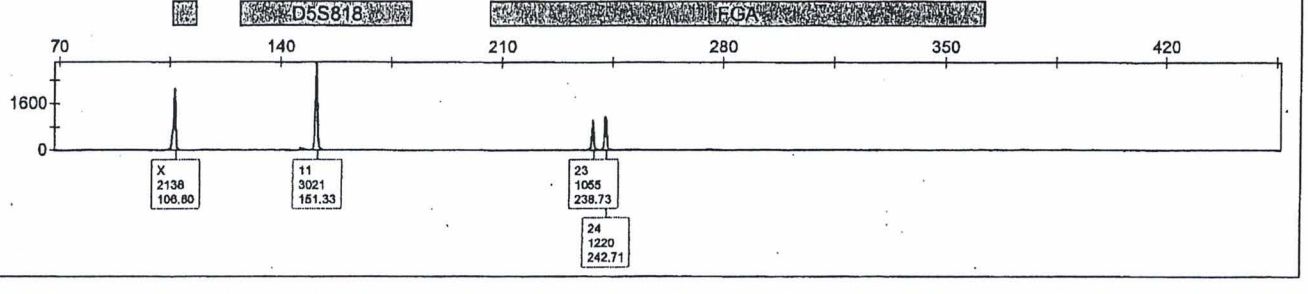
1_2S04-114-POS45_E02_062711-EBH1_10.fsa	Identifiler_Bode_v2		



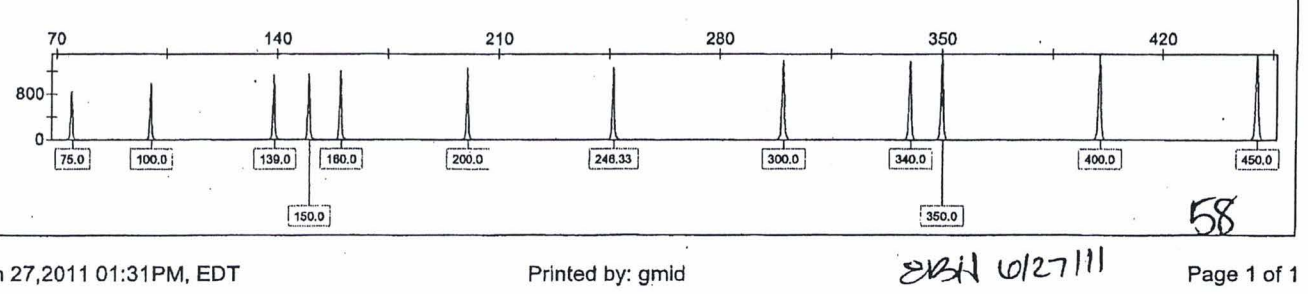
1_2S04-114-POS45_E02_062711-EBH1_10.fsa	Identifiler_Bode_v2		



1_2S04-114-POS45_E02_062711-EBH1_10.fsa	Identifiler_Bode_v2		



1_2S04-114-POS45_E02_062711-EBH1_10.fsa	Identifiler_Bode_v2		



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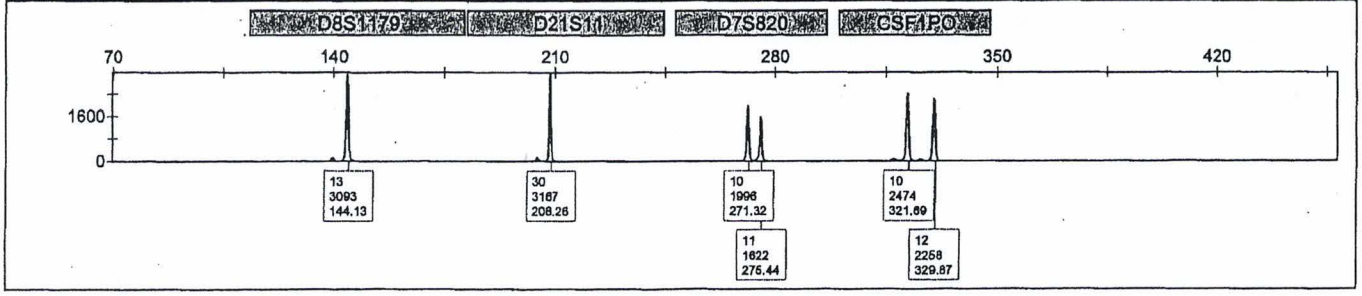
Applied Biosystems

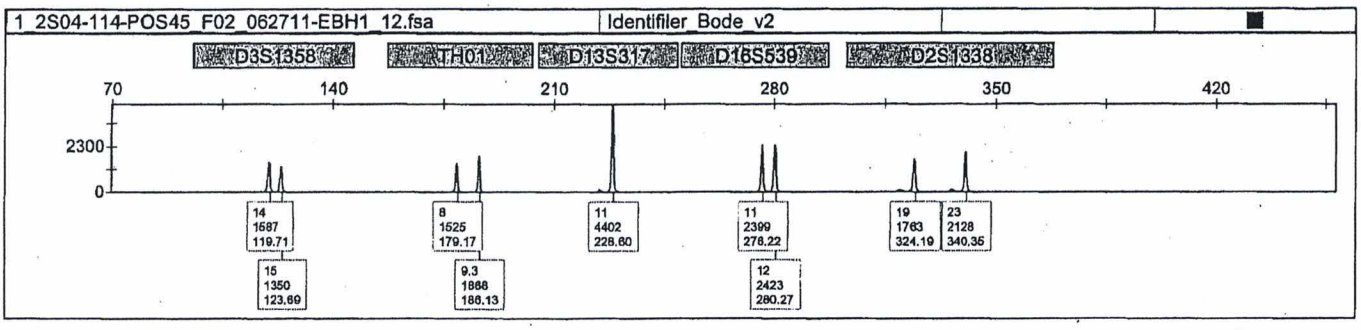
GeneMapper ID v3.2.1

GMID14_062711-EBH1_2S04-114_EBH_ID

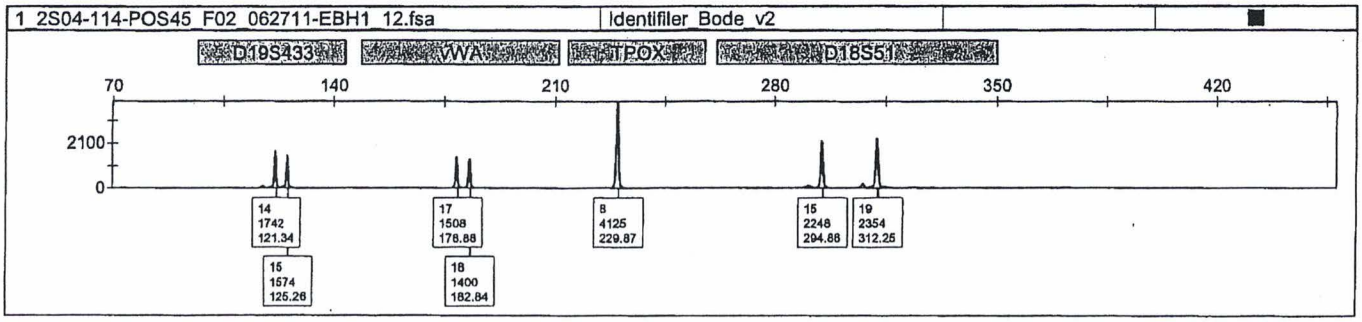
Sample File	Panel	SQO	SQ
1_2S04-114-POS45_F02_062711-EBH1_12.fsa	Identifiler_Bode_v2		



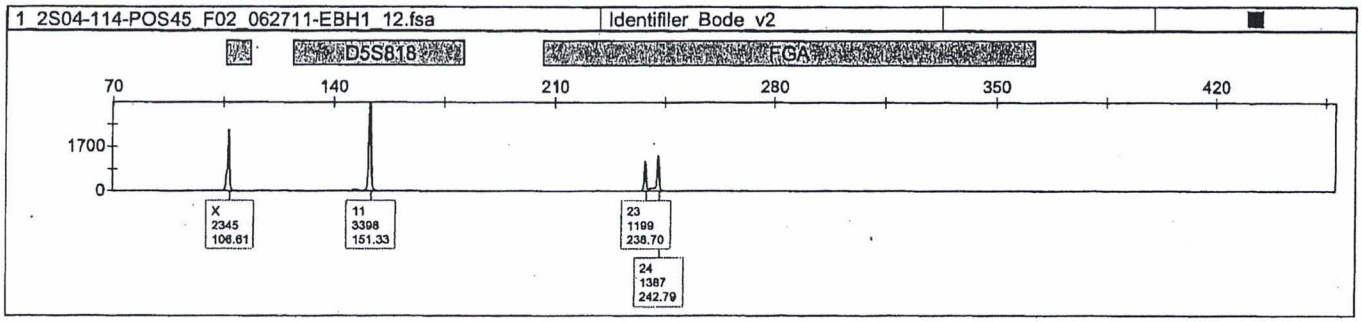
1_2S04-114-POS45_F02_062711-EBH1_12.fsa	Identifiler_Bode_v2		



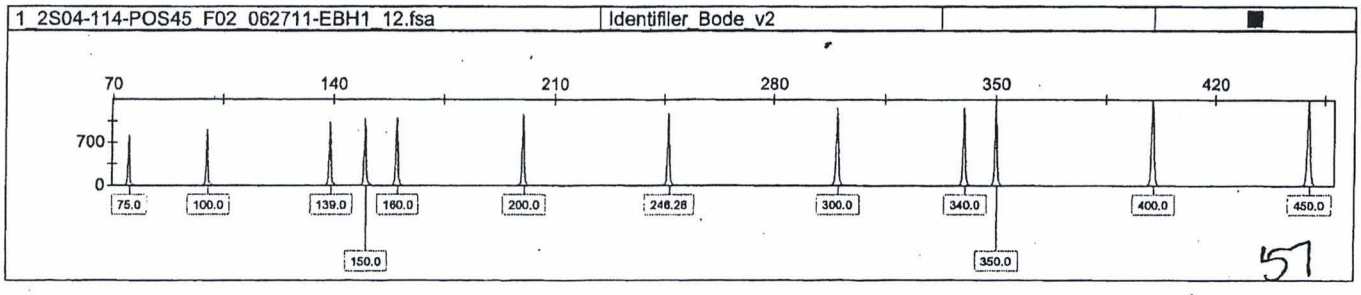
1_2S04-114-POS45_F02_062711-EBH1_12.fsa	Identifiler_Bode_v2		



1_2S04-114-POS45_F02_062711-EBH1_12.fsa	Identifiler_Bode_v2		



1_2S04-114-POS45_F02_062711-EBH1_12.fsa	Identifiler_Bode_v2		



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Sample File	Panel	SQO	SQ
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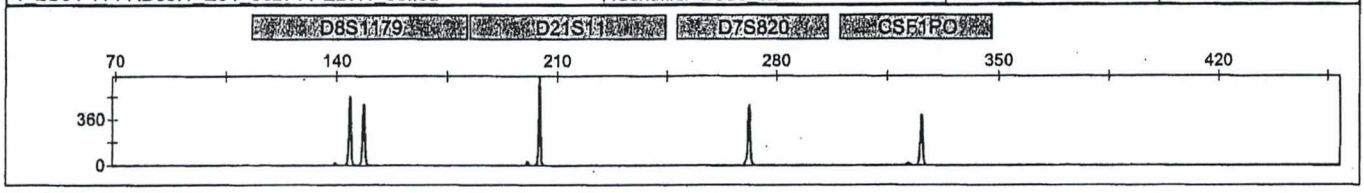
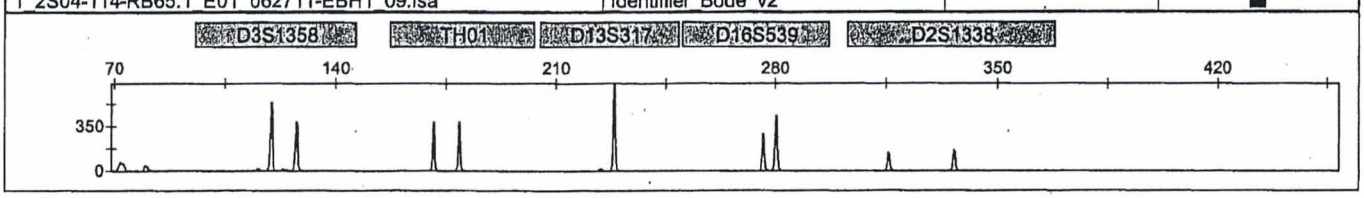
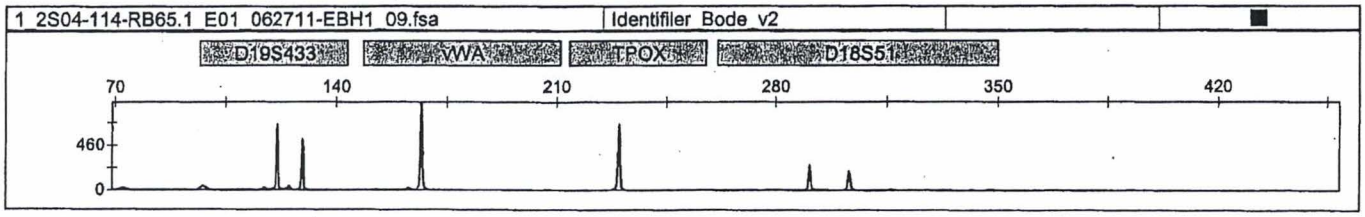


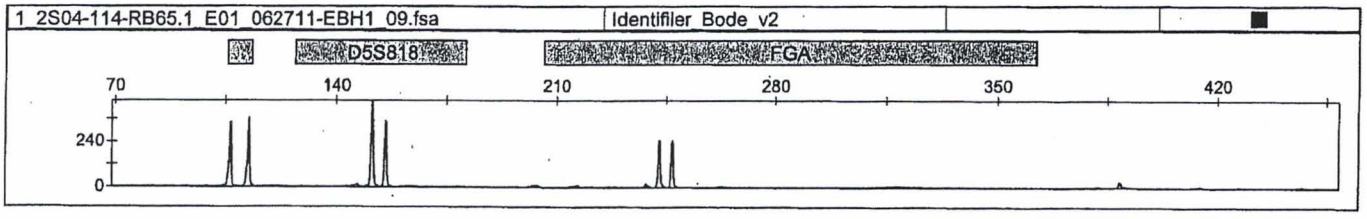
1_2S04-114-RB65.1_E01_062711-EBH1_09.fsa | Identifiler_Bode_v2



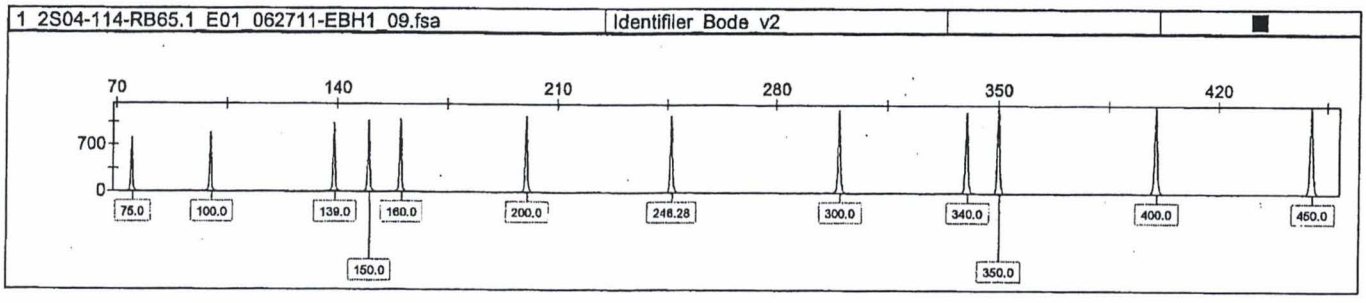
1_2S04-114-RB65.1_E01_062711-EBH1_09.fsa | Identifiler_Bode_v2



1_2S04-114-RB65.1_E01_062711-EBH1_09.fsa | Identifiler_Bode_v2



1_2S04-114-RB65.1_E01_062711-EBH1_09.fsa | Identifiler_Bode_v2



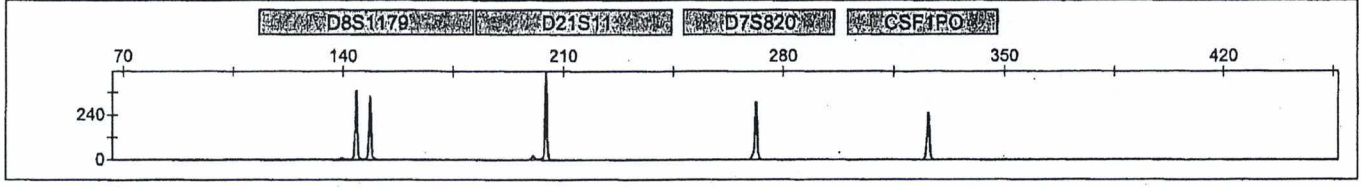
See case note
EBH 7/7/11

EBH 6/27/11
SD

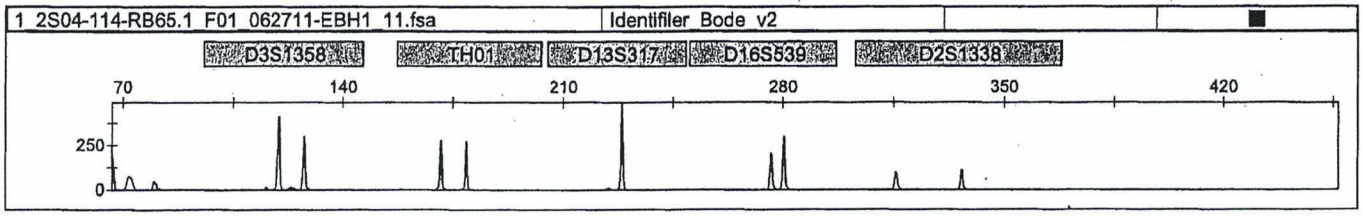
Applied Biosystems
GeneMapper ID v3.2.1

GMID14_062711-EBH1_2S04-114_EBH_ID

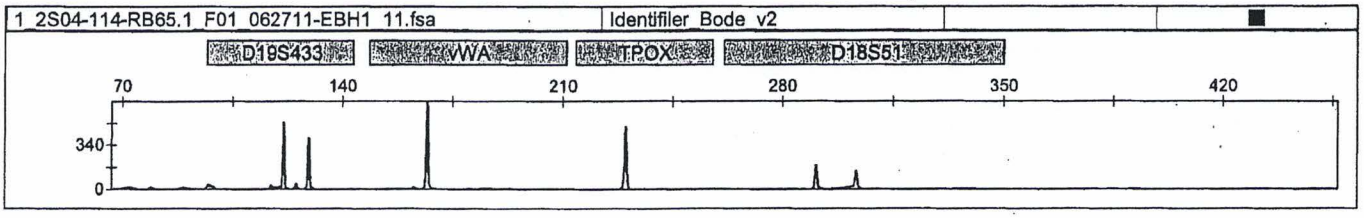
Sample File	Panel	SQO	SQ
1_2S04-114-RB65.1_F01_062711-EBH1_11.fsa	Identifiler_Bode_v2		



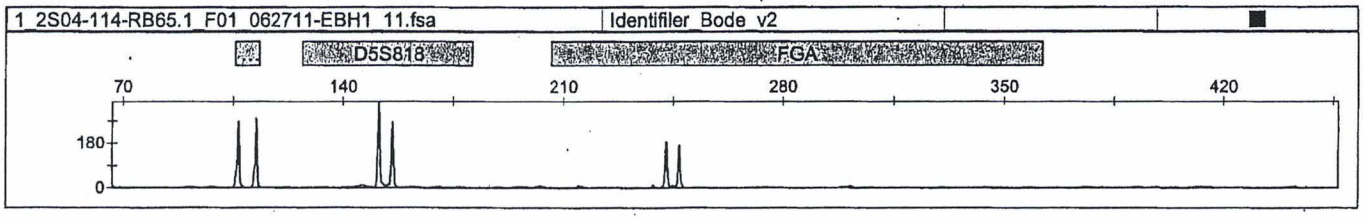
1_2S04-114-RB65.1_F01_062711-EBH1_11.fsa	Identifiler_Bode_v2		



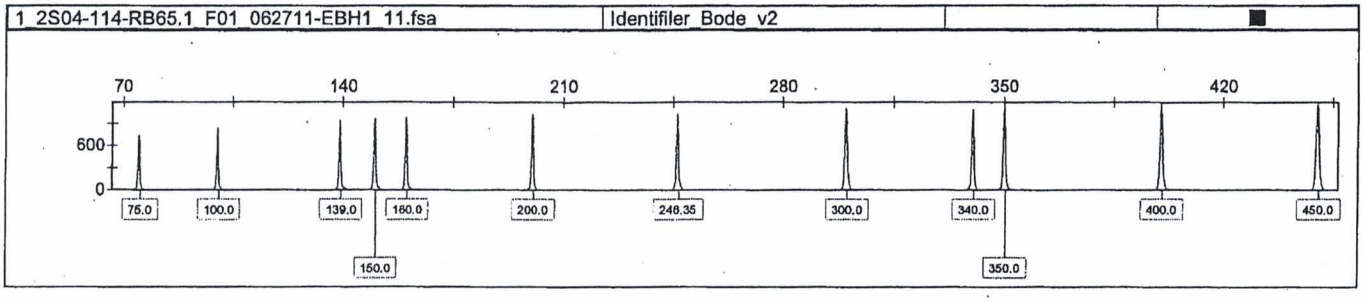
1_2S04-114-RB65.1_F01_062711-EBH1_11.fsa	Identifiler_Bode_v2		



1_2S04-114-RB65.1_F01_062711-EBH1_11.fsa	Identifiler_Bode_v2		



1_2S04-114-RB65.1_F01_062711-EBH1_11.fsa	Identifiler_Bode_v2		



See casenote

EBH 7/6/11

EBH 6/27/11

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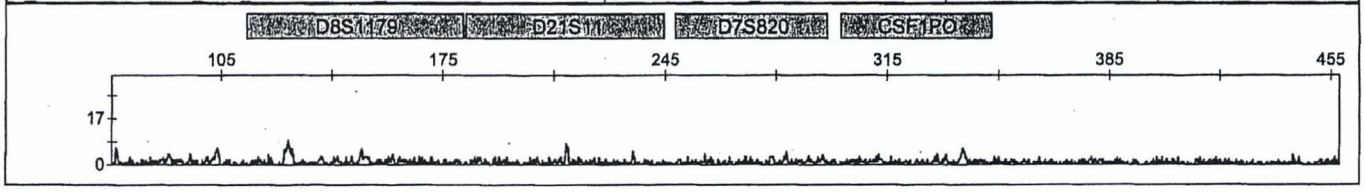
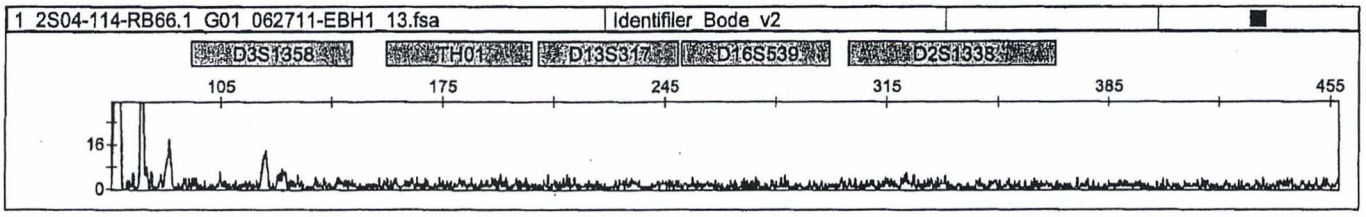
Applied Biosystems
GeneMapper ID v3.2.1

GMID14_062711-EBH1_2S04-114_EBH_ID

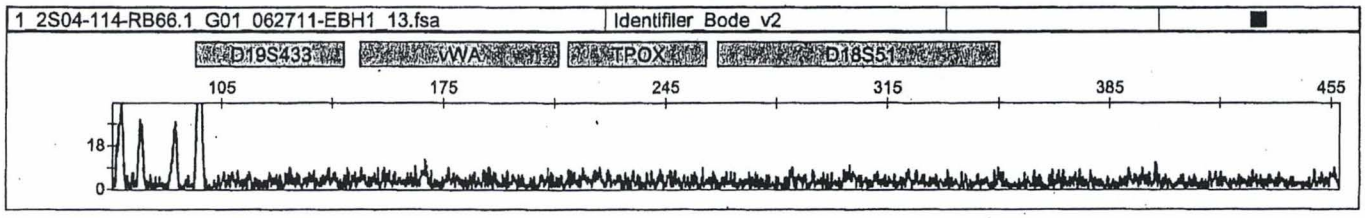
Sample File	Panel	SQO	SQ
1_2S04-114-RB66.1_G01_062711-EBH1_13.fsa	Identifiler_Bode_v2		



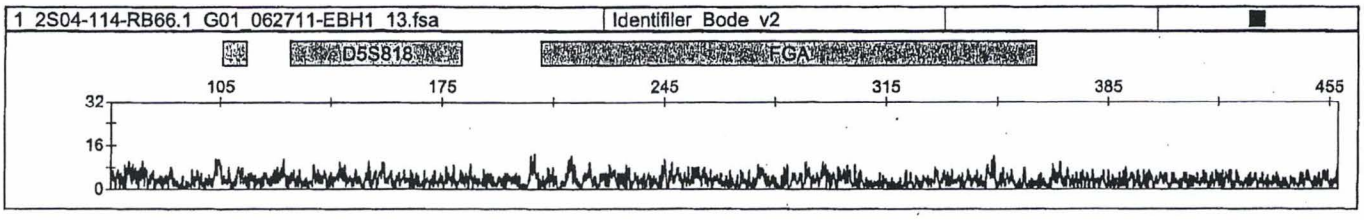
1_2S04-114-RB66.1_G01_062711-EBH1_13.fsa | Identifiler_Bode_v2



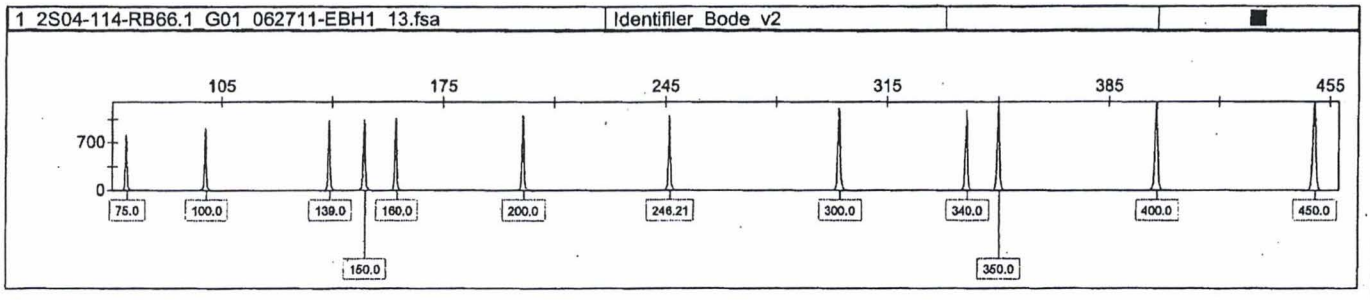
1_2S04-114-RB66.1_G01_062711-EBH1_13.fsa | Identifiler_Bode_v2



1_2S04-114-RB66.1_G01_062711-EBH1_13.fsa | Identifiler_Bode_v2



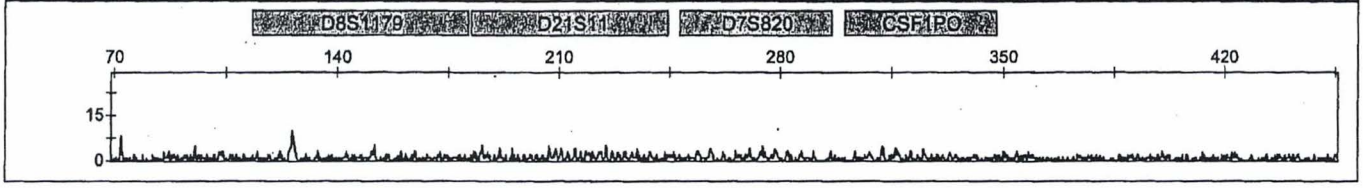
1_2S04-114-RB66.1_G01_062711-EBH1_13.fsa | Identifiler_Bode_v2



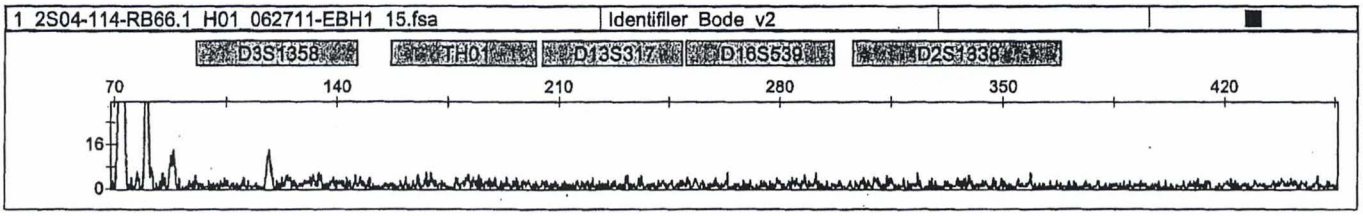
EBH 062711

5H

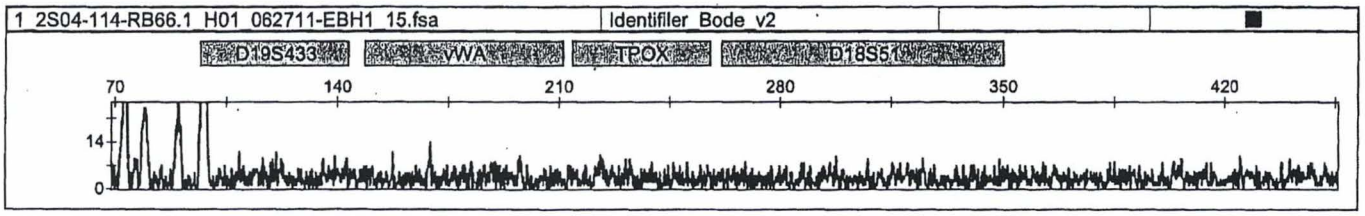
Sample File	Panel	SQO	SQ
1_2S04-114-RB66.1_H01_062711-EBH1_15.fsa	Identifiler_Bode_v2		



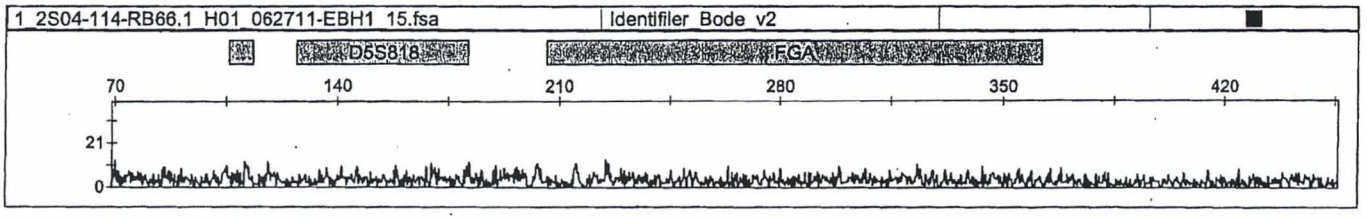
1_2S04-114-RB66.1_H01_062711-EBH1_15.fsa | Identifiler_Bode_v2



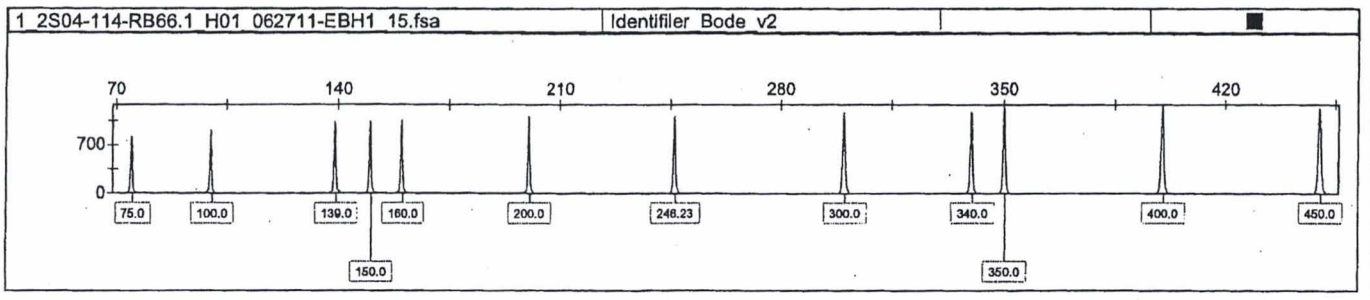
1_2S04-114-RB66.1_H01_062711-EBH1_15.fsa | Identifiler_Bode_v2



1_2S04-114-RB66.1_H01_062711-EBH1_15.fsa | Identifiler_Bode_v2



1_2S04-114-RB66.1_H01_062711-EBH1_15.fsa | Identifiler_Bode_v2



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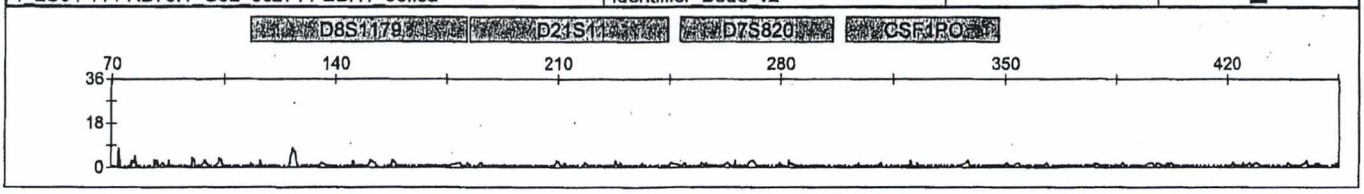
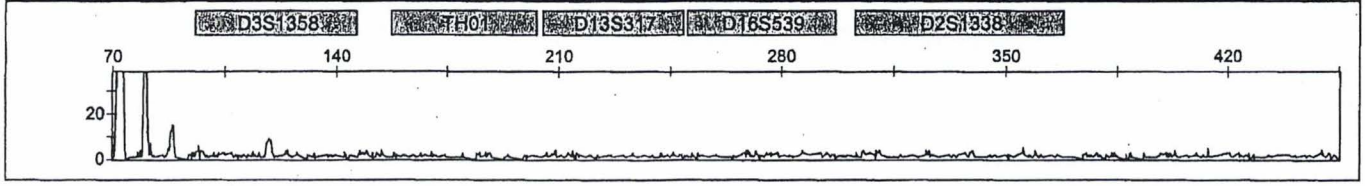
Sample File	Panel	SQO	SQ
1_2S04-114-RB70.1_C02_062711-EBH1_06.fsa	Identifiler_Bode_v2		



1_2S04-114-RB70.1_C02_062711-EBH1_06.fsa | Identifiler_Bode_v2



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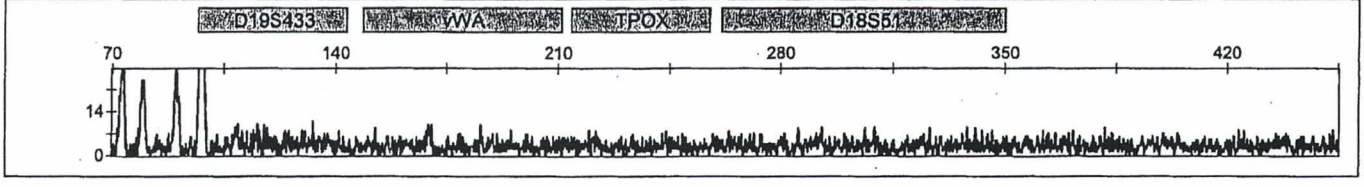
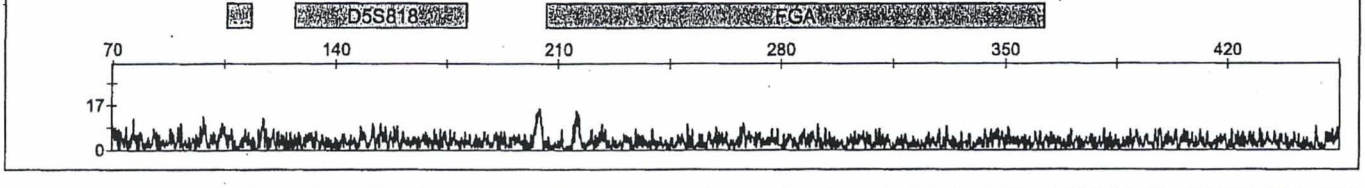
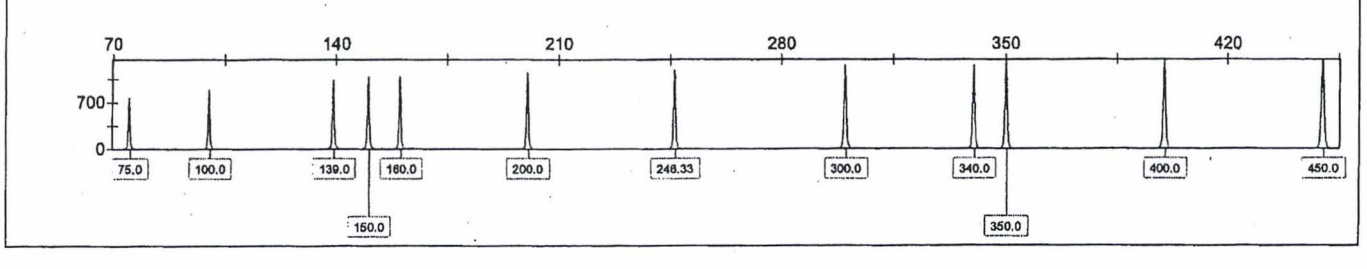


1_2S04-114-RB70.1_C02_062711-EBH1_06.fsa | Identifiler_Bode_v2



1_2S04-114-RB70.1_C02_062711-EBH1_06.fsa | Identifiler_Bode_v2



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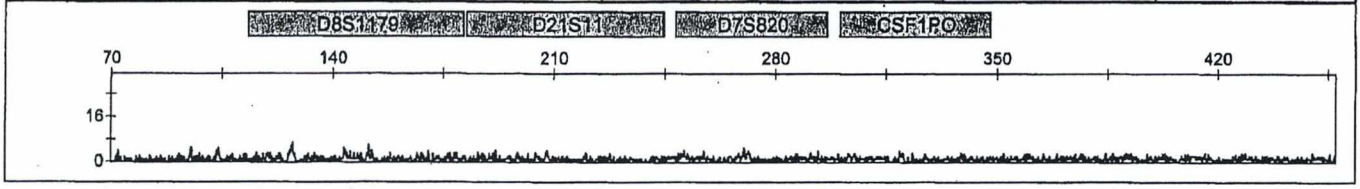
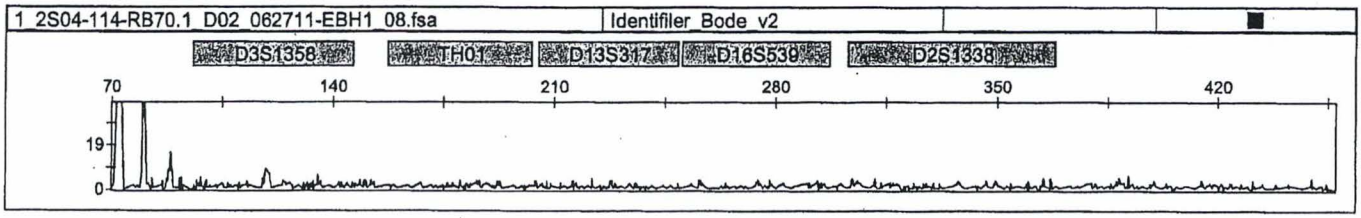
Applied Biosystems
GeneMapper ID v3.2.1

GMID14_062711-EBH1_2S04-114_EBH_ID

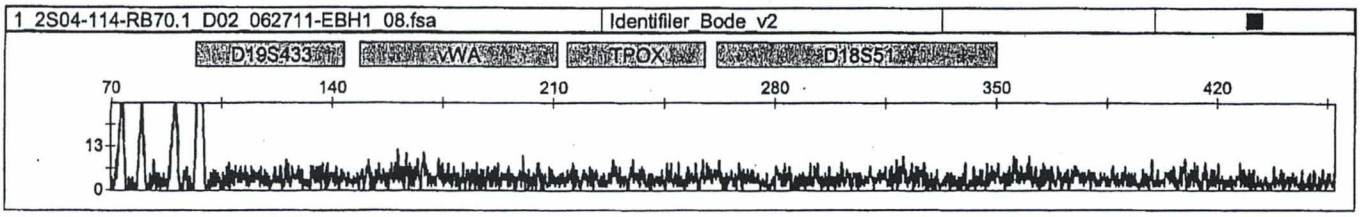
Sample File	Panel	SQO	SQ
1_2S04-114-RB70.1_D02_062711-EBH1_08.fsa	Identifiler_Bode_v2		



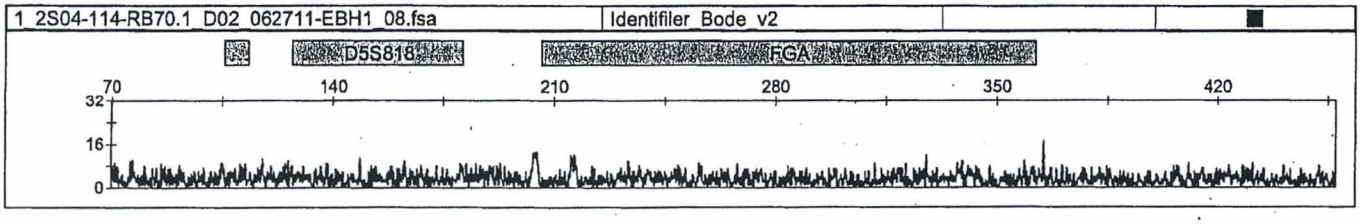
1_2S04-114-RB70.1_D02_062711-EBH1_08.fsa	Identifiler_Bode_v2		



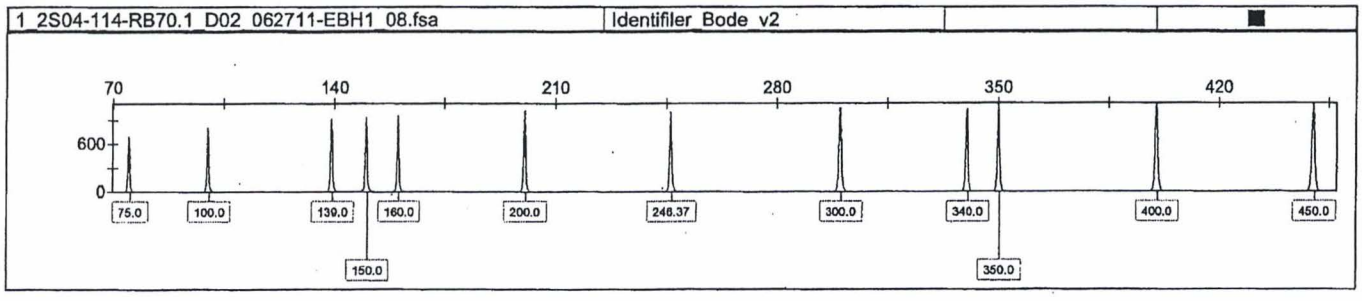
1_2S04-114-RB70.1_D02_062711-EBH1_08.fsa	Identifiler_Bode_v2		



1_2S04-114-RB70.1_D02_062711-EBH1_08.fsa	Identifiler_Bode_v2		



1_2S04-114-RB70.1_D02_062711-EBH1_08.fsa	Identifiler_Bode_v2		



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CE GMID Editing Sheet – ID

Tray ID: CG2511-CBH1
Analyst: ASC
GMID Panel: Identifiler_Bode_v2

Shipment or Case #: 2504114
Date: 7-6-11

Well	Edit: Locus, Base pair size - reason
B2	LOR
H1	See casenote
C2	spike

Editing Key

20%: 20% filter applied (after confirming no mixtures)

-A -A/Split peaks

AUT: single allele below minimum threshold

Artifact (non-specific)

D/I Degraded and/or Inhibited

Dye artifact

Elevated BL: Labels placed on elevated basline(s)

FC: Failed capillary

ILS<MIN: ILS below minimum rfu threshold

IA: Imbalanced Alleles

LOR: Loss of resolution

Matrix Issue

OL: Off ladder allele

Other provide explanation in text box (currently using this for FDLE alleles btw. 75-99 rfu)

PU: Pullup

RFU<MIN: sample rfu below minimum threshold

RFU>MAX: sample rfu above maximum threshold

Shoulder: Shoulder peak

Sizing incorrect sizing (eg migration issue)

Spikes

Stutter (n-4 if other record)

9947 Positive Control Well Numbers Checked Against Known: D4, F4					
D8S1179: 13,13	D21S11: 30,30	D7S820: 10,11	CSF1PO: 10,12		
D3S1358: 14,15	TH01: 8,9.3	D13S317: 11,11	D16S539: 11,12	D2S1338: 19,23	
D19S433: 14,15	vWA: 17,18	TPOX: 8,8	D18S51: 15,19		
AMEL: X,X	D5S818: 11,11	FGA: 23,24			

ASC 7-6-11

CE GMID Editing Sheet – ID

Tray ID: 062511-EBH1
Analyst: EBH
GMID Panel: Identifiler_Bode_v2

Shipment or Case #: 2504-114
Date: 6/27/11

Well	Edit: Locus, Base pair size - reason
B02	LOR
C02	Spike
H01	See casenote
~~E01~~	~~See casenote~~
~~F01~~	~~See casenote~~ EBH 7/6/11
~~G01~~	~~See casenote~~

Editing Key

20%: 20% filter applied (after confirming no mixtures)

-A: -A/Split peaks

AUT: single allele below minimum threshold

Artifact (non-specific)

D/I: Degraded and/or Inhibited

Dye artifact

Elevated BL: Labels placed on elevated baseline(s)

FC: Failed capillary

ILS<MIN: ILS below minimum rfu threshold

IA: Imbalanced Alleles

LOR: Loss of resolution

Matrix Issue

OL: Off ladder allele

Other: provide explanation in text box (currently using this for FDLE alleles btw. 75-99 rfu)

PU: Pullup

RFU<MIN: sample rfu below minimum threshold

RFU>MAX: sample rfu above maximum threshold

Shoulder: Shoulder peak

Sizing: Incorrect sizing (eg: migration issue)

Spikes

Stutter (n-4 if other record)

9947 Positive Control					
Well Numbers Checked Against Known: D04, F04					
D8S1179: 13,13	D21S11: 30,30	D7S820: 10,11	CSF1PO: 10,12		
D3S1358: 14,15	TH01: 8,9.3	D13S317: 11,11	D16S539: 11,12	D2S1338: 19,23	
D19S433: 14,15	vWA: 17,18	TPOX: 8,8	D18S51: 15,19		
AMEL: X,X	D5S818: 11,11	FGA: 23,24			

Document: 3100 Edits Macro
Revision: 2
Effective: Monday, March 01, 2010 9:58:33 AM

EBH
6/27/11

Applied Biosystems

GeneMapper ID v3.2.1

GMID11_062511-EBH1_2S04-114_EBH_ID

Sample File	Panel	SQO	SQ
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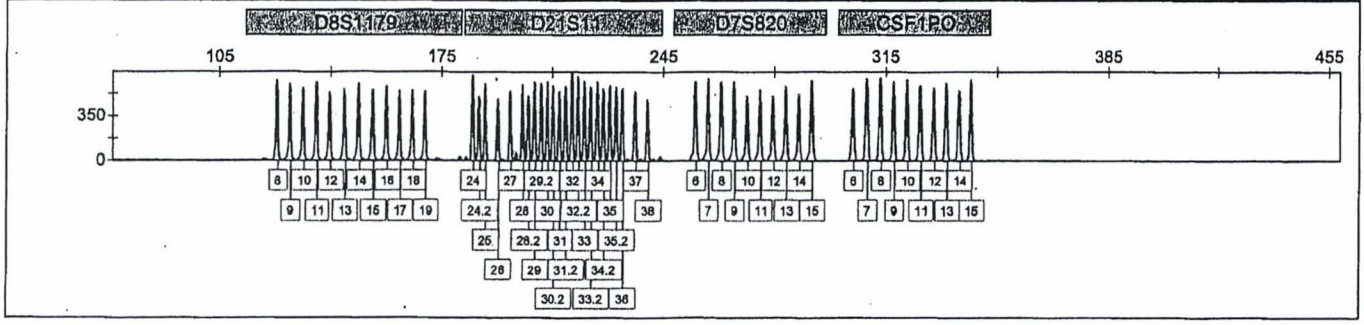
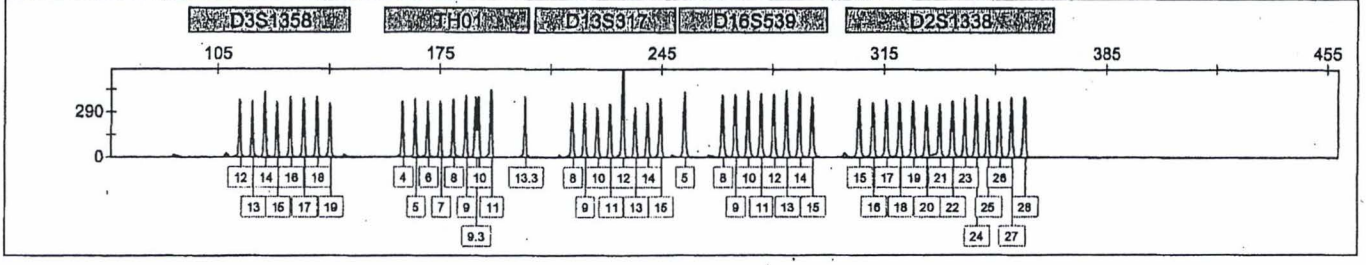
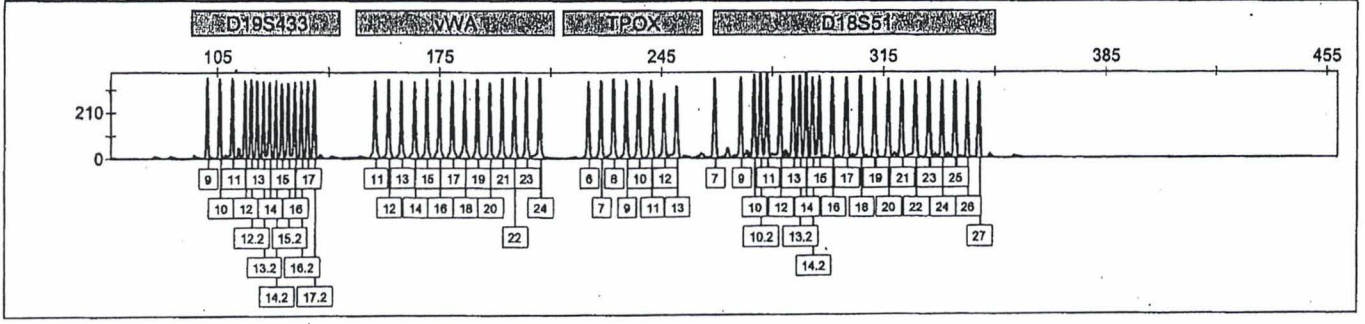


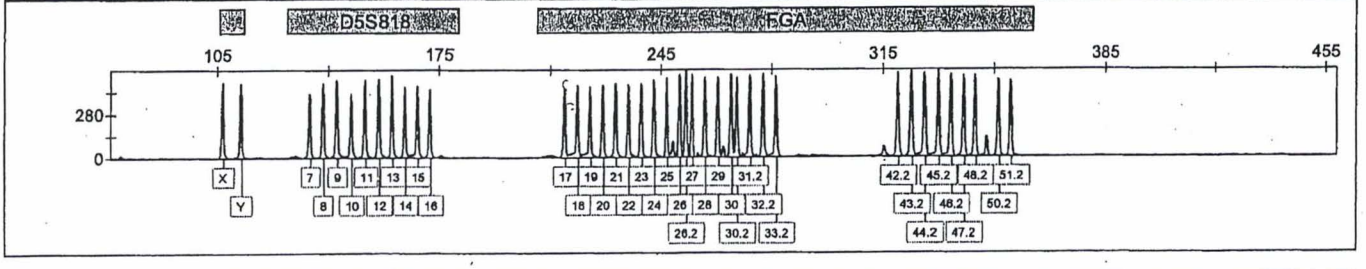
1_Ladder_ID_F05_062511-EBH1_11.fsa | Identifiler_Bode_v2



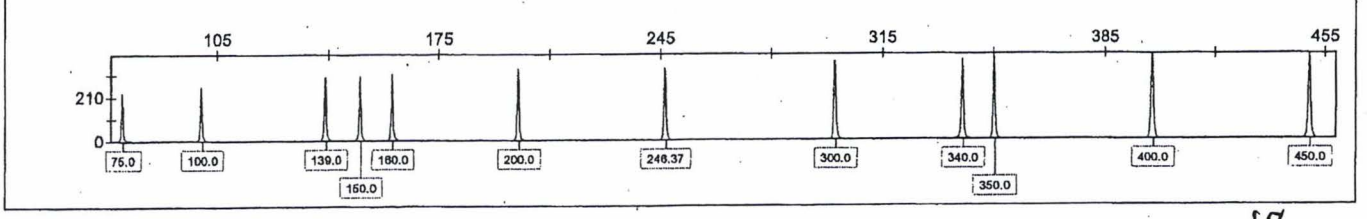
1_Ladder_ID_F05_062511-EBH1_11.fsa | Identifiler_Bode_v2



1_Ladder_ID_F05_062511-EBH1_11.fsa | Identifiler_Bode_v2



1_Ladder_ID_F05_062511-EBH1_11.fsa | Identifiler_Bode_v2



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Sample File	Panel	SQO	SQ
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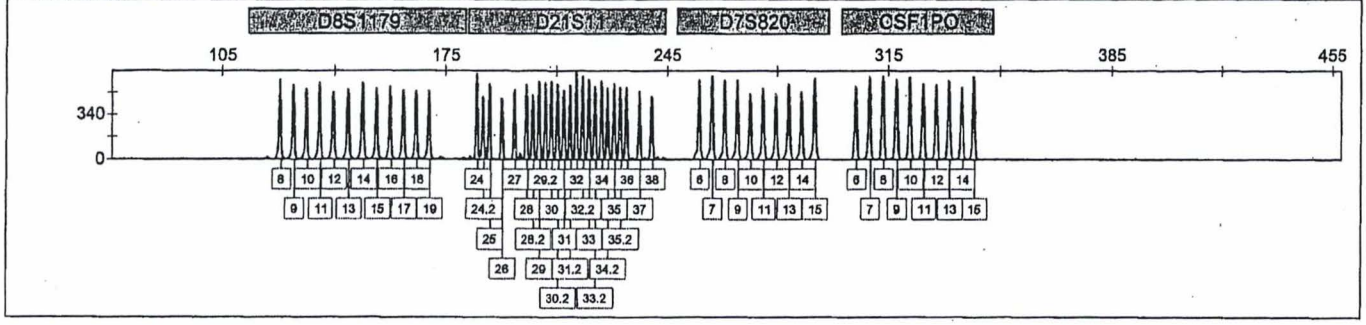
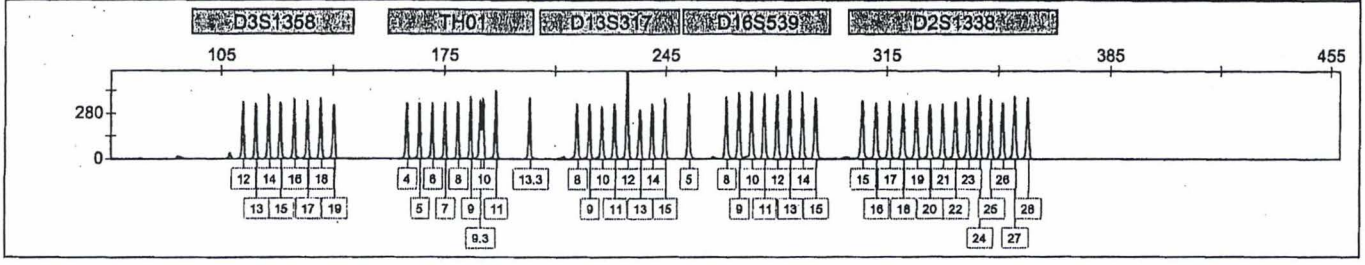
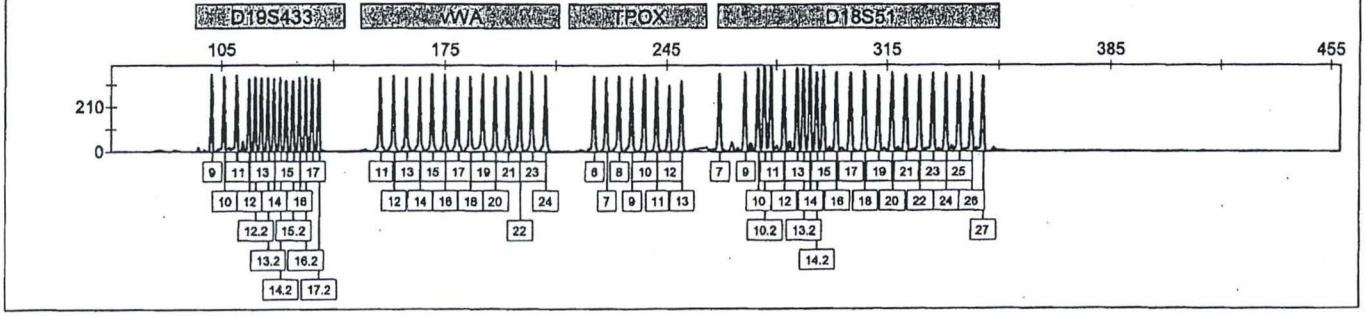


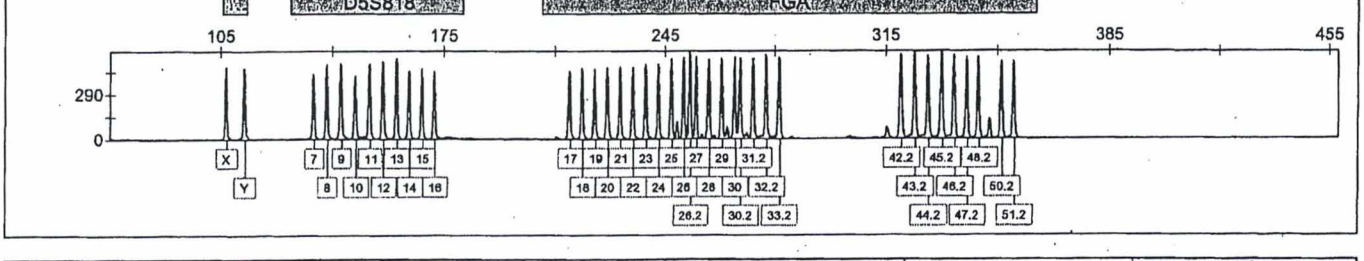
1_Ladder_ID_G05_062511-EBH1_13.fsa | Identifiler_Bode_v2



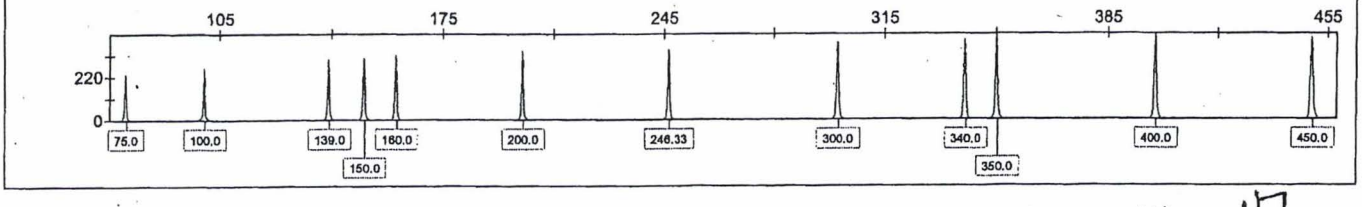
1_Ladder_ID_G05_062511-EBH1_13.fsa | Identifiler_Bode_v2



1_Ladder_ID_G05_062511-EBH1_13.fsa | Identifiler_Bode_v2



1_Ladder_ID_G05_062511-EBH1_13.fsa | Identifiler_Bode_v2



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Sample File	Panel	SQO	SQ
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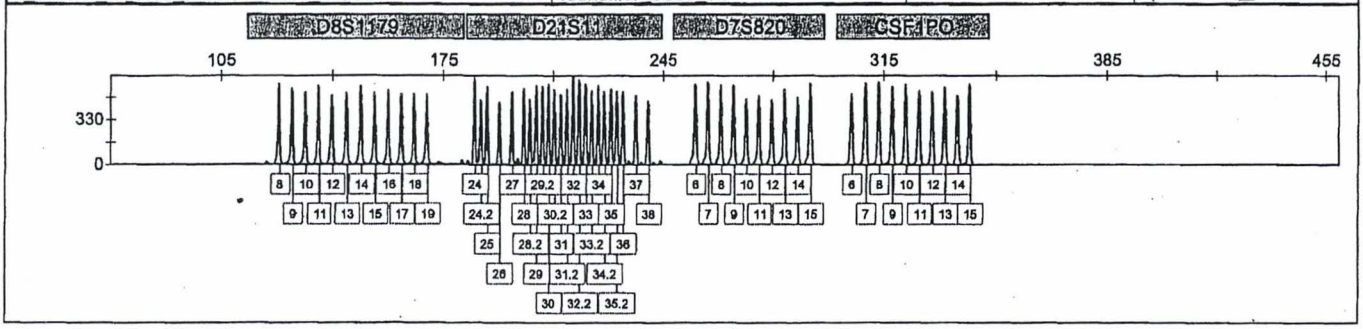
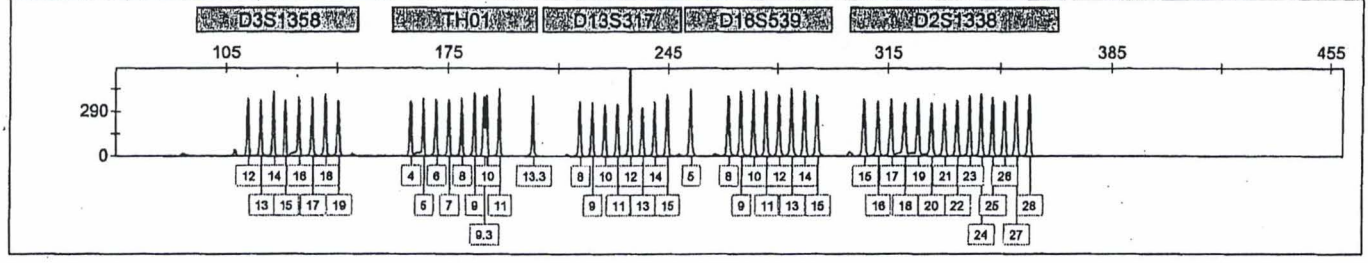
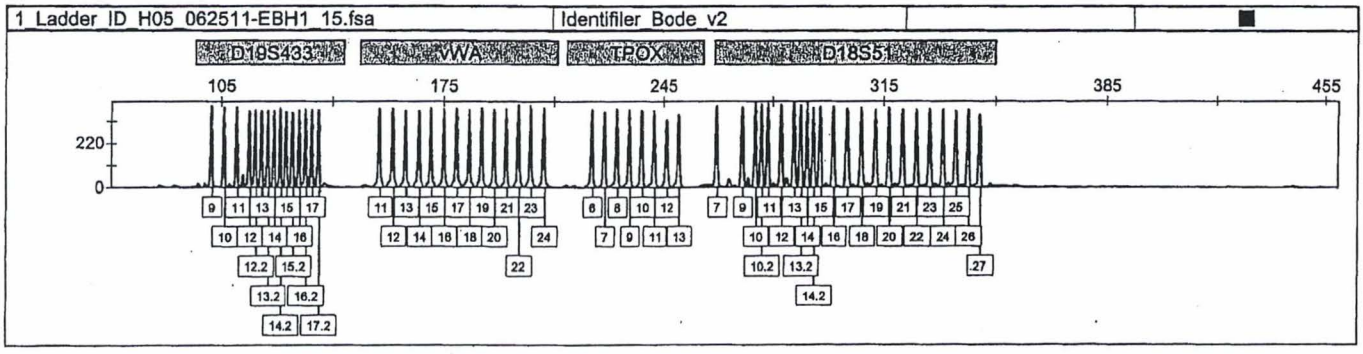


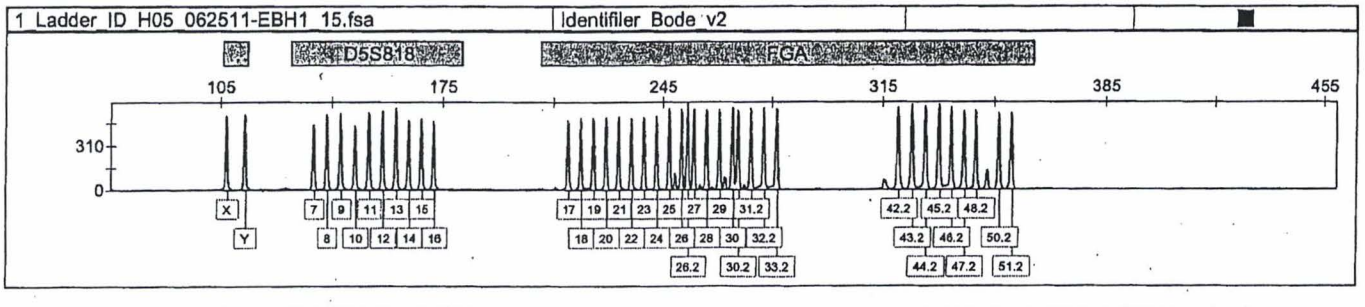
1_Ladder_ID_H05_062511-EBH1_15.fsa | Identifiler_Bode_v2



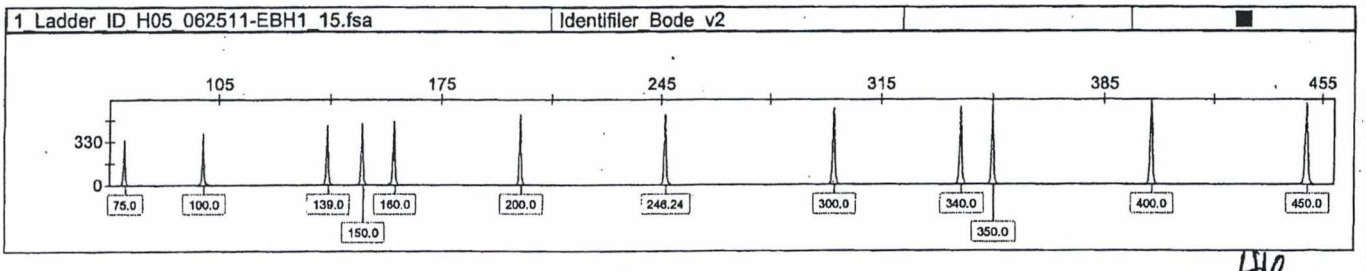
1_Ladder_ID_H05_062511-EBH1_15.fsa | Identifiler_Bode_v2



1_Ladder_ID_H05_062511-EBH1_15.fsa | Identifiler_Bode_v2



1_Ladder_ID_H05_062511-EBH1_15.fsa | Identifiler_Bode_v2



EBH 6/27/11

Applied Biosystems
GeneMapper ID v3.2.1

GMID11_062511-EBH1_2S04-114_EBH_ID

Sample File	Panel	SQO	SQ
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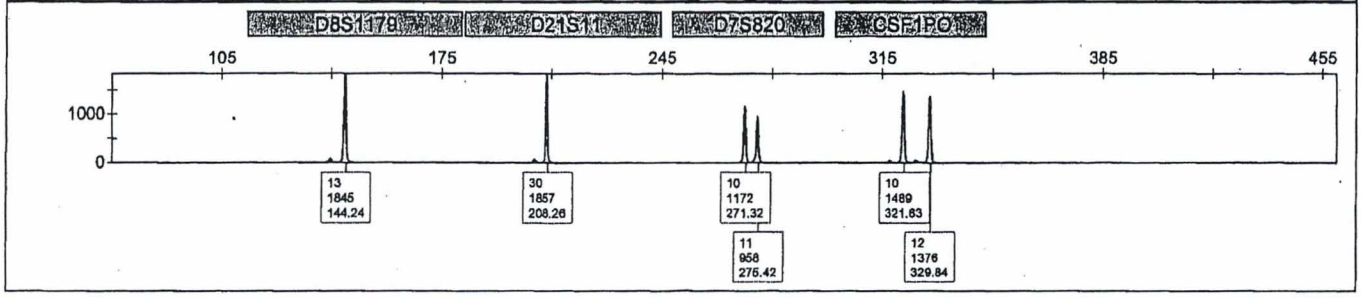
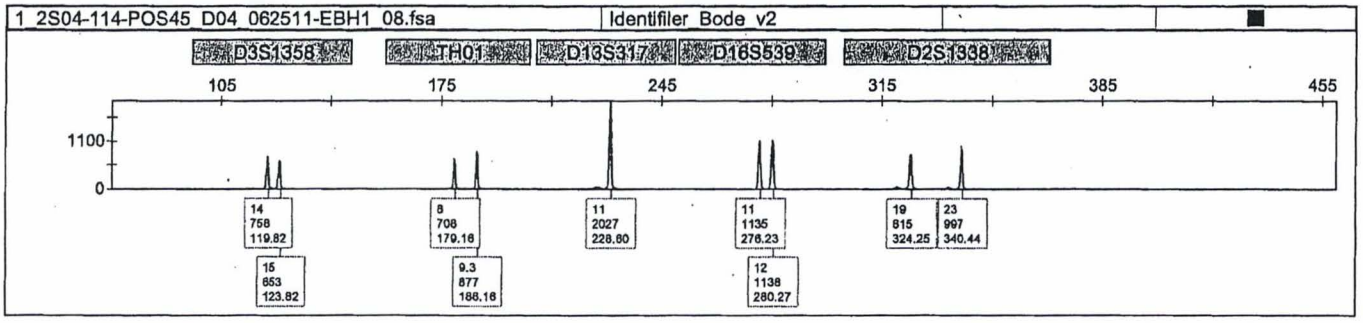
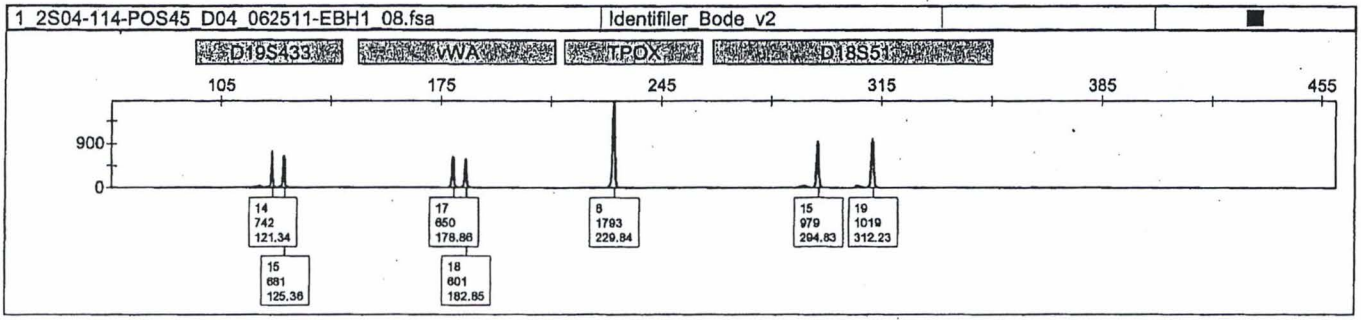


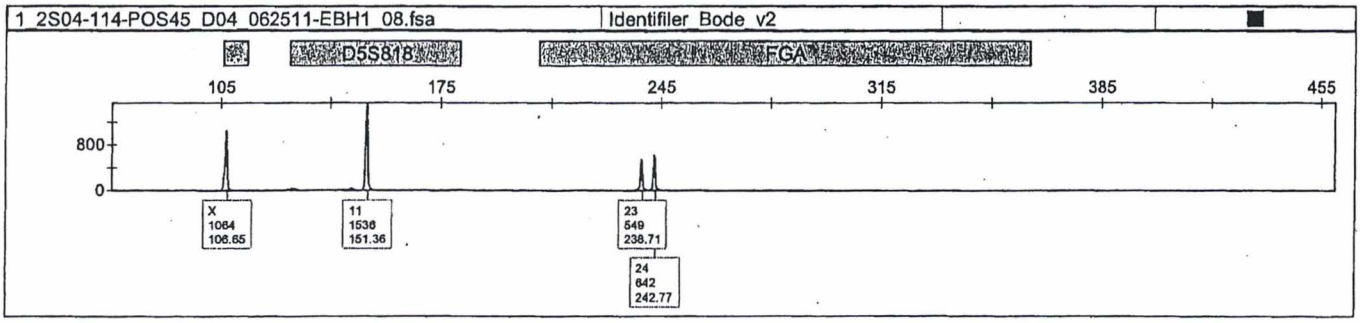
1_2S04-114-POS45_D04_062511-EBH1_08.fsa	Identifiler_Bode_v2		



1_2S04-114-POS45_D04_062511-EBH1_08.fsa	Identifiler_Bode_v2		



1_2S04-114-POS45_D04_062511-EBH1_08.fsa	Identifiler_Bode_v2		



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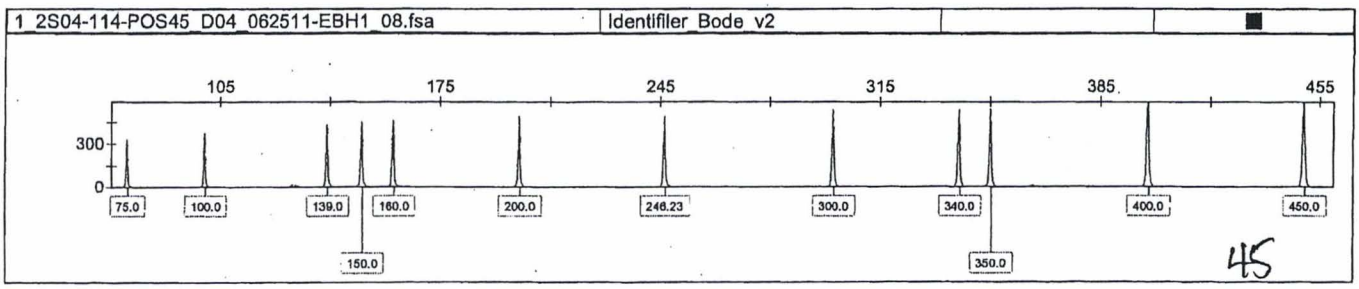

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Applied Biosystems
GeneMapper ID v3.2.1

GMID11_062511-EBH1_2S04-114_EBH_ID

Sample File	Panel	SQO	SQ
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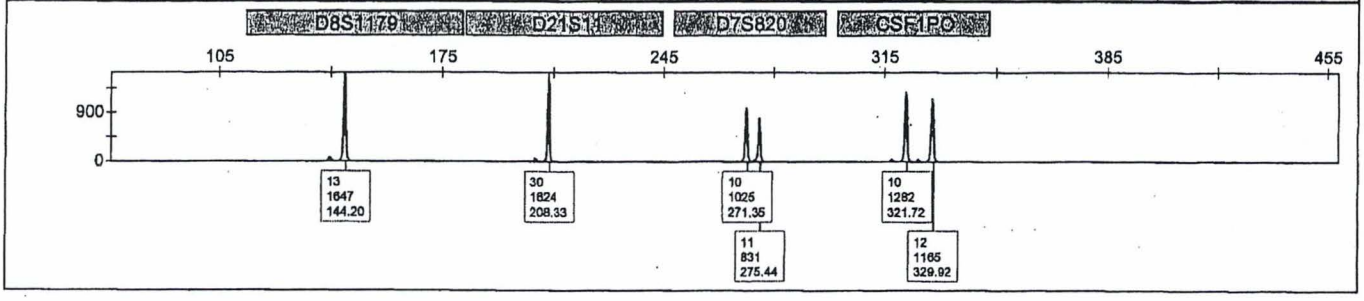
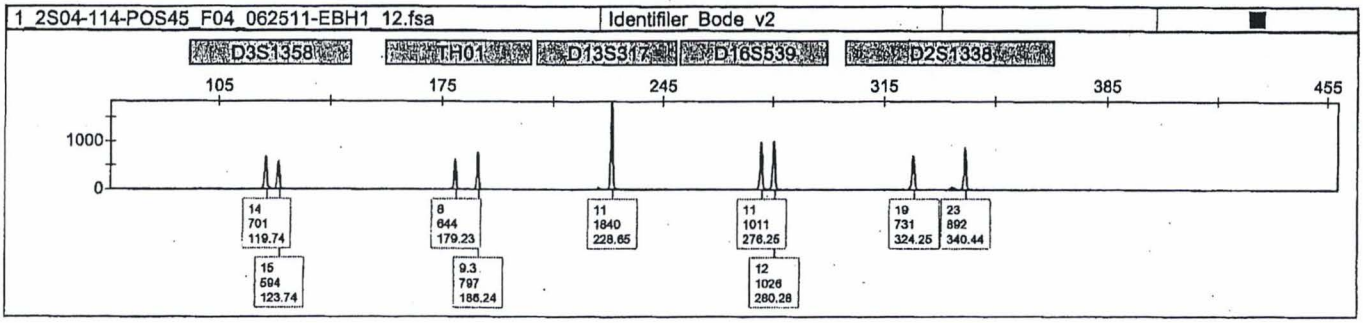
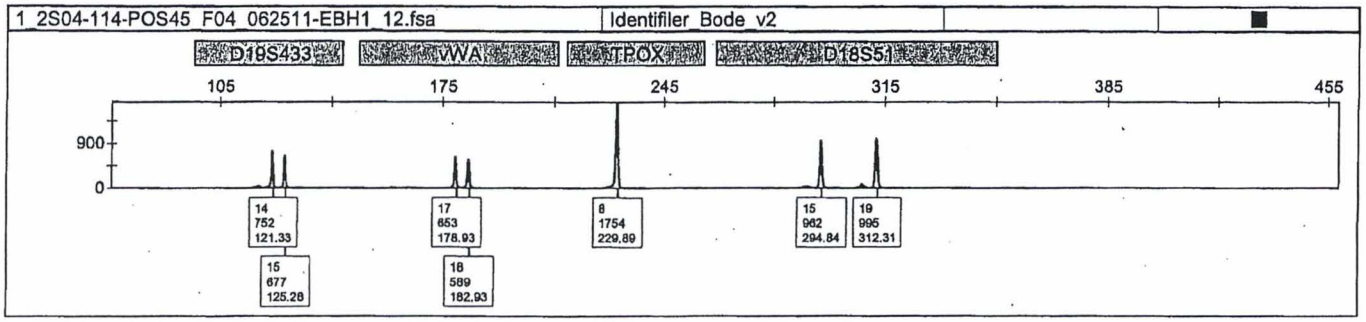


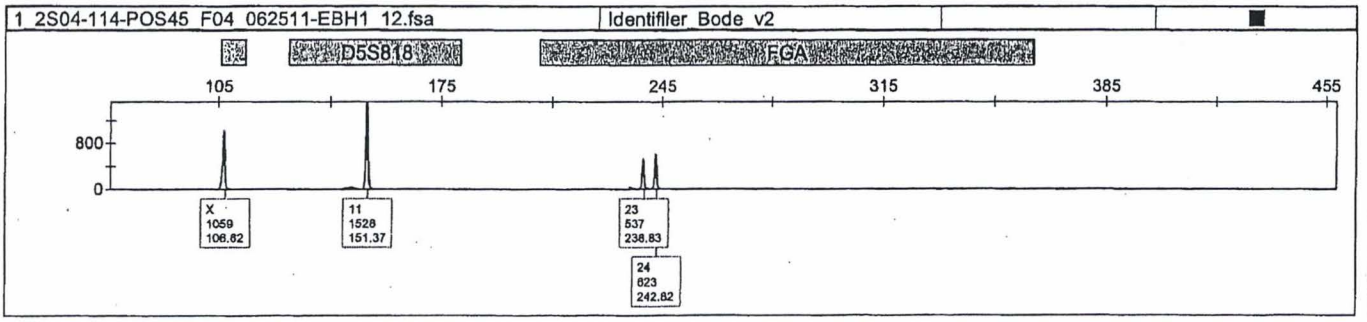
1_2S04-114-POS45_F04_062511-EBH1_12.fsa	Identifiler_Bode_v2		



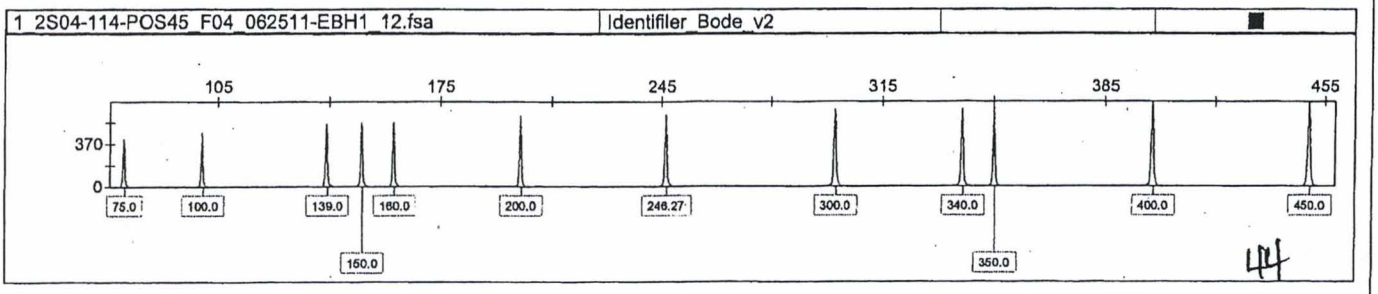
1_2S04-114-POS45_F04_062511-EBH1_12.fsa	Identifiler_Bode_v2		



1_2S04-114-POS45_F04_062511-EBH1_12.fsa	Identifiler_Bode_v2		



1_2S04-114-POS45_F04_062511-EBH1_12.fsa	Identifiler_Bode_v2		



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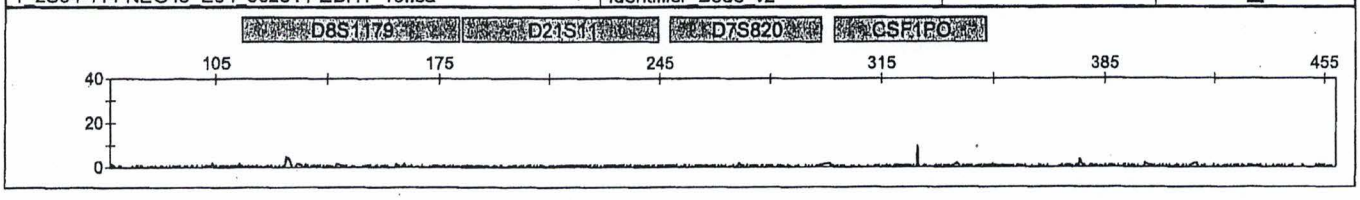
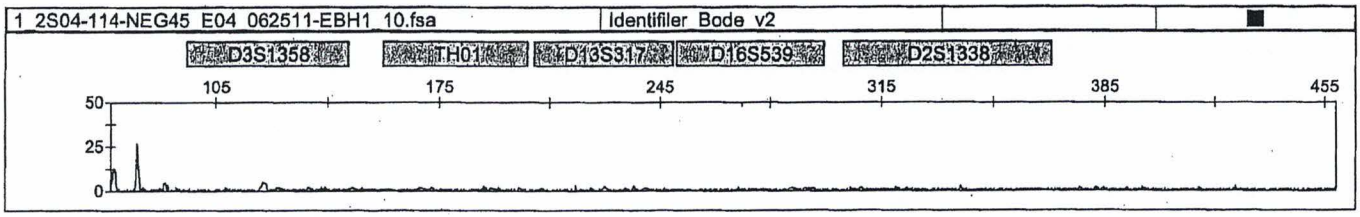
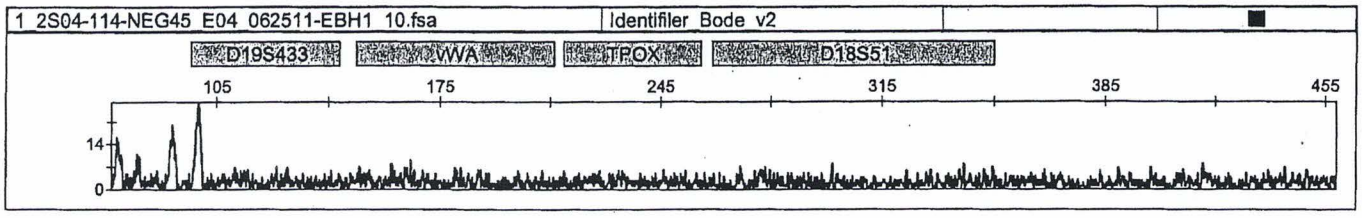
Sample File	Panel	SQO	SQ
1_2S04-114-NEG45_E04_062511-EBH1_10.fsa	Identifiler_Bode_v2		



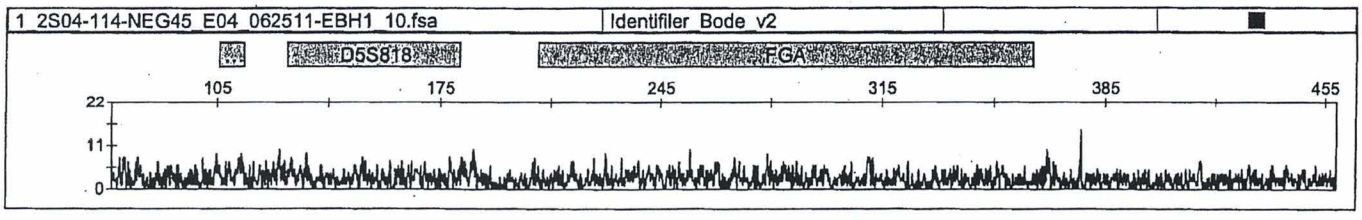
1_2S04-114-NEG45_E04_062511-EBH1_10.fsa | Identifiler_Bode_v2



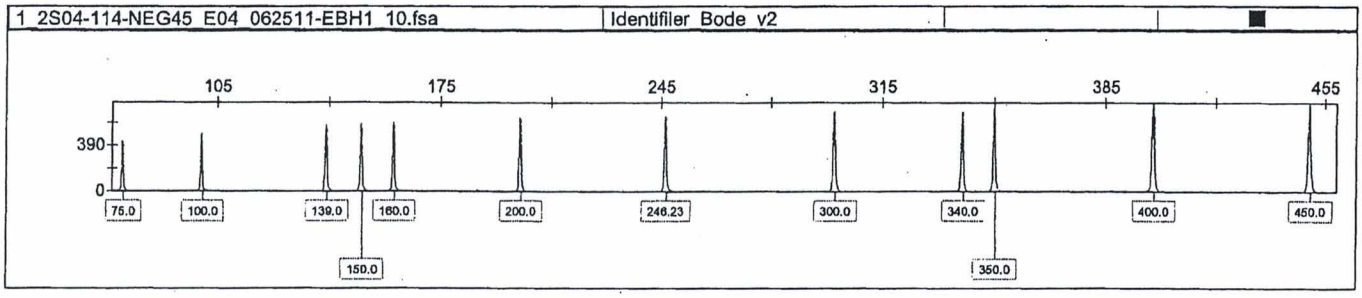
1_2S04-114-NEG45_E04_062511-EBH1_10.fsa | Identifiler_Bode_v2



1_2S04-114-NEG45_E04_062511-EBH1_10.fsa | Identifiler_Bode_v2



1_2S04-114-NEG45_E04_062511-EBH1_10.fsa | Identifiler_Bode_v2



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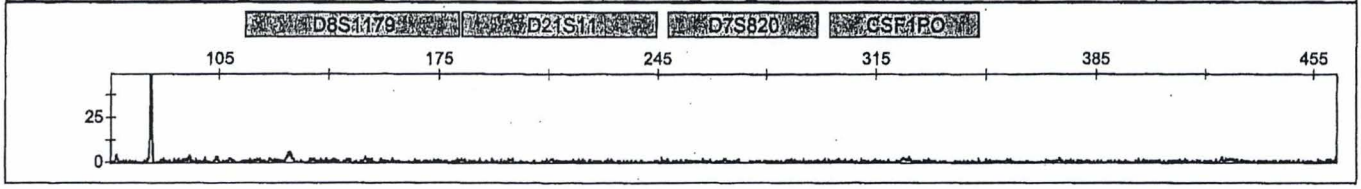
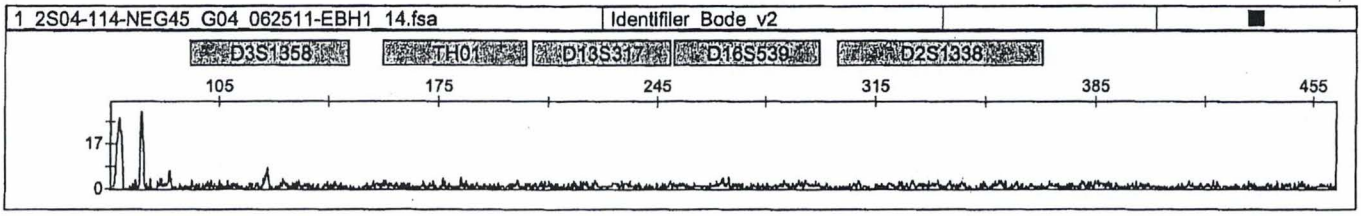
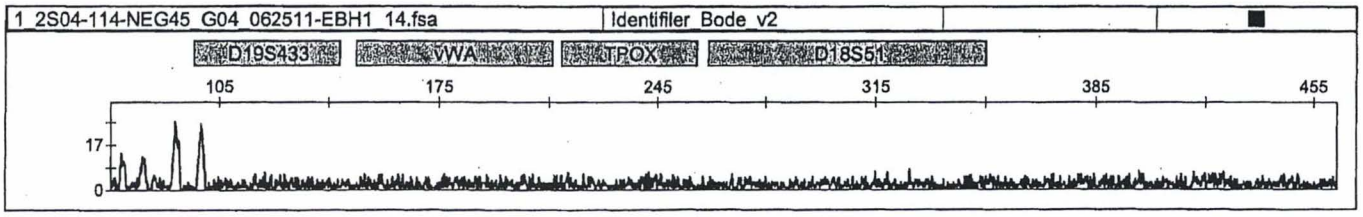
Sample File	Panel	SQO	SQ
1_2S04-114-NEG45_G04_062511-EBH1_14.fsa	Identifiler_Bode_v2		



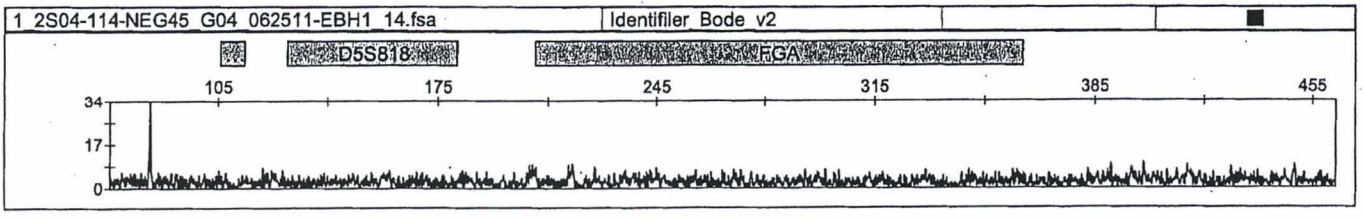
1_2S04-114-NEG45_G04_062511-EBH1_14.fsa | Identifiler_Bode_v2



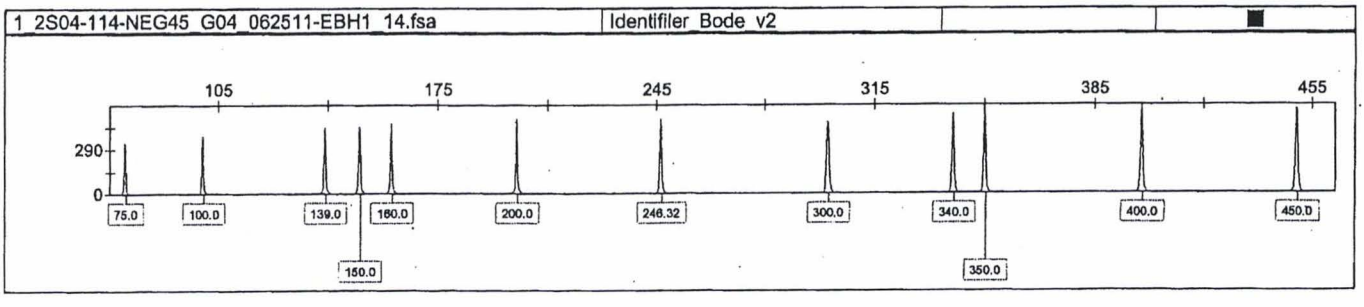
1_2S04-114-NEG45_G04_062511-EBH1_14.fsa | Identifiler_Bode_v2



1_2S04-114-NEG45_G04_062511-EBH1_14.fsa | Identifiler_Bode_v2



1_2S04-114-NEG45_G04_062511-EBH1_14.fsa | Identifiler_Bode_v2



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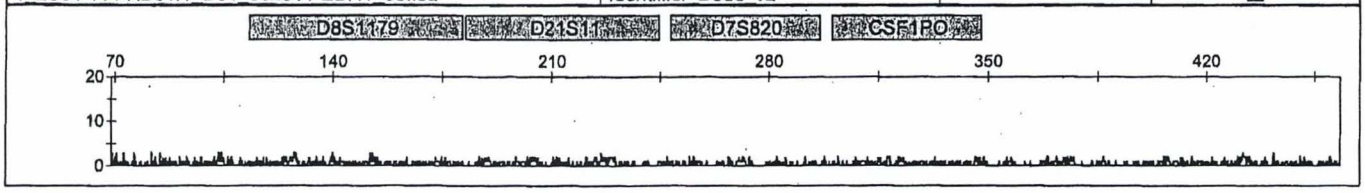
EBH 6/27/11

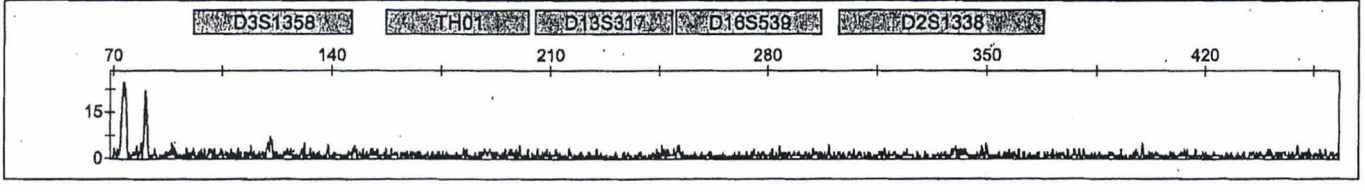
Applied Biosystems
GeneMapper ID v3.2.1

GMID11_062511-EBH1_2S04-114_EBH_ID

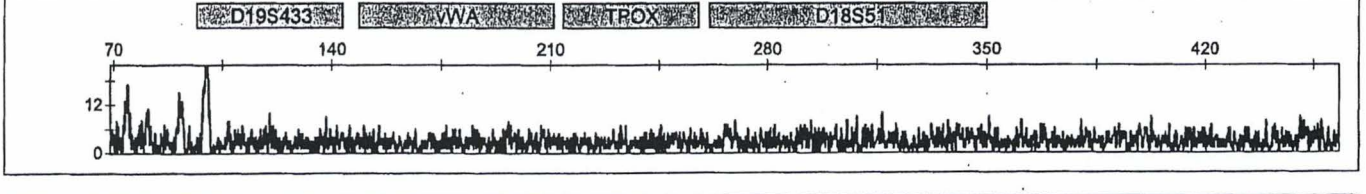
Sample File	Panel	SQO	SQ
1_2S04-114-RB61.1_B01_062511-EBH1_03.fsa	Identifiler_Bode_v2		



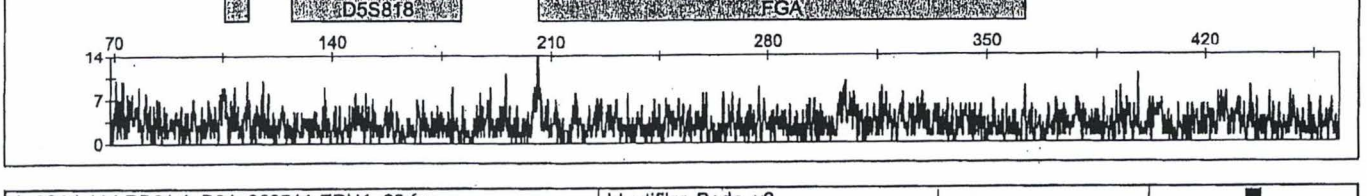
1_2S04-114-RB61.1_B01_062511-EBH1_03.fsa | Identifiler_Bode_v2



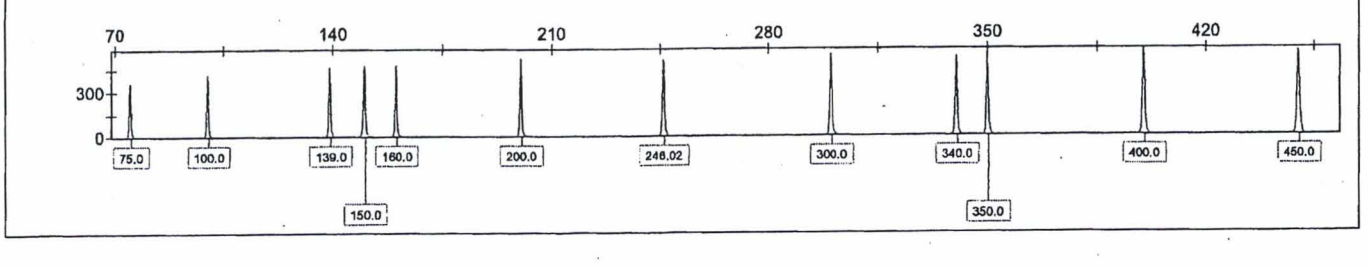
1_2S04-114-RB61.1_B01_062511-EBH1_03.fsa | Identifiler_Bode_v2



1_2S04-114-RB61.1_B01_062511-EBH1_03.fsa | Identifiler_Bode_v2



1_2S04-114-RB61.1_B01_062511-EBH1_03.fsa | Identifiler_Bode_v2



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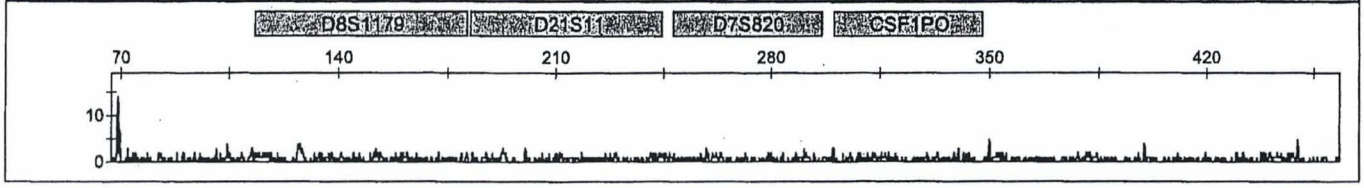
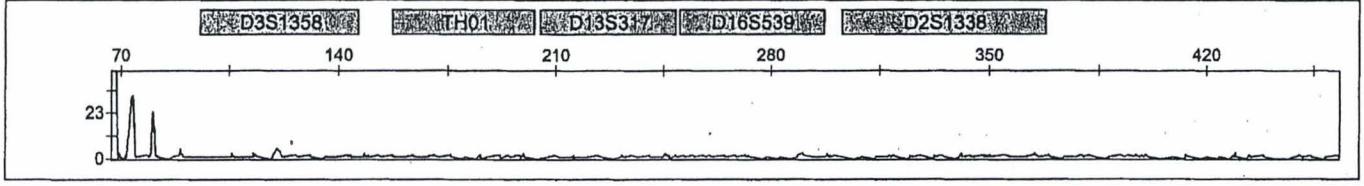
EBH 6/27/11

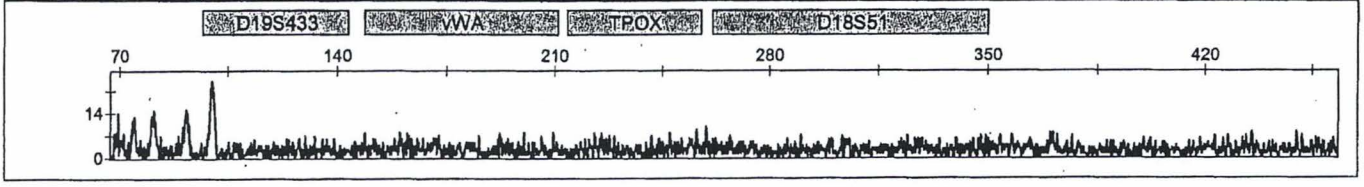
Sample File	Panel	SQO	SQ
1_2S04-114-RB63.1_D01_062511-EBH1_07.fsa	Identifiler_Bode_v2		



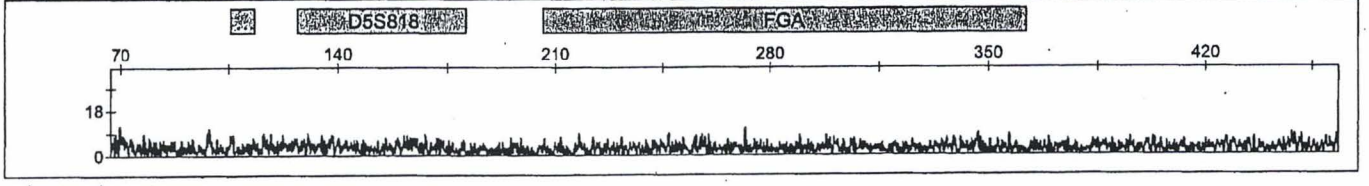
1_2S04-114-RB63.1_D01_062511-EBH1_07.fsa | Identifiler_Bode_v2



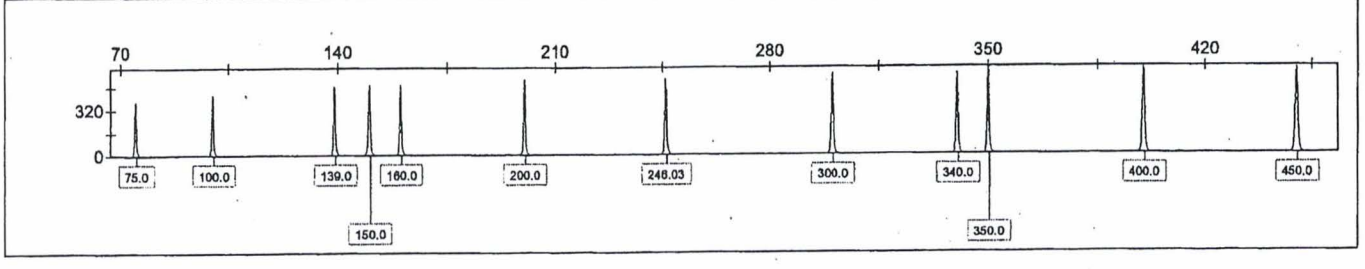
1_2S04-114-RB63.1_D01_062511-EBH1_07.fsa | Identifiler_Bode_v2



1_2S04-114-RB63.1_D01_062511-EBH1_07.fsa | Identifiler_Bode_v2



1_2S04-114-RB63.1_D01_062511-EBH1_07.fsa | Identifiler_Bode_v2



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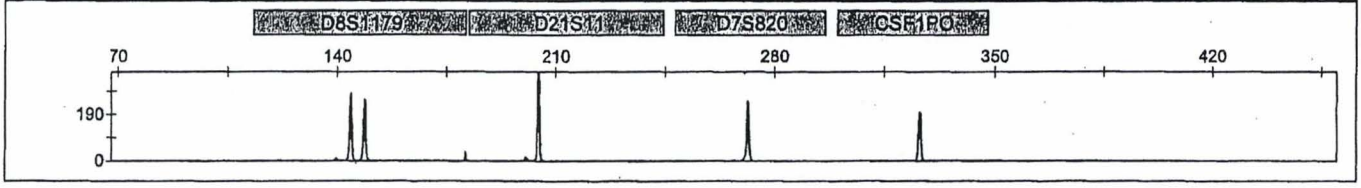
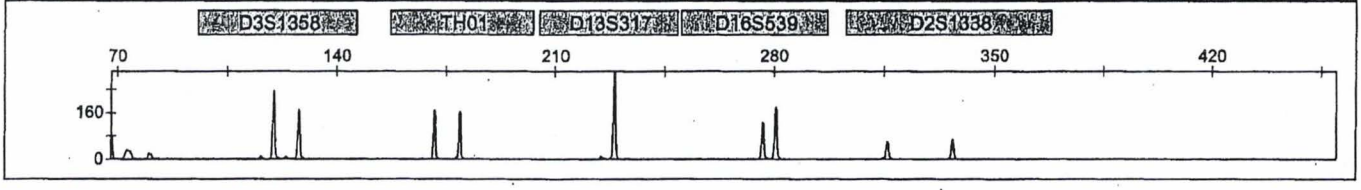
EBH 6/27/11

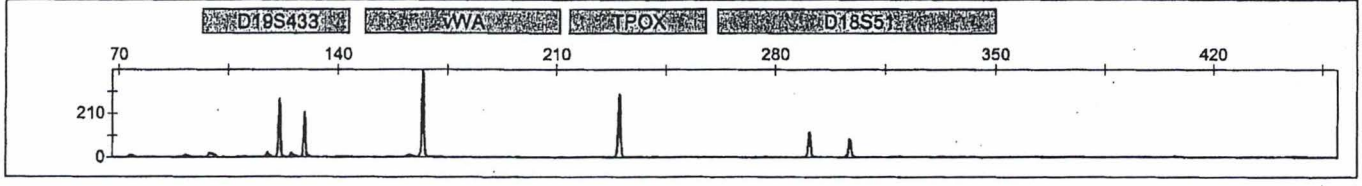
Sample File	Panel	SQO	SQ
1_2S04-114-RB65.1_H01_062511-EBH1_15.fsa	Identifiler_Bode_v2		



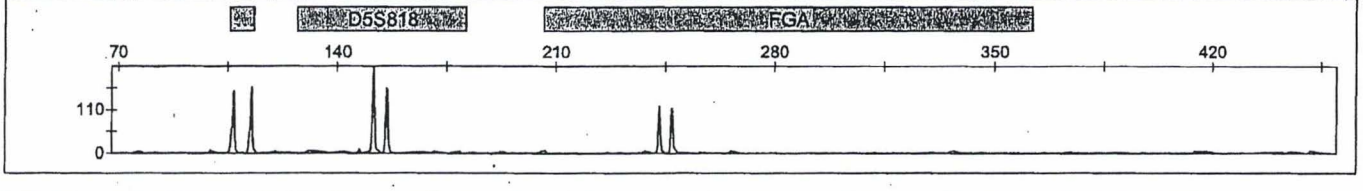
1_2S04-114-RB65.1_H01_062511-EBH1_15.fsa | Identifiler_Bode_v2



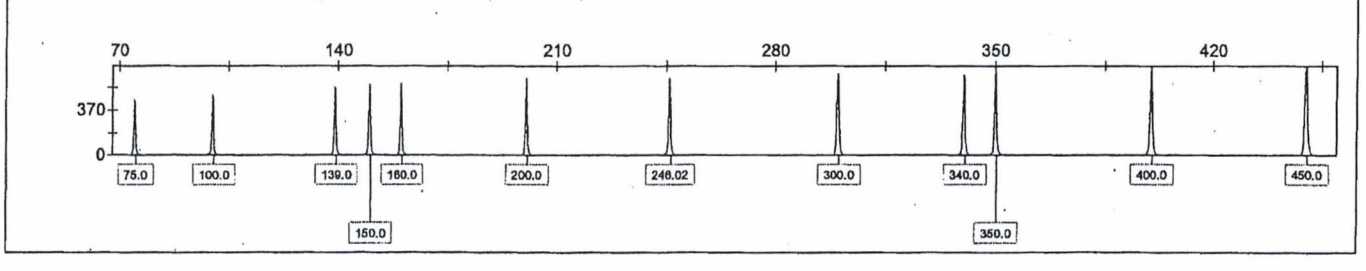
1_2S04-114-RB65.1_H01_062511-EBH1_15.fsa | Identifiler_Bode_v2



1_2S04-114-RB65.1_H01_062511-EBH1_15.fsa | Identifiler_Bode_v2



1_2S04-114-RB65.1_H01_062511-EBH1_15.fsa | Identifiler_Bode_v2



See casenote

EBH 7/6/11

EBH 6/27/11

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Sample File	Panel	SQO	SQ
1_2S04-114-RB66.1_B02_062511-EBH1_04.fsa	Identifiler_Bode_v2	X	■
No Sizing Data: 1_2S04-114-RB66.1_B02_062511-EBH1_04.fsa			
1_2S04-114-RB66.1_B02_062511-EBH1_04.fsa	Identifiler_Bode_v2	X	■
No Sizing Data: 1_2S04-114-RB66.1_B02_062511-EBH1_04.fsa			
1_2S04-114-RB66.1_B02_062511-EBH1_04.fsa	Identifiler_Bode_v2	X	■
No Sizing Data: 1_2S04-114-RB66.1_B02_062511-EBH1_04.fsa			
1_2S04-114-RB66.1_B02_062511-EBH1_04.fsa	Identifiler_Bode_v2	X	■
No Sizing Data: 1_2S04-114-RB66.1_B02_062511-EBH1_04.fsa			
1_2S04-114-RB66.1_B02_062511-EBH1_04.fsa	Identifiler_Bode_v2	X	■
No Sizing Data: 1_2S04-114-RB66.1_B02_062511-EBH1_04.fsa			

See wells G01 + H01 for re-loads on tray 062711-EBH1.

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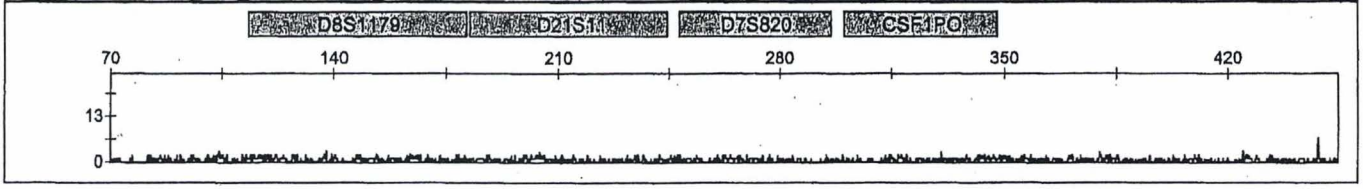
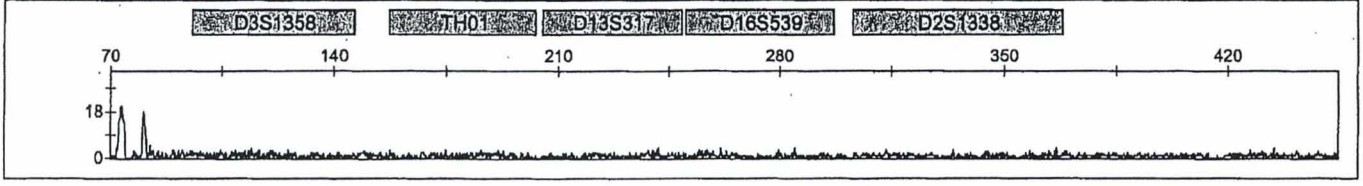
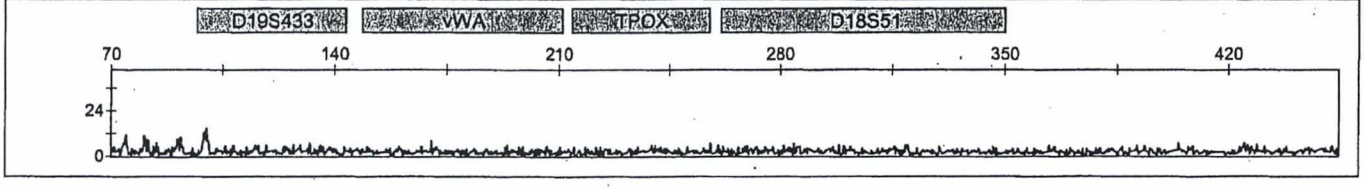
Sample File	Panel	SQO	SQ
1_2S04-114-RB68.1_H02_062511-EBH1_16.fsa	Identifiler_Bode_v2		



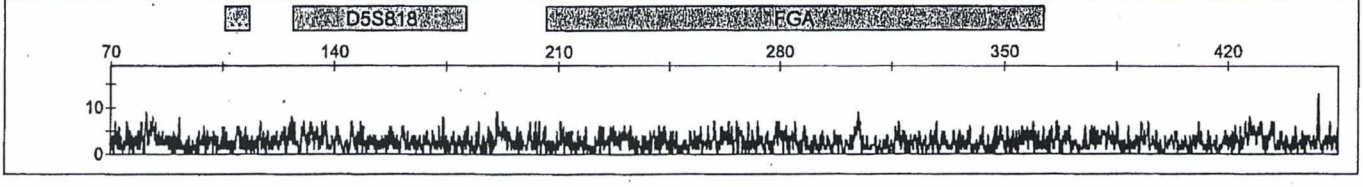
1_2S04-114-RB68.1_H02_062511-EBH1_16.fsa | Identifiler_Bode_v2



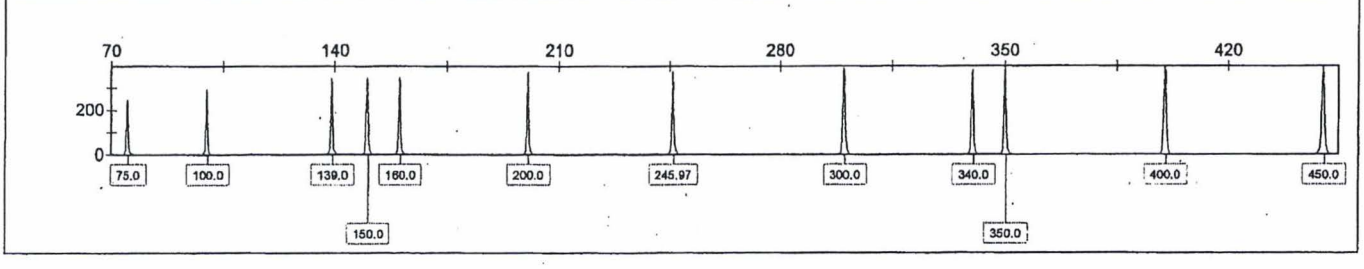
1_2S04-114-RB68.1_H02_062511-EBH1_16.fsa | Identifiler_Bode_v2



1_2S04-114-RB68.1_H02_062511-EBH1_16.fsa | Identifiler_Bode_v2



1_2S04-114-RB68.1_H02_062511-EBH1_16.fsa | Identifiler_Bode_v2



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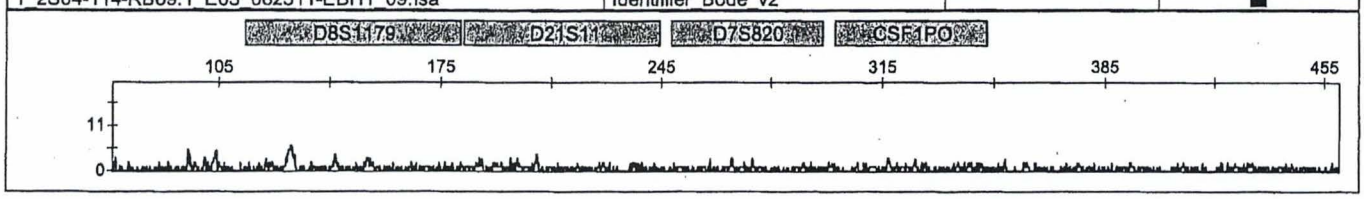
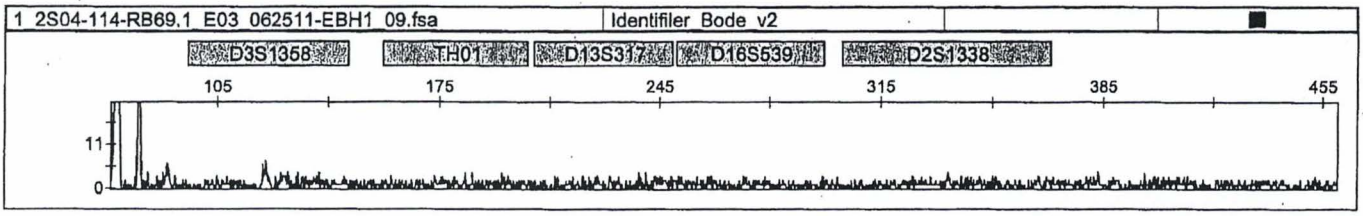
EBH 062711

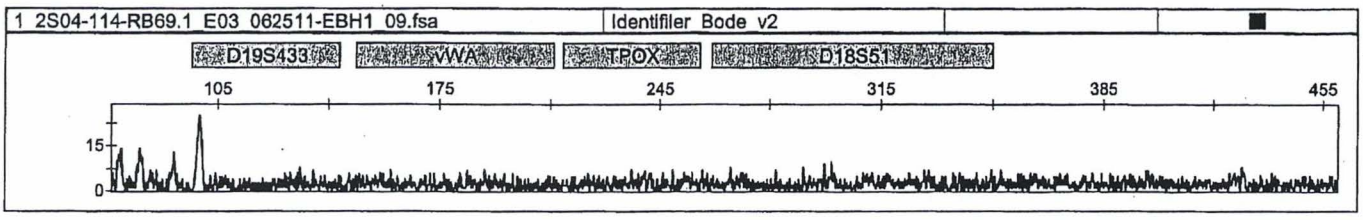
Sample File	Panel	SQO	SQ
1_2S04-114-RB69.1_E03_062511-EBH1_09.fsa	Identifiler_Bode_v2		



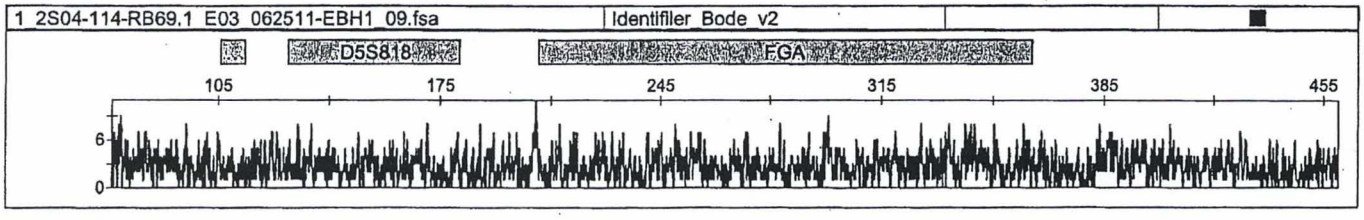
1_2S04-114-RB69.1_E03_062511-EBH1_09.fsa | Identifiler_Bode_v2



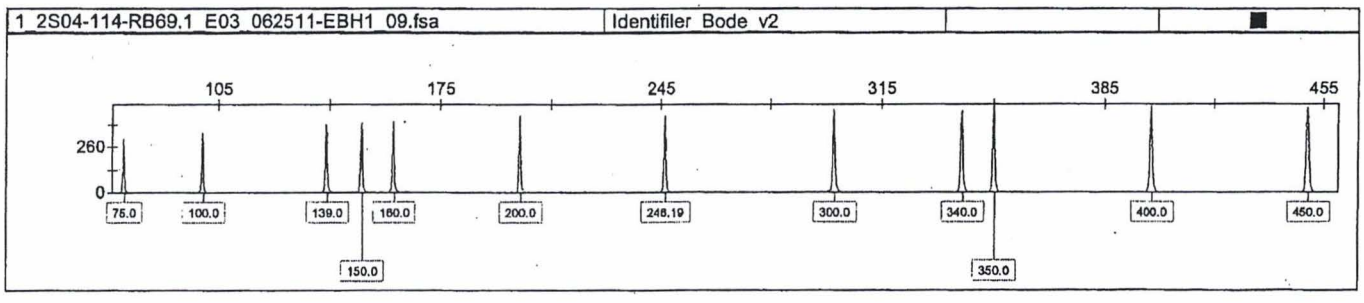
1_2S04-114-RB69.1_E03_062511-EBH1_09.fsa | Identifiler_Bode_v2



1_2S04-114-RB69.1_E03_062511-EBH1_09.fsa | Identifiler_Bode_v2



1_2S04-114-RB69.1_E03_062511-EBH1_09.fsa | Identifiler_Bode_v2



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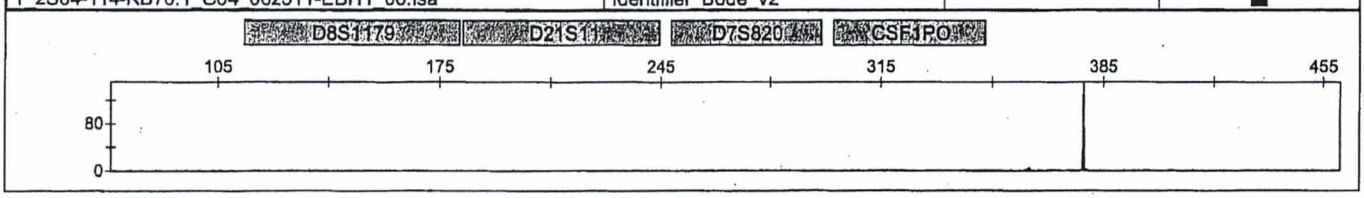
EBH 6/27/11

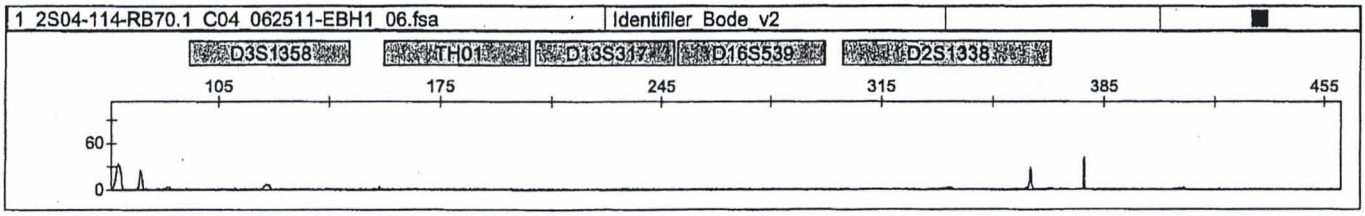
Applied Biosystems
GeneMapper ID v3.2.1

GMID11_062511-EBH1_2S04-114_EBH_ID

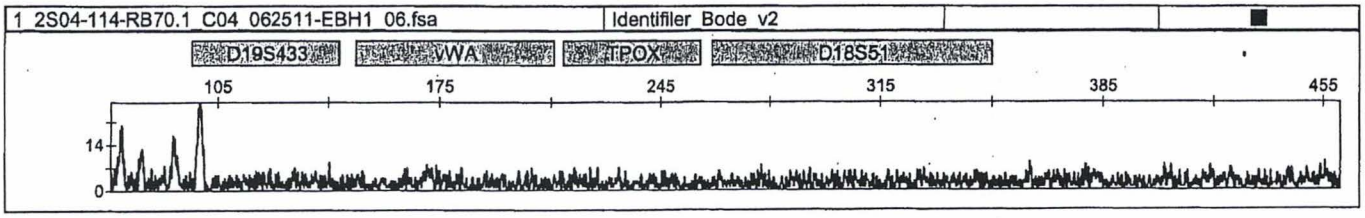
Sample File	Panel	SQO	SQ
1_2S04-114-RB70.1_C04_062511-EBH1_06.fsa	Identifiler_Bode_v2		



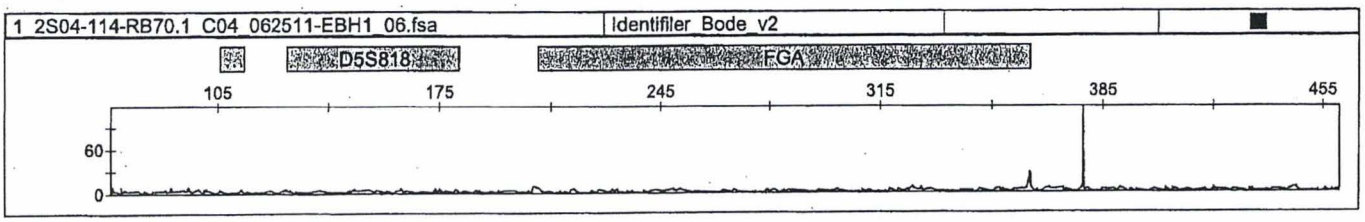
1_2S04-114-RB70.1_C04_062511-EBH1_06.fsa | Identifiler_Bode_v2



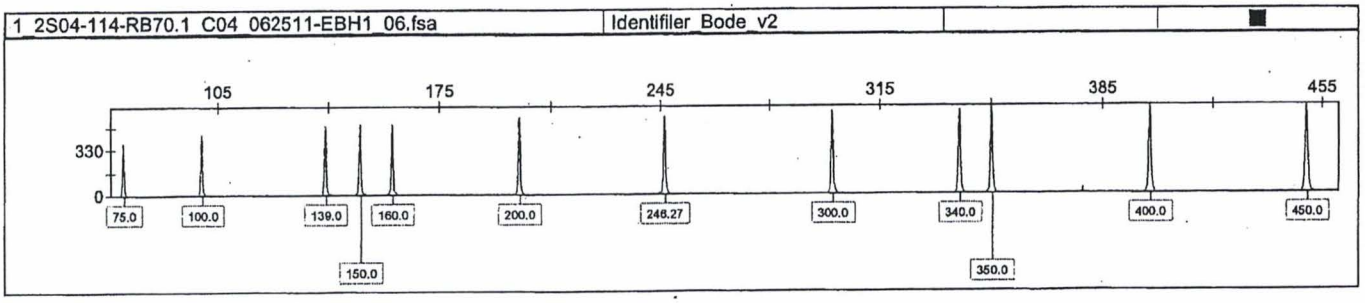
1_2S04-114-RB70.1_C04_062511-EBH1_06.fsa | Identifiler_Bode_v2



1_2S04-114-RB70.1_C04_062511-EBH1_06.fsa | Identifiler_Bode_v2



1_2S04-114-RB70.1_C04_062511-EBH1_06.fsa | Identifiler_Bode_v2



See wells C02 and D02 on tray 062711-EBH11 for re-loads.
EBH 6/27/11

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EBH 6/27/11

CE Set-up Sheet

TRAY ID: 071311-EBH1 Amp. Tray: 2S04-114-AMP49 Analyst: EBH Date: 7/13/11

	1	2	3	4	5	6	7	8	9	10	11	12
A	2S04-114-83a3.1	2S04-114-83a3.1	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
B	2S04-114-83b3.1	2S04-114-83b3.1	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
C	2S04-114-RB76.1	2S04-114-RB76.1	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
D	2S04-114-POS49	2S04-114-POS49	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
E	2S04-114-NEG49	2S04-114-NEG49	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
F	Ladder_ID	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
G	Ladder_ID	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
H	Ladder_ID	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank

	Vol.(ul)/Well		No. of Rxns		Vol. Total (ul)
Formamide Lot# 1105072	10.0 ul	x	100	=	1000
GS-500LIZ Lot# 1103128	0.12 ul	x	100	=	12
Master Mix	10.0 ul				
	+				
Amp. Product	0.7ul				

PIPETTORS LOT #S:	
Formamide:	P-118
ILS:	P-109
Formamide & ILS Mix:	P-115
Ladders:	P-044
Amp Product (3100 tray):	P-040
Amp Product (If diluted):	N/A
Diluent (for dilutions):	N/A

Machine:	13
Run #'s:	210
System:	Identifiler
Ladder Lot#:	09030116
Run Module:	Active_Run_Module_G5
Analysis Module:	75minrfu.gsp

Injected by: NJB
Date of Injection: 7/13/11

Primer Peak Verification	
Primer peaks verified for all negative samples.	
Read 1 Analyst: EBH	Date: 7/14/11
Integrity Report Evaluation	
Integrity Report Evaluation Date* :	N/A
Analyst:	N/A

Integrity performed manually EBH 7/14/11

*If possible contamination is detected, provide case note with details for affected cases

7/12/11 Start 34

AmpF*l* STR Identifiler

Amplification Worksheet (25µl Volume Reaction)

See amplification notes for reagents, lot numbers, and pipettor numbers					
Tray Coordinate (well)	Sample	Dilution	Master Mix (µl)	DNA/dH2O (µl/µl)	Total (µl)
A1.49	2S04-114-83a3.1	---	15	10/0	25
B1.49	2S04-114-83b3.1	---	15	10/0	25
C1.49	2S04-114-RB76.1	---	15	10/0	25
D1.49	2S04-114-POS49	---	15	2/8	25
E1.49	2S04-114-NEG49	---	15	0/10	25

TC#: 28 **Program#:** ID_28CYCL **2S04-114-AMP49**
Analyst: EBH **Date:** 7/13/11
Tube Witness: EBH **Date:** 7/13/11

AMPLIFICATION NOTES:
2S04-114-AMP49

			Sample Volume (µl)	Number of Reactions	Final Volume (µl)
Reagent	**Source**	**Lot #**			
Water	Fisher	107828			
PCR Reaction Mix	ABI	1103177	10.5	6	63
Identifiler Primer Set	ABI	09060069	5.5	6	33
AmpliTaq Gold	ABI	N12473	0.5	6	3
POS 9947	BODE	071311MR			
TE	BODE	N/A			

Pipettes Used:

For all volumes <2 uL	N/A
For all volumes between 2 and 10 uL	A-055
For all volumes between 11 and 100 uL	A-069
For all volumes between 101 and 1000 uL	N/A
For master mix	A-069
For water	A-055

Document: BT00429 - Identifiler Amp (CCW WS)
Revision: 3
Effective: Friday, March 05, 2010 12:27:07 PM

EBH 7/13/11

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Microcon Purification of DNA Extracts

071311EBH-MC1

Item	Source	Lot #
Microcon-100	Amicon	R85N47743
dH_2O	Fisher	N/A
TE-4 Buffer	BODE	041311JJ
cRNA	BODE	011211JJ

Tube #	Sample	Approximate Volume Recovered (ul)	Approximate Final Volume (ul)	Comments
1	2S04-114-83a3	15	22	
2	2S04-114-83b3	16	22	
3	2S04-114-RB76	16	22	

Analyst: EBH **Date:** 7/13/11

Case Number: 2S04-114

Pipettes Used:

Volumes <2 uL	A-039
Volumes 2-10 uL	A-039
Volumes 11-100 uL	A-166
Volumes 101-1000 uL	A-073

Document: BTF00222 - Microcon (WS)
Revision: 4
Effective: Tuesday, March 23, 2010 10:26:31 AM

EBH 7/14/11

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QUANTIFILER DUO QUANT

Shipment: 2S04-114 **Analyst:** EBH
Tray ID: 071311EBH-QT1 **Date:** 07/13/11

Yellow: **Concentration = Zero;** **Below limit of detection of assay.**

IPC is outside of the expected range - Inhibitors may be present OR DNA yield is greater than 50ng/µl OR both. Dilute prior to amplification.

			Human Target		Male Target				
	Sample Name	Sample Type	CT	Quantity (ng/ul)	CT	Quantity (ng/ul)	IPC Ct	Male Quantity/ Human Quantity	Status
	STD 50	Standard	22.11	50	23.04	50.000	29.89	100.00%	
	STD 16.67	Standard	23.86	16.67	24.87	16.670	29.89	100.00%	
	STD 5.56	Standard	28	5.56	26.7	5.560	29.3	100.00%	
	STD 1.85	Standard	27.46	1.85	28.55	1.850	29.29	100.00%	
	STD 0.617	Standard	29.07	0.617	30.41	0.617	29.23	100.00%	
	STD 0.206	Standard	30.65	0.206	31.74	0.206	29.04	100.00%	
	STD 0.069	Standard	31.82	0.069	32.76	0.069	29.14	100.00%	
	STD 0.023	Standard	33.37	0.023	34.92	0.023	29.18	100.00%	
	NTC	Unknown	Undetermined	*<0.023*	Undetermined	*<0.023*	29.1	--	
						Average IPC Ct	29.25		
A1	2S04-114-83a3	Unknown	36.76	0.00267	Undetermined	<0.001	29.24	--	NR
B1	2S04-114-83b3	Unknown	37.59	0.00151	37.44	0.00441	29.25	100%	INC
C1	2S04-114-RB76	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.33	--	NR

Shipment: 2S04-114
Tray ID: 071311EBH-QT1
Analyst: EBH
Date: 07/13/11

Document: BTF00242 - (3) Quantifiler Duo results (WS)
Revision: 6
Effective: Thursday, May 27, 2010 11:17:22 AM

	Male >0.023 ng/ul
INC	Male 0.001 -> 0.023 ng/ul
	Male <0.001 ng/ul, Human >0.023 ng/ul
NR	Male <0.001 ng/ul, Human <0.023 ng/ul

EBH 7/13/11

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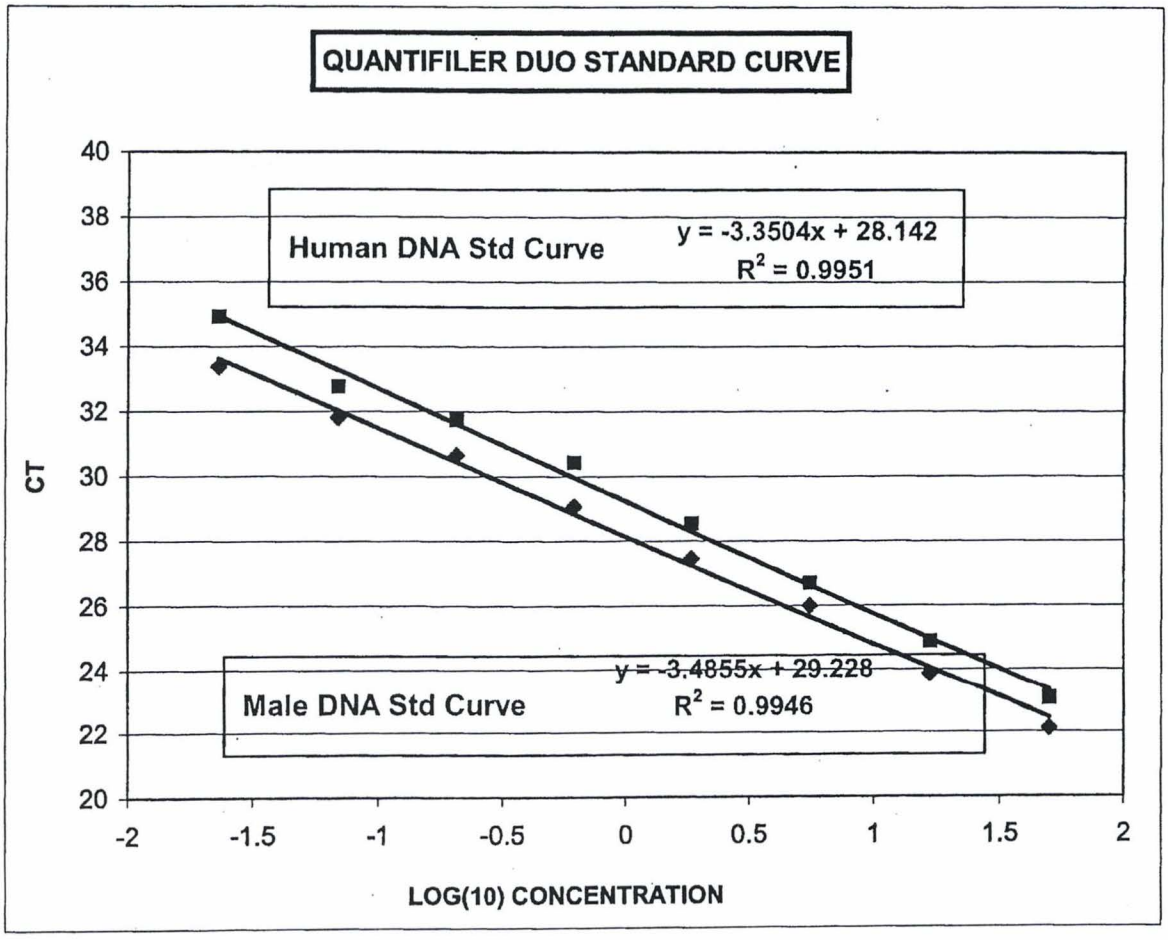
Note: CT values of 0.00 should be interpreted as "greater than 40 cycles."

7/13/2011

QUANTIFILER DUO QUANT

Shipment:	2S04-114	**Analyst:**	EBH
Tray ID:	071311EBH-QT1	**Date:**	07/13/11



Document: BTF00242 - (3) Quantifiler Duo results (WS)
Revision: 6
Effective: Thursday, May 27, 2010 11:17:22 AM

EBH 7/13/11

7/13/2011

Quantifiler Duo Sample Sheet & Plate Set-up

Analyst: EBH Date: 7/13/2011

TRAY ID: 071311EBH-QT1

	1	2	3	4	5	6	7	8	9	10	11	12
A	2S04-114-83a3	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 50
B	2S04-114-83b3	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 16.67
C	2S04-114-RB76	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 5.56
D	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 1.85
E	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 0.617
F	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 0.206
G	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 0.069
H	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	NTC	STD 0.023

Quantifiler Duo PCR Reaction Mix (ABI): 1101020
Primer Mix - *Duo* (ABI): 1007015
Human DNA Standard (ABI): 1007017
DNA Dilution Buffer Lot # (ABI): 1004012
7500 Machine #: 7503

# of Wells + 10% Extra: *13*

	1	13	*Split in 2*
Quantifiler Duo PCR RxN Mix	*12.5*	162.5	81.3
Primer Mix	*10.5*	136.5	68.3
Master Mix	***23***		
DNA or DNA Dilution Buffer	***2***		
Total Volume	***25***		

Pipettes Used:

Volumes <2 uL	N/A
Volumes 2-10 uL	A-089
Volumes 11-100 uL	A-078
Volumes 101-1000 uL	A-053
Master mix	A-078
p10 multichannel	N/A

Document: BTF00242 - (1) Quantifiler Duo samplesheet (WS)
Revision: 4
Effective: Thursday, July 30, 2009 3:53:54 PM

EBH 7/13/11

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QIAGEN EZ1 DNA Investigator (Individual Samples)

Extraction Worksheet

ITEM	SOURCE	LOT NUMBER
G2	QIAGEN	139275227
dH_2O	FISHER	107828
Proteinase K (20mg/ml)	QIAGEN	139271036
MTL (for 500uL & 1500uL lysis only)	QIAGEN	136268774
Carrier RNA (1.00 ug/uL)	BODE	011211JJ
EZ1 Reagent Cartridge	QIAGEN	139274568

Tube #	Sample	EZ1 Robot #	*Tube Witness/Date
1	2S04-114-83a3	EZ01	EMB 7/12/111
2	2S04-114-83b3	EZ01	EMB 7/12/111
3	2S04-114-RB76	EZ01	EMB 7/12/111

*see protocol for witness requirements.

Analyst: AEB/MEB(tech)/SAT(tech)
Cryobox Name: 2S04-114

Date: 7/12/11
Case Number: 2S04-114

EZ1 Protocol: Bone protocol
Protocol complete verified: MEB 07/12/11

Lysis Volume: 1500 uL
Elution Volume: 50 uL

Notes: MEB loaded all samples onto EZ1 robot on 7/12/11. Supervised by SAT.

Pipettes Used:

Volumes <2 uL	A-045
Volumes 2-10 uL	N/A
Volumes 11-100 uL	N/A
Volumes 101-1000 uL	A-009
Volumes 1001-2000 uL	A-009

Document: BTF00253 - EZ1 Individual Samples (CW WS)
Revision: 6
Effective: 7/20/2010 3:22:37 PM

MEB 7/18/11
SAT 071811
28
7/12/11

Transfer of Evidence Cuttings

Shipment or Case #: 2S04-114

Tube #	Sample Name	Sample Type
1	2S04-114-83a3	touch
2	2S04-114-83b3	touch
3	2S04-114-RB76	touch

All evidence cuttings listed above were transferred:

From Analyst: Emily Herren
(print) Emily Herren
(sign)

Date: 7/12/2011

Time: 11:45 AM

Transfer Method (check one): ____Hand to Hand __X__Temporary Evidence Storage
____Secure Refrigerator/Freezer (add location)

To Analyst: Amy Baldwin
(print)
(sign)

Date: 7/12/11

Time: 1:20pm

Document: BT00059 - Transfer of Evidence Cuttings (WS)
Revision: 3
Effective: 10/29/2010 9:03:53 AM

EXH 7/13/11

CE Set-up Sheet

TRAY ID: 070611-EBH1 **Amp. Tray:** 2S04-114-AMP47 **Analyst:** EBH **Date:** 7/6/11

	1	2	3	4	5	6	7	8	9	10	11	12
A	2S04-114-84a2.1	2S04-114-84a2.1	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
B	2S04-114-85a3.1	2S04-114-85a3.1	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
C	2S04-114-85a4.1	2S04-114-85a4.1	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
D	2S04-114-RB72.1	2S04-114-RB72.1	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
E	2S04-114-POS47	2S04-114-POS47	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
F	2S04-114-NEG47	2S04-114-NEG47	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
G	Ladder_ID	Ladder_ID	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
H	Ladder_ID	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank

	Vol.(ul)/Well		No. of Rxns		Vol. Total (ul)
Formamide Lot# 11040102	10.0 ul	x	100	=	1000
GS-500LIZ Lot# 1102127	0.12 ul	x	100	=	12

Master Mix 10.0 ul

\+

Amp. Product 0.7ul

PIPETTORS LOT #S:	
Formamide:	P-118
ILS:	P-071
Formamide & ILS Mix:	P-116
Ladders:	P-075
Amp Product (3100 tray):	P-030
Amp Product (if diluted):	N/A
Diluent (for dilutions):	N/A

Machine:	14
Run #'s:	35
System:	Identifiler
Ladder Lot#:	09030116
Run Module:	Active_Run_Module_G5
Analysis Module:	75minrfu.gsp

Injected by: NJB

Date of Injection: 7/6/11

Primer Peak Verification	
Primer peaks verified for all negative samples.	
Read 1 Analyst: EBH	Date: 7/6/11
Integrity Report Evaluation	
Integrity Report Evaluation Date* :	N/A
Analyst:	N/A

Integrity performed manually CBH 7/6/11

*If possible contamination is detected, provide case note with details for affected cases

EBH 7/6/11

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AmpF*l* STR Identifiler

Amplification Worksheet (25µl Volume Reaction)

See amplification notes for reagents, lot numbers, and pipettor numbers					
Tray Coordinate (well)	Sample	Dilution	Master Mix (µl)	DNA/dH2O (µl/µl)	Total (µl)
A1.47	2S04-114-84a2.1	—	15	10/0	25
B1.47	2S04-114-85a3.1	—	15	10/0	25
C1.47	2S04-114-85a4.1	—	15	10/0	25
D1.47	2S04-114-RB72.1	—	15	10/0	25
E1.47	2S04-114-POS47	—	15	2/8	25
F1.47	2S04-114-NEG47	—	15	0/10	25

TC#: 28 **Program#:** ID_28CYCL **2S04-114-AMP47**
Analyst: EBH **Date:** 7/6/11
Tube Witness: JAD **Date:** 7/6/11

AMPLIFICATION NOTES:
2S04-114-AMP47

			Sample Volume (µl)	Number of Reactions	Final Volume (µl)
Reagent	**Source**	**Lot #**			
Water	Fisher	107828			
PCR Reaction Mix	ABI	1103177	10.5	7	73.5
Identifiler Primer Set	ABI	0906069	5.5	7	38.5
AmpliTaq Gold	ABI	N12473	0.5	7	3.5
POS 9947	BODE	070611EBH			
TE	BODE	041311JJ			

Pipettes Used:

For all volumes <2 uL	A-116
For all volumes between 2 and 10 uL	A-116
For all volumes between 11 and 100 uL	A-070
For all volumes between 101 and 1000 uL	N/A
For master mix	A-070
For water	A-116

Document: BT00429 - Identifiler Amp (CCW WS)
Revision: 3
Effective: Friday, March 05, 2010 12:27:07 PM

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EBH
7/6/11

Vivacon Purification/Concentration of DNA Extracts

Item	Source	Lot #
Vivacon 500-30K	Sartorius	1104003V5
cRNA	BODE	011211JJ
dH_2O	Fisher	N/A
TE-4 Buffer	BODE	041311JJ

Tube #	Sample	Approximate Volume Recovered (ul)	Approximate Final Volume (ul)	Comments
1	2S04-114-84a2	21	22	
2	2S04-114-85a3	21	22	
3	2S04-114-85a4	19	22	
4	2S04-114-RB72	18	22	

Analyst: EBH **Date:** 7/6/11

Case Number: 2S04-114

Pipettes Used:

Volumes <2 uL	A-090
Volumes 2-10 uL	A-090
Volumes 11-100 uL	A-166
Volumes 101-1000 uL	A-052

Document: BTF00222 - Vivacon 500-30K (WS)
Revision: 1
Effective: 11/15/2010 11:14:54 AM

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EBH
7/6/11

QUANTIFILER DUO QUANT

Shipment: CCA1080, CCA1138, CCF1102, 2S04-114
Tray ID: 062911ABG-QT1

Analyst: ABG
Date: 06/29/11

Yellow: Concentration = Zero; Below limit of detection of assay.

Blue: IPC is outside of the expected range - Inhibitors may be present OR DNA yield is greater than 50ng/µl OR both. Dilute prior to amplification.

			Human Target		Male Target				
	Sample Name	Sample Type	CT	Quantity (ng/ul)	CT	Quantity (ng/ul)	IPC Ct	Male Quantity/ Human Quantity	Status
	STD 50	Standard	21.93	50	22.23	50.000	29.99	100.00%	
	STD 16.67	Standard	23.81	16.67	24.11	16.670	29.76	100.00%	
	STD 5.56	Standard	25.48	5.56	25.91	5.560	29.64	100.00%	
	STD 1.85	Standard	27.12	1.85	27.46	1.850	29.52	100.00%	
	STD 0.617	Standard	28.97	0.617	29.12	0.617	29.48	100.00%	
	STD 0.206	Standard	30.21	0.206	30.71	0.206	29.39	100.00%	
	STD 0.069	Standard	32.19	0.069	32.38	0.069	29.34	100.00%	
	STD 0.023	Standard	33.61	0.023	34.1	0.023	29.55	100.00%	
	NTC	Unknown	Undetermined	<0.023	Undetermined	<0.023	29.58	--	
						Average IPC Ct	29.53		
A1	CCA1080-0112-E10a1-SF	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.52	--	NR
B1	CCA1080-0112-E10b1-SF	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.53	--	NR
C1	CCA1080-0112-E10c1-SF	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.58	--	NR
D1	CCA1080-0112-E10d1-SF	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.73	--	NR
E1	CCA1080-0112-E10e1-SF	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.45	--	NR
F1	CCA1080-0112-E10f1-SF	Unknown	36.05	0.00498	31.27	0.147	29.25	100%	POS
G1	CCA1080-0112-E10g1-SF	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.39	--	NR
H1	CCA1080-0112-E10h1-SF	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.35	--	NR
A2	CCA1080-0112-E10i1-SF	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.47	--	NR
B2	CCA1080-RB40-SF	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.71	--	NR
C2	CCA1138-0047-E05b1-SF	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.45	--	NR
D2	CCA1138-RB7-SF	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.49	--	NR
E2	CCA1080-0112-E10a1-EF	Unknown	35.51	0.00712	35.33	0.0103	29.69	100%	INC
F2	CCA1080-0112-E10b1-EF	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.78	--	NR
G2	CCA1080-0112-E10c1-EF	Unknown	35.5	0.00715	34.88	0.0138	29.45	100%	INC
H2	CCA1080-0112-E10d1-EF	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.48	--	NR
A3	CCA1080-0112-E10e1-EF	Unknown	36.39	0.00398	35.28	0.0106	29.38	100%	INC
B3	CCA1080-0112-E10f1-EF	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.96	--	NR
C3	CCA1080-0112-E10g1-EF	Unknown	35.82	0.00581	Undetermined	<0.001	29.72	--	NR
D3	CCA1080-0112-E10h1-EF	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.62	--	NR
E3	CCA1080-0112-E10i1-EF	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.7	--	NR
F3	CCA1080-RB40-EF	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.57	--	NR
G3	CCA1138-0047-E05b1-EF	Unknown	34.21	0.0168	Undetermined	<0.001	29.76	--	NR
H3	CCA1138-RB7-EF	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.37	--	NR
A4	CCF1102-0058-E02e	Unknown	30.71	0.169	Undetermined	<0.001	29.54	--	NEG
B4	CCF1102-0058-E02g	Unknown	33.14	0.034	Undetermined	<0.001	29.49	--	NEG
C4	CCF1102-0058-E02h	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.74	--	NR
D4	CCA1080-0112-E16d1	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.57	--	NR
E4	CCA1080-RB39	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.75	--	NR
F4	CCA1138-0047-E06c1	Unknown	35.3	0.00821	36.54	0.00465	29.62	56.64%	INC
G4	CCA1138-RB6	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.64	--	NR
H4	2S04-114-84a2	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.73	--	NR
A5	2S04-114-85a3	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.6	--	NR
B5	2S04-114-85a4	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.59	--	NR
C5	2S04-114-RB72	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.58	--	NR

Shipment: CCA1080, CCA1138, CCF1102, 2S04-114
Tray ID: 062911ABG-QT1
Analyst: ABG
Date: 06/29/11

Document: BTF00242 - (3) Quantifiler Duo results (WS)
Revision: 6
Effective: Thursday, May 27, 2010 11:17:22 AM

POS	Male >0.023 ng/ul
INC	Male 0.001 -> 0.023 ng/ul
NEG	Male <0.001 ng/ul, Human >0.023 ng/ul
NR	Male <0.001 ng/ul, Human <0.023 ng/ul

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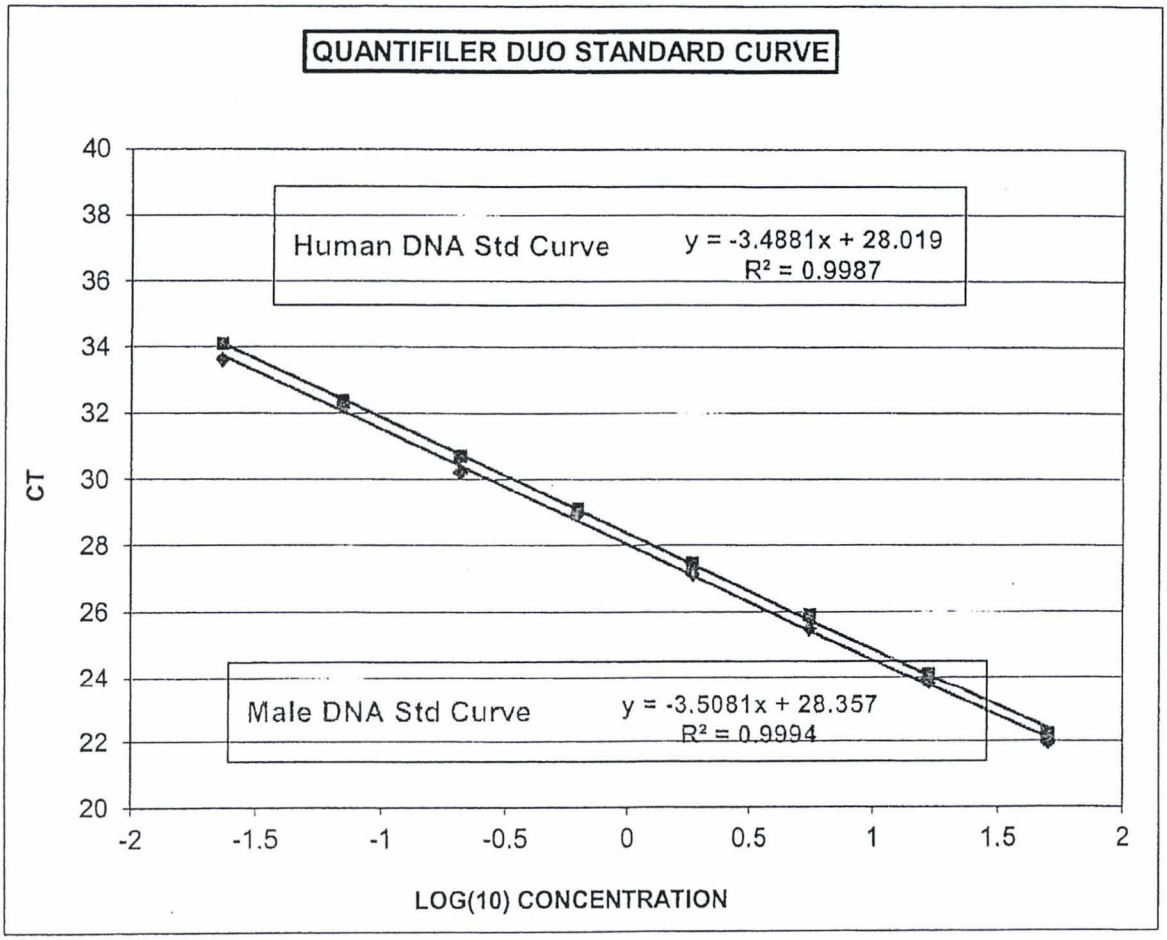
ABG 6-29-11

Note: CT values of 0.00 should be interpreted as "greater than 40 cycles."

6/29/2011

QUANTIFILER DUO QUANT

Shipment:	CCA1080, CCA1138, CCF1102, 2S04-114	**Analyst:**	ABG
Tray ID:	062911ABG-QT1	**Date:**	06/29/11



Document: BTF00242 - (3) Quantifiler Duo results (WS)
Revision: 6
Effective: Thursday, May 27, 2010 11:17:22 AM

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ABG 6-29-11

6/29/2011

Quantifiler Duo Sample Sheet & Plate Set-up

Analyst: ABG Date: 6/29/2011

CASES: CCA1080, CCF1102, CCA1138, 2S04-114

TRAY ID: 062911ABG-QT1

	1	2	3	4	5	6	7	8	9	10	11	12
A	CCA1080-0112-E10a1-SF	CCA1080-0112-E10i1-SF	CCA1080-0112-E10e1-EF	CCF1102-0058-E02e	2S04-114-85a3	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 50
B	CCA1080-0112-E10b1-SF	CCA1080-RB40-SF	CCA1080-0112-E10f1-EF	CCF1102-0058-E02g	2S04-114-85a4	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 16.67
C	CCA1080-0112-E10c1-SF	CCA1138-0047-E05b1-SF	CCA1080-0112-E10g1-EF	CCF1102-0058-E02h	2S04-114-RB72	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 5.56
D	CCA1080-0112-E10d1-SF	CCA1138-RB7-SF	CCA1080-0112-E10h1-EF	CCA1080-0112-E16d1	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 1.85
E	CCA1080-0112-E10e1-SF	CCA1080-0112-E10a1-EF	CCA1080-0112-E10i1-EF	CCA1080-RB39	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 0.617
F	CCA1080-0112-E10f1-SF	CCA1080-0112-E10b1-EF	CCA1080-RB40-EF	CCA1138-0047-E06c1	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 0.206
G	CCA1080-0112-E10g1-SF	CCA1080-0112-E10c1-EF	CCA1138-0047-E05b1-EF	CCA1138-RB6	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 0.069
H	CCA1080-0112-E10h1-SF	CCA1080-0112-E10d1-EF	CCA1138-RB7-EF	2S04-114-84a2	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	NTC	STD 0.023

Quantifiler Duo PCR Reaction Mix (ABI): 1101020
Primer Mix - *Duo* (ABI): 1007015
Human DNA Standard (ABI): 1007017
DNA Dilution Buffer Lot # (ABI): 1004012
7500 Machine #: 3

# of Wells + 10% Extra: *50*

	1	50	*Split in 2*
Quantifiler Duo PCR RxN Mix	*6.25*	312.5	156.3
Primer Mix	*5.25*	262.5	131.3
Master Mix	***11.5***		
DNA or DNA Dilution Buffer	***2***		
Total Volume	***13.5***		

Pipettes Used:

Volumes <2 uL	N/A
Volumes 2-10 uL	A-116
Volumes 11-100 uL	A-070
Volumes 101-1000 uL	A-064
Master mix	A-070
p10 multichannel	N/A

AJG 6-29-11

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QIAGEN EZ1 DNA Investigator (Individual Samples)

Extraction Worksheet

ITEM	SOURCE	LOT NUMBER
G2	QIAGEN	136264308
dH_2O	FISHER	107828
Proteinase K (20mg/ml)	QIAGEN	136270698
MTL (for 500uL & 1500uL lysis only)	QIAGEN	136268774
Carrier RNA (1.00 ug/uL)	BODE	011211JJ
EZ1 Reagent Cartridge	QIAGEN	139274568

Tube #	Sample	EZ1 Robot #	*Tube Witness/Date
1	2S04-114-84a2	EZ01	AMB 6/29/11
2	2S04-114-85a3	EZ01	AMB 6/29/11
3	2S04-114-85a4	EZ01	AMB 6/29/11
4	2S04-114-RB72	EZ01	AMB 6/29/11

*see protocol for witness requirements.

Analyst: EBH
Cryobox Name: 2S04-114

Date: 6/29/11
Case Number: 2S04-114

EZ1 Protocol: large volume
Protocol complete verified: EBH 6/29/11

Lysis Volume: 500 ul
Elution Volume: 50 ul

Notes: N/A

EBH 7/15/11

Pipettes Used:

Volumes <2 uL	A-090
Volumes 2-10 uL	N/A
Volumes 11-100 uL	A-201
Volumes 101-1000 uL	A-073
Volumes 1001-2000 uL	N/A

Document: BTF00253 - EZ1 Individual Samples (CW WS)
Revision: 6
Effective: 7/20/2010 3:22:37 PM

EBH 6/29/11

CE Set-up Sheet

TRAY ID: 062811-EBH1 **Amp. Tray:** 2S04-114-AMP46 **Analyst:** EBH **Date:** 6/28/11

	1	2	3	4	5	6	7	8	9	10	11	12
A	2S04-114-84a1.2	2S04-114-84a1.2_2	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
B	2S04-114-85a1.2	2S04-114-85a1.2_2	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
C	2S04-114-85a2.2	2S04-114-85a2.2_2	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
D	2S04-114-RB65.2	2S04-114-RB65.2_2	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
E	2S04-114-POS46	2S04-114-POS46	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
F	2S04-114-NEG46	2S04-114-NEG46	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
G	Ladder_ID	Ladder_ID	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
H	Ladder_ID	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank

	Vol.(ul)/Well		No. of Rxns		Vol. Total (ul)
Formamide Lot# 1103051	10.0 ul	x	100	=	1000
GS-500LIZ Lot# 1103128	0.12 ul	x	100	=	12
Master Mix	10.0 ul				
	+				
Amp. Product	0.7ul				

PIPETTORS LOT #S:	
Formamide:	P-118
ILS:	P-071
Formamide & ILS Mix:	P-1116
Ladders:	P-075
Amp Product (3100 tray):	P-0810
Amp Product (If diluted):	N/A
Diluent (for dilutions):	N/A

Machine:	14
Run #'s:	25
System:	Identifiler
Ladder Lot#:	09030116
Run Module:	Active_Run_Module_G5
Analysis Module:	75minrfu.gsp

Injected by: HNB
Date of Injection: 6/28/11

Primer Peak Verification	
Primer peaks verified for all negative samples.	
Read 1 Analyst: EBH	Date: 6/28/11
Integrity Report Evaluation	
Integrity Report Evaluation Date*:	N/A
Analyst:	N/A

Integrity performed manually.
EBH 6/28/11

*If possible contamination is detected, provide case note with details for affected cases

6/28/11 EBH 14

AmpF*l* STR Identifiler

Amplification Worksheet (25µl Volume Reaction)

See amplification notes for reagents, lot numbers, and pipettor numbers					
Tray Coordinate (well)	Sample	Dilution	Master Mix (µl)	DNA/dH2O (µl/µl)	Total (µl)
A1,46	2S04-114-84a1.2	---	15	10/0	25
B1,46	2S04-114-85a1.2	---	15	10/0	25
C1,46	2S04-114-85a2.2	---	15	10/0	25
D1,46	2S04-114-RB65.2	---	15	10/0	25
E1,46	2S04-114-POS46	---	15	2/8	25
F1,46	2S04-114-NEG46	---	15	0/10	25

TC#: 28 **Program#:** ID 28CYCL **2S04-114-AMP46**
Analyst: EBH **Date:** 6/27/11
Tube Witness: [illegible] **Date:** 6/27/11

AMPLIFICATION NOTES:
2S04-114-AMP46

			Sample Volume (µl)	Number of Reactions	Final Volume (µl)
Reagent	**Source**	**Lot #**			
Water	Fisher	107828			
PCR Reaction Mix	ABI	1103177	10.5	4 7	42 73.5
Identifiler Primer Set	ABI	09060069	5.5	4 7	~~22~~ 38.5
AmpliTaq Gold	ABI	N12473	0.5	4 7	~~2~~ 3.5
POS 9947	BODE	062711 ABS1			
TE	BODE	N/A			

EBH 6/27/11

Pipettes Used:

For all volumes <2 uL	N/A
For all volumes between 2 and 10 uL	A-186
For all volumes between 11 and 100 uL	A-023
For all volumes between 101 and 1000 uL	N/A
For master mix	A-023
For water	A-186

Document: BT00429 - Identifiler Amp (CCW WS)
Revision: 3
Effective: Friday, March 05, 2010 12:27:07 PM

EBH 6/27/11 18

CE Set-up Sheet

TRAY ID: 062711-EBH1 **Amp. Tray:** 2S04-114-AMP45 reloads **Analyst:** EBH **Date:** 6/27/11

	1	2	3	4	5	6	7	8	9	10	11	12
A	2S04-114-83a1.1	2S04-114-97a1.1	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
B	2S04-114-83a1.1	2S04-114-97a1.1	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
C	2S04-114-85a2.1	2S04-114-RB70.1	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
D	2S04-114-85a2.1	2S04-114-RB70.1	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
E	2S04-114-RB65.1	2S04-114-POS45	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
F	2S04-114-RB65.1	2S04-114-POS45	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
G	2S04-114-RB66.1	Ladder_ID	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank
H	2S04-114-RB66.1	Ladder_ID	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Blank

	Vol.(ul)/Well		No. of Rxns		Vol. Total (ul)
Formamide Lot# 1103051	10.0 ul	x	100	=	1000
GS-500LIZ Lot# 1103128	0.12 ul	x	100	=	12

Master Mix 10.0 ul

\+

Amp. Product 0.7ul

PIPETTORS LOT #S:	
Formamide:	P-118
ILS:	P-071
Formamide & ILS Mix:	P-116
Ladders:	P-D107
Amp Product (3100 tray):	P-0320
Amp Product (if diluted):	N/A
Diluent (for dilutions):	N/A

Machine:	4
Run #'s:	10
System:	Identifiler
Ladder Lot#:	09030116
Run Module:	Active_Run_Module_G5
Analysis Module:	75minrfu.gsp

Injected by: NJB

Date of Injection: 10/27/11

Primer Peak Verification	
Primer peaks verified for all negative samples.	
Read 1 Analyst: EBH	Date: 6/27/11
Integrity Report Evaluation	
Integrity Report Evaluation Date*:	N/A
Analyst:	N/A

Integrity performed manually EBH 6/27/11

*If possible contamination is detected, provide case note with details for affected cases

11/2/10 NDB L1

CE Set-up Sheet

TRAY ID: 062511-EBH1 Amp. Tray: 2S04-114-AMP45; CCA1156-AMP2 Analyst: EBH Date: 6/25/11

	1	2	3	4	5	6	7	8	9	10	11	12
A	2S04-114-83a1.1	2S04-114-86a1.1	2S04-114-101a1.1	2S04-114-108a1.1	CCA1156-0069-R05a1.1	CCA1156-0069-R05a1.1_2	Blank	Blank	Blank	Blank	Blank	Blank
B	2S04-114-RB61.1	2S04-114-RB66.1	2S04-114-102a1.1	2S04-114-108a2.1	CCA1156-0069-R06a1.1	CCA1156-0069-R06a1.1_2	Blank	Blank	Blank	Blank	Blank	Blank
C	2S04-114-83b1.1	2S04-114-97a1.1	2S04-114-102a2.1	2S04-114-RB70.1	CCA1156-RB2.1	CCA1156-RB2.1_2	Blank	Blank	Blank	Blank	Blank	Blank
D	2S04-114-RB63.1	2S04-114-98a1.1	2S04-114-102b1.1	2S04-114-POS45	CCA1156-POS2	CCA1156-POS2	Blank	Blank	Blank	Blank	Blank	Blank
E	2S04-114-84a1.1	2S04-114-98a2.1	2S04-114-RB69.1	2S04-114-NEG45	CCA1156-NEG3	CCA1156-NEG3	Blank	Blank	Blank	Blank	Blank	Blank
F	2S04-114-85a1.1	2S04-114-99a1.1	2S04-114-104a1.1	2S04-114-POS45	Ladder_ID	Blank	Blank	Blank	Blank	Blank	Blank	Blank
G	2S04-114-85a2.1	2S04-114-99a2.1	2S04-114-104a2.1	2S04-114-NEG45	Ladder_ID	Blank	Blank	Blank	Blank	Blank	Blank	Blank
H	2S04-114-RB65.1	2S04-114-RB68.1	2S04-114-105a1.1	Blank	Ladder_ID	Blank	Blank	Blank	Blank	Blank	Blank	Blank

	Vol.(ul)/Well		No. of Rxns		Vol. Total (ul)
Formamide Lot# 1103051	10.0 ul	x	100	=	1000
GS-500LIZ Lot# 1103128	0.12 ul	x	100	=	12

Master Mix 10.0 ul
+
Amp. Product 0.7ul

PIPETTORS LOT #S:	
Formamide:	P-118
ILS:	P-071
Formamide & ILS Mix:	P-116
Ladders:	P-0167
Amp Product (3100 tray):	P-0310
Amp Product (if diluted):	N/A
Diluent (for dilutions):	N/A

Machine:	11
Run #'s:	21-23
System:	Identifiler
Ladder Lot#:	09030160
Run Module:	Active_Run_Module_G5
Analysis Module:	75minrfu.gsp

Injected by: HNB
Date of Injection: 6/25/11

Primer Peak Verification	
Primer peaks verified for all negative samples.	
Read 1 Analyst: EBH	Date: 6/27/11
Integrity Report Evaluation	
Integrity Report Evaluation Date*:	N/A
Analyst:	N/A

Integrity performed manually.
EBH 6/27/11

*If possible contamination is detected, provide case note with details for affected cases

EBH 6/25/11 N/A 11

AmpF*l* STR Identifiler

Amplification Worksheet (25µl Volume Reaction)

See amplification notes for reagents, lot numbers, and pipettor numbers					
Tray Coordinate (well)	Sample	Dilution	Master Mix (µl)	DNA/dH2O (µl/µl)	Total (µl)
A1.45	2S04-114-83a1.1	---	15	10/0	25
B1.45	2S04-114-RB61.1	---	15	10/0	25
C1.45	2S04-114-83b1.1	---	15	10/0	25
D1.45	2S04-114-RB63.1	---	15	10/0	25
E1.45	2S04-114-84a1.1	---	15	10/0	25
F1.45	2S04-114-85a1.1	---	15	10/0	25
G1.45	2S04-114-85a2.1	---	15	10/0	25
H1.45	2S04-114-RB65.1	---	15	10/0	25
A2.45	2S04-114-86a1.1	---	15	10/0	25
B2.45	2S04-114-RB66.1	---	15	10/0	25
C2.45	2S04-114-97a1.1	---	15	10/0	25
D2.45	2S04-114-98a1.1	---	15	10/0	25
E2.45	2S04-114-98a2.1	---	15	10/0	25
F2.45	2S04-114-99a1.1	---	15	10/0	25
G2.45	2S04-114-99a2.1	---	15	10/0	25
H2.45	2S04-114-RB68.1	---	15	10/0	25
A3.45	2S04-114-101a1.1	---	15	10/0	25
B3.45	2S04-114-102a1.1	---	15	10/0	25
C3.45	2S04-114-102a2.1	---	15	10/0	25
D3.45	2S04-114-102b1.1	---	15	10/0	25
E3.45	2S04-114-RB69.1	---	15	10/0	25
F3.45	2S04-114-104a1.1	---	15	10/0	25
G3.45	2S04-114-104a2.1	---	15	10/0	25
H3.45	2S04-114-105a1.1	---	15	10/0	25
A4.45	2S04-114-108a1.1	---	15	10/0	25
B4.45	2S04-114-108a2.1	---	15	10/0	25
C4.45	2S04-114-RB70.1	---	15	10/0	25
D4.45	2S04-114-POS45	---	15	2/8	25
E4.45	2S04-114-NEG45	---	15	0/10	25

TC#: 28 **Program#:** ID 28CYCL **2S04-114-AMP45**
Analyst: EBH **Date:** 6/24/11
Tube Witness: JGB **Date:** 06/24/11

AMPLIFICATION NOTES:
2S04-114-AMP45

			Sample Volume (µl)	Number of Reactions	Final Volume (µl)
Reagent	Source	Lot #			
Water	Fisher	107828			
PCR Reaction Mix	ABI	1012174	10.5	31	325.5
Identifiler Primer Set	ABI	09060069	5.5	31	170.5
AmpliTaq Gold	ABI	N12473	0.5	31	15.5
POS 9947	BODE	062411ABG			
TE	BODE	N/A			

Pipettes Used:

For all volumes <2 uL	N/A
For all volumes between 2 and 10 uL	A-089
For all volumes between 11 and 100 uL	A-078
For all volumes between 101 and 1000 uL	A-053
For master mix	A-078
For water	A-089

Document: BT00429 - Identifiler Amp (CCW WS)
Revision: 3
Effective: Friday, March 05, 2010 12:27:07 PM

EBH 6/24/11

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Vivacon Purification/Concentration of DNA Extracts

Item	Source	Lot #
Vivacon 500-30K	Sartorius	1104003V5
cRNA	BODE	011211JJ
dH_2O	Fisher	N/A
TE-4 Buffer	BODE	041311JJ

Tube #	Sample	Approximate Volume Recovered (ul)	Approximate Final Volume (ul)	Comments
1	2S04-114-83a1	15	22	Samples 2S04-114-83a1 and 2S04-114-83a2 were combined and processed as 2S04-114-83a1
2	2S04-114-RB61	17		Samples 2S04-114-RB61 and 2S04-114-RB62 were combined and processed as 2S04-114-RB61.
5	2S04-114-83b1	15		Samples 2S04-114-83b1 and 2S04-114-83b2 were combined and processed as 2S04-114-83b1.
6	2S04-114-RB63	17		Samples 2S04-114-RB63 and 2S04-114-RB64 were combined and processed as 2S04-114-RB63.
9	2S04-114-84a1	15		
10	2S04-114-85a1	16		
11	2S04-114-85a2	15		
12	2S04-114-RB65	16		
13	2S04-114-86a1	15		Samples 2S04-114-86a1 and 2S04-114-86a2 were combined and processed as 2S04-114-86a1.
14	2S04-114-RB66	18		Samples 2S04-114-RB66 and 2S04-114-RB67 were combined and processed as 2S04-114-RB66.
17	2S04-114-97a1	16		
18	2S04-114-98a1	16		
19	2S04-114-98a2	16		
20	2S04-114-99a1	15		
21	2S04-114-99a2	15		
22	2S04-114-RB68	15		
23	2S04-114-101a1	18		
24	2S04-114-102a1	15		
25	2S04-114-102a2	16		
26	2S04-114-102b1	16		
27	2S04-114-RB69	14		
28	2S04-114-104a1	15		
29	2S04-114-104a2	17		
30	2S04-114-105a1	17		
31	2S04-114-108a1	16		
32	2S04-114-108a2	16		
33	2S04-114-RB70	18		

Analyst: EBH EBH 6/24/11 **Date:** 6/24/11
Case Number: 2S04-114

Pipettes Used:

Volumes <2 uL	A-038
Volumes 2-10 uL	A-038
Volumes 11-100 uL	A-056
Volumes 101-1000 uL	A-030

EBH 6/24/11

QUANTIFILER DUO QUANT

Shipment: 2S04-114; CCA1156
Tray ID: 062411EBH-QT1

Analyst: EBH
Date: 06/24/11

Yellow: Concentration = Zero; Below limit of detection of assay.

IPC is outside of the expected range - Inhibitors may be present OR DNA yield is greater than 50ng/µl OR both. Dilute prior to amplification.

			Human Target		Male Target				
	Sample Name	Sample Type	CT	Quantity (ng/ul)	CT	Quantity (ng/ul)	IPC Ct	Male Quantity/ Human Quantity	Status
	STD 50	Standard	22.66	50	23.53	50.000	29.79	100.00%	
	STD 16.67	Standard	24.51	16.67	25.34	16.670	29.49	100.00%	
	STD 5.56	Standard	26.24	5.56	27.1	5.560	29.31	100.00%	
	STD 1.85	Standard	27.84	1.85	28.89	1.850	29.3	100.00%	
	STD 0.617	Standard	29.51	0.617	31.06	0.617	29.29	100.00%	
	STD 0.206	Standard	31.3	0.206	32.32	0.206	29.42	100.00%	
	STD 0.069	Standard	32.79	0.069	33.45	0.069	29.36	100.00%	
	STD 0.023	Standard	33.66	0.023	35.01	0.023	29.23	100.00%	
	NTC	Unknown	Undetermined	*<0.023*	Undetermined	*<0.023*	29.3	--	
						Average IPC Ct	29.34		
A1	2S04-114-83a1	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.47	--	NR
B1	2S04-114-RB61	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.32	--	NR
C1	2S04-114-83a2	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.44	--	NR
D1	2S04-114-RB62	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.52	--	NR
E1	2S04-114-83b1	Unknown	37.08	0.00321	37.08	0.00735	29.48	100%	INC
F1	2S04-114-RB63	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.48	--	NR
G1	2S04-114-83b2	Unknown	38.3	0.00547	38.17	0.00357	29.33	65.27%	INC
H1	2S04-114-RB64	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.34	--	NR
A2	2S04-114-84a1	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.39	--	NR
B2	2S04-114-85a1	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.32	--	NR
C2	2S04-114-85a2	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.49	--	NR
D2	2S04-114-RB65	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.47	--	NR
E2	2S04-114-86a1	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.44	--	NR
F2	2S04-114-RB66	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.42	--	NR
G2	2S04-114-86a2	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.5	--	NR
H2	2S04-114-RB67	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.34	--	NR
A3	2S04-114-97a1	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.43	--	NR
B3	2S04-114-98a1	Unknown	38.02	0.0017	Undetermined	<0.001	29.62	--	NR
C3	2S04-114-98a2	Unknown	Undetermined	<0.001	37	0.00776	29.51	--	INC
D3	2S04-114-99a1	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.6	--	NR
E3	2S04-114-99a2	Unknown	Undetermined	<0.001	38.28	0.00332	29.45	--	INC
F3	2S04-114-RB68	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.53	--	NR
G3	2S04-114-101a1	Unknown	37.99	0.00173	Undetermined	<0.001	29.56	--	NR
H3	2S04-114-102a1	Unknown	37.06	0.00327	Undetermined	<0.001	29.41	--	NR
A4	2S04-114-102a2	Unknown	Undetermined	<0.001	37.42	0.00585	29.48	--	INC
B4	2S04-114-102b1	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.57	--	NR
C4	2S04-114-RB69	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.44	--	NR
D4	2S04-114-104a1	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.64	--	NR
E4	2S04-114-104a2	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.54	--	NR
F4	2S04-114-105a1	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.53	--	NR
G4	2S04-114-108a1	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.41	--	NR
H4	2S04-114-108a2	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.28	--	NR
A5	2S04-114-RB70	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.55	--	NR
B5	CCA1156-0069-R05a1	Unknown	23.43	35.43	Undetermined	<0.001	29.99	--	NEG
C5	CCA1156-0069-R06a1	Unknown	25.29	9.95	26.21	10.08	29.58	100%	POS
D5	CCA1156-RB2	Unknown	Undetermined	<0.001	Undetermined	<0.001	29.53	--	NR

Shipment: 2S04-114; CCA1156
Tray ID: 062411EBH-QT1
Analyst: EBH
Date: 06/24/11

Document: BTF00242 - (3) Quantifiler Duo results (WS)
Revision: 6
Effective: Thursday, May 27, 2010 11:17:22 AM

POS	Male >0.023 ng/ul
INC	Male 0.001 -> 0.023 ng/ul
NEG	Male <0.001 ng/ul, Human >0.023 ng/ul
NR	Male <0.001 ng/ul, Human <0.023 ng/ul

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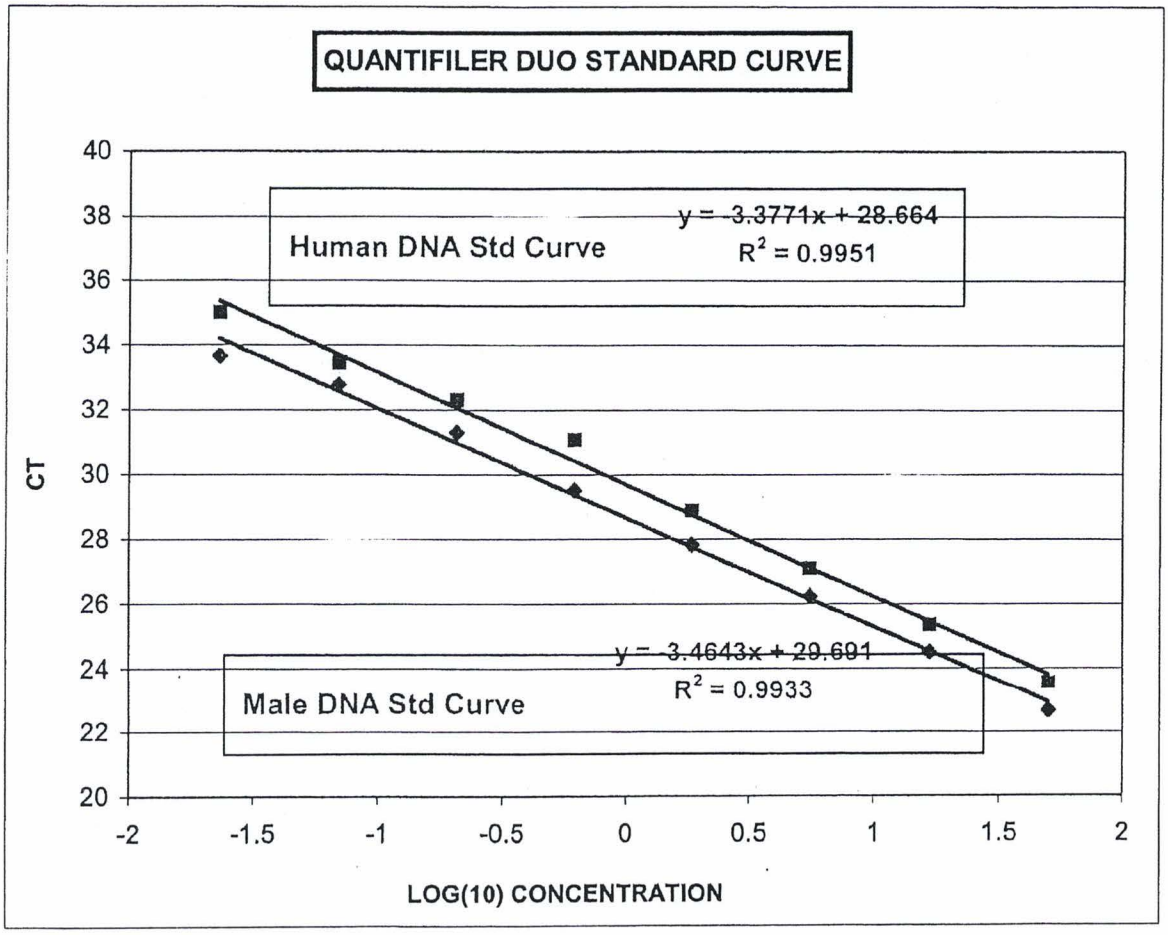
EBH 6/24/11

Note: CT values of 0.00 should be interpreted as "greater than 40 cycles."

6/24/2011

QUANTIFILER DUO QUANT

Shipment:	2S04-114; CCA1156	**Analyst:**	EBH
Tray ID:	062411EBH-QT1	**Date:**	06/24/11



Document: BTF00242 - (3) Quantifiler Duo results (WS)
Revision: 6
Effective: Thursday, May 27, 2010 11:17:22 AM

EBH 6/24/11

6/24/2011

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Quantifiler Duo Sample Sheet & Plate Set-up

Analyst: EBH Date: 6/24/2011

TRAY ID: 062411EBH-QT1

	1	2	3	4	5	6	7	8	9	10	11	12
A	2S04-114-83a1	2S04-114-84a1	2S04-114-97a1	2S04-114-102a2	2S04-114-RB70	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 50
B	2S04-114-RB61	2S04-114-85a1	2S04-114-98a1	2S04-114-102b1	CCA1156-0069-R05a1	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 16.67
C	2S04-114-83a2	2S04-114-85a2	2S04-114-98a2	2S04-114-RB69	CCA1156-0069-R06a1	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 5.56
D	2S04-114-RB62	2S04-114-RB65	2S04-114-99a1	2S04-114-104a1	CCA1156-RB2	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 1.85
E	2S04-114-83b1	2S04-114-86a1	2S04-114-99a2	2S04-114-104a2	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 0.617
F	2S04-114-RB63	2S04-114-RB66	2S04-114-RB68	2S04-114-105a1	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 0.206
G	2S04-114-83b2	2S04-114-86a2	2S04-114-101a1	2S04-114-108a1	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	STD 0.069
H	2S04-114-RB64	2S04-114-RB67	2S04-114-102a1	2S04-114-108a2	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	NTC	STD 0.023

Quantifiler Duo PCR Reaction Mix (ABI): 1101020
Primer Mix - *Duo* (ABI): 1007015
Human DNA Standard (ABI): 1007017
DNA Dilution Buffer Lot # (ABI): 1004012
7500 Machine #: 7503

# of Wells + 10% Extra: *50*

	1	**50**	***Split in 2***
Quantifiler Duo PCR RxN Mix	*12.5*	**625.0**	**312.5**
Primer Mix	*10.5*	**525.0**	**262.5**
Master Mix	***23***		
DNA or DNA Dilution Buffer	***2***		
Total Volume	***25***		

Pipettes Used:

Volumes <2 uL	N/A
Volumes 2-10 uL	A-089
Volumes 11-100 uL	A-078
Volumes 101-1000 uL	A-053
Master mix	A-078
p10 multichannel	N/A

EBH 062411

Document: BTF00242 - (1) Quantifiler Duo samplesheet (WS)
Revision: 4
Effective: Thursday, July 30, 2009 3:53:54 PM

QIAGEN EZ1 DNA Investigator (Individual Samples)

Extraction Worksheet

ITEM	SOURCE	LOT NUMBER
G2	QIAGEN	136264308
dH_2O	FISHER	107828
Proteinase K (20mg/ml)	QIAGEN	136270698
MTL (for 500uL & 1500uL lysis only)	QIAGEN	136268774
Carrier RNA (1.00 ug/uL)	BODE	011211JJ
EZ1 Reagent Cartridge	QIAGEN	139274568

Tube #	Sample	EZ1 Robot #	*Tube Witness/Date
1	2S04-114-83a1	EZ03	JLF 6/23/11
2	2S04-114-RB61	EZ03	JLF 6/23/11
3	2S04-114-83a2	EZ03	JLF 6/23/11
4	2S04-114-RB62	EZ03	JLF 6/23/11
5	2S04-114-83b1	EZ03	JLF 6/23/11
6	2S04-114-RB63	EZ03	JLF 6/23/11
7	2S04-114-83b2	EZ04	JLF 6/23/11
8	2S04-114-RB64	EZ04	JLF 6/23/11
9	2S04-114-84a1	EZ04	JLF 6/23/11
10	2S04-114-85a1	EZ04	JLF 6/23/11
11	2S04-114-85a2	EZ04	JLF 6/23/11
12	2S04-114-RB65	EZ04	JLF 6/23/11
13	2S04-114-86a1	EZ01	JLF 6/23/11
14	2S04-114-RB66	EZ01	JLF 6/23/11
15	2S04-114-86a2	EZ01	JLF 6/23/11
16	2S04-114-RB67	EZ01	JLF 6/23/11
17	2S04-114-97a1	EZ02	JLF 6/23/11
18	2S04-114-98a1	EZ02	JLF 6/23/11
19	2S04-114-98a2	EZ02	JLF 6/23/11
20	2S04-114-99a1	EZ02	JLF 6/23/11
21	2S04-114-99a2	EZ02	JLF 6/23/11
22	2S04-114-RB68	EZ02	JLF 6/23/11
23	2S04-114-101a1	EZ03	DD 6/23/11
24	2S04-114-102a1	EZ03	DD 6/23/11
25	2S04-114-102a2	EZ03	DD 6/23/11
26	2S04-114-102b1	EZ03	DD 6/23/11
27	2S04-114-RB69	EZ03	DD 6/23/11
28	2S04-114-104a1	EZ04	DD 6/23/11
29	2S04-114-104a2	EZ04	DD 6/23/11
30	2S04-114-105a1	EZ04	DD 6/23/11
31	2S04-114-108a1	EZ04	DD 6/23/11
32	2S04-114-108a2	EZ04	DD 6/23/11
33	2S04-114-RB70	EZ04	DD 6/23/11

*see protocol for witness requirements.

Analyst: EBH
Cryobox Name: 2S04-114

Date: 6/23/11
Case Number: 2S04-114

EZ1 Protocol: large volume
Protocol complete verified: EBH 6/23/11

Lysis Volume: 500 ul
Elution Volume: 50 ul

Notes: N/A

EBH 7/15/11

Pipettes Used:

Volumes <2 uL	A-090
Volumes 2-10 uL	N/A
Volumes 11-100 uL	A-119
Volumes 101-1000 uL	A-030
Volumes 1001-2000 uL	N/A

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EBH 6/24/11

Inventory Case Notes

Bode Technology, Inc.

Case Number: 2S04-114 Date: 6/21/11; 6/22/11; 6/23/11; 6/28/11; 7/12/11 Analyst: EBH

Item: 2S04-114-83

OUTER PACKAGING: Sealed outer box labeled in part "...Remington...".
CONTAINS: Two pieces of wood wrapped in brown bench paper and a brown paper grocery bag. Grocery bag labeled in part "...E-132...Wooden slats found near homicide scene...". One piece of wood ~21 inches long (designated as 2S04-114-83a) and the other ~35 inches long (designated as 2S04-114-83b), no areas of visible staining on either piece. -83b received with a piece of clear tape on one side. Both pieces received with "93-05716 E132" previously written on them by a non-Bode analyst. No apparent hairs/fibers observed.

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	QUANTITY CONSUMED
2S04-114-83	2	• 6/23/11 EBH: Wet/dry swabbed the shorter piece of wood on the side that was previously written on using two swabs. Did not swab over the writing. Cut, combined, and consumed both swabs. Sample processed as 2S04-114-83a1. Consumed ~50% of surface area sampled. • 6/23/11 EBH: Wet/dry swabbed the shorter piece of wood on the side that was not previously written on using two swabs. Cut, combined, and consumed both swabs. Sample processed as 2S04-114-83a2. Consumed ~50% of surface area sampled. • 7/12/11 EBH: Wet/dry swabbed the shorter piece of wood on both sides using four swabs (two swabs on each side). Did not swab over the writing. Cut, combined, and consumed all swabs. Sample processed as 2S04-114-83a3. Consumed ~100% of surface area sampled. • 6/23/11 EBH: Wet/dry swabbed the longer piece of wood on the side that was previously written on using two swabs. Did not swab over the writing. Cut, combined, and consumed both swabs. Sample processed as 2S04-114-83b1. Consumed ~50% surface area sampled. • 6/23/11 EBH: Wet/dry swabbed the longer piece of wood on the side that was not previously written on using two swabs. Cut, combined, and consumed both swabs. Sample processed as 2S04-114-83b2. Consumed ~50% of surface area sampled. • 7/12/11 EBH: Wet/dry swabbed the longer piece of wood on both sides using four swabs (two swabs on each side). Did not swab over the writing. Cut, combined, and consumed all swabs. Sample processed as 2S04-114-83b3. Consumed ~100% of surface area sampled.	~100% of surface area sampled

EBH 7/12/11

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Inventory Case Notes

Bode Technology, Inc.

Case Number: 2S04-114 Date: 6/21/11; 6/22/11; 6/23/11; 6/28/11, 7/12/11 Analyst: EBH

EBH 7/12/11

Item: 2S04-114-84

OUTER PACKAGING: Sealed outer bag labeled in part "...E-19...1 Brown bag containing 1 hook and 1 length cotton rope found at crime scene...".
CONTAINS: Unsealed and unlabeled inner bag.
CONTAINS: One metal hook and one piece of rope wrapped together in white bench paper. Rope: One piece of white rope ~30 inches in length, brown discoloration and debris throughout. Rope received with "93-05716 E190" and "Q20 93-05716" previously written on it by non-Bode analyst.

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	QUANTITY CONSUMED
2S04-114-84	1	• 6/23/11 EBH: Wet/dry swabbed surface of rope using two swabs. Did not swab over the writing. Cut, combined, and consumed both swabs. Sample processed as 2S04-114-84a1. Consumed ~50% of surface area sampled. • 6/23/11 EBH: One apparent hair/fiber collected from bench paper and examined microscopically for nuDNA suitability. One apparent human hair fragment, not suitable for nuDNA but may be suitable for mtDNA, dark brown in color and ~1.0 cm in length. Consumed entire apparent hair. Sample processed as 2S04-114-84b1 (for mtDNA processing). EBH 7/11/11 • 6/28/11 EBH: Wet/dry swabbed the surface of the rope using two swabs. Did not swab over areas with writing. Cut, combined, and consumed both swabs. Sample processed as 2S04-114-84a2. Consumed ~50% of surface area sampled.	-84a1/-84a2: ~100% of surface area sampled -84b1: 100% of hair

Item: 2S04-114-85

OUTER PACKAGING: Sealed outer bag labeled in part "...E-19...1 Brown bag containing 1 hook and 1 length cotton rope found at crime scene...".
CONTAINS: Unsealed and unlabeled inner bag.
CONTAINS: One metal hook and one piece of rope wrapped together in white bench paper. Hook: One metal hook with an apparent green handle. Entire hook received covered in apparent dirt and rust. Hook received with "93-05716 E196" and "Q19 93-05716" previously written on it by non-Bode analyst.

111L1 PGS

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Inventory Case Notes

Bode Technology, Inc.

Case Number: 2S04-114 Date: 6/21/11; 6/22/11; 6/23/11; 6/28/11; 7/12/11 Analyst: EBH

EBH 7/12/11

Item: 2S04-114-85 (Continued):

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	QUANTITY CONSUMED
2S04-114-85	1	• 6/23/11 EBH: Wet/dry swabbed the apparent green handle portion of the hook using two swabs. Did not swab over the writing. Cut, combined and consumed both swabs. Sample processed as 2S04-114-85a1. Consumed ~50% of surface area sampled. • 6/23/11 EBH: Wet/dry swabbed the hook portion using two swabs. Cut, combined, and consumed both swabs. Sample processed as 2S04-114-85a2. Consumed ~50% of surface area sampled. • 6/28/11 EBH: Wet/dry swabbed the apparent green handle portion of the hook using two swabs. Did not swab over writing. Cut, combined and consumed both swabs. Sample processed as 2S04-114-85a3. Consumed ~50% of surface area sampled. • 6/28/11 EBH: Wet/dry swabbed the hook portion using two swabs. Cut, combined, and consumed both swabs. Sample processed as 2S04-114-85a4. Consumed ~50% of surface area sampled.	~100% of surface area sampled

Item: 2S04-114-86

OUTER PACKAGING: Sealed outer manila envelope labeled in part "...Doral Cigarette Pack...".
CONTAINS: One empty cigarette pack and one clear plastic wrapper. Cigarette pack white, red, and gold in color with heavy dirt/debris. Pack received with "93-05716" previously written on exterior by non-Bode analyst. Plastic wrapper covered in black and brown discoloration.

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	QUANTITY CONSUMED
2S04-114-86	~~1~~ 2 EBH 7/11/11 EBH 7/12/11	• 6/22/11 EBH: Wet/dry swabbed the exterior of the cigarette pack using two swabs. Avoided areas of heaviest dirt/debris. Cut, combined, and consumed swabs. Sample processed as 2S04-114-86a1. Consumed ~50% of surface area sampled. • 6/22/11 EBH: Wet/dry swabbed the exterior (as received) of the clear plastic wrapper using two swabs. Cut, combined, and consumed both swabs. Sample processed as 2S04-114-86a2. Consumed ~50% of surface area sampled.	~50% of surface area sampled

EBH 7/7/11

Inventory Case Notes

Bode Technology, Inc.

Case Number: 2S04-114 Date: 6/21/11; 6/22/11; 6/23/11; 6/28/11; 7/12/11 Analyst: EBH

EBH 7/12/11

Item: 2S04-114-97

OUTER PACKAGING: Sealed outer brown bag labeled in part "...E-1...Blue Boy Scout Shirt...".
CONTAINS: One blue shirt wrapped in white bench paper. Minimal debris on bench paper, no apparent hairs/fibers observed, not examined further at this time. Shirt received in apparent worn condition with heavy dirt/debris throughout. "BOYSCOUTS OF AMERICA" embroidered above the front right pocket. Tag labeled "...OFFICIAL SHIRT...SIZE 8...". No apparent hairs/fibers observed. Shirt received with areas previously marked by non-Bode analyst. Shirt received with the front of the shirt unbuttoned.

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	QUANTITY CONSUMED
2S04-114-97	1	• 6/22/11 EBH: Wet/dry swabbed each of the front buttons, around the buttons, and around the button holes using two swabs. Cut, combined, and consumed both swabs. Sample processed as 2S04-114-97a1. Consumed ~50% of surface area sampled.	~50% of surface area sampled

Item: 2S04-114-98

OUTER PACKAGING: Sealed outer brown bag labeled in part "...E-2...White Polkadot Shirt...".
CONTAINS: One white and black shirt wrapped in bench paper. Minimal debris on bench paper, no apparent hairs/fibers observed, not examined further at this time. Shirt received in apparent worn condition with heavy dirt/debris throughout. Black and white triangle and polkadot pattern on the shirt. No tag. No apparent hairs/fibers observed. Shirt received with areas previously marked and cut out by non-Bode analyst, "Q9 93-05716", and "93-05716 E2" previously written on the interior collar. Shirt received right-side out.

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	QUANTITY CONSUMED
2S04-114-98	1	• 6/22/11 EBH: Scraped the exterior front bottom edge of shirt and up the shirt ~3 inches. Sample processed as 2S04-114-98a1. Consumed ~50% of surface area sampled. • 6/22/11 EBH: Scraped along the exterior shoulder hems from the collar to the sleeve hem and down both sides of the shoulder ~2 inches. Sample processed as 2S04-114-98a2. Consumed ~50% of surface area sampled.	~50% of surface area sampled

7/12/11 NAB

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Inventory Case Notes

Bode Technology, Inc.

Case Number: 2S04-114 Date: 6/21/11; 6/22/11; 6/23/11; 6/28/11, 7/12/11 Analyst: EBH

EBH 7/12/11

Item: 2S04-114-99

OUTER PACKAGING: Sealed outer brown bag labeled in part "...93-05-0666...E3...".
CONTAINS: Unsealed inner brown bag labeled in part "...E-3 Pair Blue Pants...".
CONTAINS: One pair of blue pants and one piece of white bench paper. Minimal debris on bench paper, no apparent hairs/fibers observed, not examined further at this time. Pair of blue pants in apparent worn condition with heavy dirt/debris. No apparent hairs/fibers observed. Tag labeled "...GITANO...WAIST 5...". Pants received with areas previously marked and cut by non-Bode analyst, "Q10 93-05716 previously written on the interior waistband, and "93-05716 E3" previously written on the exterior back left leg. Pants received right-side out with the button and zipper fastened.

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	QUANTITY CONSUMED
2S04-114-99	1	• 6/21/11 EBH: Wet/dry swabbed the exterior pant leg ~3 inches up from each leg opening on both the front and the back using two swabs. Avoided areas of heaviest dirt/debris. Cut, combined, and consumed both swabs. Sample processed as 2S04-114-99a1. Consumed ~50% of surface area sampled. • 6/21/11 EBH: Wet/dry swabbed the exterior front waistband from one hip to the other using two swabs. Avoided areas of heaviest dirt/debris. Cut, combined, and consumed both swabs. Sample processed as 2S04-114-99a2. Consumed ~50% of surface area sampled.	~50% of surface area sampled

Item: 2S04-114-101

OUTER PACKAGING: Sealed outer brown bag labeled in part "...E-5...Blue/Yellow Cub Scout Cap...".
CONTAINS: One blue and yellow hat wrapped in white bench paper. Minimal debris on bench paper, no apparent hairs/fibers observed, not examined further at this time. Hat received in apparent worn condition with areas of heavy dirt/debris. Hat blue with a mesh back and a yellow front. Front contains a blue patch. Hat received with areas previously marked by non-Bode analyst and "93-05716 E5" and "Q12 93-05716" written on the front yellow part of hat. No apparent hairs/fibers observed. Small white tag on the interior, worn so that no print is visible.

EBH 7/12/11

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Inventory Case Notes

Bode Technology, Inc.

Case Number: 2S04-114 Date: 6/21/11; 6/22/11; 6/23/11; 6/28/11, 7/12/11 Analyst: EBH

EBH 7/12/11

Item: 2S04-114-101 (Continued)

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	QUANTITY CONSUMED
2S04-114-101	1	• 6/22/11 EBH: Wet/dry swabbed both sides of the brim of the hat using two swabs. Avoided areas of heaviest dirt/debris. Cut, combined, and consumed both swabs. Sample processed as 2S04-114-101a1. Consumed ~50% of surface area sampled.	~50% of surface area sampled

Item: 2S04-114-102

OUTER PACKAGING: Unsealed outer brown bag labeled in part "...E-7...93-05-0666...".
CONTAINS: Sealed inner brown bag labeled in part "...E-7...Blue Jeans & Blue Wallet...".
CONTAINS: One pair of blue jeans, one piece of white bench paper, and one blue wallet. Bench paper contains minimal debris, no apparent hairs/fibers observed, not examined further at this time. Blue jeans in apparent worn condition with heavy dirt/debris throughout. Jeans received with areas previously marked and cut out by non-Bode analyst, "Q6 93-05716" previously written on exterior left front pocket, and "93-05716 E7" previously written on exterior right front pocket. Tag labeled "...NEW OROER...SIZE 7...". Pants received right-side out and front button and zipper undone. Blue wallet covered in dirt/debris. Contains photographs. Wallet received with interior previously labeled "Q5 93-05716" by non-Bode analyst.

EBH 7/7/11

Inventory Case Notes

Bode Technology, Inc.

Case Number: 2S04-114 Date: 6/21/11; 6/22/11; 6/23/11; 6/28/11, 7/12/11 Analyst: EBH

EBH 7/12/11

Item: 2S04-114-102 (Continued)

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	QUANTITY CONSUMED
2S04-114-102	1	• 6/21/11 EBH: Wet/dry swabbed the exterior pant leg cuffs and ~3 inches up the exterior seam of both legs using two swabs. Avoided areas of heaviest dirt/debris. Cut, combined, and consumed both swabs. Sample processed as 2S04-114-102a1. Consumed ~50% of surface area sampled. • 6/21/11 EBH: Wet/dry swabbed the exterior front waistband from one hip to the other using two swabs. Avoided areas of heaviest dirt/debris. Cut, combined, and consumed both swabs. Sample processed as 2S04-114-102a2. Consumed ~50% of surface area sampled. • 6/21/11 EBH: Wet/dry swabbed the exterior surface area of the wallet using two swabs. Avoided areas of heaviest dirt/debris. Cut, combined, and consumed both swabs. Sample processed as 2S04-114-102b1. Consumed ~50% of surface area sampled. • 6/21/11 EBH: One apparent hair/fiber collected and examined microscopically to determine nuDNA suitability. One apparent human hair in apparent telogen phase with 1+ follicular material, not suitable for nuDNA but may be suitable for mtDNA, medium brown in color and ~1.5 cm in length. Consumed apparent hair. Sample processed as 2S04-114-102c1. (for mtDNA testing). EBH 7/11/11	-102a1, -102a2, and -102b1: ~50% of surface area sampled -102c1: 100% of hair

EBH 7/11/11

Inventory Case Notes

Bode Technology, Inc.

Case Number: 2S04-114 Date: 6/21/11; 6/22/11; 6/23/11; 6/28/11; 7/12/11 Analyst: EBH

EBH 7/12/11

Item: 2S04-114-104

OUTER PACKAGING: Sealed outer brown bag labeled in part "...E-9...Striped Shirt...".
CONTAINS: One white and grey striped shirt and one piece of white bench paper. Minimal debris on bench paper, no apparent hairs/fibers observed, not examined further at this time. Shirt received in apparent worn condition with brown discoloration throughout, grey and white striped with a surf board pattern across the bottom of the shirt. Tag labeled "...COAST HIGHWAY...S...". No apparent hairs/fibers observed. Shirt received with areas previously marked and cut out by non-Bode analyst and "Q32 93-05716" and "93-05716 E9" written on the interior collar. Shirt received right-side out.

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	QUANTITY CONSUMED
2S04-114-104	1	• 6/22/11 EBH: Scraped the exterior front bottom edge of the shirt and up the shirt ~3 inches. Sample processed as 2S04-114-104a1. Consumed ~50% of surface area sampled. • 6/22/11 EBH: Scraped along the exterior shoulder hems from the collar to the sleeve hem and down both sides of the shoulder ~2 inches. Sample processed as 2S04-114-104a2. Consumed ~50% of surface area sampled.	~50% of surface area sampled

Item: 2S04-114-105

OUTER PACKAGING: Sealed outer brown bag labeled in part "...E10...1 pair child's underwear...".
CONTAINS: One pair of red and white underwear with a "Super Mario Brothers" pattern on the back and red elastic around the waistband and leg openings, apparent worn condition with brown discoloration and dirt/debris throughout. Tag labeled "...FRUIT OF THE LOOM...SIZE 6...". No apparent hairs/fibers observed. Underwear received with areas previously marked and cut out by non-Bode analyst, "Q30 93-05716" previously written on the interior waistband, and "93-05716 E10" previously written on the exterior back waistband. Underwear received right-side out.

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	QUANTITY CONSUMED
2S04-114-105	1	• 6/22/11 EBH: Wet/dry swabbed the exterior front elastic waistband from one hip to the other using two swabs. Cut, combined, and consumed both swabs. Sample processed as 2S04-114-105a1. Consumed ~50% of surface area sampled.	~50% of surface area sampled

EBH 7/11/11

2

Inventory Case Notes

Bode Technology, Inc.

Case Number: 2S04-114 Date: 6/21/11; 6/22/11; 6/23/11; 6/28/11 7/12/11 Analyst: EBH

EBH 7/12/11

Item: 2S04-114-108

OUTER PACKAGING: Unsealed brown bag labeled in part "...E13...93-05-0666..."
CONTAINS: Sealed inner brown bag labeled in part "...E-13 Pair Blue Jeans...".
CONTAINS: One pair of blue jeans, one manilla envelope labeled "...contents of pockets...", and one piece of white bench paper. Minimal debris on bench paper, no apparent hairs/fibers observed, not examined further at this time. Contents of manilla envelope not examined at this time. Blue jeans received in apparent worn condition with heavy dirt/debris throughout. No apparent hairs/fibers observed. Tag labeled "...RUSTLER...7SLIM...". Pants received with areas previously marked by a non-Bode analyst, "Q34 93-05716" previously written on the interior waistband, and "93-05716 E13" previously written on the exterior front left leg. Pants received right-side out with the zipper and button undone.

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	QUANTITY CONSUMED
2S04-114-108	1	• 6/22/11 EBH: Wet/dry swabbed the exterior pant leg ~3 inches up from each leg opening on both the front and the back using two swabs. Avoided areas of heaviest dirt/debris. Cut, combined, and consumed both swabs. Sample processed as 2S04-114-108a1. Consumed ~50% of surface area sampled. • 6/22/11 EBH: Wet/dry swabbed the exterior front waistband from one hip to the other using two swabs. Avoided areas of heaviest dirt/debris. Cut, combined, and consumed both swabs. Sample processed as 2S04-114-108a2. Consumed ~50% of surface area sampled.	~50% of surface area sampled

NOTES:

See photo documentation for additional details on description of evidence.

6/21/11 EBH: Fisher DNA Grade water used for swabbing lot# 107828.

6/22/11 EBH: Fisher DNA Grade water used for swabbing lot# 107828.

6/23/11 EBH: Fisher DNA Grade water used for swabbing lot# 107828.

6/28/11 EBH: Fisher DNA Grade water used for swabbing lot# 107828.

7/12/11 EBH: Fisher DNA Grade water used for swabbing lot# 107828.

EBH 7/12/11

Bode Technology™

INVOICE

Client:
Ropes and Gray
Attn: Stephen Braga
One Metro Center, 700 12th St.
NW, Suite 900
Washington, DC 20005

Invoice Date: 7/27/2011

Invoice #: Bill15059
Net Terms: 30 Days

PO Number:

Invoice Grand Total: $ 3,697.50

Requester: Stephen Braga
Phone: 202-508-4655
Fax:
email:

Bode Project #.: 2S04-114

Agency Case No.: 1993-WVS-05716 93-05-0666

Line Item Number	Quantity	Item / Part Number	Description	Unit Price	Sales Amount
0001	1	mtDNA	Blood/Buccal	$ 2,900.00	$ 2,900.00
0002	1	mtDNA	Blood/Buccal	$ 1,450.00	$ 1,450.00
			Rush Fee		
			Discount 15%		**$ (652.50)**
				TOTAL AMOUNT DUE	**$ 3,697.50**

Remit To:

The Bode Technology Group, Inc.
c/o GlobalOptions, Inc
Dept. AT 952056
Atlanta, GA 31192

Bode TIN: 54-1750293

Bank Information:

Silicon Valley Bank
Santa Clara, CA 95054
ABA# 121140399
Credit to: GlobalOptions, Inc.
Account # 3300418500

Bode Technology

10430 Furnace Road, Suite 107
Lorton, VA 22079
Phone: 703-646-9740

Supplemental Forensic Case Report
July 25, 2011

To:
Stephen L. Braga
Ropes & Gray LLP
One Metro Center
700 12th St., NW, Suite 900
Washington, DC 20005

Bode Case #: 2S04-114

Partial list of evidence received on May 12, 2011 for possible DNA analysis:

Bode Sample Name	Agency Sample ID	Agency Description
2S04-114-84	E-019	Labeled as "Rope"
2S04-114-84b		*1 apparent human hair fragment*

Partial list of new and re-submitted evidence received on May 17, 2011 for possible DNA analysis:

Bode Sample Name	Agency Sample ID	Agency Description
2S04-114-11	93-05718 FP3	Labeled as "Hair found on C. Byers's body"
2S04-114-11A		*Hair*
2S04-114-11D		*Hair*
2S04-114-11F		*Hair*
2S04-114-11H		*Hair*
2S04-114-11I		*Hair*
2S04-114-11J		*Hair*
2S04-114-11N		*Hair*
2S04-114-11X		*Hair*

Partial list of evidence received on May 24, 2011 for possible DNA analysis:

Bode Sample Name	Agency Sample ID	Agency Description
2S04-114-102	E-07	Labeled as "Blue jeans/blue wallet"
2S04-114-102c		*1 apparent human hair*

Partial list of re-submitted evidence received on June 9, 2011 for possible DNA analysis:

Bode Sample Name	Agency Sample ID	Agency Description
2S04-114-9	93-05717 FP6	Labeled as "Hair from ligature from S. Branch (skin, tissue, hair from ligature)."
2S04-114-17	93-05718 FP9	Labeled as "Hair from perineum of C. Byers ligature."
2S04-114-17a		*Hair*
2S04-114-115	K35	Labeled as "Dried known blood sample Roy Moore"

List of evidence received on July 6, 2011 for possible DNA analysis:

Bode Sample Name	Agency Sample ID	Agency Description
2S04-114-123	Not Listed	Labeled as "Mark Byers Cheek Swabs"

For a list of previously tested and reported items for mtDNA analysis, see Appendix A.

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Mitochondrial DNA Processing, Results and Conclusions:

The mtDNA profiles reported in this case were determined by procedures that have been validated according to standards established by the Scientific Working Group on DNA Analysis Methods (SWGDAM) and adopted as Federal Standards.

1. A mtDNA profile was obtained from samples 2S04-114-115 (Roy Todd Moore) and 2S04-114-123 (John Mark Byers) [see **Table 1**].

2. The mtDNA profile obtained from sample 2S04-114-115 (Roy Todd Moore) is consistent with the following samples:

   - 2S04-114-11 (A-Q, U-Z)
   - 2S04-114-14
   - 2S04-114-17
   - 2S04-114-18 (B-F, H-I)
   - 2S04-114-20B

   Therefore, Roy Todd Moore (2S04-114-115), or any maternal relative, cannot be excluded as a possible contributor of the above listed samples.

   The mtDNA population database of the Scientific Working Group on DNA Analysis and Methods (SWGDAM) has been searched for the mtDNA profiles listed above. The common mtDNA profile obtained for samples 2S04-114-11 (A-C, E-Q, U-Z), 2S04-114-14, 2S04-114-18 (B-F, H-I), and 2S04-114-20B was searched using the most conservative range of 16024-16365 and 73-340. The number of observations of these mtDNA profiles in the (SWGDAM) database is as follows:

Bode Sample No.	African Database	Caucasian Database	Hispanic Database	Asian Database	Native American Database	Total No. of Observations
2S04-114-11 (A-C, E-Q, U-Z), 2S04-114-14, 2S04-114-18 (B-F, H-I), 2S04-114-20B	0 in 1305	6 in 1674	5 in 686	0 in 848	0 in 326	11 in 4839
2S04-114-11D	0 in 1305	8 in 1674	5 in 686	0 in 848	0 in 326	13 in 4839
2S04-114-17	0 in 1305	14 in 1674	14 in 686	0 in 848	0 in 326	28 in 4839

   The mtDNA profiles obtained from all other samples listed in Table 2 and Appendix B are not consistent with the mtDNA profile obtained from sample 2S04-114-115 (Roy Todd Moore). Therefore, Roy Todd Moore (2S04-114-115), or any maternal relative, can be excluded as a possible contributor of these samples.

3. The mtDNA profile obtained from sample 2S04-114-123 (John Mark Byers) contains an insufficient number of differences from sample 2S04-114-17. Therefore, John Mark Byers (2S04-114-123), or any maternal relative, cannot be excluded as a possible contributor of sample 2S04-114-17.

   The mtDNA profile obtained from all other samples listed in Table 2 and Appendix B are not consistent with the mtDNA profile obtained from sample 2S04-114-123 (John Mark Byers). Therefore, John Mark Byers (2S04-114-123), or any maternal relative, can be excluded as a possible contributor of these samples.

4. No mtDNA profile was obtained from evidentiary sample 2S04-114-17a.

5. Due to unreproducible data, the partial mtDNA profile obtained from sample 2S04-114-84b was deemed unreportable.

See **Tables 1, 2 and Appendix B** for a summary of the mtDNA profiles reported.

Notes:

1. The DNA extracts and submitted evidence will be retained temporarily by Bode Technology until review of the data is completed, at which time the evidence and extracts will be returned to the submitting agency.
2. Mitochondrial DNA (mtDNA) is found in sub-cellular organelles called mitochondria. A specific, non-coding region of the mitochondrial genome called the D-loop, or hyper-variable control region, is known to have variability within the human population. Multiple copies of this region of mtDNA are generated using the polymerase chain reaction (PCR). The base composition, or sequence, is then determined using automated DNA sequencing.
3. Due to consumption of evidence, sample 2S04-114-9 was not processed for mtDNA analysis.
4. Sample 2S04-114-115 was extracted twice (-115a and -115b). Both extracts produced the same mtDNA profile. The common sequence produced from both extracts will be reported as sample 2S04-114-115.
5. This summary report of references Roy Todd Moore, John Mark Byers and all evidentiary items reported for mtDNA analysis was created at the request of the client (Mr. Stephen Braga).
6. A supplemental mtDNA report was issued due to the submission of additional evidence. Please refer to reports dated: July 18, 2011, July 14, 2011, July 13, 2011, June 16, 2011, September 21, 2009, July 17, 2009, May 23, 2008, September 27, 2007, January 26, 2007 and December 30, 2005 for complete lists of items received/tested for mtDNA analysis.

Report submitted by,

Mike Cariola
SVP Operations

Table 1: Analysis of Mitochondrial DNA for Reference Samples

	2S04-114-115 Roy Todd Moore	2S04-114-123 John Mark Byers
HVI Reported Range	16024-16389	16024-16569
Polymorphisms	16069 T 16126 C 16145 A 16172 C 16222 T 16261 T	16051 G 16162 G 16519 C
HVII Reported Range	49-361	1-537
Polymorphisms	73 G 242 T 263 G 295 T 315.1 C	73 G 263 G 309.1 C 315.1 C

Table 2: Analysis of Mitochondrial DNA for Evidentiary Samples

	2S04-114-11A	2S04-114-11D	2S04-114-11F	2S04-114-11H	2S04-114-11I	2S04-114-11J	2S04-114-11N	2S04-114-11X	2S04-114-102c
HVI Reported Range	16024-16390	16216-16388	16024-16388	16024-16388	16024-16388	16024-16388	16024-16388	16024-16389	16024-16388
Polymorphisms	16069 T 16126 C 16145 A 16172 C 16222 T 16261 T	16222 T 16261 T	16069 T 16126 C 16145 A 16172 C 16222 T 16261 T	16069 T 16126 C 16145 A 16172 C 16222 T 16261 T	16069 T 16126 C 16145 A 16172 C 16222 T 16261 T	16069 T 16126 C 16145 A 16172 C 16222 T 16261 T	16069 T 16126 C 16145 A 16172 C 16222 T 16261 T	16069 T 16126 C 16145 A 16172 C 16222 T 16261 T	16224 C 16311 C
HVII Reported Range	65-361	35-265	35-361	36-361	55-360	62-361	63-353	62-356	63-342
Polymorphisms	73 G 242 T 263 G 295 T 315.1 C	73 G 242 T 263 G	73 G 242 T 263 G 295 T 315.1 C	73 G 242 T 263 G 295 T 315.1 C	73 G 242 T 263 G 295 T 315.1 C	73 G 242 T 263 G 295 T 315.1 C	73 G 242 T 263 G 295 T 315.1 C	73 G 242 T 263 G 295 T 315.1 C	73 G 146 C 199 C 263 G 315.1 C

The following notations may apply:

a. Transition or transversion polymorphisms as compared to a standard sequence (Anderson, et al. 1981. *Nature* 290:457-465) are designated by the appropriate letter (base).

b. An insertion is designated a ".1" for a one base insertion, and a ".2" for a two base insertion.

Note: Polycytosine stretches are often difficult to interpret. A possible cause may be the presence of a mixture of length variants in the mtDNA of an individual. A predominant length species is often apparent; however, the frequency of a particular length species cannot be determined accurately and may vary between maternal relatives. The sequence reported for Hypervariable Region 1 represents the first 10 cytosines observed, beginning at position 16184. The sequence reported for Hypervariable Region 2 represents the number of confirmed cytosines present in the predominant base sequence. When no predominant base sequence is observed, the insertions that could not be confirmed are designated by a "N."

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Appendix A: Additional items of evidence received

Partial list of evidence received on July 7, 2004 for possible DNA analysis:

Bode Sample Name	Agency Sample ID	Agency Description
2S04-114-03	93-05716 FP6	Labeled as "Hair from M. Moore ligature."
2S04-114-03A		*Slide with two hairs (-03Aa and -03Ab).*
2S04-114-03B		*Slide with one hair.*
2S04-114-08	93-05717 FP5	Labeled as "Two dark Caucasian hairs from S. Branch."
2S04-114-08A		*Slide with one hair.*
2S04-114-08B		*Slide with two hairs (-08Ba and -08Bb).*
2S04-114-11	93-05718 FP3	Labeled as "Hair found on C. Byers's body."
2S04-114-11A-Q and -11U-Z		*Slide with 26 hairs (-11A through -11Z).*
2S04-114-14	93-05718 FP6	Labeled as "Hair from lower body of C. Byers."
2S04-114-15	93-05718 FP8	Labeled as "Hair from C. Byers ligature."
2S04-114-17	93-05718 FP9	Labeled as "Hair from perineum of C. Byers ligature."
2S04-114-18	93-05718 FP10	Labeled as "Negroid hair from white sheet." [slide with 9 hairs]
2S04-114-18A		*Hair from sheet, described as "Negroid hair frag."*
2S04-114-18B		*Hair from sheet.*
2S04-114-18C		*Hair from sheet.*
2S04-114-18D		*Hair from sheet.*
2S04-114-18E		*Hair from sheet.*
2S04-114-18F		*Hair from sheet.*
2S04-114-18G		*Hair from sheet, described as "animal hair."*
2S04-114-18H		*Hair from sheet.*
2S04-114-18I		*Hair from sheet.*
2S04-114-20	93-05716 E3	Labeled as "Hair from E3."
2S04-114-20		*Slide with two hairs (-20A and -20B).*
2S04-114-21	93-05716 E5	Labeled as "Hair from scout cap."
2S04-114-21		*Slide with two hairs (-21A and -21B).*
2S04-114-23	93-05716 E127 LS1-QH	Labeled as "Hair from tree stump."
2S04-114-27	93-05717 FP7	Labeled as "Dyed hair from white sheet used to cover S. Branch."

Appendix B: Evidentiary mtDNA Sequence Results reported on December 30, 2005, July 17, 2009, and September 21, 2009

	2S04-114-03Aa	2S04-114-03B	2S04-114-08A	2S04-114-08Ba	2S04-114-08Bb	2S04-114-11B	2S04-114-11C	2S04-114-11E	2S04-114-11G	2S04-114-11K
HVI Reported Range	15998-16390	15998-16390	15998-16390	15998-16390	15998-16390	15998-16390	15998-16390	16024-16365	16024-16365	16024-16365
Polymorphisms	16221 T	16069 T 16126 C 16193 T 16195 C 16242 A 16357 C	16069 T 16126 C 16145 A 16186 T 16231 C 16261 T	16069 T 16126 C 16145 A 16186 T 16231 C 16261 T	16069 T 16126 C 16145 A 16186 T 16231 C 16261 T	16069 T 16126 C 16145 A 16172 C 16222 T 16261 T	16069 T 16126 C 16145 A 16172 C 16222 T 16261 T	16069 T 16126 C 16145 A 16172 C 16222 T 16261 T	16069 T 16126 C 16145 A 16172 C 16222 T 16261 T	16069 T 16126 C 16145 A 16172 C 16222 T 16261 T
HVII Reported Range	35-361	35-361	35-361	35-361	35-361	49-361	35-361	73-340	73-340	73-340
Polymorphisms	263 G 309.1 C 315.1 C	73 G 150 T 152 C 263 G 295 T 309.1 C 315.1 C	73 G 75 A 150 T 152 C 195 C 215 G 263 G 295 T 309.1 C 315.1 C 319 C	73 G 75 A 150 T 152 C 195 C 215 G 263 G 295 T 309.1 C 315.1 C 319 C	73 G 75 A 150 T 152 C 195 C 215 G 263 G 295 T 309.1 C 315.1 C 319 C	73 G 242 T 263 G 295 T 315.1 C	73 G 242 T 263 G 295 T 315.1 C	73 G 86 N 242 T 263 G 295 T 315.1 C	73 G 242 T 263 G 295 T 315.1 C	73 G 242 T 263 G 295 T 315.1 C

	2S04-114-11L	2S04-114-11M	2S04-114-11O	2S04-114-11P	2S04-114-11Q	2S04-114-11U	2S04-114-11V	2S04-114-11W	2S04-114-11Y	2S04-114-11Z
HVI Reported Range	16024-16365	16024-16365	16024-16365	15998-16390	15998-16390	16024-16365	15998-16390	16024-16365	16024-16365	15998-16390
Polymorphisms	16069 T 16126 C 16145 A 16172 C 16222 T 16261 T	16069 T 16126 C 16145 A 16172 C 16222 T 16261 T	16069 T 16126 C 16145 A 16172 C 16222 T 16261 T	16069 T 16126 C 16145 A 16172 C 16222 T 16261 T	16069 T 16126 C 16145 A 16172 C 16222 T 16261 T	16069 T 16126 C 16145 A 16172 C 16222 T 16261 T	16069 T 16126 C 16145 A 16172 C 16222 T 16261 T	16069 T 16126 C 16145 A 16172 C 16222 T 16261 T	16069 T 16126 C 16145 A 16172 C 16222 T 16261 T	16069 T 16126 C 16145 A 16172 C 16222 T 16261 T
HVII Reported Range	73-340	73-340	73-340	35-361	49-361	73-340	35-361	73-340	73-340	35-361
Polymorphisms	73 G 242 T 247 N (A/G)* 263 G 295 T 315.1 C	73 G 242 T 263 G 295 T 315.1 C	73 G 242 T 263 G 295 T 315.1 C	73 G 242 T 263 G 295 T 315.1 C	73 G 242 T 263 G 295 T 315.1 C	73 G 242 T 263 G 295 T 315.1 C	73 G 242 T 263 G 295 T 315.1 C	73 G 242 T 263 G 295 T 315.1 C	73 G 242 T 263 G 295 T 315.1 C	73 G 242 T 263 G 295 T 315.1 C

* Possible heteroplasy, see notation "e".

Appendix B: Evidentiary mtDNA Sequence Results reported on December 30, 2005, July 17, 2009, and September 21, 2009 (continued)

	2S04-114-14	2S04-114-15	2S04-114-17	2S04-114-18A	2S04-114-18B	2S04-114-18C	2S04-114-18D	2S04-114-18E
HVI Reported Range	15998-16390	15998-16390	16210-16390	15998-16390	15998-16390	15998-16390	15998-16390	15998-16390
Polymorphisms	16069 T 16126 C 16145 A 16172 C 16222 T 16261 T	16093 C 16192 T 16256 T 16262 T 16270 T	16222 T 16261 T	16129 A 16183 D 16189 A 16215 G 16223 T 16278 T 16294 T 16311 C 16360 T	16069 T 16126 C 16145 A 16172 C 16222 T 16261 T	16069 T 16126 C 16145 A 16172 C 16222 T 16261 T	16069 T 16126 C 16145 A 16172 C 16222 T 16261 T	16069 T 16126 C 16145 A 16172 C 16222 T 16261 T
HVII Reported Range	49-361	35-361	N/A	35-361	35-361	35-361	35-361	35-361
Polymorphisms	73 G 242 T 263 G 295 T 315.1 C	73 G 263 G 315.1 C	Not Analyzed	73 G 151 T 152 C 182 T 186 A 189 C 247 A 263 G 315.1 C 316 A	73 G 242 T 263 G 295 T 315.1 C	73 G 242 T 263 G 295 T 315.1 C	73 G 242 T 263 G 295 T 315.1 C	73 G 242 T 263 G 295 T 315.1 C

	2S04-114-18F	2S04-114-18H	2S04-114-18I	2S04-114-20B	2S04-114-21A	2S04-114-21B	2S04-114-23	2S04-114-27
HVI Reported Range	15998-16390	15998-16390	15998-16390	15998-16390	16009-16390	16210-16390	16009-16390	15998-16390
Polymorphisms	16069 T 16126 C 16145 A 16172 C 16222 T 16261 T	16069 T 16126 C 16145 A 16172 C 16222 T 16261 T	16069 T 16126 C 16145 A 16172 C 16222 T 16261 T	16069 T 16126 C 16145 A 16172 C 16222 T 16261 T	16069 T 16126 C 16193 T 16195 C 16242 A 16357 C	16223 T 16278 T 16362 C	Anderson	16261 T
HVII Reported Range	35-361	49-361	35-361	49-361	35-361	N/A	35-361	49-361
Polymorphisms	73 G 242 T 263 G 295 T 315.1 C	73 G 242 T 263 G 295 T 315.1 C	73 G 242 T 263 G 295 T 315.1 C	73 G 242 T 263 G 295 T 315.1 C	73 G 150 T 152 C 263 G 295 T 309.1 C 315.1 C	Not Reported	263 G 309.1 C 315.1 C	263 G 309.1 C 315.1 C

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Bode Technology™

Review Form: Complete Case File

Shipment or Case #: 2S04-114 [Report dated 7/25/11]

Case File Documentation	Core Forms and Controls	Data and Report
Technical Review		
- Case submission form or submitted manifest complete - Client paperwork complete - Client communication documented* - Chain of custody (COC) completed and correct - Project guidelines followed* - Inventory sheet accurate and consistent with COC - Photodocumentation of all evidence complete* - Permission to consume documented* - Case notes complete and accurate - All pages have case or shipment #, date, initials	- Lab worksheets complete - Sample numbering correct throughout - Controls gave appropriate results : Allelic ladders Positive control(s) Negative controls(s) - Electropherograms documented properly - Internal lane standard verified - Two independent analyses performed and edits consistent - Index accurate* - Correct core forms and controls included for case+	- Electropherograms documented properly - Internal lane standard verified - Two independent analyses performed and edits consistent - Index accurate* - Allele table included and accurate* - Results accurate - Conclusions accurate* - Statistics provided* - Statistic calculations correct*
Administrative Review		
- COC accurate - Core forms and controls review form included+	- Case notes accurate*	- Report editorially accurate and includes: case identifier, evidence examined, methodology, loci or kit, results and/or conclusions, interpretative statement, date issued, disposition of evidence, signature of person accepting responsibility

**if applicable, + For case files supplemented with controls and core forms*

[signature] Supervisor HID — MtDNA Tech/Admin 7/26/11 ; 8/8/11 SVS
Name and Title — ☒ Date-Type of review

[signature] DNA Analyst II — Admin Review 8-8-11
Name and Title — ☐ Date- Type of review

Name and Title — ☐ Date- Type of review

Name and Title — ☐ Date- Bode Search including Staff DNA Search*

Self-review: 7/26/11
Adrienne Barranco

Document: BT00067 - Review Form: Entire file including: case, controls, core forms
Revision: 4
Effective: 7/9/2011 3:37:56 PM

mtDNA Search Results

Jul-26-2011 3:44 pm

Table of Contents

Search Profile

Search Options

Summary of the Databases

"Matching" Profiles

Labs Contributing to Database

Search Profile

Profile ID : 2S04-114-11, 14, etc

Search Range(s)	Differences from CRS
16024-16365 73-340	16069 T 16126 C 16145 A 16172 C 16222 T 16261 T 73 G 86 N 242 T 247 N 263 G 295 T 315.1 C

Search Options

Option	Setting
Date(s) Selected	All

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Partial Profiles Used?	Yes
Length Variants	All insertions were ignored
Heteroplasmic Scenarios	Not incorporated

Summary of the Databases within Forensic Profiles

Classification	Number of Profiles		Database	Number of Profiles	
	Searched	Total		Searched	Total
African origin	1305	1305	African-American	1148	1148
			Afro-Caribbean	0	0
			Sierra Leone	109	109
			Egypt	48	48
Caucasian origin	1674	1674	Caucasian	1655	1655
			India	19	19
Hispanic origin	686	686	Hispanic	686	686
Asian origin	848	848	Japan	163	163
			Korea	182	182
			Thailand	52	52
			China/Taiwan	356	356
			Guam	87	87
			Pakistan	8	8
Native American origin	326	326	Navajo	146	146
			Apache	180	180
Overall				**4839**	

Overall Search Results within Forensic Profiles

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency

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0	11	0.0023	11	0.0023
1	7	0.0014	18	0.0037
2	9	0.0019	27	0.0056
3	4	0.0008	31	0.0064
4	3	0.0006	34	0.0070
5	8	0.0017	42	0.0087
> 5	4797	0.9913	4839	1.0000

Average Number of Differences = 14.067

African origin Database(s) within Forensic Profiles

1305 of the 1305 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	0	0.0000	0	0.0000
1	0	0.0000	0	0.0000
2	0	0.0000	0	0.0000
3	0	0.0000	0	0.0000
4	0	0.0000	0	0.0000
5	1	0.0008	1	0.0008
> 5	1304	0.9992	1305	1.0000

Average Number of Differences = 17.246

Caucasian origin Database(s) within Forensic Profiles

1674 of the 1674 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	6	0.0036	6	0.0036

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1	7	0.0042	13	0.0078
2	1	0.0006	14	0.0084
3	2	0.0012	16	0.0096
4	3	0.0018	19	0.0114
5	6	0.0036	25	0.0149
> 5	1649	0.9851	1674	1.0000

Average Number of Differences = 11.025

Hispanic origin Database(s) within Forensic Profiles

686 of the 686 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	5	0.0073	5	0.0073
1	0	0.0000	5	0.0073
2	8	0.0117	13	0.0190
3	2	0.0029	15	0.0219
4	0	0.0000	15	0.0219
5	1	0.0015	16	0.0233
> 5	670	0.9767	686	1.0000

Average Number of Differences = 15.277

Asian origin Database(s) within Forensic Profiles

848 of the 848 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	0	0.0000	0	0.0000
1	0	0.0000	0	0.0000

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2	0	0.0000	0	0.0000
3	0	0.0000	0	0.0000
4	0	0.0000	0	0.0000
5	0	0.0000	0	0.0000
> 5	848	1.0000	848	1.0000

Average Number of Differences = 13.488

Native American origin Database(s) within Forensic Profiles

326 of the 326 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	0	0.0000	0	0.0000
1	0	0.0000	0	0.0000
2	0	0.0000	0	0.0000
3	0	0.0000	0	0.0000
4	0	0.0000	0	0.0000
5	0	0.0000	0	0.0000
> 5	326	1.0000	326	1.0000

Average Number of Differences = 15.914

African-American Database within Forensic Profiles

1148 of the 1148 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	0	0.0000	0	0.0000
1	0	0.0000	0	0.0000
2	0	0.0000	0	0.0000

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3	0	0.0000	0	0.0000
4	0	0.0000	0	0.0000
5	0	0.0000	0	0.0000
> 5	1148	1.0000	1148	1.0000

Average Number of Differences = 17.395

Afro-Caribbean Database within Forensic Profiles

0 of the 0 profiles fit the search range

Sierra Leone Database within Forensic Profiles

109 of the 109 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	0	0.0000	0	0.0000
1	0	0.0000	0	0.0000
2	0	0.0000	0	0.0000
3	0	0.0000	0	0.0000
4	0	0.0000	0	0.0000
5	0	0.0000	0	0.0000
> 5	109	1.0000	109	1.0000

Average Number of Differences = 16.908

Caucasian Database within Forensic Profiles

1655 of the 1655 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	6	0.0036	6	0.0036

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1	7	0.0042	13	0.0079
2	1	0.0006	14	0.0085
3	2	0.0012	16	0.0097
4	3	0.0018	19	0.0115
5	5	0.0030	24	0.0145
> 5	1631	0.9855	1655	1.0000

Average Number of Differences = 11.012

Hispanic Database within Forensic Profiles

686 of the 686 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	5	0.0073	5	0.0073
1	0	0.0000	5	0.0073
2	8	0.0117	13	0.0190
3	2	0.0029	15	0.0219
4	0	0.0000	15	0.0219
5	1	0.0015	16	0.0233
> 5	670	0.9767	686	1.0000

Average Number of Differences = 15.277

Japan Database within Forensic Profiles

163 of the 163 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	0	0.0000	0	0.0000
1	0	0.0000	0	0.0000

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2	0	0.0000	0	0.0000
3	0	0.0000	0	0.0000
4	0	0.0000	0	0.0000
5	0	0.0000	0	0.0000
> 5	163	1.0000	163	1.0000

Average Number of Differences = 13.663

Korea Database within Forensic Profiles

182 of the 182 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	0	0.0000	0	0.0000
1	0	0.0000	0	0.0000
2	0	0.0000	0	0.0000
3	0	0.0000	0	0.0000
4	0	0.0000	0	0.0000
5	0	0.0000	0	0.0000
> 5	182	1.0000	182	1.0000

Average Number of Differences = 13.484

Thailand Database within Forensic Profiles

52 of the 52 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	0	0.0000	0	0.0000
1	0	0.0000	0	0.0000
2	0	0.0000	0	0.0000

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3	0	0.0000	0	0.0000
4	0	0.0000	0	0.0000
5	0	0.0000	0	0.0000
> 5	52	1.0000	52	1.0000

Average Number of Differences = 13.442

Navajo Database within Forensic Profiles

146 of the 146 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	0	0.0000	0	0.0000
1	0	0.0000	0	0.0000
2	0	0.0000	0	0.0000
3	0	0.0000	0	0.0000
4	0	0.0000	0	0.0000
5	0	0.0000	0	0.0000
> 5	146	1.0000	146	1.0000

Average Number of Differences = 15.089

Apache Database within Forensic Profiles

180 of the 180 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	0	0.0000	0	0.0000
1	0	0.0000	0	0.0000
2	0	0.0000	0	0.0000
3	0	0.0000	0	0.0000

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4	0	0.0000	0	0.0000
5	0	0.0000	0	0.0000
> 5	180	1.0000	180	1.0000

Average Number of Differences = 16.583

Egypt Database within Forensic Profiles

48 of the 48 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	0	0.0000	0	0.0000
1	0	0.0000	0	0.0000
2	0	0.0000	0	0.0000
3	0	0.0000	0	0.0000
4	0	0.0000	0	0.0000
5	1	0.0208	1	0.0208
> 5	47	0.9792	48	1.0000

Average Number of Differences = 14.438

China/Taiwan Database within Forensic Profiles

356 of the 356 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	0	0.0000	0	0.0000
1	0	0.0000	0	0.0000
2	0	0.0000	0	0.0000
3	0	0.0000	0	0.0000
4	0	0.0000	0	0.0000

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5	0	0.0000	0	0.0000
> 5	356	1.0000	356	1.0000

Average Number of Differences = 13.758

Guam Database within Forensic Profiles

87 of the 87 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	0	0.0000	0	0.0000
1	0	0.0000	0	0.0000
2	0	0.0000	0	0.0000
3	0	0.0000	0	0.0000
4	0	0.0000	0	0.0000
5	0	0.0000	0	0.0000
> 5	87	1.0000	87	1.0000

Average Number of Differences = 12.230

India Database within Forensic Profiles

19 of the 19 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	0	0.0000	0	0.0000
1	0	0.0000	0	0.0000
2	0	0.0000	0	0.0000
3	0	0.0000	0	0.0000
4	0	0.0000	0	0.0000
5	1	0.0526	1	0.0526

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> 5	18	0.9474	19	1.0000

Average Number of Differences = 12.158

Pakistan Database within Forensic Profiles

8 of the 8 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	0	0.0000	0	0.0000
1	0	0.0000	0	0.0000
2	0	0.0000	0	0.0000
3	0	0.0000	0	0.0000
4	0	0.0000	0	0.0000
5	0	0.0000	0	0.0000
> 5	8	1.0000	8	1.0000

Average Number of Differences = 12.000

Profiles With 2 or Fewer Differences from Search Profile within Forensic Profiles

ID	Database	Lab ID*	Common Range	Differences from CRS	No.
USA.CAU.000166	Caucasian	2	16024-16365 73-340	16069T 16126C 16145A 16172C 16192T 16222T 16261T 73G 242T 263G 295T 315.1C	1
USA.CAU.000278	Caucasian	2	16024-16365 73-340	16069T 16126C 16145A 16172C 16222T 16261T 73G 242T 263G 295T 315.1C	0
USA.CAU.000321	Caucasian	2	16024-16365 73-340	16069T 16126C 16145A 16172C 16222T 16261T 73G 242T 263G 295T 315.1C	0

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USA.CAU.000403	Caucasian	2	16024-16365 73-340	16069T 16126C 16145A 16172C 16222T 16261T 73G 242T 263G 295T 315.1C	0
USA.CAU.000476	Caucasian	2	16024-16365 73-340	16069T 16126C 16145A 16172C 16222T 16261T 73G 242T 263G 295T 315.1C	0
USA.CAU.000566	Caucasian	1	16024-16365 73-340	16069T 16126C 16145A 16172C 16222T 16261T 73G 242T 263G 295T 309.1C 315.1C	0
USA.CAU.000624	Caucasian	2	16024-16365 73-340	16069T 16126C 16145A 16172C 16192T 16222T 16261T 73G 242T 263G 295T 315.1C	1
USA.CAU.000625	Caucasian	2	16024-16365 73-340	16069T 16126C 16145A 16172C 16222T 16261T 73G 242T 263G 295T 315.1C	0
USA.CAU.000799	Caucasian	2	16024-16365 73-340	16069T 16126C 16145A 16172C 16222T 73G 242T 263G 295T 309.1C 315.1C	1
USA.CAU.000850	Caucasian	2	16024-16365 73-340	16069T 16126C 16145A 16172C 16222T 16261T 73G 146C 242T 263G 295T 315.1C	1
USA.CAU.000851	Caucasian	2	16024-16365 73-340	16069T 16126C 16145A 16172C 16222T 16261T 73G 185A 242T 263G 295T 315.1C	1
USA.CAU.000975	Caucasian	2	16024-16365 73-340	16069T 16126C 16145A 16172C 16261N 73G 242T 263G 295T 315.1C	1
USA.CAU.001037	Caucasian	2	16024-16365 73-340	16069T 16126C 16145A 16172C 16222T 16261T 73G 146C 242T 263G 295T 309.1C 315.1C	1
USA.CAU.001046	Caucasian	2	16024-16365 73-340	16069T 16126C 16145A 16222T 16261T 73G 263G 295T 309.1C 315.1C	2
USA.HIS.000161	Hispanic	1	16024-16365 73-340	16069T 16126C 16145A 16222T 16261T 73G 263G 295T 315.1C	2
USA.HIS.000166	Hispanic	1	16024-16365 73-340	16069T 16126C 16145A 16222T 16261T 73G 263G 295T 315.1C	2
USA.HIS.000203	Hispanic	1	16024-16365	16069T 16126C 16145A 16222T	2

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			73-340	16261T 73G 263G 295T 315.1C	
USA.HIS.000320	Hispanic	1	16024-16365 73-340	16069T 16126C 16145A 16172C 16222T 16261T 73G 242T 263G 295T 315.1C	0
USA.HIS.000327	Hispanic	1	16024-16365 73-340	16069T 16126C 16145A 16172C 16222T 16261T 73G 146C 242T 263G 295T 315.1C 340T	2
USA.HIS.000355	Hispanic	1	16024-16365 73-340	16069T 16126C 16145A 16172C 16222T 16261T 73G 242T 263G 295T 315.1C	0
USA.HIS.000420	Hispanic	1	16024-16365 73-340	16069T 16126C 16145A 16222T 16261T 73G 263G 295T 315.1C	2
USA.HIS.000436	Hispanic	1	16024-16365 73-340	16069T 16126C 16145A 16222T 16261T 73G 263G 295T 315.1C	2
USA.HIS.000534	Hispanic	1	16024-16365 73-340	16069T 16126C 16145A 16172C 16222T 16261T 73G 242T 263G 295T 315.1C	0
USA.HIS.000628	Hispanic	1	16024-16365 73-340	16069T 16126C 16145A 16222T 16261T 73G 263G 295T 315.1C	2
USA.HIS.000717	Hispanic	1	16024-16365 73-340	16069T 16126C 16145A 16222T 16261T 73G 263G 295T 315.1C	2
USA.HIS.000838	Hispanic	1	16024-16365 73-340	16069T 16126C 16145A 16172C 16222T 16261T 73G 242T 263G 295T 315.1C	0
USA.HIS.000849	Hispanic	1	16024-16365 73-340	16069T 16126C 16145A 16172C 16222T 16261T 73G 242T 263G 295T 315.1C	0

*Refer to "Contributing Laboratories" table below

Laboratories Contributing to Forensic Profiles

Lab ID	Laboratory	Comments
1	FBI Laboratory	Washington, DC
2	Armed Forces DNA Identification Laboratory	Rockville, MD

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3	Institute of Legal Medicine, University of Innsbruck	Innsbruck, Austria
4	University of California	Berkeley, California
5	Departmento de Midicina Legal	Zaragoza, Spain
6	Illinois State Police	Springfield, IL
7	Instituto Nacional de Toxicologia	Madrid, Spain

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mtDNA Search Results

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Table of Contents

Search Profile

Search Options

Summary of the Databases

"Matching" Profiles

Labs Contributing to Database

Search Profile

Profile ID : 2S04-114-17

Search Range(s)	Differences from CRS
16210-16390	16222 T 16261 T

Search Options

Option	Setting
Date(s) Selected	All
Partial Profiles Used?	Yes
Length Variants	All insertions were ignored
Heteroplasmic Scenarios	Not incorporated

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Summary of the Databases within Forensic Profiles

Classification	Number of Profiles		Database	Number of Profiles	
	Searched	Total		Searched	Total
African origin	1305	1305	African-American	1148	1148
			Afro-Caribbean	0	0
			Sierra Leone	109	109
			Egypt	48	48
Caucasian origin	1674	1674	Caucasian	1655	1655
			India	19	19
Hispanic origin	686	686	Hispanic	686	686
Asian origin	848	848	Japan	163	163
			Korea	182	182
			Thailand	52	52
			China/Taiwan	356	356
			Guam	87	87
			Pakistan	8	8
Native American origin	326	326	Navajo	146	146
			Apache	180	180
Overall				**4839**	

Overall Search Results within Forensic Profiles

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	28	0.0058	28	0.0058
1	29	0.0060	57	0.0118
2	581	0.1201	638	0.1318
3	844	0.1744	1482	0.3063
4	969	0.2002	2451	0.5065

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5	764	0.1579	3215	0.6644
> 5	1624	0.3356	4839	1.0000

Average Number of Differences = 4.677

African origin Database(s) within Forensic Profiles

1305 of the 1305 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	0	0.0000	0	0.0000
1	0	0.0000	0	0.0000
2	26	0.0199	26	0.0199
3	63	0.0483	89	0.0682
4	233	0.1785	322	0.2467
5	243	0.1862	565	0.4330
> 5	740	0.5670	1305	1.0000

Average Number of Differences = 5.989

Caucasian origin Database(s) within Forensic Profiles

1674 of the 1674 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	14	0.0084	14	0.0084
1	27	0.0161	41	0.0245
2	515	0.3076	556	0.3321
3	478	0.2855	1034	0.6177
4	346	0.2067	1380	0.8244
5	214	0.1278	1594	0.9522
> 5	80	0.0478	1674	1.0000

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Average Number of Differences = 3.263

Hispanic origin Database(s) within Forensic Profiles

686 of the 686 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	14	0.0204	14	0.0204
1	2	0.0029	16	0.0233
2	25	0.0364	41	0.0598
3	77	0.1122	118	0.1720
4	97	0.1414	215	0.3134
5	74	0.1079	289	0.4213
> 5	397	0.5787	686	1.0000

Average Number of Differences = 5.341

Asian origin Database(s) within Forensic Profiles

848 of the 848 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	0	0.0000	0	0.0000
1	0	0.0000	0	0.0000
2	15	0.0177	15	0.0177
3	138	0.1627	153	0.1804
4	282	0.3325	435	0.5130
5	223	0.2630	658	0.7759
> 5	190	0.2241	848	1.0000

Average Number of Differences = 4.607

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Native American origin Database(s) within Forensic Profiles

326 of the 326 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	0	0.0000	0	0.0000
1	0	0.0000	0	0.0000
2	0	0.0000	0	0.0000
3	88	0.2699	88	0.2699
4	11	0.0337	99	0.3037
5	10	0.0307	109	0.3344
> 5	217	0.6656	326	1.0000

Average Number of Differences = 5.466

African-American Database within Forensic Profiles

1148 of the 1148 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	0	0.0000	0	0.0000
1	0	0.0000	0	0.0000
2	19	0.0166	19	0.0166
3	50	0.0436	69	0.0601
4	198	0.1725	267	0.2326
5	207	0.1803	474	0.4129
> 5	674	0.5871	1148	1.0000

Average Number of Differences = 6.082

Afro-Caribbean Database within Forensic Profiles

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0 of the 0 profiles fit the search range

Sierra Leone Database within Forensic Profiles

109 of the 109 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	0	0.0000	0	0.0000
1	0	0.0000	0	0.0000
2	0	0.0000	0	0.0000
3	9	0.0826	9	0.0826
4	25	0.2294	34	0.3119
5	25	0.2294	59	0.5413
> 5	50	0.4587	109	1.0000

Average Number of Differences = 5.560

Caucasian Database within Forensic Profiles

1655 of the 1655 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	14	0.0085	14	0.0085
1	27	0.0163	41	0.0248
2	514	0.3106	555	0.3353
3	472	0.2852	1027	0.6205
4	342	0.2066	1369	0.8272
5	211	0.1275	1580	0.9547
> 5	75	0.0453	1655	1.0000

Average Number of Differences = 3.249

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Hispanic Database within Forensic Profiles

686 of the 686 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	14	0.0204	14	0.0204
1	2	0.0029	16	0.0233
2	25	0.0364	41	0.0598
3	77	0.1122	118	0.1720
4	97	0.1414	215	0.3134
5	74	0.1079	289	0.4213
> 5	397	0.5787	686	1.0000

Average Number of Differences = 5.341

Japan Database within Forensic Profiles

163 of the 163 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	0	0.0000	0	0.0000
1	0	0.0000	0	0.0000
2	0	0.0000	0	0.0000
3	12	0.0736	12	0.0736
4	56	0.3436	68	0.4172
5	50	0.3067	118	0.7239
> 5	45	0.2761	163	1.0000

Average Number of Differences = 4.933

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Korea Database within Forensic Profiles

182 of the 182 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	0	0.0000	0	0.0000
1	0	0.0000	0	0.0000
2	4	0.0220	4	0.0220
3	21	0.1154	25	0.1374
4	53	0.2912	78	0.4286
5	61	0.3352	139	0.7637
> 5	43	0.2363	182	1.0000

Average Number of Differences = 4.742

Thailand Database within Forensic Profiles

52 of the 52 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	0	0.0000	0	0.0000
1	0	0.0000	0	0.0000
2	0	0.0000	0	0.0000
3	13	0.2500	13	0.2500
4	19	0.3654	32	0.6154
5	12	0.2308	44	0.8462
> 5	8	0.1538	52	1.0000

Average Number of Differences = 4.365

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Navajo Database within Forensic Profiles

146 of the 146 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	0	0.0000	0	0.0000
1	0	0.0000	0	0.0000
2	0	0.0000	0	0.0000
3	52	0.3562	52	0.3562
4	8	0.0548	60	0.4110
5	7	0.0479	67	0.4589
> 5	79	0.5411	146	1.0000

Average Number of Differences = 4.932

Apache Database within Forensic Profiles

180 of the 180 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	0	0.0000	0	0.0000
1	0	0.0000	0	0.0000
2	0	0.0000	0	0.0000
3	36	0.2000	36	0.2000
4	3	0.0167	39	0.2167
5	3	0.0167	42	0.2333
> 5	138	0.7667	180	1.0000

Average Number of Differences = 5.900

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Egypt Database within Forensic Profiles

48 of the 48 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	0	0.0000	0	0.0000
1	0	0.0000	0	0.0000
2	7	0.1458	7	0.1458
3	4	0.0833	11	0.2292
4	10	0.2083	21	0.4375
5	11	0.2292	32	0.6667
> 5	16	0.3333	48	1.0000

Average Number of Differences = 4.729

China/Taiwan Database within Forensic Profiles

356 of the 356 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	0	0.0000	0	0.0000
1	0	0.0000	0	0.0000
2	9	0.0253	9	0.0253
3	76	0.2135	85	0.2388
4	92	0.2584	177	0.4972
5	89	0.2500	266	0.7472
> 5	90	0.2528	356	1.0000

Average Number of Differences = 4.584

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Guam Database within Forensic Profiles

87 of the 87 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	0	0.0000	0	0.0000
1	0	0.0000	0	0.0000
2	2	0.0230	2	0.0230
3	14	0.1609	16	0.1839
4	56	0.6437	72	0.8276
5	11	0.1264	83	0.9540
> 5	4	0.0460	87	1.0000

Average Number of Differences = 4.034

India Database within Forensic Profiles

19 of the 19 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	0	0.0000	0	0.0000
1	0	0.0000	0	0.0000
2	1	0.0526	1	0.0526
3	6	0.3158	7	0.3684
4	4	0.2105	11	0.5789
5	3	0.1579	14	0.7368
> 5	5	0.2632	19	1.0000

Average Number of Differences = 4.526

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Pakistan Database within Forensic Profiles

8 of the 8 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	0	0.0000	0	0.0000
1	0	0.0000	0	0.0000
2	0	0.0000	0	0.0000
3	2	0.2500	2	0.2500
4	6	0.7500	8	1.0000
5	0	0.0000	8	1.0000
> 5	0	0.0000	8	1.0000

Average Number of Differences = 3.750

Profiles With 2 or Fewer Differences from Search Profile within Forensic Profiles

ID	Database	Lab ID*	Common Range	Differences from CRS	No.
AUT.CAU.000004	Caucasian	3	16210-16390	Not different from CRS	2
AUT.CAU.000005	Caucasian	3	16210-16390	Not different from CRS	2
AUT.CAU.000006	Caucasian	3	16210-16390	Not different from CRS	2
AUT.CAU.000007	Caucasian	3	16210-16390	Not different from CRS	2
AUT.CAU.000011	Caucasian	3	16210-16390	Not different from CRS	2
AUT.CAU.000012	Caucasian	3	16210-16390	Not different from CRS	2
AUT.CAU.000013	Caucasian	3	16210-16390	16231C 16261T	2
AUT.CAU.000016	Caucasian	3	16210-16390	16261T	1
AUT.CAU.000018	Caucasian	3	16210-16390	Not different from CRS	2

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AUT.CAU.000024	Caucasian	3	16210-16390	Not different from CRS	2
AUT.CAU.000027	Caucasian	3	16210-16390	16231C 16261T	2
AUT.CAU.000029	Caucasian	3	16210-16390	Not different from CRS	2
AUT.CAU.000036	Caucasian	3	16210-16390	16231C 16261T	2
AUT.CAU.000037	Caucasian	3	16210-16390	Not different from CRS	2
AUT.CAU.000038	Caucasian	3	16210-16390	Not different from CRS	2
AUT.CAU.000039	Caucasian	3	16210-16390	Not different from CRS	2
AUT.CAU.000041	Caucasian	3	16210-16390	16261T	1
AUT.CAU.000043	Caucasian	3	16210-16390	Not different from CRS	2
AUT.CAU.000044	Caucasian	3	16210-16390	Not different from CRS	2
AUT.CAU.000046	Caucasian	3	16210-16390	16222T	1
AUT.CAU.000050	Caucasian	3	16210-16390	Not different from CRS	2
AUT.CAU.000051	Caucasian	3	16210-16390	Not different from CRS	2
AUT.CAU.000053	Caucasian	3	16210-16390	Not different from CRS	2
AUT.CAU.000057	Caucasian	3	16210-16390	Not different from CRS	2
AUT.CAU.000058	Caucasian	3	16210-16390	Not different from CRS	2
AUT.CAU.000059	Caucasian	3	16210-16390	Not different from CRS	2
AUT.CAU.000061	Caucasian	3	16210-16390	Not different from CRS	2
AUT.CAU.000065	Caucasian	3	16210-16390	Not different from CRS	2
AUT.CAU.000066	Caucasian	3	16210-16390	Not different from CRS	2
AUT.CAU.000068	Caucasian	3	16210-16390	Not different from CRS	2
AUT.CAU.000069	Caucasian	3	16210-16390	Not different from CRS	2
AUT.CAU.000075	Caucasian	3	16210-16390	Not different from CRS	2
AUT.CAU.000076	Caucasian	3	16210-16390	Not different from CRS	2
AUT.CAU.000080	Caucasian	3	16210-16390	Not different from CRS	2
AUT.CAU.000082	Caucasian	3	16210-16390	Not different from CRS	2

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AUT.CAU.000083	Caucasian	3	16210-16390	Not different from CRS	2
AUT.CAU.000090	Caucasian	3	16210-16390	Not different from CRS	2
AUT.CAU.000099	Caucasian	3	16210-16390	Not different from CRS	2
CHN.ASN.000086	China/Taiwan	1	16210-16390	16217C 16261T	2
CHN.ASN.000122	China/Taiwan	1	16210-16390	16217C 16261T	2
CHN.ASN.000237	China/Taiwan	1	16210-16390	Not different from CRS	2
CHN.ASN.000254	China/Taiwan	1	16210-16390	16217C 16261T	2
CHN.ASN.000371	China/Taiwan	1	16210-16390	Not different from CRS	2
CHN.ASN.000384	China/Taiwan	1	16210-16390	16217C 16261T	2
CHN.ASN.000448	China/Taiwan	1	16210-16390	16217C 16261T	2
CHN.ASN.000459	China/Taiwan	1	16210-16390	16217C 16261T	2
CHN.ASN.000803	China/Taiwan	1	16210-16390	Not different from CRS	2
EGY.AFR.000011	Egypt	1	16210-16390	Not different from CRS	2
EGY.AFR.000014	Egypt	1	16210-16390	16221T 16261T	2
EGY.AFR.000027	Egypt	1	16210-16390	Not different from CRS	2
EGY.AFR.000044	Egypt	1	16210-16390	Not different from CRS	2
EGY.AFR.000051	Egypt	1	16210-16390	Not different from CRS	2
EGY.AFR.000054	Egypt	1	16210-16390	Not different from CRS	2
EGY.AFR.000056	Egypt	1	16210-16390	Not different from CRS	2
FRA.CAU.000005	Caucasian	2	16210-16365	Not different from CRS	2
FRA.CAU.000007	Caucasian	2	16210-16365	Not different from CRS	2
FRA.CAU.000009	Caucasian	2	16210-16365	Not different from CRS	2
FRA.CAU.000010	Caucasian	2	16210-16365	Not different from CRS	2
FRA.CAU.000011	Caucasian	2	16210-16365	16261T	1
FRA.CAU.000019	Caucasian	2	16210-16365	Not different from CRS	2
FRA.CAU.000023	Caucasian	2	16210-16365	Not different from CRS	2

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FRA.CAU.000025	Caucasian	2	16210-16365	Not different from CRS	2
FRA.CAU.000026	Caucasian	2	16210-16365	Not different from CRS	2
FRA.CAU.000028	Caucasian	2	16210-16365	Not different from CRS	2
FRA.CAU.000029	Caucasian	2	16210-16365	Not different from CRS	2
FRA.CAU.000030	Caucasian	2	16210-16365	Not different from CRS	2
FRA.CAU.000031	Caucasian	2	16210-16365	Not different from CRS	2
FRA.CAU.000032	Caucasian	2	16210-16365	Not different from CRS	2
FRA.CAU.000036	Caucasian	2	16210-16365	Not different from CRS	2
FRA.CAU.000037	Caucasian	2	16210-16365	Not different from CRS	2
FRA.CAU.000041	Caucasian	2	16210-16365	Not different from CRS	2
FRA.CAU.000042	Caucasian	2	16210-16365	Not different from CRS	2
FRA.CAU.000051	Caucasian	2	16210-16365	Not different from CRS	2
FRA.CAU.000052	Caucasian	2	16210-16365	Not different from CRS	2
FRA.CAU.000053	Caucasian	2	16210-16365	Not different from CRS	2
FRA.CAU.000056	Caucasian	2	16210-16365	Not different from CRS	2
FRA.CAU.000058	Caucasian	2	16210-16365	Not different from CRS	2
FRA.CAU.000063	Caucasian	2	16210-16365	Not different from CRS	2
FRA.CAU.000067	Caucasian	2	16210-16365	Not different from CRS	2
FRA.CAU.000069	Caucasian	2	16210-16365	Not different from CRS	2
FRA.CAU.000070	Caucasian	2	16210-16365	Not different from CRS	2
FRA.CAU.000071	Caucasian	2	16210-16365	Not different from CRS	2
FRA.CAU.000073	Caucasian	2	16210-16365	Not different from CRS	2
FRA.CAU.000074	Caucasian	2	16210-16365	Not different from CRS	2
FRA.CAU.000075	Caucasian	2	16210-16365	Not different from CRS	2
FRA.CAU.000076	Caucasian	2	16210-16365	Not different from CRS	2
FRA.CAU.000079	Caucasian	2	16210-16365	16261T 16311C	2

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FRA.CAU.000081	Caucasian	2	16210-16365	Not different from CRS	2
FRA.CAU.000082	Caucasian	2	16210-16365	Not different from CRS	2
FRA.CAU.000086	Caucasian	2	16210-16365	Not different from CRS	2
FRA.CAU.000087	Caucasian	2	16210-16365	Not different from CRS	2
FRA.CAU.000091	Caucasian	2	16210-16365	Not different from CRS	2
FRA.CAU.000094	Caucasian	2	16210-16365	Not different from CRS	2
FRA.CAU.000098	Caucasian	2	16210-16365	Not different from CRS	2
FRA.CAU.000101	Caucasian	2	16210-16365	Not different from CRS	2
FRA.CAU.000107	Caucasian	2	16210-16365	Not different from CRS	2
GRC.CAU.000004	Caucasian	1	16210-16390	16311N	2
GRC.CAU.000005	Caucasian	1	16210-16390	Not different from CRS	2
GRC.CAU.000013	Caucasian	1	16210-16390	16261T	1
GRC.CAU.000014	Caucasian	1	16210-16390	Not different from CRS	2
GRC.CAU.000015	Caucasian	1	16210-16390	Not different from CRS	2
GRC.CAU.000017	Caucasian	1	16210-16390	Not different from CRS	2
GRC.CAU.000019	Caucasian	1	16210-16390	Not different from CRS	2
GRC.CAU.000021	Caucasian	1	16210-16390	16261T	1
GRC.CAU.000023	Caucasian	1	16210-16390	16242T 16261T	2
GRC.CAU.000024	Caucasian	1	16210-16390	Not different from CRS	2
GRC.CAU.000026	Caucasian	1	16210-16390	Not different from CRS	2
GRC.CAU.000030	Caucasian	1	16210-16390	16261T	1
GRC.CAU.000031	Caucasian	1	16210-16390	Not different from CRS	2
GRC.CAU.000039	Caucasian	1	16210-16390	Not different from CRS	2
GRC.CAU.000041	Caucasian	1	16210-16390	Not different from CRS	2
GRC.CAU.000042	Caucasian	1	16210-16390	Not different from CRS	2
GRC.CAU.000043	Caucasian	1	16210-16390	Not different from CRS	2

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GRC.CAU.000046	Caucasian	1	16210-16390	Not different from CRS	2
GRC.CAU.000055	Caucasian	1	16210-16390	Not different from CRS	2
IND.CAU.000105	India	1	16210-16390	16261T 16357C	2
KOR.ASN.000085	Korea	2	16210-16365	16217C 16261T	2
KOR.ASN.000113	Korea	2	16210-16365	16217C 16261T	2
KOR.ASN.000129	Korea	2	16210-16365	Not different from CRS	2
KOR.ASN.000161	Korea	2	16210-16365	16217C 16261T	2
USA.335.000018	Guam	1	16210-16365	16217C 16261T	2
USA.335.000031	Guam	1	16210-16365	16217C 16261T	2
USA.AFR.000022	African-American	2	16210-16365	Not different from CRS	2
USA.AFR.000139	African-American	1	16210-16365	Not different from CRS	2
USA.AFR.000171	African-American	1	16210-16390	Not different from CRS	2
USA.AFR.000195	African-American	1	16210-16390	Not different from CRS	2
USA.AFR.000196	African-American	1	16210-16390	Not different from CRS	2
USA.AFR.000215	African-American	1	16210-16390	Not different from CRS	2
USA.AFR.000426	African-American	1	16210-16390	Not different from CRS	2
USA.AFR.000441	African-American	1	16210-16390	Not different from CRS	2
USA.AFR.000446	African-American	1	16210-16390	Not different from CRS	2
USA.AFR.000451	African-American	1	16210-16390	Not different from CRS	2
USA.AFR.000516	African-American	1	16210-16390	Not different from CRS	2

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USA.AFR.000577	African-American	1	16210-16390	16217C 16220N 16247N 16261T	2
USA.AFR.000603	African-American	1	16210-16365	Not different from CRS	2
USA.AFR.000622	African-American	1	16210-16365	Not different from CRS	2
USA.AFR.000898	African-American	1	16210-16390	Not different from CRS	2
USA.AFR.000949	African-American	1	16210-16390	Not different from CRS	2
USA.AFR.001153	African-American	1	16210-16365	Not different from CRS	2
USA.AFR.001173	African-American	1	16210-16390	Not different from CRS	2
USA.AFR.001196	African-American	1	16210-16390	Not different from CRS	2
USA.CAU.000003	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000007	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000009	Caucasian	2	16210-16365	16222T 16261T	0
USA.CAU.000010	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000013	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000015	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000021	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000024	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000025	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000032	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000035	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000040	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000044	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000047	Caucasian	2	16210-16365	Not different from CRS	2

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USA.CAU.000048	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000049	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000050	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000053	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000056	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000061	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000063	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000066	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000068	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000071	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000074	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000077	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000078	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000081	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000082	Caucasian	2	16210-16365	16261T	1
USA.CAU.000084	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000089	Caucasian	2	16210-16365	16256T 16261T	2
USA.CAU.000092	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000095	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000096	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000099	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000103	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000108	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000114	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000119	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000121	Caucasian	2	16210-16365	Not different from CRS	2

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USA.CAU.000124	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000126	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000127	Caucasian	2	16210-16365	16337N	2
USA.CAU.000130	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000131	Caucasian	2	16210-16365	16258C 16261T	2
USA.CAU.000133	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000138	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000142	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000149	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000150	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000157	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000158	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000163	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000166	Caucasian	2	16210-16365	16222T 16261T	0
USA.CAU.000167	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000169	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000171	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000172	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000176	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000178	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000179	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000180	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000193	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000199	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000208	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000209	Caucasian	2	16210-16365	Not different from CRS	2

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USA.CAU.000213	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000214	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000217	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000220	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000222	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000225	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000227	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000229	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000230	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000236	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000239	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000241	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000242	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000244	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000251	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000259	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000260	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000268	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000270	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000271	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000278	Caucasian	2	16210-16365	16222T 16261T	0
USA.CAU.000280	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000282	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000285	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000290	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000291	Caucasian	2	16210-16365	Not different from CRS	2

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USA.CAU.000294	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000295	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000297	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000299	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000300	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000301	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000305	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000312	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000316	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000321	Caucasian	2	16210-16365	16222T 16261T	0
USA.CAU.000322	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000329	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000336	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000342	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000344	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000347	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000349	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000355	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000356	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000357	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000358	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000365	Caucasian	1	16210-16365	Not different from CRS	2
USA.CAU.000368	Caucasian	1	16210-16365	Not different from CRS	2
USA.CAU.000375	Caucasian	1	16210-16365	Not different from CRS	2
USA.CAU.000378	Caucasian	1	16210-16365	Not different from CRS	2
USA.CAU.000380	Caucasian	2	16210-16365	Not different from CRS	2

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USA.CAU.000383	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000384	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000388	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000389	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000391	Caucasian	2	16210-16365	16261T	1
USA.CAU.000393	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000394	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000395	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000397	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000398	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000401	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000403	Caucasian	2	16210-16365	16222T 16261T	0
USA.CAU.000407	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000409	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000410	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000413	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000420	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000425	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000426	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000428	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000431	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000432	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000435	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000445	Caucasian	2	16210-16365	16231C 16261T	2
USA.CAU.000447	Caucasian	2	16210-16365	16231C 16261T	2
USA.CAU.000448	Caucasian	2	16210-16365	16261T 16270T	2

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USA.CAU.000449	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000450	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000452	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000457	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000463	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000466	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000467	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000468	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000469	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000474	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000475	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000476	Caucasian	2	16210-16365	16222T 16261T	0
USA.CAU.000483	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000488	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000489	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000493	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000494	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000495	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000497	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000498	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000500	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000501	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000503	Caucasian	2	16210-16365	16261T	1
USA.CAU.000505	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000507	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000509	Caucasian	2	16210-16365	Not different from CRS	2

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USA.CAU.000510	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000512	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000523	Caucasian	2	16210-16365	16222T	1
USA.CAU.000524	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000527	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000541	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000544	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000549	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000551	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000556	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000559	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000562	Caucasian	1	16210-16365	Not different from CRS	2
USA.CAU.000564	Caucasian	1	16210-16365	16261T	1
USA.CAU.000565	Caucasian	1	16210-16365	Not different from CRS	2
USA.CAU.000566	Caucasian	1	16210-16365	16222T 16261T	0
USA.CAU.000568	Caucasian	1	16210-16365	Not different from CRS	2
USA.CAU.000570	Caucasian	1	16210-16390	Not different from CRS	2
USA.CAU.000572	Caucasian	1	16210-16365	Not different from CRS	2
USA.CAU.000573	Caucasian	1	16210-16365	Not different from CRS	2
USA.CAU.000574	Caucasian	1	16210-16365	Not different from CRS	2
USA.CAU.000582	Caucasian	1	16210-16365	Not different from CRS	2
USA.CAU.000583	Caucasian	1	16210-16365	Not different from CRS	2
USA.CAU.000586	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000597	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000601	Caucasian	2	16210-16365	16261T	1
USA.CAU.000607	Caucasian	2	16210-16365	Not different from CRS	2

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USA.CAU.000611	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000612	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000613	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000614	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000615	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000622	Caucasian	2	16210-16365	16261T	1
USA.CAU.000623	Caucasian	2	16210-16365	16231C 16261T	2
USA.CAU.000624	Caucasian	2	16210-16365	16222T 16261T	0
USA.CAU.000625	Caucasian	2	16210-16365	16222T 16261T	0
USA.CAU.000626	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000627	Caucasian	2	16210-16365	16222T	1
USA.CAU.000631	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000632	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000633	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000634	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000636	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000638	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000644	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000647	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000670	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000673	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000693	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000694	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000700	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000704	Caucasian	2	16210-16365	16362N	2
USA.CAU.000711	Caucasian	2	16210-16365	Not different from CRS	2

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USA.CAU.000729	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000730	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000731	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000732	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000733	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000734	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000735	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000736	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000737	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000738	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000747	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000756	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000760	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000761	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000764	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000765	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000768	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000769	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000772	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000776	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000777	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000779	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000783	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000789	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000791	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000795	Caucasian	2	16210-16365	Not different from CRS	2

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USA.CAU.000798	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000799	Caucasian	2	16210-16365	16222T	1
USA.CAU.000801	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000803	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000804	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000810	Caucasian	2	16210-16365	16256N	2
USA.CAU.000820	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000822	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000830	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000834	Caucasian	2	16210-16365	16261T	1
USA.CAU.000836	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000837	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000840	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000841	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000844	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000846	Caucasian	2	16210-16365	16222T	1
USA.CAU.000850	Caucasian	2	16210-16365	16222T 16261T	0
USA.CAU.000851	Caucasian	2	16210-16365	16222T 16261T	0
USA.CAU.000857	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000859	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000862	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000865	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000866	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000872	Caucasian	2	16210-16365	16261T	1
USA.CAU.000877	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000879	Caucasian	2	16210-16365	Not different from CRS	2

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USA.CAU.000885	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000886	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000888	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000889	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000892	Caucasian	2	16210-16365	16231C 16261T	2
USA.CAU.000894	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000896	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000897	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000900	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000903	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000910	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000912	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000914	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000918	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000923	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000927	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000932	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000933	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000934	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000936	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000939	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000940	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000943	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000947	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000949	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000952	Caucasian	2	16210-16365	Not different from CRS	2

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USA.CAU.000953	Caucasian	1	16210-16390	Not different from CRS	2
USA.CAU.000955	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000960	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000966	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000967	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000970	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000975	Caucasian	2	16210-16365	16261N	1
USA.CAU.000980	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000986	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000987	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000996	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.000999	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001004	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001008	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001011	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001012	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001017	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001020	Caucasian	2	16210-16365	16261T 16294T	2
USA.CAU.001025	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001029	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001030	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001031	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001034	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001035	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001037	Caucasian	2	16210-16365	16222T 16261T	0
USA.CAU.001039	Caucasian	2	16210-16365	Not different from CRS	2

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USA.CAU.001045	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001046	Caucasian	2	16210-16365	16222T 16261T	0
USA.CAU.001047	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001051	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001052	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001063	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001066	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001067	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001068	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001069	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001071	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001072	Caucasian	2	16210-16365	16259T 16261T	2
USA.CAU.001073	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001074	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001080	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001090	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001091	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001093	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001094	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001098	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001106	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001108	Caucasian	2	16210-16365	16261T	1
USA.CAU.001120	Caucasian	2	16210-16365	16231C 16261T	2
USA.CAU.001122	Caucasian	2	16210-16365	16261T	1
USA.CAU.001124	Caucasian	2	16210-16365	16222T 16261T	0
USA.CAU.001127	Caucasian	2	16210-16365	Not different from CRS	2

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USA.CAU.001129	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001131	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001132	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001134	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001136	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001142	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001145	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001149	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001153	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001154	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001161	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001163	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001165	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001168	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001169	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001172	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001183	Caucasian	2	16210-16365	16261T 16278T	2
USA.CAU.001186	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001187	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001188	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001191	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001192	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001194	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001198	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001200	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001205	Caucasian	2	16210-16365	Not different from CRS	2

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USA.CAU.001209	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001211	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001212	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001215	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001216	Caucasian	2	16210-16365	Not different from CRS	2
USA.CAU.001281	Caucasian	1	16210-16390	16261T 16304C	2
USA.CAU.001285	Caucasian	1	16210-16390	Not different from CRS	2
USA.CAU.001286	Caucasian	6	16210-16365	Not different from CRS	2
USA.CAU.001288	Caucasian	6	16210-16365	Not different from CRS	2
USA.CAU.001289	Caucasian	6	16210-16365	Not different from CRS	2
USA.CAU.001291	Caucasian	6	16210-16365	Not different from CRS	2
USA.CAU.001292	Caucasian	6	16210-16365	Not different from CRS	2
USA.CAU.001293	Caucasian	6	16210-16365	Not different from CRS	2
USA.CAU.001298	Caucasian	6	16210-16365	16261T	1
USA.CAU.001302	Caucasian	6	16210-16365	Not different from CRS	2
USA.CAU.001303	Caucasian	6	16210-16365	Not different from CRS	2
USA.CAU.001307	Caucasian	6	16210-16365	Not different from CRS	2
USA.CAU.001321	Caucasian	6	16210-16365	Not different from CRS	2
USA.CAU.001322	Caucasian	6	16210-16365	Not different from CRS	2
USA.CAU.001325	Caucasian	6	16210-16365	Not different from CRS	2
USA.CAU.001326	Caucasian	6	16210-16365	Not different from CRS	2
USA.CAU.001328	Caucasian	6	16210-16365	Not different from CRS	2
USA.CAU.001329	Caucasian	6	16210-16365	16261T	1
USA.CAU.001331	Caucasian	6	16210-16365	Not different from CRS	2
USA.CAU.001333	Caucasian	6	16210-16365	Not different from CRS	2
USA.CAU.001338	Caucasian	6	16210-16365	Not different from CRS	2

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USA.CAU.001339	Caucasian	6	16210-16365	Not different from CRS	2
USA.CAU.001341	Caucasian	6	16210-16365	Not different from CRS	2
USA.CAU.001349	Caucasian	1	16210-16390	Not different from CRS	2
USA.CAU.001356	Caucasian	1	16210-16390	Not different from CRS	2
USA.CAU.001358	Caucasian	1	16210-16390	Not different from CRS	2
USA.CAU.001359	Caucasian	1	16210-16390	Not different from CRS	2
USA.CAU.001366	Caucasian	1	16210-16390	Not different from CRS	2
USA.CAU.001371	Caucasian	1	16210-16390	16261T	1
USA.CAU.001373	Caucasian	1	16210-16390	16222T	1
USA.CAU.001374	Caucasian	1	16210-16390	Not different from CRS	2
USA.CAU.001376	Caucasian	1	16210-16390	Not different from CRS	2
USA.CAU.001377	Caucasian	1	16210-16390	16261T 16278T	2
USA.CAU.001386	Caucasian	1	16210-16390	Not different from CRS	2
USA.CAU.001389	Caucasian	1	16210-16390	Not different from CRS	2
USA.CAU.001392	Caucasian	1	16210-16390	Not different from CRS	2
USA.CAU.001393	Caucasian	1	16210-16390	Not different from CRS	2
USA.CAU.001396	Caucasian	1	16210-16390	Not different from CRS	2
USA.CAU.001398	Caucasian	1	16210-16390	16231C 16261T	2
USA.CAU.001402	Caucasian	1	16210-16390	Not different from CRS	2
USA.CAU.001404	Caucasian	1	16210-16390	16261T	1
USA.CAU.001405	Caucasian	1	16210-16390	Not different from CRS	2
USA.CAU.001408	Caucasian	1	16210-16390	Not different from CRS	2
USA.CAU.001412	Caucasian	1	16210-16390	Not different from CRS	2
USA.CAU.001413	Caucasian	1	16210-16390	Not different from CRS	2
USA.CAU.001418	Caucasian	1	16210-16390	Not different from CRS	2
USA.CAU.001422	Caucasian	1	16210-16390	16222N 16356C	2

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USA.CAU.001423	Caucasian	1	16210-16390	Not different from CRS	2
USA.CAU.001425	Caucasian	1	16210-16390	Not different from CRS	2
USA.CAU.001426	Caucasian	1	16210-16390	Not different from CRS	2
USA.CAU.001427	Caucasian	1	16210-16390	Not different from CRS	2
USA.CAU.001429	Caucasian	1	16210-16390	Not different from CRS	2
USA.CAU.001432	Caucasian	1	16210-16390	Not different from CRS	2
USA.CAU.001439	Caucasian	1	16210-16390	Not different from CRS	2
USA.CAU.001440	Caucasian	1	16210-16390	Not different from CRS	2
USA.CAU.001442	Caucasian	1	16210-16390	Not different from CRS	2
USA.CAU.001446	Caucasian	1	16210-16390	Not different from CRS	2
USA.CAU.001447	Caucasian	1	16210-16390	Not different from CRS	2
USA.CAU.001451	Caucasian	1	16210-16390	Not different from CRS	2
USA.CAU.001456	Caucasian	1	16210-16390	Not different from CRS	2
USA.CAU.001457	Caucasian	1	16210-16390	Not different from CRS	2
USA.CAU.001458	Caucasian	1	16210-16390	Not different from CRS	2
USA.CAU.001459	Caucasian	1	16210-16390	Not different from CRS	2
USA.CAU.001463	Caucasian	1	16210-16390	Not different from CRS	2
USA.CAU.001465	Caucasian	1	16210-16390	Not different from CRS	2
USA.CAU.001476	Caucasian	1	16210-16390	Not different from CRS	2
USA.CAU.001479	Caucasian	1	16210-16390	Not different from CRS	2
USA.CAU.001481	Caucasian	1	16210-16390	16231C 16261T	2
USA.CAU.001482	Caucasian	1	16210-16390	Not different from CRS	2
USA.CAU.001486	Caucasian	1	16210-16390	Not different from CRS	2
USA.CAU.001491	Caucasian	1	16210-16390	Not different from CRS	2
USA.CAU.001494	Caucasian	1	16210-16390	Not different from CRS	2
USA.CAU.001497	Caucasian	1	16210-16390	Not different from CRS	2

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USA.HIS.000135	Hispanic	1	16210-16365	16234N 16325N	2
USA.HIS.000136	Hispanic	1	16210-16365	16222T 16261T 16362C	1
USA.HIS.000161	Hispanic	1	16210-16365	16222T 16261T	0
USA.HIS.000166	Hispanic	1	16210-16365	16222T 16261T	0
USA.HIS.000175	Hispanic	1	16210-16365	Not different from CRS	2
USA.HIS.000176	Hispanic	1	16210-16365	Not different from CRS	2
USA.HIS.000203	Hispanic	1	16210-16365	16222T 16261T	0
USA.HIS.000233	Hispanic	1	16210-16365	Not different from CRS	2
USA.HIS.000262	Hispanic	1	16210-16365	Not different from CRS	2
USA.HIS.000273	Hispanic	1	16210-16365	Not different from CRS	2
USA.HIS.000291	Hispanic	1	16210-16365	Not different from CRS	2
USA.HIS.000313	Hispanic	2	16210-16365	Not different from CRS	2
USA.HIS.000320	Hispanic	1	16210-16390	16222T 16261T	0
USA.HIS.000327	Hispanic	1	16210-16390	16222T 16261T	0
USA.HIS.000349	Hispanic	1	16210-16390	16222T 16256T 16261T 16278T	2
USA.HIS.000351	Hispanic	1	16210-16390	Not different from CRS	2
USA.HIS.000355	Hispanic	1	16210-16390	16222T 16261T	0
USA.HIS.000365	Hispanic	1	16210-16390	Not different from CRS	2
USA.HIS.000374	Hispanic	1	16210-16390	Not different from CRS	2
USA.HIS.000404	Hispanic	1	16210-16390	Not different from CRS	2
USA.HIS.000420	Hispanic	1	16210-16390	16222T 16261T	0
USA.HIS.000422	Hispanic	1	16210-16390	Not different from CRS	2
USA.HIS.000436	Hispanic	1	16210-16390	16222T 16261T	0
USA.HIS.000462	Hispanic	1	16210-16390	Not different from CRS	2
USA.HIS.000467	Hispanic	1	16210-16390	Not different from CRS	2
USA.HIS.000479	Hispanic	1	16210-16390	Not different from CRS	2

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USA.HIS.000484	Hispanic	1	16210-16390	Not different from CRS	2
USA.HIS.000534	Hispanic	1	16210-16390	16222T 16261T	0
USA.HIS.000584	Hispanic	1	16210-16390	16222T 16261T	0
USA.HIS.000624	Hispanic	1	16210-16390	Not different from CRS	2
USA.HIS.000628	Hispanic	1	16210-16390	16222T 16261T	0
USA.HIS.000661	Hispanic	1	16210-16390	Not different from CRS	2
USA.HIS.000677	Hispanic	1	16210-16390	Not different from CRS	2
USA.HIS.000701	Hispanic	1	16210-16390	Not different from CRS	2
USA.HIS.000713	Hispanic	1	16210-16390	Not different from CRS	2
USA.HIS.000717	Hispanic	1	16210-16390	16222T 16261T	0
USA.HIS.000794	Hispanic	1	16210-16390	Not different from CRS	2
USA.HIS.000819	Hispanic	1	16210-16365	16261T	1
USA.HIS.000838	Hispanic	1	16210-16390	16222T 16261T	0
USA.HIS.000849	Hispanic	1	16210-16390	16222T 16261T	0
USA.HIS.000861	Hispanic	1	16210-16390	Not different from CRS	2

*Refer to "Contributing Laboratories" table below

Laboratories Contributing to Forensic Profiles

Lab ID	Laboratory	Comments
1	FBI Laboratory	Washington, DC
2	Armed Forces DNA Identification Laboratory	Rockville, MD
3	Institute of Legal Medicine, University of Innsbruck	Innsbruck, Austria
4	University of California	Berkeley, California
5	Departmento de Midicina Legal	Zaragoza, Spain
6	Illinois State Police	Springfield, IL
7	Instituto Nacional de Toxicologia	Madrid, Spain

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mtDNA Search Results

Jul-25-2011 3:06 pm

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Search Profile

Search Options

Summary of the Databases

"Matching" Profiles

Labs Contributing to Database

Search Profile

Profile ID : 2S04-114-11D

Search Range(s)	Differences from CRS
16216-16388 35-265	16222 T 16261 T 73 G 242 T 263 G

Search Options

Option	Setting
Date(s) Selected	All
Partial Profiles Used?	Yes
Length Variants	All insertions were ignored
Heteroplasmic Scenarios	Not incorporated

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Summary of the Databases within Forensic Profiles

Classification	Number of Profiles		Database	Number of Profiles	
	Searched	Total		Searched	Total
African origin	1305	1305	African-American	1148	1148
			Afro-Caribbean	0	0
			Sierra Leone	109	109
			Egypt	48	48
Caucasian origin	1674	1674	Caucasian	1655	1655
			India	19	19
Hispanic origin	686	686	Hispanic	686	686
Asian origin	848	848	Japan	163	163
			Korea	182	182
			Thailand	52	52
			China/Taiwan	356	356
			Guam	87	87
			Pakistan	8	8
Native American origin	326	326	Navajo	146	146
			Apache	180	180
Overall				**4839**	

Overall Search Results within Forensic Profiles

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	13	0.0027	13	0.0027
1	15	0.0031	28	0.0058
2	6	0.0012	34	0.0070
3	65	0.0134	99	0.0205
4	397	0.0820	496	0.1025

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5	736	0.1521	1232	0.2546
> 5	3607	0.7454	4839	1.0000

Average Number of Differences = 7.950

African origin Database(s) within Forensic Profiles

1305 of the 1305 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	0	0.0000	0	0.0000
1	0	0.0000	0	0.0000
2	0	0.0000	0	0.0000
3	1	0.0008	1	0.0008
4	16	0.0123	17	0.0130
5	41	0.0314	58	0.0444
> 5	1247	0.9556	1305	1.0000

Average Number of Differences = 10.694

Caucasian origin Database(s) within Forensic Profiles

1674 of the 1674 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	8	0.0048	8	0.0048
1	6	0.0036	14	0.0084
2	5	0.0030	19	0.0114
3	57	0.0341	76	0.0454
4	277	0.1655	353	0.2109
5	462	0.2760	815	0.4869
> 5	859	0.5131	1674	1.0000

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Average Number of Differences = 5.808

Hispanic origin Database(s) within Forensic Profiles

686 of the 686 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	5	0.0073	5	0.0073
1	9	0.0131	14	0.0204
2	1	0.0015	15	0.0219
3	4	0.0058	19	0.0277
4	46	0.0671	65	0.0948
5	49	0.0714	114	0.1662
> 5	572	0.8338	686	1.0000

Average Number of Differences = 8.821

Asian origin Database(s) within Forensic Profiles

848 of the 848 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	0	0.0000	0	0.0000
1	0	0.0000	0	0.0000
2	0	0.0000	0	0.0000
3	3	0.0035	3	0.0035
4	18	0.0212	21	0.0248
5	156	0.1840	177	0.2087
> 5	671	0.7913	848	1.0000

Average Number of Differences = 6.998

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Native American origin Database(s) within Forensic Profiles

326 of the 326 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	0	0.0000	0	0.0000
1	0	0.0000	0	0.0000
2	0	0.0000	0	0.0000
3	0	0.0000	0	0.0000
4	40	0.1227	40	0.1227
5	28	0.0859	68	0.2086
> 5	258	0.7914	326	1.0000

Average Number of Differences = 8.617

African-American Database within Forensic Profiles

1148 of the 1148 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	0	0.0000	0	0.0000
1	0	0.0000	0	0.0000
2	0	0.0000	0	0.0000
3	0	0.0000	0	0.0000
4	14	0.0122	14	0.0122
5	37	0.0322	51	0.0444
> 5	1097	0.9556	1148	1.0000

Average Number of Differences = 10.789

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Afro-Caribbean Database within Forensic Profiles

0 of the 0 profiles fit the search range

Sierra Leone Database within Forensic Profiles

109 of the 109 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	0	0.0000	0	0.0000
1	0	0.0000	0	0.0000
2	0	0.0000	0	0.0000
3	0	0.0000	0	0.0000
4	0	0.0000	0	0.0000
5	2	0.0183	2	0.0183
> 5	107	0.9817	109	1.0000

Average Number of Differences = 10.761

Caucasian Database within Forensic Profiles

1655 of the 1655 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	8	0.0048	8	0.0048
1	6	0.0036	14	0.0085
2	5	0.0030	19	0.0115
3	56	0.0338	75	0.0453
4	276	0.1668	351	0.2121
5	457	0.2761	808	0.4882
> 5	847	0.5118	1655	1.0000

Average Number of Differences = 5.793

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Hispanic Database within Forensic Profiles

686 of the 686 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	5	0.0073	5	0.0073
1	9	0.0131	14	0.0204
2	1	0.0015	15	0.0219
3	4	0.0058	19	0.0277
4	46	0.0671	65	0.0948
5	49	0.0714	114	0.1662
> 5	572	0.8338	686	1.0000

Average Number of Differences = 8.821

Japan Database within Forensic Profiles

163 of the 163 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	0	0.0000	0	0.0000
1	0	0.0000	0	0.0000
2	0	0.0000	0	0.0000
3	0	0.0000	0	0.0000
4	1	0.0061	1	0.0061
5	23	0.1411	24	0.1472
> 5	139	0.8528	163	1.0000

Average Number of Differences = 7.074

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Korea Database within Forensic Profiles

182 of the 182 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	0	0.0000	0	0.0000
1	0	0.0000	0	0.0000
2	0	0.0000	0	0.0000
3	0	0.0000	0	0.0000
4	5	0.0275	5	0.0275
5	21	0.1154	26	0.1429
> 5	156	0.8571	182	1.0000

Average Number of Differences = 7.137

Thailand Database within Forensic Profiles

52 of the 52 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	0	0.0000	0	0.0000
1	0	0.0000	0	0.0000
2	0	0.0000	0	0.0000
3	0	0.0000	0	0.0000
4	1	0.0192	1	0.0192
5	9	0.1731	10	0.1923
> 5	42	0.8077	52	1.0000

Average Number of Differences = 6.750

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Navajo Database within Forensic Profiles

146 of the 146 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	0	0.0000	0	0.0000
1	0	0.0000	0	0.0000
2	0	0.0000	0	0.0000
3	0	0.0000	0	0.0000
4	23	0.1575	23	0.1575
5	25	0.1712	48	0.3288
> 5	98	0.6712	146	1.0000

Average Number of Differences = 7.753

Apache Database within Forensic Profiles

180 of the 180 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	0	0.0000	0	0.0000
1	0	0.0000	0	0.0000
2	0	0.0000	0	0.0000
3	0	0.0000	0	0.0000
4	17	0.0944	17	0.0944
5	3	0.0167	20	0.1111
> 5	160	0.8889	180	1.0000

Average Number of Differences = 9.317

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Egypt Database within Forensic Profiles

48 of the 48 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	0	0.0000	0	0.0000
1	0	0.0000	0	0.0000
2	0	0.0000	0	0.0000
3	1	0.0208	1	0.0208
4	2	0.0417	3	0.0625
5	2	0.0417	5	0.1042
> 5	43	0.8958	48	1.0000

Average Number of Differences = 8.271

China/Taiwan Database within Forensic Profiles

356 of the 356 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	0	0.0000	0	0.0000
1	0	0.0000	0	0.0000
2	0	0.0000	0	0.0000
3	3	0.0084	3	0.0084
4	9	0.0253	12	0.0337
5	66	0.1854	78	0.2191
> 5	278	0.7809	356	1.0000

Average Number of Differences = 7.163

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Guam Database within Forensic Profiles

87 of the 87 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	0	0.0000	0	0.0000
1	0	0.0000	0	0.0000
2	0	0.0000	0	0.0000
3	0	0.0000	0	0.0000
4	2	0.0230	2	0.0230
5	36	0.4138	38	0.4368
> 5	49	0.5632	87	1.0000

Average Number of Differences = 6.046

India Database within Forensic Profiles

19 of the 19 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	0	0.0000	0	0.0000
1	0	0.0000	0	0.0000
2	0	0.0000	0	0.0000
3	1	0.0526	1	0.0526
4	1	0.0526	2	0.1053
5	5	0.2632	7	0.3684
> 5	12	0.6316	19	1.0000

Average Number of Differences = 7.105

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Pakistan Database within Forensic Profiles

8 of the 8 profiles fit the search range

Number of Differences From Search Profile	Number	Frequency	Cumulative Number	Cumulative Frequency
0	0	0.0000	0	0.0000
1	0	0.0000	0	0.0000
2	0	0.0000	0	0.0000
3	0	0.0000	0	0.0000
4	0	0.0000	0	0.0000
5	1	0.1250	1	0.1250
> 5	7	0.8750	8	1.0000

Average Number of Differences = 6.875

Profiles With 2 or Fewer Differences from Search Profile within Forensic Profiles

ID	Database	Lab ID*	Common Range	Differences from CRS	No.
GRC.CAU.000013	Caucasian	1	16216-16388 35 -265	16261T 73G 263G	2
GRC.CAU.000021	Caucasian	1	16216-16388 35 -265	16261T 73G 199C 242T 263G	2
GRC.CAU.000030	Caucasian	1	16216-16388 35 -265	16261T 73G 86N 87N 198N 263G	2
USA.CAU.000009	Caucasian	2	16216-16365 73 -265	16222T 16261T 73G 146C 234G 242T 263G	2
USA.CAU.000166	Caucasian	2	16216-16365 73 -265	16222T 16261T 73G 242T 263G	0
USA.CAU.000278	Caucasian	2	16216-16365 73 -265	16222T 16261T 73G 242T 263G	0

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USA.CAU.000321	Caucasian	2	16216-16365 73 -265	16222T 16261T 73G 242T 263G	0
USA.CAU.000403	Caucasian	2	16216-16365 73 -265	16222T 16261T 73G 242T 263G	0
USA.CAU.000476	Caucasian	2	16216-16365 73 -265	16222T 16261T 73G 242T 263G	0
USA.CAU.000566	Caucasian	1	16216-16365 73 -265	16222T 16261T 73G 242T 263G	0
USA.CAU.000624	Caucasian	2	16216-16365 73 -265	16222T 16261T 73G 242T 263G	0
USA.CAU.000625	Caucasian	2	16216-16365 73 -265	16222T 16261T 73G 242T 263G	0
USA.CAU.000799	Caucasian	2	16216-16365 73 -265	16222T 73G 242T 263G	1
USA.CAU.000850	Caucasian	2	16216-16365 73 -265	16222T 16261T 73G 146C 242T 263G	1
USA.CAU.000851	Caucasian	2	16216-16365 73 -265	16222T 16261T 73G 185A 242T 263G	1
USA.CAU.000975	Caucasian	2	16216-16365 73 -265	16261N 73G 242T 263G	1
USA.CAU.001037	Caucasian	2	16216-16365 73 -265	16222T 16261T 73G 146C 242T 263G	1
USA.CAU.001046	Caucasian	2	16216-16365 73 -265	16222T 16261T 73G 263G	1
USA.CAU.001124	Caucasian	2	16216-16365 73 -265	16222T 16261T 73G 146C 234G 242T 263G	2
USA.HIS.000136	Hispanic	1	16216-16365 73 -265	16222T 16261T 16362C 73G 263G	2
USA.HIS.000161	Hispanic	1	16216-16365 73 -265	16222T 16261T 73G 263G	1
USA.HIS.000166	Hispanic	1	16216-16365 73 -265	16222T 16261T 73G 263G	1
USA.HIS.000203	Hispanic	1	16216-16365 73 -265	16222T 16261T 73G 263G	1

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USA.HIS.000320	Hispanic	1	16216-16388 35 -265	16222T 16261T 73G 242T 263G	0
USA.HIS.000327	Hispanic	1	16216-16388 35 -265	16222T 16261T 73G 146C 242T 263G	1
USA.HIS.000355	Hispanic	1	16216-16388 35 -265	16222T 16261T 73G 242T 263G	0
USA.HIS.000420	Hispanic	1	16216-16388 35 -265	16222T 16261T 73G 263G	1
USA.HIS.000436	Hispanic	1	16216-16388 35 -265	16222T 16261T 73G 263G	1
USA.HIS.000534	Hispanic	1	16216-16388 35 -265	16222T 16261T 73G 242T 263G	0
USA.HIS.000584	Hispanic	1	16216-16388 35 -265	16222T 16261T 73G 263G	1
USA.HIS.000628	Hispanic	1	16216-16388 35 -265	16222T 16261T 73G 263G	1
USA.HIS.000717	Hispanic	1	16216-16388 35 -265	16222T 16261T 73G 263G	1
USA.HIS.000838	Hispanic	1	16216-16388 35 -265	16222T 16261T 73G 242T 263G	0
USA.HIS.000849	Hispanic	1	16216-16388 35 -265	16222T 16261T 73G 242T 263G	0

*Refer to "Contributing Laboratories" table below

Laboratories Contributing to Forensic Profiles

Lab ID	Laboratory	Comments
1	FBI Laboratory	Washington, DC
2	Armed Forces DNA Identification Laboratory	Rockville, MD
3	Institute of Legal Medicine, University of Innsbruck	Innsbruck, Austria
4	University of California	Berkeley, California
5	Departmento de Midicina Legal	Zaragoza, Spain

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6	Illinois State Police	Springfield, IL
7	Instituto Nacional de Toxicologia	Madrid, Spain

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CHAIN OF CUSTODY

The Bode Technology Group, Inc.

Case Number: 2S04-114-123 **Agency ID Number:**

Submitting Agency Information

Name Ropes & Gray LLP
Address 700 12th Street, NW
Suite 900
Washington, DC 20005
Contact/Attorney Stephen L. Braga
Additional Authorized Contacts

Victim
Suspect

Phone Number (202) 508-4655
Fax Number (202) 383-9821
stephen.braga@ropesgray.com

Custody Record

Method of Delivery to Bode: Fed Ex — Condition: Good (Sealed)
Date Delivered: 7/6/2011 — Time: 10:09 AM
Delivered By: Fed Ex — TRK #: 7949 4065 6170
Delivered To: Ben Bever — Signature:

Date	Item No.	Released by (print)	Received by (print)	Purpose of change:
7/6/2011		Ben Bever	Ashley Kimple, for EMS	
Time 10:14 AM	123	(sign)	(sign)	Accessioning/Storage
Date 7/7/11	Item No.	Released by (print) Rachel Wortman, for EMS	Received by (print) Adrienne Barranco	Purpose of change:
Time 9:22 AM	123	(sign)	(sign)	Analysis
Date 07/12/11	Item No.	Released by (print) Adrienne Barranco	Received by (print) ASHLEY KIMPLE, FOR EMS	Purpose of change:
Time 8:49 AM	123	(sign)	(sign)	storage
Date	Item No.	Released by (print)	Received by (print)	Purpose of change:
Time	123 AE 071211	(sign)	(sign)	
Date	Item No.	Released by (print)	Sent via:	Purpose of change:
Time		(sign)	Tracking No.	FINAL DISPOSITION

Evidence Inventory

Bode Case #	Agency Item ID	Agency Description
2S04-114-123		Labeled as "Mark Byers Cheek Swabs"

Note: Evidence sent by the West Memphis Police Department
626 E. Broadway
West Memphis, AR 72301

Storage of Evidence: Secure evidence room

"COPY

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Case Submission Form

Bode Technology
Part of GlobalOptions Group

Bode Case No (To be filled out by Bode): 2504-114

In order to process your DNA casework efficiently, this form must be filled out and sent along with the evidence. Prior to submitting a case, please call Customer Services 866-BODE-4-ID (866-263-3443).

The Bode Technology Group
10430 Furnace Rd. Suite 107
Lorton, VA 22079
Phone: 703-646-9740
Fax: 703-646-9742
www.bodetech.com

Submitting Agency: ROPES + GRAY LLP Date: 7/6/11

Name: STEPHEN L. BRAGA Phone Number: 202-508-4655

Select the type of Submission:

☐ Initial Evidence Submission ☒ Additional Evidence Submission (Please fill in Bode Case number at the top of the page)

Select the type of Service:

☒ Standard Service - Our standard service provides complete analysis of your samples when rush services are not required.

☐ Rush Service - This is the fastest service offered. Please contact Customer Service for turnaround time (Additional charge per sample).

Promotion Code: _____

☐ 5 business days ☐ 10 business days ☐ 15 business days

Authorized Point(s) of Contact:

Name:	STEPHEN L. BRAGA	Name:	
Agency:	ROPES + GRAY LLP	Agency:	
Title:	PARTNER	Title:	
Phone Number:	202-508-4655	Phone Number:	
Fax Number:	202-383-9821	Fax Number:	
Cell Phone/Pager:	617-304-7124	Cell Phone/Pager:	
Email Address:	stephen.braga@ropesgray.com	Email Address:	

Mailing Address (Where The Report Should be Sent):

Name:	SAME AS ABOVE
Agency:	
Address:	
City/State/Zip:	
Phone Number:	
Fax Number:	
Email Address:	

Billing Address:

Name:	SAME AS ABOVE
Agency:	
Address:	
City/State/Zip:	
Phone Number:	
Fax Number:	
Email Address:	
Purchase Order #	

Evidence Return Address:

Name:	
Agency:	
Address:	
City/State/Zip:	
Phone Number:	
Email Address:	

Select type of Evidence Return:

☐ Evidence should be returned following delivery of the case report.

☒ Evidence should be returned upon request from the Authorized Point of Contact(s).

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Case Submission Form

Bode Technology™
Part of GlobalOptions Group

The Bode Technology Group
10430 Furnace Rd. Suite 107
Lorton, VA 22079
Phone: 703-646-9740
Fax: 703-646-9742
www.bodetech.com

Bode Case No (To be filled out by Bode): 2504-114

In order to process your DNA casework efficiently, this form must be filled out and sent along with the evidence. Prior to submitting a case, please call Customer Services 866-BODE-4-ID (866-263-3443).

Submitting Agency Reference/Case No: Ropes + Gray LLP

Case Background:

This CSF is for additional evidence to be received today at Bode from Donald Horgan. The evidence is (1) cheek swaps, and (2) beard hairs from John Mark Byers. We need to test for a mito profile.

Specify platform (AB/Hitachi), kit (Co/Pro+, ID, PP16, PP16BIO, PPY, YFiler, miniFiler), and software (GS/GT, GMID) preferences. If no preference, check box for Analyst Discretion

☒ Analyst Discretion

List Evidence Items* (If needed, use Page 3 to include additional items or case information) Note: Descriptions may be reflected in Chain of Custody and Report	Please check the appropriate boxes for Pre-Screening and DNA Testing Requested	Permission to Consume (If necessary)
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☒ mtDNA	☒ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No
	Pre-Screen: ☐ Blood ☐ Semen ☐ Saliva ☐ Hair DNA Testing: ☐ STR ☐ miniSTR ☐ Y-STR ☐ mtDNA	☐ Yes ☐ No

☐ Check if additional evidence items or testing instructions are listed on Page 3

* When submitting extracts, the reagent blanks must also be included. Please be sure to include the following information: Total Human Quant, Total Y Quant, Volume Remaining, and Extraction Control Names associated with samples.

If STR data is obtained, will CODIS entry or search be requested? ☐ Yes ☒ No

(NOTE: Private Forensic DNA laboratories do not have access to enter or search samples in CODIS. If "yes" is marked, Bode will contact the appropriate CODIS laboratory Technical Leader prior to initiation of this case. Please be aware that this may increase the turnaround time.

I hereby certify that the information provided on this Case Submission Form is accurate to the best of my knowledge. I understand that I will be charged for services according to the fee schedule that I have received.

Print Name STEPHEN L. BRAGA Signature

Please submit this completed form with the evidence. All evidence items must be shipped using a traceable carrier (i.e. FedEx, UPS, DHL, Priority Mail). Overnight shipping is recommended. The evidence should be shipped to:

ATTN: EVIDENCE DEPARTMENT
Bode Technology
10430 Furnace Rd. Suite 107
Lorton, VA 22079

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DENNIS P. RIORDAN
DONALD M. HORGAN

RIORDAN & HORGAN
ATTORNEYS AT LAW
523 OCTAVIA STREET
SAN FRANCISCO, CALIFORNIA 94102
TELEPHONE (415) 431-3472
FAX (415) 552-2703

E-MAIL: INFO@RIORDAN-HORGAN.COM

July 5, 2011

BY FEDERAL EXPRESS

ATTN: EVIDENCE DEPARTMENT
Bode Technology
10430 Furnace Rd. Suite 107
Lorton, VA 22079

Re: *Damien Echols*
Bode Case No. 2S04-114

To Whom It May Concern:

Enclosed please find DNA samples that relate to this case and that consist of three (3) cheek swabs, packaged and marked in the enclosed white envelope; and several beard hairs, packaged and marked in the enclosed clear plastic baggie.

Please conduct DNA testing and analysis on the enclosed items pursuant to the instructions given you by Mr. Echols's counsel in Washington, D.C.:

Stephen L. Braga
ROPES & GRAY LLP
One Metro Center, 700 12th Street, NW, Suite 900
Washington, DC 20005-3948
Stephen.Braga@ropesgray.com
Telephone: 1 202 508 4655

Thank you for your assistance in this matter.

Sincerely,

Donald M. Horgan

enc.
cc: Angela Williamson

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Print page | Close

FedEx

Detailed Results

Tracking no.: 794940656170 Select time format: 12H

Delivered

Delivered
Signed for by: B.BEVER

Shipment Dates	Destination
Ship date Jul 5, 2011	LORTON, VA
Delivery date Jul 6, 2011 10:09 AM	Signature Proof of Delivery

Shipment Options

Hold at FedEx Location
Hold at FedEx Location service is not available for this shipment.

Shipment Facts

Service type	Priority Envelope	Delivered to	Shipping/Receiving
Weight	0.5 lbs/.2 kg	Reference	Echols

Shipment Travel History

Select time zone: Local Scan Time

All shipment travel activity is displayed in local time for the location

Date/Time	Activity	Location	Details
Jul 6, 2011 10:09 AM	Delivered	LORTON, VA	
Jul 6, 2011 7:55 AM	On FedEx vehicle for delivery	ALEXANDRIA, VA	
Jul 6, 2011 7:20 AM	At local FedEx facility	ALEXANDRIA, VA	
Jul 6, 2011 5:30 AM	At destination sort facility	DULLES, VA	
Jul 6, 2011 2:52 AM	Departed FedEx location	MEMPHIS, TN	
Jul 6, 2011 12:45 AM	Arrived at FedEx location	MEMPHIS, TN	
Jul 5, 2011 6:12 PM	Left FedEx origin facility	SAN FRANCISCO, CA	
Jul 5, 2011 4:24 PM	Picked up	SAN FRANCISCO, CA	
Jul 5, 2011 4:09 PM	Shipment information sent to FedEx		

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Adrienne Barranco

From: Braga, Stephen [Stephen.Braga@ropesgray.com]
Sent: Wednesday, July 20, 2011 10:31 AM
To: Adrienne Barranco
Subject: RE: Follow-Up Questions

Any time this week will work. Thx

Stephen L. Braga
ROPES & GRAY LLP
T +1 202 508 4655 | F +1 202 383 9821
One Metro Center, 700 12th Street, NW, Suite 900
Washington, DC 20005-3948
Stephen.Braga@ropesgray.com
www.ropesgray.com

From: Adrienne Barranco [mailto:Adrienne.Barranco@bodetech.com]
Sent: Wednesday, July 20, 2011 10:29 AM
To: Braga, Stephen
Subject: RE: Follow-Up Questions

I should hopefully be able to get it into review today and the review shouldn't take very long because there's no new data...it's just re-arranged data. It'll most likely depend on how many other reviews my reviewer has to get done....but I'm hoping you will get your report later today or tomorrow. Will that work? I'll also be getting Report #3 (Roy Todd Moore, John Mark Byers and all evidence) into review this week, so that'll be forthcoming as well.
-Adrienne

From: Braga, Stephen [mailto:Stephen.Braga@ropesgray.com]
Sent: Wednesday, July 20, 2011 10:19 AM
To: Adrienne Barranco
Subject: Re: Follow-Up Questions

Thanks. Any estimation when the 2011 mito report will be done?

Stephen L. Braga
ROPES & GRAY LLP
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One Metro Center, 700 12th Street, NW, Suite 900
Washington, DC 20005-3948
Stephen.Braga@ropesgray.com
www.ropesgray.com

From: Adrienne Barranco [mailto:Adrienne.Barranco@bodetech.com]
Sent: Wednesday, July 20, 2011 09:54 AM
To: Braga, Stephen
Subject: RE: Follow-Up Questions

Everything you said is technically correct, but there are a few things I'll add:

1. There are a total of 12 EVIDENTIARY hairs in this case....I just want to clarify that because there were other hairs in this case, but they were individual reference samples.
2. Correct. Sample 9 was previously consumed during STR testing and therefore, no mtDNA testing could be done on that sample.

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3. Correct. Only a partial range was reported for sample -11D, but of the range reported, it is still consistent with Christopher Byers profile.
4. Correct, none of the references from the July 13th or July 14th report are consistent with sample -102c and therefore, they are all excluded as contributors of that sample (maternal relatives are excluded as well).

From: Braga, Stephen [mailto:Stephen.Braga@ropesgray.com]
Sent: Tuesday, July 19, 2011 6:12 PM
To: Adrienne Barranco
Subject: Follow-Up Questions

Adrienne,

I have a few questions as you work on preparing the follow-up report I have requested on just the 2011 evidence I submitted to you for mito testing.

1) It appears to me that there are a total of 12 hairs in this universe: Samples 9; 11 A, D, F, H, I, J, N & X; 17a; 84b; and 102c. Is that right?

2) Of that universe, sample 9 was consumed and not processed; 17a yielded no profile; and 84b had no reproducible data and therefore could not be profiled either. Thus, leaving a total of 9 2011 hairs receiving mito profiles. Is that right?

3) Of those 9 mito profiled hairs, 8 of them – the entire 11 series of hairs – are "consistent" with Chris Byers' mito profile. Is that right?

4) The remaining mito profiled hair – 102c – is (a) not "consistent" with any of the individual profiles you compared it to; and (b) in fact you have "excluded" all of the individual comparison profiles as being even a potential source of that hair/dna. Is that right?

Thanks,

Steve

Stephen L. Braga
ROPES & GRAY LLP
T +1 202 508 4655 | F +1 202 383 9821
One Metro Center, 700 12th Street, NW, Suite 900
Washington, DC 20005-3948
Stephen.Braga@ropesgray.com
www.ropesgray.com

Circular 230 Disclosure (R&G): To ensure compliance with Treasury Department regulations, we inform you that any U.S. tax advice contained in this communication (including any attachments) was not intended or written to be used, and cannot be used, for the purpose of avoiding U.S. tax-related penalties or promoting, marketing or recommending to another party any tax-related matters addressed herein.

This message (including attachments) is privileged and confidential. If you are not the intended recipient, please delete it without further distribution and reply to the sender that you have received the message in error.

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Date: June 27, 2011
Project Name: 2S04-114_ALB.SPF
Contig Name: 2S04-114-115a1
Compare Consensus to Reference ANDERSONCR
Comparison Range [16024..16569 1..577]

Sequence Name	Comparison Range Coverage
2S04-114-115a1	[16024..16390 35..379]

Position		ANDERSONCR	2S04-114-115a1	Number of Variants
Coverage Range		[16024..16569 1..577]		Incomplete
16,069	C	T	1	
16,126	T	C	1	
16,145	G	A	1	
16,172	T	C	1	
16,222	C	T	1	
16,261	C	T	1	
73	A	G	1	
242	C	T	1	
263	A	G	1	
295	C	T	1	
315.1	:	C	1	
Total Differences			11	

Confirmed Range: 16024-16390, 49-361

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Date: July 5, 2011
Project Name: 2S04-114_ARB.SPF
Contig Name: 2S04-114-115a1_ARB
Compare Consensus to Reference ANDERSONCR
Comparison Range [16024..16569 1..577]

Sequence Name Comparison Range Coverage
2S04-114-115a1_ARB [16024..16390 35..369]

Position	ANDERSONCR	2S04-114-115a1_ARB	Number of Variants
Coverage Range	[16024..16569 1..577]	Incomplete	
16,069	C	T	1
16,126	T	C	1
16,145	G	A	1
16,172	T	C	1
16,222	C	T	1
16,261	C	T	1
73	A	G	1
242	C	T	1
263	A	G	1
295	C	T	1
315.1	:	C	1
Total Differences		11	

Confirmed Range: 16024-16390;49-361

ARB 070571

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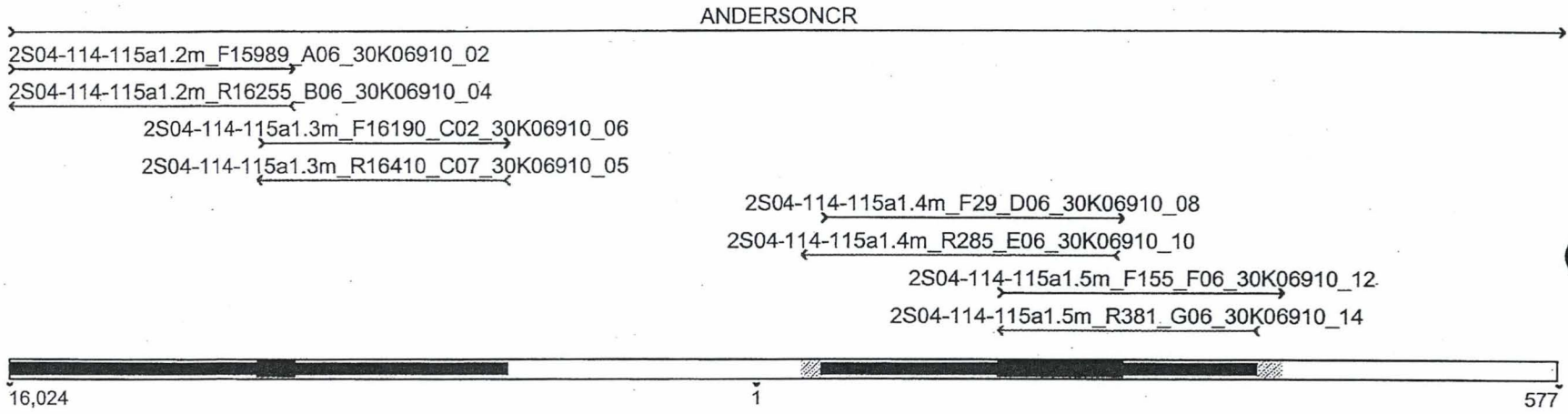
2S04-114-115a1
Sequencher(tm) "2S04-114_ALB.SPF"



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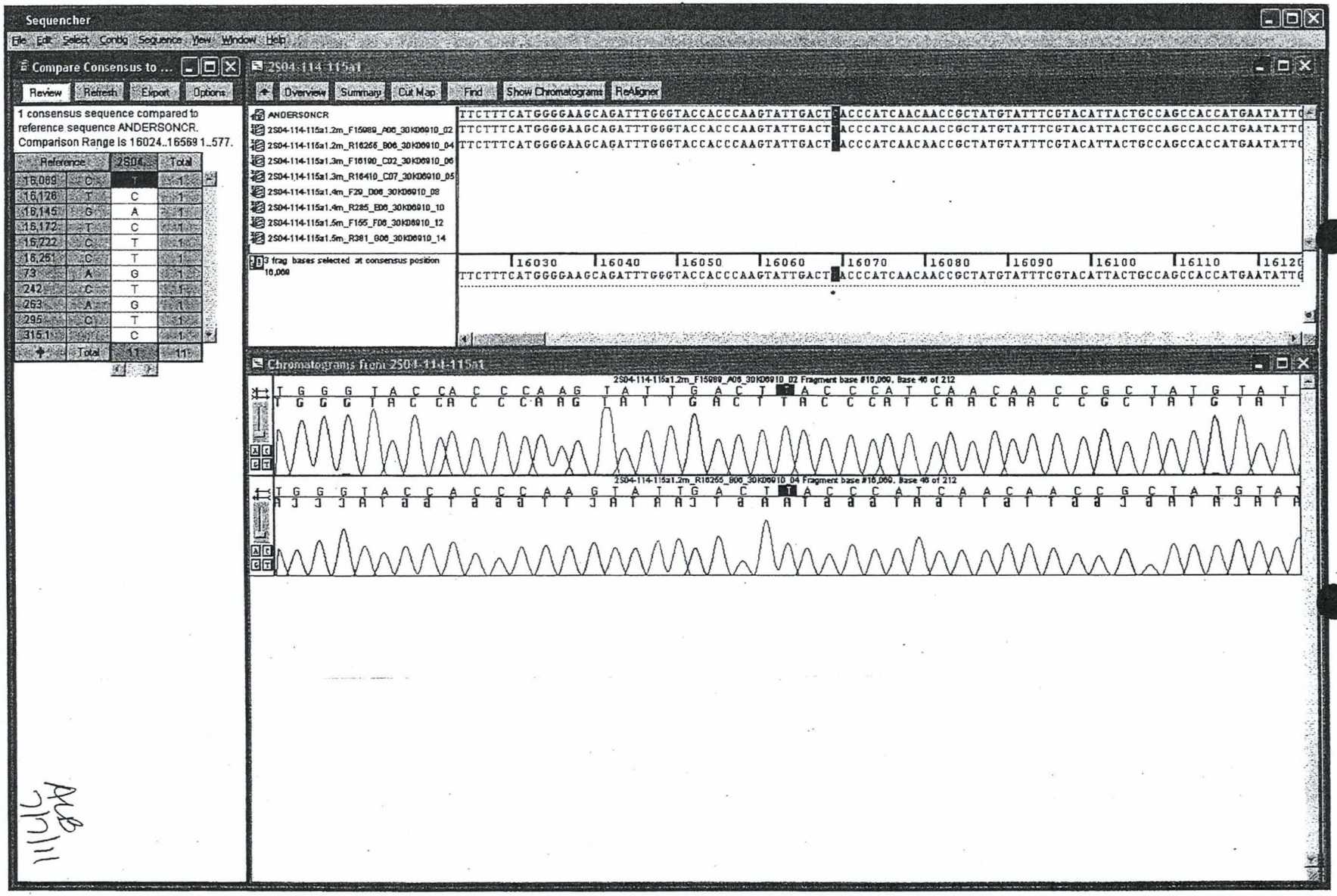
6/27/11 ALB



ALB
7/7/11

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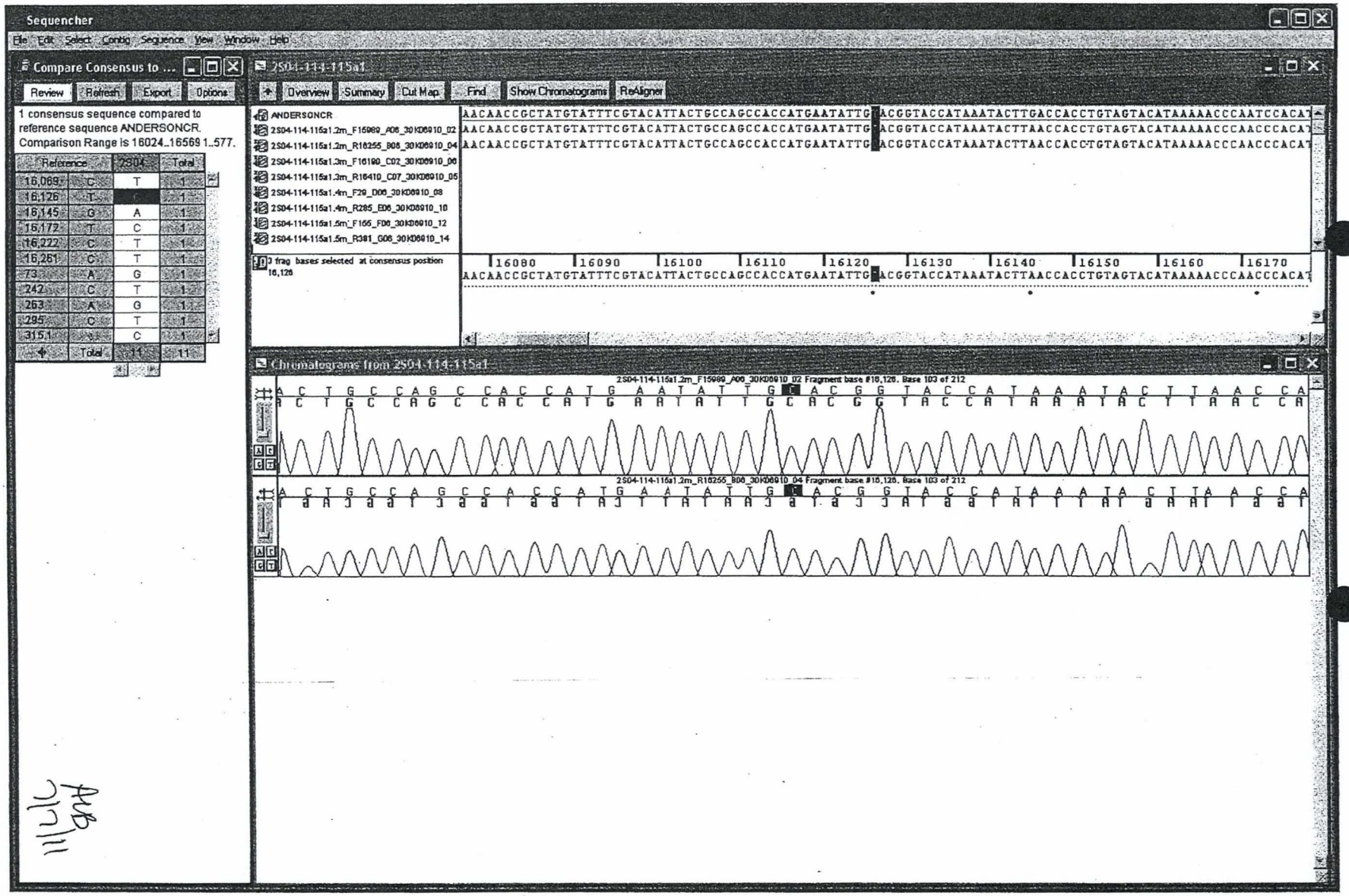
2S04-114-115a1
6/27/11 ALB



ALB
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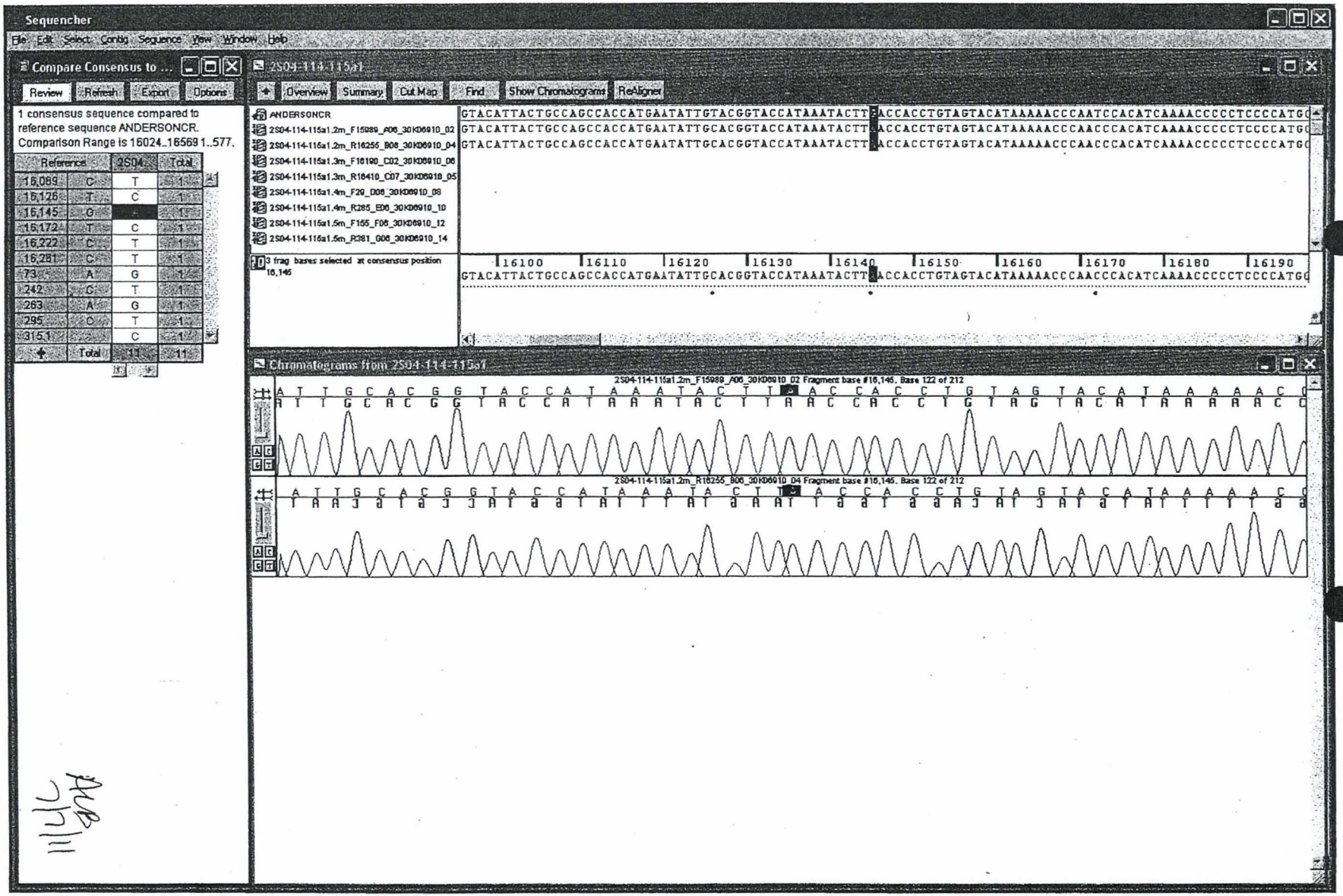
2S04-114-115a1
6/27/11 ALB



ALB 7/7/11

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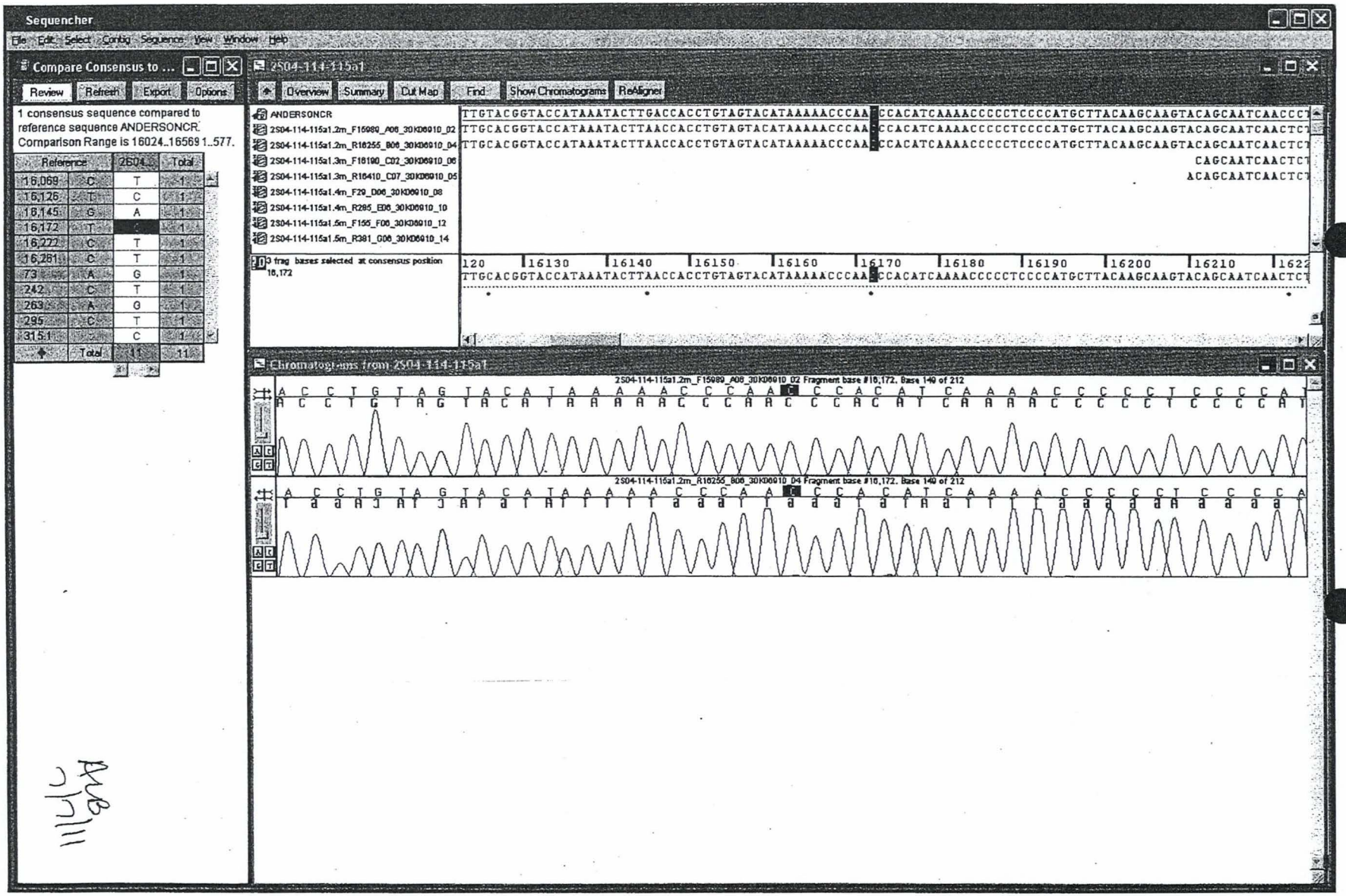
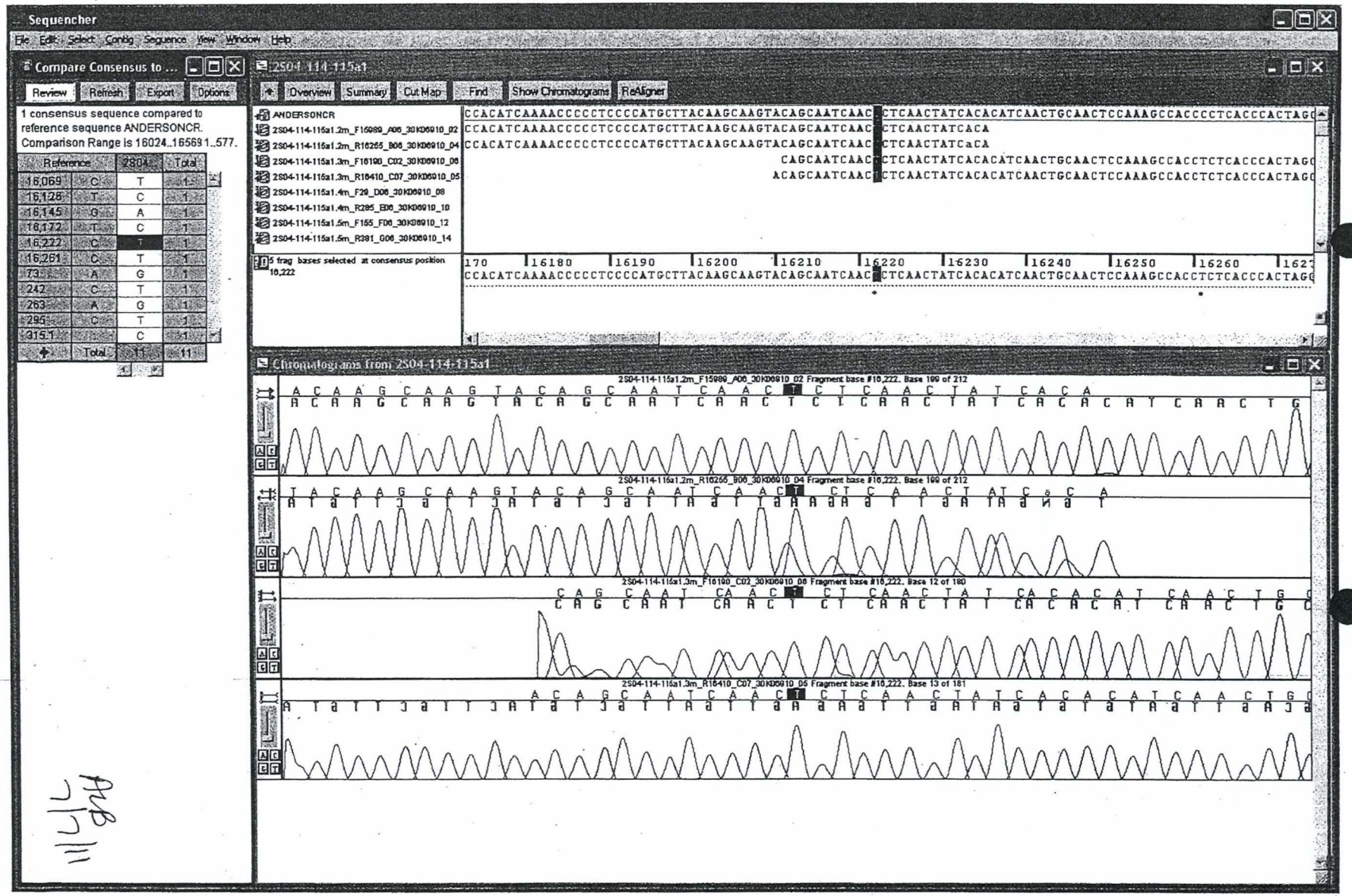
6/27/11 ALB



ALB 7/7/11

6

2S04-114-115a1
6/27/11 ALB



ALB 7/7/11

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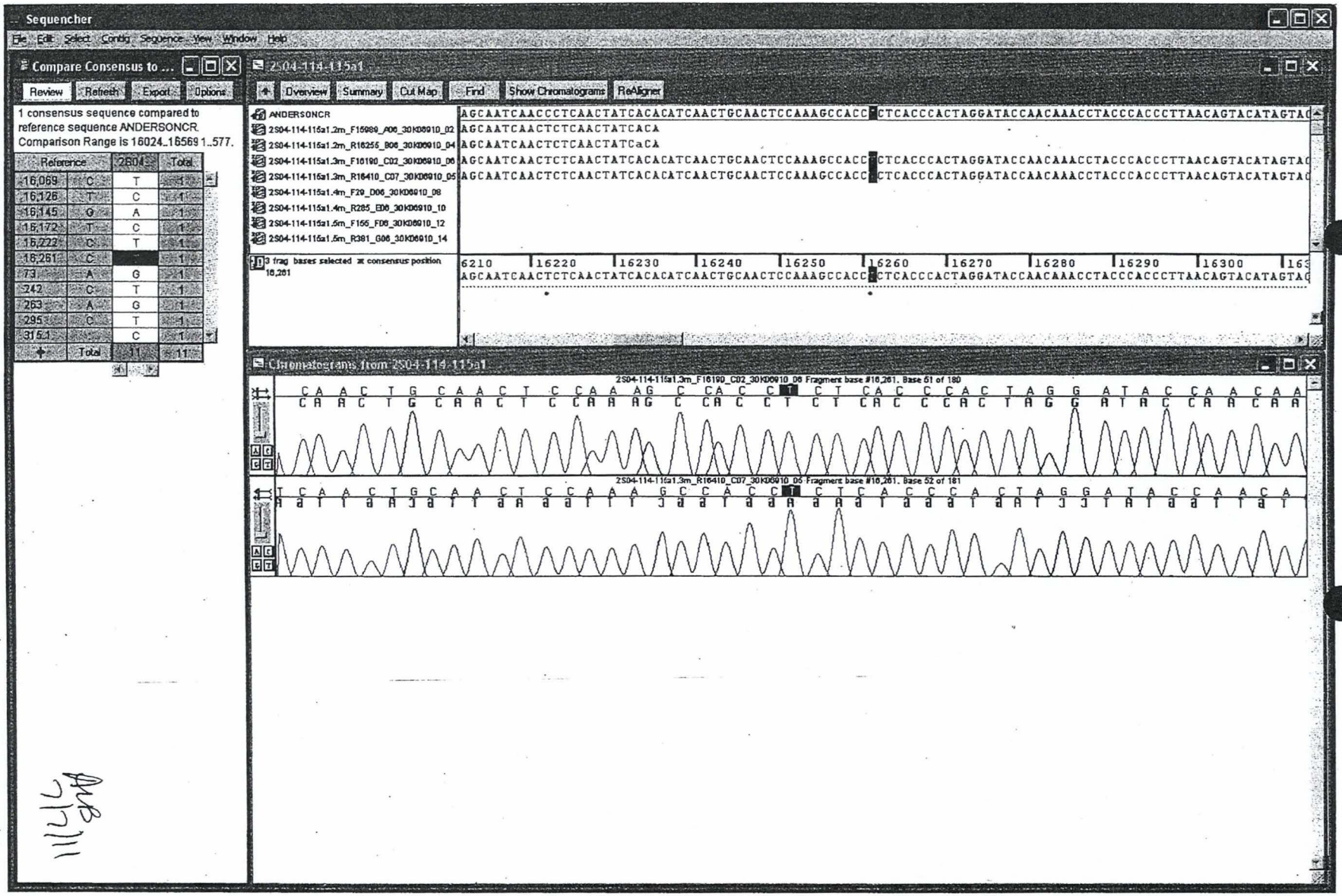
2S04-114-115a1
6/27/11 ALB



AUB
7/7/11

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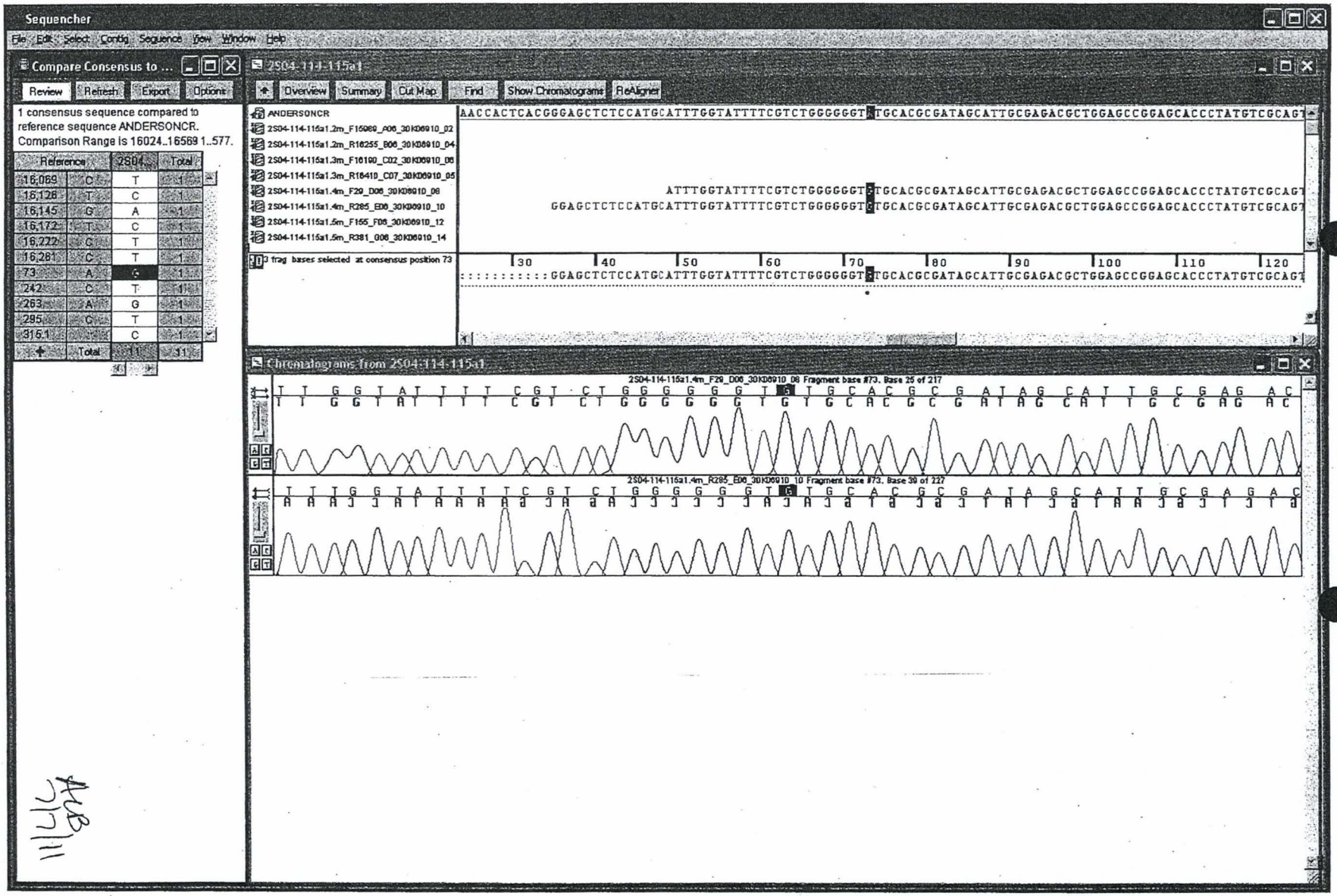
2S04-114-115a1
6/27/11 ALB



ALB 7/7/11

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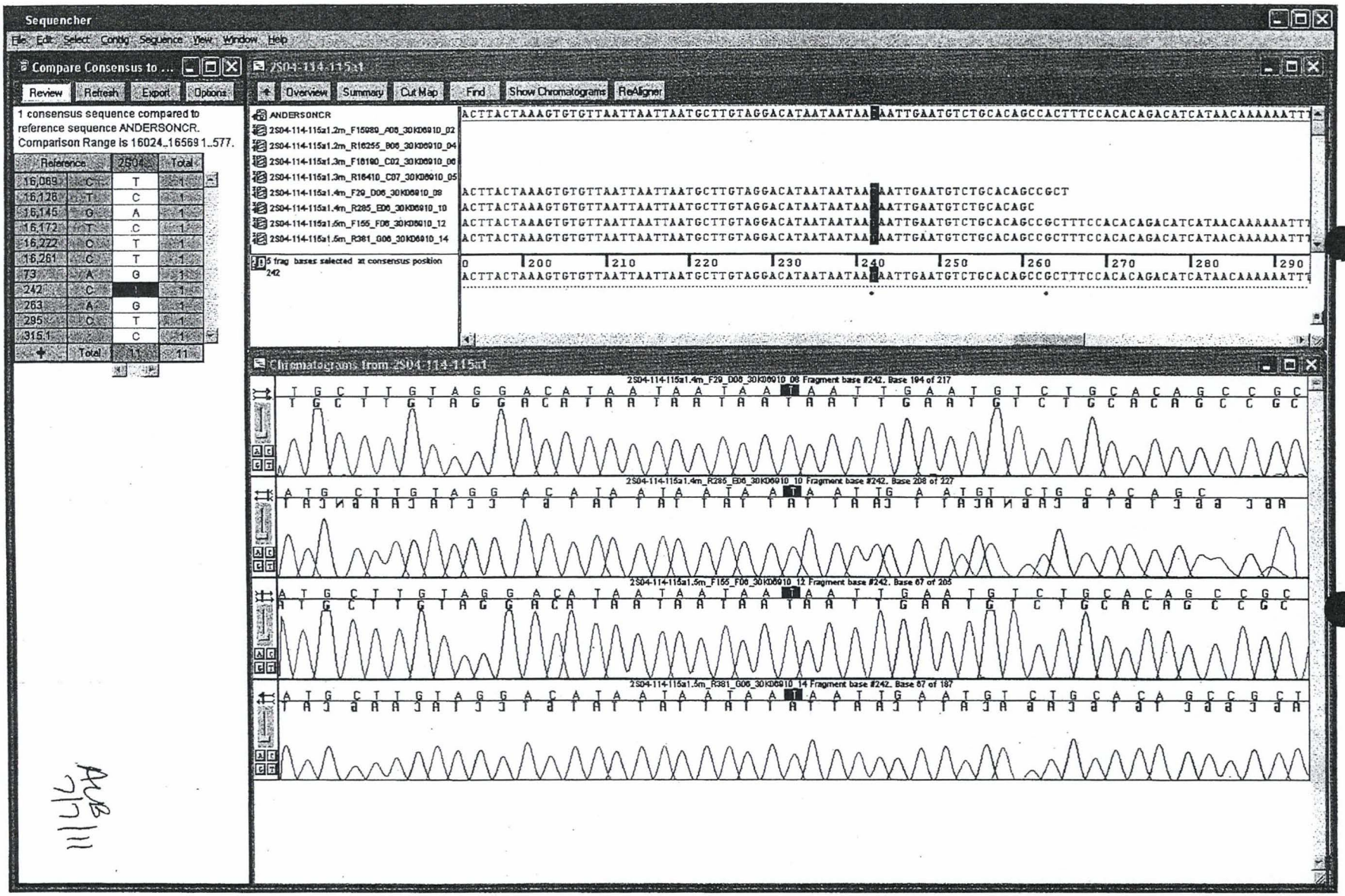
2S04-114-115a1
6/27/11 ALB



ALB
7/7/11

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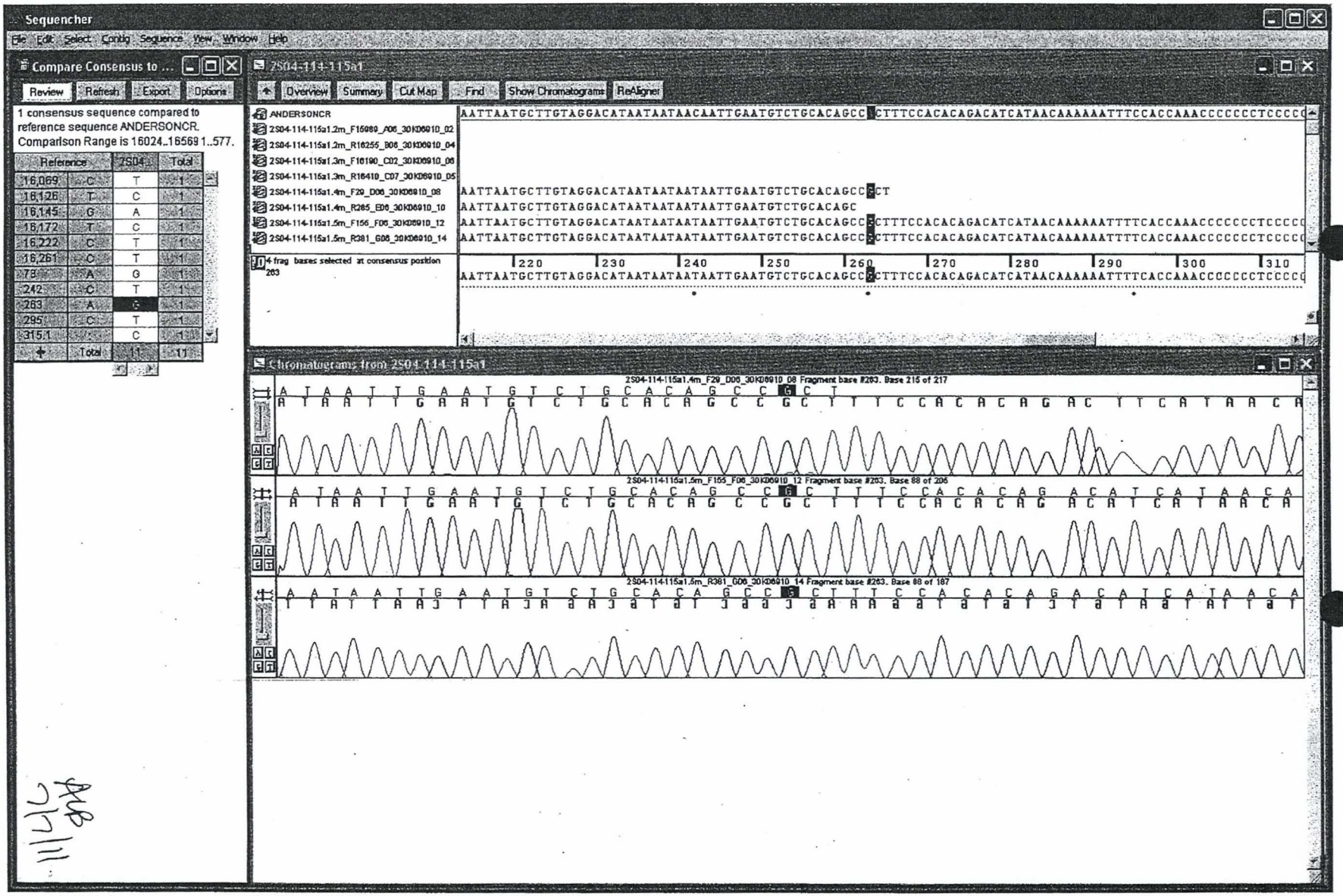
2S04-114-115a1
6/27/11 ALB



ALB
7/7/11

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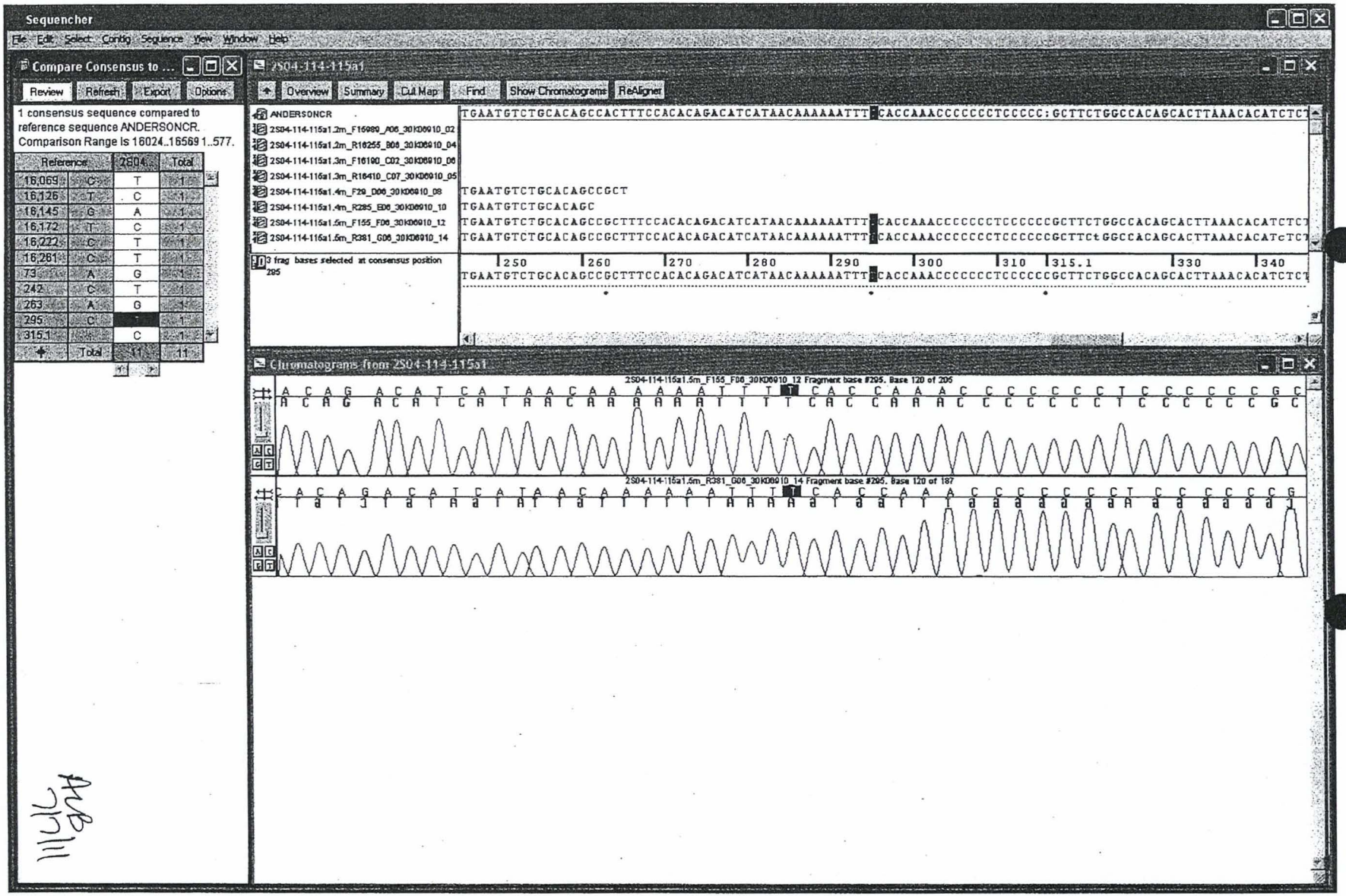
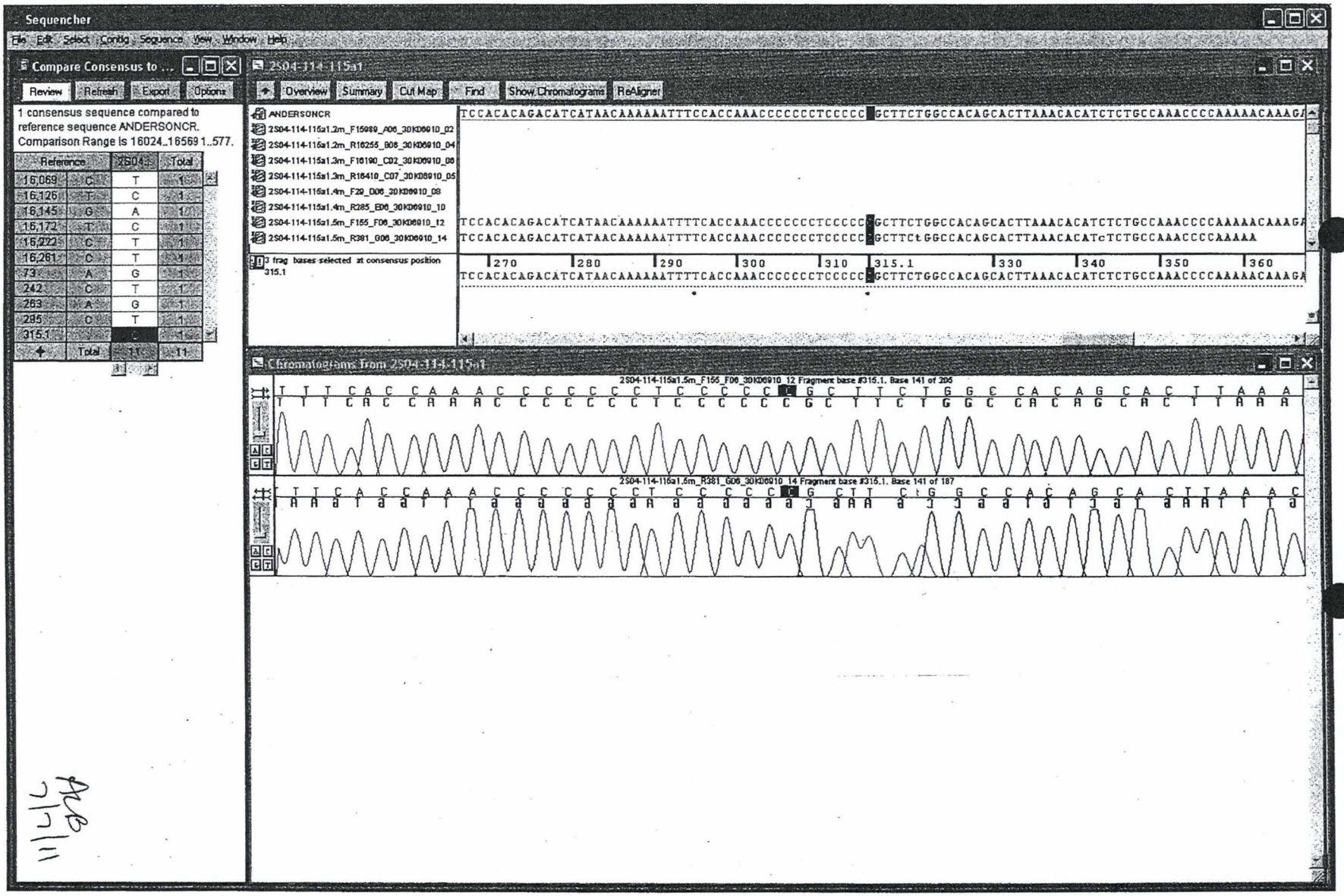
2S04-114-115a1
6/27/11 ALB



11/4/11 ALB

2S04-114-115a1
6/27/11 ALB



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Date: July 6, 2011
Project Name: 2S04-114_ALB.SPF
Contig Name: 2S04-114-115b1
Compare Consensus to Reference ANDERSONCR
Comparison Range [16024..16569 1..577]

Sequence Name	Comparison Range Coverage
2S04-114-115b1	[16024..16389 36..369]

Position		ANDERSONCR	2S04-114-115b1	Number of Variants
Coverage Range		[16024..16569	1..577]	Incomplete
16,069	C	T	1	
16,126	T	C	1	
16,145	G	A	1	
16,172	T	C	1	
16,222	C	T	1	
16,261	C	T	1	
73	A	G	1	
242	C	T	1	
263	A	G	1	
295	C	T	1	
315.1	:	C	1	
Total Differences			11	

Confirmed Range: 16024-16389, 49-368

ALB 7/7/11

Date: July 7, 2011
Project Name: 2S04-114_ARB.SPF
Contig Name: 2S04-114-115b1_ARB
Compare Consensus to Reference ANDERSONCR
Comparison Range [16024..16569 1..577]

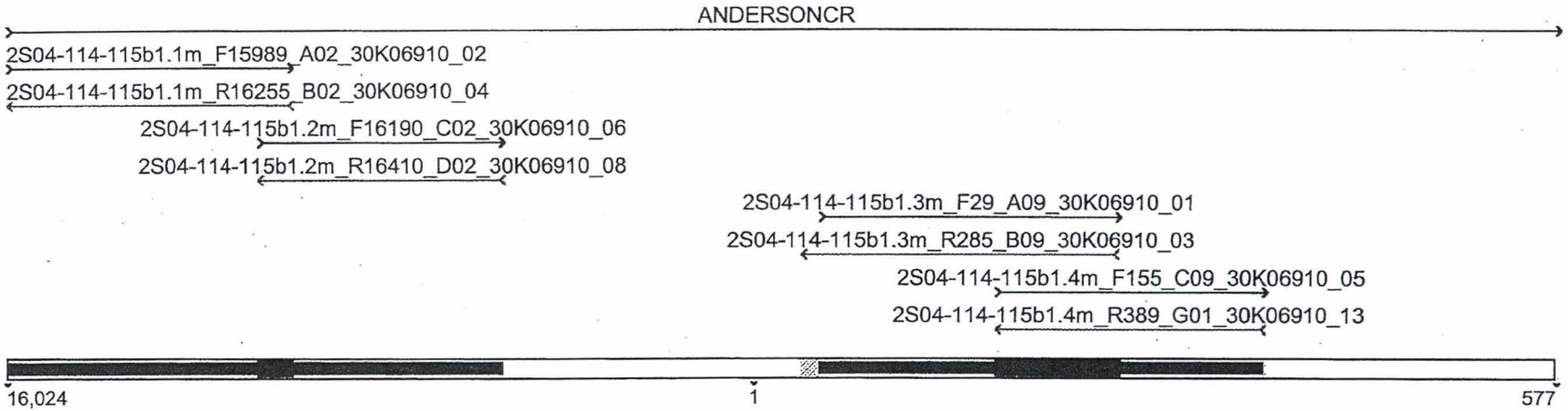
Sequence Name Comparison Range Coverage
2S04-114-115b1_ARB [16024..16390 35..369]

Position		ANDERSONCR	2S04-114-115b1_ARB	Number of Variants
Coverage Range		[16024..16569 1..577]	Incomplete	
16,069	C	T	1	
16,126	T	C	1	
16,145	G	A	1	
16,172	T	C	1	
16,222	C	T	1	
16,261	C	T	1	
73	A	G	1	
242	C	T	1	
263	A	G	1	
295	C	T	1	
315.1	:	C	1	
Total Differences			11	

Confirmed Range: 16024-16389;49-367

ARB 07.08.11

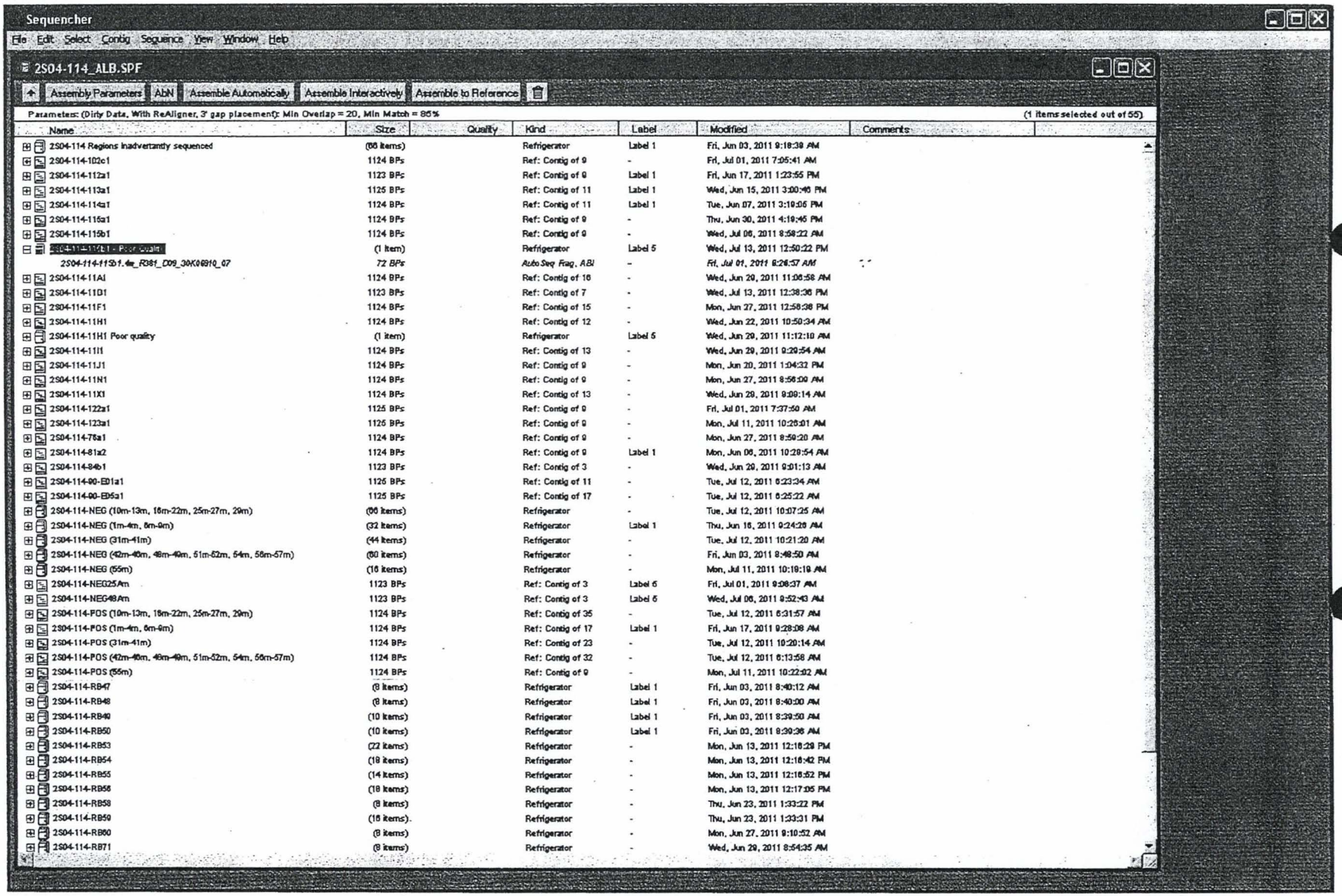
2S04-114-115b1
Sequencher(tm) "2S04-114_ALB.SPF"



ALB 8/8/11

51

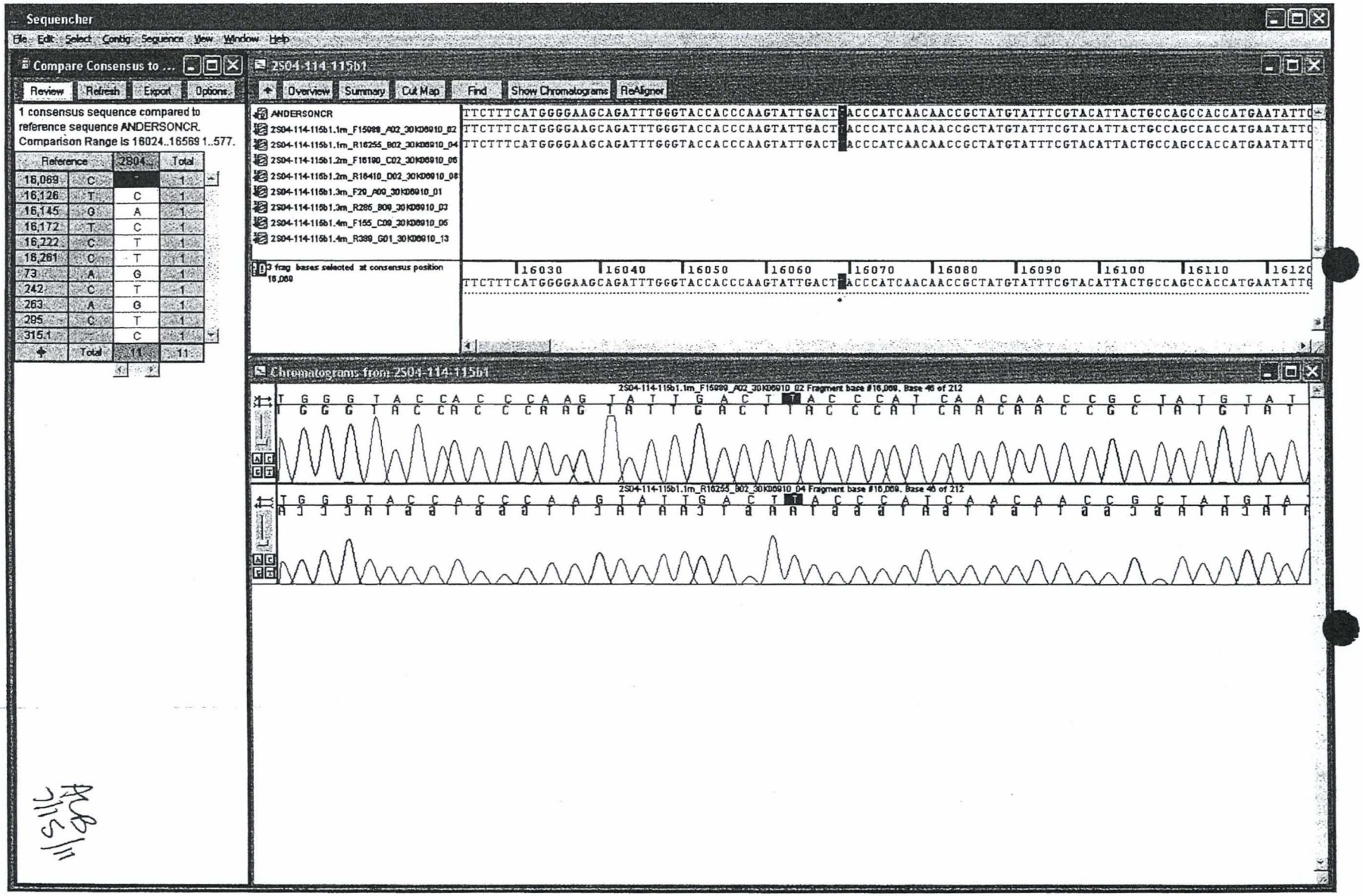
2S04-114-115b1
7/6/11 ALB



50

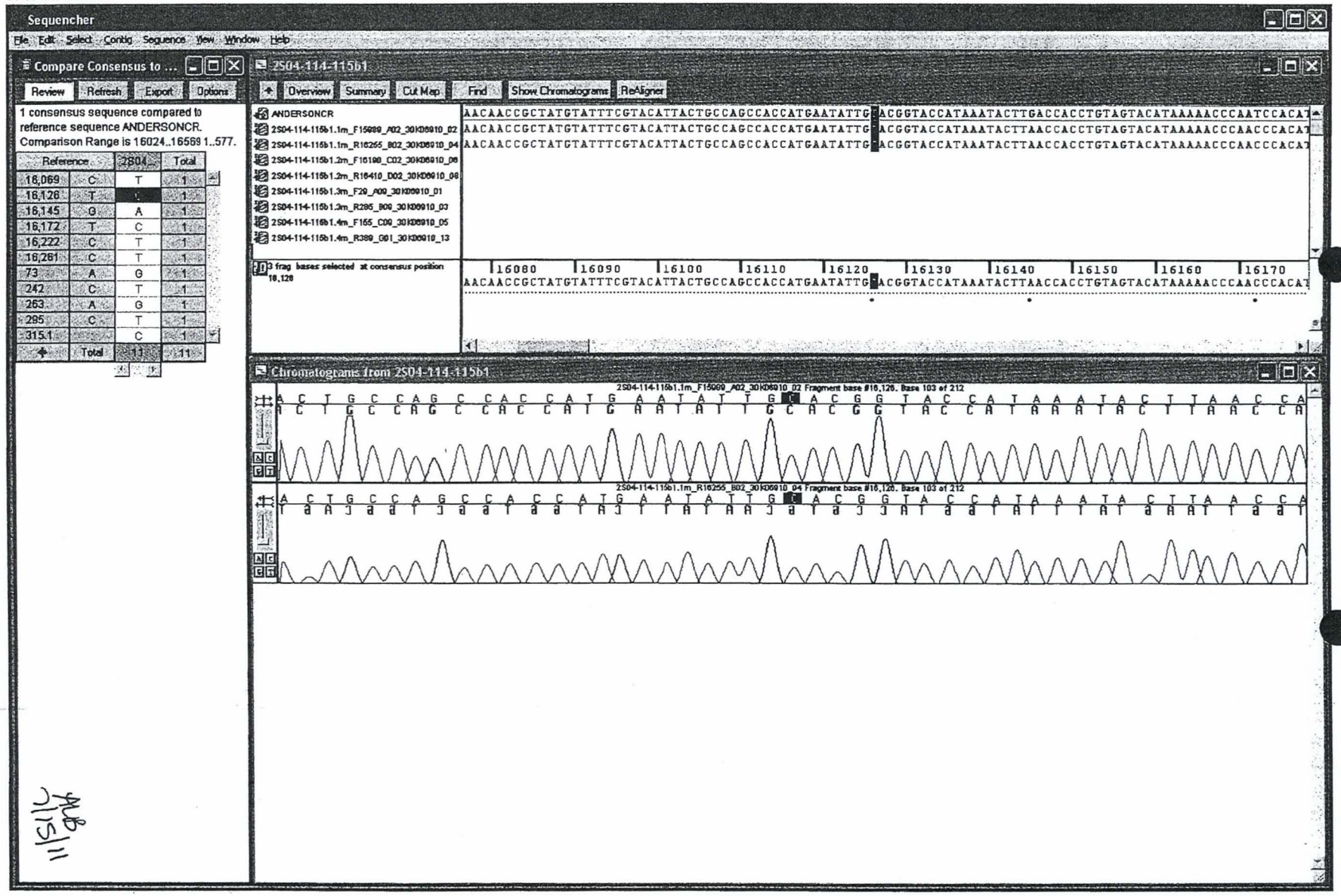
ALB 7/13/11

2S04-114-115b1
7/6/11 ALB



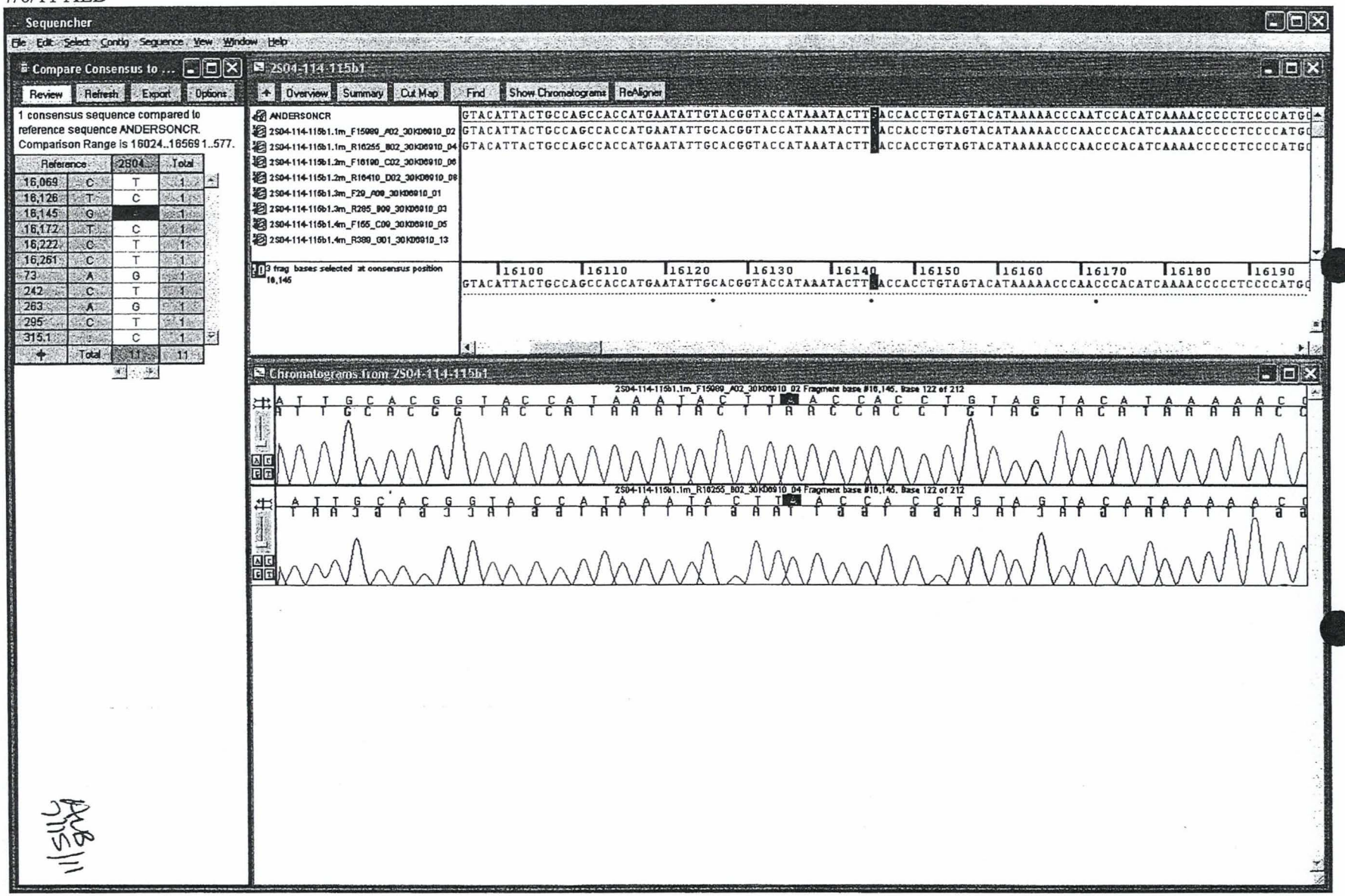
ALB 7/11/11

2S04-114-115b1
7/6/11 ALB



ALB 7/15/11

2S04-114-115b1
7/6/11 ALB



7/15/11 ALB

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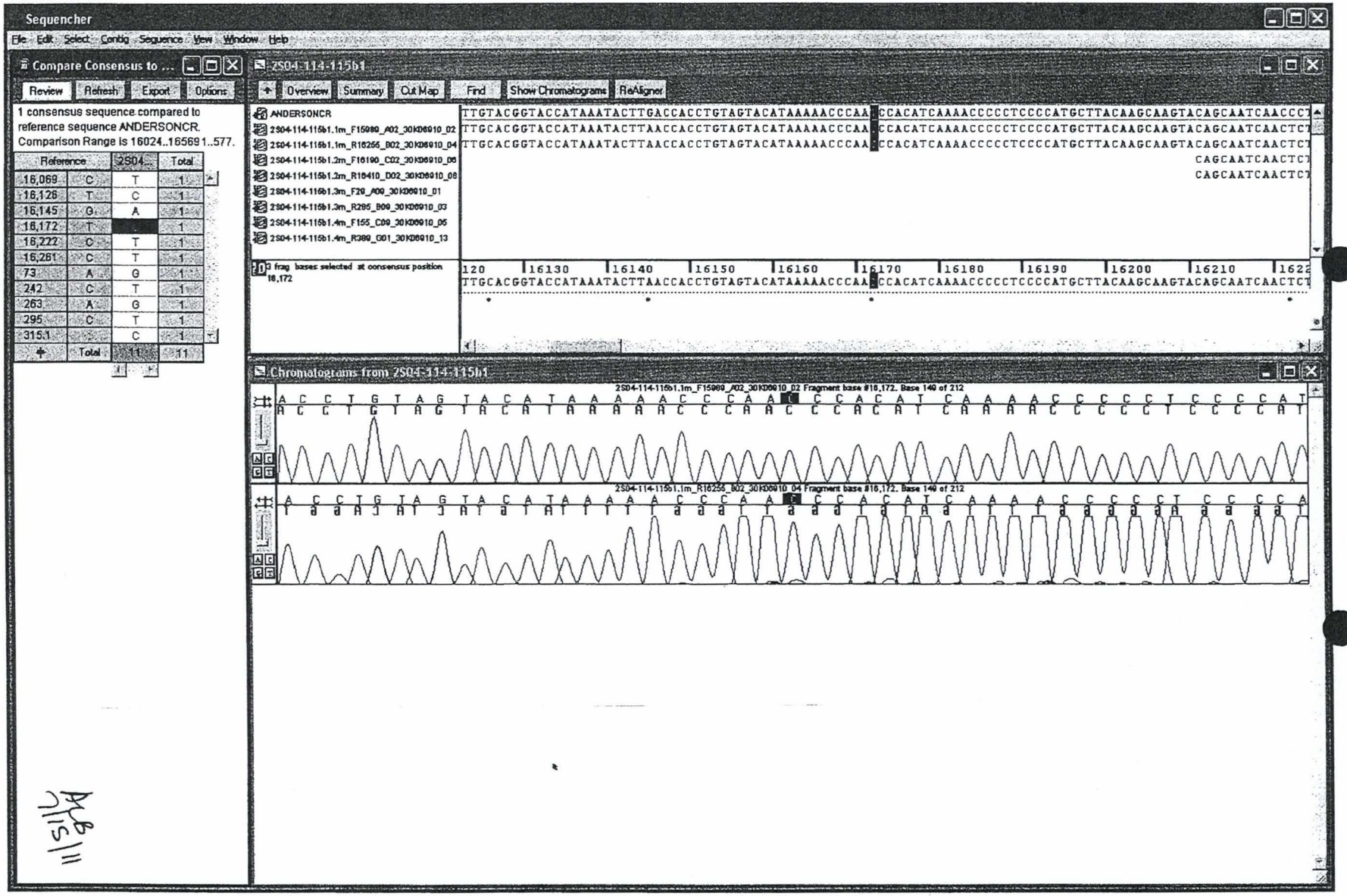
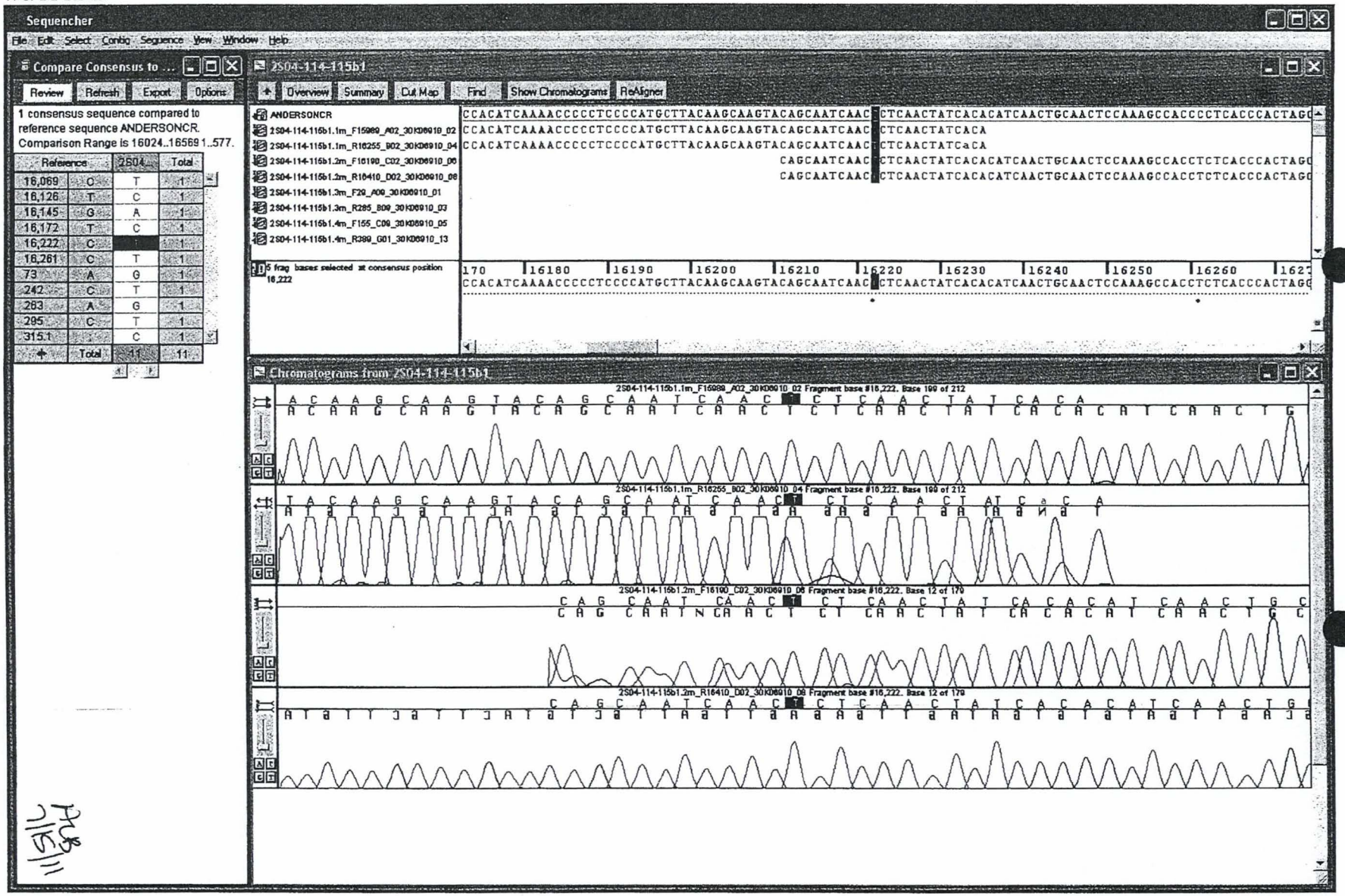
2S04-114-115b1
7/6/11 ALB



ALB
7/15/11

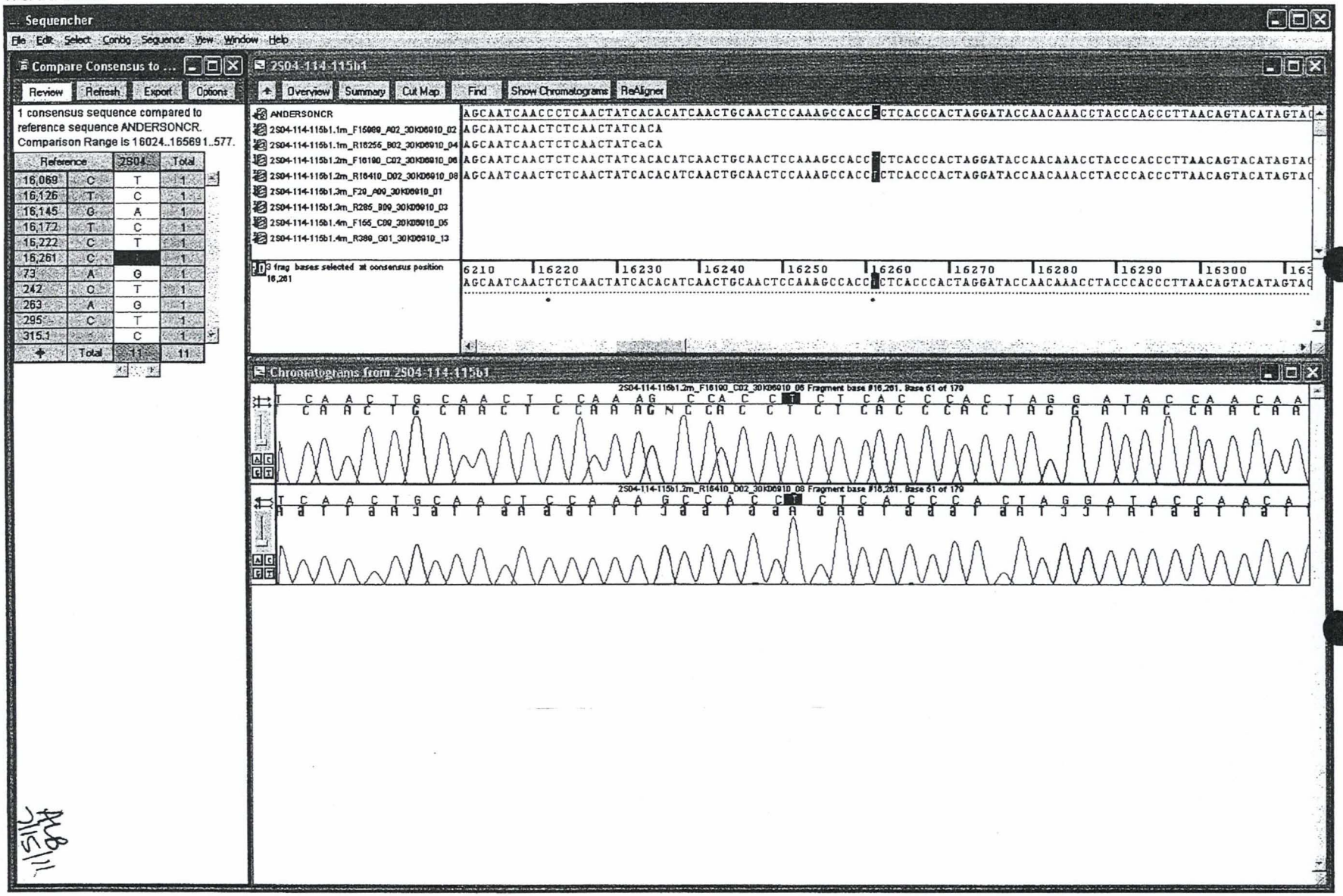
2S04-114-115b1
7/6/11 ALB



ALB 7/15/11

45

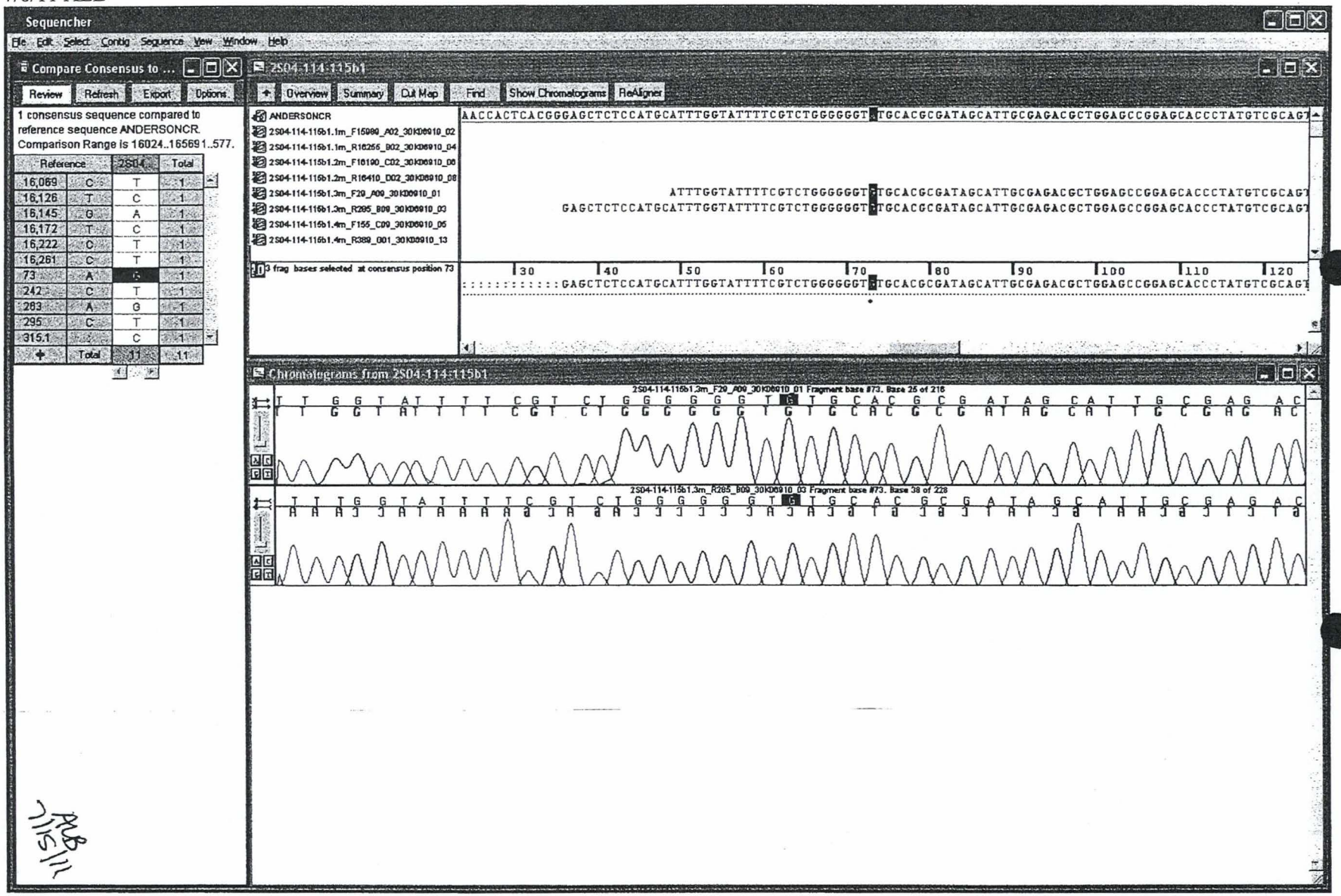
2S04-114-115b1
7/6/11 ALB



ALB 7/15/11

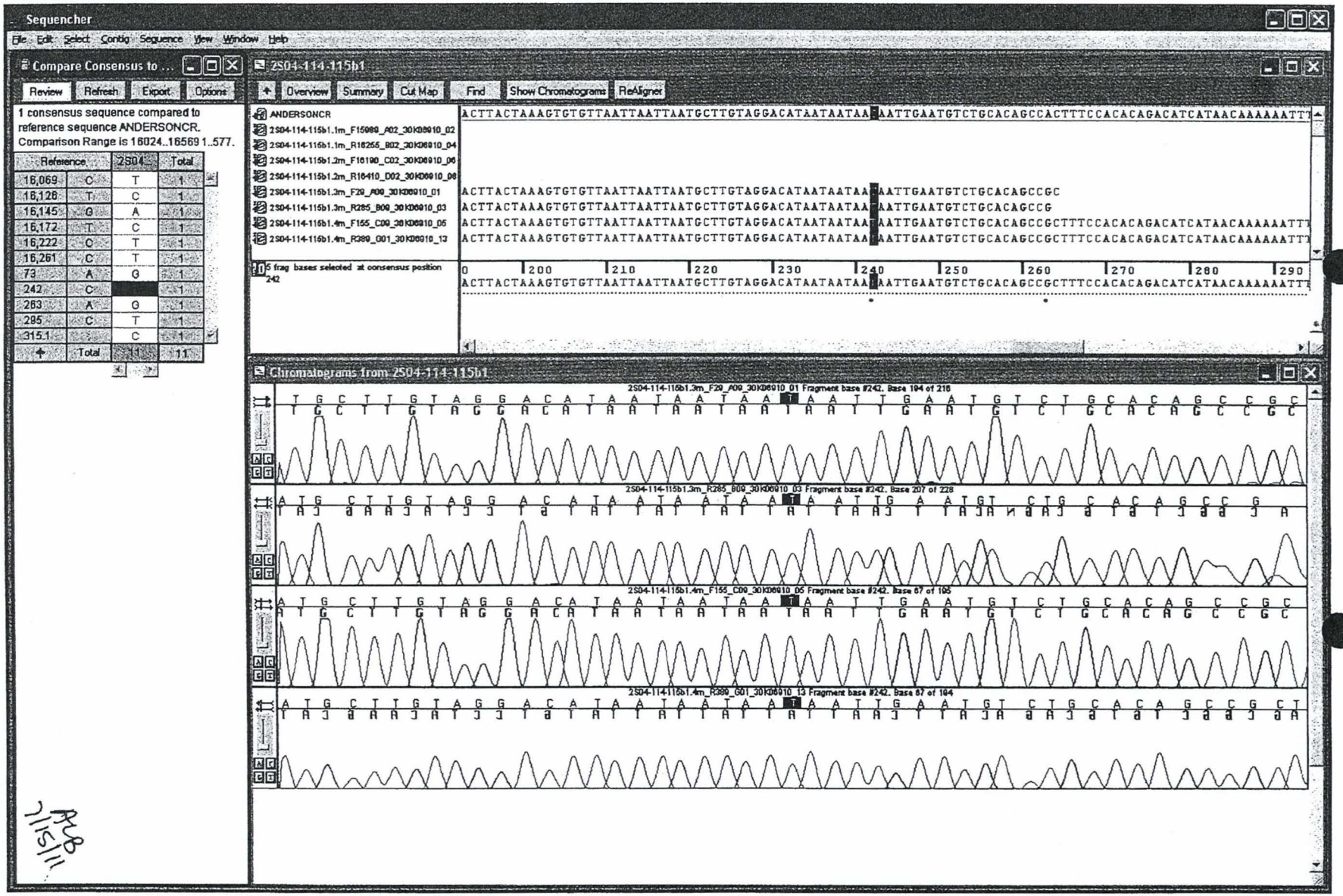
44

2S04-114-115b1
7/6/11 ALB



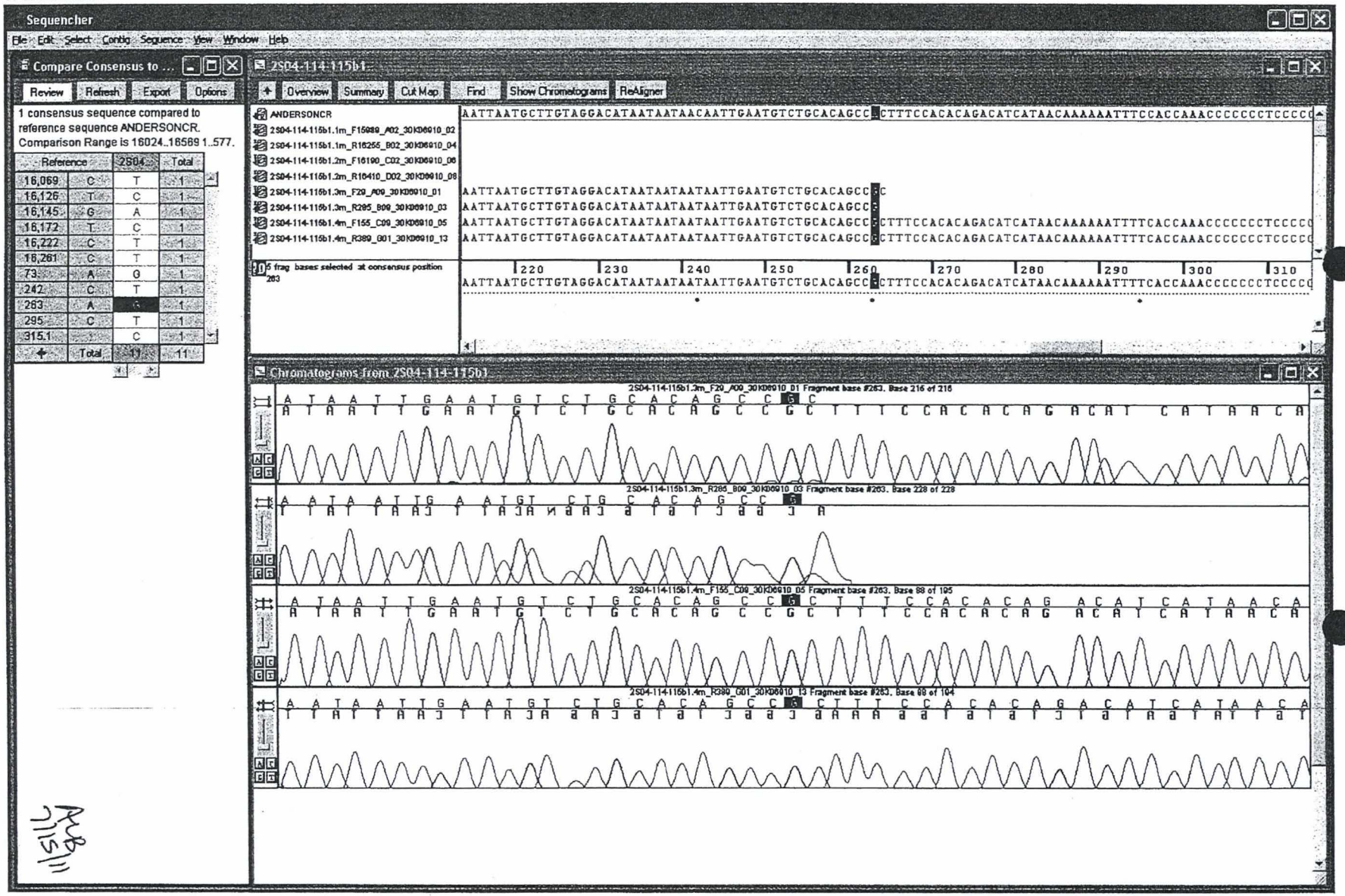
43

2S04-114-115b1
7/6/11 ALB



ALB 7/15/11

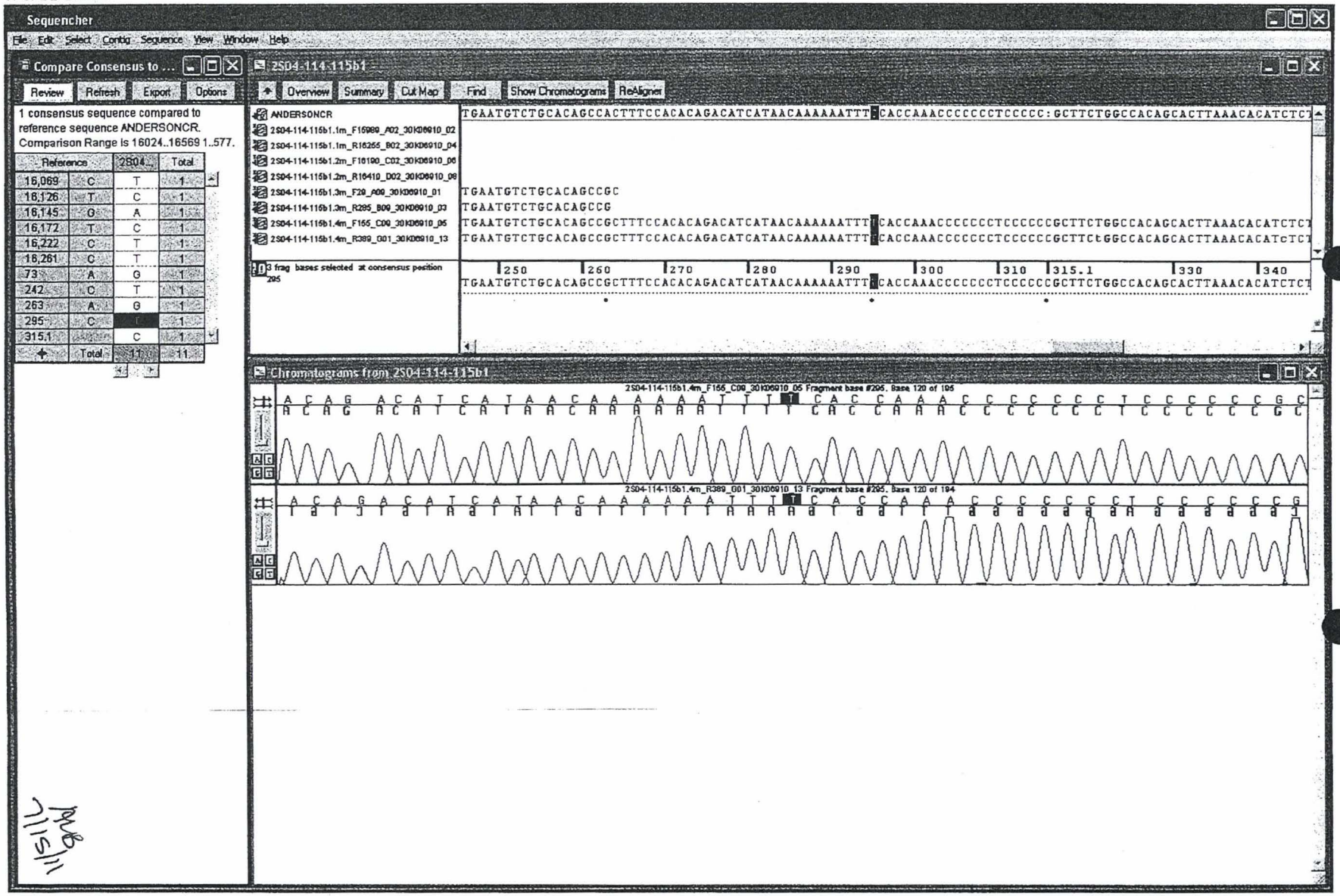
2S04-114-115b1
7/6/11 ALB



ALB 7/15/11

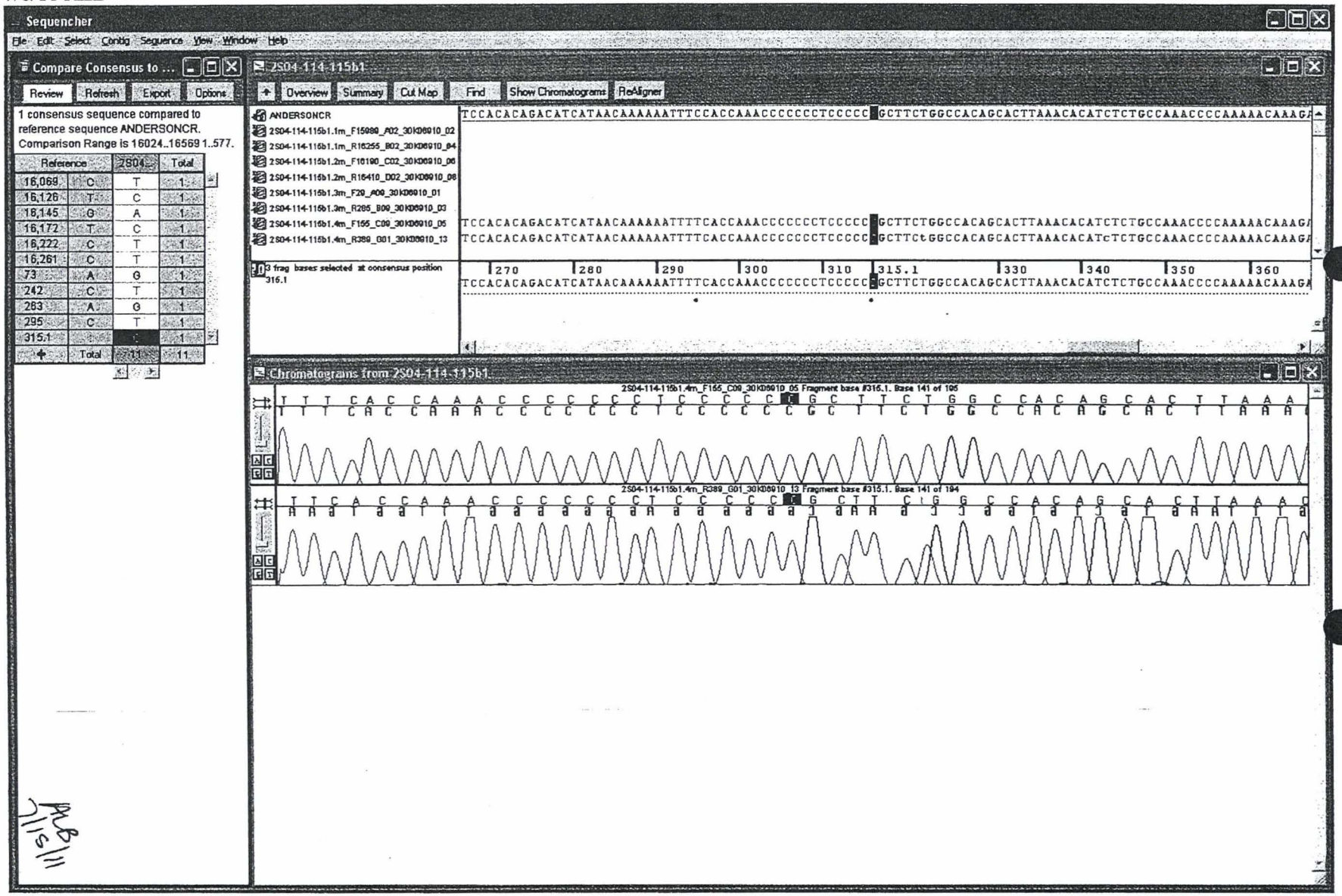
41

2S04-114-115b1
7/6/11 ALB



7/15/11

2S04-114-115b1
7/6/11 ALB



Pub 7/15/11

39

Date: July 20, 2011
Project Name: 2S04-114_ALB.SPF
Contig Name: 2S04-114-123a1
Compare Consensus to Reference ANDERSONCR
Comparison Range [16024..16569 1..577]

Sequence Name	Comparison Range Coverage
2S04-114-123a1	[16024..16569 1..537]

Position		ANDERSONCR	2S04-114-123a1	Number of Variants
Coverage Range		[16024..16569 1..577]		Incomplete
16,051	A	G	1	
16,162	A	G	1	
16,519	T	C	1	
73	A	G	1	
263	A	G	1	
309.1	:	C	1	
315.1	:	C	1	
Total Differences			7	

Confirmed Range: 16024-16569, 1-537

ALB 7/20/11

Date: July 25, 2011
Project Name: 2S04-114_ARB.SPF
Contig Name: 2S04-114-123a1_ARB
Compare Consensus to Reference ANDERSONCR
Comparison Range [16024..16569 1..577]

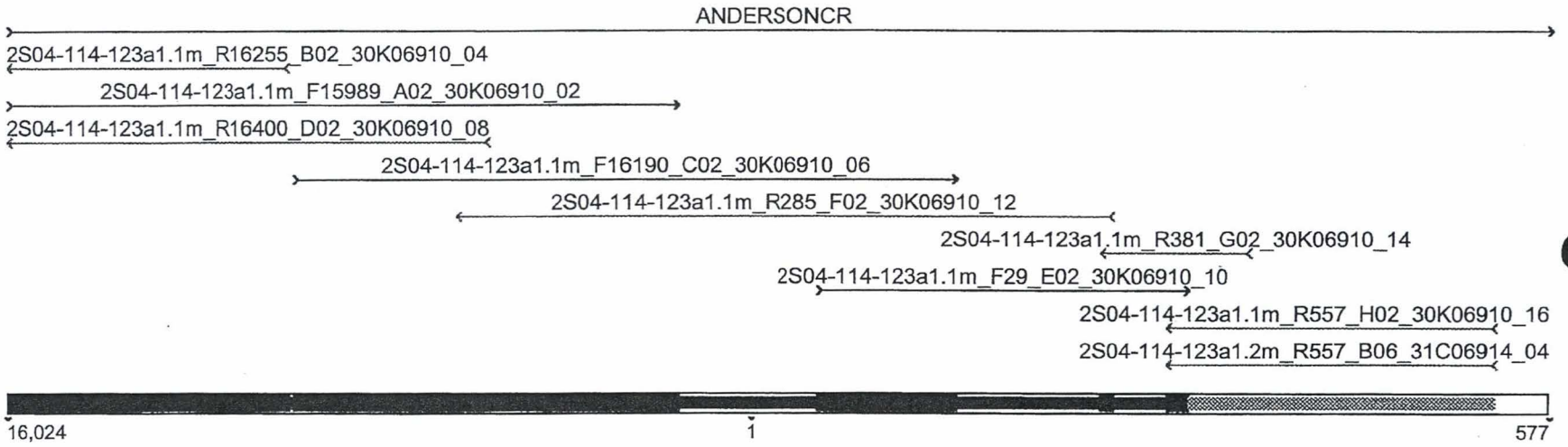
Sequence Name Comparison Range Coverage
2S04-114-123a1_ARB [16024..16569 1..537]

Position		ANDERSONCR	2S04-114-123a1_ARB	Number of Variants
Coverage Range		[16024..16569 1..577]	Incomplete	
16,051	A	G	1	
16,162	A	G	1	
16,519	T	C	1	
73	A	G	1	
263	A	G	1	
309.1	:	C	1	
315.1	:	C	1	
Total Differences			7	

Confirmed Range: 16024-16569;1-537

Thomson11

2S04-114-123a1
Sequencher(tm) "2S04-114_ALB.SPF"



ALB 7/20/11

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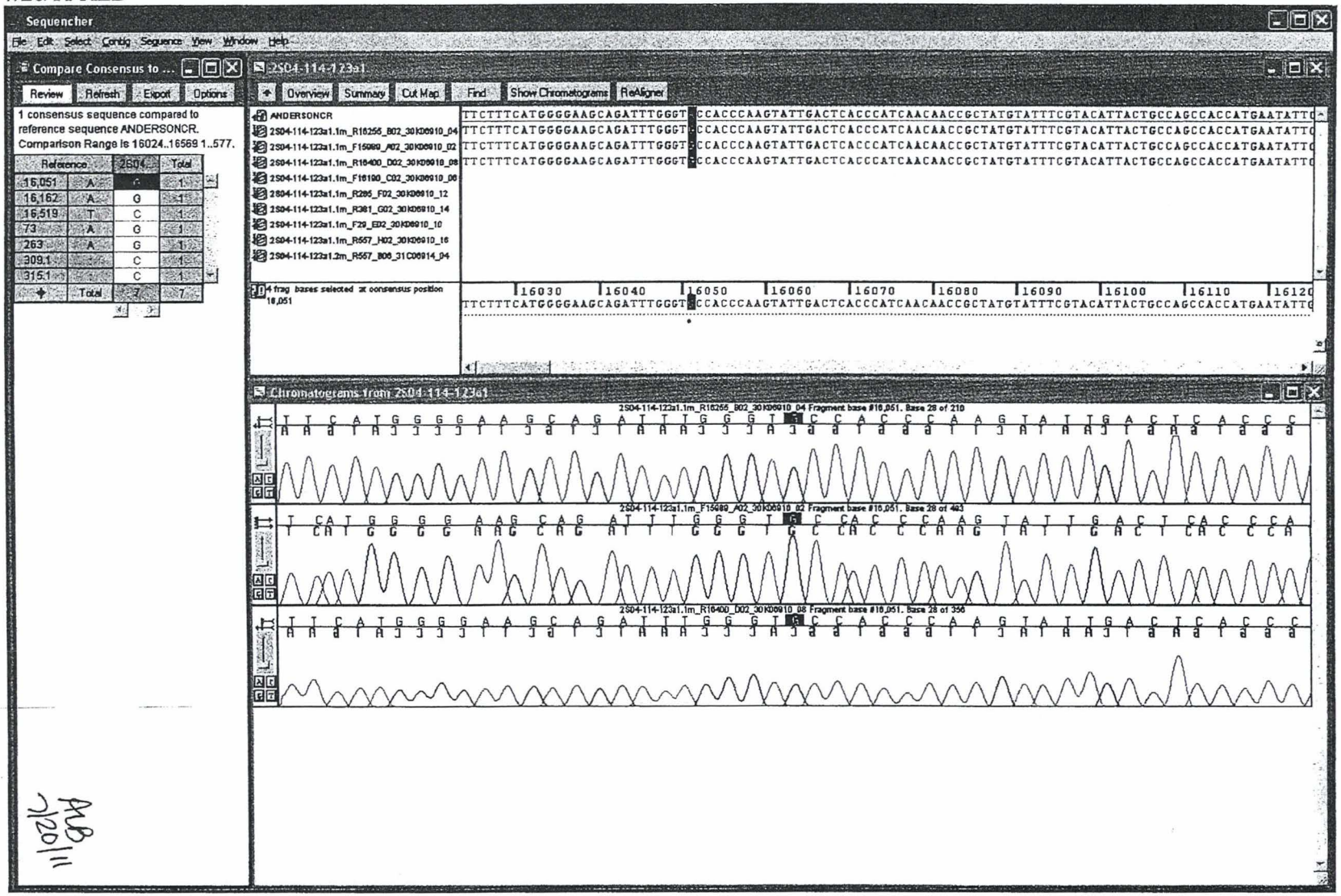
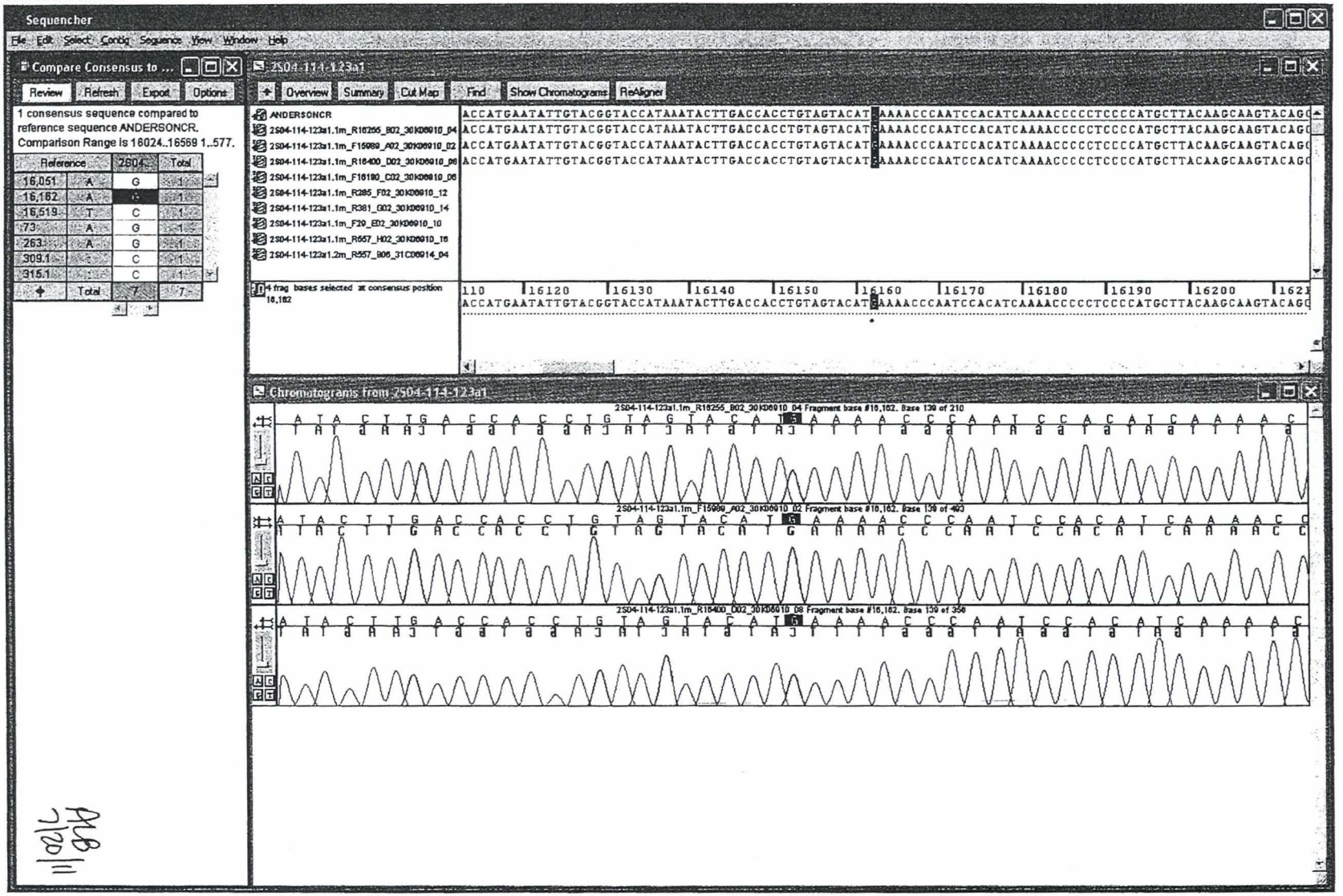
2S04-114-123a1
7/20/11 ALB



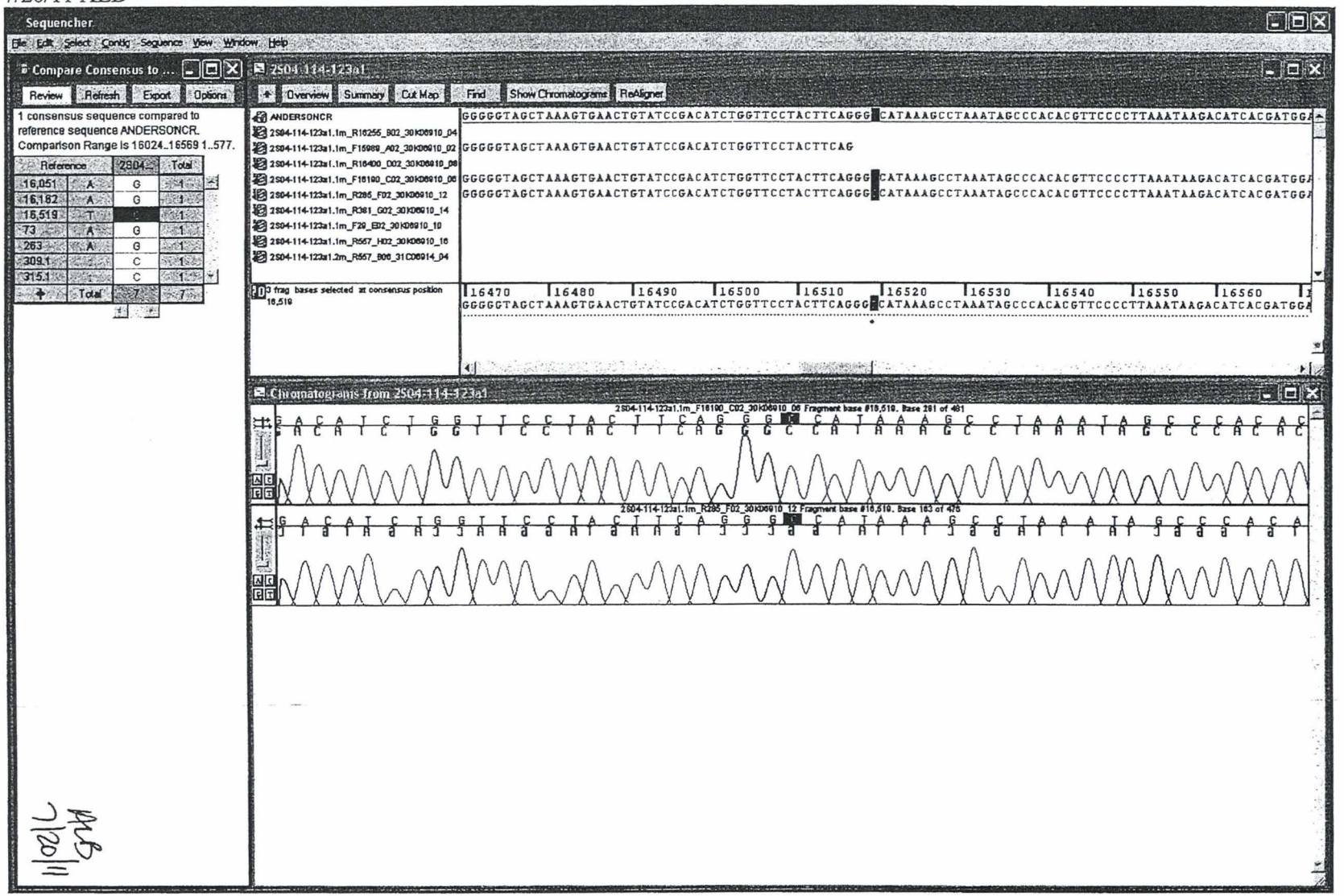
ALB 7/20/11

2S04-114-123a1
7/20/11 ALB



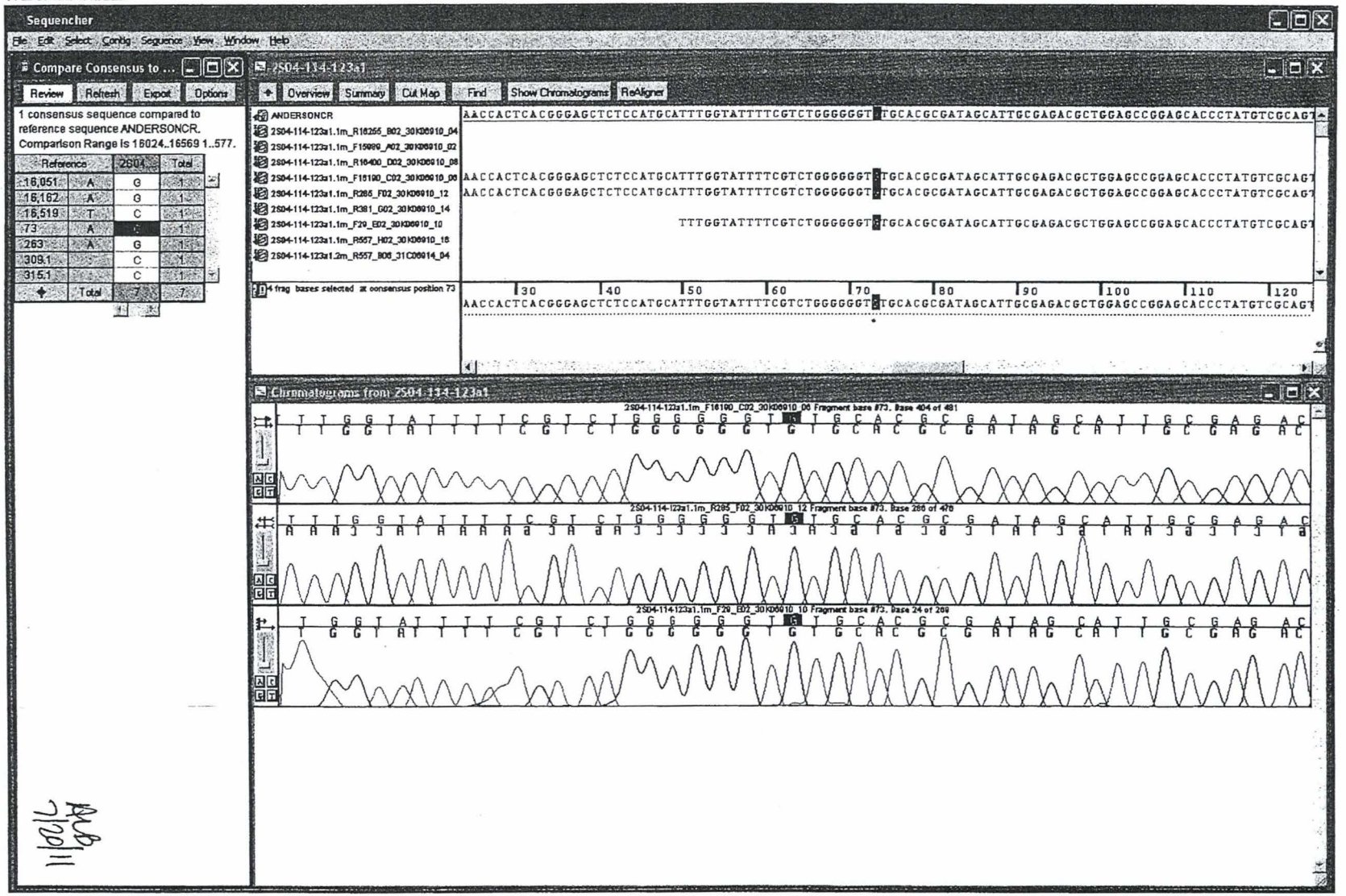
ALB 7/20/11

2S04-114-123a1
7/20/11 ALB



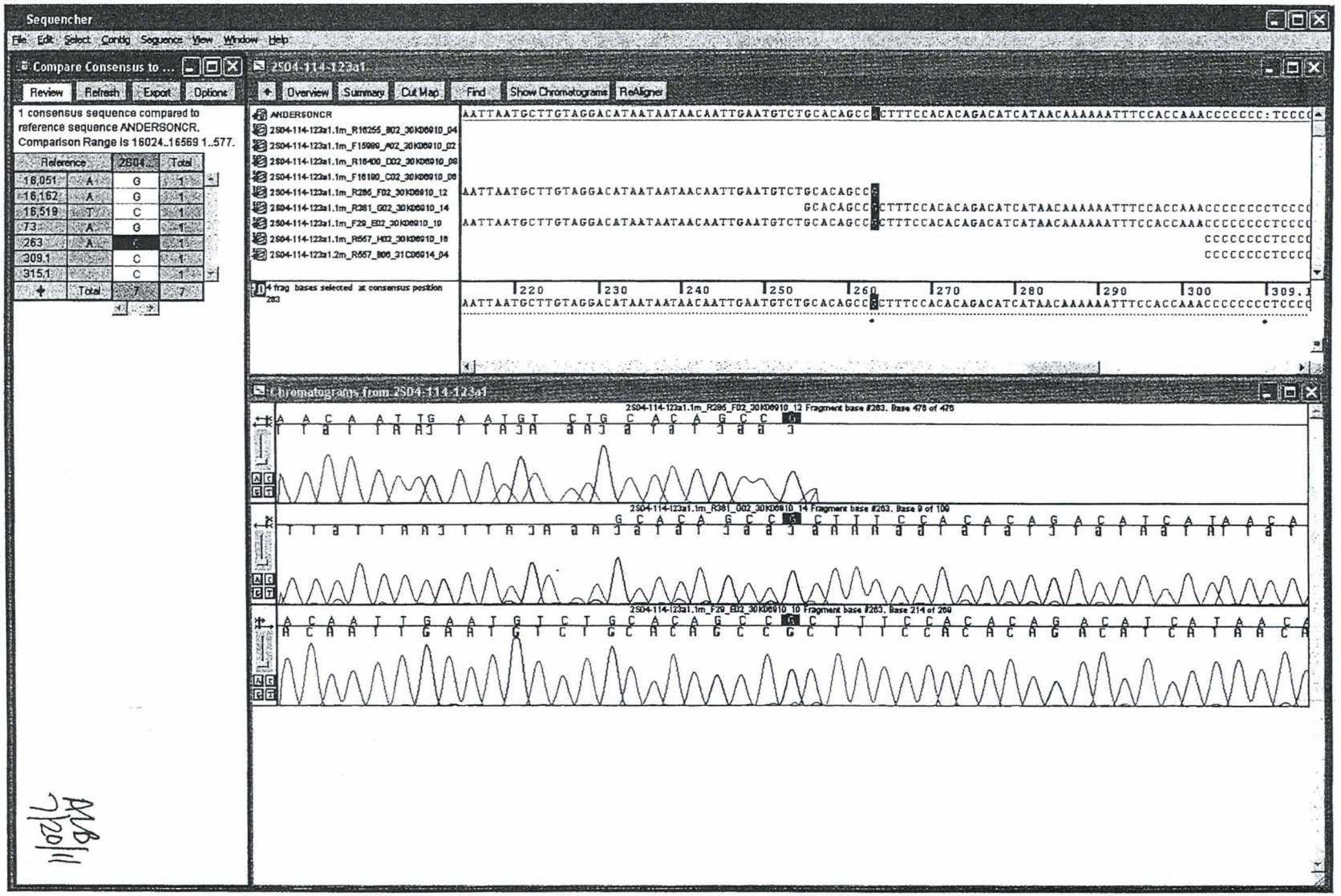
7/20/11 ALB

2S04-114-123a1
7/20/11 ALB



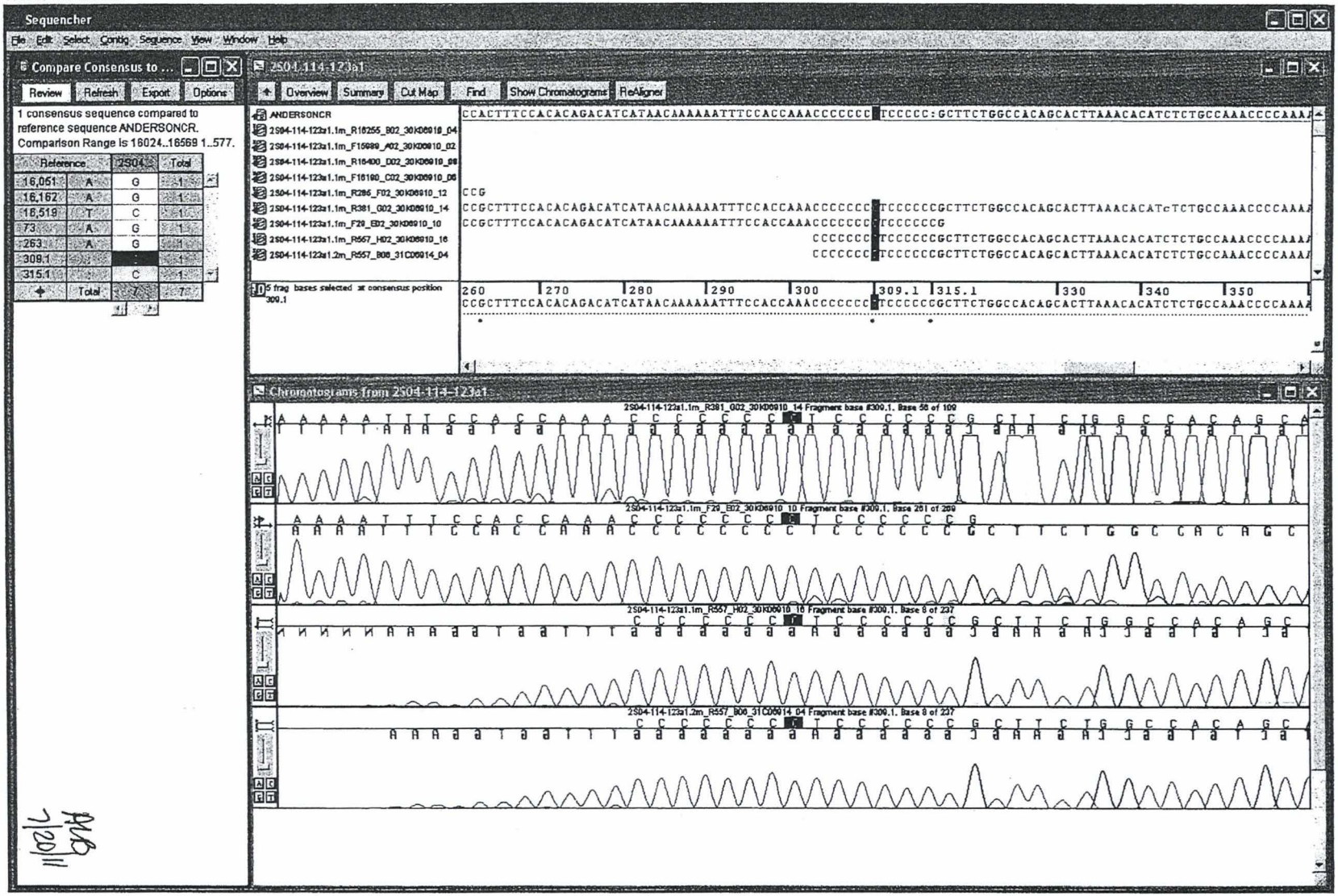
7/20/11 ALB

2S04-114-123a1
7/20/11 ALB



AMB 7/20/11

2S04-114-123a1
7/20/11 ALB



Date: July 20, 2011
Project Name: 2S04-114_ALB.SPF
Contig Name: 2S04-114-POS (55m, 58m)
Compare Consensus to Reference ANDERSONCR
Comparison Range [16024..16569 1..577]

Sequence Name Comparison Range Coverage
2S04-114-POS (55m, 58m) [16024..16569 1..537]

Position		ANDERSONCR	2S04-114-POS (55m, 58m) Number of Variants
Coverage Range		[16024..16569 1..577]	Incomplete
16,069	C	T	1
16,193	C	T	1
16,278	C	T	1
16,362	T	C	1
73	A	G	1
150	C	T	1
152	T	C	1
263	A	G	1
295	C	T	1
315.1	:	C	1
489	T	C	1
Total Differences			11

ALB 7/20/11

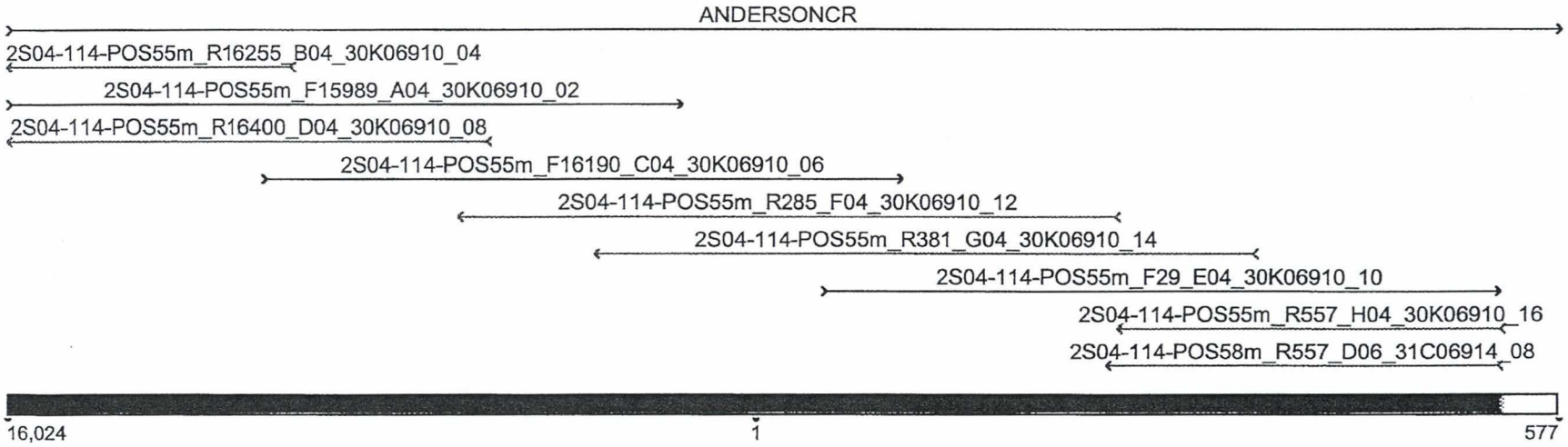
Date: July 25, 2011
Project Name: 2S04-114_ARB.SPF
Contig Name: 2S04-114-POS (55m,58m)_ARB
Compare Consensus to Reference ANDERSONCR
Comparison Range [16024..16569 1..577]

Sequence Name	Comparison Range Coverage
2S04-114-POS (55m,58m)_ARB	[16024..16569 1..537]

Position		ANDERSONCR	2S04-114-POS (55m,58m)_ARB	Number of Variants
Coverage Range		[16024..16569 1..577]	Incomplete	
16,069	C	T	1	
16,193	C	T	1	
16,278	C	T	1	
16,362	T	C	1	
73	A	G	1	
150	C	T	1	
152	T	C	1	
263	A	G	1	
295	C	T	1	
315.1	:	C	1	
489	T	C	1	
Total Differences			11	

AB 072511

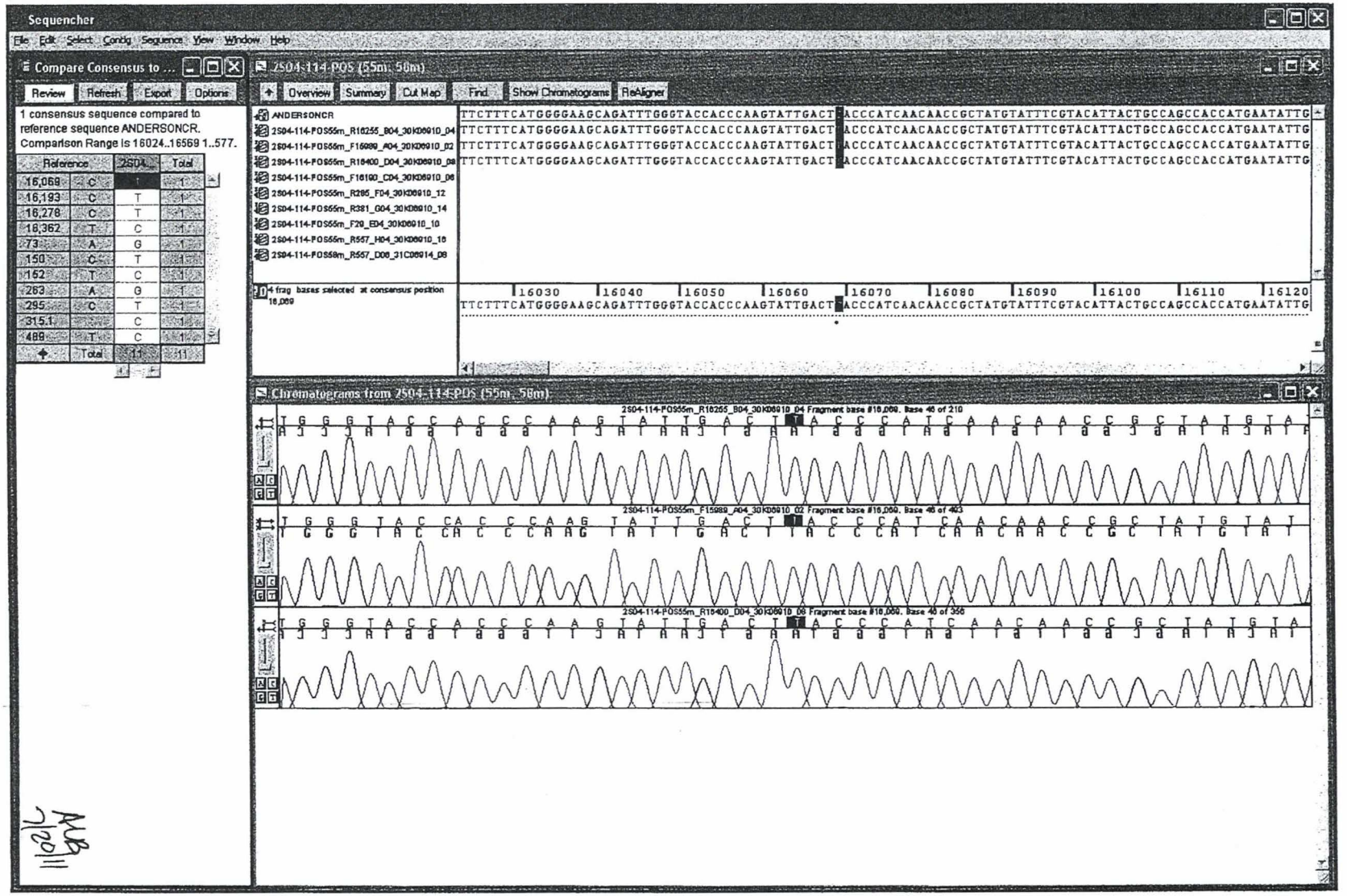
2S04-114-POS (55m, 58m)
Sequencher(tm) "2S04-114_ALB.SPF"



ALB 7/20/11

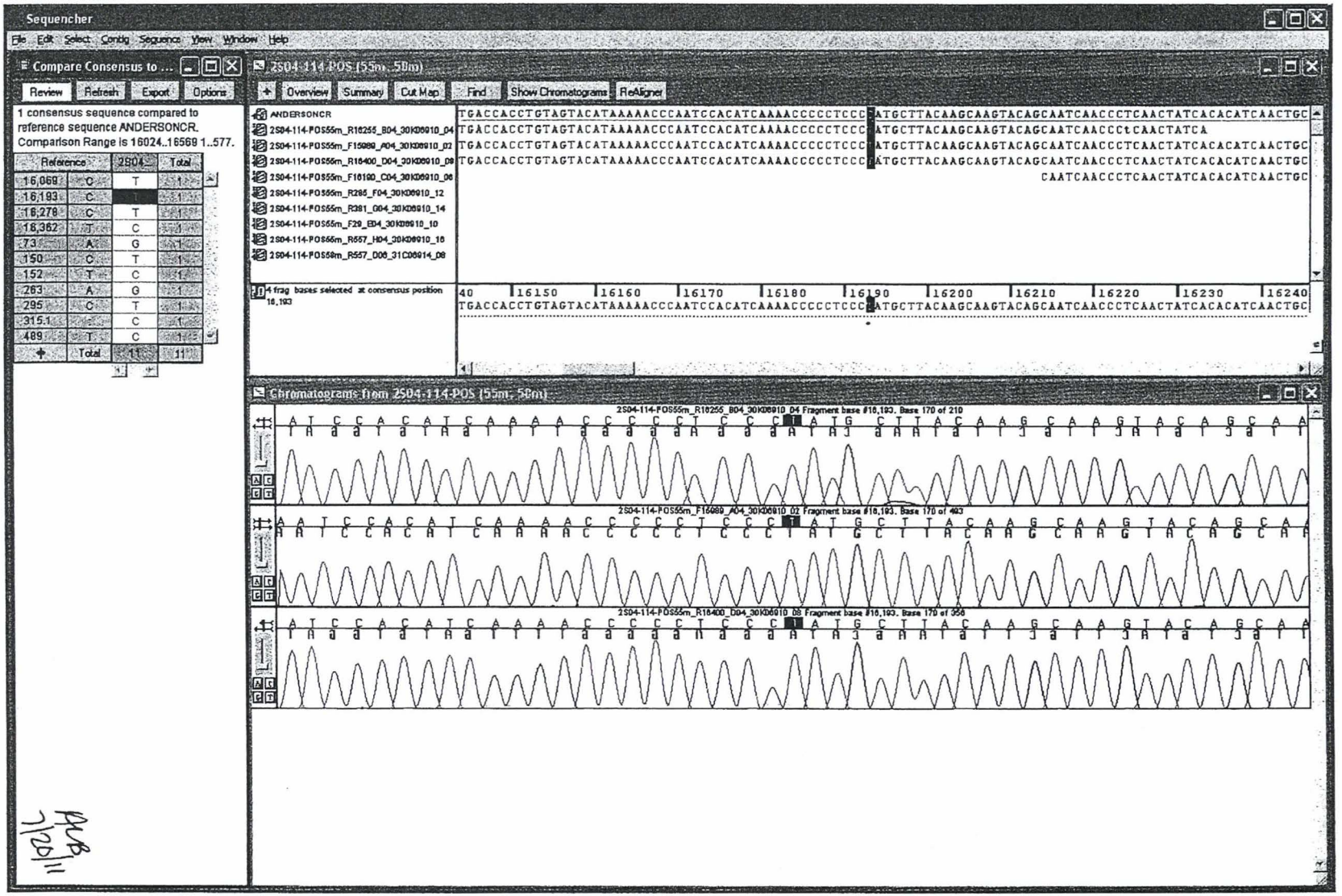
27

2S04-114-POS
7/20/11 ALB



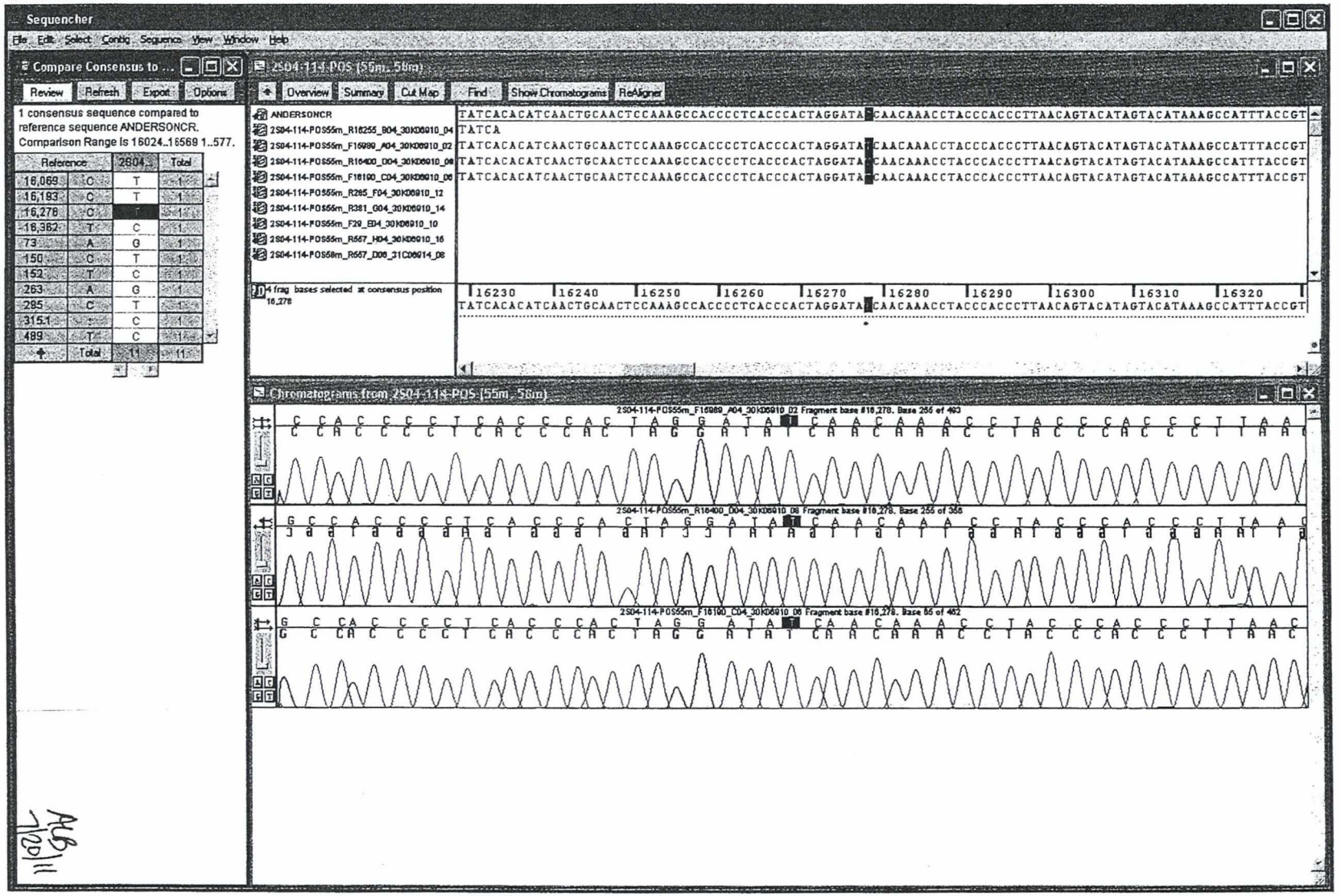
AUB 7/20/11

2S04-114-POS
7/20/11 ALB



7/20/11

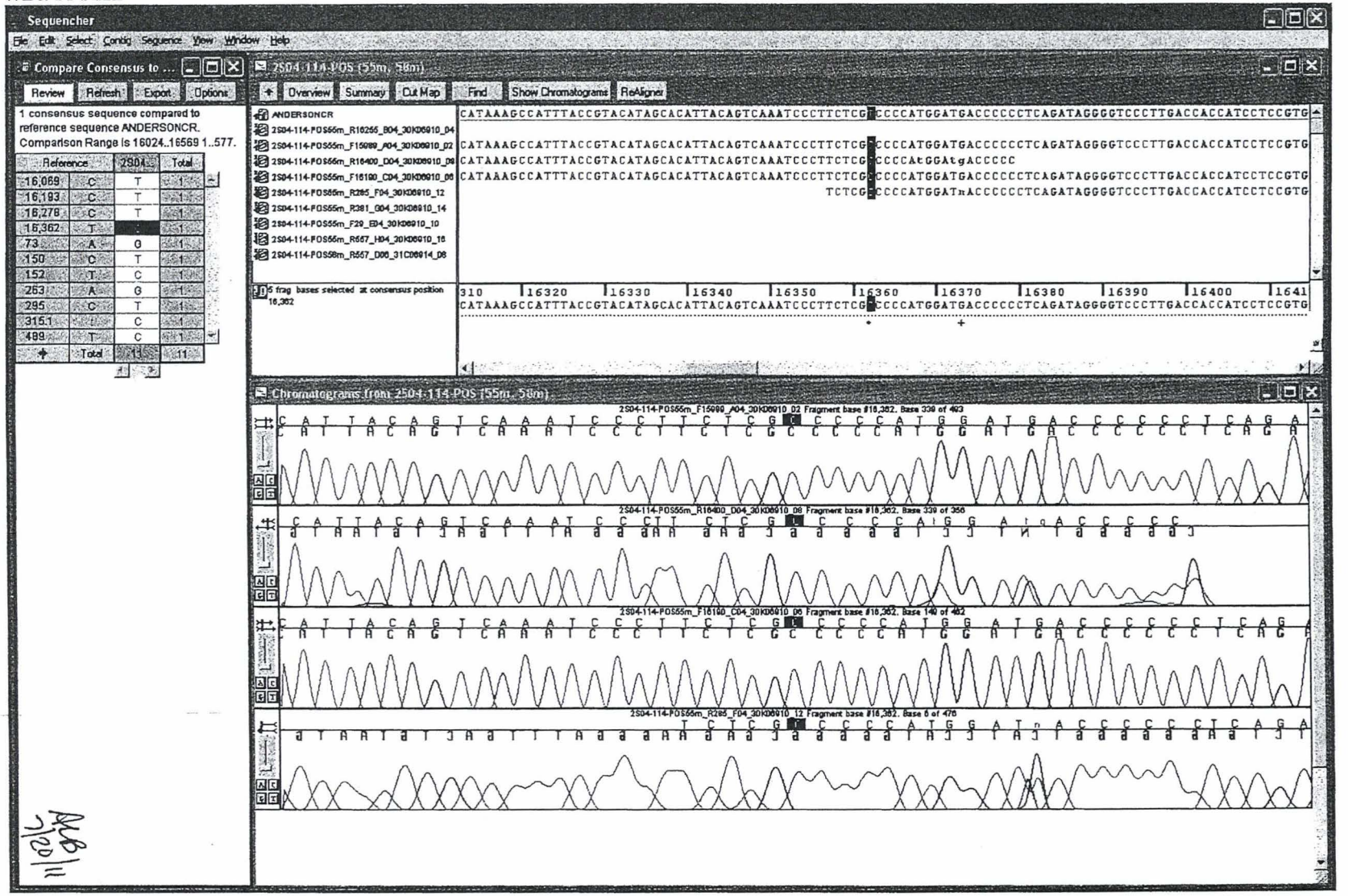
2S04-114-POS
7/20/11 ALB



ALB
7/20/11

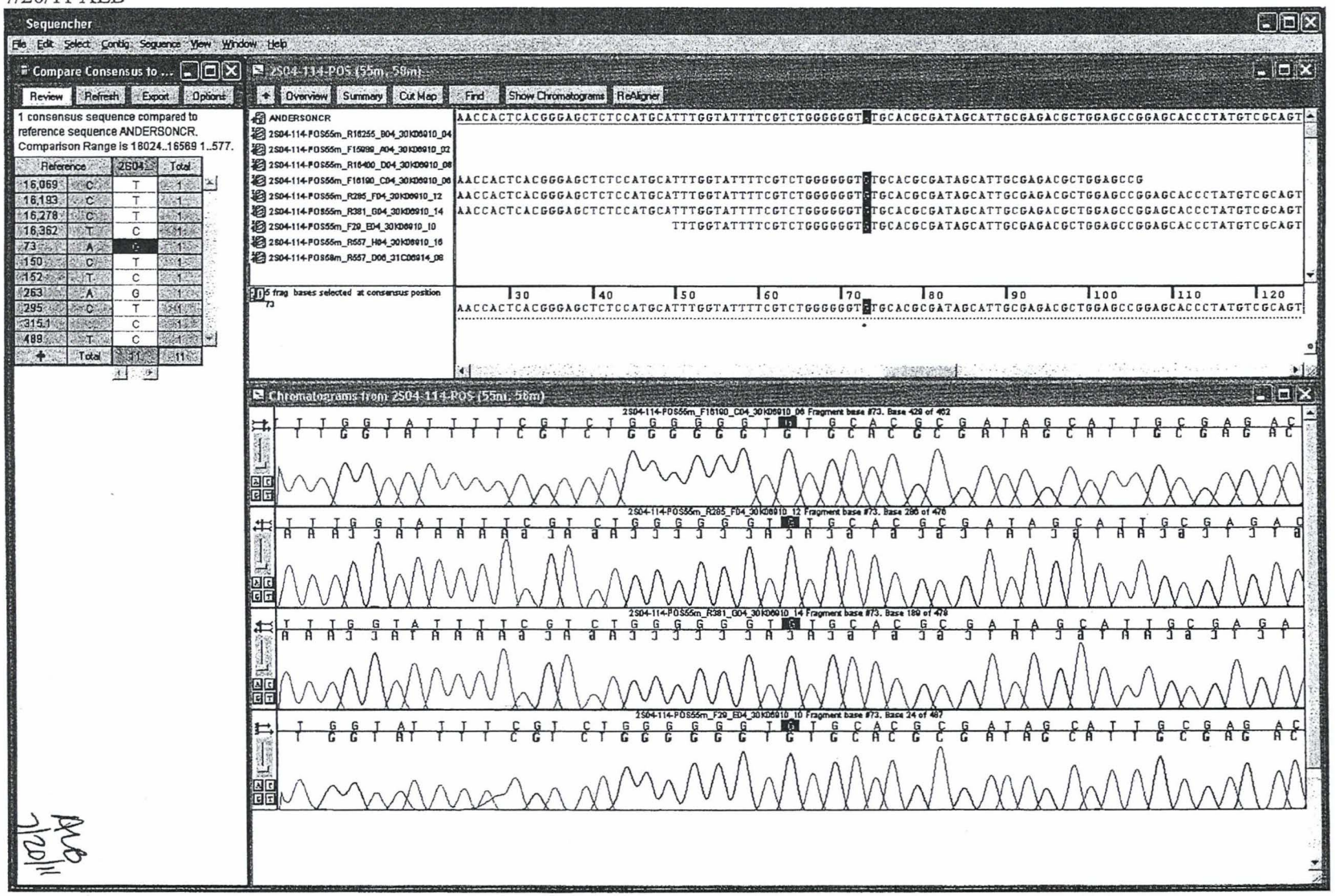
24

2S04-114-POS
7/20/11 ALB



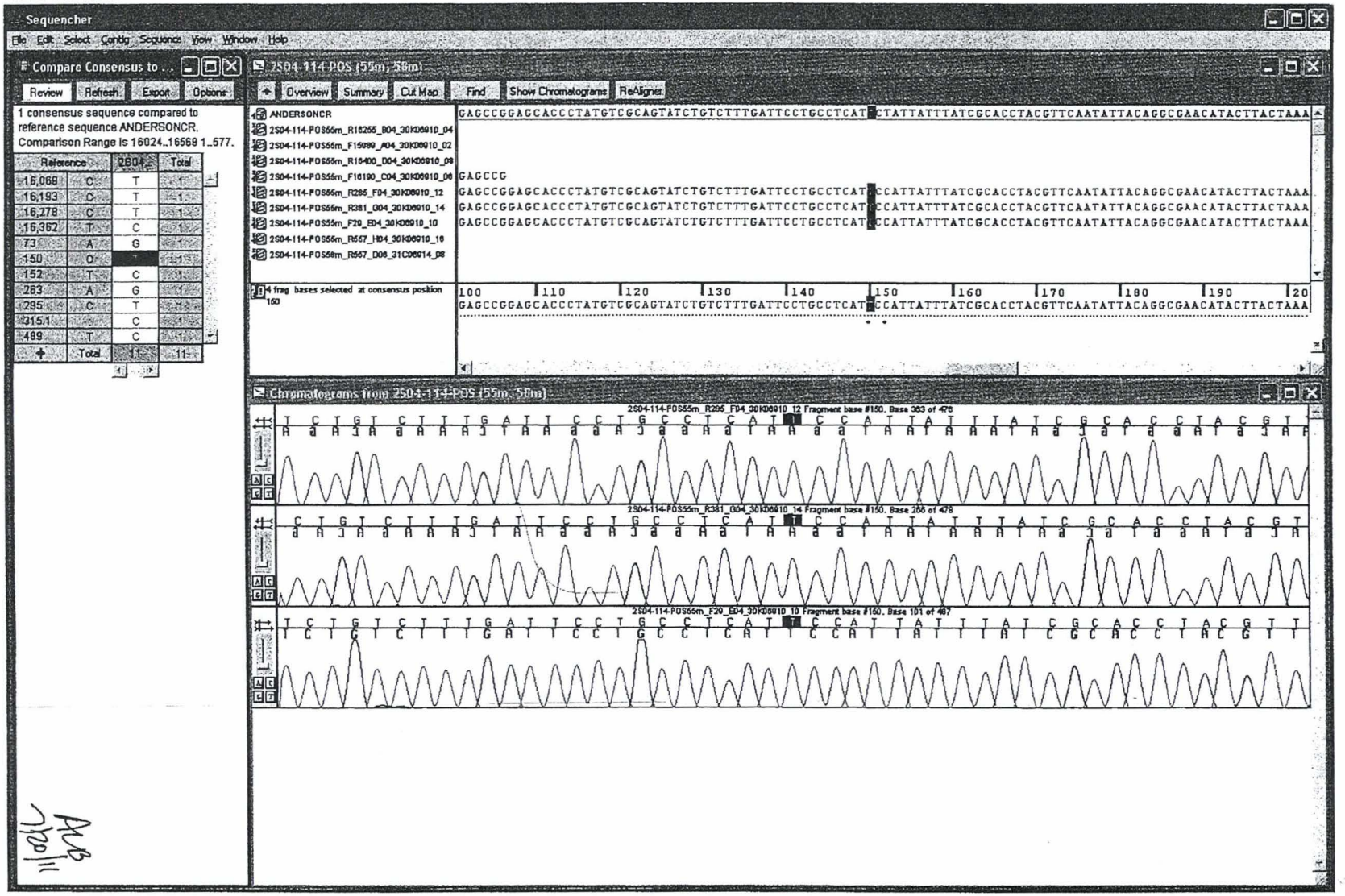
ALB 7/20/11

2S04-114-POS
7/20/11 ALB



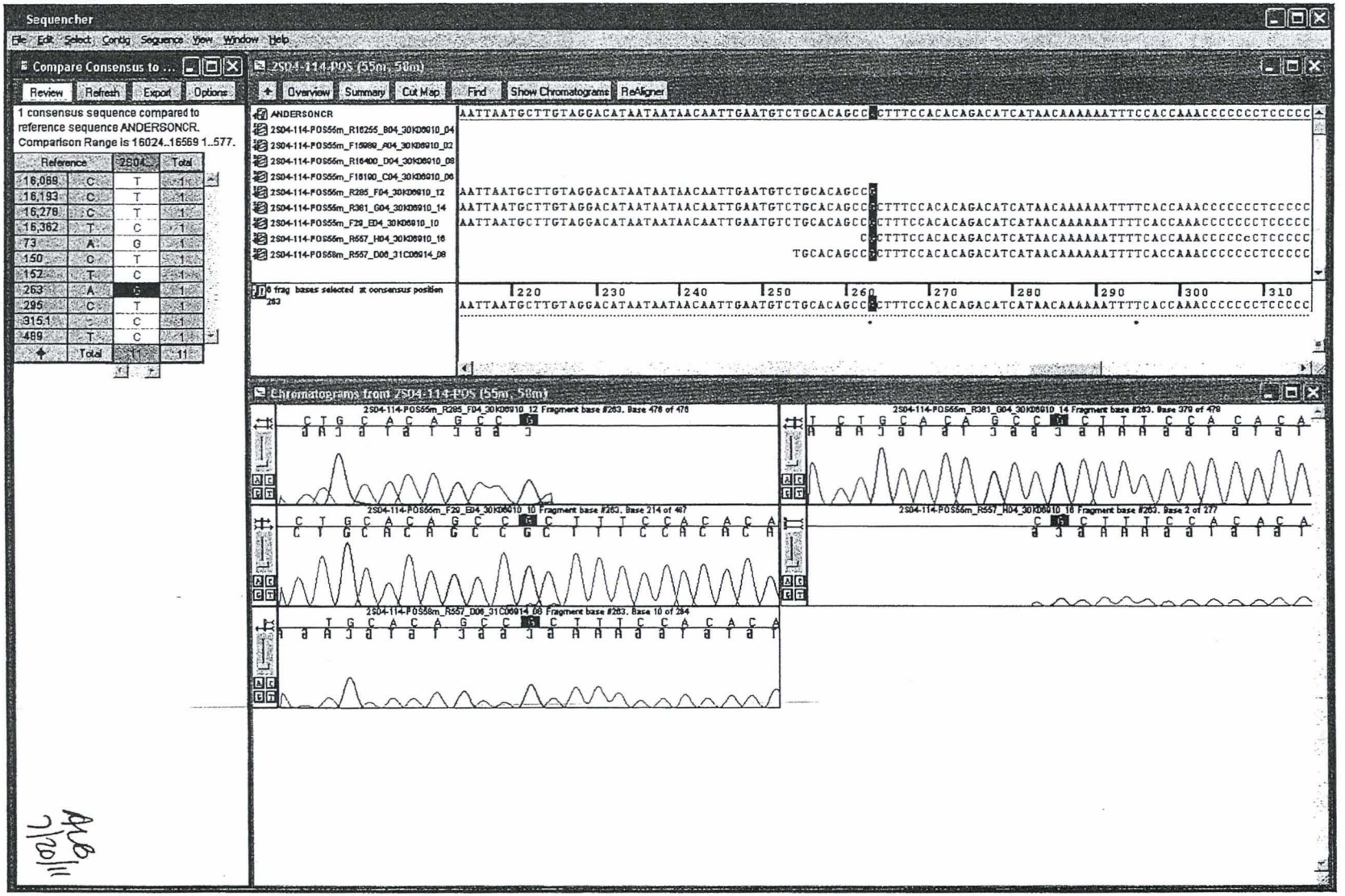
AMB 7/20/11

2S04-114-POS
7/20/11 ALB



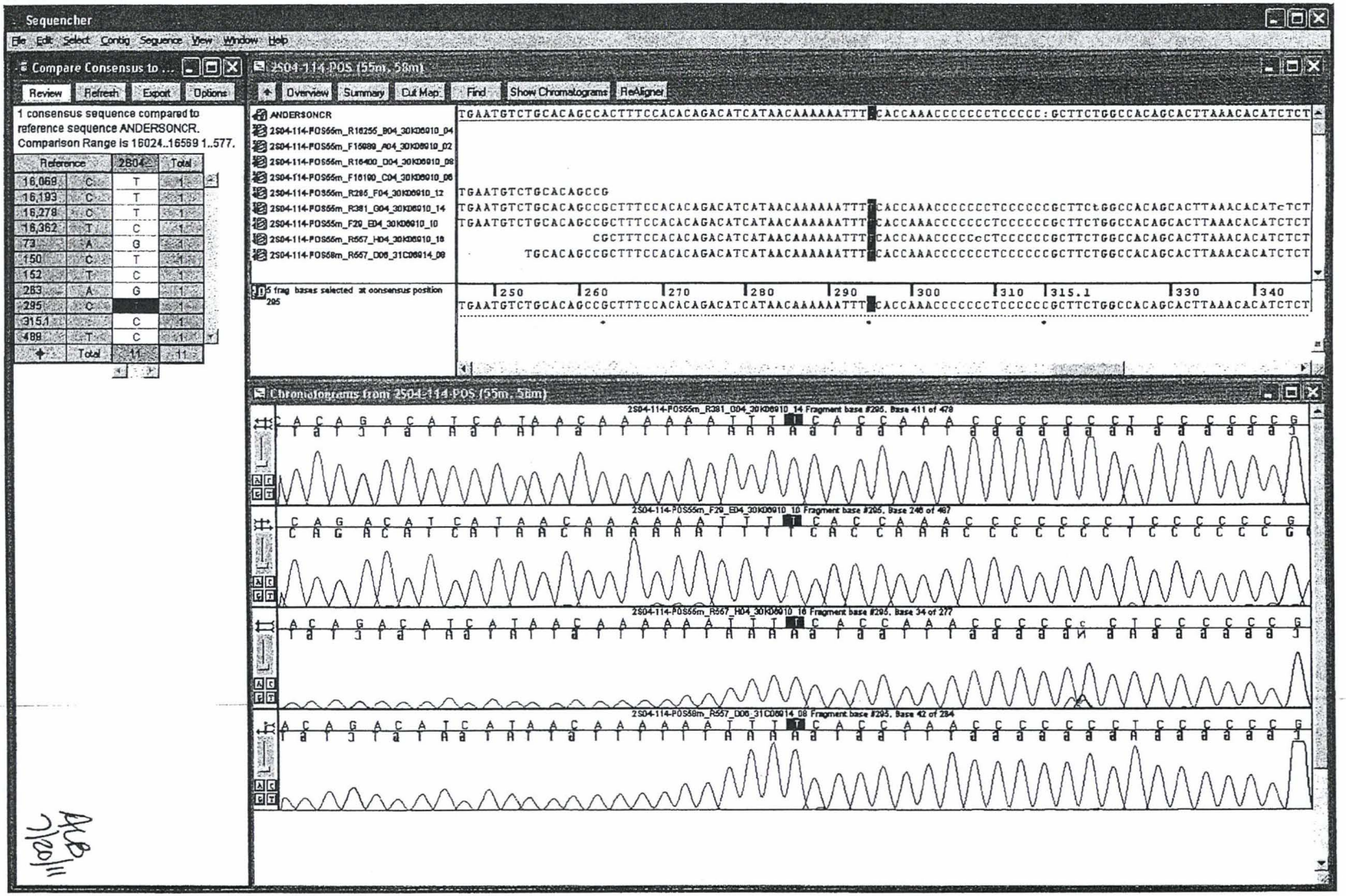
AB 7/20/11

2S04-114-POS
7/20/11 ALB



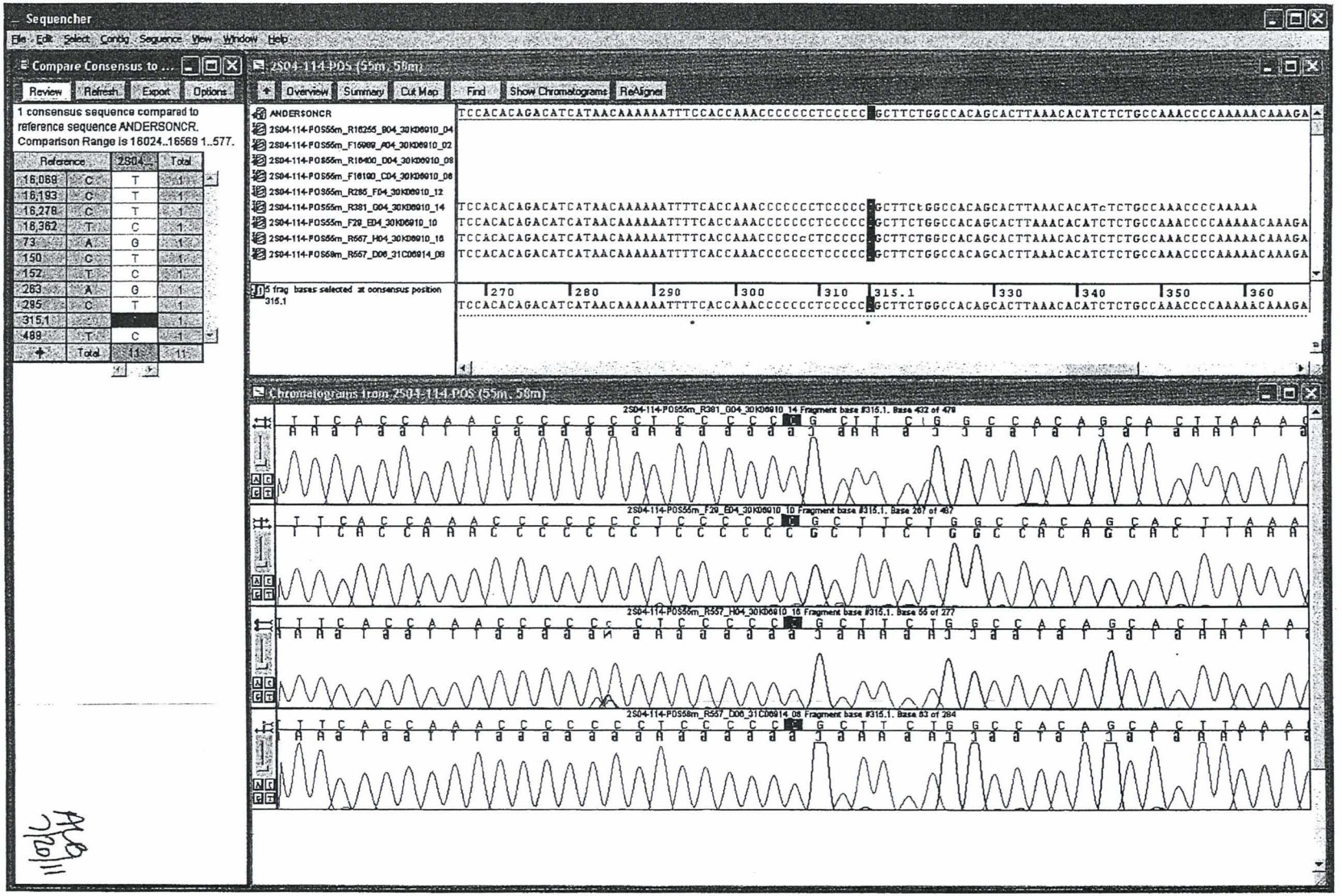
AJB 7/20/11

2S04-114-POS
7/20/11 ALB



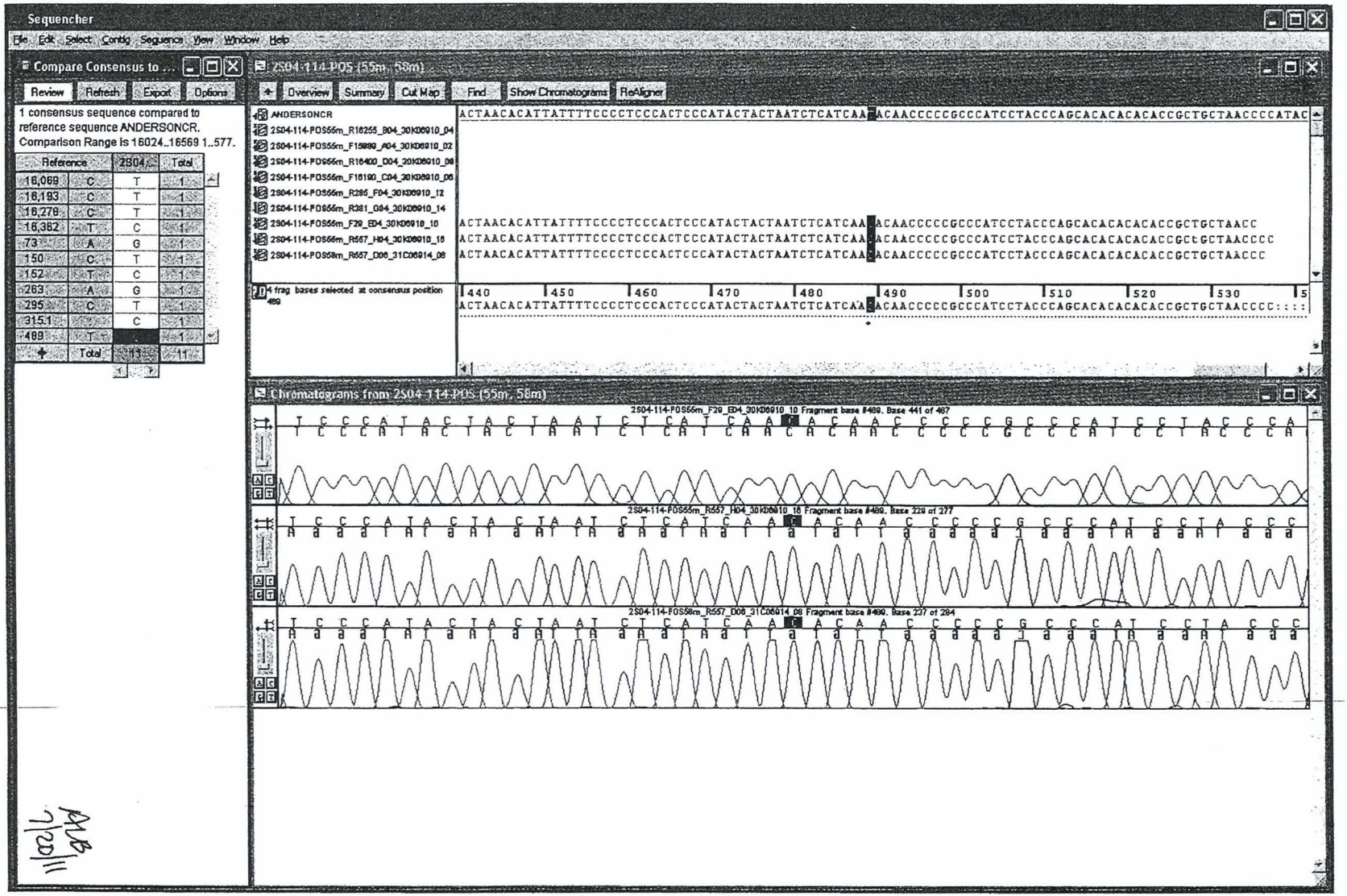
ALB 7/20/11

2S04-114-POS
7/20/11 ALB



11/20/11

2S04-114-POS
7/20/11 ALB



11/20/11 ALB

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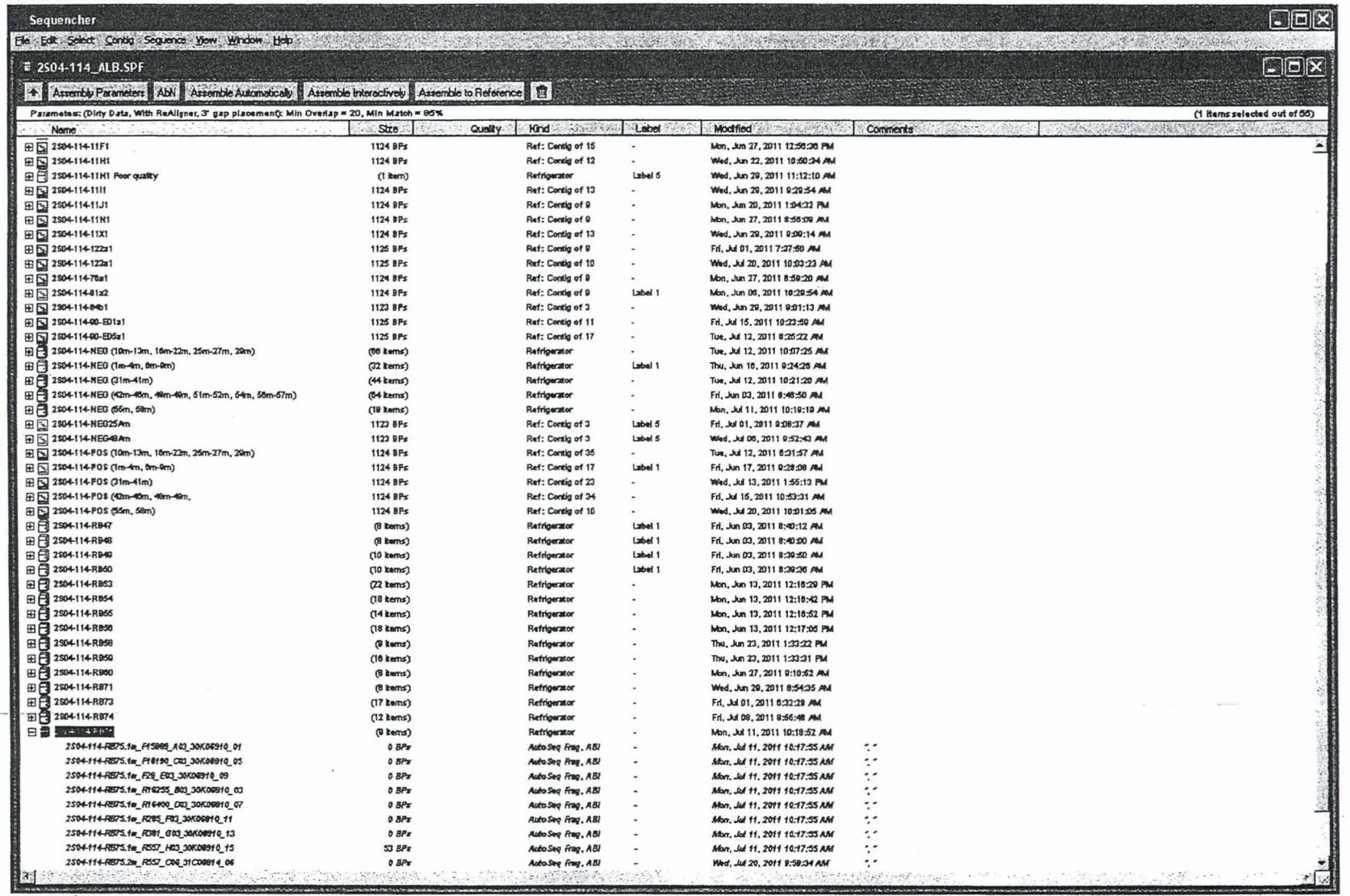
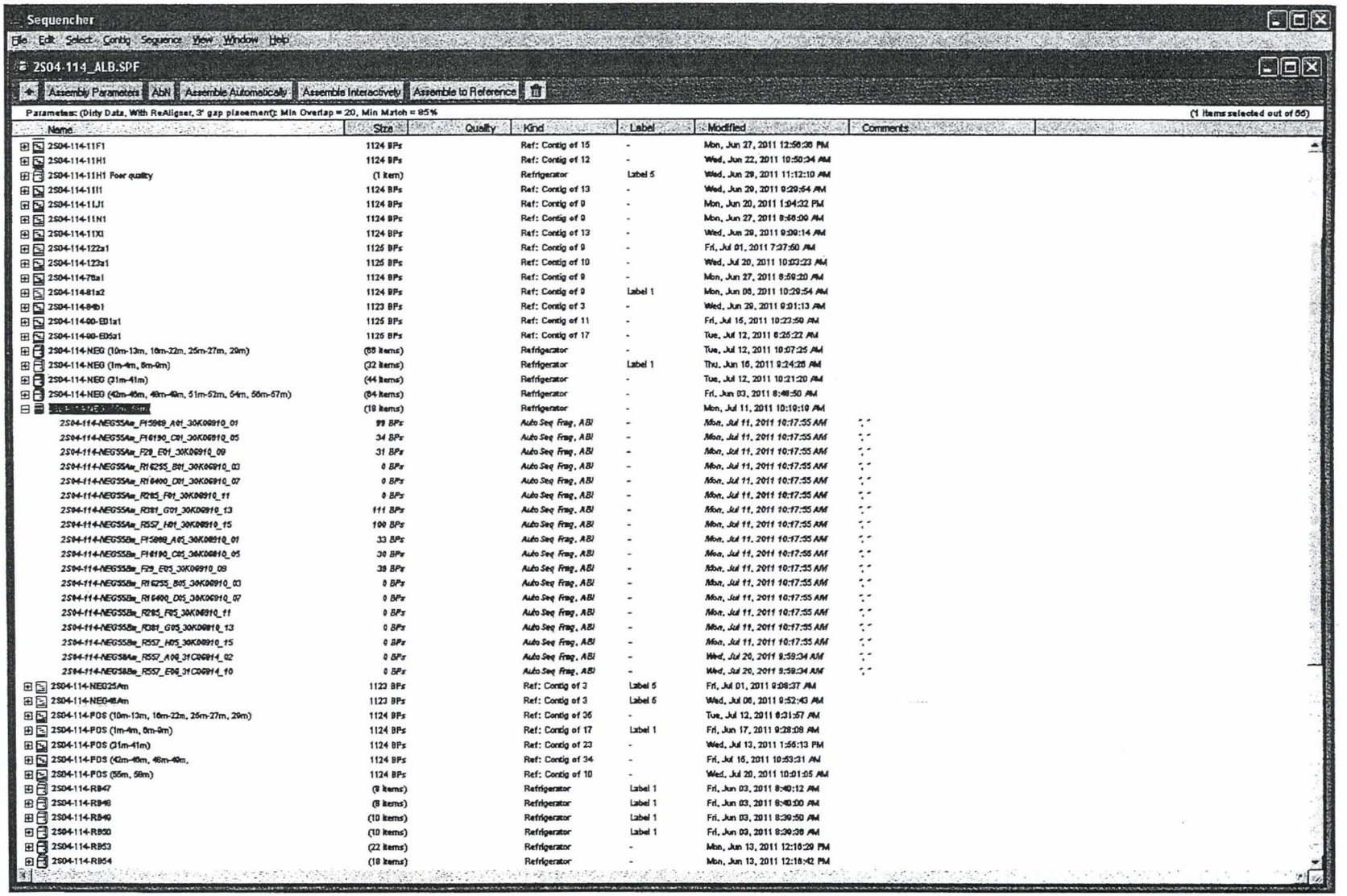
2S04-114-Unassembled RBs
7/20/11 ALB



ALB 7/20/11

2S04-114-Unassembled NEGs
7/20/11 ALB



7/20/11 ALB

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mtDNA Gel Filtration, 3100 Sequencing & Capillary Load Sheet

Date: 7/18/2011
Analyst: ALB
3100 Seq Tray ID: 071811-ALB

	1	2	3	4	5	6	7	8	9	10	11	12
A	URE1107-NEG2Am_F15989	URE1107-0055-R03a1.1m_F15989	URE1107-RB2.1m_F15989	URE1107-POS2m_F15989	URE1107-NEG2Bm_F15989	2S04-114-NEG58Am_R557						
B	URE1107-NEG2Am_R16255	URE1107-0055-R03a1.1m_R16255	URE1107-RB2.1m_R16255	URE1107-POS2m_R16255	URE1107-NEG2Bm_R16255	2S04-114-123a1.2m_R557						
C	URE1107-NEG2Am_F16190	URE1107-0055-R03a1.1m_F16190	URE1107-RB2.1m_F16190	URE1107-POS2m_F16190	URE1107-NEG2Bm_F16190	2S04-114-RB75.2m_R557						
D	URE1107-NEG2Am_R16400	URE1107-0055-R03a1.1m_R16400	URE1107-RB2.1m_R16400	URE1107-POS2m_R16400	URE1107-NEG2Bm_R16400	2S04-114-POS58m_R557						
E	URE1107-NEG2Am_F29	URE1107-0055-R03a1.1m_F29	URE1107-RB2.1m_F29	URE1107-POS2m_F29	URE1107-NEG2Bm_F29	2S04-114-NEG58Bm_R557						
F	URE1107-NEG2Am_R285	URE1107-0055-R03a1.1m_R285	URE1107-RB2.1m_R285	URE1107-POS2m_R285	URE1107-NEG2Bm_R285							
G	URE1107-NEG2Am_R381	URE1107-0055-R03a1.1m_R381	URE1107-RB2.1m_R381	URE1107-POS2m_R381	URE1107-NEG2Bm_R381							
H	URE1107-NEG2Am_R557	URE1107-0055-R03a1.1m_R557	URE1107-RB2.1m_R557	URE1107-POS2m_R557	URE1107-NEG2Bm_R557							

Gel Filtration Cartridge (Edge Biosystems): 158110

Hi-Di Formamide (AB): N/A
(20.0 ul per well)

3100 Machine ID:	3100-1 (*3100workstation*)
POP6 Lot # (AB):	1104108
1X 3100 Running Buffer (AB):	071611HMB
Run Module:	RapidSeq36_POP6DefaultModule
Run #s:	2411-2413
Pipettor #s:	P-123

Document: BTF00318 - CE Load Sheet ROWS (MITO WS)
Revision: 2
Effective: Monday, March 17, 2008 11:12:01 AM

ALB 7/20/11

H

Cycle Sequencing

Amplification Worksheet (20µl Volume Reaction)

URE1107-SEQ2, 2S04-114-SEQ34

Reagent	Reagent Lot #	Per Sample (µl)	# Rxns/ Primer	Total Vol/Primer (µl)
Big Dye (AB)	10110506M	2.0	6	12.0
5X Sequencing Buffer (AB)	1011129	6.0	6	36.0
Primer (Bode)	See Below	1.0	6	6.0

Reagent	Reagent Lot #	Per Positive Control (µl)
dH2O (Fisher)	103106	9.0
Big Dye (AB)	N/A	2.0
5X Sequencing Buffer (AB)	N/A	6.0
M13 Primer (AB)	N/A	1.0
pGEM (AB)	N/A	2.0

Primer Set (Bode)	Forward	Primer Lot #	Reverse	Primer Lot #
CR	F15989	011811LNM	R16255	082410SUB
CR	F16190	021711SUB	R16400	011811LNM
CR	F29	011811LNM	R285	082410SUB
CR			R381	022411SUB
CR			R557	022411SUB

Tray Coordinate	Sample	Master Mix (µl)	Sample/dH2O (11 µl)	Primer
A1	URE1107-NEG2Am_F15989	9	1/10	F15989
A2	URE1107-0055-R03a1.1m_F15989	9	1/10	F15989
A3	URE1107-RB2.1m_F15989	9	1/10	F15989
A4	URE1107-POS2m_F15989	9	1/10	F15989
A5	URE1107-NEG2Bm_F15989	9	1/10	F15989
B1	URE1107-NEG2Am_R16255	9	1/10	R16255
B2	URE1107-0055-R03a1.1m_R16255	9	1/10	R16255
B3	URE1107-RB2.1m_R16255	9	1/10	R16255
B4	URE1107-POS2m_R16255	9	1/10	R16255
B5	URE1107-NEG2Bm_R16255	9	1/10	R16255
C1	URE1107-NEG2Am_F16190	9	1/10	F16190
C2	URE1107-0055-R03a1.1m_F16190	9	1/10	F16190
C3	URE1107-RB2.1m_F16190	9	1/10	F16190
C4	URE1107-POS2m_F16190	9	1/10	F16190
C5	URE1107-NEG2Bm_F16190	9	1/10	F16190

TC#: 24 Program#: CycSeq

Analyst: ALB Date: 7/18/11

Case Number(s): URE1107, 2S04-114

Pipettors	Lot #
<2 uL	P-103
2 -10 uL	P-016
11 - 100 uL	P-070
101 - 1000 uL	N/A
master mix	P-016
water	P-103

Document: BTF00320 - Cycle Sequence Amp ROWS (MITO WS)

Revision: 3

Effective:

ALB 7/20/11

Cycle Sequencing

Amplification Worksheet (20µl Volume Reaction)

URE1107-SEQ2, 2S04-114-SEQ34

Tray Coordinate	Sample	Master Mix (µl)	Sample/dH2O (µl)	Primer
D1	URE1107-NEG2Am_R16400	9	1/10	R16400
D2	URE1107-0055-R03a1.1m_R16400	9	1/10	R16400
D3	URE1107-RB2.1m_R16400	9	1/10	R16400
D4	URE1107-POS2m_R16400	9	1/10	R16400
D5	URE1107-NEG2Bm_R16400	9	1/10	R16400
E1	URE1107-NEG2Am_F29	9	1/10	F29
E2	URE1107-0055-R03a1.1m_F29	9	1/10	F29
E3	URE1107-RB2.1m_F29	9	1/10	F29
E4	URE1107-POS2m_F29	9	1/10	F29
E5	URE1107-NEG2Bm_F29	9	1/10	F29
F1	URE1107-NEG2Am_R285	9	1/10	R285
F2	URE1107-0055-R03a1.1m_R285	9	1/10	R285
F3	URE1107-RB2.1m_R285	9	1/10	R285
F4	URE1107-POS2m_R285	9	1/10	R285
F5	URE1107-NEG2Bm_R285	9	1/10	R285
G1	URE1107-NEG2Am_R381	9	1/10	R381
G2	URE1107-0055-R03a1.1m_R381	9	1/10	R381
G3	URE1107-RB2.1m_R381	9	1/10	R381
G4	URE1107-POS2m_R381	9	1/10	R381
G5	URE1107-NEG2Bm_R381	9	1/10	R381
H1	URE1107-NEG2Am_R557	9	1/10	R557
H2	URE1107-0055-R03a1.1m_R557	9	1/10	R557
H3	URE1107-RB2.1m_R557	9	1/10	R557
H4	URE1107-POS2m_R557	9	1/10	R557
H5	URE1107-NEG2Bm_R557	9	1/10	R557
H6				
H7				
H8	2S04-114-NEG58Am_R557	9	1/10	R557
H9	2S04-114-123a1.2m_R557	9	1/10	R557
H10	2S04-114-RB75.2m_R557	9	1/10	R557
H11	2S04-114-POS58m_R557	9	1/10	R557
H12	2S04-114-NEG58Bm_R557	9	1/10	R557

Analyst: ALB **Date: 7/18/11**
Case Number(s): URE1107, 2S04-114

Document: BTF00320 - Cycle Sequence Amp ROWS (MITO WS)
Revision: 3
Effective:

ALB 7/20/11

EXO-SAP-IT

EXO-SAP-IT Worksheet

(Add 33µL of sample to 6µL of ExoSap for a total volume of 39µL)

URE1107 (Amp2m), 2S04-114 (Amp58m) Date: 7/18/11 Analyst: ALB

	1	2	3	4	5	6	7	8	9	10	11	12
A	URE1107-NEG2Am	URE1107-0055-R03a1.1m	URE1107-RB2.1m	URE1107-POS2m	URE1107-NEG2Bm							
B												
C												
D												
E												
F												
G												
H	2S04-114-NEG58Am	2S04-114-123a1.2m	2S04-114-RB75.2m	2S04-114-POS58m	2S04-114-NEG58Bm							

Reagent Lot #'s and Parameters:
EXO-SAP-IT Lot # (USB): 4132937
TC#: 24
Program: exo-sap

Pipettes Used:

For all volumes between 2 and 10 uL	P-113
For all volumes between 11 and 100 uL	P-060

Document: BTF00320 - EXO-SAP-IT (MITO WS)
Revision: 1
Effective: 6/13/2011 5:12:25 PM

ALB 7/20/11

11

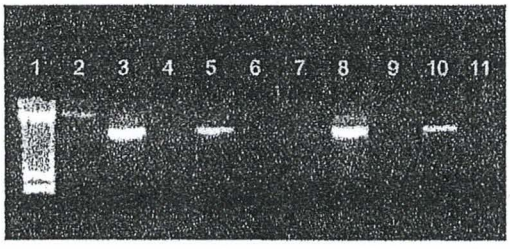
Agarose Gel Electrophoresis
2% Gel

Date: 7/18/11
Analyst: ALB
Case Number: URE1107, 2S04-114
Amp #: URE1107-Amp2m, 2S04-114-Amp58m

Gel Lot#: 071311CC
Running Buffer-1X TBE Lot # (Bode): 062411SAT
Ladder Lot# (Invitrogen): 867335
6X Gel Loading Dye Lot# (Bode): 062411ALB

Parameters
Voltage (V): 150
Run Time (mins): 25

Pipettes:
P-113 / P-103 / P-062



Lane	Sample
1	Ladder
2	URE1107-NEG2Am
3	URE1107-0055-R03a1.1m
4	URE1107-RB2.1m
5	URE1107-POS2m
6	URE1107-NEG2Bm
7	2S04-114-NEG58Am
8	2S04-114-123a1.2m
9	2S04-114-RB75.2m
10	2S04-114-POS58m
11	2S04-114-NEG58Bm

ALB 7/20/11

mtDNA Amplification

Amplification Worksheet (50µl Volume Reaction)

URE1107-AMP2m, 2S04-114-AMP58m

Primer Set	Primer Source	Forward	Primer Lot #	Reverse	Primer Lot #
CR	BODE	F15978	062311SLB	R563	022411SLB

Tray Coordinate	Sample	Master Mix (µl)	DNA (µl)	dH20 (µl)	Total (µl)	Primer Set
A1.2m	URE1107-NEG2Am	40	0	10	50	CR
A2.2m	URE1107-0055-R03a1.1m	40	3	7	50	CR
A3.2m	URE1107-RB2.1m	40	3	7	50	CR
A4.2m	URE1107-POS2m	40	1	9	50	CR
A5.2m	URE1107-NEG2Bm	40	0	10	50	CR
H1.58m	2S04-114-NEG58Am	40	0	10	50	CR
H2.58m	2S04-114-123a1.2m	40	3	7	50	CR
H3.58m	2S04-114-RB75.2m	40	3	7	50	CR
H4.58m	2S04-114-POS58m	40	1	9	50	CR
H5.58m	2S04-114-NEG58Bm	40	0	10	50	CR

TC#: 24 Program: CR Tube Witness: RL Date: 7/15/11

Analyst: ALB Date: 7/15/11

Case #: URE1107, 2S04-114

URE1107-Amp2m, 2S04-114-Amp58m

Reagent	Source	Lot #	Per Sample (µl)	# Rxns/ PS	Total Vol/PS (µl)
dH20	FISHER	097050	ALB 7/15/11 28 29	6	ALB 7/15/11 ~~108~~ 174
10X PCR Buffer	ABI	N05290	5	6	30
10 mM dNTP	ROCHE	11874920	1	6	6
20 mg/ml BSA	ROCHE	N/A	ALB 7/15/11 10	6	ALB 7/15/11 8 0
FWD Primer	BODE	See Primer Sets	2	6	12
RVS Primer	BODE	See Primer Sets	2	6	12
AmpliTaq Gold	ABI	N17041	1	6	6
POS HL-60 (1ng/uL)	BODE	071511ALB			

Additional Notes:

Pipettes Used:

For all volumes <2 uL	M-003, A-107
For all volumes between 2 and 10 uL	M-003, A-107
For all volumes between 11 and 100 uL	M-005
For all volumes between 101 and 1000 uL	M-008
For master mix	M-005
For water	M-008, A-107

Document: BTF00304 - ALL PS Amp Col (MITO WS)
Revision: 3
Effective: 6/13/2011 4:25:32 PM

ALB 7/20/11

mtDNA Gel Filtration, 3100 Sequencing & Capillary Load Sheet

Date: 7/8/2011
Analyst: ALB
3100 Seq Tray ID: 070811-ALB

	1	2	3	4	5	6	7	8	9	10	11	12
A	2S04-114-NEG55Am_F15989	2S04-114-123a1.1m_F15989	2S04-114-RB75.1m_F15989	2S04-114-POS55m_F15989	2S04-114-NEG55Bm_F15989							
B	2S04-114-NEG55Am_R16255	2S04-114-123a1.1m_R16255	2S04-114-RB75.1m_R16255	2S04-114-POS55m_R16255	2S04-114-NEG55Bm_R16255							
C	2S04-114-NEG55Am_F16190	2S04-114-123a1.1m_F16190	2S04-114-RB75.1m_F16190	2S04-114-POS55m_F16190	2S04-114-NEG55Bm_F16190							
D	2S04-114-NEG55Am_R16400	2S04-114-123a1.1m_R16400	2S04-114-RB75.1m_R16400	2S04-114-POS55m_R16400	2S04-114-NEG55Bm_R16400							
E	2S04-114-NEG55Am_F29	2S04-114-123a1.1m_F29	2S04-114-RB75.1m_F29	2S04-114-POS55m_F29	2S04-114-NEG55Bm_F29							
F	2S04-114-NEG55Am_R285	2S04-114-123a1.1m_R285	2S04-114-RB75.1m_R285	2S04-114-POS55m_R285	2S04-114-NEG55Bm_R285							
G	2S04-114-NEG55Am_R381	2S04-114-123a1.1m_R381	2S04-114-RB75.1m_R381	2S04-114-POS55m_R381	2S04-114-NEG55Bm_R381							
H	2S04-114-NEG55Am_R557	2S04-114-123a1.1m_R557	2S04-114-RB75.1m_R557	2S04-114-POS55m_R557	2S04-114-NEG55Bm_R557							

Gel Filtration Cartridge (Edge Biosystems): 158110

Hi-Di Formamide (AB): N/A
(20.0 ul per well)

3100 Machine ID:	3100-1 (*3100workstation*)
POP6 Lot # (AB):	1104168
1X 3100 Running Buffer (AB):	070811NL
Run Module:	RapidSeq36_POP6DefaultModule
Run #s:	2358-2360
Pipettor #s:	P-123

Document: BTF00318 - CE Load Sheet ROWS (MITO WS)
Revision: 2
Effective: Monday, March 17, 2008 11:12:01 AM

AB 7/26/11

8

Cycle Sequencing

Amplification Worksheet (20µl Volume Reaction)

2S04-114-SEQ31

Reagent	Reagent Lot #	Per Sample (µl)	# Rxns/ Primer	Total Vol/Primer (µl)
Big Dye (AB)	10110560M	2.0	6	12.0
5X Sequencing Buffer (AB)	1011129	6.0	6	36.0
Primer (Bode)	See Below	1.0	6	6.0

Reagent	Reagent Lot #	Per Positive Control (µl)
dH2O (Fisher)	103106	9.0
Big Dye (AB)	N/A	2.0
5X Sequencing Buffer (AB)	N/A	6.0
M13 Primer (AB)	N/A	1.0
pGEM (AB)	N/A	2.0

Primer Set (Bode)	Forward	Primer Lot #	Reverse	Primer Lot #
CR	F15989	D118111LNM	R16255	08241051LB
CR	F16190	D217115LB	R16400	D118111LNM
CR	F29	D118111LNM	R285	08241051LB
CR			R381	022411SLB
CR			R557	022411SLB

Tray Coordinate	Sample	Master Mix (µl)	Sample/dH2O (11 µl)	Primer
A1	2S04-114-NEG55Am_F15989	9	1/10	F15989
A2	2S04-114-123a1.1m_F15989	9	1/10	F15989
A3	2S04-114-RB75.1m_F15989	9	1/10	F15989
A4	2S04-114-POS55m_F15989	9	1/10	F15989
A5	2S04-114-NEG55Bm_F15989	9	1/10	F15989
B1	2S04-114-NEG55Am_R16255	9	1/10	R16255
B2	2S04-114-123a1.1m_R16255	9	1/10	R16255
B3	2S04-114-RB75.1m_R16255	9	1/10	R16255
B4	2S04-114-POS55m_R16255	9	1/10	R16255
B5	2S04-114-NEG55Bm_R16255	9	1/10	R16255
C1	2S04-114-NEG55Am_F16190	9	1/10	F16190
C2	2S04-114-123a1.1m_F16190	9	1/10	F16190
C3	2S04-114-RB75.1m_F16190	9	1/10	F16190
C4	2S04-114-POS55m_F16190	9	1/10	F16190
C5	2S04-114-NEG55Bm_F16190	9	1/10	F16190
D1	2S04-114-NEG55Am_R16400	9	1/10	R16400
D2	2S04-114-123a1.1m_R16400	9	1/10	R16400
D3	2S04-114-RB75.1m_R16400	9	1/10	R16400
D4	2S04-114-POS55m_R16400	9	1/10	R16400
D5	2S04-114-NEG55Bm_R16400	9	1/10	R16400
E1	2S04-114-NEG55Am_F29	9	1/10	F29
E2	2S04-114-123a1.1m_F29	9	1/10	F29
E3	2S04-114-RB75.1m_F29	9	1/10	F29
E4	2S04-114-POS55m_F29	9	1/10	F29
E5	2S04-114-NEG55Bm_F29	9	1/10	F29
F1	2S04-114-NEG55Am_R285	9	1/10	R285
F2	2S04-114-123a1.1m_R285	9	1/10	R285
F3	2S04-114-RB75.1m_R285	9	1/10	R285
F4	2S04-114-POS55m_R285	9	1/10	R285
F5	2S04-114-NEG55Bm_R285	9	1/10	R285
G1	2S04-114-NEG55Am_R381	9	1/10	R381
G2	2S04-114-123a1.1m_R381	9	1/10	R381
G3	2S04-114-RB75.1m_R381	9	1/10	R381
G4	2S04-114-POS55m_R381	9	1/10	R381
G5	2S04-114-NEG55Bm_R381	9	1/10	R381
H1	2S04-114-NEG55Am_R557	9	1/10	R557
H2	2S04-114-123a1.1m_R557	9	1/10	R557
H3	2S04-114-RB75.1m_R557	9	1/10	R557
H4	2S04-114-POS55m_R557	9	1/10	R557
H5	2S04-114-NEG55Bm_R557	9	1/10	R557

TC#: 20 Program#: CycSeq

Analyst: ALB Date: 7/8/11

Case Number(s): 2S04-114

Pipettors	Lot # ALB 7/8/11
<2 uL	P-0103
2 -10 uL	P-016
11 - 100 uL	P-070
101 - 1000 uL	N/A
master mix	P-016
water	P-103

Document: BTF00320 - Cycle Sequence Amp ROWS (MITO WS)

Revision: 3

Effective:

ALB 7/26/11

EXO-SAP-IT

EXO-SAP-IT Worksheet

(Add 33µL of sample to 6µL of ExoSap for a total volume of 39µL)

2S04-114-Amp55m **Date: 7/8/11** **Analyst: ALB**

	1	2	3	4	5	6	7	8	9	10	11	12
A	2S04-114-NEG55Am	2S04-114-123a1.1m	2S04-114-RB75.1m	2S04-114-POS55m	2S04-114-NEG55Bm							
B												
C												
D												
E												
F												
G												
H												

Reagent Lot #'s and Parameters:
EXO-SAP-IT Lot # (USB): 4132937
TC#: 26
Program: exo-sap

Pipettes Used:

For all volumes between 2 and 10 uL	P-113
For all volumes between 11 and 100 uL	P-060

Document: BTF00320 - EXO-SAP-IT (MITO WS)
Revision: 1
Effective: 6/13/2011 5:12:25 PM

ALB 7/8/11

6

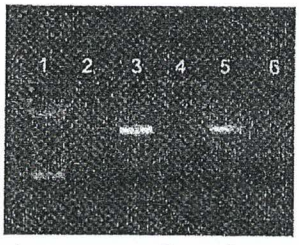
Agarose Gel Electrophoresis
2% Gel

Date: 7/8/11
Analyst: ALB
Case Number: 2S04-114
Amp #: Amp55m

Gel Lot#: 070611ARB
Running Buffer-1X TBE Lot # (Bode): 062411SAT
Ladder Lot# (Invitrogen): 867335
6X Gel Loading Dye Lot# (Bode): 062411ALB

Parameters
Voltage (V): 150
Run Time (mins): 25

Pipettes:
P-116 / P-036 / P-062



Lane	Sample
1	Ladder
2	2S04-114-NEG55Am
3	2S04-114-123a1.1m
4	2S04-114-RB75.1m
5	2S04-114-POS55m
6	2S04-114-NEG55Bm

ALB 7/26/11

mtDNA Amplification

Amplification Worksheet (50µl Volume Reaction)

2S04-114-AMP 55m

Primer Set	Primer Source	Forward	Primer Lot #	Reverse	Primer Lot #
CR	BODE	F15978	022411SCB	R563	022411SCB

Tray Coordinate	Sample	Master Mix (µl)	DNA (µl)	dH20 (µl)	Total (µl)	Primer Set
A1.55m	2S04-114-NEG55Am	40	0	10	50	CR
A2.55m	2S04-114-123a1.1m	40	3	7	50	CR
A3.55m	2S04-114-RB75.1m	40	3	7	50	CR
A4.55m	2S04-114-POS55m	40	1	9	50	CR
A5.55m	2S04-114-NEG55Bm	40	0	10	50	CR

TC#: 16 Program: CR Tube Witness: SMW Date: 7/7/11

Analyst: ALB Date: 7/7/11

Case #: 2S04-114

2S04-114-Amp55m

Reagent	Source	Lot #	Per Sample (µl)	# Rxns/ PS	Total Vol/PS (µl)
dH20	FISHER	097050	28	6	168
10X PCR Buffer	ABI	N05290	5	6	30
10 mM dNTP	ROCHE	11874970	1	6	6
20 mg/ml BSA	ROCHE	13465436	1	6	6
FWD Primer	BODE	See Primer Sets	2	6	12
RVS Primer	BODE	See Primer Sets	2	6	12
AmpliTaq Gold	ABI	N17041	1	6	6
POS HL-60 (1ng/uL)	BODE	070711ALB			

Additional Notes:

Pipettes Used:

For all volumes <2 uL	M-003, A-107
For all volumes between 2 and 10 uL	M-003, A-107
For all volumes between 11 and 100 uL	M-005
For all volumes between 101 and 1000 uL	M-008
For master mix	M-005
For water	M-008, A-107

Document: BTF00304 - ALL PS Amp Rows (MITO WS)
Revision: 3
Effective: 6/13/2011 4:26:40 PM

ALB 7/26/11

QIAGEN EZ1 DNA Investigator (Individual Samples)

Extraction Worksheet

2S04-114-RB75

ITEM	SOURCE	LOT NUMBER
G2	QIAGEN	136233683
dH_2O	FISHER	097050
Proteinase K (20mg/ml)	QIAGEN	136233014
MTL (for 500uL & 1500uL lysis only)	QIAGEN	N/A
Carrier RNA (1.00 ug/uL)	BODE	011211JJ
EZ1 Reagent Cartridge	QIAGEN	139279143

Tube #	Sample	EZ1 Robot #	*Tube Witness/Date
1	2S04-114-123a1	EZ03	NJB 070711
2	2S04-114-RB75	EZ03	NJB 070711

*see protocol for witness requirements.

Analyst: ALB, NJB (tech)
Cryobox Name: ALB

Date: 7/7/11
Case Number: 2S04-114

EZ1 Protocol: Forensic Trace
Protocol complete verified: NJB

Lysis Volume: 200uL
Elution Volume: 50uL

Notes:
NJB loaded samples onto EZ1 robot. ALB 7/27/11

Pipettes Used:

Volumes <2 uL	A-062
Volumes 2-10 uL	N/A
Volumes 11-100 uL	A-184
Volumes 101-1000 uL	A-183
Volumes 1001-2000 uL	N/A

Document: BTF00253 - EZ1 Individual Samples (CW WS)
Revision: 6
Effective: 7/20/2010 3:22:37 PM

ALB 7/26/11
NJB 071811

Inventory Case Notes

Bode Technology, Inc.

Case Number: 2S04-114 Date: 6/21/11, 6/29/11, 7/6/11 Analyst: ALB

OUTER PACKAGING: Manila envelope labeled in part "...KNOWN HEAD HAIR SAMPLES...E159 TERRY HOBBS...
INNER PACKAGING: Multiple manila envelopes wrapped in bubble wrap, of which only one, labeled in part "...E159 KHH Terry Hobbs", will be analyzed.
CONTAINS:

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	QUANTITY CONSUMED
2S04-114-90	8 hairs	• (6/21/11) Slide contains eight brownish hairs. Hairs were removed from slide using SafeClear (lot# 153285). Hairs were washed with ethanol (lot# ZR3007) and dH20 (lot# 097050) and then designated –E01 through –E08. Approximately 3cm was cut from one end of the hair designated –E05 and will be processed as 2S04-114-90-E05a1. The other hairs will not be processed at this time. • (7/6/11) Approximately 3cm was cut from one end of the hair designed –E01 and will be processed as 2S04-114-90-E01a1.	~3cm from –E05 ~3cm from –E01

OUTER PACKAGING: Manila envelope labeled in part "...K35 DRIED KNOWN BLOOD SAMPLE ROY MOORE..."
INNER PACKAGING: Multiple manila envelopes of which only one, labeled in part "...K35 Dried Blood Roy Moore", will be analyzed.
CONTAINS:

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	QUANTITY CONSUMED
2S04-114-115	One 2" x 2" piece of cloth	• (6/21/11) One piece of gauze-like cloth, measuring ~2" x 2". Reddish staining on just over half of the cloth. Writing on unstained portion reads: "93-05716 K35 R. Moore". A small ~2mm x 2mm section was cut from the reddish-stained area to be processed as 2S04-114-115a1. • (6/29/11) A second ~2mm x 2mm section was cut from the reddish-stained area to be processed as 2S04-114-115b1.	~4mm^2

NOTES: See photodocumentation for additional details on description of evidence.

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Inventory Case Notes

Bode Technology, Inc.

Case Number: 2S04-114 Date: 7/7/11 Analyst: ALB

OUTER PACKAGING: White envelope labeled in part "Mark Byers Cheek Swabs 6-18-09..."
CONTAINS:

BODE ITEM NAME	QUANTITY SUBMITTED	ANALYST NOTES	QUANTITY CONSUMED
2S04-114-123	3	• Three double-ended swabs with orange/brown stains on both ends of each swab. A small portion (~1/4) was cut from one of the swabs and placed in a tube labeled "2S04-114-123a1" for mtDNA processing.	¼ swab

NOTES:

See photodocumentation for additional details on description of evidence

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