

FLAG:

ANALYST WORKSHEET		1. PRODUCT Fresh Cantaloupe		2. SAMPLE NUMBER 713431	
3. SEALS <input checked="" type="checkbox"/> INTACT <input type="checkbox"/> NONE <input type="checkbox"/> BROKEN		4. DATE RECEIVED 09/11/11	5. RECEIVED FROM Paul Teitell		6. DISTRICT OR LAB DEN-DO
7. DESCRIPTION OF SAMPLE Two plastic bags officially sealed "713431 9/10/11 Kathy M. Mogen, CSO". Each bag containing five subs of sample consisting of two products per sub. Each sub identified "1-10" respectively. Note: Bag containing subs 1-5 left as 702B portion.					
8. NET CONTENTS	<input checked="" type="checkbox"/> NOT APPLICABLE	DECLARE/UNIT	See page 2.		9. LABELING 1 ORIGINAL(S) SUBMITTED 2 COPIES SUBMITTED <input type="checkbox"/> NONE
	<input type="checkbox"/> NOT DETERMINED	AMOUNT FOUND			
	UNITS EXAMINED	% OF DECLARED			
10. SUMMARY OF ANALYSIS					
CONTAINER: Collector's plastic bag.		<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <p style="margin: 0;">CR-AW</p> <p style="margin: 0; font-weight: bold; font-size: 1.2em;">RECEIVED</p> <p style="margin: 0;">SEP 19 2011</p> <p style="margin: 0;">FBI CB #297</p> </div>			
LABELING: See CR.					
CODE: See CR.					
PRODUCT: Semi large round produce with the appearance of cantaloupe.					
ANALYSIS: Individual analysis for <i>Listeria</i> spp.					
METHOD:		BAM online January 2001: <i>Listeria monocytogenes</i> – January 2003 Ch. 10 "Detection and Enumeration of <i>Listeria monocytogenes</i> ." Listeria - soak method.			
RESULTS: Refer to page 2.					
11. RESERVE SAMPLE One plastic bag officially sealed "713431 9/15 /2011 Julie Bentzoni, Analyst" containing five original subs un-analyzed in the condition of receipt. Identified "713431 9/11/11 JB". <i>Isolated retained in DEN-LAB for PFGE analysis.</i> Collector's Official Seals included in Worksheet as Attachment A.					
12.a. ANALYST SIGNATURE (Broke Seal <input checked="" type="checkbox"/> <i>Julie Bentzoni</i>			13. WORK-SHEET CHECK <input checked="" type="checkbox"/>		a. BY <i>R. W. [Signature]</i>
b. <i>Stephanie [Signature]</i> <i>Justin Potter</i>					b. DATE 2/13/11
c. <i>Amir Wajid</i>					14. DATE REPORTED 09/17/11
Denver District Laboratory Electronic Form 431 2006 Version 1.0		Route to: DEN-DO / PCB CLASS III DOMESTIC (7040)		PAGE 1 OF 8 PAGES ATTACHMENT(S): A, B-4, C1-6 <i>M. [Signature]</i> <i>Entered 9/19/11</i>	

AMW
09/17/2011

M. [Signature]
Entered 9/19/11

RESULTS:

Listeria monocytogenes detected in Subs 6B, 7, 8, 10, and 10B.

Listeria grayii detected in Sub 8B

No *Listeria* detected in Subs 6, 7B, 9, or 9B

Fresh Cantaloupe

713431

Sub #

Sub weight, including container (grams)

1

2

3

4

5

6

7

8

9

10

2185.4

2434.3

2254.0

2362.0

2270.0

Left untouched @ request of farm

JB 9.11.11

Julie Benton

Woduku

LISTERIA SPP. WORKSHEET: CONFIRMATION

COMP / SUB	Selective Agar		TSA-YE					Catalase					Gram Stain					Beta Hemolysis					Motility					Ident.	Summary		
	24HR STREAK: 9-12-11 JB		48HR STREAK: 9-13-11 JB		9-16-11 JB					9-16-11 JB					9-16-11 JB					9-16-11 JB					9-16-11 JB					9/17/11 JB	9/17/11 JB
	24 HR READ 1: 9-13-11 JB		48 HR READ 1: 9-14-11 JB																											<input type="checkbox"/> Vitek <input type="checkbox"/> API List.	
	24 HR READ 2: 9-14-11 JB		48 HR READ 2: 9-15-11 JB		A	B	C	D	E	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E	SEE PAGE OR ATTACH:	
6	24 Hr	Palcam	NT																												<input checked="" type="checkbox"/> No <i>Listeria</i> spp. Detected.
	48 Hr	Palcam	NT																												<input type="checkbox"/> <i>Listeria</i> detected.
		Chrom																													
6B	24 Hr	Palcam	NT																												<input type="checkbox"/> No <i>Listeria</i> spp. Detected.
	48 Hr	Palcam	TY		+	+				+	+				+	+				+	+				+	+				pg 8	<input checked="" type="checkbox"/> <i>Listeria</i> detected.
		Chrom																													<i>monocytogenes</i> detected.
7	24 Hr	Palcam	NT																												<input type="checkbox"/> No <i>Listeria</i> spp. detected.
	48 Hr	Palcam	TY		-	+	+			+	+	+			+	+	+			-	+	+			+	+	+			pg 8	<input checked="" type="checkbox"/> <i>Listeria</i> detected.
		Chrom																													<i>monocytogenes</i> detected.
7B	24 Hr	Palcam	NT																												<input checked="" type="checkbox"/> No <i>Listeria</i> spp. detected.
	48 Hr	Palcam	NT																												<input type="checkbox"/> <i>Listeria</i> detected.
		Chrom																													
8	24 Hr	Palcam	NT																												<input type="checkbox"/> No <i>Listeria</i> spp. detected.
	48 Hr	Palcam	TY		+	+	+			+	+	+			+	+	+			+	+	+			+	+	+			pg 8	<input checked="" type="checkbox"/> <i>Listeria</i> detected.
		Chrom																													<i>monocytogenes</i> detected.

TY = TYPICAL *LISTERIA SPP* GROWTH AT = ATYPICAL NG = NO GROWTH + = POSITIVE - = NEGATIVE N/A = NOT APPLICABLE
 + (GRAM STAIN) = GRAM POSITIVE RODS - (GRAM STAIN) = GRAM NEGATIVE RODS

GENERAL CONTINUATION SHEET

PRODUCT

Fresh Cantaloupe

SAMPLE NUMBER

713431

LISTERIA SPP. WORKSHEET: CONFIRMATION

COMP / SUB	Selective Agar		TSA-YE					Catalase					Gram Stain					Beta Hemolysis					Motility					Ident.	Summary				
	24HR STREAK:	48HR STREAK:	9-15-11 JB					9-15-11 JB					9-15-11 JB					9-15-11 JB					9-15-11 JB					9-16-11 JB	9-16-11 JB				
	9-13-11 JB	9-13-11 JB	9-16-11 JB					9-16-11 JB					9-16-11 JB					9-16-11 JB					9-16-11 JB						09/17/11 JV				
	24 HR READ 1:	48 HR READ 1:																															
9-13-11 JB	9-14-11 JB																																
24 HR READ 2:	48 HR READ 2:																																
9-14-11 JB	9-15-11 JB																																
				A	B	C	D	E	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E	SEE PAGE OR ATTACH:				
8B	24 Hr	Palcam	TY	+	-	-			+	+	+			+	+	+			-	-	-			-	-	-			B	<input type="checkbox"/> No <i>Listeria</i> spp. Detected.			
	48 Hr	Palcam	NT																										pg 8	<input checked="" type="checkbox"/> <i>Listeria</i>			
		Chrom																											09/17/11	gray detected.			
9	24 Hr	Palcam	NT																											<input checked="" type="checkbox"/> No <i>Listeria</i> spp. Detected.			
	48 Hr	Palcam	NT																											<input type="checkbox"/> <i>Listeria</i>			
		Chrom																												detected.			
9B	24 Hr	Palcam	NT																											<input checked="" type="checkbox"/> No <i>Listeria</i> spp. detected.			
	48 Hr	Palcam	NT																											<input type="checkbox"/> <i>Listeria</i>			
		Chrom																												detected.			
10	24 Hr	Palcam	NT																											<input type="checkbox"/> No <i>Listeria</i> spp. detected.			
	48 Hr	Palcam	TY	+	+				+	+				+	+				-	-				+	+				pg 8	<input checked="" type="checkbox"/> <i>Listeria</i>			
		Chrom																											Montreal	<i>monocytogenes</i> detected. 09/17/11			
10B	24 Hr	Palcam	TY	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B	<input type="checkbox"/> No <i>Listeria</i> spp. detected.			
	48 Hr	Palcam	TY	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	pg 8	<input checked="" type="checkbox"/> <i>Listeria</i>			
		Chrom																											09/17/11	<i>monocytogenes</i> detected.			

TY = TYPICAL *LISTERIA SPP* GROWTH AT = ATYPICAL NG = NO GROWTH += POSITIVE -- = NEGATIVE N/A = NOT APPLICABLE
 + (GRAM STAIN) = GRAM POSITIVE RODS - (GRAM STAIN) = GRAM NEGATIVE RODS

ANALYST(S)
 Julie Bonjour

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09/17/11

LISTERIA SPP. WORKSHEET: CONFIRMATION/DIRECT PLATES

ENRICHMENT	BLEB: 090911A4	Date/Initials 9-11-11 JB	Acriflavin: 080311	Date/Initials 9-11-11 JB/Jan
<input type="checkbox"/> N/A Refer to VIDAS sheet	Add antibiotics after 4 hr incubation		Cyclohexamide: 080311	
			Sodium Nalidixate: 091111	

COMP/SUB	Selective Agar		TSA-YE					Catalase					Gram Stain					Beta Hemolysis					Motility					Ident.	Summary																				
	24 HR STREAK:	48 HR STREAK:	9-15-11 JB					9-15-11 JB					9-15-11 JB					9-15-11 JB					9-15-11 JB					9-16-11 JB	09/17/11 JB																				
	9-12-11 JB	9-13-11 JB	9-16-11 JB					9-16-11 JB					9-16-11 JB					9-16-11 JB					9-16-11 JB																										
24 HR READ 1:	48 HR READ 1:																										<input type="checkbox"/> Vitek <input checked="" type="checkbox"/> API List. SEE PAGE OR ATTACH:																						
	24 HR READ 2:	48 HR READ 2:																																															
	24 Hr	48 Hr																																															
E. coli ATCC 8739	24 Hr	Palcam	NG																																								<input type="checkbox"/> No <i>Listeria</i> spp. detected.						
	48 Hr	Palcam	NG																																								<input type="checkbox"/> <i>Listeria</i> detected.						
		Chrom																																															
L. innocua ATCC 33090	24 Hr	Palcam	TY					+					+					+					+																				<input type="checkbox"/> Controls performed properly						
	48 Hr	Palcam	TY					+					+					+					+																									<input type="checkbox"/> Controls did not perform properly	
		Chrom																																															
L. mono ATCC 19115	48 Hr	Chrom																																															
		S. pyogenes ATCC 19615																																															
		S. aureus ATCC 25923																																															

TY = TYPICAL *LISTERIA SPP* GROWTH AT = ATYPICAL NG = NO GROWTH + = POSITIVE - = NEGATIVE N/A = NOT APPLICABLE
 + (GRAM STAIN) = GRAM POSITIVE RODS - (GRAM STAIN) = GRAM NEGATIVE RODS

BLEB: 50317	API Listeria: 1000281891	Poly O Type 1: 0349179	Microscope: 1700164
Palcam: 090911B2	Saline: 07311143	Poly O Type 4: 10911665	Pipettor #:
Chromogenic:	ZYM B: 1000278690	Poly O Type 1&4:	Pipettor validated date: <i>expired</i>
TSA-YE: 090911A2	TSB-YE: 090211C1	Vitek Card: NA	30 °C incubator: 0911853
Blood Agar: 1189510	Tryptose Broth: 091211A2	Vitek System: NA	35 °C incubator: <i>NA</i>
Motility: 091011C5	FA Buffer:	Vitek Saline: NA	0202080 (V) / 0271247 / 03151031 / 03094359

GENERAL CONTINUATION SHEET

PRODUCT

Fresh Cantaloupe

SAMPLE NUMBER

713431

api Listeria

18-24 hour incubation at 36°C +/- 2 °C

DIM	ESC	αMAN	DARL	XYL	RHA	MDG	RIB	G1P	TAG	βHEM	OXIDASE	Serology	DATE:
1	2	4	1	2	4	1	2	4	1			POLY O <input checked="" type="checkbox"/>	9.16.2011
-	+	+	+	-	+	+	-	-	-	+	-	TYPE 1 <input type="checkbox"/>	SUB #: <u>L. monocytogenes ATCC 19115</u>
												TYPE 4 <input checked="" type="checkbox"/>	IDENT: <u>L. monocytogenes</u> <u>See attachment B4</u>
6			5			1			0	P.aeruginosa ATCC 9027 Oxidase: +			
DIM	ESC	αMAN	DARL	XYL	RHA	MDG	RIB	G1P	TAG	βHEM	OXIDASE	Serology	DATE:
1	2	4	1	2	4	1	2	4	1			POLY O <input checked="" type="checkbox"/>	9.16.2011
+	+	+	+	-	+	+	-	-	-	-	-	TYPE 1 <input type="checkbox"/>	SUB #: <u>L. innocua ATCC 33090</u>
												TYPE 4 <input type="checkbox"/>	IDENT: <u>L. innocua</u> <u>See attachment B3</u>
7			5			1			0				
DIM	ESC	αMAN	DARL	XYL	RHA	MDG	RIB	G1P	TAG	βHEM	OXIDASE	Serology	DATE:
1	2	4	1	2	4	1	2	4	1			POLY O <input type="checkbox"/>	9.16.2011
+	+	+	-	-	+	+	+	-	-	-	-	TYPE 1 <input type="checkbox"/>	SUB #: <u>83</u>
												TYPE 4 <input type="checkbox"/>	IDENT: <u>Listeria grayi</u> <u>See attachment B1</u>
7			4			3			0				
DIM	ESC	αMAN	DARL	XYL	RHA	MDG	RIB	G1P	TAG	βHEM	OXIDASE	Serology	DATE:
1	2	4	1	2	4	1	2	4	1			POLY O <input checked="" type="checkbox"/>	9.16.2011
-	+	+	+	-	+	+	-	-	-	+	-	TYPE 1 <input checked="" type="checkbox"/>	SUB #: <u>103</u>
												TYPE 4 <input type="checkbox"/>	IDENT: <u>Listeria monocytogenes</u> <u>See attachment B5</u>
6			5			1			0				
DIM	ESC	αMAN	DARL	XYL	RHA	MDG	RIB	G1P	TAG	βHEM	OXIDASE	Serology	DATE:
1	2	4	1	2	4	1	2	4	1			POLY O <input type="checkbox"/>	
												TYPE 1 <input type="checkbox"/>	SUB #:
												TYPE 4 <input type="checkbox"/>	IDENT:
DIM	ESC	αMAN	DARL	XYL	RHA	MDG	RIB	G1P	TAG	βHEM	OXIDASE	Serology	DATE:
1	2	4	1	2	4	1	2	4	1			POLY O <input type="checkbox"/>	
												TYPE 1 <input type="checkbox"/>	SUB #:
												TYPE 4 <input type="checkbox"/>	IDENT:
DIM	ESC	αMAN	DARL	XYL	RHA	MDG	RIB	G1P	TAG	βHEM	OXIDASE	Serology	DATE:
1	2	4	1	2	4	1	2	4	1			POLY O <input type="checkbox"/>	
												TYPE 1 <input type="checkbox"/>	SUB #:
												TYPE 4 <input type="checkbox"/>	IDENT:
DIM	ESC	αMAN	DARL	XYL	RHA	MDG	RIB	G1P	TAG	βHEM	OXIDASE	Serology	DATE:
1	2	4	1	2	4	1	2	4	1			POLY O <input type="checkbox"/>	
												TYPE 1 <input type="checkbox"/>	SUB #:
												TYPE 4 <input type="checkbox"/>	IDENT:
DIM	ESC	αMAN	DARL	XYL	RHA	MDG	RIB	G1P	TAG	βHEM	OXIDASE	Serology	DATE:
1	2	4	1	2	4	1	2	4	1			POLY O <input type="checkbox"/>	
												TYPE 1 <input type="checkbox"/>	SUB #:
												TYPE 4 <input type="checkbox"/>	IDENT:

ANALYST(S)
Julie B...

api Listeria

18-24 hour incubation at 36°C +/- 2 °C

DIM	ESC	αMAN	DARL	XYL	RHA	MDG	RIB	G1P	TAG	βHEM	OXIDASE	Serology	
1	2	4	1	2	4	1	2	4	1			POLYO <input checked="" type="checkbox"/>	DATE: <u>09/17/11 JV</u>
-	+	+	+	-	+	+	-	-	-	+	-	TYPE1 <input checked="" type="checkbox"/>	SUB #: <u>L. monocytogenes ATCC 19115</u>
												TYPE4 <input checked="" type="checkbox"/>	IDENT: <u>L. mono</u>
6			5			1			0	P.aeruginosa ATCC 9027 Oxidase: <u>+</u>			
1	2	4	1	2	4	1	2	4	1			POLYO <input checked="" type="checkbox"/>	DATE: <u>09/17/11 JV</u>
+	+	+	+	-	+	+	-	-	-	-	-	TYPE1 <input checked="" type="checkbox"/>	SUB #: <u>L. innocua ATCC 33090</u>
												TYPE4 <input checked="" type="checkbox"/>	IDENT: <u>L. innocua</u>
7			5			1			0				
1	2	4	1	2	4	1	2	4	1			POLYO <input checked="" type="checkbox"/>	DATE: <u>09/17/11 JV</u>
-	+	+	+	-	+	+	-	-	-	+	-	TYPE1 <input checked="" type="checkbox"/>	SUB #: <u>713431-6B ISOB</u>
												TYPE4 <input checked="" type="checkbox"/>	IDENT: <u>L. mono</u>
6			5			1			0				
1	2	4	1	2	4	1	2	4	1			POLYO <input checked="" type="checkbox"/>	DATE: <u>09/17/11 JV</u>
-	+	+	+	-	+	+	-	-	-	+	-	TYPE1 <input checked="" type="checkbox"/>	SUB #: <u>713431-7 ISOB</u>
												TYPE4 <input checked="" type="checkbox"/>	IDENT: <u>L. mono</u>
6			5			1			0				
1	2	4	1	2	4	1	2	4	1			POLYO <input checked="" type="checkbox"/>	DATE: <u>09/17/11 JV</u>
-	+	+	+	-	+	+	-	-	-	+	-	TYPE1 <input checked="" type="checkbox"/>	SUB #: <u>713431-8 ISOB</u>
												TYPE4 <input checked="" type="checkbox"/>	IDENT: <u>L. mono</u>
6			5			1			0				
1	2	4	1	2	4	1	2	4	1			POLYO <input checked="" type="checkbox"/>	DATE: <u>09/17/11 JV</u>
-	+	+	+	-	+	+	-	-	-	+	-	TYPE1 <input checked="" type="checkbox"/>	SUB #: <u>713431-10 ISOB</u>
												TYPE4 <input checked="" type="checkbox"/>	IDENT: <u>L. mono</u>
6			5			1			0				
1	2	4	1	2	4	1	2	4	1			POLYO <input type="checkbox"/>	DATE: _____
												TYPE1 <input type="checkbox"/>	SUB #: _____
												TYPE4 <input type="checkbox"/>	IDENT: _____
1	2	4	1	2	4	1	2	4	1			POLYO <input type="checkbox"/>	DATE: _____
												TYPE1 <input type="checkbox"/>	SUB #: _____
												TYPE4 <input type="checkbox"/>	IDENT: _____

ANALYST(S) Janial Agel

FORM FDA 431a (2010) Version 1.0

FLAG:

ANALYST WORKSHEET		1. PRODUCT <i>Listeria Isolate(s)</i>		2. SAMPLE NUMBER 713431	
3. SEALS <input type="checkbox"/> INTACT <input checked="" type="checkbox"/> NONE <input type="checkbox"/> BROKEN		4. DATE RECEIVED 09/15-16/2011	5. RECEIVED FROM Julie L. Bentzoni		6. DISTRICT OR LAB DEN-DO
7. DESCRIPTION OF SAMPLE Five plates each identified "713431 10B E", "713431 Sub 6B B", "713431 Sub 7 B", "713431 Sub 8 B", and "713431 Sub 10 B".					
8. NET CON-TENTS	<input checked="" type="checkbox"/> NOT APPLICABLE	DECLARE/UNIT	9. LABEL-ING		ORIGINAL(S) SUBMITTED
	<input type="checkbox"/> NOT DETERMINED	AMOUNT FOUND			COPIES SUBMITTED
	UNITS EXAMINED	% OF DECLARED			<input checked="" type="checkbox"/> NONE
10. SUMMARY OF ANALYSIS					
CONTAINER: Plastic Petri dish.					
LABELING: None.					
CODE: None.					
PRODUCT: <i>Listeria isolate(s)</i> .					
ANALYSIS: Pulsed-field gel electrophoresis.					
METHOD: CDC PFGE method (code PNL04): "Standard Operating Procedure for PulseNet PFGE of <i>Listeria monocytogenes</i> ", PNL04, Effective date 10/30/2008". Plugs were made in disposable molds, lysed for 2 hours, washed 6 times for 15 minutes each (2x with water, 4x with TE buffer), and restricted for 60 minutes with <i>Asc I</i> and <i>Apa I</i> .					
RESULTS: See reverse of page 1 and page 2. Electronic tiffs FDN11074 and FDN11075, submitted to CFSAN.					
Quality control data maintained in the Denver Laboratory.					
11. RESERVE SAMPLE Five freezer vials each identified "713413 Sub 10B Iso E 9-15-11 TV", "713431 Sub 6B Iso B 9/1911 TV", "713431 7 Iso B 9/1911 TV", "713431 8 Iso B 9/19/11 TV", and "713431 Sub 10 Iso A 9/19/11 TV" containing the frozen isolate(s) in BHI Broth with 20% glycerol.					
12-a. ANALYST SIGNATURE (Broke Seal <input type="checkbox"/>) <i>Tania Vogel</i>		13. WORK-SHEET CHECK	a. BY <i>[Signature]</i>		
b. <i>[Signature]</i> (SHAUNA M. MADSON)			b. DATE 9/22/11		
c.		14. DATE REPORTED 09/21/11			
Denver District Laboratory Electronic Form 431 2006 Version 1.0		Route to: <i>Den-Do/DCB</i>		PAGE 1 OF 2 PAGES	
		<i>Class IV Domestic</i>		ATTACHMENT(S):	

CB-DO
RECEIVED
SEP 23 2011
Full CB #297

En 400 d m
9/23/11

FDA PFGE TIFF Submission Worksheet

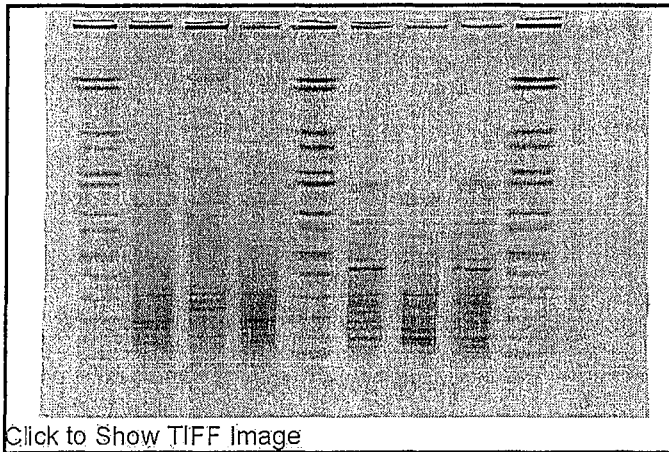


Gel Name TIFF Submission Date

Organism Gel Run Date

Data Lane	Description	Enzyme	FACTS ID	Comp/Sub	Isolate	Other ID
1	Global Standard	Xbal				
2		Ascl	713432	SUB 33	C	
3		Ascl	713432	SUB 34	C	
4		Ascl	713431	SUB 10B	E	
5	Global Standard	Xbal				
6		Apal	713432	SUB 33	C	
7		Apal	713432	SUB 34	C	
8		Apal	713431	SUB 10B	E	
9	Global Standard	Xbal				
10						
11						
12						
13						
14						
15						

- Gel contains outbreak-related samples
- Gel contains investigation-related samples
- If boxes above are checked, please provide contact names for results reporting in comments section below.



Click to Show TIFF Image

Comments

CHEF Mapper, 18h
Fermentas enzymes

ANALYST(S) *Dania Vogel* *Back of*

PAGE 1 OF 2 PAGES

FDA PFGE TIFF Submission Worksheet

Print Form

Gel Name: FDN11075

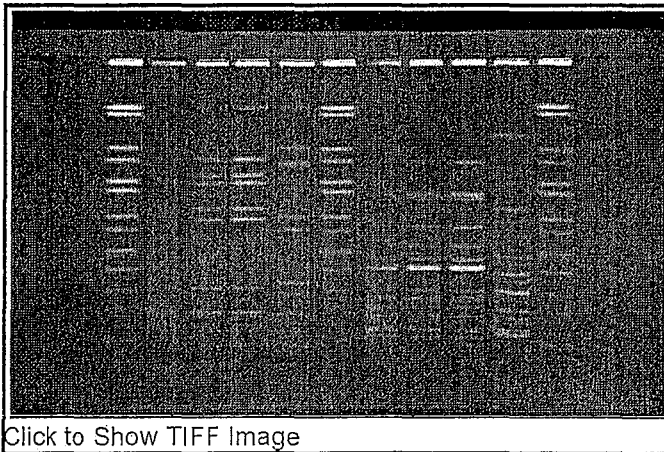
TIFF Submission Date: 2011-09-18

Organism: *Listeria*

Gel Run Date: 2011-09-16

Data Lane	Description	Enzyme	FACTS ID	Comp/Sub	Isolate	Other ID
1	Global Standard	XbaI				
2		AscI	713431	6B	B	
3		AscI	713431	7	B	
4		AscI	713431	8	B	
5		AscI	713431	10	B	
6	Global Standard	XbaI				
7		ApaI	713431	6B	B	
8		ApaI	713431	7	B	
9		ApaI	713431	8	B	
10		ApaI	713431	10	B	
11	Global Standard	XbaI				
12						
13						
14						
15						

- Gel contains outbreak-related samples
 - Gel contains investigation-related samples
- If boxes above are checked, please provide contact names for results reporting in comments section below.



Click to Show TIFF Image

Comments

Chef DR-III
20hr
Fermentas

ANALYST(S)

Ania Vogel