

# **Chain of Custody**



**ATTACHMENT 4a  
Battelle Duxbury Operations  
Sample Receipt Form**

Project Number: 6487013-0002 Client: LONG ISLAND SOUND  
Received by: Jessica Fishy Date/Time Received: 1/22/07 11:30 AM  
No. of Shipping Containers 1

**SHIPMENT**

Method of Delivery:  Commercial Carrier (Air bill No. \_\_\_\_\_)  
 Hand Delivered  
 US Mail (RPS No. \_\_\_\_\_)

COC Forms:  Shipped with samples  No forms  
Cooler(s)\Box(es) were sealed with:  Tape  Custody Seals (Other specify)  
Were the seals intact for each shipping container?  Yes  No  NA  
If NO, see Sample Custody Corrective Action Form.

**SAMPLES**

Sample Labels:  Sample labels agree with COC forms  
 Discrepancies (see Sample Custody Corrective Action Form)\*

Container Seals:  Tape  Custody Seals (Other specify)  
 Seals intact for each shipping container  
 Seal broken (list impacted samples):

Condition of Samples:  Sample containers intact  
 Sample containers broken/leaking (see Sample Custody Corrective Action Form)\*

Temperature upon receipt (°C): 4° C Temperature blank used  Yes  No  
(Note: If temperature upon receipt differs from required conditions, list impacted samples):

Samples Acidified?  Yes  No  Unknown

Initial pH 5 - 9? (Y/N):  If no, individual sample adjustments on the Auxiliary Sample Receipt Form.

Total Residual Chlorine Present? (water) (Y/N):   
If yes, individual sample adjustments on the Auxiliary Sample Receipt Form.

Head Space <1% in samples for water VOC analysis  Yes  No  
Individual sample deviations listed below.

Sample Containers:  
Samples returned in PC-grade jars?  Yes  No  Unknown / Lot No. \_\_\_\_\_

Storage Location: HILLMAN House BDO IDs Assigned: V1119 - V1387, V1313 - V13 V1638  
with IMF 1/22/07

Holding Times:	Water-	Sediment-	Tissue-
		<u>1/22/03</u>	<u>1/22/03</u>

Additional Comments:  
Samples logged in by: [Signature] Date/Time: 1/23/07 5:00 PM



Internal Distribution

Jim Hatch  
Jessica Fahey  
Lisa Lefkowitz

Date: January 22, 2002

To: Sample Custodian

From: Stacy Abramson

Subject: Client Sample ID for LISS lobster samples

In order to distinguish the various matrices of lobster sample composites (i.e., muscle, hepatopancreas, and carapace) for the Long Island Sound Study, please modify the Client Sample ID by adding the following suffixes:

- M for muscle
- H for hepatopancreas
- C for carapace

Each composite type should be logged in with a unique Battelle log-in ID.

Thanks.

**ATTACHMENT 3**  
**Battelle Duxbury Operations**  
**Sample Custody Corrective Action Form**

Project Number 6487013-0003 Client LONG ISLAND SOUND

Description of Problem:		Explanation:
Client ID:*	Jars and C-O-C do not have matching IDs	the "0's" were changed to zero's in each id from V1119 -> V1377 ex. LISOSLOBRIL0C2-M - originally LISOSLOBRIL0C2-M - corrected
	Extra samples not listed on the C-O-C	
	Missing samples listed on the C-O-C	
	Either label or C-O-C cannot be verified	
	<input checked="" type="checkbox"/> ID's entered wrong	
Temperature and Preservation:	Receipt temperature outside of acceptability	
	Preservation discrepancy on C-O-C	
	Not documented as being compliant with the SOP	
VOA Analysis:	Water VOA samples >1% headspace or bubbles	
	No trip blank included	
Sample Container Integrity:	Sample Broken	
	Cap broken	
	Sample Leaking	
	Custody Seal broken	
Custody:*	Jars and C-O-C do not match for time/date	
	Samples received outside of holding time	
	Samples not relinquished from sender	
	Sample Collector not identified	
	Incomplete Sample Custody Forms	
Other:		

\* The C-O-C must reference this form for each sample issue

Project Manager and Laboratory Manager must be notified upon receipt of the samples when problems are identified

**Documentation of project manager notification:**

Sample Custodian: \_\_\_\_\_ Date: 3-5-02  
Laboratory Manager: \_\_\_\_\_ Date: 3-5-02  
Project Manager: \_\_\_\_\_ Date: 3-5-02  
Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Documentation of client notification (should be completed by project manager within 24 hrs):**

On 3/5/02 I contacted Internal Staff affected weekly mtg  
Date Name of client contact by client Name of client organization

Results of communication with client (Describe any corrective action directed by the client):

Date this form was received back to the custodian: \_\_\_\_\_

*all date reports will be updated.*



**CHAIN OF CUSTODY RECORD**

Client/Project Name: ACE/LLS Lobster Survey Project Location: Long Island Sound Analysis Requested: Muscle (tail + claw) hepatopancreas carapace (shell)

Project Number: 9000-184 Field Logbook No.:  Chain of Custody Tape No.:  Send Results/Report to: Deb McGrath / ENSR

Sampler: (Print Name) / Affiliation: Stephanie Kelly / ENSR  
 Signature: Stephanie Kelly

Field Sample No./ Identification	Date	Time	Grp	Comp	Sample Container (Size/Alt)	Sample Type (Liquid, Sludge, Etc.)	Preservative	Field Filtered	Lab I.D.	Remarks
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LS05NLSEAL002/7/3/00/1000				X	NA	Lobster	ice	NA	X	X	X	VII31 VII32 VII33	5 lobsters
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LS05NLSEAL003												VII34 VII35 VII36	
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LS05NLSEAL004												VII37 VII38 VII39	
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LS05NLSEAL005												VII40 VII41 VII42	
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LS05LOBR4L001		1200										VII43 VII44 VII45	
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LS05LOBR4L002												VII76 VII77 VII78	
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LS05LOBR4L003												VII79 VII80 VII81	
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LS05LOBR4L004												VII82 VII83 VII84	
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LS05LOBR4L005												VII85 VII86 VII87	
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LS05LOBR4L005												VII88 VII89 VII90	
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Relinquished by: (Print Name) Stephanie Kelly Date: 7/31/00 Time: 1730  
 Signature: Stephanie Kelly Received by: (Print Name) Keller J. Costa Date: 7/24/00 Time: 1730  
 Signature: Stephanie Kelly

Relinquished by: (Print Name) Elizabeth Romo Date: 7/22/02 Time: 9:35  
 Signature: Elizabeth Romo Received by: (Print Name) JAMES D. 1407211 Date: 1/22/02 Time: 11:50AM  
 Signature: James D. 1407211

Relinquished by: (Print Name) Patricia Roca Date:  Time:   
 Signature: Patricia Roca Received by: (Print Name)  Date:  Time:   
 Signature:

Signature:  Time:  Signature:  Time:

Analytical Laboratory (Destination): Woods Hole Group  
 Atn: Keller Costa  
 Dissected 7/3/00  
 Frozen 7/3/00 Serial No. 21103

# CHAIN OF CUSTODY RECORD



Client/Project Name: ACOE/LIS Lobsters Project Location: Long Island Sound Analysis Requested: Muscle (tail + claw), Shell (carapace), Hepatopancreas

Project Number: 9000-184 Field Logbook No.:                     

Sampler: (Print Name) / Affiliation: Don R Tracey / ENSR Chain of Custody Tape No.:                     

Signature: [Signature] Send Results/Report to: Beto McGrath / ENSR

Field Sample No. Identification	Date	Time	Grid	Comp	Sample Container (Size/Mark)	Sample Type (Liquid, Sludge, Etc.)	Preservative	Field Filtered	M	N	C	Lab ID	Remarks
LIS0510B31001	8-17	10:30	X	X	VIA	HISSUE	ICE	W/A	X	X	X	VII46 VII47 VII48	LOBSTERS
LIS0510B231002			X	X					X	X	X	VII4A VII50 VII51	
LIS0510B231003			X	X					X	X	X	VII52 VII53 VII54	
LIS0510B231004			X	X					X	X	X	VII55 VII56 VII57	
LIS0610B231005			X	X					X	X	X	VII58 VII59 VII60	

Field Requested by: (Print Name) Don R Tracey Date: 8/17/00 Time: 1520 Received by: (Print Name) [Signature] Date: 8/17/00 Time: 15:30

Signature: [Signature] Date: 1/22/02 Time:                      Received by: (Print Name) JAMES D. HARTZEL Date: 1/22/02 Time: 11:59am

Signature: [Signature] Date:                      Time:                      Received by: (Print Name)                      Date:                      Time:                     

Analytical Laboratory (Destination): WOODS HOLE GROUP

Serial No. 31106

Client/Project Name:

ACOE / LIS04 BENTHIC

Project Location:

LONG ISLAND SOUND

Project Number: 9000 184

Field Logbook No.: 0200A379

Chain of Custody Tape No.:

Sampler: (Print Name) / Affiliation:

Don Boyle / ENSR

Send Results/Report to:

DELO MCGRATH / ENSR

Field Sample No./ Identification	Date	Time	Grab	Comp	Sample Container (Size/Alt)	Sample Type (Liquid, Sludge, Etc.)	Preservative	Field Filtered	Lab I.D.	Remarks
LIS04NLSER4	7-11	0640	X	X	B03 GLASS	Chaperons	-20°C	N/A	V1267	1 bottle e 50g tissue
LIS04NLSER4	7-11	0640	X	X	B03 GLASS	Nephthys	"	"	V1268	1 bottle e 56g tissue
LIS04NLSER4	7-11	0640	X	X	B03 GLASS	Yoldia limicola	"	"	V1269	1 bottle e 16g tissue
LIS04NLSER4	7-11	0640	X	X	B03 GLASS	Nephthys	"	"	V1270	1 bottles e 110g tissue total
LIS04NLSER4	7-11	0640	X	X	B03 GLASS	Incisa	"	"	V1271	1 bottle
LIS04NLSER4	7-11	0640	X	X	B03 GLASS	Pterousa	"	"	V1272	1 bottle e 44.5g tissue
LIS04NLSER4	7-11	0640	X	X	B03 GLASS	Pinar	"	"	V1273	2 bottles e 63g tissue
LIS04NLSER4	7-11	0640	X	X	B03 GLASS	Nephthys	"	"	V1274	1 bottle
LIS04NLSER4	7-11	0640	X	X	B03 GLASS	Incisa	"	"	V1275	1 bottle
LIS04NLSER4	7-11	0640	X	X	B03 GLASS	Yoldia limicola	"	"	V1276	1 bottle

ISSUE

Relinquished by: (Print Name)  
Don Boyle

Date: 7/13/2000  
Time: 1210

Received by: (Print Name)  
Diane M. Jensen

Date: 7/13/2000  
Time: 1210

Analytical Laboratory (Destination):  
Woods Hole Group

Relinquished by: (Print Name)  
James D. Wartzel

Date: 1/22/02  
Time: 11:30 AM

Received by: (Print Name)  
ATW: HELDER COSTA

Date: 1/22/02  
Time: 11:30 AM

Analytical Laboratory (Destination):  
Raynham, MA

Relinquished by: (Print Name)  
James D. Wartzel

Date: 1/22/02  
Time: 11:30 AM

Received by: (Print Name)  
ATW: HELDER COSTA

Date: 1/22/02  
Time: 11:30 AM

Analytical Laboratory (Destination):  
Raynham, MA

Serial No. **31077**



CHAIN OF CUSTODY RECORD

Client/Project Name:

ACE/LIES Lobsters

Project Location:

Hudson Canyon

Project Number: 91000-184

Field Logbook No.:

Chain of Custody Tape No.:

Sampler (Print Name/Affiliation): Scott D. Olszewski; MARQUETTE FISHERIES

Send Results/Report to:

Dev Mc Grath/ENSR

Signature:

[Signature]

Field Sample No./ Identification	Date	Time	Grab	Comp	Sample Container (Size/Qty)	Sample Type (Liquid, Sludge, Etc.)	Preservative	Field Filtered	Analysis Requested	Lab ID	Remarks
LI55508B0001	8-5	1030	X	X	NA	lobster tissue	ice	NA	Tissue (Claw + tail)		
LI55508B0002			X	X					Hepatopancreas		
LI55508B0003			X	X					Ovary		
LI55508B0004			X	X							
LI55508B0005			X	X							
LI55508B0006			X	X							
LI55508B0007			X	X							
LI55508B0008			X	X							
LI55508B0009			X	X							
LI55508B0010			X	X							
LI55508B0011			X	X							
LI55508B0012			X	X							
LI55508B0013			X	X							
LI55508B0014			X	X							
LI55508B0015			X	X							
LI55508B0016			X	X							
LI55508B0017			X	X							
LI55508B0018			X	X							
LI55508B0019			X	X							
LI55508B0020			X	X							
LI55508B0021			X	X							
LI55508B0022			X	X							
LI55508B0023			X	X							
LI55508B0024			X	X							
LI55508B0025			X	X							
LI55508B0026			X	X							
LI55508B0027			X	X							
LI55508B0028			X	X							
LI55508B0029			X	X							
LI55508B0030			X	X							
LI55508B0031			X	X							
LI55508B0032			X	X							
LI55508B0033			X	X							
LI55508B0034			X	X							
LI55508B0035			X	X							
LI55508B0036			X	X							
LI55508B0037			X	X							
LI55508B0038			X	X							
LI55508B0039			X	X							
LI55508B0040			X	X							
LI55508B0041			X	X							
LI55508B0042			X	X							
LI55508B0043			X	X							
LI55508B0044			X	X							
LI55508B0045			X	X							
LI55508B0046			X	X							
LI55508B0047			X	X							
LI55508B0048			X	X							
LI55508B0049			X	X							
LI55508B0050			X	X							
LI55508B0051			X	X							
LI55508B0052			X	X							
LI55508B0053			X	X							
LI55508B0054			X	X							
LI55508B0055			X	X							
LI55508B0056			X	X							
LI55508B0057			X	X							
LI55508B0058			X	X							
LI55508B0059			X	X							
LI55508B0060			X	X							
LI55508B0061			X	X							
LI55508B0062			X	X							
LI55508B0063			X	X							
LI55508B0064			X	X							
LI55508B0065			X	X							
LI55508B0066			X	X							
LI55508B0067			X	X							
LI55508B0068			X	X							
LI55508B0069			X	X							
LI55508B0070			X	X							
LI55508B0071			X	X							
LI55508B0072			X	X							
LI55508B0073			X	X							
LI55508B0074			X	X							
LI55508B0075			X	X							
LI55508B0076			X	X							
LI55508B0077			X	X							
LI55508B0078			X	X							
LI55508B0079			X	X							
LI55508B0080			X	X							
LI55508B0081			X	X							
LI55508B0082			X	X							
LI55508B0083			X	X							
LI55508B0084			X	X							
LI55508B0085			X	X							
LI55508B0086			X	X							
LI55508B0087			X	X							
LI55508B0088			X	X							
LI55508B0089			X	X							
LI55508B0090			X	X							
LI55508B0091			X	X							
LI55508B0092			X	X							
LI55508B0093			X	X							
LI55508B0094			X	X							
LI55508B0095			X	X							
LI55508B0096			X	X							
LI55508B0097			X	X							
LI55508B0098			X	X							
LI55508B0099			X	X							
LI55508B0100			X	X							

Relinquished by: (Print Name)

Received by: (Print Name)

Analytical Laboratory (Destination):

Signature:

Signature:

Woods Hole Group

Relinquished by: (Print Name)

Received by: (Print Name)

Woods Hole Group

Signature:

Signature:

Woods Hole Group

Relinquished by: (Print Name)

Received by: (Print Name)

Woods Hole Group

Signature:

Signature:

Woods Hole Group

Signature:

Signature:

Woods Hole Group

Serial No. - 31099



CHAIN OF CUSTODY RECORD

Client/Project Name: ACCOE/LTS Lobster Survey

Project Location: Long Island Sound

Analysis Requested: MUSCLE (tail+claw), CARAPACE (shell)

Project Number: 9000 - 184

Field Logbook No.:

Sampler: (Print Name)/Affiliation: Jean Tierney/ENSR

Chain of Custody Tape No.:

Signature: Jean Tierney

Send Results/Report to: Deb McGrath/ENSR

Field Sample No. / Date

Time

Grab

Comp

Sample Container (Stow/Alt)

Sample Type (Liquid, Sludge, Etc.)

Preservative

Field Filtered

Lab ID

Remarks

LTS0502BRACK1 7-31 0900 X X NA Lobster ice N/A X X X

LTS0502BRACK2 7-31 0900 X X NA NA NA X X X

LTS0502BRACK3 7-31 0900 X X NA NA NA X X X

LTS0502BRACK4 7-31 0900 X X NA NA NA X X X

LTS0502BRACK5 7-31 0900 X X NA NA NA X X X

Relinquished by: (Print Name) Joan K. Tierney

Date: 7/31/00 Time: 1500

Received by: (Print Name) Stephanie Kelly

Date: 7/31/00 Time: 1500

Analytical Laboratory (Destination): Woods Hole Group

Relinquished by: (Print Name) Stephanie Kelly

Date: 7/31/00 Time: 1730

Received by: (Print Name) Helder Costa

Date: 7/31/00 Time: 1730

Analytical Laboratory (Destination): ATTD: Helder Costa

Relinquished by: (Print Name) Elizabeth Parke

Date: 7/31/00 Time: 9:35

Received by: (Print Name) James D. Martz

Date: 1/22/02 Time: 11:50AM

Analytical Laboratory (Destination): Dissected 7/31/00 Frozen 7/31/00

Serial No. 31097



# CHAIN OF CUSTODY RECORD

Client/Project Name:

ACOE / LIS Lobster Survey

Project Location:

LONG ISLAND SOUND

Analysis Requested

Muscle (tail meat)  
Hepatopancreas  
Shell (carapace)

Project Number: 9403-007

Field Logbook No.: DISCOR417

Sampler: (Print Name) / Institution:

John H. Teracy / ENSR

Send Results/Report to:

DEO Mc Grath / ENSR

Field Sample No. Identification

Date

Time

Grab Comp

Sample Container (Screwcap)

Sample Type (Liquid, Sludge, Etc.)

Preservative

Field Filtered

Lab ID

Remarks

LIS0500821001 8-1 0900 X X

N/A

Lobster

ice

N/A

X X X X

V191 V192 V193

4 lobsters

LIS0500821002 8-1 0900 X X

N/A

Lobster

ice

N/A

X X X X

V194 V195 V196

4 lobsters

LIS0500821003 8-1 0900 X X

N/A

Lobster

ice

N/A

X X X X

V197 V198 V199

3 lobsters

[Diagonal line across the table]											
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Relinquished by: (Print Name)

John H. Teracy

Date: 8/1/02

Time: 8/1/02

Received by: (Print Name) K. Bates

Signature: K. Bates

Date: 8/1/02

Time: 13:30

Analytical Laboratory (Destination):

Woods Hole Group

Relinquished by: (Print Name)

Elizabeth P. Pina

Date: 10/1/02

Time: 9:46

Received by: (Print Name)

Signature: James D. Hartzel

Date: 1/22/02

Time: 11:30am

Relinquished by: (Print Name)

Gate Potts

Date:

Received by: (Print Name)

Date:

Signature:

Time:

Signature:

Time:

Serial No.

31096



# CHAIN OF CUSTODY RECORD

Client/Project Name: **AGCS/LITS LABORATORY**

Project Location: **Long Island Sound**

Analysis Requested

Project Number: **7000 184**

Field Logbook No.:

Sampler: (Print Name) / Address: **Dean Tracey/ENSR**

Chain of Custody Tape No.:

Signature: *Dean Tracey*

Send Results/Report to: **Deanna McGrath/ENSR**

Field Sample No./ Identification	Date	Time	Grab	Comp	Sample Container (Size/Mark)	Sample Type (Liquid, Sludge, Etc.)	Preservative	Field Filtered	M	H	C	Lab ID.	Remarks
8-7	8/7	1100	X	X	N/A	Lobster tissue	ice	N/A	X	X	X	V1200 V1201 V1202	
15502030221026		1100	X	X				N/A	X	X	X	V1203 V1204 V1205	

Relinquished by: (Print Name)	Date:	Time:	Received by: (Print Name)	Date:	Time:	Analytical Laboratory (Destination):
<i>Dean Tracey</i>	8-7-00	1640	<i>Dianne M. Jarvis</i>	8/7/2000	1640	Analytical Laboratory (Destination): <b>AGCS/LITS LABORATORY</b>
<i>Elizabeth Roth</i>	8/7/00	1640	<i>James D. Harz</i>	8/7/2000	11:30am	
<i>Chalra Porta</i>	8/7/00	9:46	<i>James D. Harz</i>	8/7/2000	11:30am	

Serial No. **31095**



CHAIN OF CUSTODY RECORD

Client/Project Name: ACCOE / LITS

Project Location: LONG ISLAND SOUND

Analysis Requested

Project Number: 9000-184

Field Logbook No.:

Chain of Custody Tape No.:

Sampler: (Print Name) / Affiliation: JOAN TRACEY / ENSR

Signature: JOAN TRACEY

Send Results/Report to: DEDD MCGRATH

MUSCLE (TAIL+HEAD)  
HEPATOPANCREAS  
SHELL

Field Sample No./ Identification	Date	Time	Grab	Comp	Sample Container (Seawater)	Sample Type (Liquor, Sludge, Etc.)	Preservative	Field Filtered	Lab ID	Remarks
LIS05WLANFIELD1	7-26	1030	X	X	N/A	5 lobster tissue	ice	N/A	V1206 V1207 V1208	
LIS05WLANFIELD2			X	X		"		X	V1209 V1210 V1211	
LIS05WLANFIELD3			X	X		"		X	V1212 V1213 V1214	
LIS05WLANFIELD4			X	X		"		X	V1215 V1216 V1217	
LIS05WLANFIELD5			X	X		"		X	V1218 V1219 V1220	
LIS0520BRANWELL		1130	X	X	N/A	2 lobster tissue	ice	X	V1221 V1222 V1223	DISSECTED and FROZEN ON 7/26/02

Relinquished by: (Print Name) JOAN TRACEY

Signature: JOAN TRACEY

Date: 7/26/00

Time: 1045

Received by: (Print Name) DANIEL J. JOYCE

Signature: DANIEL J. JOYCE

Date: 7/26/2000

Time: 1045

Analytical Laboratory (Destination): Woods Hole Gear

Relinquished by: (Print Name) ELIZABETH RYAN

Signature: ELIZABETH RYAN

Date: 7/23/02

Time: 9:35

Received by: (Print Name) JAMES P. HARTZ

Signature: JAMES P. HARTZ

Date: 7/23/02

Time: 11:54 AM

Relinquished by: (Print Name)

Signature:

Date:

Time:

Received by: (Print Name)

Signature:

Date:

Time:

Serial No. 31105

Client/Project Name: ACOE/LIS Lobster Survey Project Location: Long Island Sound Analysis Requested: Muscle (tail+claw), Shell (carapace), hepatopancreas

Project Number: 9000-184 Field Logbook No.:          Chain of Custody Tape No.:          Send Results/Report to: Dev McGeehan/ENSR

Sampler: (Print Name) / Affiliation: Joan K Tracy Signature: [Signature]

Field Sample No. / Identification	Date	Time	Grab	Comp	Sample Container (Size/Mat)	Sample Type (Liquid, Sludge, Etc.)	Preservative	Field Filtered	M	N	C	Lab ID	Remarks
LESS CLW310C1	8-22	0700	X	X	N/A	lobster tissue	ice	N/A	X	X	X	V1224, V1225, V1226	5 Lobsters
LESS CLW310C2			X	X					X	X	X	V1227, V1228, V1229	
LESS CLW310C3			X	X					X	X	X	V1230, V1231, V1232	
LESS CLW310C4			X	X					X	X	X	V1233, V1234, V1235	
LESS CLW310C5			X	X					X	X	X	V1236, V1237, V1238	

Relinquished by: (Print Name) Joan K Tracy Date: 8/22/00 Time: 1400  
 Signature: [Signature]  
 Received by: (Print Name) DIANE PATRICK Date: 8/22/2000 Time: 1357  
 Signature: [Signature]  
 Relinquished by: (Print Name) ETZABETH PATRICK Date: 1/22/02 Time: 11:50A  
 Signature: [Signature]  
 Received by: (Print Name) JAMES D HARTCH Date: 1/22/02 Time: 11:50A  
 Signature: [Signature]  
 Relinquished by: (Print Name) Challe Patric Date:          Time:           
 Signature:           
 Received by: (Print Name)          Date:          Time:           
 Signature:         

Analytical Laboratory (Destination): Woods Hole Spour  
 Serial No: 31102



# CHAIN OF CUSTODY RECORD

Client/Project Name:

ACOE/113 ~~FFH~~ Lobster

Project Location:

Long Island Sound

Analysis Requested

Project Number: 9000-184

Field Logbook No: 0900A449

Sampler: (Print Name) /Affiliation:

Stephanie Kelly/ENSR

Signature: Stephanie Kelly

Chain of Custody Tape No.:

Send Results/Report to: Deb McGrath

Field Sample No./ Identification

Date

Time

Grab Comp

Sample Container (Size/Mark)

Sample Type (Liquid, Sludge, Etc.)

Preservative

Field Filled

Muscle

Hepatopancreas

Carapace

Lab I.D.

Remarks

LN05CSK92LOC2

9/22/02

12:00

X

1055 LCR

ICE

NA

X

X

X

V1239

V1240

V1241

3

lobsters

LN05CSK92LOC3

X

X

X

V1242

V1243

V1244

3

lobsters

LN05CSB92LOC4

X

X

X

V1245

V1246

V1247

2

lobsters

LN05CSB92LOC5

X

X

X

V1251

V1252

V1253

2

lobsters

Relinquished by: (Print Name) Stephanie Kelly Signature: Stephanie Kelly		Date: 9/22/02	Received by: (Print Name) Michelle Susio Signature: Michelle Susio	Date: 9/22/02	Analysis Requested	Lab I.D.	Remarks
		Time: 1715	Signature: Michelle Susio	Time: 1715			
Relinquished by: (Print Name) Elizabeth Forta Signature: Elizabeth Forta		Date: 10/31/02	Received by: (Print Name) James D. Ward Signature: James D. Ward	Date: 1/22/02	Analysis Requested	Lab I.D.	Remarks
Relinquished by: (Print Name) Caleb Penn Signature: Caleb Penn		Time: 9:45	Signature: James D. Ward	Time: 11:20AM			

Analytical Laboratory (Destination):

Woods Hole Group

Signature:

Time:

Signature:

Time:

Time:

Serial No.:

31070



CHAIN OF CUSTODY RECORD

Client/Project Name:

ACOE/LIS Lobster

Project Location:

Long Island Sound

Project Number: 9000-184

Field Logbook No.: 0900A4499

Sampler: (Print Name) Affiliator:

Stephanie Kelly/ENSR

Chain of Custody Tape No.:

Send Results/Report to:

Deb McGrath

Signature:

Stephanie Kelly

Field Sample No./Identification	Date	Title	Grab Comp	Sample Container (Size/Mat)	Sample Type (Liquid, Sludge, Etc.)	Preservative	Field Filtered	Lab ID	Remarks
US05SB9210C2	10/10/03	0800	X	-	lobster	ice	NA	V1254V1255.V1256	2 lobster
<div style="border: 1px solid black; padding: 5px; transform: rotate(-45deg); display: inline-block;">           RECEIVED            LABORATORY            CAROLINA         </div>									
Analytical Laboratory (Destination): Wood Hole Group									

US05SB9210C2

10/10/03

0800

X

-

lobster

ice

NA

Field Filtered

Lab ID

Remarks

V1254V1255.V1256

2 lobster

Note:

Please combine samples

1) US05CSB9210C1  
 9/22/03 (3 lobster)

US05CSB9210C4 = 5 lobster  
 9/22/03 (2 lobster)

US05CSB9210C5 = 5 lobster  
 9/22/03 (2 lobster)

2) US05CSB9210C2 = 1 lobster  
 9/22/03 (3 lobster)

US05CSB9210C3 = 5 lobster  
 9/22/03 (2 lobster)

US05CSB9210C2

Relinquished by: (Print Name)

Stephanie Kelly

Date: 10/21/03

Time: 3:04

Received by: (Print Name)

Eddie Hutchinson

Date: 10/21/03

Time: 1:30 PM

Signature: Stephanie Kelly

Relinquished by: (Print Name)

Elizabeth Rika

Date: 11/21/03

Time: 9:45

Received by: (Print Name)

JAMES D. HANZL

Date: 1/22/02

Time: 11:30 AM

Wood Hole Group

Signature: Elizabeth Rika

Date: 11/21/03

Received by: (Print Name)

Date: 1/22/02

Signature:

Time:

Signature:

Time:

Serial No.

31071

### Chain of Custody

Ada Blythe  
PSC Analytical Service  
5555 North Service Road  
Burlington, Ontario  
Canada L7R5H7

Proj. No. **Long Island Sound**

SAMPLERS: Signature

ANALYSIS REQUESTED ->  
"NUMBER OF CONTAINERS"

DATE	TIME	BATTELLE ID	CLIENT ID	SAMPLE DESCRIPTION	PEST	PCB Dioxin	TPH FINGERPRINT	PAH	VOA	TBT	METALS	OTHER	ACIDIFIED	PRESERVED	Total Number of Containers
		V1159	L3505108E3L045-H	Lobster Hepatopancr	6574	X									120
		V1177	L3505108E4L041-H		6575										
		V1180	L3505108E4L042-H		6576										
		V1183	L3505108E4L043-H		6577										
		V1186	L3505108E4L044-H		6578										
		V1189	L3505108E4L045-H		6579										
		V1162	L3505109HCL041-H		6580										
		V1165	L3505109HCL042-H		6581										
		V1168	L3505109HCL043-H	USE FOR MDL VERIFICATION	6582										
		V1171	L3505109HCL044-H		6583										
		V1174	L3505109HCL045-H		6584										

Relinquished by: *Jessica M. Foley*

Date/Time: 2/15/02 4:30 pm

Received by: *[Signature]*

Date/Time: 02/16/02 2:00 pm

Comments: **X** BATTELLE SAMPLE # V1165 USED FOR MDL VERIFICATION - RSC ID'S 6570-3 inclusive



# Chain of Custody

Ada BYTNE  
 PSC Analytical Services  
 5555 North Service Road  
 Burlington, Ontario  
 Canada L7L 5H7

Proj. No \_\_\_\_\_  
 Prof. Name \_\_\_\_\_  
 Long Island Sound

SAMPLERS: Signature \_\_\_\_\_

ANALYSIS REQUESTED →  
 "NUMBER OF CONTAINERS"

DATE	TIME	BATTELLE ID	CLIENT ID	SAMPLE DESCRIPTION	USE FOR MS/MSD	PEST	PCB Dioxins	TPH FINGERPRINT	PAH	VOA	TBT	METALS	OTHER	ACIDIFIED	PRESERVED	Total Number of Containers
		V1207	LS05WMBD10C1-H	Hepato pancreas (lobster)	USE FOR MS/MSD	0997										1200
		V1210	LS05WMBD10C2-H			0997										
		V1213	LS05WMBD10C3-H			0997										
		V1216	LS05WMBD10C4-H			0997										
		V1219	LS05WMBD10C5-H			0997										
		V1225	LS05WMBD10C1-H			0997										
		V1228	LS05WMBD10C2-H			0997										
		V1231	LS05WMBD10C3-H			0997										
		V1234	LS05WMBD10C4-H			0997										
		V1237	LS05WMBD10C5-H			0997										
		V1240	LS05WMBD10C1-H			0997										
		V1243	LS05WMBD10C2-H			0997										
		V1845	LS05WMBD10C3-H			0997										
		V1249	LS05WMBD10C4-H			0997										
		V1252	LS05WMBD10C5-H			0997										
		V1132	LS05WMBD10C1-H			0997										
		V1135	LS05WMBD10C2-H			0997										

USE FOR Tmplicite

Relinquished by: *Janice M. Fisher*

Date/Time: 2/15/02 4:30 pm

Received by: *[Signature]*

Date/Time: 02/16/02 2:00 pm

Comments:

NAL

**TO BE COMPLETED BY PROJECT MANAGER (prior to arrival when possible)**

Matrix: \_\_\_\_\_ WP# W63003

Yes No  
  Navy-type Project (requires high-level sample tracking procedures)  
  Filter Samples: Amounts Entire sample Half of sample  
  Freeze dry sample(s) - samples will be weighed and placed in ultralow temp freezer (Lab# 130)  
  Special instructions: \_\_\_\_\_

Sample Preservation Instructions: \_\_\_\_\_

Date To Archive: \_\_\_\_\_ Date To Dispose: \_\_\_\_\_

**TO BE COMPLETED UPON SAMPLE ARRIVAL/LOG-IN**

Yes No N/A Indicate in Appropriate Box

Was a custody seal present?

Was the custody seal intact?

Was cooler(s) temperature(s) within acceptable range of 4±2°C 27 °C  
(if multiple coolers, note temp. of each) \_\_\_\_\_ °C

Was Project Manager notified of any custody/login discrepancies (cooler temp, sponsor codes, etc)?  
Comment/Remedy: \_\_\_\_\_

Were all chain of custody forms signed and dated?

Were samples filtered at MSL?

Sample condition(s):

Acceptable  Other (explain): \_\_\_\_\_

Container type:

Teflon poly  Glass  Spex  Other: \_\_\_\_\_

Notes: \_\_\_\_\_

Completed By: \_\_\_\_\_

Date/Time: \_\_\_\_\_

**SAMPLE PRESERVATION**

Sample(s) were preserved at MSL

Sample(s) were preserved upon arrival at MSL (noted on CoC / Sample / per PM Instruction)

Random pH checked for ~10% of samples (use dip paper) Sample IDs: \_\_\_\_\_

Complete pH check required for project (use pH meter and record on pH Record form)

If preservation necessary, record Acid Lot#

Type:  0.2% HNO3 Notes: \_\_\_\_\_

0.5% HCl (Hg samples) Notes: \_\_\_\_\_

Refrigerate/Freeze Notes: Deep freeze

Other Notes: \_\_\_\_\_

Completed By: [Signature]

Date/Time: 02/06/02 1135





... Putting Technology To Work

# Chain of Custody

Battelle  
1529 Sequim Bay Rd  
Sequim, WA 98382

Proj. No. \_\_\_\_\_  
 Proj. Name: LOUIS DRUM SOUND

SAMPLERS: Signature

*Jessica M. Jolley*

ANALYSIS REQUESTED →  
 "NUMBER OF CONTAINERS"

DATE	TIME	BATTELLE ID	CLIENT ID	SAMPLE DESCRIPTION	PEST	PCB	TRH FINGERPRINT	PAH	VOA	TBT	METALS	OTHER	ACIDIFIED	PRESERVED	TOLE NUMBER
2/15/02	17:57-63	V1158	41505108821002-H	lobster hepatopancreas							✓				
	64	V1151	41505108821002-H	USE FOR MS/MSD							✓				
	65	V1154	41505108821002-H								✓				
	66	V1222	41505108821002-H								✓				
	67	V1120	41505108821002-H								✓				
	68	V1123	41505108821002-H								✓				
	69	V1126	41505108821002-H								✓				
	70	V1129	41505108821002-H								✓				
	71	V1132	41505108821002-H								✓				
	72	V1135	41505108821002-H								✓				
	73	V1138	41505108821002-H								✓				
	74	V1201	41505108821002-H								✓				
	75	V1204	41505108821002-H								✓				
	76	V1147	41505108821002-H								✓				
	77	V1150	41505108821002-H								✓				
	78	V1153	41505108821002-H								✓				
	79	V1156	41505108821002-H								✓				

Relinquished by:

*Jessica M. Jolley*

Received by:

*[Signature]*

Date/Time

2/15/02 4:30 pm

Date/Time

02/10/02 12:05

Relinquished by:

Received by:

Date/Time

Date/Time

Comments:

ORIGINAL



# **Response to Comments**



**Response to Comments  
Lobster Hepatopancreas Draft Report (June 4, 2002)**

**Comments: Tom Fredette**

**Hepatopancreas Report**

Presuming all we pretty much asked from the contractor was a data dump then these reports are fine. I was hoping to see some summary tables and data analysis discussion (means, comparisons between stations, etc.), but perhaps that wasn't the task requested. If not, then I guess that will be done in the future?

**Response -** Data synthesis was not part of this task.

2. Page 7, Section 4.0. I didn't see any discussion of QC for the radionuclides nor lipids. Was there any QC?

**Response -** this section focused on QA/QC issues. However, a brief discussion of acceptable QC for radionuclides will be included.

3. Page 8, Section 4.3. You state here that the TBT data are considered unusable, yet on page 10, Section 5.3 you state no data were rejected and all the data are useable. It can't be both. This also seems inconsistent with your commentary on dioxin/furans and dioxin-like PCBs. Isn't there some question about their usability? It doesn't seem like Section 5.3 is really telling the true story.

**Response -** Section 5 of the report provides the results of the Tier III validation of one batch (Batch 1) of lobster hepatopancreas data for dioxin/furans and WHO congeners only. The butyltin data did not undergo the Tier 3 validation. In addition, the blank concentrations for dioxin/furans in the batch validated had all blank values <PQL so no corrective action was required. The PCB blank concentrations, however, were elevated above the PQL. The lab indicated that they could not re-analyze (the proposed corrective action) because there was no tissue left for re-extraction. In the meantime, we've discovered that the blank concentrations reported were most like high due to carryover from the OPR standard and after re-running all blanks have pretty much confirmed this. A formal corrective action plan is in place (see response below to Andy Beliveau Comment 2).

4. Page 8, Section 4.5, 2nd paragraph. I found the last two sentences confusing. What is it you are really trying to say. Are the data of any use because of it?

**Response -** see response below to Andy Beliveau Comment 2.

5. PAH tab. The first group of data in this section was pesticides and not PAHs. Perhaps just a collation error?

**Response -** Yes, this was a collation error and will be corrected in the final versions. The PAH tab should have gone just before the PAH QA/QC narrative.

**EPA New England comments for Report 2: Lobster Hepatopancreas Analytical Results - Jean Brochi**  
June 24, 2002

1.) Toxaphene: why were the detection limits so high in some of the samples. We usually see 50-100 ppb, but, in some samples we often see >300ppb

**Response -** The MDLs for Toxaphene are ~ 50 - 100 times higher than for individual Pesticides. Due to the very small sample mass for some of the hepatopancreas samples (< 5 grams) the MDL was elevated proportionally.

2.) The J values for some of the carcinogenic PAHs and acenaphthene (BJ) were not mentioned in the QC summary

**Response -** PAH data were flagged using QAPP QA/QC qualifiers (see page xxx in QAPP). The definition of the J flag based on the QAPP is "value detected above the MDL but below the RL". This does not require any additional discussion. Only dioxin/furan and WHO congeners from the first batch of hepatopancreas data underwent Tier 3 validation and received "validation" criteria, where "J" means indicates that value is approximate, generally due to some QA/QC exceedence. Likewise, the "B" flag for PAHs is defined in the QAPP as "sample concentration is less than 10 times the blank concentration". Blank contamination is discussed in the QA/QC narrative and in Section 4.2 of the report.

3.) Butyltins - Do I read the QC summary correctly that nearly all of the TBT data is unusable (tagged JR and UR) because of low recovery?

**Response -** Yes, the butyltin method is not very effective in high lipid matrices such as lobster hepatopancreas and results can be varied. However, surrogate recoveries for all hepatopancreas samples were consistently low (<20%). QC samples such as blanks and blank spikes (samples that did not contain the hepatopancreas matrix) showed good surrogate recoveries, indicating that it was not an instrumental or procedural problem; rather the low recoveries were due to matrix interferences. For this reason, data were flagged as unusable "R".

EPA New England comments for Report 2: Lobster Hepatopancreas Analytical  
Results - Andy Beliveau  
June 20, 2002

- 1.) The problems with the PAHs in the Pah blanks need to be explained in greater detail. The data users will still have problems with several of the carcinogenic results being nullified by the blank. Please use 5x to calculate the blank action level.

**Response** - Variable background levels, especially at the low levels we are looking at, are often observed. The action level (10x blank concentration) used to flag sample results was taken from the QAPP (see worksheet 9a "Data Reporting Qualifiers - Chemistry). While I agree that an action limit of "5x" is probably more realistic, the QAPP specified an action limit of "10x". PAH data could be reflagged to reflect an action limit of "5x" blank concentration; and would be noted as a deviation from the QAPP. To be consistent, this should be done for all matrices.

- 2.) Blanks in the PCB results. Making a statement like "Blanks may not be representative of background concentrations" begs the contractor to do some kind of corrective action. There was plenty of material to rerun the blanks. No extra sample is needed. WE understand that the blanks are being rerun but the samples( LCSs) previously run before the blanks are not being run. More info about the carry over issue needs to be placed in this package as well. This reviewer's big issue is that we need to discern the sample concentrations versus the background reference concentrations.

**Response** - Sample concentrations in many cases were similar to or lower than the levels found in the associated procedural blanks (PBs), leading to the conclusion that the blank contamination observed in the PBs was a results of carryover from running the PB "immediately" following the "ongoing precision and recovery (OPR) standard as required by the method, rather than a general laboratory contamination issue. All PBs have been re-analyzed (for both PCBs and dioxin/furans) with a solvent blank run prior to the PB. Target analyte concentrations for all PB re-runs were lower, in some cases by an order of magnitude. Selected sample extracts from each batch are also being re-run to confirm that sample concentrations were not affected by the carryover issue. Results for those analyses will be provided by July 8, 2002 and corrective action will be formalized in a memo to all participating agencies. Details of the standards and the way the QC and sample extracts are run relative to one another will be included in this memo.

- 3.) The blanks do not appear to have a major effect on the dioxin and congener PCB result except for PCB 169 which is the second most toxic congener. The lab should know that #169 does co-elute with #190 on some columns and to isolate by itself there may be the need to perform a carbon/silica gel clean-up to get the correct result. EPA knows that congener #169 makes up very little (low ppm range of a pure Aroclor) of

the total PCB. Other congeners are in the percent range thus a single dilution of the sample to put it on scale may dilute out the #169 peak

**Response -**

The column that the laboratory uses (SPB-Octyl) does separate all 209 congeners except 156/157. If you look at our raw data in the data packages, you will see that 169 and 190 are reported separately. Also, the lab uses a silica gel/fluorosil cleanup for hi-res PCBs. The PCB 169 values are very low in all samples (also, there are no congeners present in the percent level in any of the samples), and ND in many. No dilutions were performed on any of the hepatopancreas samples so no results should have been compromised by dilutions. When the procedural blanks were re-run, the blank concentration went way down and all sample values are now greater than 5x the blank concentration, therefore, "B" flags will most likely be removed from PCB 169 values.

- 4.) All PCB method blanks look like they are too high. Some samples with a high blank were not flagged consistently within the data groups. The LCSs had no flags.

**Response -** See response to Comment 2 above regarding blank contamination and the process for corrective action.

The LCS percent recoveries that are out of control limits are flagged. Other than the Tier 3 validated data, no other sample data are flagged for LCS exceedences.