M901376

ENSR CHAIN OF CUSTODY RECORD

Page 1 of 1

Client/Project Name: ACOE/LIS ~~Finfish~~ (SK) Lobster	Project Location: Long Island Sound
Project Number: 9000-184	Field Logbook No.: 0900A449
Sampler: (Print Name) /Affiliation: Stephanie Kelly / ENSR	Chain of Custody Tape No.:
Signature: Stephanie Kelly	Send Results/Report to: Deb McGrath

Analysis Requested: Muscle; Hepatopancreas; Carapace

Field Sample No./ Identification	Date	Time	Grab	Comp	Sample Container (Size/Mat'l)	Sample Type (Liquid, Sludge, Etc.)	Preservative	Field Filtered	M	H	C	Lab I.D.	Remarks
LISNCSB91LOC1	9/20/00	1230		X	—	lobster	ice	NA	X	X	X	V1239	V1240	V1241	3 lobsters
LISNCSB91LOC2					—				X	X	X	V1242	V1243	V1244	3 lobsters
LISNCSB91LOC3					—				X	X	X	V1245	V1246	V1247	3 lobsters
LISNCSB91LOC4					—				X	X	X	V1248	V1249	V1250	2 lobsters
LISNCSB91LOC5					—				X	X	X	V1251	V1252	V1253	2 lobsters

Relinquished by: (Print Name) Stephanie Kelly Signature: Stephanie Kelly	Date: 9/22/00 Time: 1715	Received by: (Print Name) Michelle Susko Signature: Michelle Susko	Date: 9/22/00 Time: 1715
Relinquished by: (Print Name) Elizabeth Porta Signature: Elizabeth Porta	Date: 1/22/02 Time: 9:45	Received by: (Print Name) JAMES D. HAZID Signature:	Date: 1/22/02 Time: 11:30AM
Relinquished by: (Print Name) Signature:	Date: Time:	Received by: (Print Name) Signature:	Date: Time:

Analytical Laboratory (Destination): Woods Hole Group

Serial No. 31070

M901376

ENSR

CHAIN OF CUSTODY RECORD

Client/Project Name: ACOE/LIS Lobster

Project Number: 9000-184

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

Signature: Stephanie Kelly

Project Location: Long Island Sound

Field Logbook No.: 0900A449

Chain of Custody Tape No.:

Send Results/Report to: Deb McGrath

Field Sample No./ Identification	Date	Time	Grab	Comp	Sample Container (Size/Mat'l)	Sample Type (Liquid, Sludge, Etc.)	Preservative	Field Filtered	Meat (M)	Hepatopancreas (H)	Carapace (C)	Lab I.D.	Remarks
LS05CSB92LOC2	10/2/00	0820		X	—	lobster	ice	NA	V1254	V1255	V1256	2 lobsters	
~~LIS~~													
Note:													
Please combine samples						1) LS05CSB92LOC1 9/22/00 (3 lobsters) + LS05CSB92LOC4 9/22/00 (2 lobsters) = 5 lobsters ⇒ LS05CSB92LOC1							
						2) LS05CSB92LOC2 9/22/00 (3 lobsters) + LS05CSB92LOC5 9/22/00 (2 lobsters) = 5 lobsters ⇒ LS05CSB92LOC2							

Relinquished by: (Print Name)	Date / Time	Received by: (Print Name)	Date / Time
Stephanie Kelly; Signature: Stephanie Kelly	Date: 10/2/00; Time: 1304	Edie Hutchinson; Signature: Edie Hutchinson	Date: 10/2/00; Time: 1304
Elizabeth Porta; Signature: Elizabeth Porta	Date: 1/22/02; Time: 9:45	James D. Hatch; Signature: [signature]	Date: 1/22/02; Time: 11:30am
Relinquished by: (Print Name); Signature:	Date: ; Time:	Received by: (Print Name); Signature:	Date: ; Time:

Analytical Laboratory (Destination): Wood Hole Group

Serial No. 31071

CHAIN OF CUSTODY RECORD

Client/Project Name: ACOE / LIS04 Benthic	**Project Location:** Long Island Sound
Project Number: 9000-184	**Field Logbook No.:** 0200A379
Sampler: (Print Name) /Affiliation: Don Boye / ENSR **Signature:**	**Chain of Custody Tape No.:** **Send Results/Report to:** Deb McGrath / ENSR

Analysis Requested: TISSUE

Field Sample No./ Identification	Date 2000	Time	Grab	Comp	Sample Container (Size/Mat'l)	Sample Type (Liquid, Sludge, Etc.)	Preservative	Field Filtered	TISSUE						Lab I.D.	Remarks
LIS04NLLRFC1	7-10	1920	X	X	8oz GLASS	Nephtys incisa	-20°C	N/A	X		11257				1 bottle	≈ 47g tissue
LIS04NLLRFC2	7-10	1920	X	X	8oz (3) GLASS	Pitar morrhuana	"	"	X		11258				3 bottles	≈ 89g tissue
LIS04NLLRFC3	7-10	1920	X	X	Foil / (2) bag	Mercenaria mercenaria	"	"	X		11259				2 individuals	297g gross 204g gross
LIS04NLLRFC4	7-10	1920	X	X	8oz GLASS	Diopatra cuprea	"	"	X		11260				1 bottle	≈ 14.6g tissue
LIS04NLLRFC5	7-10	1920	X	X	8oz GLASS	Phascolosoma albinis	"	"	X		11261				1 bottle	≈ 20.4g tissue
LIS04NLRLCC1	7-12	0530	X	X	8oz (2) GLASS	Pitar morrhuana	"	"	X		11262				2 bottles	collected on 7-11-00 Frozen on 7-12-00
LIS04NLRLCC2	7-12	0530	X	X	"	"	"	"	X		11263				2 bottles	"
LIS04NLRLCC3	7-12	0530	X	X	"	"	"	"	X		11264				2 bottles	"
LIS04NLSEAC1	7-11	0640	X	X	"	"	"	"	X		11265				2 bottles	≈ 52g tissue
LIS04NLSEAC2	7-11	0640	X	X	8 oz GLASS	Phascolosoma albinis	"	"	X		11266				1 bottle	≈ 29g tissue

Relinquished by: (Print Name) Don Boye **Signature:**	**Date:** 7/13/2000 **Time:** 1210	**Received by: (Print Name)** Dianne M Jones **Signature:**	**Date:** 7/13/2000 **Time:** 1210
Relinquished by: (Print Name) Elizabeth Potter **Signature:** Elizabeth Potter	**Date:** 1/22/02 **Time:** 9:30	**Received by: (Print Name)** JAMES D. WARD **Signature:**	**Date:** 1/22/02 **Time:** 11:30AM
Relinquished by: (Print Name) **Signature:**	**Date:** **Time:**	**Received by: (Print Name)** **Signature:**	**Date:** **Time:**

Analytical Laboratory (Destination):
Woods Hole Group
Raynham, MA
ATTN: Heider Costa

Serial No. 31076

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M901376

ENSR CHAIN OF CUSTODY RECORD

Page 3 of 3

Client/Project Name: ACOE/LIS04 BENTHIC	Project Location: Long Island Sound
Project Number: 9000 184	Field Logbook No.: 0200A379
Sampler: (Print Name) /Affiliation: Don Boye' /ENSR	Chain of Custody Tape No.:
Signature:	Send Results/Report to: DEB McGRATH /ENSR

Analysis Requested: Tissue

Field Sample No./ Identification	Date 2000	Time	Grab	Comp	Sample Container (Size/Mat'l)	Sample Type (Liquid, Sludge, Etc.)	Preservative	Field Filtered	Tissue						Lab I.D.	Remarks
LIS04CLFVPC4	7-12	0810	X	X	8oz GLASS	Pitar morrhuana	-20°C	NA	X		V1277				2 bottles	"
LIS04CLN93C1	7-12	0930	X	X	8oz GLASS	"	"	"	X		V1278				1 bottle	1 ≈ 118g TISSUE TOTAL
LIS04CLN93C2	7-12	0930	X	X	8oz GLASS	"	"	"	X		V1279				2 bottles	"
LIS04CLN93C3	7-12	0930	X	X	8oz GLASS	Nephtys incisa	"	"	X		V1280				1 bottle	1 ≈ 43.5g TISSUE
LIS04CLN93C4	7-12	0930	X	X	8oz GLASS	Anadara transversa	"	"	X		V1281				2 bottles	" ≈ 62g TISSUE

Relinquished by: (Print Name) Don Boye'	Date: 7/13/2000	Received by: (Print Name) Dianne M Jenack	Date: 7/13/2000
Signature:	Time: 1210	Signature:	Time: 1210
Relinquished by: (Print Name) ELIZABETH PORTER	Date: 1/22/02	Received by: (Print Name) JAMES D. WATCH	Date: 1/22/02
Signature: Elizabeth Porter	Time: 9:25	Signature:	Time: 11:30AM
Relinquished by: (Print Name)	Date:	Received by: (Print Name)	Date:
Signature:	Time:	Signature:	Time:

Analytical Laboratory (Destination):

Woods Hole Group
Raynham, MA
ATTN: HELDER COSTA

Serial No. 01078

M901376

ENSR

CHAIN OF CUSTODY RECORD

Page 1 of 2

Client/Project Name: ACOE/~~LIS~~ Benthic II

Project Number: 9000-184

Sampler: (Print Name) /Affiliation: Joan Tracey/ENSR

Signature: [signature]

Project Location: Long Island Sound

Field Logbook No.: 0200 A379

Chain of Custody Tape No.:

Send Results/Report to: Deb McGrath/ENSR

Analysis Requested

Field Sample No./ Identification	Date 2000	Time	Grab	Comp	Sample Container (Size/Mat'l)	Sample Type (Liquid, Sludge, Etc.)	Preservative	Field Filtered	Tissue							Lab I.D.	Remarks
LIS06NLLRFC1	8-29	1045	X	X	tin foil	Mercenaria mercenaria	-20°C	N/A	X		V1282						283 grams
LIS06NLLRFC2	8-29	1045	X	X	16oz glass	Pitar morrhuana	-20°C	N/A	X		V1283						250 grams
LIS06NLLRFC3	8-29	1045	X	X	8oz glass	Nephtys incisa	-20°C	N/A	X		V1284						51 grams
LIS06NLLRFC4	8-30	0335	X	X	8oz glass	Nephtys incisa	-20°C	N/A	X		V1285						51 grams
LIS06NLLRFC5	8-30	0335	X	X	16oz glass	Pitar morrhuana	-20°C	N/A	X		V1286						260 grams
MSMSD LIS06NLRLCC1	8-30	1015	X	X	3-16oz glass	Pitar morrhuana	-20°C	N/A	X		V1287					3 jars	1005 grams
LIS06NLRLCC2	8-30	1015	X	X	8oz glass	Nephtys incisa	-20°C	N/A	X		V1288						8 grams (partial sample)
LIS06NLSEAC1	8-30	1745	X	X	16oz glass	Pitar morrhuana	-20°C	N/A	X		V1289						245 grams
LIS06NLSEAC2	8-30	2345	X	X	16oz glass	Pitar morrhuana	-20°C	N/A	X		V1290						249 grams
LIS06NLSEAC3	8-30	2345	X	X	8oz glass	Nephtys incisa	-20°C	N/A	X		V1291						50 grams

Relinquished by	Date/Time	Received by	Date/Time
Relinquished by: (Print Name) Joan K. Tracey Signature: [signature]	Date: 9/1/00 Time: 0800	Received by: (Print Name) Pete Rump Signature: [signature]	Date: 9/1/00 Time: 8:15am
Relinquished by: (Print Name) Elizabeth Porta Signature: [signature]	Date: 1/22/02 Time: 9:30	Received by: (Print Name) JAMES D. HATCH Signature: [signature]	Date: 1/22/02 Time: 11:30am
Relinquished by: (Print Name) Signature:	Date: Time:	Received by: (Print Name) Signature:	Date: Time:

Analytical Laboratory (Destination): Woods Hole Group Raynham, MA

Serial No. 25480

M901376

ENSR CHAIN OF CUSTODY RECORD

Page 2 of 2

Client/Project Name: LIS Benthic II	Project Location: Long Island Sound
Project Number: 4000-184	Field Logbook No.: 0200A379
Sampler: (Print Name) /Affiliation: Joan K. Tracey/ENSR	Chain of Custody Tape No.:
Signature: J. K. Tracey	Send Results/Report to: Deb McGrath/ENSR

Analysis Requested: Issue

Field Sample No./ Identification	Date	Time	Grab	Comp	Sample Container (Size/Mat'l)	Sample Type (Liquid, Sludge, Etc.)	Preservative	Field Filtered			Lab I.D.					Remarks
LIS06CLREFC1	8/31	0611	X	X	8oz glass	Nephtys incisa	-20°C	N/A	X		V1292					50 grams
LIS06CLREFC2	8/31	1130	X	X	16oz Glass	Pitar morrhuana	-20°C	N/A	X		V1293					250 grams
LIS06CLREFC3	8/31	1505	X	X	16oz glass	Nephtys incisa	-20°C	N/A	X		V1294				MS/MSD	205 Grams
LIS06CLREFC4	8/31	1600	X	X	16oz glass	Pitar morrhuana	-20°C	N/A	X		V1295					251 grams
LIS06CLPVFC1	8/31	2300	X	X	16oz glass	Pitar morrhuana	-20°C	N/A	X		V1296					250 grams
LIS06CLPVFC2	9/31	2300	X	X	8oz glass	Nephtys incisa	-20°C	N/A	X		V1297					56 grams
LIS06CLPVFC3	9/1	0430	X	X	16oz glass	Pitar morrhuana	-20°C	N/A	X		V1298					260 grams
LIS06CLN93C1	9/1	0450	X	X	16oz glass	Pitar morrhuana	-20°C	N/A	X		V1299					276 grams
LIS06CLN93C2	9/1	0630	X	X	16 oz glass	Pitar morrhuana	-20°C	N/A	X		V1300					275 grams
LIS06CLN93C3	9/1	0630	X	X	16oz glass	Nephtys incisa	-20°C	N/A	X		V1301					50 grams
LIS06CLN93C4	9/1	0655	X	X	16oz glass	Nephtys incisa	-20°C	N/A	X		V1302					52 grams

Relinquished by: (Print Name) Joan K. Tracey	Date: 9/1/00	Received by: (Print Name) Peter Rhynas	Date: 9/1/00
Signature: J. K. Tracey	Time: 0800	Signature:	Time: 0845
Relinquished by: (Print Name) Elizabeth Porta	Date: 1/22/02	Received by: (Print Name) JAMES D. HAGIS	Date: 1/22/02
Signature: Elizabeth Porta	Time: 9:30	Signature:	Time: 11:30AM
Relinquished by: (Print Name)	Date:	Received by: (Print Name)	Date:
Signature:	Time:	Signature:	Time:

Analytical Laboratory (Destination): Woods Hole Group, Raynham, MA

Serial No. 1109

M901376

ENSR

CHAIN OF CUSTODY RECORD

Client/Project Name: ALOF / L.I. Sound

Project Number: 9000-184

Sampler: (Print Name) /Affiliation: T. Page

Signature: [signature]

Project Location: L.I. Sound

Field Logbook No.:

Chain of Custody Tape No.:

Send Results/Report to: ENSR, 35 Nagog Park, Acton, MA — Debbie McGrath

Analysis Requested: bio accumulation

Field Sample No./ Identification	Date	Time	Grab	Comp	Sample Container (Size/Mat'l)	Sample Type (Liquid, Sludge, Etc.)	Preservative	Field Filtered	bio accumulation						Lab I.D.	Remarks
CLIKW	2/19/00	2109		X	glass 8 oz	tissue	-20C	—	X		V1303					
CLIS-REF	2/19/00	2057		↓	↓	↓	↓	—	↓		V1304					
CS2KW	2/19/00	2059		↓	↓	↓	↓	—	↓		V1305					
WLWISH	2/19/00	0910		↓	↓	↓	↓	—	↓		V1306					
NLDS Seaworth	2/17/00	0736		↓	↓	↓	↓	—	↓		V1307					
NLWRF	2/17/00	2338		↓	↓	↓	↓	—	↓		V1308					
NLDS Sea	2/17/00	0736		↓	↓	↓	↓	—	↓		V1309					
NLRLC	2/17/00	1000		↓	↓	↓	↓	—	↓		V1310					
CSPF3	2/17/00	1503		↓	↓	↓	↓	—	↓		V1311					

Relinquished by: (Print Name)	Date/Time	Received by: (Print Name)	Date/Time
T. Page; Signature: [signature]	Date: 21 Feb 00; Time: 1411	H. Costa; Signature: [signature]	Date: 2/21/00; Time: 1411
Elizabeth Porta; Signature: Elizabeth Porta	Date: 1/22/02; Time: 9:30	James D. Ward; Signature: [signature]	Date: 1/22/02; Time: 11:30AM
Signature:	Date: Time:	Signature:	Date: Time:

Analytical Laboratory (Destination): Woods Hole Group

Cooler 4°C

Serial No. 23[illegible]1

M901376

ENSR

CHAIN OF CUSTODY RECORD

Page 1 of 1

Client/Project Name: ACOE/LIS Benthic II

Project Location: Long Island Sound

Project Number: 9000-184

Field Logbook No.: 0000A379

Sampler: (Print Name) /Affiliation: Isabelle P. Williams / ENSR

Chain of Custody Tape No.:

Signature: Isabelle P. Williams

Send Results/Report to: Deb McGrath / ENSR

Analysis Requested: Tissue

Field Sample No./ Identification	Date 2000	Time	Grab	Comp	Sample Container (Size/Mat'l)	Sample Type (Liquid, Sludge, Etc.)	Preservative	Field Filtered	Tissue						Lab I.D.	Remarks
LISDGNLSEA C4	9/1	2300	X	X	16oz glass	Nephtys InLisa	-20°C	N/A	X		01312					53 grams

Relinquished by: (Print Name) Isabelle P. Williams
Signature: Isabelle P. Williams
Date: 9/5/2000
Time: 1440

Received by: (Print Name) DIANNE M JANIK
Signature:
Date: 9/5/2000
Time: 1440

Relinquished by: (Print Name) Elizabeth Porta
Signature: Elizabeth Porta
Date: 1/22/02
Time: 9:25

Received by: (Print Name) JAMES D. WATCH
Signature:
Date: 1/22/02
Time: 11:30AM

Relinquished by: (Print Name)
Signature:
Date:
Time:

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

Analytical Laboratory (Destination):

Woods Hole Group
Raynham, MA

Serial No. 01101

M901376

ENSR CHAIN OF CUSTODY RECORD 14819

Page 1 of 2

Client/Project Name: EPA/ Long Island Sound	Project Location: Long Island Sound
Project Number: 9000-184	Field Logbook No.:
Sampler: (Print Name) /Affiliation: Isabelle P. Williams / ENSR Signature: Isabelle P. Williams	Chain of Custody Tape No.: 13506 / 14076 Send Results/Report to: Deb McGrath, ENSR, 35 Nagog Park, Acton, MA 01720

Analysis Requested: TOC

Field Sample No./ Identification	Date	Time	Grab	Comp	Sample Container (Size/Mat'l)	Sample Type (Liquid, Sludge, Etc.)	Preservative	Field Filtered	TOC							Lab I.D.	Remarks
LIS03 WLEB1C1J	7/6	1833	✓	—	whirlpak	Sediment	on ice	—	✓							V1313	
LIS03 WLE5HC1J	7/6	1926	✓	—	"	"	"	—	✓							V1314	
LIS03 WLMDIC1J	7/6	2001	✓	—	"	"	"	—	✓							V1315	
LIS03 WLW5HC1J	7/6	2046	✓	—	"	"	"	—	✓							V1316	
LIS03 WLSTHC1J	7/6	2127	✓	—	"	"	"	—	✓							V1317	
LIS03 CSRF3C1J	7/6	0556	✓	—	"	"	"	—	✓							V1318	
LIS03 CS892C1J	7/6	0652	✓	—	"	"	"	—	✓							V1319	
LIS03 CSS94C1J	7/6	0725	✓	—	"	"	"	—	✓							V1320	
LIS03 CS2KWC1J	7/6	0847	✓	—	"	"	"	—	✓							V1321	
LIS03 CS4KWC1J	7/6	0943	✓	—	"	"	"	—	✓							V1322	

Relinquished by: (Print Name)	Date/Time	Received by: (Print Name)	Date/Time
Isabelle P. Williams Signature: Isabelle P. Williams	Date: 7/7/00 Time: 1225	Don Boyle Signature:	Date: 7/7/00 Time: 1230
Don Boyle Signature:	Date: 7/7/00 Time: 1341	[illegible] Signature:	Date: 7/7/00 Time: 1345
Elizabeth Potter Signature:	Date: 7/22/02 Time: 1005	Jessica M. Fahey Signature:	Date: 1/22/02 Time: 11:30 AM

Analytical Laboratory (Destination): Woods Hole Group

Serial No. 32259

331

M901376

ENSR CHAIN OF CUSTODY RECORD

Client/Project Name: EPA / Long Island Sound

Project Location: Long Island Sound

Project Number: 9000-184

Field Logbook No.:

Sampler: (Print Name) /Affiliation: Isabelle P. Williams / ENSR

Chain of Custody Tape No.: 13506 / 14076

Signature: Isabelle P

Send Results/Report to: Deb McGrath, ENSR, 35 Nagog Park, Acton, MA 01720

Analysis Requested: TOC

Field Sample No./ Identification	Date	Time	Grab	Comp	Sample Container (Size/Mat'l)	Sample Type (Liquid, Sludge, Etc.)	Preservative	Field Filtered	TOC							Lab I.D.	Remarks
LIS03 NLLRFC1J	7/5	2306	✓	—	whirlpak	sediment	on ice	—	✓							V1323	
LIS03 NL2K2C1J	7/6	0005	"	—	"	"	"	—	✓							V1324	
LIS03 NLIKEC1J	7/6	0044	✓	—	"	"	"	—	✓							V1325	
LIS03 NLRLCC1J	7/6	0226	✓	—	"	"	"	—	✓							V1326	
LIS03 NLSEAC1J	7/6	0333	✓	—	"	"	"	—	✓							V1327	
LIS03 CLFVPC1J	7/6	1255	✓	—	"	"	"	—	✓							V1328	
LIS03 CLN74C1J	7/6	1326	✓	—	"	"	"	—	✓							V1329	
LIS03 CLN93C1J	7/6	1400	✓	—	"	"	"	—	✓							V1330	
LIS03 CL1KWC1J	7/6	1433	✓	—	"	"	"	—	✓							V1331	
LIS03 CL2KWC1J	7/6	1511	✓	—	"	"	"	—	✓							V1332	
LIS03 CLREFC1J	7/6	1556	✓	—	"	"	"	—	✓							V1333	

Relinquished by: (Print Name)	Date/Time	Received by: (Print Name)	Date/Time
Isabelle P. Williams Signature: Isabelle P. Williams	7/7/00 1225	Jon Boyle Signature:	7/7/00 1230
Relinquished by: (Print Name) Don Boyle Signature:	7/7/00 1341	Received by: (Print Name) C.R. Richaw Signature: C.R. Richaw	7/7/00 13:42
Relinquished by: (Print Name) Elizabeth Porter Signature: Elizabeth Porter	7/22/00 1005	Received by: (Print Name) Jessica M. Taney Signature: Jessica M. Taney	7/22/00 11:30 AM

Analytical Laboratory (Destination): Woods Hole Group

Serial No. 32260

ENSR

U.S. Army Corps of Engineers, New England District (NED)
Long Island Sound EIS Sampling - February 2000

CHAIN OF CUSTODY

Survey LIS01 **Analytical Lab ID** WHG **COC_ID** 19

	Name	Signature	Affiliation	Date and Time
Released	D. Boyle	DB	ENSR	18 Feb 1330
Rec'd	H. Costa		WHG	2/18/2000 1330
Released	H. Costa		WHG	2/18/2000 1645
Rec'd 1°C	Dianne Javal		WHG	2/18/2000 1645
Released	Elizabeth Porta		WHG	1/22/02 9:55
Rec'd	Jessica M. Fahey		Battelle	1/22/02 1130 AM

Fieldbook Nu

Num of Coolers: 1

Num of Bottles

COC Tape No's

Recipient's Address

1145 Massachusetts Ave., Boxborough, MA 01719

Comments

BOTTLE_ID	Bar Code	DATE/TIME	Container	Media	Analysis	Preservative	Filtered
11335	LIS01CS4KWC1A	02/17/00 17:28:00	(2) 8OZ GL JARS	SED	ORGANICS/METALS	-20C	NO
11336	LIS01CS4KWC2A	02/17/00 17:40:00	(2) 8OZ GL JARS	SED	ORGANICS/METALS	-20C	NO
11337	LIS01CS4KWC3A	02/17/00 18:04:00	(2) 8OZ GL JARS	SED	ORGANICS/METALS	-20C	NO
11338	LIS01CS4KWC4A	02/17/00 18:44:00	(2) 8OZ GL JARS	SED	ORGANICS/METALS	-20C	NO
11339	LIS01CS4KWC5A	02/17/00 19:22:00	(2) 8OZ GL JARS	SED	ORGANICS/METALS	-20C	NO
11340	LIS01CS4KWCPA	02/17/00 19:44:00	(2) 8OZ GL JARS	SED	ORGANICS/METALS	-20C	NO
11341	LIS01CSRF3C1A	02/17/00 15:03:00	(2) 8OZ GL JARS	SED	ORGANICS/METALS	-20C	NO
11342	LIS01CSRF3C2A	02/17/00 15:26:00	(2) 8OZ GL JARS	SED	ORGANICS/METALS	-20C	NO
11343	LIS01CSRF3C3A	02/17/00 15:49:00	(2) 8OZ GL JARS	SED	ORGANICS/METALS	-20C	NO
11344	LIS01CSRF3C4A	02/17/00 16:09:00	(2) 8OZ GL JARS	SED	ORGANICS/METALS	-20C	NO
11345	LIS01CSRF3C5A	02/17/00 16:25:00	(2) 8OZ GL JARS	SED	ORGANICS/METALS	-20C	NO
11346	LIS01CSRF3CPA	02/17/00 17:01:00	(2) 8OZ GL JARS	SED	ORGANICS/METALS	-20C	NO
11347	LIS01CSRF4C1A	02/17/00 13:05:00	(2) 8OZ GL JARS	SED	ORGANICS/METALS	-20C	NO
	LIS01CSRF4C2A	02/17/00 13:23:00	(2) 8OZ GL JARS	SED	ORGANICS/METALS	-20C	NO

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CHAIN OF CUSTODY

1348	LIS01CSRF4C3A	02/17/00 13:40:00	(2) 8OZ GL JARS	SED	ORGANICS/METALS	-20C	NO
11349	LIS01CSRF4C4A	02/17/00 13:58:00	(2) 8OZ GL JARS	SED	ORGANICS/METALS	-20C	NO
11350	LIS01CSRF4C5A	02/17/00 14:07:00	(2) 8OZ GL JARS	SED	ORGANICS/METALS	-20C	NO
V1351	LIS01CSRF4CPA	02/17/00 14:35:00	(2) 8OZ GL JARS	SED	ORGANICS/METALS	-20C	NO
11352	LIS01NL1KEC1B	02/16/00 20:36:00	2 OZ GL JAR	SED	AVS/SEM	-20C	NO
11353	LIS01NL1KEC2B	02/16/00 20:56:00	2 OZ GL JAR	SED	AVS/SEM	-20C	NO
11354	LIS01NL1KEC3B	02/16/00 21:22:00	2 OZ GL JAR	SED	AVS/SEM	-20C	NO
11355	LIS01NL1KEC4B	02/16/00 21:48:00	2 OZ GL JAR	SED	AVS/SEM	-20C	NO
V1356	LIS01NL1KEC5B	02/16/00 22:15:00	2 OZ GL JAR	SED	AVS/SEM	-20C	NO
V1357	LIS01NL1KECPB	02/16/00 22:40:00	2 OZ GL JAR	SED	AVS/SEM	-20C	NO
V1358	LIS01NL2KEC1B	02/16/00 16:45:00	2 OZ GL JAR	SED	AVS/SEM	-20C	NO
11359	LIS01NL2KEC2B	02/16/00 17:22:00	2 OZ GL JAR	SED	AVS/SEM	-20C	NO
V1)	LIS01NL2KEC3B	02/16/00 17:40:00	2 OZ GL JAR	SED	AVS/SEM	-20C	NO
V1361	LIS01NL2KEC4B	02/16/00 18:00:00	2 OZ GL JAR	SED	AVS/SEM	-20C	NO
V1362	LIS01NL2KEC5B	02/16/00 18:30:00	2 OZ GL JAR	SED	AVS/SEM	-20C	NO
11363	LIS01NL2KECPB	02/16/00 19:05:00	2 OZ GL JAR	SED	AVS/SEM	-20C	NO
V1364	LIS01NLLRFC1B	02/16/00 13:35:00	2 OZ GL JAR	SED	AVS/SEM	-20C	NO
V1365	LIS01NLLRFC2B	02/16/00 14:10:00	2 OZ GL JAR	SED	AVS/SEM	-20C	NO
V1366	LIS01NLLRFC3B	02/16/00 15:10:00	2 OZ GL JAR	SED	AVS/SEM	-20C	NO
V1367	LIS01NLLRFC4B	02/16/00 15:20:00	2 OZ GL JAR	SED	AVS/SEM	-20C	NO
V1368	LIS01NLLRFC5B	02/16/00 15:42:00	2 OZ GL JAR	SED	AVS/SEM	-20C	NO
V1369	LIS01NLLRFCPB	02/16/00 15:43:00	2 OZ GL JAR	SED	AVS/SEM	-20C	NO
V1370	LIS01NLWRFC1B	02/16/00 23:08:00	2 OZ GL JAR	SED	AVS/SEM	-20C	NO
V1371	LIS01NLWRFC2B	02/16/00 23:28:00	2 OZ GL JAR	SED	AVS/SEM	-20C	NO
V1372	LIS01NLWRFC3B	02/17/00 0:17:00	2 OZ GL JAR	SED	AVS/SEM	-20C	NO
V1373	LIS01NLWRFC4B	02/17/00 0:33:00	2 OZ GL JAR	SED	AVS/SEM	-20C	NO
V1274	LIS01NLWRFC5B	02/17/00 0:48:00	2 OZ GL JAR	SED	AVS/SEM	-20C	NO

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CHAIN OF CUSTODY

1375	LIS01NLWRFCPB	02/17/00 1:12:00	2 OZ GL JAR	SED	AVS/SEM	-20C	NO

LOG-IN CHECKLIST

Reference SOP# MSL-A-001

Central File #: 1767 Project Manager: Barlows

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

Matrix: tissue (lobster-edible) WP# 23003

Yes	No	
☐	☒	Navy-type Project (requires high-level sample tracking procedures)
☐	☒	Filter Samples: Amount: 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: NA Date To Dispose: Hold freeze dried tissue 1 year to 2/03

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? 3.6 °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: [signature] Date/Time: 02/05/02 1120

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:
- ☐ Other Notes:

Completed By: [signature] Date/Time: 02/05/02 1230

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Chain of Custody

Proj. No	Proj. Name
	Long Island Sound

SAMPLERS: Signature

Bruce D Munz

DATE	TIME	BATTELLE ID	CLIENT ID	SAMPLE DESCRIPTION	PEST	PCB	TPH FINGERPRINT	PAH	VOA	TBT	METALS	OTHER	ACIDIFIED	PRESERVED	Total Number of Containers
2/1/02	1107	V1206	LIS05WLMDBLK1-M	Lobster Meat											
	2 09	V1209	LIS05WLMDBLK2-M												
	3 12	V1212	LIS05WLMDBLK3-M												
	4 15	V1215	LIS05WLMDBLK4-M												
	5 18	V1218	LIS05WLMDBLK5-M												
	6 24	V1224	LIS05TLLN93LOG1-M												
	7 27	V1227	LIS05TLLN93LOG2-M												
	8 30	V1230	LIS05TLLN93LOG3-M	Use for MS/MSD (batch)											
	9 33	V1233	LIS05TLLN93LOG4-M												
	10 36	V1236	LIS05WLLN93LOG5-M	Use for Triplicate (batch)											
	11 39	V1239	LIS05TCSB92LOG1-M												
	12 42	V1242	LIS05TCSB92LOG2-M												
	13 45	~~V1245~~ V1844	LIS05TCSB92LOG3-M												
	14 48	V1248	LIS05TCSB92LOG4-M												
	15 51	V1251	LIS05TCSB92LOG5-M												
	16 54	V1131	LIS05NLSEALOG1-M												
	17 57	V1134	LIS05NLSEALOG2-M												

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Comments:

① B. Halle Sample ID S/B V1844 for Sample LIS05TCSB92LOG3-M.

BDM 2/4/02

ORIGINAL

1767 [illegible]

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Proj. No	Proj. Name
	Long Island Sound

SAMPLERS: Signature [signature]

DATE	TIME	BATTELLE ID	CLIENT ID	SAMPLE DESCRIPTION	PEST	PCB	TPH FINGERPRINT	PAH	VOA	TBT	METALS	OTHER	ACIDIFIED	PRESERVED	Total Number of Containers
2/4/02	1767-18	V1137	LIS05NLSEALOC3-M	Lobster Meat											
	19	V1140	LIS05NLSEALOC4-M	Use for MS/MSD (batch 2)											
	20	V1143	LIS05NLSEALOC5-M	Use for Triplicate (batch 2)											
	21	V1221	LIS05LOBR1LOC1-M												
	22	V1119	LIS05LOBR1LOC2-M												
	23	V1122	LIS05LOBR1LOC3-M												
	24	V1125	LIS05LOBR1LOC4-M												
	25	V1128	LIS05LOBR1LOC5-M												
	26	V1191	LIS05LOBR2LOC1-M												
	27	V1194	LIS05LOBR2LOC2-M												
	28	V1197	LIS05LOBR2LOC3-M [illegible]	separate jar for MDL Verification											
	29	V1200	LIS05LOBR2LOC4-M												
	30	V1203	LIS05LOBR2LOC5-M												
	31	V1146	LIS05LOBR3LOC1-M												
	32	V1149	LIS05LOBR3LOC2-M												
	33	V1152	LIS05LOBR3LOC3-M												
	1767-34	V1155	LIS05LOBR3LOC4-M	Use for MS/MSD (batch 3)											

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Comments:

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33

Lobster Meat Item

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Proj. No	Proj. Name
	Long Island Sound

SAMPLERS: Signature

Bryce D Murphy

DATE	TIME	BATTELLE ID	CLIENT ID	SAMPLE DESCRIPTION	PEST	PCB	TPH FINGERPRINT	PAH	VOA	TBT	METALS	OTHER	ACIDIFIED	PRESERVED	Total Number of Containers
2/1/02	1967.35	V1158	LIS05LOBC3LOL5-M	Lobster Meat											
	36	V1176	LIS05LOBC9LOL1-M												
	37	V1179	LIS05LOBC4LOL2-M	Use for triplicate (batch 3)											
	38	V1182	LIS05LOBC4LOL3-M												
	39	V1185	LIS05LOBC4LOL4-M												
	40	V1188	LIS05LOBC4LOL5-M												
	41	V1161	LIS05LOBH2LOL1-M												
	42	V1164	LIS05LOBH2LOL2-M												
	43	V1167	LIS05LOBH2LOL3-M												
	44	V1170	LIS05LOBH2LOL4-M												
	1967.45	V1173	LIS05LOBH2LOL5-M												

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Comments:

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Response to Comments

Battelle Response to Comments **June 28, 2002**
Lobster Meat Draft Report (May 24, 2002)

Comments: Chris High

12 Jun 02

Comments for review of: Draft Report Lobster Meat Analytical Results in support of the LIS EIS. Overall I found the data well-presented and formatted with sufficient detail. My comments are mostly minor in content.

1. Add the study area and station numbers to all sample data (already corrected by Battelle).

Response - Correction pages sent to Chris High. Corrected pages will be included in final draft to all parties.

2. On table 2 in introduction, change the "Reference #5" study area to "Hudson Canyon Reference #5".

Response – will make change

3. For the Dioxins and Furans, has the alternate SRM, EDF 2526 been run? If so what were the results.

Response - This SRM has been run by PSC for both PCBs and dioxin/furans with considerably better recoveries and less matrix interferences (no diphenyl ether interference for dioxins). Results are attached.

4. The statement was made on the bottom of page 8 of 10 in the introduction that the PCB like congeners found in the blanks were not necessarily representative of general background contamination. How can this be supported? Is this an argument against blank correcting the data? Can we re-run a subset of this data to make this determination?

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 the carryover issue did not affect sample concentrations. Results for those analyses will be provided by July 8, 2002 and corrective action will be formalized at that time.

5. On pg 9 of 10 in the introduction. In Sec 5.2 1st Paragraph the statement was made that the dioxin like PCB congeners found in the blanks were below the RL..ie the PQL. However, in 2 of the 3 batches there were exceedences. This is a bit misleading and should be reworded to clarify so that it is not interpreted that all blanks were below the RL.

Response - This section of the report provides the results of the Tier III validation of one batch (Batch 1) of lobster meat data. The concentrations in the procedural blank for both dioxin/furans and PCBs were below the PQL; therefore no corrective action was required. The other two batches of lobster meat were not part of the Tier III validation.

6. Where there is surrogate recovery data presented please qualify with a %. Some of the data is appropriately qualified, however, some like the PCB data is not.

Response – Will correct in final report

7. In several instances PCB 170 was flagged with an E (Ref #2, NLDS) due to extensive matrix interference. Please state in the data flag explanation this is due to a known Phthalate, which interferes with recovery.

Response - Will note in section 4.1 that PCB data are flagged w/ "E" to indicate values are estimated due to bis(2-ethylhexyl)phthalate interference.

8. In the section on metals, the holding times statement is somewhat misleading. Please remove the two sentences which state that the samples were extracted within 28 days or 6 mo of receipt. The following table adequately describes this.

Response – Corrected to indicate that all samples were "analyzed within holding times".

9. The certificate of analysis from PSC in section I. Sample Receipt/Analysis has a column entitled "data sampled". This should be renamed "date shipped".

Response – Will correct.

10. The MDLs for the Dioxins/Furans and 12 WHO Congeners are presented as MDL ranges. Is this typical?

Response – Yes. The data format that was developed for this program did not include reporting MDLs for each sample/analyte. Because all results are reported on a sample specific basis, the MDLs are different for each sample and for each analyte. The ranges are presented to indicate whether the target MDLs were met for that batch.

11. There is a problem with 2 batches of Dioxin/Furan and Dioxin like PCB Congeners in that in many instances for the PCB Congeners the blanks show higher values than the RLs. Have the blanks been rerun with a subset of sample data to possibly determine if this was not representative of the sample data (sort of the same question as in 4 above). If not due to sample volume, would there be some argument that these values in the blanks were typically found to be above those in the samples and are therefore not representative?

Response - See response to Comment 4. above.

12. In the QA/QC summary, please note which batch of the Dioxins/Furans and PCB Congeners received the Tier 3 evaluation. It is evident if one observes the additional set of data flags but may be not so evident to the casual reader. Point of note on these additional data flags, these data flags need to be reconciled with the standard data flags as the combination of the two are very misleading. For example in the first batch of PCB Congeners PCB 189 in V1227 is flagged with a JB stating the result is >MDL but also flagged with a U showing result <MDL. This does not make sense. Also, it is my understanding that these additional data flags in the first batch will cause difficulties when placing the data in the data usability tables along with the remaining two batches (which don't have the same flags). Therefore, these flags in the first batch need to somehow be reconciled into one set of data flags similar to the remaining two batches.

Response - The QA/QC narrative will be revised to note specifically which batch received the Tier 3 validation. The issue of two sets of qualifiers still needs to be resolved. The Tier 2 validation that all data received used the QAPP qualifiers, while the Tier 3 validation used the standard EPA qualifiers. For example, the QAPP qualifier for a blank exceedence (sample concentration < 5x blank concentration) is "B", while the Tier 3 validation procedure is to flag with a "U" to make the concentration into a "non-detect" value. Because this has not been reconciled, and because only the Tier 3 validation batch has the "validation" qualifiers, both were left on for this report. There are two solutions to this problem:

1.) Only load the QAPP qualifiers into the database. This will mean that for all future use of the data (for EIS preparation/reporting) only the QAPP qualifiers will be propagated.
2.) Go back and re-qualify all non-Tier 3 validated batches using the Tier 3 qualifiers. This means that any time the sample concentration is <5x the blank concentration the sample value will turn into a non-detect value. If these data are used for any calculations, the convention is to use ½ of a non-detect (or "U" flagged) value. For the purposes of the EIS, this may not be the best approach.

13. In the PSC certificate of analysis the Sample No shows a range of samples for each batch. These sample ranges often overlap (noted the data did not however). Please correct.

Response - The Sample No. on the PSC certificate of analysis was reviewed and no overlaps were found. Note that the first number listed is the procedural blank for that batch, which is not listed under the "sampling list" on the second page of the certificate.

14. In regards to the radionuclides, the overall count time was increased from 30 min to 2 hrs to obtain the MDA (appropriate sensitivity via number of hits etc). I am assuming the sample data was normalized for the extended count when determining the pCi/ g amount of radioactive isotopes. Is this correct?

Response - Yes data were calculated for the time counted. The extended count time was used because of the relatively small sample mass available.

EPA comments for Report 1: Lobster Meat Analytical Results
Due: June 12, 2002

These comments include the New England office and Region 2.

Dave: I have looked at these data sets and have concluded that the data is probably OK but the flagging conventions related to Blanks may be a little confusing. If the blank is multiplied by 5 for analytes that are no lab contaminants and 10 if they are lab contaminants, then all data that falls below that blank action level should be considered non detected at the sample concentration. I think that they flagged these samples according to their convention and not our. All data above that level should be considered real data. I think that the J and the B together are a little over- kill and more confusing.

Response - The flagging conventions for all data (excluding blank flags for WHO PCBs and dioxin/furans) were defined in the QAPP (see worksheet 9a "Data Reporting Qualifiers – Chemistry). The action limit for blank flagging was as follows:

1.) If the concentration in the blank was greater than the RL the blank itself was flagged with a "B".
2.) If the sample concentration was less than 10 times the blank concentration, the sample value was flagged with a "B". The "10x" action level was a carryover from the LIS program, since that QAPP was adapted for all analyses (except dioxin/furan and WHO congeners).

However, the flagging convention for blank contamination for the WHO PCB congeners and the dioxin/furans was to use the action levels that the Tier 3 validators used. This action level was "5x" the blank concentration and was consistent with the EPA Region I and II validation criteria. All WHO PCB congener and dioxin/furan data were flagged using the QAPP qualifiers and using the "5x" action limit for blank flagging to be consistent w/ the validators, who only qualified one batch per matrix using their conventions.

Here are some of my thoughts.
PAHs
When a sample is detected below 10 times the blank concentration it should be considered as non-detected due to the uncertainty. BDO needs to apply this region 1 convention evenly across the board. Why they chose 10x as a factor for the carcinogenic is not known. The non carcinogenic are not a problem with this issue. The carcinogenic are an issue as now we would consider them non detected but at what concentration?

Response - See response above as to why the "10x" factor was used for all PAH data.

PCB congeners;

The comment at the bottom of page 8 of 10 about the blank representing real background levels is very disconcerting. The concentrations in the blank a predominantly higher than the sample concentration in all the data sets. The rule used in validation of blanks using Region DV guidance would indicate that all the detects below the 5x level would be non-

detected. If the blank is not representative, of the data set, we will be showing many non-detects where there are low detects of PCB congeners. What is the right thing to do? Without rerunning a blank over we will never know and we will have to live with the results as is. If the data user were to throw out the blanks and just use the data as with no blank qualifiers, will that affect the risk? If it does not then I recommend to throw out the blanks and requalify the data with the correct flags. I do not recommend this lightly because it is against my nature to do so, but the data user needs to know what is real.

A reason why the blanks are high could be the analytical sequence that they were run. If the blanks we run directly after a LC, MSD, or SRM then there may be some carry over. The only way to find that out is to go directly to the data packages.

The issue must be evaluated for the PCB congeners. They must apply the same rule to the congeners. Obviously congener #126 is most important. If 0.082 is found for congener 126 in the blank, the action level would be 0.410. All detects under that number would be considered non-detected. A result of 0.009 would be undetected not (J) as is flagged in the data set. A result of 0.007 is flagged as U undetected but with no (B). Some data is flagged inconsistently or the validator uses a slightly different convention. I am most concerned about the loss of the actual detects due to blank validation.

Dioxins;

The same issue exists in the dioxin data. If a value is found below the 5xBlank level, it should be considered undetected.

Response - See response to Comment 4. under Chris High comments above for discussion of blank issue and corrective actions. The other issue is which flagging conventions should be carried into the database. Only the Tier 3 validated data were flagged using the EPA validation criteria (one batch per matrix). All data that received a level 2 type of validation were flagged using the QAPP flags. See discussion under comment 12 under Chris High comments for possible resolution.

Battelle Response to Comments
Lobster Meat Draft Report (May 24, 2002)

June 28, 2002

Comments: Tom Fredette

Meat 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.

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 to Comment 4 under Chris High comments above for discussion of blank issue and corrective actions. Most likely we will be able to substitute the re-analyzed blanks and most of the "B" flagged data will go away.