

# Aquatec Biological Sciences



Ecology



Environmental  
Toxicology



Natural Resource  
Assessments



Microbiology

November 30, 2004

Mr. Robert Thomas  
Katahdin Analytical Laboratory  
340 County Road No. 5  
P.O. Box 720  
Westbrook, Maine 04092

Dear Mr. Thomas,

Enclosed please find the results for the twenty samples delivered on September 8, 2004. Upon receipt, we checked the preservative and added more 3-5 percent formalin to the samples to insure proper preservation.

Samples were initially processed in an effort to provide preliminary results for a meeting on November 8, 2004. These preliminary results were reported before quality control processing was accomplished. Initial QC processing indicated that additional processing was necessary to meet our established laboratory control limits. Based on these initial QC results, all samples except 28109 (MYRS6401C) and 28110 (MYRS6401D) were re-picked in their entirety. The re-picked data was included as part of the final reporting.

Three samples, samples 28107 (MYRS6401A), 28108 (MYRS6401B), and 28113 (MYRS6402C) were selected as QC samples. The final calculations based on these three QC samples resulted in 95% picking efficiency.

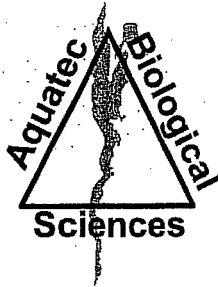
This submittal completes the data package for this Sample Delivery Group.

Please feel free to contact me if we can be of further assistance.

Sincerely,

Philip C. Downey, Ph.D.  
Director

Enclosures



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Rob Thomas  
Katahdin Analytical Laboratory  
340 County Road No. 5  
P.O. Box 720  
Westbrook, Maine 04092  
Reference: Macroinvertebrates

Date : 12/1/04  
BTR No. : 08225  
Project No. : 04053  
No. of Samples : 20  
Date Received : 9/8/04

Laboratory Sample ID : 28107  
Client Sample ID : MYRSB6401A  
Remarks :

Date/Time Sample Collected : 8/31/04 @ 5:45:00 PM  
Percent Sample Examined : 100  
Sampling Depth (m) : Not Reported

Phylum	Class	Order	Family	Sub-Family	Tribe	Genus/Species/Variety	# Counted		
Annelida	Oligochaeta	Tubificida	Tubificidae				10		
							1		
	Polychaeta			Nereidae			<i>Neanthes virens</i>	8	
			Aricida	Orbinidae			<i>Scoloplos fragilis</i>	7	
			Capitellida	Capitellidae			<i>Heteromastus filiformis</i>	119	
			Phyllodocida	Phyllodocidae			<i>Eteone sp.</i>	13	
			Spionida	Spionidae			<i>Polydora sp.</i>	1	
							<i>Streblospio benedicti</i>	2	
				Terebellida	Ampharetidae				1
		Mollusca	Gastropoda						1
Mesogastropoda	Hydrobiidae					<i>Hydrobia sp.</i>	13		
Pelecypoda	Veneroida		Tellinidae			<i>Gemma gemma</i>	43		
						<i>Macoma balthica</i>	6		
					<i>Macoma tenta</i>	6			
Arthropoda	Crustacea	Amphipoda	Ampellicidae				111		
		Cumacea	Diastylidae				2		
		Mysidacea	Mysidae				1		
<b>Sub-Total:</b>							<b>345</b>		
Annelida	Oligochaeta	Tubificida	Tubificidae				2		
	Polychaeta	Capitellida	Capitellidae			<i>Heteromastus filiformis</i>	2		

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**Date : 12/1/04**  
**BTR No. : 08225**  
**Project No. : 04053**  
**No. of Samples : 20**  
**Date Received : 9/8/04**

**Laboratory Sample ID : 28107**  
**Client Sample ID : MYRSB6401A**  
**Remarks :**

**Date/Time Sample Collected : 8/31/04 @ 5:45:00 PM**  
**Percent Sample Examined : 100**  
**Sampling Depth (m) : Not Reported**

Phylum	Class	Order	Family	Sub-Family	Tribe	Genus/Species/Variety	# Counted
Annelida	Polychaeta	Splonida	Spionidae			<i>Streblospio benedicti</i>	3
Mollusca	Pelecypoda	Veneroida	Tellinidae			<i>Gemma gemma</i>	3
Arthropoda	Crustacea	Amphipoda	Ampeliscidae				16
		Mysidacea	Mysidae				1
<b>Sub-Total:</b>							<b>27</b>
<b>Grand Total:</b>							<b>372</b>



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**Date : 12/1/04**  
**BTR No. : 08225**  
**Project No. : 04053**  
**No. of Samples : 20**  
**Date Received : 9/8/04**

**Laboratory Sample ID : 28108**  
**Client Sample ID : MYRSB6401B**  
**Remarks :**

**Date/Time Sample Collected : 8/31/04 @ 5:45:00 PM**  
**Percent Sample Examined : 100**  
**Sampling Depth (m) : Not Reported**

Phylum	Class	Order	Family	Sub-Family	Tribe	Genus/Species/Variety	# Counted
Annelida	Polychaeta	Spionida	Spionidae			<i>Streblospio benedicti</i>	4
		Terebellida	Ampharetidae				3
Arthropoda	Crustacea	Amphipoda	Ampeliscidae				1
<b>Sub-Total:</b>							<b>12</b>
<b>Grand Total:</b>							<b>539</b>

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**Date : 12/1/04**  
**BTR No. : 08225**  
**Project No. : 04053**  
**No. of Samples : 20**  
**Date Received : 9/8/04**

**Laboratory Sample ID : 28109**  
**Client Sample ID : MYRSB6401C**  
**Remarks :**

**Date/Time Sample Collected : 8/31/04 @ 5:45:00 PM**  
**Percent Sample Examined : 100**  
**Sampling Depth (m) : Not Reported**

Phylum	Class	Order	Family	Sub-Family	Tribe	Genus/Species/Variety	# Counted
Annelida	Polychaeta		Nereidae			<i>Neanthes virens</i>	8
			Ariciida	Orbiniidae		<i>Scoloplos sp.</i>	3
			Capitellida	Capitellidae		<i>Heteromastus filliformis</i>	64
			Phyllodocida	Phyllodocidae		<i>Eteone sp.</i>	18
			Spionida	Spionidae		<i>Polydora sp.</i>	3
Mollusca	Gastropoda	Mesogastropoda	Hydrobiidae			<i>Hydrobia sp.</i>	8
	Pelecypoda	Veneroidea	Tellinidae			<i>Gemma gemma</i>	41
						<i>Macoma balthica</i>	4
					<i>Macoma tenta</i>	13	
Arthropoda	Crustacea	Amphipoda	Ampeliscidae				71
		Isopoda	Idoteidae			<i>Edotea sp.</i>	1
<b>Sub-Total:</b>							<b>234</b>
<b>Grand Total:</b>							<b>234</b>









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**Date : 12/1/04**  
**BTR No. : 08225**  
**Project No. : 04053**  
**No. of Samples : 20**  
**Date Received : 9/8/04**

**Laboratory Sample ID : 28113**  
**Client Sample ID : MYRSB6402C**  
**Remarks :**

**Date/Time Sample Collected : 8/31/04 @ 6:15:00 PM**  
**Percent Sample Examined : 100**  
**Sampling Depth (m) : Not Reported**

Phylum	Class	Order	Family	Sub-Family	Tribe	Genus/Species/Variety	# Counted
<i>Grand Total:</i>							<b>192</b>

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**Date : 12/1/04**  
**BTR No. : 08225**  
**Project No. : 04053**  
**No. of Samples : 20**  
**Date Received : 9/8/04**

**Laboratory Sample ID : 28114**  
**Client Sample ID : MYRSB6402D**  
**Remarks :**

**Date/Time Sample Collected : 8/31/04 @ 6:15:00 PM**  
**Percent Sample Examined : 100**  
**Sampling Depth (m) : Not Reported**

Phylum	Class	Order	Family	Sub-Family	Tribe	Genus/Species/Variety	# Counted	
Annelida	Oligochaeta	Tubificida	Tubificidae			<i>Tubificoides sp.</i>	1	
	Polychaeta			Cirratulidae			<i>Tharyx sp.</i>	4
				Nereidae			<i>Neanthes virens</i>	6
				Aricida	Orbinidae		<i>Scoloplos sp.</i>	3
				Capitellida	Capitellidae		<i>Heteromastus filliformis</i>	31
	Phyllodocida	Phyllodocidae		<i>Eteone sp.</i>	16			
	Spionida	Spionidae		<i>Streblospio benedicti</i>	6			
Mollusca	Pelecypoda	Veneroidea	Tellinidae			<i>Gemma gemma</i>	5	
						<i>Macoma balthica</i>	4	
Arthropoda	Crustacea	Amphipoda	Ampeliscidae				6	
<b>Sub-Total:</b>							<b>122</b>	
<b>Grand Total:</b>							<b>122</b>	



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**Date : 12/1/04**  
**BTR No. : 08225**  
**Project No. : 04053**  
**No. of Samples : 20**  
**Date Received : 9/8/04**

**Laboratory Sample ID : 28116**  
**Client Sample ID : MY06BG403B**  
**Remarks :**

**Date/Time Sample Collected : 9/1/04 @ 7:30:00 AM**  
**Percent Sample Examined : 100**  
**Sampling Depth (m) : Not Reported**

Phylum	Class	Order	Family	Sub-Family	Tribe	Genus/Species/Variety	# Counted	
Annelida	Polychaeta		Nephtyidae			<i>Aglaophamus circinata</i>	1	
			Nereidae			<i>Neanthes virens</i>	4	
			Ariclida	Orbiniidae			<i>Scoloplos sp.</i>	3
			Capitellida	Capitellidae			<i>Heteromastus filliformis</i>	2
			Phyllodocida	Glyceridae			<i>Glycera sp.</i>	2
			Spionida	Spionidae			<i>Pygospio sp.</i>	1
							<i>Streblospio benedicti</i>	7
		Terebellida	Ampharetidae				1	
Mollusca	Pelecypoda	Veneroida	Tellinidae			<i>Macoma tenta</i>	9	
Arthropoda	Crustacea	Amphipoda	Ampeliscidae				112	
			Corophiidae			<i>Corophium sp.</i>	1	
<b>Sub-Total:</b>							<b>143</b>	
<b>Grand Total:</b>							<b>143</b>	

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**Date : 12/1/04**  
**BTR No. : 08225**  
**Project No. : 04053**  
**No. of Samples : 20**  
**Date Received : 9/8/04**

**Laboratory Sample ID : 28117**  
**Client Sample ID : MY06BG403C**  
**Remarks :**

**Date/Time Sample Collected : 9/1/04 @ 7:30:00 AM**  
**Percent Sample Examined : 100**  
**Sampling Depth (m) : Not Reported**

Phylum	Class	Order	Family	Sub-Family	Tribe	Genus/Species/Variety	# Counted		
Nemertea	Enopla	Hoplonemertea	Prostomatidae			<i>Prostoma graecense</i>	1		
Annelida	Oligochaeta	Tubificida	Tubificidae			<i>Tubificoides sp.</i>	1		
						<i>Tharyx sp.</i>	1		
	Polychaeta			Cirratulidae			<i>Aglaophamus circinata</i>	5	
				Nephtyidae			<i>Neanthes virens</i>	11	
				Nereidae			<i>Scoloplos sp.</i>	3	
				Aricida	Orbinidae		<i>Heteromastus filiformis</i>	10	
				Capitellida	Capitellidae		<i>Glycera sp.</i>	4	
				Phyllodocida	Phyllodocidae			<i>Eteone sp.</i>	2
								<i>Polydora sp.</i>	2
			Spionida	Spionidae			<i>Pygospio sp.</i>	1	
							<i>Streblospio benedicti</i>	80	
Mollusca	Pelecypoda	Terebellida	Ampharetidae				3		
		Veneroida	Tellinidae			<i>Gemma gemma</i>	2		
						<i>Macoma tenta</i>	5		
Arthropoda	Crustacea	Amphipoda	Ampeliscidae				446		
			Corophiidae			<i>Corophium sp.</i>	2		
<b>Sub-Total:</b>							<b>586</b>		
<b>Grand Total:</b>							<b>586</b>		

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**Date : 12/1/04**  
**BTR No. : 08225**  
**Project No. : 04053**  
**No. of Samples : 20**  
**Date Received : 9/8/04**

**Laboratory Sample ID : 28118**  
**Client Sample ID : MY06BG403D**  
**Remarks :**

**Date/Time Sample Collected : 9/1/04 @ 7:30:00 AM**  
**Percent Sample Examined : 100**  
**Sampling Depth (m) : Not Reported**

Phylum	Class	Order	Family	Sub-Family	Tribe	Genus/Species/Variety	# Counted
Annelida	Oligochaeta						1
		Polychaeta					4
				Cirratulidae		<i>Tharyx sp.</i>	4
				Nephtyidae		<i>Aglaophamus circinata</i>	7
				Nereidae		<i>Neanthes virens</i>	10
		Ariciida		Orbiniidae		<i>Scoloplos sp.</i>	9
		Capitellida		Capitellidae		<i>Heteromastus filliformis</i>	2
						<i>Capitella sp.</i>	1
		Phyllodocida		Glyceridae		<i>Glycera sp.</i>	3
				Phyllodocidae		<i>Eteone sp.</i>	12
		Spionida		Spionidae		<i>Polydora sp.</i>	2
						<i>Streblospio benedicti</i>	143
			Terebellida	Ampharetidae			5
Mollusca	Pelecypoda	Veneroida	Tellinidae			<i>Macoma balthica</i>	3
						<i>Macoma tenta</i>	50
Arthropoda	Crustacea	Amphipoda	Ampeliscidae				506
			Corophiidae			<i>Corophium sp.</i>	1
			Cumacea	Diastylidae			2
			Mysidacea	Mysidae			1

**Sub-Total: 766**

**Grand Total: 766**



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**Date : 12/1/04**  
**BTR No. : 08225**  
**Project No. : 04053**  
**No. of Samples : 20**  
**Date Received : 9/8/04**

**Laboratory Sample ID : 28120**  
**Client Sample ID : MY06BG405B**  
**Remarks :**  
**Date/Time Sample Collected : 9/1/04 @ 7:50:00 AM**  
**Percent Sample Examined : 100**  
**Sampling Depth (m) : Not Reported**

Phylum	Class	Order	Family	Sub-Family	Tribe	Genus/Species/Variety	# Counted	
Nemertea	Enopla	Hoplonemertea	Prostomatidae			<i>Prostoma graecense</i>	2	
Annelida	Oligochaeta	Tubificida	Tubificidae			<i>Tubificoides sp.</i>	1	
						<i>Tharyx sp.</i>	1	
	Polychaeta			Cirratulidae			<i>Aglaophamus circinata</i>	3
				Nephtyidae			<i>Neanthes virens</i>	3
				Nereidae			<i>Scoloplos sp.</i>	7
				Ariciida	Orbiniidae		<i>Heteromastus filliformis</i>	6
				Capitellida	Capitellidae		<i>Eteone sp.</i>	3
				Phyllodocida	Phyllodocidae		<i>Polydora sp.</i>	1
				Spionida	Spionidae		<i>Streblospio benedicti</i>	18
				Terebellida	Ampharetidae			1
Mollusca	Pelecypoda	Veneroida	Tellinidae			<i>Gemma gemma</i>	1	
						<i>Macoma balthica</i>	3	
						<i>Macoma tenta</i>	2	
Arthropoda	Crustacea	Amphipoda	Ampeliscaidae				93	
			Corophiidae			<i>Corophium sp.</i>	1	
		Mysidacea	Mysidae				2	
<b>Sub-Total:</b>							<b>149</b>	
<b>Grand Total:</b>							<b>149</b>	

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**Date : 12/1/04**  
**BTR No. : 08225**  
**Project No. : 04053**  
**No. of Samples : 20**  
**Date Received : 9/8/04**

**Laboratory Sample ID : 28121**  
**Client Sample ID : MY06BG405C**  
**Remarks :**

**Date/Time Sample Collected : 9/1/04 @ 7:50:00 AM**  
**Percent Sample Examined : 100**  
**Sampling Depth (m) : Not Reported**

Phylum	Class	Order	Family	Sub-Family	Tribe	Genus/Species/Variety	# Counted	
Annelida	Oligochaeta	Tubificida	Tubificidae				1	
			Nephtyidae			<i>Aglaophamus circinata</i>	6	
	Polychaeta		Nereidae			<i>Neanthes virens</i>	3	
			Pectinariidae			<i>Pectinaria gouldii</i>	1	
			Capitellida	Capitellidae			<i>Heteromastus filliformis</i>	7
			Phyllodocida	Phyllodocidae			<i>Eteone sp.</i>	1
			Spionida	Spionidae			<i>Streblospio benedicti</i>	19
Mollusca	Pelecypoda	Veneroida	Tellinidae			<i>Macoma tenta</i>	4	
Arthropoda	Crustacea	Amphipoda	Ampeliscidae				147	
			Corophiidae			<i>Corophium sp.</i>	2	
<b>Sub-Total:</b>							<b>191</b>	
<b>Grand Total:</b>							<b>191</b>	



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**Date : 12/1/04**  
**BTR No. : 08225**  
**Project No. : 04053**  
**No. of Samples : 20**  
**Date Received : 9/8/04**

**Laboratory Sample ID : 28123**  
**Client Sample ID : MY06BG416A**  
**Remarks :**

**Date/Time Sample Collected : 9/1/04 @ 8:30:00 AM**  
**Percent Sample Examined : 100**  
**Sampling Depth (m) : Not Reported**

Phylum	Class	Order	Family	Sub-Family	Tribe	Genus/Species/Variety	# Counted				
Nemertea	Enopla	Hoploneurtea	Prostomatidae			<i>Prostoma graecense</i>	2				
Annelida	Oligochaeta	Tubificida	Tubificidae			<i>Tubificoides sp.</i>	2				
		Polychaeta							2		
								Nephtyidae	<i>Aglaophamus circinata</i>	3	
								Nereidae	<i>Neanthes virens</i>	20	
								Ariclida	Orbinidae	<i>Scoloplos sp.</i>	4
								Capitellida	Capitellidae	<i>Heteromastus filiformis</i>	10
								Phyllodocida	Phyllodocidae	<i>Eteone sp.</i>	9
								Spionida	Spionidae	<i>Streblospio benedicti</i>	1
Mollusca	Pelecypoda	Mytiloidea	Mytilidae			<i>Mytilus edulis</i>	1				
				Veneroidea	Tellinidae			<i>Macoma balthica</i>	2		
								<i>Macoma tenta</i>	5		
Arthropoda	Crustacea	Amphipoda	Ampeliscidae				124				
						<i>Corophium sp.</i>	3				
<b>Sub-Total:</b>							<b>190</b>				
<b>Grand Total:</b>							<b>190</b>				

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**Date : 12/1/04**  
**BTR No. : 08225**  
**Project No. : 04053**  
**No. of Samples : 20**  
**Date Received : 9/8/04**

**Laboratory Sample ID : 28124**  
**Client Sample ID : MY06BG416B**  
**Remarks :**

**Date/Time Sample Collected : 9/1/04 @ 8:30:00 AM**  
**Percent Sample Examined : 100**  
**Sampling Depth (m) : Not Reported**

Phylum	Class	Order	Family	Sub-Family	Tribe	Genus/Species/Variety	# Counted	
Annelida	Oligochaeta	Tubificida	Tubificidae			<i>Tubificoides sp.</i>	4	
							2	
	Polychaeta			Nereidae			<i>Neanthes virens</i>	19
			Aricida	Orbinidae			<i>Scoloplos sp.</i>	1
			Capitellida	Capitellidae			<i>Heteromastus filiformis</i>	17
			Phyllodocida	Phyllodocidae			<i>Eteone sp.</i>	8
			Spionida	Spionidae			<i>Polydora sp.</i>	4
						<i>Streblospio benedicti</i>	8	
Mollusca	Gastropoda	Mesogastropoda	Naticidae				1	
	Pelecypoda	Veneroidea	Tellinidae			<i>Gemma gemma</i>	1	
						<i>Macoma balthica</i>	1	
					<i>Macoma tenta</i>	3		
Arthropoda	Crustacea	Amphipoda	Ampeliscidae				64	
			Corophiidae			<i>Corophium sp.</i>	1	
			Cumacea	Diastylidae				1
			Mysidacea	Mysidae				1
<b>Sub-Total:</b>							<b>136</b>	
<b>Grand Total:</b>							<b>136</b>	



