

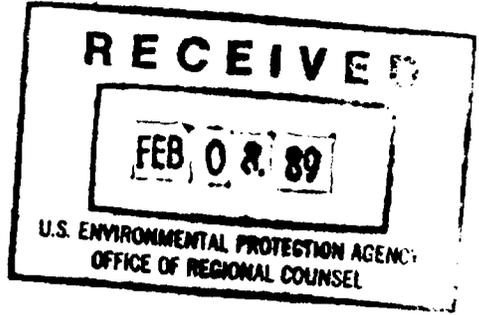


6017

Site: New Bedford
Date: 11.12.87
O.D.N.

TRIP REPORT
NEW BEDFORD HARBOR AND ACUSHNET RIVER ESTUARY
NEW BEDFORD, MASSACHUSETTS
DECEMBER 22, 1986
JOB NUMBER 3096-003

To: Daniel P. Ostrye
From: Stephen O'Neil *L.O.N.*
Date: January 8, 1987



Introduction

On December 22, 1986, GHR Analytical, Inc. collected water samples from New Bedford Harbor and the Acushnet River Estuary to be analyzed for polychlorinated biphenyls (PCB's) and total suspended solids. All samples were collected from stations recommended by Malcolm L. Spaulding of Applied Science Associates in correspondence dated November 26, 1986 to Dr. John F. Brown of General Electric. (Refer to Figure 1).

A total of 3 crews were employed in order that samples could be collected within the time frame requested by ASI. Crew I (Peter Francis and Steve O'Neil) sampled stations 1, 1A, 1B, 1C, and 2, which range from the cove just north of the Coggeshall Street Bridge to a point north of the Aerovox plant. Crew II (James Mich and Scott Alphonse) sampled stations 4, 5, and 6, which range from Fish Island to the northern end of the harbor. The third crew (James Ricci and Robert Pullano) collected samples from stations 9, 11, 12, 15, and 17, which covers an area ranging from the mouth of Clarks Cove to a point north of the hurricane barrier. Daniel Ostrye travelled along the shore between stations 1 and 6 in order to document the sampling on video tape and for safety considerations.

Scope of Work

Water samples were to be collected mid-way between low and high tide (\pm 1 1/4 hours of slack before high water). Samples were to be collected at mid-depth in the water column for total suspended solids, total PCB's, dissolved PCB's, and particulate PCB's. Sampling was to be performed progressing from areas of least contamination to highest.

Deviations from Work Scope

On December 22, 1986, high tide in the New Bedford Harbor occurred at 1036 hours. Ideally, all samples should have been collected between 0615 and 0845 hours to satisfy criteria outlined by ASI. Unavoidable circumstances resulted in an actual sampling period ranging from 0615 hours to 1035 hours. Crew II experienced mechanical problems with their engine and were unable to sample all stations before 0845 hours. Crew I had difficulty due to the ice cover which extended from the Coggeshall Street Bridge to Station 1A (See Figure 1). Crew I also had to sample Station 2 as a result of the engine failure experienced by Crew II. The sampling time for Crew III was extended to 1000 hours resulting from the large distance between sampling points.

Due to the low level of suspended solids content in the outer harbor water, Crew III found it necessary to filter large volumes of water in order to obtain an appropriate sample for particulate PCB's. As a result, they ran out of gasoline for their generator and were unable to collect a sample in duplicate.

Sampling Methodology

At each station, total depth of the water column was measured. The filter housing and collection tubes were rinsed with a mixture of 1:1 hexane/acetone solution. After a final rinse with PCB free water, a clean glass fiber filter was placed on the clean filter housing.

Prior to connecting the sample line to the filter unit, the inlet tube was lowered to mid-depth. The lines were flushed for 5 minutes with sample at a rate of approximately 2 liters per minute. After 5 minutes, 2 liters of water was collected in a glass bottle to be analyzed for total PCB's and suspended solids.

The sample line was then attached to the inlet on the filter housing and 17 to 57 liters of water were filtered under pressure. All filtrate was collected in calibrated containers so that the total volume filtered could be noted.

After filtering 4 to 19 liters of water, 1 to 2 liters of filtrate was collected in glass bottles for the dissolved PCB fraction. Once the total volume of sample was pumped, the filter housing was pressurized to remove as much water as possible. The unit was then opened and the filter paper was placed in a glass soil jar to be analyzed for particulate PCB's.

For quality control purposes, each crew collected one station in replicate with the decontamination step outlined above performed in between. Following the final sampling, the unit was again decontaminated and a blank was collected. This was obtained by pumping PCB free water through the entire system.

All samples were taken to GHR Analytical, assigned laboratory numbers, and extracted according to protocol outlined in EPA Method 608. All extracts were then shipped to Dr. Robert Wagner at General Electric in Schenectady, New York for analysis.

Sampling Equipment and Reagents

All equipment and reagents used were selected so as not to contribute contaminants or interferences to the samples. The stainless steel pressure filter units used were the Seitz Model 14B, with Gelman glass fiber filters (#66085) as the filter media. All sample lines were 3/8 inch silicone tubing, which were connected using 8mm straight couplings made of teflon.

Samples were collected in glass bottles and jars with foil lined screw caps. The decontamination solution was made up of equal parts of reagent grade acetone and hexane.

Enclosures:

Figure 1: Location of sampling stations proposed by ASI, Inc.

Appendix A - Chain of Custody documents.

Appendix B - Field sampling logs.

Appendix C - Chain of Custody documents for extracts send to Dr. Robert Wagner.

Figure 1: Location of sampling stations proposed by ASI, Inc.

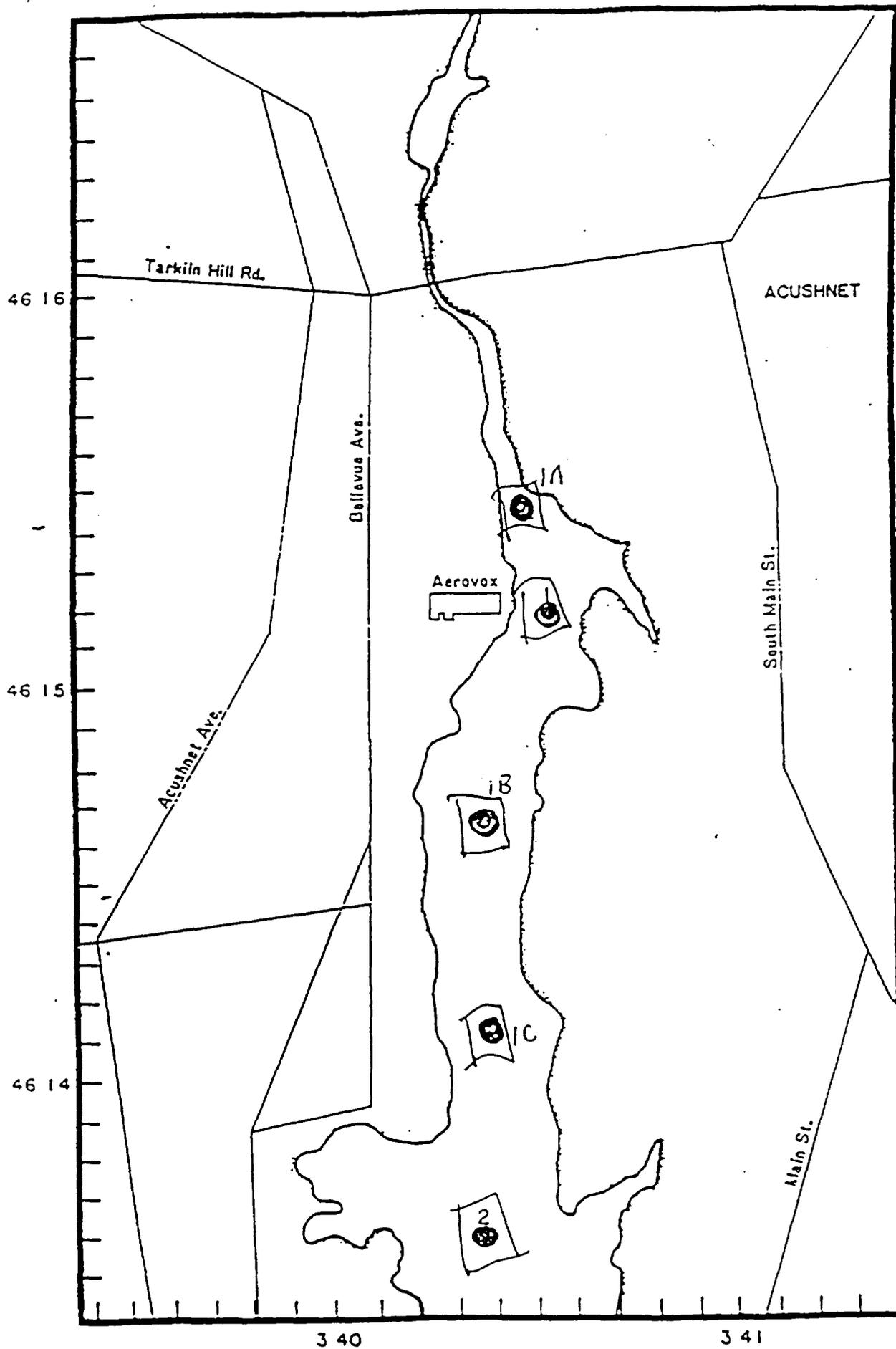


Figure 1. Location of Battelle PCB Water Column Sampling Stations.

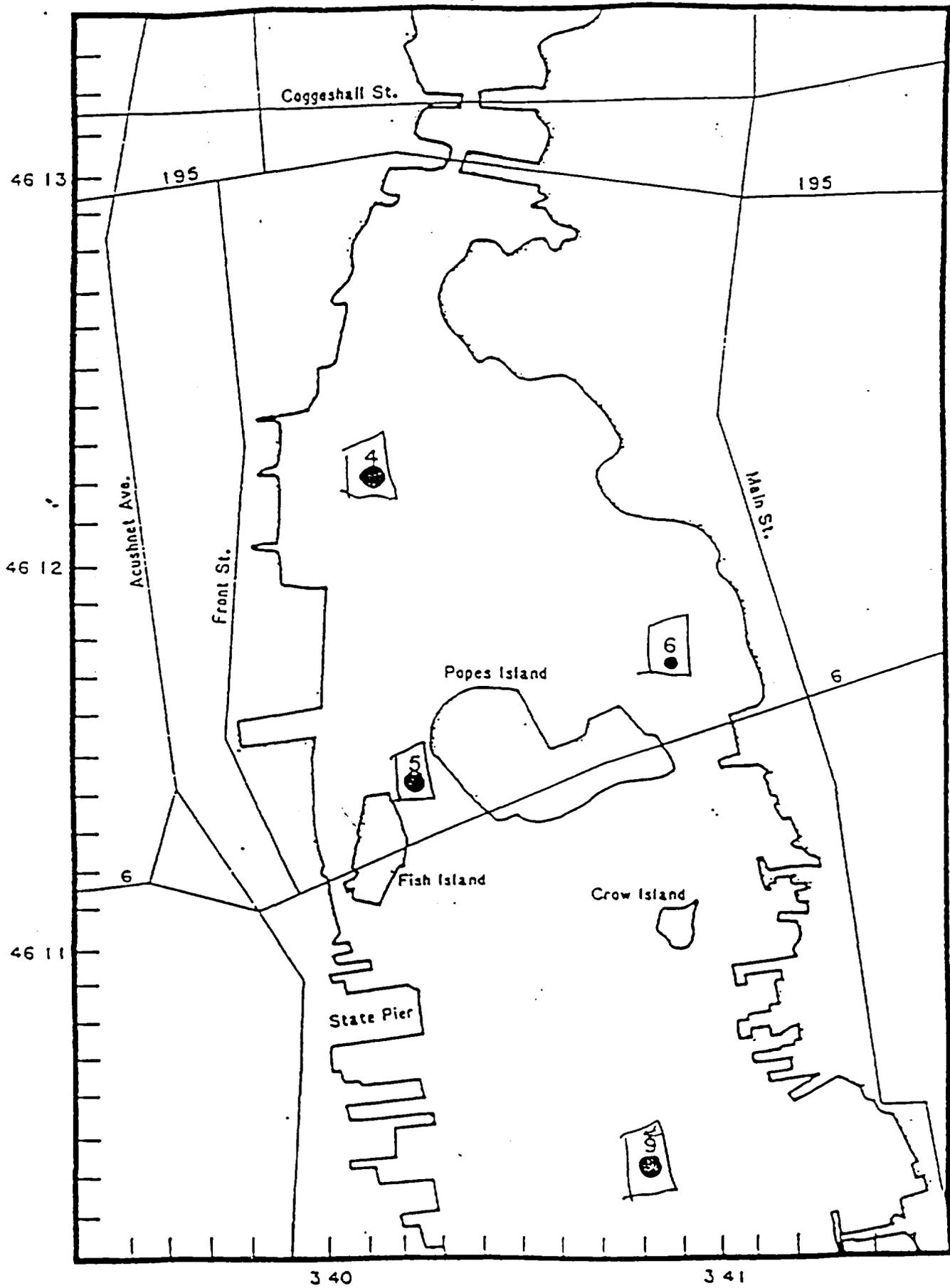


Figure 1. (cont.) Location of Battelle PCB Water Column Sampling Stations.

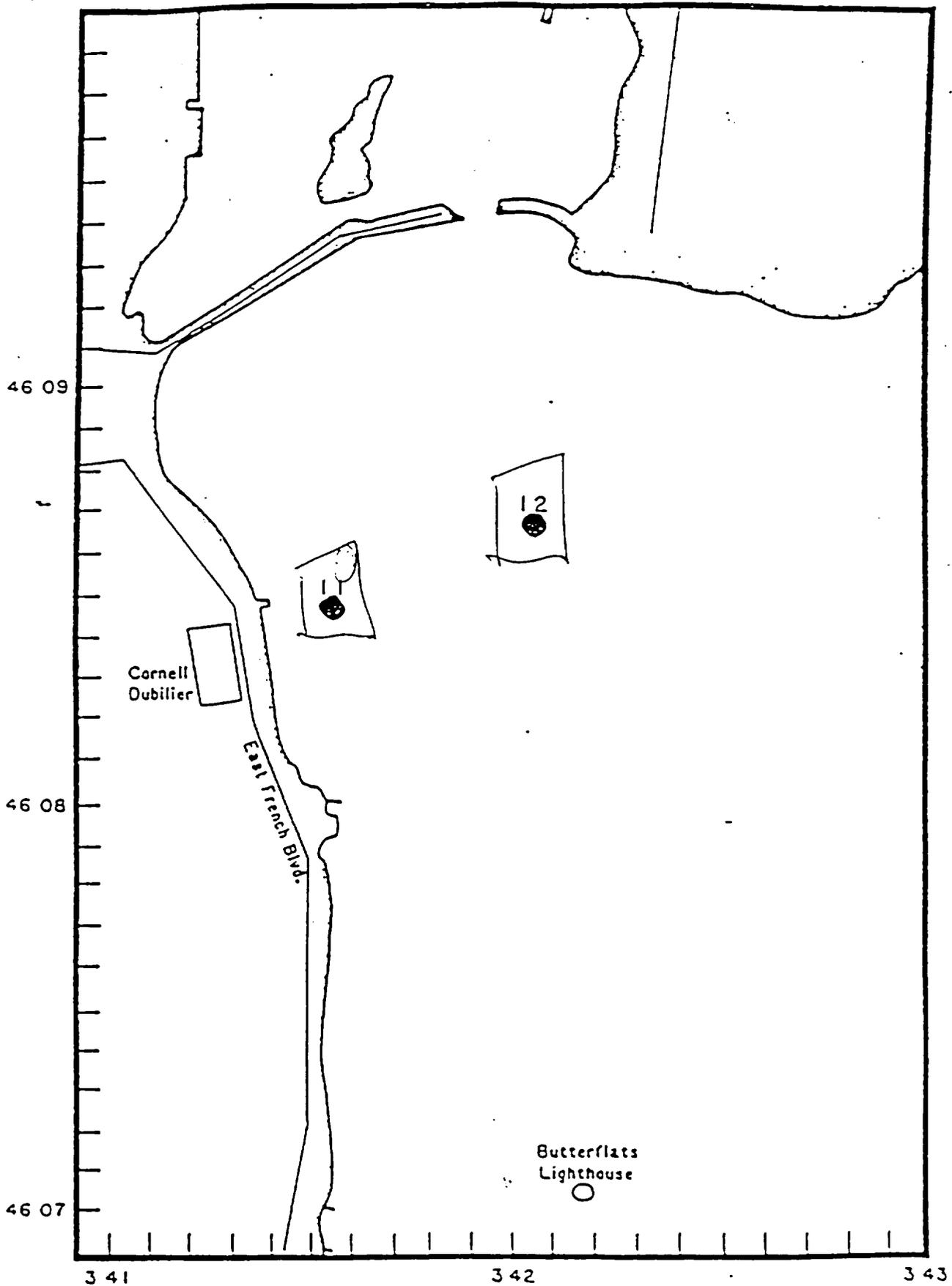


Figure 1. (cont.) Location of Battelle PCB Water Column Sampling Stations.

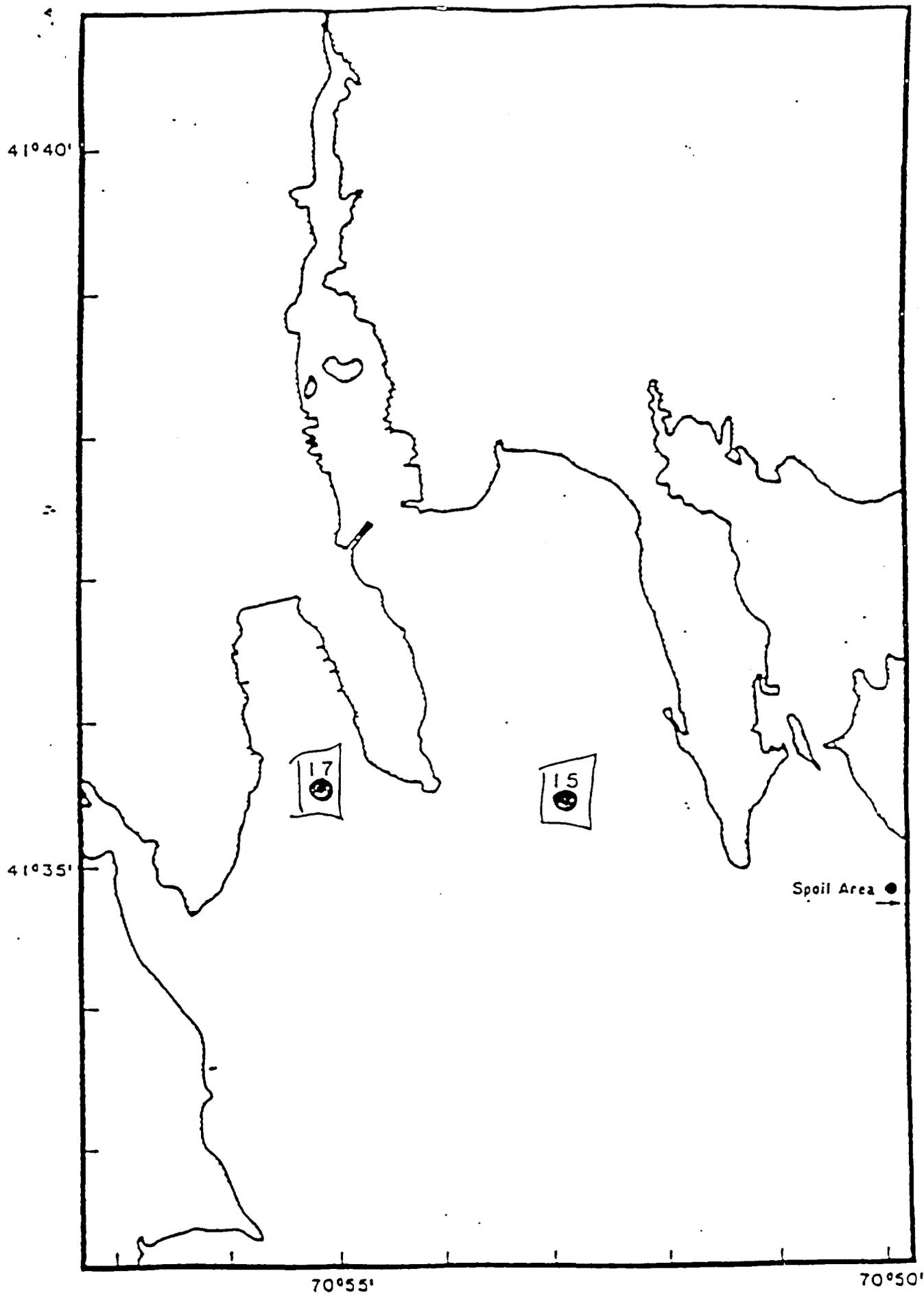


Figure 1. (cont.) Location of Battelle PCB Water Column Sampling Stations.

Appendix A - Chain of Custody documents.

GHR Analytical Inc.
26 Main St.: Lakeville, MA

3001
CHAIN OF CUSTODY RECORD

PROJECT NO.: 3096-003		WORK PLAN NO.:		SITE NAME: <i>Ropes + Gray Acushnet RIVER</i>		NO. OF CON-TAINERS	<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 2px;">500 ml Glass</div> <div style="border: 1px solid black; padding: 2px;">1 Liter Glass</div> <div style="border: 1px solid black; padding: 2px;">Glass Soil Jar</div> </div>				32-297		
SAMPLERS (SIGNATURE):							REMARKS						
STATION NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION								
036	12/22	0645			Station IC - TOTAL	2	2			57A	A	} 62854	
037					" " - DISSOLVED	4	4				B		
038					" " - Suspended	1					C		
039	12/22	0745			Station IB - TOTAL	2	2				A	} 62856	
040					" " - DISSOLVED	4	4				B		
041					" " - Suspended	1					C		
042	12/22	0805			Station I - TOTAL	2	2				A	} 62854	
043					" " - DISSOLVED	4	4				B		
044					" " - Suspended	1					C		
045	12/22	0830			Station I Rep. - TOTAL	2	2				A	} 62855	
046					" " - DISSOLVED	4	4				B		
047					" " - Suspended	1					C		
048	12/22	0905			Station I A - Total	2	2				53A	} 62853	
049					" " - DISSOLVED	2	2				53B		
RELINQUISHED BY (SIGNATURE):		DATE/TIME:		RECEIVED BY (SIGNATURE):		RELINQUISHED BY (SIGNATURE):		DATE/TIME:		RECEIVED BY (SIGNATURE):			
<i>Stephen O'Neil</i>		12/22/06 1500		<i>R. Hooper</i> 12/22									
RELINQUISHED BY (SIGNATURE):		DATE/TIME:		RECEIVED BY (SIGNATURE):		RELINQUISHED BY (SIGNATURE):		DATE/TIME:		RECEIVED BY (SIGNATURE):			
RELINQUISHED BY (SIGNATURE):		DATE/TIME:		RECEIVED FOR LABORATORY BY (SIGNATURE):		DATE/TIME:		REMARKS:					

Distribution: Original accompanies shipment; copy to coordinator field files

PROJECT NO.:		WORK PLAN NO.:		SITE NAME:		NO. OF CONTAINERS					REMARKS	
3096-003				Ropes + Gray Rushnet River			<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 2px;">500 ml Glass</div> <div style="border: 1px solid black; padding: 2px;">1 Liter Glass</div> <div style="border: 1px solid black; padding: 2px;">Glass Soil Jar</div> </div>					
SAMPLERS (SIGNATURE):												
STATION NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION							
050	4/22/02	0905			STATION 1A - Suspended	1		1				PCB Analysis 628530
051	4/22	1010			STATION 2 - TOTAL	2	2					A } B } 62858 C } ↓
052	↓	↓			" " - Dissolved	4	4					
053	↓	↓			" " - Suspended	1		1				
054	↓	↓			" " - Suspended TOTAL	1	1					Suspended Solids
055	4/22	1145			Blank - Total	1		1				PCB Analysis } A } B } 62859 C } ↓
056	↓	↓			" - Dissolved	1		1				
057	↓	↓			" - Suspended	1		1				

RELINQUISHED BY (SIGNATURE): <i>Stephen O'Neil</i>	DATE/TIME: 13/22/02 1500	RECEIVED BY (SIGNATURE): <i>Vin Hardy</i>	DATE/TIME: 10/02	RELINQUISHED BY (SIGNATURE):	DATE/TIME:	RECEIVED BY (SIGNATURE):
RELINQUISHED BY (SIGNATURE):	DATE/TIME:	RECEIVED BY (SIGNATURE):	DATE/TIME:	RELINQUISHED BY (SIGNATURE):	DATE/TIME:	RECEIVED BY (SIGNATURE):
RELINQUISHED BY (SIGNATURE):	DATE/TIME:	RECEIVED FOR LABORATORY BY (SIGNATURE):	DATE/TIME:	REMARKS:		

Distribution: Original accompanies shipment; copy to coordinator field files.

PROJECT NO.:		WORK PLAN NO.:		SITE NAME:		NO. OF CONTAINERS	REMARKS					
3096-003				Road & Gray/Asenov								
SAMPLERS (SIGNATURE): <i>James E. Mills</i>												
STATION NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION							
021	12/22	0710		X	5 Total	1	X					A } 1gal, 11gal, 1gal soil jar
022		0720		"	5 Dissolved	1						B } 62860
023		0730			5 Particulate	1						C }
024		0820			6 Total	1						A } 1gal, 1gal, 1gal soil jar
025		0825			6 Dissolved	1						B } 62860
026		0825			6 Particulate	1						C }
027		1005			4 Total	1						A }
028		1015			4 Dissolved	1						B } 62860 1gal
029		1020			4 Particulate	1						C } 1gal soil jar
030		1035			4 Duplicate Total	1						A }
031		1040			" " Dissolved	2						B } 62860 2-1gal
032		1045			" " Particulate	1						C } 1gal soil jar
033		1105			Blank Total	1						A }
034		1110			Blank Dissolved	1						B } 62864 2-1gal, 1gal soil jar
RELINQUISHED BY (SIGNATURE):		DATE/TIME:		RECEIVED BY (SIGNATURE):		RELINQUISHED BY (SIGNATURE):		DATE/TIME:		RECEIVED BY (SIGNATURE):		
<i>[Signature]</i>		12/22 11:50		<i>[Signature]</i>								
RELINQUISHED BY (SIGNATURE):		DATE/TIME:		RECEIVED BY (SIGNATURE):		RELINQUISHED BY (SIGNATURE):		DATE/TIME:		RECEIVED BY (SIGNATURE):		
RELINQUISHED BY (SIGNATURE):		DATE/TIME:		RECEIVED FOR LABORATORY BY (SIGNATURE):		DATE/TIME:		REMARKS:				

PROJECT NO.:		WORK PLAN NO.:		SITE NAME:		NO. OF CONTAINERS					REMARKS		
3096003				Ropes & Gray-			<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 2px;">Gallon</div> <div style="border: 1px solid black; padding: 2px;">1 liter</div> <div style="border: 1px solid black; padding: 2px;">500 ml</div> <div style="border: 1px solid black; padding: 2px;">glass soil</div> </div>					PCB's	
SAMPLERS (SIGNATURE):													
STATION NO.						DATE	TIME	COMP.	GRAB	STATION LOCATION			
001	12/22	0730			station 17						1	C Filter	} b2869
002	12/22	0720			" "						1	A Total Fraction	
003	12/22	0850			" "						1	B Dissolved Fraction	
004	12/22	0820			station 15						1	C Filter	} b2868
005	12/22	0747			" "						1	A Total Fraction	
006	12/22	0800			" "						1	B Dissolved Fraction	
007	12/22	0900			station 12						1	C Filter	} b2867
008	12/22	0840			" "						1	A Total Fraction	
009	12/22	0855			" "						1	B Dissolved Fraction	
010	12/22	0950			station 11						1	C Filter	} b2866
011	12/22	0920									1	A Total Fraction	
012	12/22	0935									1	B Dissolved Fraction	
RELINQUISHED BY (SIGNATURE):						DATE/TIME:	RECEIVED BY (SIGNATURE):			RELINQUISHED BY (SIGNATURE):	DATE/TIME:	RECEIVED BY (SIGNATURE):	
<i>Robert Sullivan</i>						12/22/04 1159	<i>Riz Hroprey</i> 12/22						
RELINQUISHED BY (SIGNATURE):						DATE/TIME:	RECEIVED BY (SIGNATURE):			RELINQUISHED BY (SIGNATURE):	DATE/TIME:	RECEIVED BY (SIGNATURE):	
RELINQUISHED BY (SIGNATURE):						DATE/TIME:	RECEIVED FOR LABORATORY BY (SIGNATURE):			DATE/TIME:	REMARKS:		

GHR Analytical Inc.
26 Main St., Lakeville, MA

CHAIN OF CUSTODY RECORD

PROJECT NO.:		WORK PLAN NO.:		SITE NAME:		NO. OF CONTAINERS	Container Type				REMARKS	
3096003				Ropes + Gray			Gallon	Liter	300ml	Glass Jar		
SAMPLER SIGNATURE:						STATION NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	
Robert Sullivan												
013	12/22	1030			Station 9	1						C Filter
014	12/22	1000			" "	1						A Total Fraction
015	12/22	1014			" "	1						B Dissolved Fraction
016	12/22	1230			Field blank	1						C Filter
017	12/22	1230			" "	1						A Total Fraction
018	12/22	1230			" "	1						B Dissolved Fraction
019	12/20	1500			Trip Blank	2			2			Tap water
020	12/20	1500			" "	2			2			Tap water.

PCB's

62805
60870
62811

RELINQUISHED BY (SIGNATURE): Robert Sullivan	DATE/TIME: 12/22/06	RECEIVED BY (SIGNATURE): R. Gray	RELINQUISHED BY (SIGNATURE):	DATE/TIME:	RECEIVED BY (SIGNATURE):
RELINQUISHED BY (SIGNATURE):	DATE/TIME:	RECEIVED BY (SIGNATURE):	RELINQUISHED BY (SIGNATURE):	DATE/TIME:	RECEIVED BY (SIGNATURE):
RELINQUISHED BY (SIGNATURE):	DATE/TIME:	RECEIVED FOR LABORATORY BY (SIGNATURE):	DATE/TIME:	REMARKS:	

Distribution: Original accompanies shipment; copy to coordinator of field files.

Appendix B - Field sampling logs.

Appendix C - Chain of Custody documents for extracts
sent to Dr. Robert Wagner.



December 30, 1986

Dr. Robert Wagner
GE Research & Development Center
Building K-1 Room 5333
Schenectady, NY 12301

Dear Dr. Wagner,

Per our conversation on December 30, 1986, please find the extracts for samples collected December 22, 1986 for Ropes & Gray. Also enclosed is a complete list of all sample numbers, station identifications and volumes analyzed.

If you should have any questions, feel free to contact myself or Steve O'Neil at (617) 947-5077.

Sincerely,

A handwritten signature in black ink, appearing to read 'James E. Mich', is written over a horizontal line.

James E. Mich
Laboratory Supervisor
GHR Analytical, Inc.

PROJECT NO.:		WORK PLAN NO.:		SITE NAME:		NO. OF CONTAINERS	REMARKS					
				Kerosene Gray - Acushnet River								
SAMPLER'S (SIGNATURE):						1	C-100 Tube					
[Signature]												
STATION NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION							
6286C					Station # 001	1						Hexane Extract of Sample
A					002	1						"
B					003	1						"
6288C					004	1						"
A					005	1						"
B					006	1						"
62867C					007	1						"
A					008	1						"
B					009	1						"
62866C					010	1						"
A					011	1						"
B					012	1						"

RELINQUISHED BY (SIGNATURE):	DATE/TIME:	RECEIVED BY (SIGNATURE):	DATE/TIME:	RECEIVED BY (SIGNATURE):	DATE/TIME:	RECEIVED BY (SIGNATURE):
[Signature]	12/30/06 1:00	[Signature]	12/29/06 11:32			
RELINQUISHED BY (SIGNATURE):	DATE/TIME:	RECEIVED BY (SIGNATURE):	DATE/TIME:	RECEIVED BY (SIGNATURE):	DATE/TIME:	RECEIVED BY (SIGNATURE):
RELINQUISHED BY (SIGNATURE):	DATE/TIME:	RECEIVED FOR LABORATORY BY (SIGNATURE):	DATE/TIME:	REMARKS:		

PROJECT NO.:		WORK PLAN NO.:		SITE NAME:		NO. OF CONTAINERS	REMARKS					
SAMPLERS (SIGNATURE):												
STATION NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION							
6285C					Station # 013	1	1					Hexane Extract of Sample
A					014	1	1					"
B					015	1	1					"
62870C					016	1	1					"
A					017	1	1					"
B					018	1	1					"
62871					019	1	1					"
Blank					Method Blank	1	1					"
Blank					Method Blank	1	1					"
Blank					Method Blank	1	1					"
Blank					Method Blank	1	1					"
Spike					Method Spike	1	1					"

RELINQUISHED BY (SIGNATURE):	DATE/TIME:	RECEIVED BY (SIGNATURE):	RELINQUISHED BY (SIGNATURE):	DATE/TIME:	RECEIVED BY (SIGNATURE):
<i>[Signature]</i>	12/30/86 1700	Arbitt # FAX 102915326			
RELINQUISHED BY (SIGNATURE):	DATE/TIME:	RECEIVED BY (SIGNATURE):	RELINQUISHED BY (SIGNATURE):	DATE/TIME:	RECEIVED BY (SIGNATURE):
RELINQUISHED BY (SIGNATURE):	DATE/TIME:	RECEIVED FOR LABORATORY BY (SIGNATURE):	DATE/TIME:	REMARKS:	

Distribution: Original accompanies shipment; copy to coordinator field files.

PROJECT NO.:		WORK PLAN NO.:		SITE NAME:		NO. OF CONTAINERS	REMARKS				
SAMPLERS (SIGNATURE):											
STATION NO	DATE	TIME	COMP.	GRAB	STATION LOCATION						
6282A					Station # 021	1	1				Hexane Extract of Sample
B					022	1	1				"
C					023	1	1				"
6283A					024	1	1				"
B					025	1	1				"
C					026	1	1				"
6284A					027	1	1				"
B					028	1	1				"
C					029	1	1				"
6284A					030	1	1				"
B					031	1	1				"
C					032	1	1				"
6284A					033	1	1				"
B					034	1	1				"

RELINQUISHED BY (SIGNATURE):	DATE/TIME:	RECEIVED BY (SIGNATURE):	RELINQUISHED BY (SIGNATURE):	DATE/TIME:	RECEIVED BY (SIGNATURE):
<i>[Signature]</i>	12/30/86	<i>[Signature]</i>			
RELINQUISHED BY (SIGNATURE):	DATE/TIME:	RECEIVED BY (SIGNATURE):	RELINQUISHED BY (SIGNATURE):	DATE/TIME:	RECEIVED BY (SIGNATURE):
RELINQUISHED BY (SIGNATURE):	DATE/TIME:	RECEIVED FOR LABORATORY BY (SIGNATURE):	DATE/TIME:	REMARKS:	

Distribution: Original accompanies shipment; copy to coordinator field files.

GHR Analytical Inc.
26 Main St., Lakeville, MA

CHAIN OF CUSTODY RECORD

PROJECT NO.:		WORK PLAN NO.:		SITE NAME:		NO. OF CONTAINERS	REMARKS				
				Ropes & Gray - Acushnet River							
SAMPLERS (SIGNATURE):						NO. OF CONTAINERS	REMARKS				
<i>[Signature]</i>											
STATION NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION						
62857A					Station # 036	1	1				Hexane Extract of Sample
B					037	1	1				"
C					038	1	1				"
62856A					039	1	1				"
B					040	1	1				"
C					041	1	1				"
62854A					042	1	1				"
B					043	1	1				"
C					044	1	1				"
62855A					045	1	1				"
B					046	1	1				"
C					047	1	1				"
62853A					048	1	1				"
B					049	1	1				"

RELINQUISHED BY (SIGNATURE):	DATE/TIME:	RECEIVED BY (SIGNATURE):	RELINQUISHED BY (SIGNATURE):	DATE/TIME:	RECEIVED BY (SIGNATURE):
<i>[Signature]</i>	12/31/86 AM	G. E. Anbill * 102915326			
RELINQUISHED BY (SIGNATURE):	DATE/TIME:	RECEIVED BY (SIGNATURE):	RELINQUISHED BY (SIGNATURE):	DATE/TIME:	RECEIVED BY (SIGNATURE):
RELINQUISHED BY (SIGNATURE):	DATE/TIME:	RECEIVED FOR LABORATORY BY (SIGNATURE):	DATE/TIME:	REMARKS:	

Distribution: Original accompanies shipment; copy to coordinator field files.

GHR Analytical Inc.
26 Main St.; Lakeville, MA

CHAIN OF CUSTODY RECORD

PROJECT NO.:		WORK PLAN NO.:		SITE NAME: <i>Ropes Gray - Ashnet River</i>		NO. OF CONTAINERS	REMARKS					
SAMPLERS (SIGNATURE): <i>[Signature]</i>												
STATION NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION							
<i>62852C</i>					<i>Station # 050</i>	1	1				<i>Hexane Extract of Sample</i>	
<i>62858A</i>					<i>051</i>	1	1					11
<i>B</i>					<i>052</i>	1	1					11
<i>C</i>					<i>053</i>	1	1				11	
<i>62859A</i>					<i>055</i>	1	1				11	
<i>B</i>					<i>056</i>	1	1				11	
<i>C</i>					<i>057</i>	1	1				11	

RELINQUISHED BY (SIGNATURE): <i>[Signature]</i>	DATE/TIME: <i>12/30/06 1700</i>	RECEIVED BY (SIGNATURE): <i>[Signature]</i>	RECEIVED BY (SIGNATURE):	RELINQUISHED BY (SIGNATURE):	DATE/TIME:	RECEIVED BY (SIGNATURE):
RELINQUISHED BY (SIGNATURE):	DATE/TIME:	RECEIVED BY (SIGNATURE):	RECEIVED BY (SIGNATURE):	RELINQUISHED BY (SIGNATURE):	DATE/TIME:	RECEIVED BY (SIGNATURE):
RELINQUISHED BY (SIGNATURE):	DATE/TIME:	RECEIVED FOR LABORATORY BY (SIGNATURE):	RECEIVED FOR LABORATORY BY (SIGNATURE):	DATE/TIME:	REMARKS:	

Distribution: Original accompanies shipment; copy to coordinator filed files.