ASSESSMENT OF THE ENVIRONMENTAL IMPACTS OF THE HART-MILLER ISLAND CONTAINMENT FACILITY

TENTH ANNUAL INTERPRETIVE REPORT
AUGUST 1990 - AUGUST 1991

SUBMITTED TO
MARYLAND WATER RESOURCES ADMINISTRATION

PREPARED FOR
MARYLAND PORT ADMINISTRATION

BY
DEPARTMENT OF NATURAL RESOURCES
TIDEWATER ADMINISTRATION

MPA CONTRACT NO. 291665

OCTOBER, 1993

FOREWORD

The tenth annual data report represents the results of monitoring of the Hart-Miller Island dredge containment facility conducted from August 1990 through August 1991. Data reports from the principal investigators are included. Also included are printouts for the Resource Monitoring Data Storage System. There is no data from Project I because the scope of work is limited to scientific coordinating and data management. This data report serves as a companion to the associated interpretive report entitled "The Continuous State Assessment of the Environmental Impacts of Operation of the Hart-Miller Island Containment Facility, Tenth Annual Interpretive Report."

TABLE OF CONTENTS

FORWARD i

TABLE OF CONTENTS ii

LIST OF FIGURES iii

LIST OF TABLES iv

PROJECT II **1**

PART I: SEDIMENTARY ENVIRONMENT 2

INTRODUCTION 2
METHODOLOGY 2
FIELD METHODS 2
LABORATORY PROCEDURES 6
Radiographic Technique 6
Textural Analysis 7
Trace Metal Analysis 8

PART II: BEACH EROSION STUDY 11

INTRODUCTION 11
METHODOLOGY 11

REFERENCES 14

APPENDIX A 73

PROJECT III **74**

BENTHIC STUDIES 75

PROJECT IV **81**

ANALYTICAL SERVICES 81

LIST OF FIGURES

SEDIMENTARY ENVIRONMENT

PART 1: SEDIMENTARY ENVIRONMENT

Figure 1-1: The Hart-Miller Island Containment Facility and vicinity with locations of the surficial sediment and core stations sampled during the tenth year of exterior monitoring 3

Figure 1-2: Pejrup's (1988) classification of sediment type. 9

PART 2: BEACH EROSION STUDY

Figure 2-1: Locations of bench marks and profile lines along the recreational beach between Hart and Miller Islands. 12

BENTHIC STUDIES

Figure 1: Benthic infaunal and epifaunal sampling station locations at Hart Miller Island containment facility. University of Maryland, Chesapeake Biological Laboratory designations 78

LIST OF TABLES

SEDIMENTARY ENVIRONMENT

PART 1: SEDIMENTARY ENVIRONMENT

Table 1-1: Wentworth size nomenclature 17

Table 1-2: LORAN-C and geographic coordinates of stations sampled during the tenth monitoring year 18

Table 1-3: Field descriptions - surficial sediment samples collected on November 7, 1990 (Cruise 24) 20

Table 1-4: Sedimentological parameters - surficial samples collected on November 7, 1990 (Cruise 24) 33

Table 1-5: Trace metal concentrations - surficial sediment samples collected on November 7, 1990 (Cruise 24) 35

Table 1-6: Enrichment factors - surficial sediment samples collected on November 7, 1990 (Cruise 24) 37

Table 1-7: Field descriptions - surficial sediment samples collected on April 9-10, 1991 (Cruise 25) 39

Table 1-8: Sedimentological parameters - surficial samples collected on April 9-10, 1991 (Cruise 25) 51

Table 1-9: Trace metal concentrations - surficial sediment samples collected on April 9-10, 1991 (Cruise 25) 53

Table 1-10: Enrichment factors - surficial sediment samples collected on April 9-10, 1991 (Cruise 25) 55

Table 1-11: Sedimentological parameters - subsamples taken from gravity cores collected on April 9-10, 1991 (Cruise 25) 57

Table 1-12: Trace metal concentrations - subsamples taken from gravity cores collected on April 9-10, 1991 (Cruise 25) 60

Table 1-13: Enrichment factors - subsamples taken from gravity cores collected on April 9-10, 1991 (Cruise 25) 63

LIST OF TABLES, CON'T

PART 2: BEACH EROSION STUDY

Table 2-1: Distance and elevation data for Hart-Miller Island beach profiles, May 2, 7, & 11, 1990 . . 66

Table 2-2: Distance and elevation data for Hart-Miller Island beach profiles, February 6, 7, & 21, 1991 69

Table 2-3: Distance and elevation data for Hart-Miller Island beach profiles, May 2 & 8, 1991 71

BENTHIC STUDIES

Table 1: Weather Codes for Benthic Data Sheets 79

Table 2: Salinity (in 0/00) and temperature (°C) data for the benthic sampling stations on the different collection dates during the tenth year of sampling 80

The Continuing State Assessment of the Environmental Impacts of Construction and Operation of the Hart-Miller Island Containment Facility

Project II

SEDIMENTARY ENVIRONMENT
TENTH YEAR DATA REPORT
(November 1990 - October 1991)

Part 1: Sedimentary Environment
Lamere Hennessee, James M. Hill, and June Park

Part 2: Beach Erosion Study
Robert Cuthbertson

Coastal and Estuarine Geology Program
Maryland Geological Survey
2300 St. Paul St.
Baltimore, MD 21218
(301) 554-5500

File Report No. 67

submitted to

Tidewater Administration
Maryland Department of Natural Resources
Tawes State Office Building
Annapolis, MD 21041

January 1992

PART 1: SEDIMENTARY ENVIRONMENT

Lamere Hennessee, James M. Hill, and June Park

INTRODUCTION

This report partially fulfills the requirements of a contract (#291655) with the State of Maryland to assess the environmental impacts of construction and operation of the Hart-Miller Island Dredged Material Containment Facility. The reported data were collected under the Sedimentary Environment Project (Project II) of that contract, the primary objective of which was to identify the sedimentological and geochemical conditions of the near-surface sediment column in the vicinity of the containment facility.

METHODOLOGY

FIELD METHODS

The information presented in this report is based on analyses of samples collected on two cruises aboard the R/V Discovery during the tenth year of monitoring. Sampling sites (Fig. 1-1) were located in the field by means of the LORAN-C navigational system. For the past eight years, the same LORAN X and Y TDs (time delays) have been used to locate the stations that were established during the initial phase of this project. The repeatability of LORAN-C navigation, that is, the ability to return to a location at which a navigation fix has previously been obtained, is affected

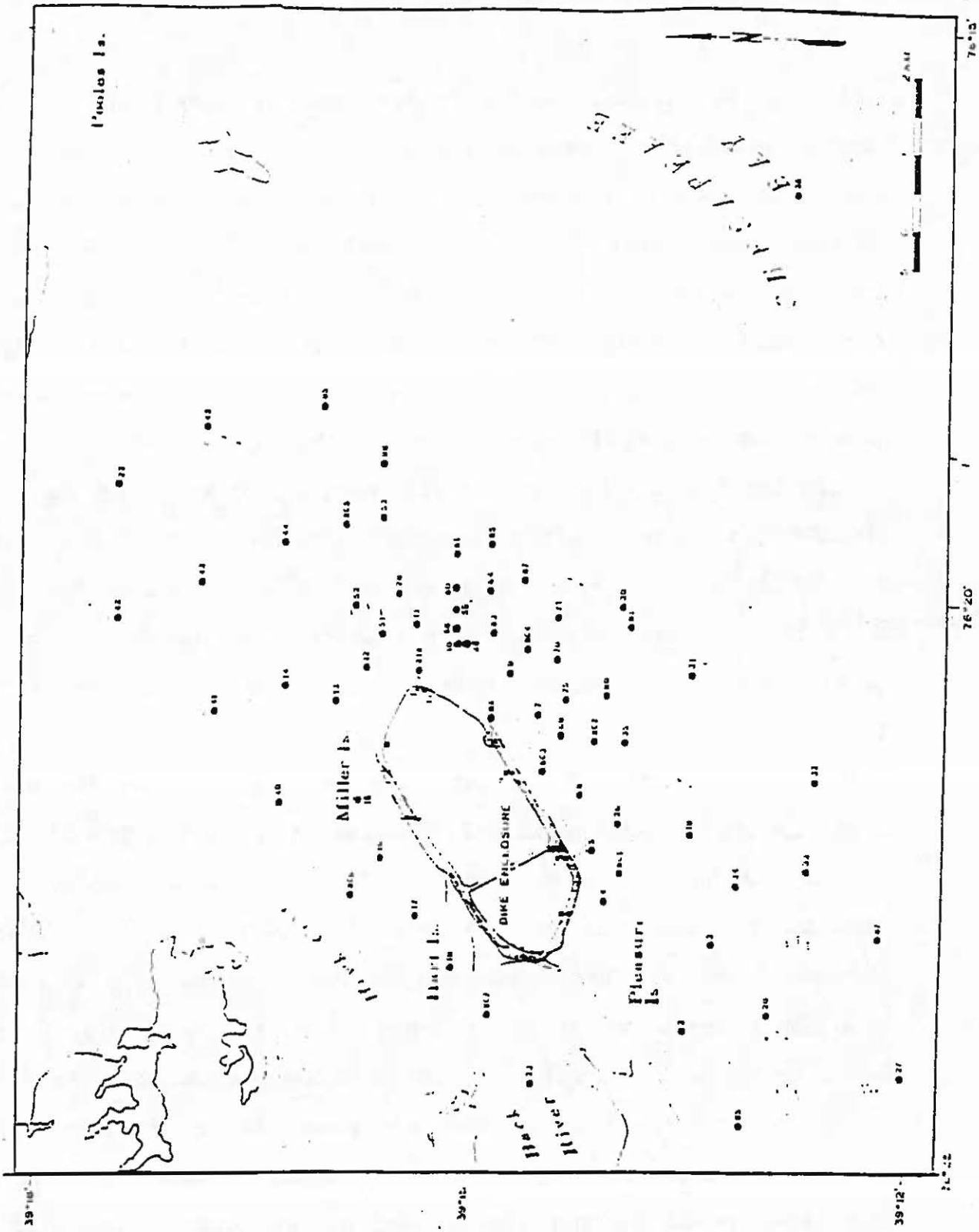

Figure 1-1: The Hart-Miller Island Containment Facility and vicinity with locations of the surficial sediment and core stations sampled during the tenth year of exterior monitoring.

primarily by seasonal and weather-related changes along the signal transmission path. Data recorded in 1982 from the U.S. Coast Guard Harbor Monitor at Yorktown, Virginia provide an approximate range of repeatable error. That year, variations in the X-lines amounted to 0.256 units and, in the Y-lines, 0.521 units. In the central Chesapeake Bay, one X-TD unit equals approximately 285 m (312 yd) and one Y-TD unit, 156 m (171 yd). Therefore, when a vessel reoccupies an established station in the Bay region, it should be within about 100 m (109 yd) of its original location (Halka, 1987). LORAN-C TDs were converted to 'corrected' latitudes and longitudes (NAD 1927) using a computer program that incorporates the results of a LORAN-C calibration in Chesapeake Bay (Halka, 1987). The LORAN-C TDs, latitude, and longitude for each station are listed in Table 1-2.

Surficial sediment samples were collected in November 1990 (Cruise 24) and April 1991 (Cruise 25). During the ninth year of monitoring, the number of sampling stations was doubled in response to the detection of abnormally high Zn levels in sediments near spillway #1 (Hennessee and Hill, in press). The expanded sampling plan was retained throughout the tenth year. In November 1990, 60 sites, including all of the box core (BC) stations, were occupied. In April 1991, sediment samples were collected at 63 stations. During that cruise, six new stations were added north of the dike, based on the likely path of effluent discharged from spillway #2 (Johnson et al., 1989).

Undisturbed samples of the upper 8-10 cm of the

sediments were obtained with a dip-galvanized Petersen sampler. At least one grab sample was collected at each station for textural and trace metal analyses. During the November cruise, a second grab sample was taken for organic contaminant analysis at 12 stations (3, 19, 21B, 23, 24, 25, 28, 30, 34, 36, BC3, and BC6). Budgetary constraints during the tenth year resulted in a decision to collect and analyze organics samples only once a year. Consequently, none of the sediment samples collected in April 1991 was analyzed for organic constituents. Triplicate grab samples were collected at eight stations (11, 12, 16, 24, 25, 28, BC3, and BC6) in both November 1990 and in April 1991. Upon collection, each sediment sample was described lithologically (Tables 1-3 and 1-7) and subsampled.

Sediment and trace metal subsamples were collected using plastic scoops rinsed with distilled water. These samples were taken several centimeters from the top, below the flocculent layer, and away from the sides of the sampler to avoid possible contamination by the grab sampler. They were placed in 18-oz "Whirl-Pak" bags. Samples designated for textural analysis were stored out of direct sunlight at ambient temperatures. Those intended for trace metal analysis were refrigerated and maintained at 4°C until processing.

Subsamples for organic analysis were collected with an aluminum scoop (also rinsed with distilled water), placed in pre-treated glass jars, and immediately refrigerated. They were delivered to the Maryland Environmental Service (MES) office at the

containment facility, then transferred to Martel Laboratory Services, Inc. for analysis.

In April 1991, gravity cores were collected at the seven BC stations and at stations 5, 12, and 25 (Fig. 1-1). A Benthos gravity corer (Model #2171) fitted with clean cellulose acetate butyrate (CAB) liners, 6.7 cm in diameter, was used. Each core was cut and capped at the sediment-water interface and refrigerated until it could be x-rayed and processed in the lab.

LABORATORY PROCEDURES

Radiographic Technique

Prior to processing, the upper 50 cm of each core were x-rayed at MGS, using a TORR-MED x-ray unit (x-ray settings: 90 kv, 5 mas, 30 sec). A negative x-ray image of the core was obtained by xeroradiographic processing. On a negative xeroradiograph, denser objects or materials, such as shells or sand, produce lighter images. Objects of lesser density permit easier penetration of x-rays and, therefore, appear as darker features. The xeroradiographs are reproduced in an appendix to the Tenth Year Interpretive Report.

Each core was then extruded, photographed, and described. Visual and radiographic observations of the cores are presented in an appendix of this report. On the basis of these observations, sediment samples for textural and trace metal analyses were taken at selected intervals from each core.

Textural Analysis

In the laboratory, subsamples from both the surficial grabs and gravity cores were analyzed for water content and grain size composition (sand-silt-clay content). Values of the measured textural parameters are tabulated separately for the surficial samples (Tables 1-4 and 1-8) and for the core subsamples (Table 1-11.

Water content was calculated as the percentage of the water weight to the total weight of the wet sediment:

$$Wc = \frac{Ww}{Wt} \times 100$$

where Wc = water content (%)
Ww = weight of water (g)
Wt = weight of wet sediment (g).

Water weight was determined by weighing approximately 25 g of the wet sample, drying the sediment at 65°C, and reweighing it. The difference between total wet weight (Wt) and dry weight equals water weight (Ww). Bulk density was also determined from water content measurements.

The relative proportions of sand, silt, and clay were determined using the sedimentological procedures described in Kerhin et al. (1988). The sediment samples were pre-treated with hydrochloric acid and hydrogen peroxide to remove carbonate and organic matter, respectively. Then the samples were wet sieved through a 62-μm mesh to separate the sand from the mud (silt plus clay) fraction (see Table 1-1 for the definitions of sand, silt, and clay). The finer fraction was analyzed using the pipette

method to determine the silt and clay components (Blatt et. al., 1980). Each fraction was weighed; percent sand, silt, and clay were determined; and the sediments were categorized according to Pejrup's (1988) classification (Fig. 1-2).

Trace Metal Analysis

Sediment solids were analyzed for six trace metals - iron (Fe), manganese (Mn), zinc (Zn), copper (Cu), chromium (Cr), and nickel (Ni) - using a lithium metaborate fusion technique, followed by standard flame (Fe, Mn, Zn) or furnace (Cr, Cu, Ni) atomic absorption spectrophotometry. This procedure, based on methods developed by Suhr and Ingamells (1966) for whole rock analysis, was refined specifically for the analysis of Chesapeake Bay sediments (Sinex et al., 1980; Sinex and Helz, 1981; Cantillo, 1982). Trace metal concentrations of surficial samples are reported in Tables 1-5 and 1-9; those of core subsamples are given in Table 1-12. Enrichment factors are also tabulated separately for surficial samples (Tables 1-6 and 1-10) and core subsamples (Table 1-13).

The MGS laboratory followed the steps below in handling and preparing trace metal samples:

1. Samples were homogenized in the "Whirl-Pak" bags in which they were stored and refrigerated (4°C).

2. Approximately 10 g of wet sample were drawn into a modified "Leur-Loc" syringe fitted with a 1.25 mm polyethylene screen, used to remove shell material and large pieces of detritus.

3. Sieved samples were disaggregated in high-purity water and dried overnight at 110°C in teflon evaporating dishes.

4. Dried samples were then hand-ground with an agate mortar and pestle and stored in "Whirl-Pak" bags.

PEJRUP'S DIAGRAM

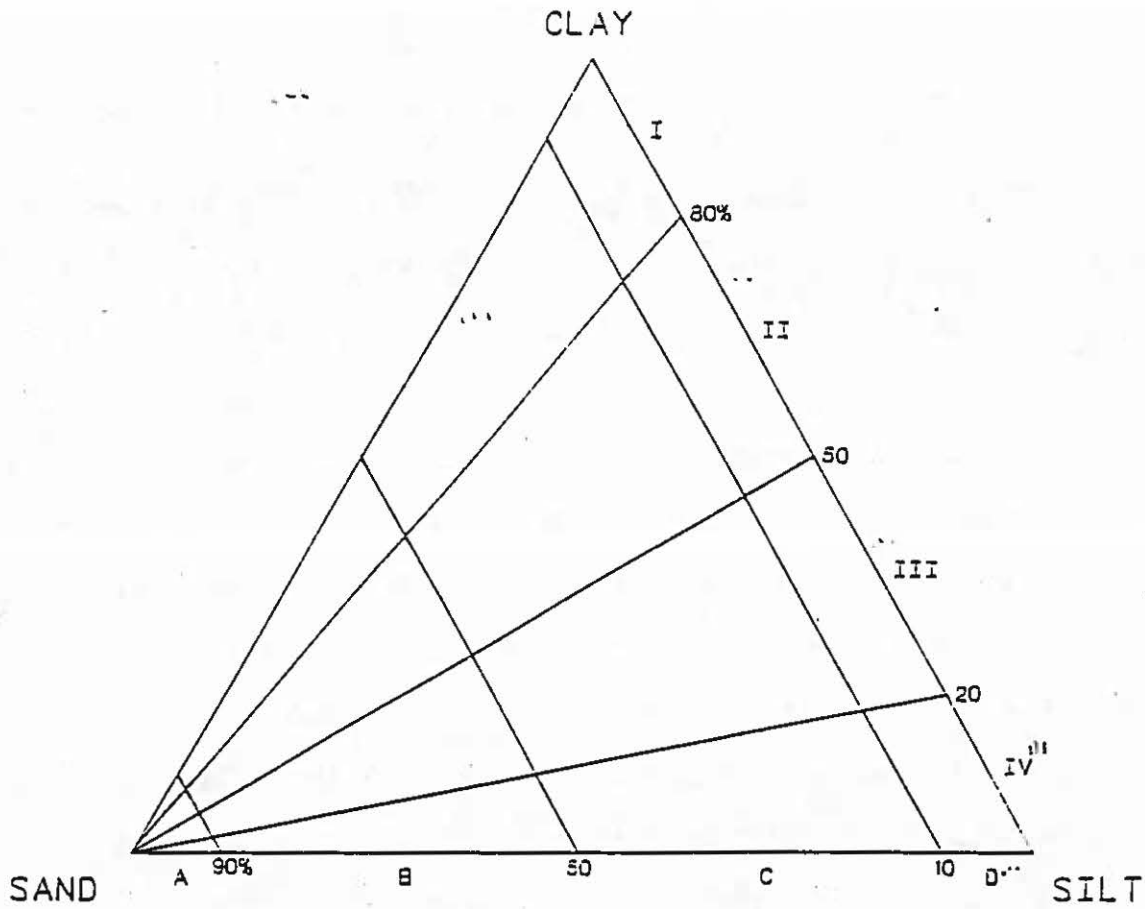

Figure 1-2: Pejrup's (1988) classification of sediment type.

5. Samples were weighed (0.25 ± 0.0002 g) into a drill-point graphite crucible (7.8 cc vol.) and mixed with $LiBO_2$ (0.75 ± 0.01 g).

6. The crucibles were placed in a highly regulated muffle furnace at 930 ± 5°C for 20 min.

7. The molten beads produced by heating were poured directly into teflon beakers containing 100 ml of a solution composed of 4% HNO_3, 1000 ppm La (from $La(NO_3)_3$), and 2000 ppm Cs (from $CsNO_3$), and stirred for 10 min. If dissolution did not occur within 30 min, the solution and bead were discarded and the sample was re-fused.

8. The dissolved samples were transferred to polyethylene bottles and stored for analysis.

All surfaces that came into contact with the samples were acid washed (3 days 1:1 HNO_3; 3 days 1:1 HCl), rinsed six times in high purity water (less than 5 mega-ohms), and stored in high-purity water until use.

The dissolved samples were analyzed with a Perkin-Elmer atomic absorption spectrophotometer (Model #3030B) using the method of bracketing standards (Van Loon, 1980). The instrumental parameters used to determine the solution concentrations of Cr, Ni, Zn, and Cu were the recommended, standard F.A.A.S. conditions given in the Perkin-Elmer manuals. Fe and Mn were analyzed using an acetylene-nitrous flame in order to eliminate interferences due to Al and Si (Butler, 1975). Blanks were run every 12 samples, and National Institute of Standards and Technology (NIST) Standard Reference Material #1646 (Estuarine Sediment) was run five times every 24 samples.

PART 2: BEACH EROSION STUDY

Robert Cuthbertson

INTRODUCTION

Since the spring of 1983, the Maryland Geological Survey (MGS) has been assessing the erosional problems affecting the recreational beach between Hart and Miller Islands. This year, the primary objectives of the study were to determine net sediment loss from the beach and to identify areas in which sediment was eroding or accreting.

METHODOLOGY

Ten profile lines were surveyed along the recreational beach to assess the changes occurring from the center line of the dike roadway to approximately 30 ft offshore (Fig. 2-1). The ten lines were surveyed three times during the study year: May 1990, February 1991, and May 1991.

Profile elevations were transferred directly from Maryland Port Administration (MPA) bench mark number 281614 (elevation = 14.57 ft MLW), located approximately 22 ft east of the center line of the dike roadway at station 30+00, and from bench marks established along the chain link fence by the Great Lakes Dredging Company (Fig. 2-1).

Initially, the location of each profile station along the center line of the dike roadway was established as described in Hennessee et al. (1990). During subsequent surveys, the center line of the dike roadway was located by measuring 13 ft east of the chain link fence with a fiberglass tape. An automatic level

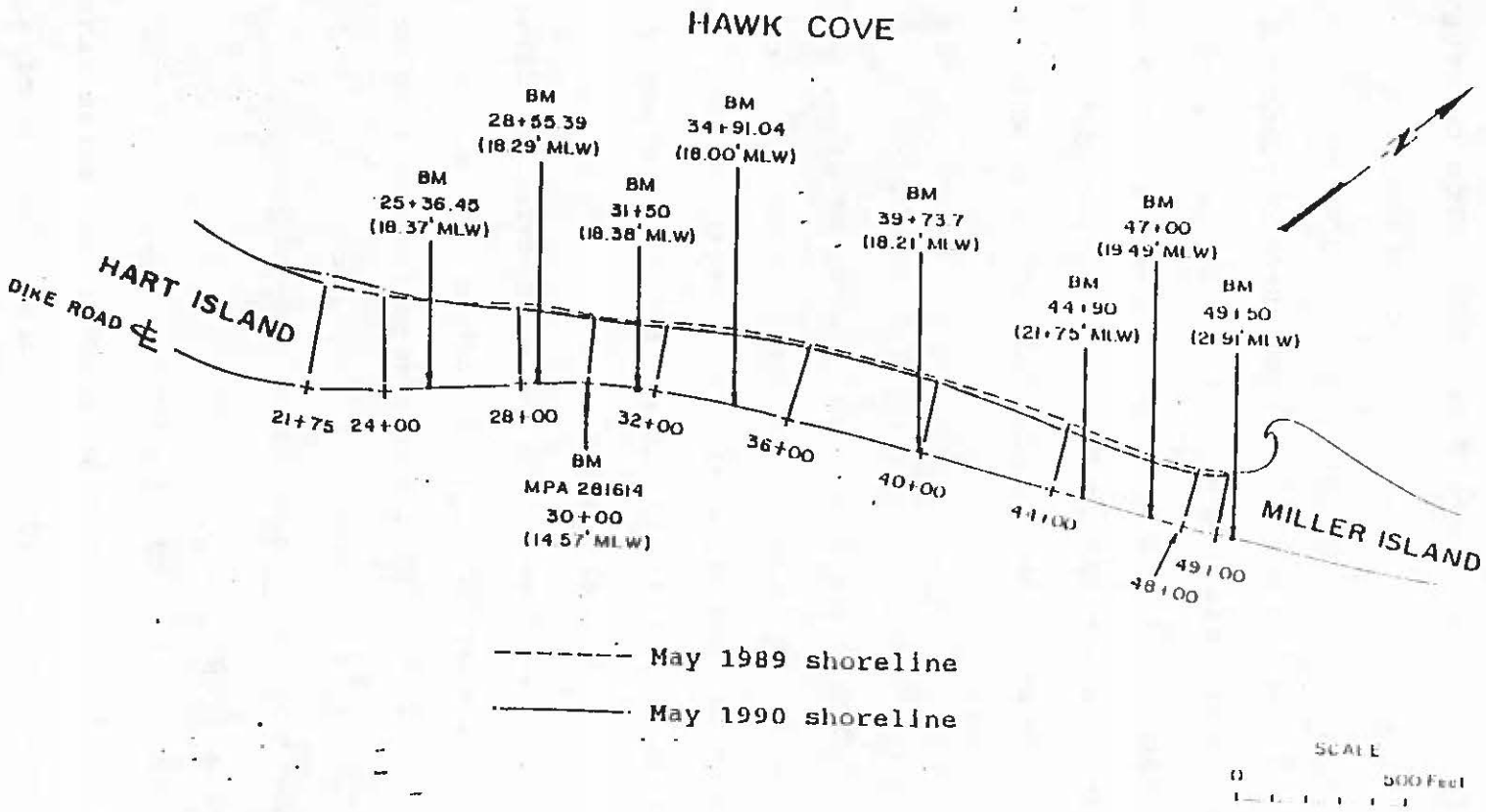

Figure 2-1: Locations of bench marks and profile lines along the recreational beach between Hart and Miller Islands.

was set up along the center line of the dike roadway. The level was then aligned with the orange marks painted on the fence from earlier surveys. Alignment of the level with the orange marks ensured repeatability in measuring the same azimuth down the profile as earlier surveys.

Through May 1989, profiles were measured from the center line of the dike roadway downslope in 50 ft increments and at obvious changes in elevation. The water line and elevations below mean low water were also recorded. By September 1989, the area between the chain link fence and the snow fence was stabilized with two berms, drainage ditches, and vegetation. The area between the chain link fence and the snow fence was eliminated from subsequent profiling sessions. Elevations were transferred from the center line of the roadway to wooden stakes placed several feet bayward of the snow fence. The transfer of elevations was necessary to reduce or eliminate elevation recording errors introduced by the stadia rods bending in the wind.

Distance and elevation data from the three surveys conducted during the monitoring year are tabulated in Tables 2-1 through 2-3.

REFERENCES

Blatt, H., Middleton, G., and Murray, R., 1980, Origin of Sedimentary Rocks: Englewood Cliffs, NJ, Prentice-Hall, Inc., 782 p.

Butler, L.R.P., 1975, Application of atomic absorption spectrometry in geochemistry, in Dean, J.A., and Rains, T.C., eds., Flame Emission and Atomic Absorption Spectrometry: Volume 3 - Elements and Matrices: New York, Marcel Dekker, Inc., p. 510-547.

Cantillo, A.Y., 1982, Trace elements deposition histories in the Chesapeake Bay, Unpubl. Ph.D. dissertation, Chemistry Dept., Univ. of Maryland, College Park, MD, 298 p.

Folk, R.L., 1974, Petrology of Sedimentary Rocks: Austin, TX, Hemphill Publishing Co., 182 p.

Halka, J.P., 1987, LORAN-C Calibration in Chesapeake Bay: Baltimore, MD, Maryland Geol. Survey Report of Investigations No. 47, 34 p.

Hennessee, L., Cuthbertson, R., and Hill, J., 1990, Sedimentary environment, in Assessment of the Environmental Impacts of the Hart and Miller Islands Containment Facility: 7th Annual Interpretive Report, Aug. '87 - Aug. '88: Annapolis, MD, Maryland Dept. of Natural Resources, Tidewater Admin., p. 29-143.

Hennessee, L., and Hill, J., in press, Sedimentary environment, in Assessment of the Environmental Impacts of the Hart and Miller Islands Containment Facility: 9th Annual Interpretive Report, Aug. '89 - Aug. '90: Annapolis, MD, Maryland Dept. of Natural Resources, Tidewater Admin.

Johnson, B.H., Heath, R.E., and Kim, K., 1989, Development of a three-dimensional hydrodynamic model of the upper Chesapeake Bay: Final Report to the Maryland Dept. of Natural Resources, Tidewater Admin.

Kerhin, R.T., Halka, J.P., Wells, D.V., Hennessee, E.L., Blakeslee, P.J., Zoltan, N., and Cuthbertson, R.H., 1988, The Surficial Sediments of Chesapeake Bay, Maryland: Physical Characteristics and Sediment Budget: Baltimore, MD, Maryland Geol. Survey Report of Investigations No. 48, 82 p.

Pejrup, M., 1988, The triangular diagram used for classification of estuarine sediments: a new approach, in de Boer, P.L., van Gelder, A., and Nio, S.D., eds., Tide-Influenced Sedimentary Environments and Facies: Dordrecht, Holland, D. Reidel

Publishing Co., p. 289-300.

Sinex, S.A., Cantillo, A.Y., and Helz, G.R., 1980, Accuracy of acid extraction methods for trace metals in sediments, Anal. Chem., v. 52, p. 2342-2346.

Sinex, S.A., and Helz, G.R., 1981, Regional geochemistry of trace metals in Chesapeake Bay sediments, Environ. Geology, v. 3, p. 315-323.

Suhr, N.H., and Ingamells, C.O., 1966, Solution techniques for analysis of silicates, Anal. Chem., v. 38, p. 730-734.

Van Loon, J.C., 1980, Analytical Atomic Absorption Spectroscopy: Selected Methods: New York Academic Press, 337 p.

TABLES

Table 1-1: Wentworth size nomenclature*

Diameter (mm)	Phi (ϕ)	Wentworth size class	
> 2.00	< -1.0	gravel	gravel
1.00 to 2.00	0.0 to -1.0	very coarse sand	
0.50 to 1.00	1.0 to 0.0	coarse sand	
0.25 to 0.50	2.0 to 1.0	medium sand	sand
0.125 to 0.25	3.0 to 2.0	fine sand	
0.0625 to 0.125	4.0 to 3.0	very fine sand	
0.0039 to 0.0625	8.0 to 4.0	silt	mud
< 0.0039	> 8.0	clay	

* from Folk (1974)

Table 1-2: LORAN-C and geographic coordinates of stations sampled during the tenth monitoring year

Station number MGS	RMDSS	LORAN-C time delays X	Y	Corrected* latitude(N) (deg, min, sec)	longitude(W)
2	XIF3638	27640.8	42888.1	39 13 32.2	76 23 43.8
3	XIF3430	27636.5	42886.5	39 13 21.7	76 22 58.1
4	XIF4126	27637.3	42895.6	39 14 5.4	76 22 35.5
5	XIF4221	27635.4	42897.0	39 14 10.8	76 22 7.9
6	XIF4317	27633.4	42898.5	39 14 16.6	76 21 38.9
7	XIF4609	27631.0	42902.6	39 14 34.5	76 20 56.0
8A	XIF5009	27632.3	42906.5	39 14 53.8	76 20 57.7
9	XIF4806	27629.9	42905.2	39 14 46.1	76 20 33.9
10	XIF5203	27630.0	42909.7	39 15 7.6	76 20 19.3
11	XIF5501	27630.2	42913.4	39 15 25.3	76 20 8.7
12	XIF5805	27633.3	42917.4	39 15 46.3	76 20 31.2
13	XIF6008	27635.5	42919.7	39 15 58.6	76 20 49.1
14	XIF6407	27636.1	42924.0	39 16 19.5	76 20 41.0
15	XIF5917	27639.2	42917.2	39 15 49.1	76 21 41.7
16	XIF5722	27641.1	42914.9	39 15 39.5	76 22 12.4
17	XIF5427	27642.6	42911.4	39 15 23.8	76 22 42.7
18	XIF5232	27643.9	42908.0	39 15 8.6	76 23 10.2
19	XIF3620	27632.3	42889.0	39 13 30.8	76 21 59.3
20	XIF3064	27638.1	42881.4	39 12 58.6	76 23 35.1
21B	XIF5505	27632.1	42912.9	39 15 24.1	76 20 32.9
22	XIG7589	27631.7	42939.2	39 17 29.0	76 18 55.7
23	XIF4642	27646.8	42900.5	39 14 35.0	76 24 11.5
24	XIF5302	27629.8	42909.0	39 15 4.1	76 20 19.3
25**	XIF4405	27629.7	42900.4	39 14 23.2	76 20 48.3
26	XIF4016	27633.6	42895.0	39 14 0.1	76 21 53.6
27	XIF2038	27637.4	42869.7	39 12 2.7	76 24 8.1
28**	XIG5699	27629.4	42915.1	39 15 33.0	76 19 53.0
30**	X16 3090	27624.3	42896.1	39 13 59.2	76 19 59.5
31		27625.5	42890.0	39 13 31.0	76 20 35.0
32		27627.0	42879.0	39 12 39.8	76 21 31.3
33		27631.0	42879.0	39 12 42.5	76 22 18.9
34**	X1F3224 / X1F3325	27633.4	42884.9	39 13 12.0	76 22 26.8
35		27630.0	42895.0	39 13 57.7	76 21 10.8
36**	X16 2964	27602.6	42884.7	39 12 51.0	76 16 23.3
40	X1F 6417	27641.2	42923.6	39 16 21.0	76 21 43.0
41	X16 6809	27639.0	42929.6	39 16 48.0	76 20 55.0
42	X16 7501	27637.4	42938.2	39 17 28.0	76 20 6.0
43	X16 6998	27633.8	42931.6	39 16 54.0	76 19 47.0
44	X16 6394	27630.0	42924.9	39 16 20.0	76 19 26.0
45	X16 6984	27627.1	42932.2	39 16 53.0	76 18 26.0
51		27631.5	42916.3	39 15 40.0	76 20 14.0
52		27631.0	42918.7	39 15 51.0	76 19 59.0
53		27626.6	42917.0	39 15 40.0	76 19 13.0

Table 1-2 (con't): LORAN-C and geographic coordinates of stations sampled during the tenth monitoring year

Station number MGS	RMDSS	LORAN-C time delays X	Y	Corrected* latitude(N) (deg, min, sec)	longitude(W)
58	X165202	27629.4	42910.1	39 15 9.0	76 20 11.0
59	X165200	27628.6	42910.2	39 15 9.0	76 20 1.0
60		27627.7	42910.3	39 15 9.0	76 19 50.0
61		27626.2	42910.5	39 15 9.0	76 19 32.0
63		27628.6	42906.8	39 14 53.0	76 20 13.0
64	X164999	27627.0	42907.5	39 14 55.0	76 19 51.0
65	X164995	27625.0	42907.7	39 14 55.0	76 19 27.0
67		27625.6	42904.7	39 14 41.0	76 19 45.0
69		27631.3	42900.6	39 14 25.0	76 21 7.0
70		27628.2	42901.4	39 14 27.0	76 20 27.0
71	X164501	27626.4	42901.7	39 14 27.0	76 20 5.0
80		27628.5	42897.0	39 14 6.0	76 20 46.0
81	X163902	27625.0	42895.3	39 13 56.0	76 20 10.0
85		27643.4	42882.8	39 13 9.0	76 24 34.0
87		27632.1	42872.6	39 12 13.0	76 22 54.0
95	X166183	27623.3	42922.7	39 16 5.0	76 18 15.0
98		27624.3	42917.3	39 15 40.0	76 18 45.0
BC-1	XIF4024	27635.7	42894.5	39 13 59.1	76 22 20.3
BC-2	XIF4285	27630.7	42897.6	39 14 10.5	76 21 10.0
BC-3	XIF4615	27633.3	42901.9	39 14 32.6	76 21 25.8
BC-4	XIF4703	27628.5	42904.0	39 14 39.5	76 20 21.5
BC-5	XIF6388	27627.8	42920.1	39 15 55.6	76 19 16.9
BC-6	XIF5925	27643.4	42917.1	39 15 51.4	76 22 32.0
BC-7	XIF4964	27645.0	42904.6	39 14 53.2	76 23 35.4

* Latitude and longitude were derived from LORAN-C TDs using a computer program that incorporates the results of a LORAN-C calibration in Chesapeake Bay (Halka, 1987).

** Coincides with a benthic station

X162964 - 11/20/91 - 5/11/93

Table 1-3: Field descriptions - surficial sediment samples collected on November 7, 1990 (Cruise 24)

Station number	Water depth (ft.)	Description
2	5	No floc; clean, well-sorted, dark yellowish brown (10 YR 4/2) fine sand; a few Rangia cuneata, 3 cm long, articulated - some alive, yellowish white shells; no odor
3	12	Dark yellowish brown (10 YR 4/2) floc layer consisting of 2-3 cm of soft, fluffy, fine to very fine sandy mud; no shells in floc layer; overlies soft, grayish black (N2) sandy mud; shell hash, a few articulated (dead) and disarticulated Rangia, 2-4 cm long, occur in patches; plant matter; no odor
4	10	Dark yellowish brown (10 YR 4/2) floc layer consisting of 3-4 cm of soft, smooth mud; a few Rangia, 1-2.5 cm long, mostly disarticulated, some live; overlies smooth, sticky, dark gray (N3) mud, neither soft nor firm (color and texture are more typical of modern Bay mud than of "fluid mud" layer); a few Rangia shells; no odor
5	15	Floc layer of soft, smooth, dark yellowish brown (10 YR 4/2) mud; overlies soft, smooth, greenish gray to dark greenish gray (5 GY 5/1) mud (only difference between two layers is color - fluffy mud throughout), slight increase in firmness with depth; no shells in grab; no odor
6	13	Thin (<1 cm), shelly floc layer of soft, watery, dark yellowish brown (10 YR 4/2) mud; some disarticulated Rangia, 2-4 cm long; overlies smooth, grayish black (N2) mud; some-many juvenile Macoma (?), 0.5 cm long, mostly disarticulated; some worms; no odor; little evidence of "fluid mud" layer
7	15	Dark yellowish brown (10 YR 4/2) floc layer consisting of 3-4 cm of soft, very slightly

gritty mud; overlies soft, grayish black (N2)

Table 1-3 (con't): Field descriptions - surficial sediment samples collected on November 7, 1990 (Cruise 24)

Station number	Water depth (ft.)	Description
7		mud; a few articulated (live) Rangia at top of layer, 3-4 cm long; a few Macoma; plant matter; no odor
8A	8	Floc layer of soft, dark yellowish brown (10 YR 4/2), fine sandy mud; no shells in floc layer; overlies mottled olive gray (5 Y 4/1) and dark gray to grayish black (N2.5) sandy mud; a few Rangia; burrows; plant matter; lots of wood fragments
9	17	Shelly floc layer consisting of 2-3 cm of soft, soupy, slightly gritty, dark yellowish brown (10 YR 4/2) mud; a few disarticulated juvenile Rangia; overlies mottled olive gray (5 Y 4/1), dark gray (N3), and grayish black (N2) mud, very slightly gritty, neither soft nor firm; a few articulated and disarticulated Macoma; worms; burrows; no odor
10	13	No floc; dark yellowish brown (10 YR 4/2) and medium dark gray (N4), slightly muddy medium sand; a few disarticulated Rangia, 2 cm long
11	12	No floc; clean, medium sand, a little mud; a few disarticulated Rangia; heavy minerals
12	9.5	Dark yellowish brown (10 YR 4/2) floc layer consisting of 1-2 cm of gritty, watery mud; many disarticulated Rangia; overlies soft, smooth, very cohesive, slightly gritty, dark gray to grayish black (N2.5) mud; a few disarticulated Rangia; no burrows; no odor (first grab sample described; all three look similar)
13	6	No floc; dark yellowish brown (10 YR 4/2), well-sorted, medium sand; Rangia, mostly disarticulated, some live, 1-4 cm long; heavy minerals

Table 1-3 (con't): Field descriptions - surficial sediment samples collected on November 7, 1990 (Cruise 24)

Station number	Water depth (ft.)	Description
14	11	Dark yellowish brown (10 YR 4/2) floc layer consisting of 1-2 cm of soft, smooth, fluffy mud; overlies a layer of dark gray (N3) mud that differs from the floc layer only in color - texture is the same; a few disarticulated Rangia, 2.5 cm long; no burrows
15	8.5	Shelly floc layer, 3 cm thick, consisting of soft, smooth, dark yellowish brown (10 YR 4/2) mud; adult Rangia, mostly alive; overlies soft, dark gray (N3) mud; disarticulated Rangia, 2-4 cm long; no odor
16	8.5	Dark yellowish brown (10 YR 4/2) floc layer consisting of 3-4 cm of smooth, fine sandy mud; overlies mottled grayish black (N2), olive gray (5 Y 4/1), and dark yellowish brown (10 YR 4/2) fine to very fine sandy mud; many articulated and disarticulated adult Rangia at top of layer, a few Rangia at depth, shell hash; burrows, some oxidized; no odor
17	7	Dark yellowish brown (10 YR 4/2) floc layer consisting of 1-2 cm of smooth mud; many adult Rangia, mostly disarticulated, some live; overlies mottled dark gray (N3) and olive gray (5 Y 4/1) smooth mud, neither soft nor firm; a few shells; lots of burrows; plant matter; no odor
18	7	Floc layer of smooth, soupy, dark yellowish brown (10 YR 4/2) mud; a few juvenile Rangia, 1 cm long; plant matter; overlies mottled dark gray (N3) and olive gray (5 Y 4/1), smooth, cohesive mud, neither soft nor firm; a few Rangia; burrows, some oxidized; no odor
19	15	Dark yellowish brown (10 YR 4/2) floc layer consisting of 1-2 cm of soft, smooth, watery mud; overlies smooth, dark gray (N3) mud; very

Table 1-3 (con't): Field descriptions - surficial sediment samples collected on November 7, 1990 (Cruise 24)

Station number	Water depth (ft.)	Description
19		shelly - more shell than sediment, many disarticulated oyster shells and shell fragments; no odor (description applies to first grab collected; second grab has more shells than first)
20	12	Dark yellowish brown (10 YR 4/2) floc layer consisting of 1-2 cm of soupy, gritty mud; overlies cohesive, dark gray to grayish black (N2.5) mud, uniform in color except for burrows, neither firm nor soft; some Rangia at top of layer, 2-4 cm long, some disarticulated, many live; some Rangia at depth, also some disarticulated, unbroken Macoma, 2 cm long; no odor
21B	11	No floc; dark yellowish brown (10 YR 4/2) medium sand; a few disarticulated Rangia, 2.5 cm long; heavy minerals; no odor
22	9	Dark yellowish brown (10 YR 4/2) floc layer consisting of 2-3 cm of soft, soupy, very gritty, fine sandy mud; overlies olive gray (5 Y 4/1) and dark gray to grayish black (N2.5) fine sandy mud, with pockets of olive gray (5 Y 4/1) medium sand; some Rangia, layered just below floc, 2-4 cm long, disarticulated, some live; a few Rangia at depth; plant matter
23	8.5	Dark yellowish brown (10 YR 4/2) floc layer consisting of 2 cm of gritty, fine to very fine sandy mud; many juvenile Rangia; overlies 6-cm thick layer of firm, olive gray (5 Y 4/1) and grayish black (N2) mud; a few disarticulated Rangia; plant matter; overlies, in turn, a layer of dark greenish gray (5 GY 4/1) mud, softer than layer above; burrows
24	15	Thin (1 cm), shelly, dark yellowish brown (10 YR 4/2) floc layer of fine sandy mud or muddy

Table 1-3 (con't): Field descriptions - surficial sediment samples collected on November 7, 1990 (Cruise 24)

Station number	Water depth (ft.)	Description
24		fine sand; a few Rangia and oyster shells in floc layer; overlies greenish black (5 GY 2/1) fine sandy mud, shelly throughout; a few Rangia and oyster shells; no odor (drifted about 0.1 lane between second and third grabs)
25	16	Thin (<1 cm), shelly floc layer of soupy, gritty mud; many disarticulated Rangia, 0.5-4 cm long; overlies mottled grayish black (N2) and black (N1), smooth, cohesive, slightly gritty mud; a few disarticulated Macoma, 2-2.5 cm long; a few burrows; worms; no odor (description applies to first grab collected)
26	14	Thin (<1 cm), dark yellowish brown (10 YR 4/2) floc layer of slightly gritty, watery mud; overlies sticky, dark gray to grayish black (N2.5) mud; neither soft nor firm; some/many Rangia, mostly articulated, scattered throughout layer, 2-2.5 cm long; a few articulated (dead) Macoma, 2 cm long; some worms; burrows, some oxidized; no odor
27	13	Dark yellowish brown (10 YR 4/2) floc layer consisting of 2-3 cm of slightly gritty mud; a few disarticulated Rangia in floc layer, 2.5 cm long; overlies mottled dark yellowish brown (10 YR 4/2), dark gray (N3), and olive gray (5 Y 4/1), fairly firm, lumpy mud; a few articulated and disarticulated Rangia, 2.5 cm long, disarticulated Macoma, 2 cm long; burrows; no odor
28	17	Dark yellowish brown (10 YR 4/2) floc layer consisting of 2-3 cm of fine to very fine sandy mud; overlies soft, grayish black (N2) medium to fine sandy mud, sand pockets, some clay lumps; many Rangia, 2.5 cm long, disarticulated, some live, layered just below floc; a few Rangia at depth, also

Table 1-3 (con't): Field descriptions - surficial sediment samples collected on November 7, 1990 (Cruise 24)

Station number	Water depth (ft.)	Description
28		disarticulated, some live; burrows; no odor (description applies to first grab)
30	15	Floc layer, 1-2 cm thick, of soft, smooth, dark yellowish brown (10 YR 4/2) mud; overlies soft, smooth, dark gray (N3) mud mottled with dark yellowish brown (10 YR 4/2); many disarticulated Rangia, 2.5 cm long, just below floc, no Rangia at depth, a few articulated and disarticulated Macoma, 2.5 cm long, some live; no odor
31	15	Floc layer, 2-3 cm thick, of smooth, dark yellowish brown (10 YR 4/2) mud; some/many disarticulated Rangia in floc layer, 1-4 cm long, a few oyster shells, 1-2.5 cm long; overlies smooth (no grit), sticky, cohesive, dark gray to grayish black (N2.5) mud, uniform in color; a few disarticulated Rangia and oyster fragments; worms; no odor
32	14	Moderate brown (5 YR 3/4) floc layer consisting of 2-3 cm of soft, soupy, slightly gritty mud; overlies cohesive, dark gray (N3) mud; some/many Rangia just below floc layer, 2-4 cm long, some disarticulated, some live; some Macoma and Rangia (1-2.5 cm long, disarticulated, in scattered pockets) at depth; some worms; a few burrows, some oxidized, some Macoma burrows; no odor
33	15	Moderate brown (5 YR 3/4) floc layer consisting of 2-3 cm of soft, fluffy, very slightly gritty mud; overlies olive gray (5 Y 4/1) mud; entire grab floc-like - only difference between floc layer and underlying one is in color; increasingly firm with depth; a few articulated (dead) Rangia, 2 cm long, at bottom of grab

Table 1-3 (con't): Field descriptions - surficial sediment samples collected on November 7, 1990 (Cruise 24)

Station number	Water depth (ft.)	Description
34	17	Dark yellowish brown (10 YR 4/2) floc layer consisting of 3-4 cm of soft, smooth (no grit) mud; no shells in floc layer; overlies smooth (no grit), grayish black (N2) mud, uniform in color, some lumps; a few articulated Macoma, 2 cm long; burrows, some oxidized; no odor
35	15	Floc layer, 1-2 cm thick, of smooth, soupy, dark yellowish brown (10 YR 4/2) mud; overlies soft, sticky, dark gray (N3) mud, uniform in color and texture; many articulated and disarticulated Rangia just below floc layer, about 2.5 cm long, some live; some/many Rangia at depth, 1-2 cm long; no odor
36	17	Dark yellowish brown (10 YR 4/2) floc layer consisting of 3-4 cm of soft, soupy, slightly gritty mud; no shells in floc layer; overlies firm, mottled grayish black (N2) and olive gray (5 Y 4/1) mud; a few articulated Macoma, some live; a few burrows - worm and Macoma; no odor
51	13	Thin (1 cm) floc layer of dark yellowish brown (10 YR 4/2) sandy mud; some/many disarticulated Rangia, crab in floc layer; overlies mottled grayish black (N2), olive gray (5 Y 4/1) and dark yellowish brown (10 YR 4/2) fine sandy mud; few/some disarticulated Rangia; burrows; worms; no odor
52	14	Floc layer, 2 cm thick, of soft, soupy mud, dark yellowish brown (10 YR 4/2) grading into olive gray (5 Y 4/1); overlies sticky, grayish black (N2) very fine sandy mud; few/some juvenile Rangia(?), shell hash; some worms; no odor
53	15	Floc layer, 3-4 cm thick, of very soft, smooth mud, like thick mush, dark yellowish brown (10

Table 1-3 (con't): Field descriptions - surficial sediment samples collected on November 7, 1990 (Cruise 24)

Station number	Water depth (ft.)	Description
53		YR 4/2) grading into dark gray (N3); no shells in floc layer; overlies soft, cohesive, dark gray (N3) mud; a few Rangia, <2 cm long, mostly articulated; no burrows; no odor
58	15	Shell bed - mostly disarticulated oysters; no sample taken
59	12	Shell bed - mostly disarticulated oysters; no sample taken
60	18	Dark yellowish brown (10 YR 4/2) floc layer, 2 cm thick, of soft, smooth mud; a few disarticulated Rangia, 2 cm long, in floc layer; overlies soft, smooth grayish black (N2) mud, mottled with dark greenish gray to greenish black (5 GY 3/1); a few live Macoma (their burrows produce mottling); burrows, some oxidized (olive gray - 5 Y 4/1)
61	18	Thin (1 cm), shelly floc layer consisting of smooth, soupy, dark yellowish brown (10 YR 4/2) mud; a few disarticulated Rangia in floc layer; overlies soft, smooth, dark gray (N3) mud mottled with olive gray (5 Y 4/1); a few disarticulated Rangia; burrows; no odor
63	17	Shelly floc layer, 2 cm thick, consisting of smooth, soupy mud, grading from dark yellowish brown (10 YR 4/2) to dark greenish gray (5 GY 4/1); a few disarticulated Rangia, 2 cm long, in floc layer; overlies soft mud, mottled olive black (5 Y 2/1), dark gray (N3), and black (N1), mottling not just associated with burrows; Rangia; many burrows; worms; no odor
64	19	Shelly floc layer consisting of 3-4 cm of soft, smooth, dark yellowish brown (10 YR 4/2) mud; overlies soft, smooth, grayish black (N2) mud; many disarticulated Rangia, 1-2.5 cm

Table 1-3 (con't): Field descriptions - surficial sediment samples collected on November 7, 1990 (Cruise 24)

Station number	Water depth (ft.)	Description
64		long, just below floc layer; a few Rangia at depth; burrows - some produced by mollusks and some by worms (oxidized - olive gray (5 Y 4/1)); no odor
65	15	Shelly floc layer, 1-2 cm thick, of soft, smooth mud; some disarticulated Rangia, 2-2.5 cm long, in floc layer; overlies soft, smooth, grayish black (N2) mud; a few articulated Rangia, 1 cm long, and a few/some disarticulated Macoma, 2 cm long; no odor
67	16	Thin (1 cm), shelly floc layer consisting of soft, smooth mud, dark yellowish brown (10 YR 4/2) grading into olive gray (5 Y 4/1); some/many Rangia, 2-4 cm long, in floc layer, smaller ones disarticulated, some of the larger ones alive; overlies soft, smooth, dark gray to grayish black (N2.5) mud; some/many Macoma; burrows; no odor
69	15	Dark yellowish brown (10 YR 4/2) floc layer consisting of 2-3 cm of fluffy, slightly gritty mud; overlies smooth, grayish black (N2) mud mottled with dark yellowish brown (10 YR 4/2), neither soft nor firm; articulated and disarticulated Rangia, 1-2.5 cm long, just below floc layer, larger ones alive; a few disarticulated Macoma, 2 cm long; very few Rangia at depth; burrows; worms
70	17	Shelly floc layer, 1-2 cm thick, consisting of soft, soupy, somewhat gritty, dark yellowish brown (10 YR 4/2) mud; a few Rangia, 1-2.5 cm long, and Macoma, 2 cm long, in floc layer; overlies smooth, grayish black (N2) mud, uniform in color except for burrows, neither soft nor firm; a few Macoma, 2 cm long, at depth; many burrows; no odor

Table 1-3 (con't): Field descriptions - surficial sediment samples collected on November 7, 1990 (Cruise 24)

Station number	Water depth (ft.)	Description
71	16	Thin (1 cm), shelly floc layer consisting of soft, soupy, dark yellowish brown (10 YR 4/2) mud; a few articulated Rangia, 2 cm long, in floc layer; overlies sticky, grayish black (N2) mud, uniform in color, neither soft nor firm; a few Rangia and Macoma; burrows; no odor
80	16	Dark yellowish brown (10 YR 4/2) floc layer consisting of 3-4 cm of soft, smooth mud; some Rangia, 2-2.5 cm long, in floc layer, mostly disarticulated; overlies cohesive, grayish black (N2) mud, neither soft nor firm; some Rangia, 2-2.5 cm long, and Macoma, <2.5 cm long, at depth, mostly disarticulated; no odor
81	15	Dark yellowish brown (10 YR 4/2) floc layer consisting of 2-3 cm of soft, soupy mud; overlies sticky, somewhat firm, dark gray to grayish black (N2.5) mud; some/many articulated and disarticulated Rangia, 2.5 cm long, just below floc layer, most alive; a few live Macoma at depth; a few burrows; no odor
85	8	Thin (<1 cm) floc layer consisting of dark yellowish brown (10 YR 4/2) medium to fine sandy mud; overlies soft muddy sand; Rangia, 2-4 cm long, mostly disarticulated, some live; no odor
87	15	Shelly floc layer consisting of slightly gritty, soupy, dark yellowish brown (10 YR 4/2) mud; many disarticulated oyster and Rangia shells, mostly at the top of the grab; overlies soft, medium dark gray to dark gray (N3.5) mud; no odor
98	13	Floc layer consisting of 3-4 cm of soft, smooth mud, dark yellowish brown (10 YR 4/2) grading into dark gray (N3); some articulated

Table 1-3 (con't): Field descriptions - surficial sediment samples collected on November 7, 1990 (Cruise 24)

Station number	Water depth (ft.)	Description
98		Rangia, 2-2.5 cm long, in floc layer; overlies soft, smooth, dark gray (N3) mud; a few disarticulated Rangia; burrows; no odor
BC-1	13	Dark yellowish brown (10 YR 4/2) layer consisting of 2-3 cm of soft mud; overlies soft, smooth, medium gray to medium dark gray (N4.5) mud, feels like Play-doh ("fluid mud" layer); a few disarticulated oyster shells; top of grab no longer inhabited; wood fragments; no odor
BC-2	15	Dark yellowish brown (10 YR 4/2) floc layer consisting of 2-3 cm of smooth, very slightly gritty mud; overlies smooth, grayish black (N2) mud; some articulated and disarticulated Rangia, 2-3 cm long, just below floc layer, some live; some juvenile Macoma (?) and a few Rangia, 2-2.5 cm long, at depth; no odor
BC-3	13	Dark yellowish brown (10 YR 4/2) floc layer consisting of 2-3 cm of slightly gritty mud; overlies smooth, cohesive, grayish black (N2) mud mottled with black (N1); some disarticulated Rangia, 1-4 cm long, just below floc layer; some articulated Rangia, variable in size, in pockets at depth; no odor (description applies to first grab collected; grabs 2-6 had very shelly tops; pink mud; some of other grabs are really firm/stiff - more evidence of this being a "fluid mud" station)
BC-4	17	Shelly floc layer consisting of 2 cm of soft, soupy, very slightly gritty, dark yellowish brown (10 YR 4/2) mud; some/many Rangia in floc layer, mostly disarticulated; overlies smooth, stiff, grayish black (N2) mud mottled with olive gray (5 Y 4/1), some lumps; a few Macoma at depth, mostly disarticulated,

Table 1-3 (con't): Field descriptions - surficial sediment samples collected on November 7, 1990 (Cruise 24)

Station number	Water depth (ft.)	Description
BC-4		encrusted Rangia shell; burrows; wood fragments; no odor
BC-5	14	Dark yellowish brown (10 YR 4/2) floc layer consisting of 2 cm of slightly gritty, soupy mud; overlies smooth, sticky, dark gray (N3) mud; few/some articulated and disarticulated Rangia, about 2.5 cm long, in layer just below floc, some live; a few disarticulated Rangia, 1-4 cm long, at depth; burrows; no odor
BC-6	8	Dark yellowish brown (10 YR 4/2) floc layer consisting of soft, very slightly gritty mud; some articulated and disarticulated Rangia, mostly adult, in floc layer; overlies sticky, dark gray (N3) mud, neither soft nor firm; a few Rangia; no odor (description applies to first grab collected)
BC-7	8	Dark yellowish brown (10 YR 4/2) floc layer consisting of 3 cm of thick, soft, smooth mud; many juvenile Rangia in floc layer; overlies smooth mud, mottled dark gray to grayish black (N2.5) and olive gray (5 Y 4/1); a few Rangia, 1-2.5 cm long, at depth; plant matter; no odor

* The alphanumeric codes following the color names are Munsell numerical designations; the names themselves are from the Inter-Society Color Council - National Bureau of Standards (ISCC-NBS) system

Table 1-4: Sedimentological parameters - surficial samples collected on November 7, 1990 (Cruise 24)

Station number	Water (%)	Sand (%)	Silt (%)	Clay (%)	Pejrup's class	Clay:mud
2	27.80	96.83	1.62	1.55	A,III	0.49
3	24.80	91.05	4.39	4.55	A,II	0.51
4	59.44	8.24	54.40	37.36	D,III	0.41
5	67.70	0.58	50.45	48.97	D,III	0.49
6	60.11	1.41	36.17	62.42	D,II	0.63
7	59.47	0.78	43.08	56.15	D,II	0.57
8A	45.43	59.28	23.52	17.20	B,III	0.42
9	65.61	2.89	40.73	56.39	D,II	0.58
10	26.94	96.89	1.60	1.51	A,III	0.49
11-1	20.62	98.36	0.70	0.94	A,II	0.57
11-2	21.08	83.56	7.70	8.73	B,II	0.53
11-3	21.25	97.03	1.58	1.39	A,III	0.47
12-1	53.79	16.83	39.98	43.19	C,II	0.52
12-2	50.33	32.57	33.08	34.35	C,II	0.51
12-3	52.18	36.69	31.21	32.10	C,II	0.51
13	23.63	98.46	1.03	0.51	A,III	0.33
14	64.72	1.34	48.38	50.28	D,II	0.51
15	62.48	2.38	40.96	56.66	D,II	0.58
16-1	50.35	31.66	34.66	33.68	C,III	0.49
16-2	49.04	40.01	29.45	30.54	C,II	0.51
16-3	50.37	34.28	34.07	31.65	C,III	0.48
17	59.74	3.01	46.80	50.19	D,II	0.52
18	59.78	4.11	46.73	49.16	D,II	0.51
19	65.01	2.14	37.33	60.53	D,II	0.62
20	64.73	1.23	46.71	52.06	D,II	0.53
21B	25.69	97.12	1.82	1.06	A,III	0.37
22	35.77	68.18	15.83	15.99	B,II	0.50
23	43.33	53.59	29.15	17.26	B,III	0.37
24-1	48.41	50.10	20.13	29.77	B,II	0.60
24-2	47.26	50.36	21.26	28.38	B,II	0.57
24-3	61.60	13.21	36.46	50.33	C,II	0.58
25-1	61.54	1.84	42.97	55.18	D,II	0.56
25-2	61.82	1.77	42.43	55.81	D,II	0.57
25-3	64.20	1.84	41.82	56.34	D,II	0.57
26	59.35	0.58	41.55	57.87	D,II	0.58
27	62.13	1.91	42.72	55.37	D,II	0.56
28-1	46.71	59.30	18.04	22.66	B,II	0.56
28-2	44.18	55.79	18.78	25.43	B,II	0.58
28-3	50.38	53.88	19.98	26.13	B,II	0.57
30	60.23	0.17	48.12	51.71	D,II	0.52
31	61.32	0.94	48.05	51.01	D,II	0.51
32	60.74	0.29	47.82	51.89	D,II	0.52

Table 1-4 (con't): Sedimentological parameters - surficial samples collected on November 7, 1990 (Cruise 24)

Station number	Water (%)	Sand (%)	Silt (%)	Clay (%)	Pejrup's class	Clay:mud
33	68.82	0.49	43.36	56.15	D,II	0.56
34	63.73	0.50	44.62	54.87	D,II	0.55
35	58.21	1.41	42.64	55.95	D,II	0.57
36	58.02	5.21	55.37	39.42	D,III	0.42
51	33.91	75.54	11.70	12.77	B,II	0.52
52	53.94	31.88	30.24	37.88	C,II	0.56
53	66.54	0.93	44.24	54.84	D,II	0.55
60	59.91	1.53	46.95	51.52	D,II	0.52
61	61.97	5.90	40.33	53.77	D,II	0.57
63	65.12	6.91	38.85	54.25	D,II	0.58
64	63.81	1.05	49.24	49.71	D,II	0.50
65	64.79	0.94	46.65	52.41	D,II	0.53
67	62.41	0.96	48.33	50.71	D,II	0.51
69	62.16	2.35	42.08	55.57	D,II	0.57
70	64.04	0.81	43.90	55.28	D,II	0.56
71	58.45	0.47	46.11	53.42	D,II	0.54
80	62.41	1.04	43.52	55.44	D,II	0.56
81	54.47	2.23	47.05	50.72	D,II	0.52
85	29.04	93.58	3.29	3.13	A,III	0.49
87	60.11	4.50	40.05	55.44	D,II	0.58
98	65.81	0.31	46.57	53.12	D,II	0.53
BC1	48.57	0.35	45.41	54.24	D,II	0.54
BC2	63.33	1.10	40.53	58.37	D,II	0.59
BC3-1	57.08	16.57	46.96	36.46	C,III	0.44
BC3-2	41.03	6.01	61.00	32.99	D,III	0.35
BC3-3	62.25	5.37	52.87	41.76	D,III	0.44
BC4	59.86	2.05	45.65	52.30	D,II	0.53
BC5	62.52	0.75	41.63	57.63	D,II	0.58
BC6-1	63.58	2.30	42.74	54.96	D,II	0.56
BC6-2	63.11	2.05	43.03	54.91	D,II	0.56
BC6-3	66.89	1.66	41.28	57.06	D,II	0.58
BC7	61.35	6.01	56.39	37.60	D,III	0.40

* includes less than 1% gravel

Table 1-5: Trace metal concentrations - surficial sediment samples collected on November 7, 1990 (Cruise 24)

Station number	Cr (µg/g)	Cu (µg/g)	Fe (wt. %)	Mn (µg/g)	Ni (µg/g)	Zn (µg/g)
2*	22.6	15.6	0.49	1014	14.0	33.6
3*	31.3	16.6	0.81	655	12.2	54.3
4*	120.8	42.0	3.86	2255	39.5	254.9
5*	143.8	48.5	4.55	5235	54.9	301.1
6*	148.4	61.9	5.12	1891	77.8	396.0
7*	133.8	52.3	4.67	2707	70.5	342.1
8A*	65.7	20.7	2.00	1087	20.6	121.9
9*	137.6	58.2	5.08	3011	68.5	370.9
10*	24.2	22.7	0.40	479	11.5	27.3
11-1*	16.5	13.1	0.29	299	10.3	18.0
11-2	23.3	17.2	0.68	766	10.1	43.4
11-3	19.5	12.2	0.36	497	10.2	24.3
12-1*	99.9	35.9	3.28	2359	35.7	188.7
12-2*	96.7	35.1	2.81	2107	39.4	184.1
12-3*	97.8	36.7	2.89	2012	43.3	184.5
13	17.7	10.9	0.24	667	8.3	18.9
14	124.7	49.6	4.37	4259	60.4	278.8
15	129.2	48.3	4.41	1277	62.9	298.1
16-1*	101.7	34.0	2.89	743	41.1	193.4
16-2*	96.0	33.8	2.75	847	44.5	206.0
16-3*	100.2	34.1	2.76	809	42.2	198.4
17	142.9	45.7	4.03	914	53.1	283.2
18	149.6	56.1	3.85	1020	57.6	280.1
19	112.1	26.4	4.57	2450	35.1	175.8
20*	152.2	57.1	4.86	3627	72.4	377.4
21B	14.9	7.1	0.21	276	6.4	20.1
22*	64.6	26.8	2.10	1111	30.8	131.4
23*	101.1	40.0	2.25	841	33.3	191.6
24-1*	55.2	22.0	1.95	1034	27.3	136.7
24-2*	65.2	25.2	2.25	1693	35.6	162.3
24-3*	128.3	45.5	4.35	3792	60.6	312.1
25-1	137.9	65.1	4.53	2208	80.4	376.9
25-2	144.5	58.3	4.82	2061	81.8	394.4
25-3	141.2	58.4	4.69	2281	83.0	408.7
26*	130.7	39.6	4.04	1568	56.2	221.9
27	159.1	62.2	5.40	9666	105.2	521.6
28-1*	88.4	33.6	3.00	2059	52.4	223.1
28-2*	80.6	29.1	3.01	1712	46.5	202.1
28-3*	73.8	29.2	2.71	2278	41.3	192.7
30*	124.2	44.9	5.05	2877	67.9	283.8
31	121.1	46.7	5.05	3101	75.2	320.1
32	136.8	50.6	5.03	4470	74.7	359.7
33*	146.0	55.9	4.94	7284	80.6	401.4

Range
Active Cell

Table 1-5 (con't): Trace metal concentrations - surficial sediment samples collected on November 7, 1990 (Cruise 24)

Station number	Cr (µg/g)	Cu (µg/g)	Fe (wt. %)	Mn (µg/g)	Ni (µg/g)	Zn (µg/g)
34	148.5	53.0	4.97	4513	67.3	369.5
35*	133.9	49.2	4.59	2842	64.6	336.4
36	114.2	41.6	4.34	3840	49.8	248.6
51	47.1	18.6	1.32	1005	18.3	92.4
52*	110.0	40.2	3.35	3432	55.7	268.3
53	122.6	38.4	4.43	2667	47.1	222.8
60*	139.0	64.2	4.74	2920	74.5	358.0
61	127.4	49.9	4.70	3551	68.5	310.2
63	119.2	34.8	4.43	2737	48.7	251.1
64	134.6	50.8	4.64	2823	82.2	336.9
65	129.8	48.9	4.93	3494	69.5	314.9
67*	133.8	54.2	4.71	2470	75.0	347.8
69	140.0	49.6	4.65	2340	68.9	339.3
70	146.4	58.1	5.15	2522	83.3	422.2
71	138.4	49.5	5.00	2339	71.2	349.4
80	144.9	52.8	5.31	2522	74.3	362.7
81*	126.8	45.9	4.61	2837	61.7	302.0
85	32.6	11.6	0.56	647	4.8	53.0
87	156.8	56.7	5.49	5490	89.9	537.7
98	125.3	45.1	4.43	4630	60.8	280.7
BC1	129.3	33.8	2.71	912	27.7	133.0
BC2*	142.7	50.9	4.63	3001	69.8	339.5
BC3-1	121.7	43.7	3.73	2464	46.3	236.3
BC3-2	100.5	26.5	2.96	546	24.6	100.8
BC3-3	118.7	43.9	3.68	4050	44.0	243.3
BC4	140.6	71.9	5.08	3984	130.5	622.3
BC5*	131.7	53.3	5.01	4102	67.2	310.3
BC6-1	158.3	59.6	4.92	1359	77.1	393.4
BC6-2	151.8	57.3	4.82	1357	73.2	367.3
BC6-3	150.7	56.2	4.92	1170	66.5	361.0
BC7	173.9	60.3	4.03	1263	53.3	308.0

* replicate lab samples averaged

Table 1-6: Enrichment factors - surficial sediment samples collected on November 7, 1990 (Cruise 24)

Station number	Cr	Cu	Mn	Ni	Zn
2*	2.46	3.51	11.75	2.02	3.47
3*	2.02	2.16	4.48	1.05	3.32
4*	1.64	1.14	3.25	0.71	3.28
5*	1.65	1.12	6.38	0.84	3.29
6*	1.52	1.27	2.05	1.05	3.84
7*	1.50	1.18	3.22	1.05	3.64
8A*	1.73	1.09	3.02	0.71	3.03
9*	1.42	1.20	3.29	0.94	3.63
10*	3.21	6.08	6.73	2.01	3.43
11-1*	3.00	4.78	5.74	2.47	3.09
11-2	1.79	2.65	6.21	1.02	3.15
11-3	2.87	3.61	7.74	1.98	3.38
12-1*	1.59	1.15	3.98	0.75	2.85
12-2*	1.80	1.31	4.16	0.97	3.25
12-3*	1.77	1.34	3.86	1.04	3.17
13	3.80	4.69	15.16	2.37	3.84
14	1.50	1.20	5.41	0.96	3.17
15	1.54	1.15	1.61	0.99	3.36
16-1*	1.85	1.24	1.43	0.99	3.33
16-2*	1.83	1.30	1.71	1.12	3.73
16-3*	1.91	1.30	1.63	1.06	3.57
17	1.86	1.20	1.26	0.91	3.49
18	2.04	1.53	1.47	1.04	3.62
19	1.29	0.61	2.98	0.53	1.91
20*	1.64	1.24	4.15	1.03	3.86
21B	3.76	3.61	7.40	2.13	4.82
22*	1.62	1.35	2.94	1.02	3.12
23*	2.35	1.87	2.07	1.02	4.23
24-1*	1.49	1.19	2.95	0.97	3.49
24-2*	1.52	1.18	4.17	1.10	3.58
24-3*	1.55	1.10	4.84	0.97	3.57
25-1	1.60	1.51	2.71	1.23	4.13
25-2	1.57	1.27	2.37	1.18	4.06
25-3	1.58	1.31	2.70	1.23	4.33
26*	1.70	1.03	2.15	0.97	2.73
27	1.55	1.21	9.94	1.35	4.80
28-1*	1.55	1.18	3.82	1.21	3.70
28-2*	1.40	1.02	3.16	1.07	3.33
28-3*	1.43	1.13	4.67	1.08	3.53
30*	1.29	0.94	3.17	0.93	2.79
31	1.26	0.97	3.41	1.03	3.15
32	1.42	1.06	4.93	1.03	3.55

Table 1-6 (con't): Enrichment factors - surficial sediment samples collected on November 7, 1990 (Cruise 24)

Station number	Cr	Cu	Mn	Ni	Zn
33*	1.55	1.19	8.19	1.13	4.04
34	1.57	1.12	5.04	0.94	3.69
35*	1.53	1.13	3.44	0.98	3.64
36	1.38	1.01	4.91	0.80	2.84
51	1.87	1.48	4.24	0.96	3.48
52*	1.73	1.27	5.68	1.16	3.99
53	1.45	0.91	3.34	0.74	2.50
60*	1.54	1.43	3.42	1.09	3.75
61	1.42	1.12	4.19	1.01	3.28
63	1.41	0.83	3.43	0.76	2.82
64	1.52	1.15	3.38	1.23	3.61
65	1.38	1.04	3.93	0.98	3.17
67*	1.49	1.21	2.92	1.11	3.67
69	1.58	1.12	2.79	1.03	3.62
70	1.49	1.19	2.72	1.12	4.07
71	1.45	1.04	2.60	0.99	3.47
80	1.43	1.05	2.64	0.97	3.39
81*	1.44	1.05	3.41	0.93	3.25
85	3.03	2.16	6.36	0.59	4.66
87	1.50	1.09	5.56	1.14	4.87
98	1.48	1.07	5.81	0.95	3.15
BC1	2.50	1.31	1.87	0.71	2.43
BC2*	1.62	1.16	3.60	1.05	3.64
BC3-1	1.71	1.23	3.67	0.86	3.15
BC3-2	1.78	0.94	1.02	0.58	1.69
BC3-3	1.69	1.25	6.10	0.83	3.28
BC4	1.45	1.49	4.36	1.78	6.09
BC5*	1.38	1.12	4.55	0.93	3.08
BC6-1	1.69	1.27	1.53	1.09	3.97
BC6-2	1.65	1.25	1.56	1.05	3.79
BC6-3	1.60	1.20	1.32	0.94	3.64
BC7	2.26	1.57	1.74	0.92	3.79

* replicate lab samples averaged

Table 1-7: Field descriptions - surficial sediment samples collected on April 9-10, 1991 (Cruise 25)

Station number	Water depth (ft.)	Description
2	5	No floc; dark yellowish brown (10 YR 4/2) fine to very fine sand (mostly fine sand), pretty clean; a few Rangia cuneata, live and fragments; no odor
3	12	Dark yellowish brown (10 YR 4/2) floc layer of soupy, muddy fine sand; overlies dark yellowish brown (10 YR 4/2) and dark gray (N3), slightly muddy fine sand; some shell fragments, <0.5 cm, a few articulated, adult Rangia; no odor
4	11	Dark yellowish brown floc layer consisting of 2-3 cm of soft, very slightly gritty mud; overlies soft, olive black (5 Y 2/1) mud; articulated and disarticulated adult Rangia just below floc layer; some burrows; worm; plant matter; no odor
5	15	Dark yellowish brown (10 YR 4/2) floc layer consisting of 2-3 cm of soft, smooth mud; overlies soft, slick, creamy, olive gray (5 Y 4/1) mud, some grayish black (N2) near Macoma shells (texture characteristic of "fluid mud" layer); some Rangia near top, a few Macoma at depth; worm; no odor
6	13	Thin (<1 cm), shelly floc layer consisting of smooth, dark yellowish brown (10 YR 4/2) mud; many articulated and disarticulated Rangia, 1-4 cm long, in floc layer; overlies smooth, stiff mud, grading from olive gray (5 Y 4/1) to grayish black (N2) (no obvious characteristics of "fluid mud" layer); some dead Macoma; some burrows, some oxidized; no odor
7	15	Shelly floc layer consisting of 2-3 cm of soft, soupy, dark yellowish brown (10 YR 4/2) mud; some disarticulated Rangia in floc layer; overlies smooth, olive gray (5 Y 4/1) mud

Table 1-7 (con't): Field descriptions - surficial sediment samples collected on April 9-10, 1991 (Cruise 25)

Station number	Water depth (ft.)	Description
7		grading into dark gray to grayish black (N2.5); a few Macoma, Rangia (?); a few burrows, some oxidized; no odor
8A	11	Floc layer of dark yellowish brown (10 YR 4/2) muddy medium sand; no shells in floc layer; overlies soft, gritty mud, mottled olive gray (5 Y 4/1), dark gray (N3) and grayish black (N2); some/many articulated adult Rangia just below floc layer, some live; few shells at depth; no odor
9	17	Shelly floc layer consisting of 2 cm of soft, smooth, dark yellowish brown (10 YR 4/2) mud; many disarticulated Rangia, 1-2.5 cm long, in floc layer; overlies slightly gritty, lumpy mud, mottled olive gray (5 Y 4/1) and dark gray (N3); some disarticulated Macoma at depth; oyster; overall, not many shells below floc layer; many burrows; plant matter; no odor
10	16	No floc; clean, dark yellowish brown (10 YR 4/2) fine sand; a few disarticulated Rangia; heavy minerals; no odor
11	11	No floc; clean, dark yellowish brown (10 YR 4/2) medium to fine sand; a few Rangia, 2 cm long, mostly disarticulated
12	10	Thin (1 cm), shelly floc layer of slightly gritty, dark yellowish brown (10 YR 4/2) mud; many Rangia at top, mostly disarticulated, some live; overlies smooth, slightly sandy, grayish black (N2) mud, uniform in color; not many shells below top layer of Rangia; smells like sewage

Table 1-7 (con't): Field descriptions - surficial sediment samples collected on April 9-10, 1991 (Cruise 25)

Station number	Water depth (ft.)	Description
13	6	No floc; dark yellowish brown (10 YR 4/2) medium sand; a few disarticulated Rangia, 2 cm long; heavy minerals; no odor
14	10	Dark yellowish brown (10 YR 4/2) floc layer consisting of 3-4 cm of smooth, soft mud; a few/some adult Rangia in layer at top of grab; overlies soft, smooth, uniformly dark gray (N3) mud; no shells below top layer of Rangia
15	8	Dark yellowish brown (10 YR 4/2) floc layer consisting of 2 cm of soft, smooth mud; many articulated and disarticulated Rangia, 2.5 cm long, at top of grab; overlies soft, sticky, grayish black (N2) mud; small Rangia below surface; a few burrows
16	7	Dark yellowish brown (10 YR 4/2) floc layer consisting of 2 cm of soupy sandy mud; Rangia near top, most articulated, some disarticulated, 2.5 cm long; overlies thin (<1 cm) layer of olive gray (5 Y 4/1) mud (?); in turn, overlies soft, grayish black (N2) fine sandy mud, uniform in color; worms; mucous strands (third grab is sandier than first two)
17	7	Dark yellowish brown (10 YR 4/2) floc layer consisting of 2 cm of soft, soupy mud; Rangia at top of grab, all about 2.5 cm long, some articulated, most disarticulated; overlies smooth (no grit), lumpy, grayish black (N2) mud, uniform in color and texture; disarticulated Rangia; burrows, some oxidized; no odor
18	5	Dark yellowish brown (10 YR 4/2) floc layer consisting of 2-3 cm of soft, smooth mud; Rangia, 2.5 cm long, at top of grab, mostly disarticulated; live adult crab; plant matter on top; overlies soft, lumpy, grayish black

Table 1-7 (con't): Field descriptions - surficial sediment samples collected on April 9-10, 1991 (Cruise 25)

Station number	Water depth (ft.)	Description
18		(N2) mud; lots of burrows, some oxidized; leaves
19	15	Dark yellowish brown (10 YR 4/2) floc layer consisting of 2-3 cm of soft, very slightly gritty mud; no shells; overlies sticky, cohesive, grayish black (N2) mud; a few Rangia just below floc layer - articulated adults and smaller, disarticulated shells; a few Rangia at depth; burrows, some oxidized; worm; no odor
20	12	Dark yellowish brown (10 YR 4/2) floc layer consisting of 2-3 cm of soft, smooth (no grit), watery mud; overlies mottled dark gray (N3) and dark greenish gray (5 GY 4/1), smooth mud, neither soft nor firm; Rangia just below floc layer - some disarticulated, a few smaller, articulated shells; some disarticulated Rangia and a few disarticulated Macoma at depth; a few burrows, some dark yellowish brown (10 YR 4/2) (i.e., oxidized); plant matter; no odor
21B	10	No floc; clean, dark yellowish brown (10 YR 4/2) medium to fine sand; disarticulated Rangia, 2 cm long; heavy minerals
22	7	Thin (1 cm) floc layer of dark yellowish brown (10 YR 4/2) fine sandy mud; overlies soft muddy fine sand, variably sandier and muddier, mottled dark yellowish brown (10 YR 4/2) and greenish black (5 GY 2/1); some live Rangia
23	9	Dark yellowish brown (10 YR 4/2) floc layer consisting of 1-2 cm of slightly gritty mud; shell fragments and small shells near top; plant matter; overlies gritty, medium dark gray (N4) mud

Table 1-7 (con't): Field descriptions - surficial sediment samples collected on April 9-10, 1991 (Cruise 25)

Station number	Water depth (ft.)	Description
24	15	Dark yellowish brown (10 YR 4/2) floc layer consisting of 3 cm of soft, fine sandy mud; overlies soft, dark gray (N3), medium to fine sandy mud or muddy sand; disarticulated Rangia and oyster shells just below floc layer, shells throughout grab below floc; no odor (three grabs different from one another - second grab sandier; third grab shellier)
25	16	Shelly floc layer consisting of 1-2 cm of soft, smooth, dark yellowish brown (10 YR 4/2) mud; some Rangia, 2 cm long or smaller, mostly disarticulated, some articulated; overlies cottage cheesy, mostly dark gray to grayish black (N2.5) mud mottled near top with olive gray (5 Y 4/1); some/many Macoma and a few juvenile Rangia (in pockets) at depth; burrows, some oxidized; no odor
26	14	Dark yellowish brown (10 YR 4/2) floc layer consisting of 1-2 cm of soft, smooth (no grit) mud, wood fragments; overlies soft, smooth grayish black (N2) mud mottled with dark yellowish brown (10 YR 4/2); a few disarticulated Rangia near top of layer, some articulated and disarticulated Rangia at depth; no burrows evident; no odor.
27	13	Dark yellowish brown (10 YR 4/2) floc layer consisting of 2-3 cm of very slightly gritty mud; no shells in floc layer; overlies sticky mud, neither soft nor firm, mottled olive gray (5 Y 4/1) and dark yellowish brown (10 YR 4/2) at top and grayish black (N2) and olive black (5 Y 2/1) near bottom; a few Macoma and articulated and disarticulated Rangia at depth; a few burrows, some oxidized; no odor
28	16	Thin (1 cm) floc layer of dark yellowish brown (10 YR 4/2) fine sandy mud; overlies grayish

Table 1-7 (con't): Field descriptions - surficial sediment samples collected on April 9-10, 1991 (Cruise 25)

Station number	Water depth (ft.)	Description
28		black (N2) fine sandy mud, uniform in color; many Rangia, 1-3 cm long, mostly disarticulated, at top of layer, oyster shell, a few shell fragments; no odor
30	15	Thin (1 cm), shelly floc layer of soft, dark yellowish brown (10 YR 4/2) mud; many articulated and disarticulated Rangia, 2.5 cm long; plant matter; overlies soft, smooth, greenish black (5 GY 2/1) mud; single Macoma, otherwise, almost no shells below floc; a few burrows; mucous strands; leaf; no odor
31	15	Dark yellowish brown (10 YR 4/2) floc layer consisting of 1-2 cm of very slightly gritty, watery mud; plant matter; overlies stiff, smooth (no grit), slightly lumpy mud, mostly dark gray (N3), stiffer with depth; a few disarticulated and articulated (live) Macoma; worm burrows, some oxidized; no odor
32	14	Dark yellowish brown (10 YR 4/2) floc layer consisting of 2-3 cm of soft, smooth (no grit), lumpy, cohesive mud; overlies sticky, dark greenish gray (5 GY 4/1) mud grading into grayish black (N2), neither soft nor firm; a few disarticulated adult Rangia just below floc layer; a few disarticulated Macoma and a few/some disarticulated juvenile Rangia at depth; a few worm burrows, some oxidized; no odor
33	15	Dark yellowish brown (10 YR 4/2) floc layer consisting of 1-2 cm of very slightly gritty, soupy mud; many disarticulated, juvenile Rangia in floc layer; overlies cohesive, very slightly gritty mud, mostly dark gray (N3), some dark greenish gray (5 GY 4/1); many disarticulated Rangia and some disarticulated

Table 1-7 (con't): Field descriptions - surficial sediment samples collected on April 9-10, 1991 (Cruise 25)

Station number	Water depth (ft.)	Description
33		Macoma at depth; burrows, some oxidized; no odor
34	17	Dark yellowish brown (10 YR 4/2) floc layer consisting of 4 cm of soft, smooth mud; no shells in floc layer; overlies smooth (no grit), slightly lumpy mud, grayish black (N2) mottled with unrecorded color; a few articulated Macoma at depth; a few burrows, some oxidized; plant matter; smells like hydrogen sulfide
35	15	Shelly floc layer consisting of 1-2 cm of smooth, watery, dark yellowish brown (10 YR 4/2) mud; many Rangia, 1-3 cm long, in floc layer, larger ones articulated, smaller ones disarticulated; overlies smooth mud, primarily grayish black (N2); a few Macoma at depth; very few burrows, some oxidized; plant matter; no odor
36	17	Dark yellowish brown (10 YR 4/2) floc layer consisting of 3-4 cm of soft, smooth mud; overlies dark gray to grayish black (N2.5) mud, increasingly firm with depth; a few Macoma; worms; a few burrows; plant matter; no odor
40	8	Dark yellowish brown (10 YR 4/2) floc layer consisting of 2-3 cm of soft, fluffy, soupy mud; a few/some articulated (some live) and disarticulated Rangia at surface; overlies thin layer of soft, olive gray (5 Y 4/1) mud; in turn, overlies soft, grayish black (N2) mud; burrows, some oxidized
41	10	Dark yellowish brown (10 YR 4/2) floc layer, 2-3 cm thick, consisting of soft, smooth mud; a few/some Rangia in floc layer, mostly articulated, some live; overlies soft, smooth,

Table 1-7 (con't): Field descriptions - surficial sediment samples collected on April 9-10, 1991 (Cruise 25)

Station number	Water depth (ft.)	Description
41		grayish black (N2) mud, uniform in color and texture; no shells below floc layer; no odor
42	8	Thin (1 cm) floc layer consisting of soft, dark yellowish brown (10 YR 4/2) mud, not watery; overlies grayish black (N2) sandy mud, uniform in color and texture; disarticulated Rangia at top of layer; lots of shell fragments, particularly oyster shell fragments
43	10	Dark yellowish brown (10 YR 4/2) floc layer, 2-3 cm thick, consisting of soft, smooth mud; overlies soft, lumpy, cottage cheesy, grayish black (N2) mud; Rangia at top of layer; some burrows
44	12	Dark yellowish brown (10 YR 4/2) floc layer consisting of 2 cm of soft, watery mud; overlies soft, smooth (no grit), lumpy, grayish black (N2) mud; a few articulated Rangia at top of layer, no Rangia below that; some burrows; no odor
45	10	Dark yellowish brown (10 YR 4/2) floc layer consisting of 4 cm of soft, smooth mud; a few Rangia at top; overlies somewhat soft, cottage cheesy, grayish black (N2) mud; no shells below top layer
51	12	Floc layer, 1-2 cm thick, of sandy mud; overlies fine sandy mud mottled dark greenish gray (5 GY 4/1) and dark gray to grayish black (N2.5); articulated Rangia, 1-3 cm long; burrows, some oxidized
52	12	Oyster bar
53	14	Dark yellowish brown (10 YR 4/2) floc layer consisting of 1-2 cm of soft, fluffy, soupy mud; overlies soft, lumpy, medium dark gray

Table 1-7 (con't): Field descriptions - surficial sediment samples collected on April 9-10, 1991 (Cruise 25)

Station number	Water depth (ft.)	Description
53		(N4) mud grading into dark greenish gray (5 GY 4/1); a few Rangia
58	15	Oyster bar; small crabs
59	14	Oyster bar
60	19	Floc layer, 1-2 cm thick, of soft, smooth mud; some articulated and disarticulated Rangia, 2.5 cm long, in floc layer; overlies soft, smooth, dark gray to grayish black (N2.5) mud; a few Macoma; burrows, some oxidized
61	19	Floc layer of soft, smooth mud; some articulated and disarticulated Rangia, 2.5 cm long, in floc layer; overlies soft, smooth, dark gray to grayish black (N2.5) mud, uniform in color; some shells; a few burrows
63	18	Thin (1 cm) floc layer of slightly gritty, dark yellowish brown (10 YR 4/2) mud; many articulated (larger) and disarticulated (smaller) Rangia, 1-2.5 cm long, in floc layer; overlies soft, lumpy mud, mottled olive gray (5 Y 4/1) and medium dark gray to dark gray (N3.5); a few Macoma; a few burrows; no odor
64	19	Thin (1 cm), shelly floc layer of soupy, dark yellowish brown (10 YR 4/2) mud; a few disarticulated Rangia, 2-2.5 cm long, in floc layer (shells concentrated on surface); overlies soft, smooth, greenish black (5 GY 2/1) mud; single articulated, dead Macoma; many burrows, some oxidized; no odor
65	16	Shelly floc layer of soft, slightly gritty, dark yellowish brown (10 YR 4/2) mud; some/many articulated and disarticulated Rangia, 2-2.5 cm long; overlies soft, smooth,

Table 1-7 (con't): Field descriptions - surficial sediment samples collected on April 9-10, 1991 (Cruise 25)

Station number	Water depth (ft.)	Description
65		slightly gritty, dark gray to grayish black (N2.5) mud; not many shells below floc layer; some burrows; no odor
67	16	Dark yellowish brown (10 YR 4/2) floc layer consisting of 2-3 cm of soft, smooth mud; overlies soft, smooth (no grit), slightly lumpy mud, mottled olive gray (5 Y 4/1) and dark gray (N3); a few disarticulated Rangia, 2-4 cm long, just below floc; a few Rangia or Macoma at depth; a few burrows, some oxidized
69	15	Dark yellowish brown (10 YR 4/2) floc layer consisting of 2-3 cm of soft, smooth mud; overlies smooth, dark gray (N3) mud with olive gray (5 Y 4/1) mottling (in burrows); some articulated (larger) and disarticulated (smaller) Rangia, 1-4 cm long, and single, broken oyster shell just below floc layer; a few Rangia and Macoma at depth; some burrows, some oxidized; unidentified odor
70	17	Shelly floc layer consisting of 1-2 cm of soft, smooth, dark yellowish brown (10 YR 4/2) mud; some disarticulated Rangia, 2 cm long, and oyster shell fragments in floc layer; overlies 1-2 cm of soft, smooth, olive gray (5 Y 4/1) mud grading into dark gray (N3) mud of similar texture; a few scattered, juvenile Rangia; no odor
71	16	Shelly floc layer of watery, dark yellowish brown (10 YR 4/2) mud; many disarticulated Rangia, 2.5 cm long, within/just below floc layer; overlies uniformly soft, smooth, grayish black (N2) mud; some disarticulated Rangia, 1 cm long, and a single live Macoma at depth; some burrows; no odor

Table 1-7 (con't): Field descriptions - surficial sediment samples collected on April 9-10, 1991 (Cruise 25)

Station number	Water depth (ft.)	Description
80	16	Shelly floc layer consisting of 1-2 cm of soft, smooth, dark yellowish brown (10 YR 4/2) mud; overlies soft, sticky, dark greenish gray (5 GY 4/1) mud grading into dark gray (N3); a few disarticulated Rangia, 2-2.5 cm long, just below floc layer; a few Macoma at depth; some burrows, some oxidized; no odor
85	9	No floc; soft, watery, dark yellowish brown (10 YR 4/2) muddy fine sand; a few/some yellowish, articulated (adult) and disarticulated Rangia
87	15	Thin (<1 cm), dark yellowish brown (10 YR 4/2) floc layer of medium to fine sandy mud (?); surface has a lumpy appearance; a few disarticulated Rangia, 1-3 cm long, in floc layer; overlies stiff, sticky, smooth (no grit) mud, mottled dusky brown (5 YR 2/2) (in burrows), dark greenish gray (5 GY 4/1), dark yellowish brown (10 YR 4/2), and a little dark gray (N3); a few disarticulated Macoma and oyster shells; a few burrows; no odor
95	12	Soft (mushy), dark greenish gray to greenish gray (5 GY 5/1) mud; overlies sticky, soft, cottage cheesy, grayish black (N2) mud; a few Rangia
98	14	Dark yellowish brown (10 YR 4/2) floc layer consisting of 2-3 cm of soft, smooth mud; some articulated Rangia, 1-2.5 cm long, on surface; overlies soft, smooth, dark gray to grayish black (N2.5) mud, uniform in texture and color; occasional shells; no odor
BC-3	13	Floc layer of slightly gritty, watery, dark yellowish brown (10 YR 4/2) mud; overlies firm, lumpy, very cohesive, creamy, pale reddish brown (10 R 5/4) mud (color and

Table 1-7 (con't): Field descriptions - surficial sediment samples collected on April 9-10, 1991 (Cruise 25)

Station number	Water depth (ft.)	Description
BC-3		texture characteristic of "fluid mud" layer); a few articulated and disarticulated Rangia just below floc layer, vary in size; single Macoma at depth (third sample very shelly)
BC-4	17	Shelly floc layer consisting of 1-2 cm of gritty, dark yellowish brown (10 YR 4/2) mud; some disarticulated Rangia, 1-4 cm long, in floc layer; overlies smooth (not gritty), slightly lumpy, dark gray (N3) mud, neither soft nor firm; a few Macoma; a few burrows; worms; black line, possibly around something decomposing
BC-5	13	Dark yellowish brown (10 YR 4/2) floc layer consisting of 2-3 cm of soft, smooth mud; some live Rangia, 2.5 cm long, on surface; overlies soft, grayish black (N2) mud; shells scattered throughout; no odor
BC-6	8	Dark yellowish brown (10 YR 4/2) floc layer consisting of 2-3 cm of soft, smooth, soupy mud; Rangia on surface; overlies thin, olive gray (5 Y 4/1) layer; in turn, overlies soft, lumpy, gelatinous, grayish black (N2) mud; oyster shell fragments

* The alphanumeric codes following the color names are Munsell numerical designations; the names themselves are from the Inter-Society Color Council - National Bureau of Standards (ISCC-NBS) system

Table 1-8: Sedimentological parameters - surficial samples collected on April 9-10, 1991 (Cruise 25)

Station number	Water (%)	Sand (%)	Silt (%)	Clay (%)	Pejrup's class	Clay:mud
2	29.07	95.51	0.98	3.52	A,II	0.78
3	26.75	85.90	6.00	8.10	B,II	0.57
4	61.18	5.33	54.35	40.32	D,III	0.43
5	63.34	6.84	47.80	45.36	D,III	0.49
6	62.45	1.78	40.24	57.99	D,II	0.59
7	63.77	2.68	37.70	59.61	D,II	0.61
8A	49.10	56.89	23.89	19.22	B,III	0.45
9	62.41	4.64	39.65	55.72	D,II	0.58
10	27.46	94.97	1.91	3.12	A,II	0.62
11-1	19.63	95.05	2.10	2.85	A,II	0.58
11-2	27.85	95.44	1.73	2.84	A,II	0.62
11-3	17.82	97.90	0.75	1.36	A,II	0.65
12-1	54.51	26.41	34.77	38.83	C,II	0.53
12-2	54.50	38.38	28.13	33.49	C,II	0.54
12-3	52.88	43.26	24.28	32.46	C,II	0.57
13	19.91	97.05	1.33	1.62	A,II	0.55
14	60.97	1.69	46.60	51.72	D,II	0.53
15	62.72	2.04	39.80	58.16	D,II	0.59
16-1	35.98	67.35	16.09	16.56	B,II	0.51
16-2	31.26	75.54	11.81	12.66	B,II	0.52
16-3	22.83	88.98	5.38	5.64	B,II	0.51
17	60.10	5.29	42.39	52.32	D,II	0.55
18	67.95	6.94	43.26	49.79	D,II	0.54
19	62.89	1.17	41.76	57.07	D,II	0.58
20	68.16	1.22	45.04	53.74	D,II	0.54
21B	19.28	96.75	1.44	1.81	A,II	0.56
22	40.82	73.84	11.12	15.04	B,II	0.57
23	50.32	55.75	22.10	22.15	B,II	0.50
24-1	56.43	53.34	20.47	26.19	B,II	0.56
24-2	47.33	66.28	14.31	19.41	B,II	0.58
24-3	39.12	83.51	7.34	9.15	B,II	0.55
25-1	62.53	0.27	41.18	58.55	D,II	0.59
25-2	62.20	1.94	40.95	57.11	D,II	0.58
25-3	64.49	1.80	40.95	57.25	D,II	0.58
26	65.17	1.67	43.10	55.24	D,II	0.56
27	64.06	2.38	37.97	59.65	D,II	0.61
28-1	40.05	53.99	18.37	27.64	B,II	0.60
28-2	48.97	53.09	19.15	27.77	B,II	0.59
28-3	43.42	58.60	16.71	24.69	B,II	0.60
30	64.83	0.30	42.63	57.07	D,II	0.57
31	60.91	1.51	46.07	52.42	D,II	0.53
32	65.55	0.64	44.39	54.97	D,II	0.55

Table 1-8 (con't): Sedimentological parameters - surficial samples collected on April 9-10, 1991 (Cruise 25)

Station number	Water (%)	Sand (%)	Silt (%)	Clay (%)	Pejrup's class	Clay:mud
33	58.89	1.70	41.37	56.94	D,II	0.58
34	70.26	0.28	41.80	57.92	D,II	0.58
35	62.63	0.74	38.38	60.88	D,II	0.61
36	63.64	4.82	54.65	40.53	D,III	0.43
40	64.21	0.51	39.78	59.71	D,II	0.60
41	66.58	0.08	39.08	60.84	D,II	0.61
42	49.76	48.40	22.47	29.13	C,II	0.56
43	68.86	1.00	39.20	59.80	D,II	0.60
44	65.79	0.52	37.30	62.18	D,II	0.63
45	67.97	1.61	35.18	63.22	D,II	0.64
51	42.50	84.79	2.35	12.86	B,I	0.85
52	25.64	47.49*	18.62	33.89	C,II	0.65
53	64.35	0.44	38.28	61.29	D,II	0.62
58	42.93	34.56*	27.34	38.09	C,II	0.58
59	50.36	43.85*	22.89	33.26	C,II	0.59
60	62.94	1.63	43.26	55.11	D,II	0.56
61	62.62	2.04	40.40	57.57	D,II	0.59
63	61.24	7.23	39.32	53.45	D,II	0.58
64	62.19	0.37	49.38	50.26	D,II	0.50
65	63.82	1.40	43.13	55.46	D,II	0.56
67	62.47	1.09	44.88	54.02	D,II	0.55
69	65.48	2.62	39.96	57.43	D,II	0.59
70	62.96	0.70	45.14	54.16	D,II	0.55
71	60.83	0.58	43.38	56.04	D,II	0.56
80	64.18	0.66	41.01	58.32	D,II	0.59
85	28.44	87.85*	5.51	6.63	B,II	0.55
87	57.07	3.62*	37.96	58.42	D,II	0.61
95	62.22	0.52	45.09	54.39	D,II	0.55
98	69.28	0.35	41.97	57.67	D,II	0.58
BC3-1	47.77	4.06	54.06	41.88	D,III	0.44
BC3-2	61.99	20.64	44.04	35.32	C,III	0.45
BC3-3	62.16	16.53	43.82	39.65	C,III	0.47
BC4	61.15	0.53	41.94	57.53	D,II	0.58
BC5	65.57	0.96	51.70	47.35	D,III	0.48
BC6-1	62.90	2.30	42.51	55.20	D,II	0.56
BC6-2	66.69	2.11	42.97	54.92	D,II	0.56
BC6-3	66.54	2.60	42.54	54.86	D,II	0.56

* includes less than 2% gravel

Table 1-9: Trace metal concentrations - surficial sediment samples collected on April 9-10, 1991 (Cruise 25)

Station number	Cr (µg/g)	Cu (µg/g)	Fe (wt. %)	Mn (µg/g)	Ni (µg/g)	Zn (µg/g)
2	22.1	9.6	0.38	991	9.6	28.7
3•	33.8	14.9	0.97	958	17.8	61.8
4•	114.8	45.2	3.93	2673	65.6	254.7
5	127.7	47.4	4.58	3211	67.9	280.7
6•	128.9	48.3	4.62	3432	76.1	330.5
7	131.1	56.2	4.78	1952	80.3	363.2
8A	58.9	21.6	1.70	1145	21.0	87.4
9	132.5	52.3	4.98	3693	91.7	430.1
10	31.1	12.1	0.52	568	5.7	31.4
11-1•	18.8	10.0	0.36	577	8.8	24.2
11-2	14.7	9.4	0.31	563	7.3	21.1
11-3	21.0	10.1	0.28	500	0.8	18.4
12-1	93.9	34.5	3.08	1972	45.2	183.2
12-2	76.5	22.9	2.56	1702	28.0	164.8
12-3•	79.0	26.3	2.65	1807	38.5	158.9
13	18.1	8.8	0.28	923	3.5	20.4
14	114.6	39.7	4.29	5064	51.8	261.7
15	126.6	48.7	4.62	1634	66.4	297.5
16-1	61.3	22.1	2.00	981	23.3	124.7
16-2•	51.7	18.9	1.38	569	17.3	84.5
16-3	45.8	15.1	0.93	491	9.6	58.5
17	130.6	50.2	4.01	1125	51.4	278.8
18	117.3	47.5	3.55	1610	46.8	248.6
19	132.6	50.3	4.86	6934	71.1	346.8
20•	142.4	53.5	4.73	4833	62.6	361.9
21B	13.7	8.6	0.34	631	BD	21.4
22	38.0	18.0	1.35	1128	6.2	72.3
23	93.2	34.6	2.59	1382	10.5	215.9
24-1	48.5	23.9	2.13	1800	18.6	142.2
24-2•	45.0	22.2	1.66	1279	6.1	119.3
24-3	30.4	16.7	0.92	1074	BD	61.4
25-1	130.2	60.4	5.00	2427	60.3	399.1
25-2	127.2	51.5	4.97	2369	78.4	375.7
25-3	124.1	60.3	5.21	3780	114.9	475.2
26•	128.2	49.8	4.86	3404	73.5	328.1
27	150.6	59.7	6.06	9454	89.1	472.1
28-1	65.1	29.1	2.87	1858	42.1	189.0
28-2	65.1	29.7	2.74	1947	33.9	179.2
28-3	61.6	27.0	2.32	1369	37.1	168.9
30•	110.2	47.3	4.72	2906	73.5	291.4
31	108.6	48.9	4.67	2701	82.2	308.6
32	114.6	51.9	4.78	5002	72.5	340.6
33	128.6	58.3	5.01	3701	91.9	398.5

Table 1-9 (con't): Trace metal concentrations - surficial sediment samples collected on April 9-10, 1991 (Cruise 25)

Station number	Cr (µg/g)	Cu (µg/g)	Fe (wt. %)	Mn (µg/g)	Ni (µg/g)	Zn (µg/g)
34	130.0	55.5	4.95	6134	82.2	356.9
35*	127.7	48.5	4.75	2770	77.3	337.2
36	101.6	44.3	4.26	3377	52.1	244.5
40	120.5	50.5	4.51	3361	69.1	296.3
41	122.1	48.3	4.76	3202	68.9	293.7
42*	74.7	32.1	3.01	1879	45.3	200.0
43*	121.1	51.0	4.94	4335	73.6	316.0
44	124.8	46.6	4.89	3470	73.2	306.0
45	103.0	43.9	4.70	2754	63.4	272.9
51	39.8	20.3	1.61	2144	16.6	109.9
52	49.7	39.2	2.37	2692	36.0	194.6
53*	97.9	32.9	4.86	2621	50.2	229.3
58	56.8	23.9	3.33	3036	34.2	192.9
59	64.1	51.9	2.82	2121	28.6	175.0
60	121.6	49.3	4.88	2842	64.7	339.3
61	115.8	64.8	4.82	3101	80.9	327.2
63*	122.2	66.8	5.07	3437	118.5	560.3
64	121.5	54.9	4.81	1614	72.6	347.4
65	109.8	50.1	4.54	2200	69.4	300.3
67	121.8	57.7	4.61	2282	76.1	339.3
69	116.4	49.0	4.25	2448	63.1	294.2
70*	127.2	65.2	4.94	2157	79.3	373.0
71	114.4	65.9	4.73	2036	73.5	350.9
80	120.4	63.5	4.95	3702	57.8	355.3
85*	37.3	17.9	0.88	633	0.1	62.2
87	125.8	79.1	5.25	3725	70.4	538.7
95*	102.7	51.7	4.47	3164	55.2	248.0
98	104.6	52.7	4.55	3637	74.9	251.8
BC3-1	99.4	47.3	3.24	1870	51.9	200.8
BC3-2	95.4	41.2	3.51	1833	47.4	201.5
BC3-3	100.3	47.4	3.79	2922	58.8	229.9
BC4*	115.7	72.6	5.32	2916	141.9	575.6
BC5	101.7	48.6	4.72	3646	70.2	285.1
BC6-1	119.1	55.3	4.82	2366	66.3	323.8
BC6-2	135.0	57.2	4.74	1743	72.9	359.5
BC6-3	151.6	60.0	4.84	1598	82.5	374.0

* duplicate lab samples averaged

Table 1-10: Enrichment factors - surficial sediment samples collected on April 9-10, 1991 (Cruise 25)

Station number	Cr	Cu	Mn	Ni	Zn
2	3.08	2.69	14.61	1.76	3.78
3*	1.83	1.63	5.50	1.27	3.17
4*	1.53	1.21	3.78	1.16	3.22
5	1.46	1.09	3.89	1.03	3.05
6*	1.46	1.10	4.13	1.14	3.56
7	1.44	1.24	2.27	1.17	3.77
8A	1.81	1.33	3.73	0.86	2.55
9	1.40	1.10	4.12	1.28	4.29
10	3.16	2.47	6.11	0.77	3.02
11-1*	2.71	2.89	8.80	1.67	3.30
11-2	2.51	3.23	10.17	1.65	3.41
11-3	3.93	3.79	9.91	0.20	3.26
12-1	1.60	1.18	3.56	1.02	2.96
12-2	1.57	0.94	3.69	0.76	3.20
12-3*	1.56	1.04	3.78	1.01	2.97
13	3.38	3.28	18.26	0.87	3.62
14	1.40	0.97	6.55	0.84	3.03
15	1.44	1.11	1.97	1.00	3.20
16-1	1.60	1.16	2.72	0.81	3.09
16-2*	1.96	1.44	2.29	0.87	3.04
16-3	2.58	1.70	2.92	0.71	3.12
17	1.71	1.32	1.56	0.89	3.45
18	1.73	1.41	2.52	0.91	3.48
19	1.43	1.09	7.93	1.02	3.55
20*	1.58	1.19	5.67	0.92	3.80
21B	2.12	2.67	10.37	NA	3.15
22	1.48	1.41	4.64	0.32	2.66
23	1.89	1.40	2.96	0.28	4.14
24-1	1.19	1.18	4.69	0.61	3.32
24-2*	1.42	1.41	4.28	0.25	3.57
24-3	1.73	1.90	6.46	NA	3.30
25-1	1.37	1.27	2.70	0.84	3.97
25-2	1.34	1.09	2.65	1.09	3.75
25-3	1.25	1.22	4.03	1.53	4.53
26*	1.38	1.08	3.89	1.05	3.35
27	1.30	1.04	8.66	1.02	3.87
28-1	1.19	1.07	3.59	1.02	3.27
28-2	1.25	1.14	3.95	0.86	3.25
28-3	1.39	1.22	3.27	1.11	3.61
30*	1.22	1.05	3.42	1.08	3.07
31	1.22	1.10	3.21	1.22	3.28
32	1.26	1.14	5.81	1.05	3.54

Table 1-10 (con't): Enrichment factors - surficial sediment samples collected on April 9-10, 1991 (Cruise 25)

Station number	Cr	Cu	Mn	Ni	Zn
33	1.35	1.22	4.10	1.27	3.95
34	1.38	1.18	6.88	1.15	3.58
35*	1.41	1.07	3.23	1.13	3.52
36	1.25	1.09	4.40	0.85	2.85
40	1.40	1.18	4.14	1.06	3.26
41	1.35	1.07	3.73	1.00	3.06
42*	1.30	1.12	3.47	1.04	3.30
43*	1.29	1.09	4.87	1.03	3.18
44	1.34	1.00	3.94	1.04	3.11
45	1.15	0.98	3.25	0.94	2.88
51	1.30	1.32	7.39	0.71	3.39
52	1.10	1.74	6.30	1.05	4.08
53*	1.06	0.71	3.00	0.72	2.34
58	0.89	0.76	5.06	0.71	2.88
59	1.19	1.94	4.18	0.70	3.09
60	1.31	1.06	3.24	0.92	3.46
61	1.26	1.42	3.57	1.17	3.37
63*	1.27	1.39	3.77	1.62	5.49
64	1.33	1.20	1.86	1.05	3.59
65	1.27	1.16	2.69	1.06	3.29
67	1.38	1.32	2.75	1.14	3.65
69	1.44	1.22	3.20	1.03	3.44
70*	1.35	1.39	2.42	1.11	3.75
71	1.27	1.47	2.39	1.08	3.69
80	1.28	1.35	4.15	0.81	3.57
85*	2.24	2.16	4.02	0.01	3.53
87	1.26	1.58	3.94	0.93	5.09
95*	1.20	1.22	3.93	0.84	2.75
98	1.21	1.22	4.44	1.14	2.75
BC3-1	1.61	1.53	3.20	1.11	3.08
BC3-2	1.42	1.23	2.90	0.94	2.85
BC3-3	1.39	1.32	4.28	1.08	3.01
BC4*	1.14	1.44	3.04	1.85	5.37
BC5	1.13	1.08	4.29	1.03	3.00
BC6-1	1.29	1.21	2.72	0.95	3.33
BC6-2	1.49	1.27	2.04	1.07	3.76
BC6-3	1.64	1.30	1.83	1.18	3.84

* duplicate lab samples averaged

Table 1-11: Sedimentological parameters - subsamples taken from gravity cores collected on April 9-10, 1991 (Cruise 25)

Station number	Water (%)	Sand (%)	Silt (%)	Clay (%)	Pejrup's class	Clay:mud
Station 5						
0.0- 2.5	63.15	3.45	39.63	56.92	D,II	0.59
2.5- 5.0	57.97	3.92	36.88	59.20	D,II	0.62
5.0- 7.5	57.10	5.55	36.33	58.13	D,II	0.62
7.5- 10.0	55.30	6.07	36.84	57.09	D,II	0.61
20.0- 24.0	54.10	2.90	32.42	64.68	D,II	0.67
34.0- 38.0	59.15	3.39	37.84	58.78	D,II	0.61
46.0- 50.0	62.81	1.50	34.70	63.80	D,II	0.65
Station 12						
0.0- 4.0	30.62	43.86	25.94	30.19	C,II	0.54
8.0- 12.0	33.55	87.46	5.98	6.56	B,II	0.52
16.0- 20.0	28.71	81.29	6.98	11.73	B,II	0.63
Station 25						
0.0- 2.5	62.88	1.36	35.84	62.80	D,II	0.64
2.5- 5.0	62.10	1.29	39.74	58.97	D,II	0.60
5.0- 7.5	59.61	1.45	40.11	58.44	D,II	0.59
7.5- 10.0	58.74	1.35	38.98	59.67	D,II	0.60
20.0- 24.0	57.19	0.93	38.51	60.56	D,II	0.61
28.0- 32.0	57.84	0.77	39.04	60.19	D,II	0.61
40.0- 44.0	57.06	0.68	34.53	64.79	D,II	0.65
51.0- 55.0	56.10	0.60	37.99	61.40	D,II	0.62
70.0- 74.0	60.26	0.95	37.22	61.83	D,II	0.62
Station BC-1						
0.0- 2.5	51.95	1.30	44.66	54.04	D,II	0.55
2.5- 5.0	47.61	0.39	43.11	56.49	D,II	0.57
5.0- 7.5	50.37	0.17	32.19	67.64	D,II	0.68
7.5- 10.0	57.42	0.30	33.89	65.81	D,II	0.66
16.0- 20.0	57.83	3.50	34.28	62.22	D,II	0.64
28.0- 32.0	55.92	2.97	32.38	64.65	D,II	0.67
36.0- 40.0	54.47	4.48	35.90	59.62	D,II	0.62
68.0- 72.0	63.17	1.82	35.57	62.61	D,II	0.64
Station BC-2						
0.0- 2.5	60.77	1.78	36.82	61.40	D,II	0.63
2.5- 5.0	60.78	1.30	36.70	62.01	D,II	0.63
5.0- 7.5	56.84	0.81	36.65	62.54	D,II	0.63
7.5- 10.0	61.81	0.89	37.63	61.48	D,II	0.62
28.0- 32.0	55.96	2.00	39.31	58.69	D,II	0.60

Table 1-11 (con't): Sedimentological parameters - subsamples taken from gravity cores collected on April 9-10, 1991 (Cruise 25)

Station number	Water (%)	Sand (%)	Silt (%)	Clay (%)	Pejrup's class	Clay:mud
Station BC-2, con't						
52.0- 56.0	56.31	1.14	32.50	66.36	D,II	0.67
66.0- 70.0	59.50	0.53	35.35	64.12	D,II	0.64
Station BC-3						
0.0- 2.5	50.65	13.07	45.82	41.11	C,III	0.47
2.5- 5.0	45.09	3.12	54.40	42.49	D,III	0.44
5.0- 7.5	43.37	2.05	57.46	40.48	D,III	0.41
7.5- 10.0	43.32	3.39	52.87	43.74	D,III	0.45
13.0- 16.0	43.95	0.69	53.66	45.65	D,III	0.46
19.0- 22.0	49.96	0.55	47.55	51.90	D,II	0.52
30.0- 34.0	60.10	4.24	32.01	63.75	D,II	0.67
40.0- 44.0	56.55	3.35	37.35	59.31	D,II	0.61
70.0- 74.0	54.76	2.82	32.85	64.33	D,II	0.66
Station BC-4						
0.0- 2.5	59.80	4.68	42.48	52.84	D,II	0.55
2.5- 5.0	61.97	2.98	42.90	54.12	D,II	0.56
5.0- 7.5	59.60	2.59	43.74	53.67	D,II	0.55
7.5- 10.0	58.91	2.75	41.46	55.79	D,II	0.57
14.0- 18.0	56.89	1.28	37.98	60.74	D,II	0.62
24.0- 28.0	56.49	0.74	41.18	58.08	D,II	0.59
32.0- 36.0	57.62	0.94	37.80	61.26	D,II	0.62
39.0- 43.0	58.63	5.19	38.67	56.14	D,II	0.59
54.0- 58.0	57.96	1.45	43.63	54.93	D,II	0.56
62.0- 66.0	62.07	1.29	41.99	56.72	D,II	0.57
72.0- 76.0	65.84	1.22	39.96	58.82	D,II	0.60
Station BC-5						
0.0- 2.5	66.17	0.89	40.04	59.08	D,II	0.60
2.5- 5.0	66.43	0.85	35.39	63.76	D,II	0.64
5.0- 7.5	65.69	0.87	35.08	64.05	D,II	0.65
7.5- 10.0	62.04	1.44	38.62	59.94	D,II	0.61
13.0- 17.0	65.21	1.27	36.50	62.23	D,II	0.63
38.0- 42.0	54.61	0.90	37.78	61.32	D,II	0.62
66.0- 70.0	58.70	0.77	38.99	60.23	D,II	0.61
81.0- 85.0	60.31	1.06	40.60	58.35	D,II	0.59

Table 1-11 (con't): Sedimentological parameters - subsamples taken from gravity cores collected on April 9-10, 1991 (Cruise 25)

Station number	Water (%)	Sand (%)	Silt (%)	Clay (%)	Pejrup's class	Clay:mud
Station BC-6						
0.0- 2.5	84.32	2.16	39.63	58.22	D,II	0.59
2.5- 5.0	65.61	1.55	37.85	60.60	D,II	0.62
5.0- 7.5	64.30	2.17	39.84	57.98	D,II	0.59
7.5- 10.0	62.80	2.49*	42.92	54.59	D,II	0.56
15.0- 19.0	54.74	5.39	39.95	54.66	D,II	0.58
24.0- 28.0	60.82	2.23	40.11	57.66	D,II	0.59
60.0- 64.0	62.51	1.10	36.47	62.42	D,II	0.63
Station BC-7						
0.0- 2.5	62.45	3.74	48.44	47.82	D,III	0.50
2.5- 5.0	61.57	4.15	53.89	41.95	D,III	0.44
5.0- 7.5	58.98	2.75	58.11	39.14	D,III	0.40
7.5- 10.0	59.61	2.09	52.26	45.65	D,III	0.47
26.0- 30.0	65.96	3.42	47.84	48.74	D,II	0.50
38.0- 42.0	64.93	4.42	50.75	44.83	D,III	0.47

* includes less than 1% gravel

Table 1-12: Trace metal concentrations - subsamples taken from gravity cores collected on April 9-10, 1991 (Cruise 25)

Depth (cm)	Cr (µg/g)	Cu (µg/g)	Fe (wt. %)	Mn (µg/g)	Ni (µg/g)	Zn (µg/g)
Station 5						
0- 2.5	156.8	68.2	5.18	3007	112.4	543.7
2.5- 5	166.2	76.7	5.44	2505	143.7	677.8
5- 7.5	148.4	78.7	5.16	2245	135.2	629.6
7.5-10	135.5	76.5	5.02	2137	120.2	537.0
20-24*	104.9	44.2	5.04	1883	46.1	172.5
34-38	94.8	25.1	4.96	1215	38.7	118.2
46-50*	105.6	21.5	4.91	1254	45.5	115.1
Station 12						
0- 4*	62.3	36.3	2.53	1493	40.7	149.7
8-12	37.8	16.7	1.09	802	19.5	67.6
16-20*	40.0	13.6	1.28	313	1.7	33.1
Station 25						
0- 2.5	134.1	59.2	5.40	2618	80.7	411.2
2.5- 5	129.5	73.9	5.55	4574	147.9	634.8
5- 7.5	126.4	80.1	5.37	3632	153.4	686.8
7.5-10	125.2	79.2	5.17	2683	140.0	563.8
20-24*	103.0	67.2	5.12	2344	64.4	279.3
28-32	101.5	61.0	4.97	2724	60.5	246.8
40-44	103.3	41.2	5.14	2287	56.7	178.2
51-55	104.8	36.3	4.95	1549	49.2	140.5
70-74	102.6	31.1	4.50	1311	24.2	123.0
Station BC-1						
0- 2.5*	109.0	32.6	2.88	952	35.4	139.9
2.5- 5	106.6	31.3	2.67	896	31.6	114.6
5- 7.5	125.5	35.1	3.14	948	16.8	119.5
7.5-10	124.0	40.7	4.14	2452	54.7	212.2
16-20	128.1	67.5	5.25	4220	134.2	667.4
28-32*	98.0	54.1	5.04	2551	64.2	208.6
36-40	100.4	32.4	4.71	1600	39.9	112.6
68-72	99.3	22.3	4.67	1201	30.7	104.4
Station BC-2						
0- 2.5	118.4	49.2	4.72	2486	70.3	303.2
2.5- 5	124.9	58.6	5.00	2153	74.2	336.3
5- 7.5*	110.9	55.8	4.71	2723	72.9	318.4
7.5-10	105.4	58.1	4.73	2426	65.4	246.8
28-32	134.5	58.2	5.19	2697	92.7	407.3

Table 1-12 (con't): Trace metal concentrations - subsamples taken from gravity cores collected on April 9-10, 1991 (Cruise 25)

Depth (cm)	Cr (µg/g)	Cu (µg/g)	Fe (wt. %)	Mn (µg/g)	Ni (µg/g)	Zn (µg/g)
Station BC-2, con't						
52-56	107.3	34.5	4.84	1762	44.1	161.7
66-70	109.4	23.6	4.68	1266	31.7	125.2
Station BC-3						
0- 2.5*	99.9	33.1	3.35	889	41.5	183.0
2.5- 5	93.4	33.3	2.99	598	28.9	119.8
5- 7.5	92.7	30.2	3.24	522	30.8	125.6
7.5-10	91.3	30.2	3.37	626	28.0	114.1
13-16	105.0	31.7	3.95	407	27.6	86.4
19-22*	116.0	41.0	4.06	1778	50.0	204.8
30-34	142.9	63.0	5.01	2177	84.9	414.2
40-44	136.9	79.0	4.97	2142	119.1	580.8
70-74	105.3	33.6	4.93	1455	34.4	128.4
Station BC-4						
0- 2.5	112.9	51.3	4.83	4133	82.1	388.3
2.5- 5*	113.4	53.1	4.71	3685	86.5	392.5
5- 7.5	110.5	60.2	4.78	3407	93.2	415.1
7.5-10	108.0	64.8	5.00	2859	91.3	372.7
14-18	99.9	45.3	4.93	1815	56.2	209.4
24-28	99.3	39.1	4.87	1915	45.8	143.2
32-36*	103.6	34.8	4.86	1656	36.1	127.5
39-43	95.5	33.5	4.56	1422	44.2	118.6
54-58	94.0	31.7	4.32	1093	34.9	114.9
62-66	93.9	27.0	4.43	1335	32.5	111.9
72-76*	95.2	26.8	4.55	1685	32.3	121.2
Station BC-5						
0- 2.5*	115.7	53.9	4.81	5233	70.3	307.9
2.5- 5	112.7	50.9	4.68	3329	63.2	278.0
5- 7.5	112.4	52.9	4.64	3506	69.9	317.1
7.5-10	110.7	47.9	4.60	2946	70.4	321.4
13-17	112.5	35.1	4.78	1953	50.4	250.9
38-42*	97.4	55.3	4.60	1692	55.6	275.1
66-70	109.7	27.2	4.95	1292	35.9	124.2
81-85	107.6	20.7	4.57	1190	37.5	116.5

Table 1-12 (con't): Trace metal concentrations - subsamples taken from gravity cores collected on April 9-10, 1991 (Cruise 25)

Depth (cm)	Cr (µg/g)	Cu (µg/g)	Fe (wt. %)	Mn (µg/g)	Ni (µg/g)	Zn (µg/g)
Station BC-6						
0- 2.5	141.2	58.9	4.76	2036	66.3	317.0
2.5- 5	138.7	63.8	4.77	1194	72.2	351.5
5- 7.5*	144.7	63.3	4.79	1242	81.7	416.6
7.5-10	154.3	69.5	4.69	1330	110.6	504.5
15-19	92.3	38.4	4.29	1002	35.9	141.8
24-28	94.2	21.6	4.92	1257	22.9	108.9
60-64	97.3	22.9	4.91	1650	25.1	113.8
Station BC-7						
0- 2.5*	125.0	52.4	3.86	1615	42.2	291.9
2.5- 5	139.2	65.9	3.70	1080	41.5	281.6
5- 7.5	130.7	62.8	3.67	801	37.4	269.7
7.5-10	137.8	63.2	3.81	783	37.6	285.3
26-30	182.6	80.0	4.31	964	59.5	460.1
38-42*	208.3	104.1	4.08	1258	78.1	574.8

* replicate lab samples averaged

Table 1-13: Enrichment factors - subsamples taken from gravity cores collected on April 9-10, 1991 (Cruise 25)

Depth (cm)	Cr	Cu	Mn	Ni	Zn
Station 5					
0- 2.5	1.59	1.38	3.22	1.50	5.21
2.5- 5	1.60	1.48	2.56	1.83	6.19
5- 7.5	1.51	1.61	2.42	1.82	6.06
7.5-10	1.41	1.60	2.36	1.66	5.31
20-24*	1.09	0.92	2.07	0.63	1.70
34-38	1.00	0.53	1.36	0.54	1.18
46-50*	1.13	0.46	1.42	0.64	1.17
Station 12					
0- 4*	1.29	1.51	3.28	1.12	2.95
8-12	1.82	1.61	4.08	1.24	3.08
16-20*	1.64	1.12	1.36	0.09	1.28
Station 25					
0- 2.5	1.30	1.15	2.69	1.04	3.79
2.5- 5	1.22	1.40	4.58	1.85	5.68
5- 7.5	1.23	1.57	3.75	1.98	6.35
7.5-10	1.27	1.61	2.88	1.88	5.42
20-24*	1.05	1.38	2.54	0.87	2.71
28-32	1.07	1.29	3.04	0.84	2.47
40-44	1.05	0.84	2.47	0.77	1.72
51-55	1.11	0.77	1.74	0.69	1.41
70-74	1.20	0.73	1.62	0.37	1.36
Station BC-1					
0- 2.5*	1.98	1.19	1.84	0.85	2.41
2.5- 5	2.10	1.24	1.87	0.82	2.14
5- 7.5	2.09	1.18	1.67	0.37	1.89
7.5-10	1.57	1.03	3.29	0.92	2.55
16-20	1.28	1.35	4.47	1.77	6.32
28-32*	1.02	1.13	2.81	0.88	2.06
36-40	1.12	0.72	1.89	0.59	1.19
68-72	1.12	0.50	1.43	0.46	1.11
Station BC-2					
0- 2.5	1.31	1.10	2.92	1.03	3.19
2.5- 5	1.31	1.23	2.39	1.03	3.34
5- 7.5*	1.24	1.25	3.21	1.07	3.36
7.5-10	1.17	1.29	2.85	0.96	2.59
28-32	1.36	1.18	2.89	1.24	3.90

Table 1-13 (con't): Enrichment factors - subsamples taken from gravity cores collected on April 9-10, 1991 (Cruise 25)

Depth (cm)	Cr	Cu	Mn	Ni	Zn
Station BC-2, con't					
52-56	1.16	0.75	2.02	0.63	1.66
66-70	1.23	0.53	1.50	0.47	1.33
Station BC-3					
0- 2.5*	1.56	1.04	1.47	0.86	2.71
2.5- 5	1.64	1.17	1.11	0.67	1.99
5- 7.5	1.50	0.98	0.90	0.66	1.93
7.5-10	1.42	0.94	1.03	0.58	1.68
13-16	1.39	0.85	0.57	0.48	1.09
19-22*	1.50	1.06	2.43	0.85	2.50
30-34	1.49	1.32	2.41	1.18	4.10
40-44	1.44	1.67	2.39	1.66	5.81
70-74	1.12	0.72	1.64	0.48	1.29
Station BC-4					
0- 2.5	1.23	1.12	4.75	1.18	4.00
2.5- 5*	1.26	1.19	4.34	1.27	4.14
5- 7.5	1.21	1.33	3.96	1.35	4.32
7.5-10	1.13	1.37	3.18	1.27	3.71
14-18	1.06	0.97	2.04	0.79	2.11
24-28	1.07	0.85	2.18	0.65	1.46
32-36*	1.12	0.75	1.89	0.52	1.30
39-43	1.10	0.77	1.73	0.67	1.29
54-58	1.14	0.77	1.40	0.56	1.32
62-66	1.11	0.64	1.67	0.51	1.25
72-76*	1.10	0.62	2.05	0.49	1.32
Station BC-5					
0- 2.5*	1.26	1.18	6.04	1.01	3.18
2.5- 5	1.26	1.15	3.95	0.94	2.95
5- 7.5	1.27	1.20	4.19	1.04	3.39
7.5-10	1.26	1.10	3.56	1.06	3.47
13-17	1.23	0.77	2.27	0.73	2.61
38-42*	1.11	1.26	2.04	0.84	2.97
66-70	1.16	0.58	1.45	0.50	1.25
81-85	1.24	0.48	1.45	0.57	1.27

Table 1-13 (con't): Enrichment factors - subsamples taken from gravity cores collected on April 9-10, 1991 (Cruise 25)

Depth (cm)	Cr	Cu	Mn	Ni	Zn
Station BC-6					
0- 2.5	1.56	1.30	2.38	0.97	3.31
2.5- 5	1.52	1.41	1.39	1.05	3.66
5- 7.5*	1.58	1.39	1.44	1.18	4.32
7.5-10	1.73	1.56	1.58	1.64	5.35
15-19	1.13	0.94	1.30	0.58	1.64
24-28	1.00	0.46	1.42	0.32	1.10
60-64	1.04	0.49	1.87	0.35	1.15
Station BC-7					
0- 2.5*	1.70	1.43	2.32	0.76	3.75
2.5- 5	1.97	1.87	1.62	0.78	3.78
5- 7.5	1.87	1.80	1.21	0.71	3.65
7.5-10	1.90	1.75	1.14	0.68	3.72
26-30	2.22	1.95	1.24	0.96	5.30
38-42*	2.68	2.69	1.71	1.33	7.00

* replicate lab samples averaged

Table 2-1: Distance and elevation data for Hart-Miller Island beach profiles, May 2, 7, & 11, 1990

Date surveyed	Profile	Stadia station	Distance* (ft)	Elevation** (ft)
5/2/90	21+75	1	222	5.12
		2	240	5.11
		3	292	1.80
		4	298	2.69
		5	310	1.25
		6	370	-1.12
	24+00	1	214	4.41
		2	217	4.29
		3	242	3.37
		4	252	2.34
		5	258	2.75
		6	272	1.05
		7	330	-0.94
5/11/90	28+00	1	167	6.04
		2	170	5.36
		3	194	2.66
		4	200	2.61
		5	208	1.45
		6	226	-0.30
		7	242	-0.83
	30+00	1	146	6.14
		2	150	5.37
		3	168	2.36
		4	174	2.42
		5	182	0.93
		6	200	-0.73
		7	218	-1.32
5/2/90	32+00	1	146	7.97
		2	152	6.45
		3	154	4.89
		4	166	2.40
		5	168	2.69
		6	170	2.42
		7	170	2.12
		8	178	1.44
		9	196	-0.36
		10	228	-0.80

Table 2-1 (con't): Distance and elevation data for Hart-Miller Island beach profiles, May 2, 7, & 11, 1990

Date surveyed	Profile	Stadia station	Distance* (ft)	Elevation** (ft)
5/11/90	36+00	1	172	7.12
		2	174	6.49
		3	182	5.40
		4	185	3.81
		5	200	1.32
		6	220	-0.22
		7	264	-0.77
	40+00	1	179	6.63
		2	182	6.37
		3	185	6.10
		4	189	3.48
		5	203	1.48
		6	223	-0.32
		7	255	-0.69
	44+00	1	148	6.89
		2	152	6.43
		3	153	6.37
		4	162	2.65
		5	176	0.88
		6	194	-0.26
		7	226	-0.84
5/7/90	48+00	1	124	7.63
		2	126	6.72
		3	130	3.23
		4	138	2.22
		5	140	2.52
		6	141	2.60
		7	141	2.28
		8	158	0.82
		9	164	-0.30
		10	236	-0.89
5/11/90	49+00	1	144	6.94
		2	148	6.46
		3	153	5.83
		4	159	2.55

Table 2-1 (con't): Distance and elevation data for Hart-Miller Island beach profiles, May 2, 7, & 11, 1990

Date surveyed	Profile	Stadia station	Distance* (ft)	Elevation** (ft)
5/11/90	49+00	5	175	0.94
		6	193	-0.38
		7	219	-0.87

* from center line (CL) of dike roadway

** mean low water (MLW) datum

Table 2-2: Distance and elevation data for Hart-Miller Island beach profiles, February 6, 7, & 21, 1991

Date surveyed	Profile	Stadia station	Distance* (ft)	Elevation** (ft)
2/6/91	21+75	1	260	4.09
		2	286	2.53
		3	322	1.59
		4	350	-0.77
	24+00	1	212	4.41
		2	214	4.39
		3	270	1.53
		4	288	-0.63
	28+00	1	167	6.05
		2	184	4.18
		3	192	3.00
		4	210	1.40
		5	230	-0.68
2/21/91	30+00	1	146	6.54
		2	160	4.62
		3	160	3.06
		4	189	1.03
		5	200	-0.67
2/6/91	32+00	1	144	7.92
		2	150	6.98
		3	152	3.32
		4	168	1.65
		5	186	-0.50
	36+00	1	172	7.18
		2	173	6.52
		3	184	5.50
		4	186	3.16
		5	192	1.69
		6	220	-0.25
2/7/91	40+00	1	180	6.61
		2	181	6.45
		3	184	2.85
		4	204	1.13
		5	228	-0.51

Table 2-2 (con't): Distance and elevation data for Hart-Miller Island beach profiles, February 6, 7, & 21, 1991

Date surveyed	Profile	Stadia station	Distance* (ft)	Elevation** (ft)
2/7/91	44+00	1	144	7.51
		2	152	2.69
		3	168	1.12
		4	192	-0.47
	48+00	1	124	7.54
		2	130	3.15
		3	164	0.88
		4	180	-0.58
	49+00	1	142	6.62
		2	148	3.01
		3	174	1.29
		4	200	-0.61

* from center line (CL) of dike roadway

** mean low water (MLW) datum

Table 2-3: Distance and elevation data for Hart-Miller Island beach profiles, May 2 & 8, 1991

Date surveyed	Profile	Stadia station	Distance* (ft)	Elevation** (ft)
5/2/91	21+75	1	223	5.59
		2	309	2.40
		3	327	0.09
	24+00	1	214	4.39
		2	252	1.80
		3	280	-0.09
	28+00	1	170	5.39
		2	218	2.11
		3	236	0.14
5/8/91	30+00	1	148	6.65
		2	188	3.58
		3	188	2.88
		4	208	0.72
		5	252	-0.79
	32+00	1	143	9.06
		2	144	8.98
		3	148	7.54
		4	188	3.37
		5	190	2.51
		6	204	0.94
		7	266	-0.82
	36+00	1	172	7.21
		2	174	6.52
		3	208	3.51
		4	208	2.90
		5	224	0.97
		6	280	-0.81
5/8/91	40+00	1	176	7.11
		2	212	3.21
		3	214	2.76
		4	228	1.39
		5	274	-0.64

Table 2-3 (con't): Distance and elevation data for Hart-Miller Island beach profiles, May 2 & 8, 1991

Date surveyed	Profile	Stadia station	Distance* (ft)	Elevation** (ft)
5/8/91	44+00	1	142	7.76
		2	182	3.87
		3	182	2.49
		4	192	1.41
		5	238	-0.77
	48+00	1	116	9.19
		2	166	4.76
		3	168	2.67
		4	178	1.43
		5	222	-0.70
	49+00	1	128	8.63
		2	140	7.23
		3	179	4.29
		4	181	2.77
		5	193	1.31
		6	233	-0.69

* from center line (CL) of dike roadway

** mean low water (MLW) datum

APPENDIX A

Visual and radiographic observations of gravity cores collected on April 9-10, 1991 (Cruise 25).

Legend

	laminated
	bioturbated
	shells
	wood fragments
	plant matter
	burrow
	gas bubbles
	transitional in color or texture

	sand
	silt
	clay

Ref. No. (UMCEES)CBL 92-061

Tenth Annual Data Report

Benthic Monitoring Studies - Project III
December 1990-August 1991

The Continuing State Assessment of the Environmental Impacts of Operation of the Hart and Miller Islands Containment Facility

Submitted to

Maryland Department of Natural Resources
Tidewater Administration
Monitoring and Data Management Section

Prepared by
Dr. Linda E. Duguay
Center for Environmental & Estuarine Studies
Chesapeake Biological Laboratory
Solomons, MD 20688-0038

July 1992

Tenth Year - Data from Benthic Monitoring Studies

December 1990-August 1991

This report contains the data collected under the tenth year Benthic Monitoring Project (Project III) of the Hart and Miller Island Environmental Assessment Program. A series of three cruises were conducted aboard the University of Maryland research vessel RV Aquarius on December 6, 1990, April 8, 1991, and August 12, 1991.

On all three cruises we were able to reach all of the twenty-two stations, illustrated in Figure 1 (Chesapeake Biological Lab - Designations). Five stations with the HM prefix (HM7,9,16,22,26) are benthic infaunal reference sites, and have been sampled since the inception of the project. The eight stations with the S prefix positioned around the perimeter of the island represent the nearfield experimental infaunal stations. Four additional benthic infaunal stations (G5,G25,G84 and HM12) were added successively over the course of the ninth sampling year in response to findings of the sedimentary group from Maryland Geological Survey that an enrichment in Zinc has occurred in the sediments at these stations, which may potentially be a result of effluent discharge. The four stations with the R prefix are epifaunal sampling sites, and consist of various piers/pilings at three locations (R2,3,4) around the island and at a reference piling (station R5) located to the southwest of the containment facility.

The benthic infaunal samples (HM, S, and G - Fig. 1) were obtained with a 0.05 m2 Ponar grab. Three replicates samples were

obtained at each station. These samples were individually washed on a 0.5 mm mesh-opening screen. Samples were preserved in a solution of 10% seawater/formalin with rose bengal stain. On return to the laboratory, the samples were rinsed on a 0.5 mm sieve to remove formalin and then stored in 70~ ethyl alcohol until the organisms could be picked, sorted and identified. The epibenthic samples were obtained by scraping a qualitative sample with a specially designed aluminum piling sampler from concrete or wood pilings located at dolphins or fishing piers around the perimeter of the island within about 50 feet of the stone riprap wall of the containment facility. The metal pole on a navigational beacon at the Pleasure Island Channel served as a Reference site (R5). Two samples were were collected at each piling, one sample was taken at about 1-1.3 m below the surface and a second at 2.5-3 m below the water surface.

Individual specimens in the samples were identified to the lowest taxonomic unit possible. The attached sheets present the actual number of individuals recorded for each of the three replicate samples at the quantitative reference (HM) and nearfield (S) stations. Colonial forms and qualitative epibenthic samples (R) were classified to three densities, very abundant (1), abundant or common (2), and present (3). These qualitative designations are recorded on the data sheets for the four epibenthic stations.

Additional ecological data on the sheets includes information on time of sampling, depth recorded (from the ship's fathometer), tidal state (E= ebb, F= flood, H= high slack, L= low slack), and weather conditions (see Table 1 for the code). Surface temperature and

salinity from water collected through the ship's (through-hull seawater) pumping system were determined with a mercury thermometer (+ or - 1 °C) and a hand-held Goldberg AO refractomer (+ or - 1 o/oo) and are presented in Table 2 for the various stations on the different sampling dates. Table 2 also lists the state station designations for each of the sampling stations.

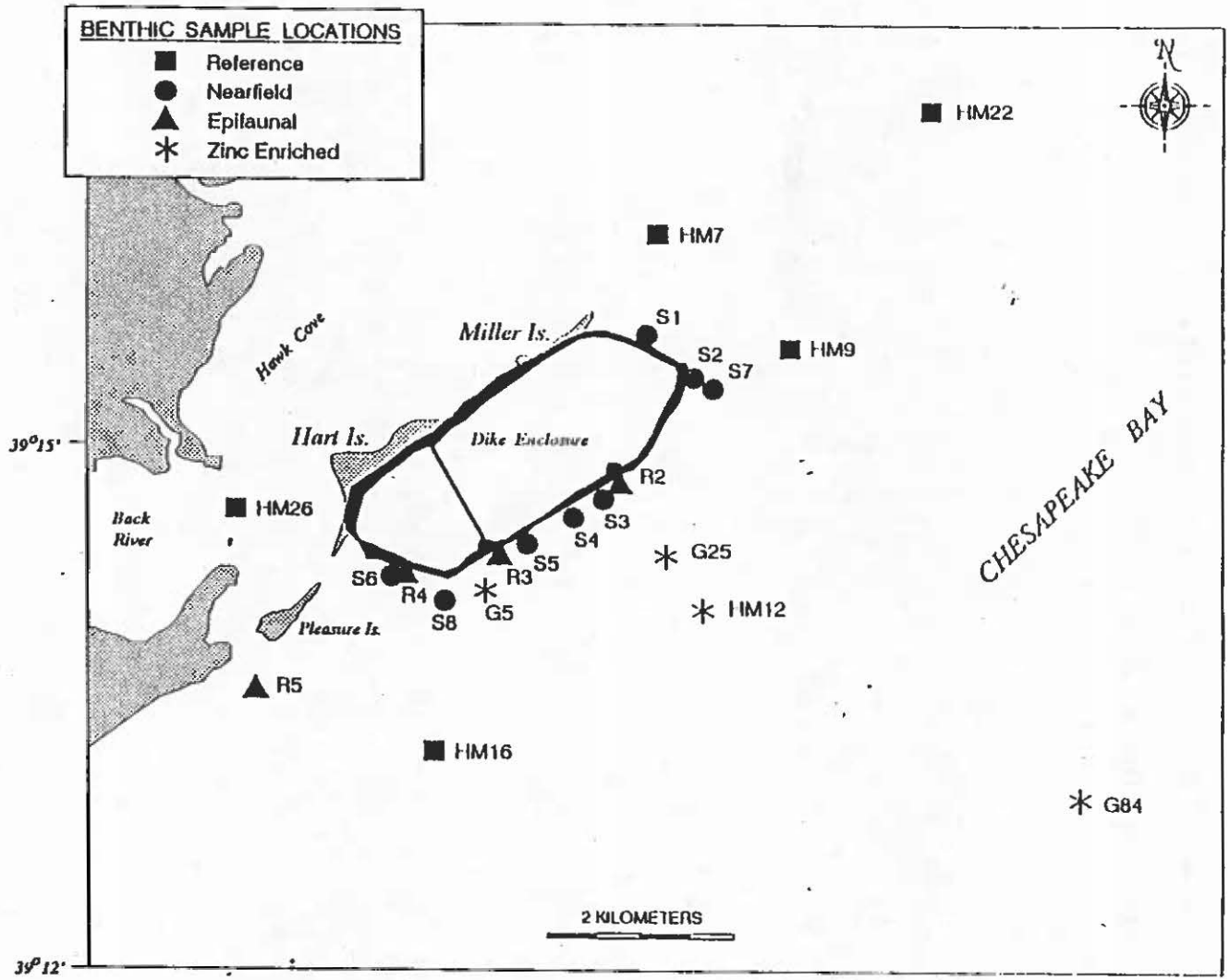

Figure 1. Benthic infaunal and epifaunal sampling station locations at Hart Miller Islands containment facility. University of Maryland, Chesapeake Biological Laboratory designations.

TABLE 1: WEATHER CODES FOR BENTHIC DATA SHEETS - this is a one (1) digit numeric value which describes the weather conditions at the time the sample was collected.

0- clear (no clouds)

1- partly cloudy

2- continuous layers of clouds

3 blowing snow, sandstorm or dust storm

4- fog, haze, or thick dust

S- drizzle

6- rain

7- snow, or rain and snow mixed

8- showers

9- thunderstorms

-- blank, not recorded

TABLE 2: Salinity (in O/OO) and temperature (°C) data for the benthic sampling stations on the different collection dates during the tenth year of sampling.

CBL STA. #	STATE STA. #	DEC 90 SAL. 0/00	DEC 90 TEMP. oC	APR 91 SAL. O /00	APR 91 TEMP. oC	AUG 91 SAL. 0/00	AUG 91 TEMP. oC
R1	XIF4811	NS*	NS	NS	NS	NS	NS
R2	XIF4813	NR**	NR	2	15.5	NR	NR
R3	XlF4514	NR	NR	NR	NR	NR	NR
R4	XIF4518	NR	NR	NR	NR	NR	NR
R5	XIF3638	NR	NR	2	16	NR	NR
S1	XIF5710	0	7	2	15	NR	NR
S2	XIF5406	NR	NR	2	14	9	28
S3	XIF4811	NR	NR	2	16	NR	NR
S4	XIF4715	0	7	2	10	NR	NR
S5	XIF4420	NR	NR	2	10	10	27.5
S6	XIF4327	NR	NR	2	10	10	27
S7	XIG5405	NR	NR	2	15.5	NR	NR
S8	XIF4124	NR	NR	2	10	NR	NR
HM7	XIF6388	NR	NR	0	15	8	28
HM9	XIF5297	0	7	2	15	NR	NR
HM12	XIF5805	0	7	4	10	10	28
HM16	XIF3325	2	8	2	10	9	27
HM22	XIG7689	NR	NR	2	14.5	NR	NR
HM26	XIF5145	0	6.5	2	16.5	NR	NR
G5	XIF4221	2	7.5	NR	NR	NR	NR
G25	XIF4405	0	8	NR	NR	NR	NR
G84		0	7	NR	NR	10	28

***NS= NOT SAMPLED **NR=NOT RECORDED**

PROJECT IV

ANALYTICAL SERVICES

CBL- Duguay cbl-1 PONAR GRAB

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD		COUNTY	TIDE	WEATHER	REPIT.	
XIF571 0	901206	1656	06	021399977	70	01	11			BA		1	1	

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
3915 3.9	0762057.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1	GRAB #2	GRAB #3		SEQUENCE	NUMBER
1	70	03	03	02	8 02	90	06	40	03			D. leucolen	2
2	70	04	01	00	2 02	90	06	40	03			M. leidyi	2
3	70	04	01	00	3 02	90	06	40	03			H. filiform	2
4	70	04	01	00	8 02	90	06	40	03			M. species	2
5	70	04	01	00	4 02	90	06	40	03			N. succinea	2
6	70	04	09	00	1 02	90	06	40	03			S. fragilis	2
7	70	04	01	03	8 02	90	06	40	03			P. gouldi	2
8	70	04	01	01	7 02	90	06	40	03			E. heteropo	2
9	70	04	01	05	7 02	90	06	40	03		1	P. ligni	2
10	70	04	01	00	5 02	90	06	40	03			S. viridis	2
11	70	04	01	01	8 02	90	06	40	03	1		S. benedict	2
12	70	04	01	03	9 02	90	06	40	03			H. grayi	2
13	70	04	02	02	9 02	90	06	40	03			L. hoffmeis	2
14	70	04	02	02	3 02	90	06	40	03	1	1	P. tubifici	2
15	70	04	01	00	7 02	90	06	40	03			C. capitata	2
16	70	04	05	00	6 02	90	06	40	03			I. recurvus	2
17	70	04	05	00	7 02	90	06	40	03			C. leucopha	2
18	70				02	90	06	40	03			L. species	2
19	70	04	05	00	9 02	90	06	40	03			M. balthica	2
20	70	04	05	01	0 02	90	06	40	03			M. mitchell	2
21	70	04	05	00	8 02	90	06	40	03	5	6 3	R. cuneata	2
22	70	04	05	03	2 02	90	06	40	03			M. arenaria	2
23	70	04	04	01	9 02	90	06	40	03			Hydrobia	2
24	70	04	04	02	1 02	90	06	40	03			S. niger	2
25	70	04	04	02	0 02	90	06	40	03			D. obscura	2

CBL- Duguay cbl-2 Ponar grab

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
XIF5710 S1	901206	1656	06	02139977	70	01	11		BA		1	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
391539.	0762057.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
27	70	05	30	71	02	90	64	00	3		B. improvis	2
28	70	05	30	71	02	90	64	00	3		B. subalbid	2
29	70	05	31	44	02	90	64	00	3		L. american	2
30	70	05	31	61	02	90	64	00	3	1	C. polita	2
31	70	05	31	63	02	90	64	00	3		C. lunifron	2
33	70	05	31	64	02	90	64	00	3		E. triloba	2
34	70	05	31	76	02	90	64	00	3		N. biarticu	2
35	70	05	31	73	02	90	64	00	3		G. palustri	2
36	70	05	31	71	02	90	64	00	3	2 1 1	L. plumusos	2
37	70	05	31	73	02	90	64	00	3	1 1 1 3 1 3	C. lacustre	2
38	70	05	31	73	02	90	64	00	3		G. daiberi	2
39	70	05	31	72	02	90	64	00	3		G. tigrinus	2
40	70	05	31	72	02	90	64	00	3	1	M. nitida	2
41	70	05	31	62	02	90	64	00	3		C. almyra	2
42	70	05	31	72	02	90	64	00	3		M. edwardsi	2
43	70	05	42	40	02	90	64	00	3		C. species	2
44	70	05	31	90	02	90	64	00	3		R. harrisi	2
45	70	05	31	70	02	90	64	00	3		G. mucronat	2
46	70	03	30	10	02	90	64	00	3		C. caspia	2
47	70	03	30	10	02	90	64	00	3		G. francisc	2
48	70	03	50	50	02	90	64	00	3		S. elliptic	2
49	70	06	60	20	02	90	64	00	3	1	M. tenuis	2
50	70	06	60	20	02	90	64	00	3		V. pavida	2
	70				02	90	64	00	3			2
	700				02	90	64	00	3			2

CSL- Duguay cbl-1 PONAR GRAB

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
XIF540 6 52	901206	1643	10	021399977	70	01	11		BA		1	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSSS	
391525	0762035	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE	NUMBER
1	70	03	03	028	029	006	403				D. leucolen		2
2	70	04	01	002	029	006	403				M. leidyi		2
3	70	04	01	003	029	006	403				E. filiform		2
4	70	04	01	008	029	006	403				M. species		2
5	70	04	01	004	029	006	403	1	6		N. succinea		2
6	70	04	09	001	029	006	403				S. fragilis		2
7	70	04	01	038	029	006	403				P. gouldi		2
8	70	04	01	017	029	006	403				E. heteropo		2
9	70	04	01	057	029	006	403	24	71		P. ligni		2
10	70	04	01	005	029	006	403	2	5		S. viridis		2
11	70	04	01	018	029	006	403				S. benedict		2
12	70	04	01	039	029	006	403				H. grayi		2
13	70	04	02	029	029	006	403				L. hoffmeis		2
14	70	04	02	023	029	006	403				P. tubifici		2
15	70	04	01	007	029	006	403				C. capitata		2
16	70	04	05	006	029	006	403				I. recurvus		2
17	70	04	05	007	029	006	403				C. leucopha		2
18	70				029	006	403				L. species		2
19	70	04	05	009	029	006	403				M. balthica		2
20	70	04	05	010	029	006	403				M. mitchell		2
21	70	04	05	008	029	006	403	1			R. cuneata		2
22	70	04	05	032	029	006	403				M. arenaria		2
23	70	04	04	019	029	006	403				Hydrobia		2
24	70	04	04	021	029	006	403				S. niger		2
25	70	04	04	020	029	006	403				D. obscura		2

CSL- Duguay cbl-2 Ponar grab

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
XIF540 6 S2	901206	1643	10	021399977	70	01	11		BA		1	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSSS	
391525	0762035	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
27	70	05	30	71	02	90	64	003	5	14	1	B. improvis 2
28	70	05	30	71	02	90	64	003				B. subalbid 2
29	70	05	31	54	02	90	64	003				L. american 2
30	70	05	31	62	02	90	64	003	1			C. polita 2
31	70	05	31	63	02	90	64	003		2	4	C. lunifron 2
33	70	05	31	64	02	90	64	003				E. trilcba 2
34	70	05	31	76	02	90	64	003				N. biarticu 2
35	70	05	31	70	02	90	64	003				G. palustri 2
36	70	05	31	71	02	90	64	003				L. plumusos 2
37	70	05	31	71	02	90	64	003	140	329	13	C. lacustre 2
38	70	05	31	73	02	90	64	003				G. daiberi 2
39	70	05	31	72	02	90	64	003				G. tigrinus 2
40	70	05	31	72	02	90	64	003		4		M. nitida 2
41	70	05	31	62	02	90	64	003				C. almyra 2
42	70	05	31	75	02	90	64	003				M. edwardsi 2
43	70	05	42	40	02	90	64	003				C. species 2
44	70	05	31	94	02	90	64	003				R. harrisi 2
45	70	05	31	70	02	90	64	003				G. mucronat 2
46	70	03	30	10	02	90	64	003				C. caspia 2
47	70	03	30	10	02	90	64	003				G. francisc 2
48	70	03	50	50	02	90	64	003				S. elliptic 2
49	70	06	60	20	02	90	64	003	11	29	48	M. tenuis 2
50	70	06	60	20	02	90	64	003		2		V. pavida 2
	70				02	90	64	003				2
	70	0			02	90	64	003				2

CEL- Duguay cbl-1 PONAR GRAB

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
53	901206	1601	13	021399977	70	01	11		BA		1	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
39145.0	076210.7	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE	NUMBER
1	70	03	03	02	8	029	006	403			D. leucolen		2
2	70	04	01	00	2	029	006	403	1	2	M. leidyi		2
3	70	04	01	00	3	029	006	403	1	3	E. filiform		2
4	70	04	01	00	8	029	006	403			M. species		2
5	70	04	01	00	4	029	006	403			N. succinea		2
6	70	04	09	00	1	029	006	403			S. fragilis		2
7	70	04	01	03	8	029	006	403			P. gouldi		2
8	70	04	01	01	7	029	006	403			E. heteropo		2
9	70	04	01	05	7	029	006	403		1	P. ligni		2
10	70	04	01	00	5	029	006	403	2	3 1	S. viridis		2
11	70	04	01	01	8	029	006	403	1 1	4 4 1 6	S. benedict		2
12	70	04	01	03	9	029	006	403			E. grayi		2
13	70	04	02	02	9	029	006	403			L. hoffmeis		2
14	70	04	02	02	3	029	006	403	2 0	7 1 2 6	P. tubifici		2
15	70	04	01	00	7	029	006	403			C. capitata		2
16	70	04	05	00	6	029	006	403			I. recurvus		2
17	70	04	05	00	7	029	006	403			C. leucopha		2
18	70					029	006	403			L. species		2
19	70	04	05	00	9	029	006	403			M. balthica		2
20	70	04	05	01	0	029	006	403		1	M. mitchell		2
21	70	04	05	00	8	029	006	403	3	1 1 5	R. cuneata		2
22	70	04	05	03	2	029	006	403			M. arenaria		2
23	70	04	04	01	9	029	006	403			Hydrobia		2
24	70	04	04	02	1	029	006	403			S. niger		2
25	70	04	04	02	0	029	006	403			D. obscura		2

CSL- Duguay cbl-2 Ponar grab

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD		COUNTY	TIDE	WEATHER	REPETIT.	
S3														
XIF481	901206	1601	13	021399977	70	01	11			BA		1	1	

LATITUDE	LONGITUDE		SEQUENCE NUMBER
DDMMSSS	DDDMMSSS		
391450	076210 7		1

5/14/03 OK

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1	GRAB #2	GRAB #3		SEQUENCE NUMBER
								VALUE				
27	70	05	30	70	11	02	90	064	003		B. improvis	2
28	70	05	30	70	12	02	90	064	003		B. subalbid	2
29	70	05	31	40	54	02	90	064	003		L. american	2
30	70	05	31	60	12	02	90	064	003	4 / 1	C. polita	2
31	70	05	31	60	30	02	90	064	003		C. lunifron	2
33	70	05	31	60	24	02	90	064	003		E. trilcba	2
34	70	05	31	70	26	02	90	064	003		N. biarticu	2
35	70	05	31	70	03	02	90	064	003		G. palustri	2
36	70	05	31	70	16	02	90	064	003	1 1 / 9 / 1 / 7	L. plumusos	2
37	70	05	31	70	13	02	90	064	003	8 / 5 / 5	C. lacustra	2
38	70	05	31	70	33	02	90	064	003		G. daiberi	2
39	70	05	31	70	20	02	90	064	003		G. tigrinus	2
40	70	05	31	70	22	02	90	064	003	1	M. nitida	2
41	70	05	31	60	21	02	90	064	003		C. almyra	2
42	70	05	31	70	25	02	90	064	003	1 / 3 / 4	M. edwardsi	2
43	70	05	42	40	01	02	90	064	003		C. species	2
44	70	05	31	90	14	02	90	064	003		R. harrisi	2
45	70	05	31	70	45	02	90	064	003		G. mucronat	2
46	70	03	30	10	01	02	90	064	003		C. caspia	2
47	70	03	30	10	02	02	90	064	003		G. francisc	2
48	70	03	50	50	31	02	90	064	003		S. elliptic	2
49	70	06	60	20	01	02	90	064	003	1	M. tenuis	2
50	70	06	60	20	02	02	90	064	003		V. pavida	2
	70					02	90	064	003			2
	70					02	90	064	003			2

CEL- Duguay cbl-1 PONAR GRAB

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
54	901206	1543	13	021399977	70	01	11		BA		1	1

LATITUDE (DDMMSS)	LONGITUDE (DDDMMSS)	SEQUENCE NUMBER
391440.	0762128.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1	GRAB #2	GRAB #3		SEQUENCE NUMBER
								VALUE				
1	70	03	30	28	02	90	06	40	03		D. leucolen	2
2	70	04	01	00	02	90	06	40	03	1 1	M. leidyi	2
3	70	04	81	03	02	90	06	40	03	1 1	H. filiform	2
4	70	04	81	08	02	90	06	40	03		M. species	2
5	70	04	81	04	02	90	06	40	03	2 1 8	N. succinea	2
6	70	04	89	01	02	90	06	40	03		S. fragilis	2
7	70	04	81	38	02	90	06	40	03		P. gouldi	2
8	70	04	81	17	02	90	06	40	03		E. heteropo	2
9	70	04	81	57	02	90	06	40	03	1 3	P. ligni	2
10	70	04	81	05	02	90	06	40	03	3 2 5	S. viridis	2
11	70	04	81	18	02	90	06	40	03	1 2 9 1 4	S. benedict	2
12	70	04	81	39	02	90	06	40	03		H. grayi	2
13	70	04	82	02	02	90	06	40	03		L. hoffmeis	2
14	70	04	82	03	02	90	06	40	03	2 1 49 9	P. tubifici	2
15	70	04	81	07	02	90	06	40	03		C. capitata	2
16	70	04	95	06	02	90	06	40	03		I. recurvus	2
17	70	04	95	07	02	90	06	40	03		C. leucopha	2
18	70				02	90	06	40	03		L. species	2
19	70	04	95	09	02	90	06	40	03		M. balthica	2
20	70	04	95	10	02	90	06	40	03	2 2	M. mitchell	2
21	70	04	95	08	02	90	06	40	03	6 3 2	R. cuneata	2
22	70	04	95	32	02	90	06	40	03		M. arenaria	2
23	70	04	94	19	02	90	06	40	03		Hydrobia	2
24	70	04	94	21	02	90	06	40	03		S. niger	2
25	70	04	94	20	02	90	06	40	03		D. obscura	2

CHL- Duguay chl-2 Ponar grab

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD		COUNTY	TIDE	WEATH.	REPLIT.
XIF4715 54	901206	1543	13	021399977	70	01	11			BA		1	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
39144 0.	076212 8.	1

5/14/03 OK

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
27	70	05	3 07	01	1 02	90	64	003			B. improvis	2
28	70	05	3 07	01	2 02	90	64	003			B. subalbid	2
29	70	05	3 14	05	4 02	90	64	003			L. american	2
30	70	05	3 16	01	2 02	90	64	003	6	4 1 1	C. polita	2
31	70	05	3 16	03	0 02	90	64	003			C. lunifron	2
33	70	05	3 16	02	4 02	90	64	003	2	1 1	E. triloba	2
34	70	05	3 17	02	6 02	90	64	003			N. biarticu	2
35	70	05	3 17	00	3 02	90	64	003			G. palustri	2
36	70	05	3 17	01	6 02	90	64	003	14	11 1 2	L. plumuscs	2
37	70	05	3 17	01	3 02	90	64	003	80	82 7 5	C. lacustre	2
38	70	05	3 17	03	3 02	90	64	003			G. daiberi	2
39	70	05	3 17	02	0 02	90	64	003	2	1	G. tigrinus	2
40	70	05	3 17	02	2 02	90	64	003	5	1 1	M. nitida	2
41	70	05	3 16	02	1 02	90	64	003			C. almyra	2
42	70	05	3 17	02	5 02	90	64	003			M. edwardsi	2
43	70	05	4 24	00	1 02	90	64	003			C. species	2
44	70	05	3 19	01	4 02	90	64	003			R. harrisi	2
45	70	05	3 17	04	5 02	90	64	003			G. mucronat	2
46	70	03	3 01	00	1 02	90	64	003		1	C. caspia	2
47	70	03	3 01	00	2 02	90	64	003			G. francisc	2
48	70	03	5 05	03	1 02	90	64	003			S. elliptic	2
49	70	06	6 02	00	1 02	90	64	003	1	1 1	M. tenuis	2
50	70	06	6 02	00	2 02	90	64	003			V. pavida	2
	70				02	90	64	003				2
	700				02	90	64	003				2

CEL- Duguay cbl-1 PONAR GRAB

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
S5	901206	1404	17	021399977	70	01	11		BA		1	1

LATITUDE (DDMMSS)	LONGITUDE (DDDMMSS)	SEQUENCE NUMBER
391423	076220	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1	GRAB #2	GRAB #3		SEQUENCE NUMBER
								VALUE				
1	70	03	03	02	80	29	00	64	00	03	D. leucolen	2
2	70	04	01	00	20	29	00	64	00	03	M. leidyi	2
3	70	04	01	00	30	29	00	64	00	03	H. filiform	2
4	70	04	01	00	80	29	00	64	00	03	M. species	2
5	70	04	01	00	40	29	00	64	00	03	N. succinea	2
6	70	04	09	00	10	29	00	64	00	03	S. fragilis	2
7	70	04	01	03	80	29	00	64	00	03	P. gouldi	2
8	70	04	01	01	70	29	00	64	00	03	E. heteropo	2
9	70	04	01	05	70	29	00	64	00	03	P. ligni	2
10	70	04	01	00	50	29	00	64	00	03	S. viridis	2
11	70	04	01	01	80	29	00	64	00	03	S. benedict	2
12	70	04	01	03	90	29	00	64	00	03	H. grayi	2
13	70	04	02	02	90	29	00	64	00	03	L. hoffmeis	2
14	70	04	02	02	30	29	00	64	00	03	P. tubifici	2
15	70	04	01	00	70	29	00	64	00	03	C. capitata	2
16	70	04	05	00	60	29	00	64	00	03	I. recurvus	2
17	70	04	05	00	70	29	00	64	00	03	C. leucopha	2
18	70					29	00	64	00	03	L. species	2
19	70	04	05	00	90	29	00	64	00	03	M. balthica	2
20	70	04	05	01	00	29	00	64	00	03	M. mitchell	2
21	70	04	05	00	80	29	00	64	00	03	R. cuneata	2
22	70	04	05	03	20	29	00	64	00	03	M. arenaria	2
23	70	04	04	01	90	29	00	64	00	03	Hydrobia	2
24	70	04	04	02	10	29	00	64	00	03	S. niger	2
25	70	04	04	02	00	29	00	64	00	03	D. obscura	2

CSL- Duguay cbl-2 Ponar grab

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATHER	REPLIC.
S5	901206	1404	17	021399	7700	01	11	BA		1	1
XIF442O											

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSSS	
391423	076220	1

5/14/03 OK

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
27	70	05	30	70	11	02	90	64	00	3	B. improvis	2
28	70	05	30	70	12	02	90	64	00	3	B. subalbid	2
29	70	05	31	40	54	02	90	64	00	3	L. american	2
30	70	05	31	60	12	02	90	64	00	3	C. polita	2
31	70	05	31	60	30	02	90	64	00	3	C. lunifron	2
33	70	05	31	60	24	02	90	64	00	3	E. trilcba	2
34	70	05	31	70	26	02	90	64	00	3	N. biarticu	2
35	70	05	31	70	03	02	90	64	00	3	G. palustri	2
36	70	05	31	70	16	02	90	64	00	3	L. plumusos	2
37	70	05	31	70	13	02	90	64	00	3	C. lacustre	2
38	70	05	31	70	33	02	90	64	00	3	G. daiberi	2
39	70	05	31	70	20	02	90	64	00	3	G. tigrinus	2
40	70	05	31	70	22	02	90	64	00	3	M. nitida	2
41	70	05	31	60	21	02	90	64	00	3	C. almyra	2
42	70	05	31	70	25	02	90	64	00	3	M. edwardsi	2
43	70	05	42	40	01	02	90	64	00	3	C. species	2
44	70	05	31	90	14	02	90	64	00	3	R. harrisi	2
45	70	05	31	70	45	02	90	64	00	3	G. mucronat	2
46	70	03	30	10	01	02	90	64	00	3	C. caspia	2
47	70	03	30	10	02	02	90	64	00	3	G. francisc	2
48	70	03	50	50	31	02	90	64	00	3	S. elliptic	2
49	70	06	60	20	01	02	90	64	00	3	M. tenuis	2
50	70	06	60	20	02	02	90	64	00	3	V. pavida	2
	70					02	90	64	00	3		2
	70	0				02	90	64	00	3		2

CBL- Duguay cbl-1 PONAR GRAB

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB	CODE	METHOD		COUNTY	TIDE	WEATH.	REPIT.
S6														
XIF4327	901206	1242	10	021399977	70	01	11				BA		1	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
39141 7.	076241 .	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
1	70	03	03	02	8 02	90	06	40	03		D. leucolen	2
2	70	04	01	00	2 02	90	06	40	03	2	M. leidyi	2
3	70	04	01	00	3 02	90	06	40	03	1 1 2	H. filiform	2
4	70	04	01	00	8 02	90	06	40	03		M. species	2
5	70	04	01	00	4 02	90	06	40	03	1	N. succinea	2
6	70	04	09	00	1 02	90	06	40	03		S. fragilis	2
7	70	04	01	03	8 02	90	06	40	03		P. gouldi	2
8	70	04	01	01	7 02	90	06	40	03		E. hetercpo	2
9	70	04	01	05	7 02	90	06	40	03		P. ligni	2
10	70	04	01	00	5 02	90	06	40	03	2 1 3	S. viridis	2
11	70	04	01	01	8 02	90	06	40	03	7 6 1 3	S. benedict	2
12	70	04	01	03	9 02	90	06	40	03		H. grayi	2
13	70	04	02	02	9 02	90	06	40	03		L. hoffmeis	2
14	70	04	02	02	3 02	90	06	40	03	1 9 1 8 2 1	P. tubifici	2
15	70	04	01	00	7 02	90	06	40	03		C. capitata	2
16	70	04	05	00	6 02	90	06	40	03		I. recurvus	2
17	70	04	05	00	7 02	90	06	40	03		C. leucopha	2
18	70				02	90	06	40	03		L. species	2
19	70	04	05	00	9 02	90	06	40	03	2	M. balthica	2
20	70	04	05	01	0 02	90	06	40	03	5 2 6	M. mitchell	2
21	70	04	05	00	8 02	90	06	40	03	1 4 0 1 1 2 1 0 0	R. cuneata	2
22	70	04	05	03	2 02	90	06	40	03		M. arenaria	2
23	70	04	04	01	9 02	90	06	40	03		Hydrobia	2
24	70	04	04	02	1 02	90	06	40	03		S. niger	2
25	70	04	04	02	0 02	90	06	40	03		D. obscura	2

CSL- Duguay cbl-2 Ponar grab

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD		COUNTY	TIDE	WEATHER	REPLICATE
XIF4327 56	901206	1242	10	021399977	70	01	11			BA		1	1

5/14/03 OK

LATITUDE (DDMMSS)	LONGITUDE (DDDMMSS)	SEQUENCE NUMBER
391417.	0762241.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
27	700	53	07	011	029	00	64	003			B. improvis	2
28	700	53	07	012	029	00	64	003			B. subalbid	2
29	700	53	14	054	029	00	64	003			L. american	2
30	700	53	16	012	029	00	64	003	13	9 6	C. polita	2
31	700	53	16	030	029	00	64	003			C. lunifron	2
33	700	53	16	024	029	00	64	003	2	1	E. trilcba	2
34	700	53	17	026	029	00	64	003			N. biarticu	2
35	700	53	17	003	029	00	64	003			G. palustri	2
36	700	53	17	016	029	00	64	003	31	42 6	L. plumuscs	2
37	700	53	17	013	029	00	64	003	12	6 1	C. lacustre	2
38	700	53	17	033	029	00	64	003			G. daiberi	2
39	700	53	17	020	029	00	64	003			G. tigrinus	2
40	700	53	17	022	029	00	64	003			M. nitida	2
41	700	53	16	021	029	00	64	003			C. almyra	2
42	700	53	17	025	029	00	64	003	2		M. edwardsi	2
43	700	54	24	001	029	00	64	003			C. species	2
44	700	53	19	014	029	00	64	003			R. harrisi	2
45	700	53	17	045	029	00	64	003			G. mucronat	2
46	700	33	01	001	029	00	64	003			C. caspia	2
47	700	33	01	002	029	00	64	003			G. francisc	2
48	700	35	05	031	029	00	64	003			S. elliptic	2
49	700	66	02	001	029	00	64	003	1		M. tenuis	2
50	700	66	02	002	029	00	64	003			V. pavida	2
	70				029	00	64	003				2
	700				029	00	64	003				2

CSL- Duguay cbl-1 PONAR GRAB

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD		COUNTY	TIDE	WEATH.	REPIT.
X I 6 5 4 0 5 (S7)	9 0 1 2 0 6	1 6 1 7	1 3	0 2 1 3 9 9 9 7	7 0	0 1	1			B A		1	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
D D M M S S S	D D D M M S S S	
3 9 1 5 2 3	0 7 6 2 0 2 8	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1	GRAB #2	GRAB #3		SEQUENCE NUMBER
								VALUE				
1	7	0 0	3 3	0 3	0 2 8 0	2 9 0 0	6 4 0 0 3				D. leucolen	2
2	7	0 0	4 0	0 1	0 0 2 0	2 9 0 0	6 4 0 0 3				M. leidyi	2
3	7	0 0	4 8	0 1	0 0 3 0	2 9 0 0	6 4 0 0 3			1	H. filiform	2
4	7	0 0	4 8	0 1	0 0 8 0	2 9 0 0	6 4 0 0 3				M. species	2
5	7	0 0	4 8	0 1	0 0 4 0	2 9 0 0	6 4 0 0 3				N. succinea	2
6	7	0 0	4 8	0 9	0 0 1 0	2 9 0 0	6 4 0 0 3				S. fragilis	2
7	7	0 0	4 8	0 1	0 3 8 0	2 9 0 0	6 4 0 0 3				P. gouldi	2
8	7	0 0	4 8	0 1	0 1 7 0	2 9 0 0	6 4 0 0 3				E. heteropo	2
9	7	0 0	4 8	0 1	0 5 7 0	2 9 0 0	6 4 0 0 3		1		P. ligni	2
10	7	0 0	4 8	0 1	0 0 5 0	2 9 0 0	6 4 0 0 3			1 1	S. viridis	2
11	7	0 0	4 8	0 1	0 1 8 0	2 9 0 0	6 4 0 0 3		1		S. benedict	2
12	7	0 0	4 8	0 1	0 3 9 0	2 9 0 0	6 4 0 0 3				H. grayi	2
13	7	0 0	4 8	0 2	0 2 9 0	2 9 0 0	6 4 0 0 3				L. hoffmeis	2
14	7	0 0	4 8	0 2	0 2 3 0	2 9 0 0	6 4 0 0 3			1	P. tubifici	2
15	7	0 0	4 8	0 1	0 0 7 0	2 9 0 0	6 4 0 0 3				C. capitata	2
16	7	0 0	4 9	0 5	0 0 6 0	2 9 0 0	6 4 0 0 3				I. recurvus	2
17	7	0 0	4 9	0 5	0 0 7 0	2 9 0 0	6 4 0 0 3				C. leucopha	2
18	7	0				0 2 9 0	0 6 4 0 0 3				L. species	2
19	7	0 0	4 9	0 5	0 0 9 0	2 9 0 0	6 4 0 0 3				M. balthica	2
20	7	0 0	4 9	0 5	0 1 0 0	2 9 0 0	6 4 0 0 3		1		M. mitchell	2
21	7	0 0	4 9	0 5	0 0 8 0	2 9 0 0	6 4 0 0 3		4	6 2	R. cuneata	2
22	7	0 0	4 9	0 5	0 3 2 0	2 9 0 0	6 4 0 0 3				M. arenaria	2
23	7	0 0	4 9	0 4	0 1 9 0	2 9 0 0	6 4 0 0 3				Hydrobia	2
24	7	0 0	4 9	0 4	0 2 1 0	2 9 0 0	6 4 0 0 3				S. niger	2
25	7	0 0	4 9	0 4	0 2 0 0	2 9 0 0	6 4 0 0 3				D. obscura	2

CSL- Duguay cbl-2 Ponar grab

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
XI65405 S7	901206	1617	13	02139977	70	01	11	BA		1	1	

LATITUDE	LONGITUDE	SEQUENCE NUMBER
39152 3.	076202 8.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1	GRAB #2	GRAB #3		SEQUENCE NUMBER
								VALUE				
27	70	05	30	70	11	02	90	06	40	03	B. improvis	2
28	70	05	30	70	12	02	90	06	40	03	B. subalbid	2
29	70	05	31	40	54	02	90	06	40	03	L. american	2
30	70	05	31	60	12	02	90	06	40	03	C. polita	2
31	70	05	31	60	30	02	90	06	40	03	C. lunifron	2
33	70	05	31	60	24	02	90	06	40	03	E. trilcba	2
34	70	05	31	70	26	02	90	06	40	03	N. biarticu	2
35	70	05	31	70	03	02	90	06	40	03	G. palustri	2
36	70	05	31	70	16	02	90	06	40	03	L. plumusos	2
37	70	05	31	70	13	02	90	06	40	03	C. lacustre	2
38	70	05	31	70	33	02	90	06	40	03	G. daiberi	2
39	70	05	31	70	20	02	90	06	40	03	G. tigrinus	2
40	70	05	31	70	22	02	90	06	40	03	M. nitida	2
41	70	05	31	60	21	02	90	06	40	03	C. almyra	2
42	70	05	31	70	25	02	90	06	40	03	M. edwardsi	2
43	70	05	42	40	01	02	90	06	40	03	C. species	2
44	70	05	31	90	14	02	90	06	40	03	R. harrisi	2
45	70	05	31	70	45	02	90	06	40	03	G. mucronat	2
46	70	03	30	10	01	02	90	06	40	03	C. caspia	2
47	70	03	30	10	02	02	90	06	40	03	G. francisc	2
48	70	03	50	50	31	02	90	06	40	03	S. elliptic	2
49	70	06	60	20	01	02	90	06	40	03	M. tenuis	2
50	70	06	60	20	02	02	90	06	40	03	V. pavida	2
	70					02	90	06	40	03		2
	700					02	90	06	40	03		2

| | | | | | | | |

CIL- Duguay cbl-1 PONAR GRAB

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD		COUNTY	TIDE	WEATH.	REPIT.
XIF414 S8	901206	1218	14	021399977	70	01	11			BA		1	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSSS	
391408	0762224	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
1	70	03	30	30	29	06	40	03			D. leucolen	2
2	70	04	01	00	29	06	40	03			M. leidyi	2
3	70	04	01	03	29	06	40	03			H. filiform	2
4	70	04	01	08	29	06	40	03			M. species	2
5	70	04	01	04	29	06	40	03			N. succinea	2
6	70	04	09	01	29	06	40	03			S. fragilis	2
7	70	04	01	38	29	06	40	03			P. gouldi	2
8	70	04	01	17	29	06	40	03			E. heteropo	2
9	70	04	01	57	29	06	40	03			P. ligni	2
10	70	04	01	05	29	06	40	03	12	4	S. viridis	2
11	70	04	01	18	29	06	40	03		1	S. benedict	2
12	70	04	01	39	29	06	40	03			H. grayi	2
13	70	04	02	02	29	06	40	03			L. hoffmeis	2
14	70	04	02	23	29	06	40	03	4 13	1	P. tubifici	2
15	70	04	01	07	29	06	40	03			C. capitata	2
16	70	04	05	06	29	06	40	03			I. recurvus	2
17	70	04	05	07	29	06	40	03			C. leucopha	2
18	70				29	06	40	03			L. species	2
19	70	04	05	09	29	06	40	03			M. balthica	2
20	70	04	05	01	29	06	40	03	2		M. mitchell	2
21	70	04	05	08	29	06	40	03			R. cuneata	2
22	70	04	05	32	29	06	40	03			M. arenaria	2
23	70	04	04	19	29	06	40	03			Hydrobia	2
24	70	04	04	21	29	06	40	03			S. niger	2
25	70	04	04	20	29	06	40	03			D. obscura	2

CSL- Duguay cbl-2 Ponar grab

5/14/03
OK

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD		COUNTY	TIDE	WEATH.	REPIT.	
XIF414 58	901206	1218	14	0213997	70	01	11			BA		1	1	

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSS)	SEQUENCE NUMBER
3914081	0762224	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
27	70	05	30	71	02	90	64	003			B. improvis	2
28	70	05	30	71	02	90	64	003			B. subalbid	2
29	70	05	31	45	02	90	64	003			L. american	2
30	70	05	31	62	02	90	64	003	6	4 4	C. polita	2
31	70	05	31	63	02	90	64	003			C. lunifron	2
33	70	05	31	64	02	90	64	003			E. trilcba	2
34	70	05	31	76	02	90	64	003			N. biarticu	2
35	70	05	31	70	02	90	64	003			G. palustri	2
36	70	05	31	76	02	90	64	003	110	227	122 L. plumuscs	2
37	70	05	31	73	02	90	64	003	1	7	8 C. lacustre	2
38	70	05	31	73	02	90	64	003			G. daiberi	2
39	70	05	31	70	02	90	64	003			G. tigrinus	2
40	70	05	31	72	02	90	64	003			M. nitida	2
41	70	05	31	61	02	90	64	003			C. almyra	2
42	70	05	31	75	02	90	64	003		1	M. edwardsi	2
43	70	05	42	40	01	90	64	003			C. species	2
44	70	05	31	94	02	90	64	003			R. harrisi	2
45	70	05	31	70	45	90	64	003			G. mucronat	2
46	70	03	30	10	01	90	64	003			C. caspia	2
47	70	03	30	10	02	90	64	003		1	G. francisc	2
48	70	03	50	50	31	90	64	003			S. elliptic	2
49	70	06	60	20	01	90	64	003			M. tenuis	2
50	70	06	60	20	02	90	64	003			V. pavida	2
	70				02	90	64	003				2
	700				02	90	64	003				2

CSL- Duguay cbl-1 PONAR GRAB

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPHT.
XIF638 #M7	901206	1737	10	021399977	70	01	11		BA		1	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSSS	
391615.	0762050.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
1	70	03	30	02	80	29	00	64	00	3	D. leucolen	2
2	70	04	01	00	20	29	00	64	00	3	M. leidyi	2
3	70	04	81	00	30	29	00	64	00	3	H. filiform	2
4	70	04	81	00	80	29	00	64	00	3	M. species	2
5	70	04	81	00	40	29	00	64	00	3	N. succinea	2
6	70	04	89	00	10	29	00	64	00	3	S. fragilis	2
7	70	04	81	03	80	29	00	64	00	3	P. gouldi	2
8	70	04	81	01	70	29	00	64	00	3	E. heteropo	2
9	70	04	81	05	70	29	00	64	00	3	P. ligni	2
10	70	04	81	00	50	29	00	64	00	3	S. viridis	2
11	70	04	81	01	80	29	00	64	00	3	S. benedict	2
12	70	04	81	03	90	29	00	64	00	3	H. grayi	2
13	70	04	82	02	90	29	00	64	00	3	L. hoffmeis	2
14	70	04	82	02	30	29	00	64	00	3	P. tubifici	2
15	70	04	81	00	70	29	00	64	00	3	C. capitata	2
16	70	04	95	00	60	29	00	64	00	3	I. recurvus	2
17	70	04	95	00	70	29	00	64	00	3	C. leucopha	2
18	70				02	29	00	64	00	3	L. species	2
19	70	04	95	00	90	29	00	64	00	3	M. balthica	2
20	70	04	95	01	00	29	00	64	00	3	M. mitchell	2
21	70	04	95	00	80	29	00	64	00	3	R. cuneata	2
22	70	04	95	03	20	29	00	64	00	3	M. arenaria	2
23	70	04	94	01	90	29	00	64	00	3	Hydrobia	2
24	70	04	94	02	10	29	00	64	00	3	S. niger	2
25	70	04	94	02	00	29	00	64	00	3	D. obscura	2

GRAB #1	GRAB #2	GRAB #3
1	4	2
10	15	18
34	30	24
1	3	4
		2

CSL- Duguay cbl-2 Ponar grab

SAMPLING STATION NO.	DATE	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD		COUNTY	TIDE	WEATH.	REPIT.	
#M7	YYMMDD													
XIF6388	901206	1737	10	021399977	70	01	11			BA		1	1	

LATITUDE	LONGITUDE		SEQUENCE NUMBER
DDMMSSS	DDDMMSSS		
391615	076205		1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1	GRAB #2	GRAB #3		SEQUENCE NUMBER
								VALUE				
27	70	05	30	70	11	02	90	64	00	3	B. improvis	2
28	70	05	30	70	12	02	90	64	00	3	B. subalbid	2
29	70	05	31	40	54	02	90	64	00	3	L. american	2
30	70	05	31	60	12	02	90	64	00	3	C. polita	2
31	70	05	31	60	03	02	90	64	00	3	C. lunifron	2
33	70	05	31	60	24	02	90	64	00	3	E. trilcba	2
34	70	05	31	70	26	02	90	64	00	3	N. biarticu	2
35	70	05	31	70	03	02	90	64	00	3	G. palustri	2
36	70	05	31	70	16	02	90	64	00	3	L. plumusos	2
37	70	05	31	70	13	02	90	64	00	3	C. lacustre	2
38	70	05	31	70	33	02	90	64	00	3	G. daiberi	2
39	70	05	31	70	20	02	90	64	00	3	G. tigrinus	2
40	70	05	31	70	22	02	90	64	00	3	M. nitida	2
41	70	05	31	60	21	02	90	64	00	3	C. almyra	2
42	70	05	31	70	25	02	90	64	00	3	M. edwardsi	2
43	70	05	42	40	01	02	90	64	00	3	C. species	2
44	70	05	31	90	14	02	90	64	00	3	R. harrisi	2
45	70	05	31	70	45	02	90	64	00	3	G. mucronat	2
46	70	03	30	10	01	02	90	64	00	3	C. caspia	2
47	70	03	30	10	02	02	90	64	00	3	G. francisc	2
48	70	03	50	50	31	02	90	64	00	3	S. elliptic	2
49	70	06	60	20	01	02	90	64	00	3	M. tenuis	2
50	70	06	60	20	02	02	90	64	00	3	V. pavida	2
	70					02	90	64	00	3		2
	70	0				02	90	64	00	3		2

CEL- Duguay cbl-1 PONAR GRAB

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATHER	REPEAT
XIF5297 (HM 9)	901206	1628	16	021399977	70	01	11		BA		1	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSSS	
39153.3	076195.3	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
1	70	03	30	28	029	00	64	00	3		D. leucolen	2
2	70	04	00	12	029	00	64	00	3	1	M. leidyi	2
3	70	04	80	13	029	00	64	00	3	4 1 4	H. filiform	2
4	70	04	80	18	029	00	64	00	3		M. species	2
5	70	04	80	14	029	00	64	00	3		N. succinea	2
6	70	04	80	09	029	00	64	00	3		S. fragilis	2
7	70	04	80	13	029	00	64	00	3		P. gouldi	2
8	70	04	80	17	029	00	64	00	3		E. hetercpo	2
9	70	04	80	57	029	00	64	00	3		P. ligni	2
10	70	04	80	15	029	00	64	00	3	1 4	S. viridis	2
11	70	04	80	18	029	00	64	00	3	2 2 3	S. benedict	2
12	70	04	80	39	029	00	64	00	3		H. grayi	2
13	70	04	80	29	029	00	64	00	3		L. hoffmeis	2
14	70	04	80	23	029	00	64	00	3	5 9 5	P. tubifici	2
15	70	04	80	07	029	00	64	00	3		C. capitata	2
16	70	04	90	56	029	00	64	00	3		I. recurvus	2
17	70	04	90	57	029	00	64	00	3	1	C. leucopha	2
18	70				029	00	64	00	3		L. species	2
19	70	04	90	59	029	00	64	00	3		M. balthica	2
20	70	04	90	51	029	00	64	00	3		M. mitchell	2
21	70	04	90	58	029	00	64	00	3	2 3 1 0	R. cuneata	2
22	70	04	90	53	029	00	64	00	3		M. arenaria	2
23	70	04	90	41	029	00	64	00	3		Hydrobia	2
24	70	04	90	42	029	00	64	00	3		S. niger	2
25	70	04	90	40	029	00	64	00	3		D. obscura	2

CSL- Duguay cbl-2 Ponar grab

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
X I F 5 2 9 7 #M 9	9 0 1 2 0 6	1 6 2 8	1 6	0 2 1 3 9 9 9 7	7 0	0 1	1		B A		1	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSS)	SEQUENCE NUMBER
3 9 1 5 3 3.	0 7 6 1 9 5 3.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
27	7	0 0	5 3	0 7	0 1 1	0 2 9	0 0 6 4	0 0 3			B. improvis	2
28	7	0 0	5 3	0 7	0 1 2	0 2 9	0 0 6 4	0 0 3			B. subalbid	2
29	7	0 0	5 3	1 4	0 5 4	0 2 9	0 0 6 4	0 0 3			L. american	2
30	7	0 0	5 3	1 6	0 1 2	0 2 9	0 0 6 4	0 0 3	5	8 3	C. polita	2
31	7	0 0	5 3	1 6	0 3 0	0 2 9	0 0 6 4	0 0 3			C. lunifron	2
33	7	0 0	5 3	1 6	0 2 4	0 2 9	0 0 6 4	0 0 3			E. trilcba	2
34	7	0 0	5 3	1 7	0 2 6	0 2 9	0 0 6 4	0 0 3			N. biarticu	2
35	7	0 0	5 3	1 7	0 0 3	0 2 9	0 0 6 4	0 0 3			G. palustri	2
36	7	0 0	5 3	1 7	0 1 6	0 2 9	0 0 6 4	0 0 3	2 1	1 6 2 1	L. plumuscs	2
37	7	0 0	5 3	1 7	0 1 3	0 2 9	0 0 6 4	0 0 3		1	C. lacustre	2
38	7	0 0	5 3	1 7	0 3 3	0 2 9	0 0 6 4	0 0 3			G. daiberi	2
39	7	0 0	5 3	1 7	0 2 0	0 2 9	0 0 6 4	0 0 3			G. tigrinus	2
40	7	0 0	5 3	1 7	0 2 2	0 2 9	0 0 6 4	0 0 3			M. nitida	2
41	7	0 0	5 3	1 6	0 2 1	0 2 9	0 0 6 4	0 0 3			C. almyra	2
42	7	0 0	5 3	1 7	0 2 5	0 2 9	0 0 6 4	0 0 3	2	3	M. edwardsi	2
43	[illegible]	[illegible]	[illegible]	4 2 4	0 0 1	0 2 9	0 0 6 4	0 0 3			C. species	2
44	[illegible]	[illegible]	[illegible]	3 1 9	0 1 4	0 2 9	0 0 6 4	0 0 3			R. harrisi	2
45	7	0 0	5 3	1 7	0 4 5	0 2 9	0 0 6 4	0 0 3			G. mucronat	2
46	7	0 0	3 3	0 1	0 0 1	0 2 9	0 0 6 4	0 0 3			C. caspia	2
47	7	0 0	3 3	0 1	0 0 2	0 2 9	0 0 6 4	0 0 3			G. francisc	2
48	7	0 0	3 5	0 5	0 3 1	0 2 9	0 0 6 4	0 0 3			S. elliptic	2
49	7	0 0	6 6	0 2	0 0 1	0 2 9	0 0 6 4	0 0 3	9	3 4	M. tenuis	2
50	7	0 0	6 6	0 2	0 0 2	0 2 9	0 0 6 4	0 0 3			V. pavida	2
	7	0				0 2 9	0 0 6 4	0 0 3				2
	7	0 0				0 2 9	0 0 6 4	0 0 3				2

CEL- Duguay cbl-1 PONAR GRAB

SAMPLING STATION NO. #M 16	DATE YYMMDD	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPLIT.
XIF3325	901206	1145	18	021399977	70	01	11		BA		1	1

LATITUDE DDMMSSS	LONGITUDE DDDMMSSS	SEQUENCE NUMBER
391317	0762230	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
1	70	03	03	028	029	006	403				D. leucolen	2
2	70	04	01	002	029	006	403		2	1	M. leidyi	2
3	70	04	01	003	029	006	403	4	2	3	H. filiform	2
4	70	04	01	008	029	006	403				M. species	2
5	70	04	01	004	029	006	403			1	N. succinea	2
6	70	04	09	001	029	006	403				S. fragilis	2
7	70	04	01	038	029	006	403				P. gouldi	2
8	70	04	01	017	029	006	403		1		E. heteropo	2
9	70	04	01	057	029	006	403				P. ligni	2
10	70	04	01	005	029	006	403		4		S. viridis	2
11	70	04	01	018	029	006	403	8	7	8	S. benedict	2
12	70	04	01	039	029	006	403				H. grayi	2
13	70	04	02	029	029	006	403				L. hoffmeis	2
14	70	04	02	023	029	006	403	17	71	11	P. tubifici	2
15	70	04	01	007	029	006	403				C. capitata	2
16	[illegible]	[illegible]	05	006	029	006	403				I. recurvus	2
17	[illegible]	[illegible]	05	007	029	006	403				C. leucopha	2
18	70				029	006	403				L. species	2
19	70	04	05	009	029	006	403	6	8	3	M. balthica	2
20	70	04	05	101	029	006	403		2	5	M. mitchell	2
21	70	04	05	008	029	006	403				R. cuneata	2
22	70	04	05	032	029	006	403				M. arenaria	2
23	70	04	04	019	029	006	403				Hydrobia	2
24	70	04	04	021	029	006	403				S. niger	2
25	70	04	04	020	029	006	403				D. obscura	2

CSL- Duguay cbl-2 Ponar grab

SAMPLING STATION NO. #M 16	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD		COUNTY	TIDE	WEATH.	REPIT.
X H F 3 3 2 5	9 0 1 2 0 6	1 1 4 5	1 8	0 2 1 3 9 9 9 7	7 0	0 1	1			B A		1	1

5/14/05 OK

LATITUDE	LONGITUDE	SEQUENCE NUMBER
D D M M S S S	D D D M M S S S	
3 9 1 3 1 7	0 7 6 2 2 3 0	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1	GRAB #2	GRAB #3		SEQUENCE NUMBER
								VALUE				
27	7	0 0	5 3	0 7	0 1 1	0 2 9	0 0 6 4	0 0 3			B. improvis	2
28	7	0 0	5 3	0 7	0 1 2	0 2 9	0 0 6 4	0 0 3			B. subalbid	2
29	7	0 0	5 3	1 4	0 5 4	0 2 9	0 0 6 4	0 0 3			L. american	2
30	7	0 0	5 3	1 6	0 1 2	0 2 9	0 0 6 4	0 0 3	1 2	1 5 / 1 2	C. polita	2
31	7	0 0	5 3	1 6	0 3 0	0 2 9	0 0 6 4	0 0 3			C. lunifron	2
33	7	0 0	5 3	1 6	0 2 4	0 2 9	0 0 6 4	0 0 3			E. trilcba	2
34	7	0 0	5 3	1 7	0 2 6	0 2 9	0 0 6 4	0 0 3			N. biarticu	2
35	7	0 0	5 3	1 7	0 0 3	0 2 9	0 0 6 4	0 0 3			G. palustri	2
36	7	0 0	5 3	1 7	0 1 6	0 2 9	0 0 6 4	0 0 3	1 4 9	1 6 2 / 2 3 0	L. plumuscs	2
37	7	0 0	5 3	1 7	0 1 3	0 2 9	0 0 6 4	0 0 3	1	2 / 3	C. lacustre	2
38	7	0 0	5 3	1 7	0 3 3	0 2 9	0 0 6 4	0 0 3			G. daiberi	2
39	7	0 0	5 3	1 7	0 2 0	0 2 9	0 0 6 4	0 0 3			G. tigrinus	2
40	7	0 0	5 3	1 7	0 2 2	0 2 9	0 0 6 4	0 0 3	1 0	7 / 1 9	M. nitida	2
41	7	0 0	5 3	1 6	0 2 1	0 2 9	0 0 6 4	0 0 3			C. almyra	2
42	7	0 0	5 3	1 7	0 2 5	0 2 9	0 0 6 4	0 0 3	2		M. edwardsi	2
43	[illegible]		[illegible]	2 4	0 0 1	0 2 9	0 0 6 4	0 0 3			C. species	2
44	[illegible]		[illegible]	1 9	0 1 4	0 2 9	0 0 6 4	0 0 3			R. harrisi	2
45	7	0 0	5 3	1 7	0 4 5	0 2 9	0 0 6 4	0 0 3			G. mucronat	2
46	7	0 0	3 3	0 1	0 0 1	0 2 9	0 0 6 4	0 0 3			C. caspia	2
47	7	0 0	3 3	0 1	0 0 2	0 2 9	0 0 6 4	0 0 3			G. francisc	2
48	7	0 0	3 5	0 5	0 3 1	0 2 9	0 0 6 4	0 0 3			S. elliptic	2
49	7	0 0	6 6	0 2	0 0 1	0 2 9	0 0 6 4	0 0 3	5	1 2 / 2	M. tenuis	2
50	7	0 0	6 6	0 2	0 0 2	0 2 9	0 0 6 4	0 0 3	1	1	V. pavida	2
	7	0				0 2 9	0 0 6 4	0 0 3				2
	7	0 0				0 2 9	0 0 6 4	0 0 3				2

CEL- Duguay cbl-1 PONAR GRAB

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD		COUNTY	TIDE	WEATH.	REPIT.
XI6768 9 #M22	901206	1714	11	02139977	70	01	11			BA		1	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
3926581.	0761851.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1	GRAB #2	GRAB #3		SEQUENCE	NUMBER
1	70	03	03	028	029	064	003				D. leucolen		2
2	70	04	01	002	029	064	003				M. leidyi		2
3	70	04	01	003	029	064	003		2	1	E. filiform		2
4	70	04	01	008	029	064	003				M. species		2
5	70	04	01	004	029	064	003				N. succinea		2
6	70	04	09	001	029	064	003				S. fragilis		2
7	70	04	01	038	029	064	003				P. gouldi		2
8	70	04	01	017	029	064	003				E. heteropo		2
9	70	04	01	057	029	064	003		2	2	P. ligni		2
10	70	04	01	005	029	064	003		1	1 3	S. viridis		2
11	70	04	01	018	029	064	003		1 4	1 1 0	S. benedict		2
12	70	04	01	039	029	064	003				H. grayi		2
13	70	04	02	029	029	064	003				L. hoffmeis		2
14	70	04	02	023	029	064	003		1 4	2 7	P. tubifici		2
15	70	04	01	007	029	064	003				C. capitata		2
16	[illegible]	09	05	006	029	064	003				I. recurvus		2
17	[illegible]	09	05	007	029	064	003				C. leucopha		2
18	70				029	064	003				L. species		2
19	70	04	09	059	029	064	003				M. balthica		2
20	70	04	09	051	029	064	003			1	M. mitchell		2
21	70	04	09	058	029	064	003	1 5		1 4 1 4	R. cuneata		2
22	70	04	09	032	029	064	003				M. arenaria		2
23	70	04	09	041	029	064	003				Hydrobia		2
24	70	04	09	041	029	064	003				S. niger		2
25	70	04	09	040	029	064	003				D. obscura		2

CEL- Duguay cbl-2 Ponar grab

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
XIG768 9 #M 22	901206	1714	11	02139977	70	01			BA		1	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSS.S	DDDMMSS.S	
392658.	076185.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
27	70	05	30	71	02	90	64	00	3		B. improvis	2
28	70	05	30	72	02	90	64	00	3		B. subalbid	2
29	70	05	31	54	02	90	64	00	3		L. american	2
30	70	05	31	62	02	90	64	00	3	1 4 3	C. polita	2
31	70	05	31	60	02	90	64	00	3		C. lunifron	2
33	70	05	31	64	02	90	64	00	3	1	E. trilcba	2
34	70	05	31	76	02	90	64	00	3		N. biarticu	2
35	70	05	31	70	02	90	64	00	3		G. palustri	2
36	70	05	31	76	02	90	64	00	3	9 1 1 2 0	L. plumusos	2
37	70	05	31	73	02	90	64	00	3	1 2 3	C. lacustre	2
38	70	05	31	73	02	90	64	00	3		G. daiberi	2
39	70	05	31	70	02	90	64	00	3		G. tigrinus	2
40	70	05	31	72	02	90	64	00	3		M. nitida	2
41	70	05	31	61	02	90	64	00	3		C. almyra	2
42	70	05	31	75	02	90	64	00	3	1	M. edwardsi	2
43	70	[illegible]	32	40	01	90	64	00	3		C. species	2
44	70	[illegible]	31	94	02	90	64	00	3		R. harrisi	2
45	70	05	31	70	04	90	64	00	3		G. mucronat	2
46	70	03	30	10	02	90	64	00	3		C. caspia	2
47	70	03	30	10	02	90	64	00	3		G. francisc	2
48	70	03	35	05	02	90	64	00	3		S. elliptic	2
49	70	06	60	20	02	90	64	00	3	2 1	M. tenuis	2
50	70	06	60	20	02	90	64	00	3		V. pavida	2
	70				02	90	64	00	3			2
	700				02	90	64	00	3			2

CEL- Duquay cbl-1 PONAR GRAB

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
XIF5145 #M 26	901207	0742	13	021399977	70	01	11		BA		1	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
3914439.	0762355.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1	GRAB #2	GRAB #3		SEQUENCE NUMBER
1	70	03	03	02	80	29	00	64	003		D. leucolen	2
2	70	04	01	00	20	29	00	64	003	2	M. leidyi	2
3	70	04	01	00	30	29	00	64	003		H. filiform	2
4	70	04	01	00	80	29	00	64	003		M. species	2
5	70	04	01	00	40	29	00	64	003		N. succinea	2
6	70	04	09	00	10	29	00	64	003		S. fragilis	2
7	70	04	01	03	80	29	00	64	003		P. gouldi	2
8	70	04	01	01	70	29	00	64	003		E. heteropo	2
9	70	04	01	05	70	29	00	64	003	16	P. ligni	2
10	70	04	01	00	50	29	00	64	003	1	S. viridis	2
11	70	04	01	01	80	29	00	64	003	1	S. benedict	2
12	70	04	01	03	90	29	00	64	003		H. grayi	2
13	70	04	02	02	90	29	00	64	003		L. hoffmeis	2
14	70	04	02	02	30	29	00	64	003	31 1 09	124 P. tubifici	2
15	70	04	01	00	70	29	00	64	003		C. capitata	2
16	[illegible]	[illegible]	05	00	60	29	00	64	003		I. recurvus	2
17	[illegible]	[illegible]	05	00	70	29	00	64	003	1 1	C. leucopha	2
18	70					29	00	64	003		L. species	2
19	70	04	05	00	90	29	00	64	003	1	M. balthica	2
20	70	04	05	01	00	29	00	64	003	1 1	M. mitchell	2
21	70	04	05	00	80	29	00	64	003	216 53 3	601 R. cuneata	2
22	70	04	05	03	20	29	00	64	003		M. arenaria	2
23	70	04	04	01	90	29	00	64	003		Hydrobia	2
24	70	04	04	02	10	29	00	64	003		S. niger	2
25	70	04	04	02	00	29	00	64	003		D. obscura	2

CBL- Duguay cbl-2 Ponar grab

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD		COUNTY	TIDE	WEATH.	REPHT.
XIF514 5 #M 26	901207	0742	13	021397	77	00	01	11		BA		1	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSSS	
391439.	076235 5.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
27	70	05	30	11	02	90	06	40	03		B. improvis	2
28	70	05	30	12	02	90	06	40	03		B. subalbid	2
29	70	05	31	54	02	90	06	40	03		L. american	2
30	70	05	31	62	02	90	06	40	03	7 2 2	C. polita	2
31	70	05	31	63	00	90	06	40	03		C. lunifron	2
33	70	05	31	64	02	90	06	40	03	1 1 1	E. trilcba	2
34	70	05	31	76	02	90	06	40	03		N. biarticu	2
35	70	05	31	73	02	90	06	40	03		G. palustri	2
36	70	05	31	76	02	90	06	40	03	5 1 1	L. plumuscs	2
37	70	05	31	73	02	90	06	40	03	3 7 1 1	C. lacustre	2
38	70	05	31	73	02	90	06	40	03		G. daiberi	2
39	70	05	31	70	02	90	06	40	03	1	G. tigrinus	2
40	70	05	31	72	02	90	06	40	03		M. nitida	2
41	70	05	31	61	02	90	06	40	03		C. almyra	2
42	70	05	31	75	02	90	06	40	03		M. edwardsi	2
43	70	05	24	24	00	10	02	90	06	40	03	C. species	2
44	70	05	31	19	01	40	02	90	06	40	03	R. harrisi	2
45	70	05	31	17	04	50	02	90	06	40	03	G. mucronat	2
46	70	03	30	10	00	10	02	90	06	40	03	C. caspia	2
47	70	03	30	10	00	20	02	90	06	40	03	G. francisc	2
48	70	03	50	50	03	10	02	90	06	40	03	S. elliptic	2
49	70	06	60	20	00	10	02	90	06	40	03	M. tenuis	2
50	70	06	60	20	00	20	02	90	06	40	03	V. pavida	2
	70						02	90	06	40	03		2
	700						02	90	06	40	03		2

CEL- Duguay cbl-1 PONAR GRAB

SAMPLING STATION NO. #M 12	DATE YY MM DD	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
XIF5805	901206	1445	15	021399977	70	01	11		BA		1	1

LATITUDE DDMMSS	LONGITUDE DDDMMSS	SEQUENCE NUMBER
391405	0762021	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1	GRAB #2	GRAB #3		SEQUENCE NUMBER
								VALUE				
1	70	03	30	02	80	29	00	64	00	3	D. leucolena	2
2	70	04	01	00	20	29	00	64	00	3	M. leidyi	2
3	70	04	01	00	30	29	00	64	00	3	F. filiform	2
4	70	04	01	00	80	29	00	64	00	3	M. species	2
5	70	04	01	00	40	29	00	64	00	3	N. succinea	2
6	70	04	09	00	10	29	00	64	00	3	S. fragilis	2
7	70	04	01	03	80	29	00	64	00	3	P. gouldi	2
8	70	04	01	01	70	29	00	64	00	3	E. heteropo	2
9	70	04	01	05	70	29	00	64	00	3	P. ligni	2
10	70	04	01	00	50	29	00	64	00	3	S. viridis	2
11	70	04	01	01	80	29	00	64	00	3	S. benedict	2
12	70	04	01	03	90	29	00	64	00	3	H. grayi	2
13	70	04	02	02	90	29	00	64	00	3	L. hoffmeis	2
14	70	04	02	02	30	29	00	64	00	3	P. tubifici	2
15	70	04	01	00	70	29	00	64	00	3	C. capitata	2
16	[illegible]	[illegible]	05	00	60	29	00	64	00	3	I. recurvus	2
17	[illegible]	[illegible]	05	00	70	29	00	64	00	3	C. leucopha	2
18	70				0	29	00	64	00	3	L. species	2
19	70	04	95	00	90	29	00	64	00	3	M. balthica	2
20	70	04	95	01	00	29	00	64	00	3	M. mitchell	2
21	70	04	95	00	80	29	00	64	00	3	R. cuneata	2
22	70	04	95	03	20	29	00	64	00	3	M. arenaria	2
23	70	04	94	01	90	29	00	64	00	3	Hydrobia	2
24	70	04	94	02	10	29	00	64	00	3	S. niger	2
25	70	04	94	02	00	29	00	64	00	3	D. obscura	2

CHL- Duguay cbl-2 Ponar grab

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD		COUNTY	TIDE	WEATH.	REPIT.	
XIF580 5 #M 12	901206	1445	15	021399977	70	01	11			BA		1	1	

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSS)		SEQUENCE NUMBER
391405	0762021		1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
27	70	05	30	71	02	90	06	40	03		B. improvis	2
28	70	05	30	72	02	90	06	40	03		B. subalbid	2
29	70	05	31	44	02	90	06	40	03		L. american	2
30	70	05	31	62	02	90	06	40	03	10 / 7 / 8	C. polita	2
31	70	05	31	63	02	90	06	40	03		C. lunifron	2
33	70	05	31	64	02	90	06	40	03		E. trilcba	2
34	70	05	31	76	02	90	06	40	03		N. biarticu	2
35	70	05	31	73	02	90	06	40	03		G. palustri	2
36	70	05	31	76	02	90	06	40	03	42 / 15 / 39	L. plumuscs	2
37	70	05	31	73	02	90	06	40	03	7 / 10 / 8	C. lacustre	2
38	70	05	31	73	02	90	06	40	03		G. daiberi	2
39	70	05	31	72	02	90	06	40	03	1	G. tigrinus	2
40	70	05	31	72	02	90	06	40	03	1	M. nitida	2
41	70	05	31	61	02	90	06	40	03		C. almyra	2
42	70	05	31	75	02	90	06	40	03	5 / 1 / 1	M. edwardsi	2
43	[illegible]	[illegible]	42	40	01	90	06	40	03		C. species	2
44	[illegible]	[illegible]	31	94	02	90	06	40	03		R. harrisi	2
45	70	05	31	74	02	90	06	40	03		G. mucronat	2
46	70	03	30	10	02	90	06	40	03		C. caspia	2
47	70	03	30	10	02	90	06	40	03		G. francisc	2
48	70	03	50	50	02	90	06	40	03		S. elliptic	2
49	70	06	60	20	02	90	06	40	03	3	M. tenuis	2
50	70	06	60	20	02	90	06	40	03		V. pavida	2
	70				02	90	06	40	03			2
	70				02	90	06	40	03			2

CEL- Duguay cbl-1 PONAR GRAB

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPTH.
G5	901206	1304	13	021399977	70	00	11		BA		1	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSSS	
394125	0762236	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
1	70	03	03	02	80290	64	03				D. leucolen	2
2	70	04	01	00	20290	64	03		1		M. leidyi	2
3	70	04	01	00	30290	64	03	1			H. filiform	2
4	70	04	01	00	80290	64	03				M. species	2
5	70	04	01	00	40290	64	03				N. succinea	2
6	70	04	09	00	10290	64	03				S. fragilis	2
7	70	04	01	03	80290	64	03				P. gouldi	2
8	70	04	01	01	70290	64	03				E. heteropo	2
9	70	04	01	05	70290	64	03				P. ligni	2
10	70	04	01	00	50290	64	03	7	1	5	S. viridis	2
11	70	04	01	01	80290	64	03	2	4		S. benedict	2
12	70	04	01	03	90290	64	03				H. grayi	2
13	70	04	02	02	90290	64	03				L. hoffmeis	2
14	70	04	02	02	30290	64	03	55	48	1	P. tubifici	2
15	70	04	01	00	70290	64	03				C. capitata	2
16	70	04	05	00	60290	64	03				I. recurvus	2
17	70	04	05	00	70290	64	03				C. leucopha	2
18	70				02290	64	03				L. species	2
19	70	04	05	00	90290	64	03	2	1	1	M. balthica	2
20	70	04	05	01	00290	64	03	1	4	1	M. mitchell	2
21	70	04	05	00	80290	64	03	3	2	3	R. cuneata	2
22	70	04	05	03	20290	64	03				M. arenaria	2
23	70	04	04	01	90290	64	03				Hydrobia	2
24	70	04	04	02	10290	64	03				S. niger	2
25	70	04	04	02	00290	64	03				D. obscura	2

CEL- Duguay cbl-2 Penar grab

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPLIT.
XIF4221 G5	901206	1304	13	021399	70	01	11		BA		1	1

5/14/03 OK

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
3914 25.	0762 236.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1	GRAB #2	GRAB #3		SEQUENCE NUMBER
								VALUE				
27	70	05	30	71	02	90	64	00	3		B. improvis	2
28	70	05	30	72	02	90	64	00	3		B. subalbid	2
29	70	05	31	44	02	90	64	00	3		L. american	2
30	70	05	31	62	02	90	64	00	3	10 / 9 / 12	C. polita	2
31	70	05	31	63	02	90	64	00	3		C. lunifron	2
33	70	05	31	64	02	90	64	00	3	1	E. trilcba	2
34	70	05	31	72	02	90	64	00	3		N. biarticu	2
35	70	05	31	73	02	90	64	00	3		G. palustri	2
36	70	05	31	76	02	90	64	00	3	86 / 92 / 77	L. plumuscs	2
37	70	05	31	73	02	90	64	00	3	4 / 4 / 4	C. lacustre	2
38	70	05	31	73	02	90	64	00	3		G. daiberi	2
39	70	05	31	72	02	90	64	00	3		G. tigrinus	2
40	70	05	31	72	02	90	64	00	3	1 / 1 / 2	M. nitida	2
41	70	05	31	61	02	90	64	00	3		C. almyra	2
42	70	05	31	72	02	90	64	00	3	4	M. edwardsi	2
43	[illegible]	[illegible]	42	40	02	90	64	00	3		C. species	2
44	[illegible]	[illegible]	31	94	02	90	64	00	3		R. harrisi	2
45	70	05	31	7.0	02	90	64	00	3		G. mucronat	2
46	70	03	30	10	02	90	64	00	3		C. caspia	2
47	70	03	30	10	02	90	64	00	3		G. francisc	2
48	70	03	50	50	02	90	64	00	3		S. elliptic	2
49	70	06	60	20	02	90	64	00	3	1	M. tenuis	2
50	70	06	60	20	02	90	64	00	3		V. pavida	2
	70				02	90	64	00	3			2
	70				02	90	64	00	3			2

CBL- Duguay cbl-1 PCNAR GRAB

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATHER	REPLIT.
G 25	901206	1426	16	0213997	70	01	11		BA		1	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
3914442	0762110	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1	GRAB #2	GRAB #3		SEQUENCE NUMBER
1	70	03	03	028	029	006	403				D. leucolen	2
2	70	04	01	002	029	006	403	1	3		M. leidyi	2
3	70	04	01	003	029	006	403	2	3	3	E. filiform	2
4	70	04	01	008	029	006	403				M. species	2
5	70	04	01	004	029	006	403		9	2	N. succinea	2
6	70	04	09	001	029	006	403				S. fragilis	2
7	70	04	01	038	029	006	403				P. gouldi	2
8	70	04	01	017	029	006	403				E. hetercpo	2
9	70	04	01	057	029	006	403		17		P. ligni	2
10	70	04	01	005	029	006	403	1	3		S. viridis	2
11	70	04	01	018	029	006	403	6	21	2	S. benedict	2
12	70	04	01	039	029	006	403				H. grayi	2
13	70	04	02	029	029	006	403				L. hoffmeis	2
14	70	04	02	023	029	006	403	3	34	2	P. tubifici	2
15	70	04	01	007	029	006	403				C. capitata	2
16	[illegible]	[illegible]	05	006	029	006	403				I. recurvus	2
17	[illegible]	[illegible]	05	007	029	006	403				C. leucopha	2
18	70				029	006	403				L. species	2
19	70	04	05	009	029	006	403				M. balthica	2
20	70	04	05	010	029	006	403		1		M. mitchell	2
21	70	04	05	008	029	006	403		6	2	R. cuneata	2
22	70	04	05	032	029	006	403				M. arenaria	2
23	70	04	04	019	029	006	403				Hydrobia	2
24	70	04	04	021	029	006	403				S. niger	2
25	70	04	04	020	029	006	403				D. obscura	2

CEL- Duguay cbl-2 Ponar grab

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
XHF445 G25	901206	1426	16	021399	7	0	01	11	BA		1	1

LATITUDE (DDMMSS)	LONGITUDE (DDDMMSS)	SEQUENCE NUMBER
391442	0762110	1

5/14/03 OK

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1	GRAB #2	GRAB #3		SEQUENCE NUMBER
								VALUE				
27	70	05	30	71	02	90	64	00	3	10	B. improvis	2
28	70	05	30	72	02	90	64	00	3		B. subalbid	2
29	70	05	31	54	02	90	64	00	3		L. american	2
30	70	05	31	62	02	90	64	00	3	2 / 11 / 3	C. polita	2
31	70	05	31	63	02	90	64	00	3		C. lunifron	2
33	70	05	31	64	02	90	64	00	3	2	E. trilcba	2
34	70	05	31	67	02	90	64	00	3		N. biarticu	2
35	70	05	31	70	02	90	64	00	3		G. palustri	2
36	70	05	31	76	02	90	64	00	3	48 / 1 2	L. plumuscs	2
37	70	05	31	73	02	90	64	00	3	15 / 2	C. lacustre	2
38	70	05	31	73	02	90	64	00	3		G. daiberi	2
39	70	05	31	70	02	90	64	00	3		G. tigrinus	2
40	70	05	31	72	02	90	64	00	3	2 / 9	M. nitida	2
41	70	05	31	61	02	90	64	00	3		C. almyra	2
42	70	05	31	75	02	90	64	00	3	3 / 1	M. edwardsi	2
43	70	[illegible]	32	40	02	90	64	00	3		C. species	2
44	70	[illegible]	31	94	02	90	64	00	3	4	R. harrisi	2
45	70	06	31	70	04	90	64	00	3		G. mucronat	2
46	70	03	30	10	00	90	64	00	3		C. caspia	2
47	70	03	30	10	02	90	64	00	3		G. francisc	2
48	70	03	50	50	03	90	64	00	3		S. elliptic	2
49	70	06	60	20	01	90	64	00	3	3 / 62 / 16	M. tenuis	2
50	70	06	60	20	02	90	64	00	3	4	V. pavida	2
	70				02	90	64	00	3		Bryozoan	2
	700				02	90	64	00	3			2

CEL- Duguay cb1-1 PONAR GRAB

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
X G84	901206	1511	16	0213997	70	01	11		BA		1	1

LATITUDE (DDMMSS)	LONGITUDE (DDDMMSS)	SEQUENCE NUMBER
391290	0761660	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
1	70	03	03	02	80	29	00	64	00	3	D. leucolen	2
2	70	04	01	00	20	29	00	64	00	3	M. leidyi	2
3	70	04	01	00	30	29	00	64	00	3	E. filiform	2
4	70	04	01	00	80	29	00	64	00	3	M. species	2
5	70	04	01	00	40	29	00	64	00	3	N. succinea	2
6	70	04	09	00	10	29	00	64	00	3	S. fragilis	2
7	70	04	01	03	80	29	00	64	00	3	P. gouldi	2
8	70	04	01	01	70	29	00	64	00	3	E. heteropo	2
9	70	04	01	05	70	29	00	64	00	3	P. ligni	2
10	70	04	01	00	50	29	00	64	00	3	S. viridis	2
11	70	04	01	01	80	29	00	64	00	3	S. benedict	2
12	70	04	01	03	90	29	00	64	00	3	H. grayi	2
13	70	04	02	02	90	29	00	64	00	3	L. hoffmeis	2
14	70	04	02	02	30	29	00	64	00	3	P. tubifici	2
15	70	04	01	00	70	29	00	64	00	3	C. capitata	2
16	[illegible]	[illegible]	05	00	60	29	00	64	00	3	I. recurvus	2
17	[illegible]	[illegible]	05	00	70	29	00	64	00	3	C. leucopha	2
18	70					29	00	64	00	3	L. species	2
19	70	04	05	00	90	29	00	64	00	3	M. balthica	2
20	70	04	05	01	00	29	00	64	00	3	M. mitchell	2
21	70	04	05	00	80	29	00	64	00	3	R. cuneata	2
22	70	04	05	03	20	29	00	64	00	3	M. arenaria	2
23	70	04	04	01	90	29	00	64	00	3	Hydrobia	2
24	70	04	04	02	10	29	00	64	00	3	S. niger	2
25	70	04	04	02	00	29	00	64	00	3	D. obscura	2

CEL- Duguay ch1-2 Ponar grab

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD		COUNTY	TIDE	WEATH.	REPIT.	
G84	901206	1511	16	0213997	70	01	11			BA		1	1	
X1635710														

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
3912900	0761660	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
27	70	05	37	01	02	90	64	003			B. improvis	2
28	70	05	37	02	02	90	64	003			B. subalbid	2
29	70	05	31	45	02	90	64	003			L. american	2
30	70	05	31	62	02	90	64	003	19	16	25 C. polita	2
31	70	05	31	63	02	90	64	003			C. lunifron	2
33	70	05	31	64	02	90	64	003			1 E. trilcha	2
34	70	05	31	72	02	90	64	003			N. biarticu	2
35	70	05	31	70	02	90	64	003			G. palustri	2
36	70	05	31	76	02	90	64	003	190	153	200 L. plumuscos	2
37	70	05	31	73	02	90	64	003		2	C. lacustre	2
38	70	05	31	73	02	90	64	003			G. daiberi	2
39	70	05	31	70	02	90	64	003			G. tigrinus	2
40	70	05	31	72	02	90	64	003	1	3	5 M. nitida	2
41	70	05	31	61	02	90	64	003			C. almyra	2
42	70	05	31	75	02	90	64	003	3	2	M. edwardsi	2
43	70	05	42	40	01	90	64	003			C. species	2
44	70	05	31	90	01	40	64	003			R. harrisi	2
45	70	05	31	70	45	02	64	003			G. mucronat	2
46	70	03	30	10	01	90	64	003			C. caspia	2
47	70	03	30	10	02	90	64	003			1 G. francisc	2
48	70	03	50	50	31	02	64	003			S. elliptic	2
49	70	06	60	20	01	90	64	003			M. tenuis	2
50	70	06	60	20	02	90	64	003			V. pavida	2
	70					02	90	64	003			2
	70	0				02	90	64	003			2

CBL- Duguay cbl-1a Scraping

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
R2-Top												
XIF4813	901207	1029	03	0213997	70	01	1		BA		1	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
3914446.	0762116.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE (0 = None Present; 1 = Very Abundant; 2 = Abundant; 3 = Present)	REMARKS		SEQUENCE NUMBER
1	70	03	03	028	029	015	041			D. leucolen	2
2	70	04	01	002	029	015	041			M. leidyi	2
3	70	04	01	003	029	015	041			H. filiform	2
4	70	04	01	008	029	015	041			M. species	2
5	70	04	01	004	029	015	041	3		N. succinea	2
6	70	04	09	001	029	015	041			S. fragilis	2
7	70	04	01	038	029	015	041			P. gouldi	2
8	70	04	01	017	029	015	041			E. heteropo	2
9	70	04	01	057	029	015	041			P. ligni	2
10	70	04	01	005	029	015	041			S. viridis	2
11	70	04	01	018	029	015	041			S. benedict	2
12	70	04	01	039	029	015	041			H. grayi	2
13	70	04	02	029	029	015	041			L. hoffmeis	2
14	70	04	02	023	029	015	041			P. tubifici	2
15	70	04	01	007	029	015	041			C. capitata	2
16	70	04	05	006	029	015	041			I. recurvus	2
17	[illegible]	[illegible]	05	007	029	015	041			C. leucopha	2
18	[illegible]				029	015	041			L. species	2
19	70	04	05	009	029	015	041			M. balthica	2
20	70	04	05	010	029	015	041			M. mitchell	2
21	70	04	05	008	029	015	041			R. cuneata	2
22	70	04	05	032	029	015	041			M. arenaria	2
23	70	04	04	019	029	015	041			Hydrobia	2
24	70	04	04	021	029	015	041			S. niger	2
25	70	04	04	020	029	015	041			D. obscura	2

CBL- Duguay cbl-2a Scraping

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD		COUNTY	TIDE	WEATH.	REPIT.
XIF4813 R2-Top	901207	1029	03	0213997	70	01	11			BA		1	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
3914446	0762116	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE (0 = None Present, 1 = Very Abundant, 2 = Abundant, 3 = Present)	REMARKS		SEQUENCE	NUMBER
27	70	05	30	7	01	02	90	154	041	2		B. improvis 2
28	70	05	30	7	01	02	90	154	041			B. subalbid 2
29	70	05	31	4	05	02	90	154	041			L. american 2
30	70	05	31	6	01	02	90	154	041			C. polita 2
31	70	05	31	6	03	02	90	154	041			C. lunifron 2
33	70	05	31	6	02	02	90	154	041			E. trilcba 2
34	70	05	31	7	02	02	90	154	041			N. biarticu 2
35	70	05	31	7	00	02	90	154	041			G. palustri 2
36	70	05	31	7	01	02	90	154	041			L. plumusos 2
37	70	05	31	7	01	02	90	154	041	3		C. lacustre 2
38	70	05	31	7	03	02	90	154	041			G. daiberi 2
39	70	05	31	7	02	02	90	154	041	3		G. tigrinus 2
40	70	05	31	7	02	02	90	154	041			M. nitida 2
41	70	05	31	6	02	02	90	154	041			C. almyra 2
42	70	05	31	7	02	02	90	154	041			M. edwardsi 2
43	70	05	42	4	00	02	90	154	041			C. species 2
44	70	05	31	9	01	02	90	154	041			R. harrisi 2
45	[illegible]	[illegible]	5	1	7	02	90	154	041			G. mucronat 2
46	70	03	30	1	00	02	90	154	041	3		C. caspia 2
47	70	03	30	1	00	02	90	154	041			G. francisc 2
48	70	03	50	5	03	02	90	154	041			S. elliptic 2
49	70	06	60	2	00	02	90	154	041			M. tenuis 2
50	70	06	60	2	00	02	90	154	041	3		V. pavida 2
	70					02	90	154	041			2
	70	0				02	90	154	041			2

CBL- Duguay cbl-1a Scraping

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPLIT.
R2-Bottom												
XIF4813	901207	1029	08	021399977	70	01	11		BA		1	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
3914466	0762116	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE (0 = None Present; 1 = Very Abundant; 2 = Abundant; 3 = Present)	REMARKS		SEQUENCE	NUMBER
1	70	03	03	02	8 02	90	154	041		D. leucolen		2
2	70	04	01	00	2 02	90	154	041		M. leidyi		2
3	70	04	01	00	3 02	90	154	041		H. filiform		2
4	70	04	01	00	8 02	90	154	041		M. species		2
5	70	04	01	00	4 02	90	154	041	2	N. succinea		2
6	70	04	09	00	1 02	90	154	041		S. fragilis		2
7	70	04	01	03	8 02	90	154	041		P. gouldi		2
8	70	04	01	01	7 02	90	154	041		E. heteropo		2
9	70	04	01	05	7 02	90	154	041		P. ligni		2
10	70	04	01	00	5 02	90	154	041		S. viridis		2
11	70	04	01	01	8 02	90	154	041		S. benedict		2
12	70	04	01	03	9 02	90	154	041		H. grayi		2
13	70	04	02	02	9 02	90	154	041		L. hoffmeis		2
14	70	04	02	02	3 02	90	154	041		P. tubifici		2
15	70	04	01	00	7 02	90	154	041		C. capitata		2
16	[illegible]	9	05	00	6 02	90	154	041		I. recurvus		2
17	[illegible]	9	05	00	7 02	90	154	041		C. leucopha		2
18	70 [illegible]				02	90	154	041		L. species		2
19	70	04	9 05	00	9 02	90	154	041		M. balthica		2
20	70	04	9 05	01	0 02	90	154	041		M. mitchell		2
21	70	04	9 05	00	8 02	90	154	041		R. cuneata		2
22	70	04	9 05	03	2 02	90	154	041		M. arenaria		2
23	70	04	9 04	01	9 02	90	154	041		Hydrobia		2
24	70	04	9 04	02	1 02	90	154	041		S. niger		2
25	70	04	9 04	02	0 02	90	154	041		D. obscura		2

CBL- Duguay cbl-2a Scraping

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB	CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
R1-Bottom													
XIF4813	901207	1029	08	0213997	70	0	1	1		BA		1	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
3914446.	0762116.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE (0 = None Present; 1 = Very Abundant; 2 = Abundant; 3 = Present)	REMARKS		SEQUENCE	NUMBER
27	700	53	07	011	029	154	041	3		B. improvis		2
28	700	53	07	012	029	154	041	3		B. subalbid		2
29	700	53	14	054	029	154	041			L. american		2
30	700	53	16	012	029	154	041			C. polita		2
31	700	53	16	030	029	154	041			C. lunifron		2
33	700	53	16	024	029	154	041			E. trilcba		2
34	700	53	17	026	029	154	041			N. biarticu		2
35	700	53	17	003	029	154	041			G. palustri		2
36	700	53	17	016	029	154	041			L. plumusos		2
37	700	53	17	013	029	154	041	2		C. lacustre		2
38	700	53	17	033	029	154	041			G. daiberi		2
39	700	53	17	020	029	154	041	3		G. tigrinus		2
40	700	53	17	022	029	154	041			M. nitida		2
41	700	53	16	021	029	154	041			C. almyra		2
42	700	53	17	025	029	154	041			M. edwardsi		2
43	700	54	24	001	029	154	041			C. species		2
44	700	52	19	014	029	154	041			R. harrisi		2
45	700	33	17	045	029	154	041			G. mucronat		2
46	700	33	01	001	029	154	041	3		C. caspia		2
47	700	33	01	002	029	154	041			G. francisc		2
48	700	35	05	031	029	154	041			S. elliptic		2
49	700	66	02	001	029	154	041	3		M. tenuis		2
50	700	66	02	002	029	154	041	3		V. pavida		2
	70				029	154	041					2
	700				029	154	041					2

CBL- Duguay cbl-1a Scraping

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB	CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
XIF45 14 (R3-Top)	901207	1007	03	021399977	70	01	11			BA		1	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
3914432	0762123	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE (0 = None Present; 1 = Very Abundant; 2 = Abundant; 3 = Present)	REMARKS		SEQUENCE NUMBER
1	70	03	03	028	029	01	541			D. leucolen	2
2	70	04	01	002	029	01	541			M. leidyi	2
3	70	04	01	003	029	01	541			H. filiform	2
4	70	04	01	008	029	01	541			M. species	2
5	70	04	01	004	029	01	541	2		N. succinea	2
6	70	04	09	004	029	01	541			S. fragilis	2
7	70	04	01	038	029	01	541			P. gouldi	2
8	70	04	01	017	029	01	541			E. heterop	2
9	70	04	01	057	029	01	541			P. ligni	2
10	70	04	01	005	029	01	541			S. viridis	2
11	70	04	01	018	029	01	541			S. benedict	2
12	70	04	01	039	029	01	541			H. grayi	2
13	70	04	02	029	029	01	541			L. hoffmeis	2
14	70	04	02	023	029	01	541			P. tubifici	2
15	70	04	01	007	029	01	541			C. capitata	2
16	70	04	05	006	029	01	541			I. recurvus	2
17	70	04	05	007	029	01	541			C. leucopha	2
18	[illegible]	[illegible]			029	01	541			L. species	2
19	70	04	05	009	029	01	541			M. balthica	2
20	70	04	05	010	029	01	541			M. mitchell	2
21	70	04	05	008	029	01	541			R. cuneata	2
22	70	04	05	032	029	01	541			M. arenaria	2
23	70	04	04	019	029	01	541			Hydrobia	2
24	70	04	04	021	029	01	541			S. niger	2
25	70	04	04	020	029	01	541			D. obscura	2

CBL- Duguay cbl-2a Scraping

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
R3-Top												
XIF451 4	901207	1007	03	021399977	70	01	11		BA		1	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSSS	
391432.	0762123.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE (0 = None Present, 1 = Very Abundant, 2 = Abundant, 3 = Present)	REMARKS		SEQUENCE	NUMBER
27	70	05	30	71	02	90	154	041	1	B. improvis		2
28	70	05	30	72	02	90	154	041		B. subalbid		2
29	70	05	31	45	02	90	154	041		L. american		2
30	70	05	31	62	02	90	154	041		C. polita		2
31	70	05	31	63	02	90	154	041		C. lunifron		2
33	70	05	31	64	02	90	154	041		E. trilcba		2
34	70	05	31	76	02	90	154	041		N. biarticu		2
35	70	05	31	70	02	90	154	041		G. palustri		2
36	70	05	31	76	02	90	154	041		L. plumuscs		2
37	70	05	31	73	02	90	154	041	2	C. lacustre		2
38	70	05	31	73	02	90	154	041		G. daiberi		2
39	70	05	31	70	02	90	154	041	3	G. tigrinus		2
40	70	05	31	72	02	90	154	041		M. nitida		2
41	70	05	31	62	02	90	154	041		C. almyra		2
42	70	05	31	75	02	90	154	041		M. edwardsi		2
43	70	05	42	40	01	90	154	041		C. species		2
44	70	05	31	94	01	90	154	041		R. harrisi		2
45	70	05	31	70	45	90	154	041		G. mucronat		2
46	70	03	30	10	01	90	154	041	1	C. caspia		2
47	70	03	30	10	02	90	154	041		G. francisc		2
48	70	03	50	50	31	90	154	041		S. elliptic		2
49	70	06	60	20	01	90	154	041		M. tenuis		2
50	70	06	60	20	02	90	154	041		V. pavida		2
	70					90	154	041				2
	700					90	154	041				2

CBL- Duguay cbl-1a Scraping

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD		COUNTY	TIDE	WEATH.	REPIT.
R3-Bottom													
XIF4514	901207	1007	08	0213997	70	01	11			BA		1	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
391432	0762123	1

RESOURCE MONITORING DATA SHEET

VALUE: 0 = None Present; 1 = Very Abundant; 2 = Abundant; 3 = Present

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE	REMARKS		SEQUENCE	NUMBER
1	70	03	03	02	8	029	015	4	041	D. leucolen		2
2	70	04	01	00	2	029	015	4	041	M. leidyi		2
3	70	04	01	00	3	029	015	4	041	H. filiform		2
4	70	04	01	00	8	029	015	4	041	M. species		2
5	70	04	01	00	4	029	015	4	041	N. succinea		2
6	70	04	80	90	04	029	015	4	041	S. fragilis		2
7	70	04	01	03	8	029	015	4	041	P. gouldi		2
8	70	04	01	01	7	029	015	4	041	E. heteropo		2
9	70	04	01	05	7	029	015	4	041	P. ligni		2
10	70	04	01	00	5	029	015	4	041	S. viridis		2
11	70	04	01	01	8	029	015	4	041	S. benedict		2
12	70	04	01	03	9	029	015	4	041	H. grayi		2
13	70	04	02	02	9	029	015	4	041	L. hoffmeis		2
14	70	04	02	02	3	029	015	4	041	P. tubifici		2
15	70	04	01	00	7	029	015	4	041	C. capitata		2
16	70	04	90	05	6	029	015	4	041	I. recurvus		2
17	[illegible]	[illegible]	90	05	7	029	015	4	041	C. leucopha		2
18	70	[illegible]				029	015	4	041	L. species		2
19	70	04	90	05	9	029	015	4	041	M. balthica		2
20	70	04	90	05	10	029	015	4	041	M. mitchell		2
21	70	04	90	05	8	029	015	4	041	R. cuneata		2
22	70	04	90	05	32	029	015	4	041	M. arenaria		2
23	70	04	90	04	19	029	015	4	041	Hydrobia		2
24	70	04	90	04	21	029	015	4	041	S. niger		2
25	70	04	90	04	20	029	015	4	041	D. obscura		2

CBL- Duguay cbl-2a Scraping

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
R3-Bottom												
XIF4514	901207	1007	08	0213997	70	01	11		BA		1	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSSS	
391432.	0762123.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE (0 = None Present, 1 = Very Abundant, 2 = Abundant, 3 = Present)	REMARKS		SEQUENCE	NUMBER
27	70	053	07	011	029	01	541			B. improvis		2
28	70	053	07	012	029	01	541	3		B. subalbid		2
29	70	053	14	054	029	01	541			L. american		2
30	70	053	16	012	029	01	541			C. polita		2
31	70	053	16	030	029	01	541			C. lunifron		2
33	70	053	16	024	029	01	541			E. triloba		2
34	70	053	17	026	029	01	541			N. biarticu		2
35	70	053	17	003	029	01	541			G. palustri		2
36	70	053	17	016	029	01	541			L. plumusos		2
37	70	053	17	013	029	01	541	1		C. lacustre		2
38	70	053	17	033	029	01	541			G. daiberi		2
39	70	053	17	020	029	01	541	3		G. tigrinus		2
40	70	053	17	022	029	01	541			M. nitida		2
41	70	053	16	021	029	01	541			C. almyra		2
42	70	053	17	025	029	01	541			M. edwardsi		2
43	70	054	24	001	029	01	541			C. species		2
44	[illegible]	[illegible]	19	014	029	01	541			R. harrisi		2
45	[illegible]	[illegible]	17	045	029	01	541			G. mucronat		2
46	70	033	01	001	029	01	541	2		C. caspia		2
47	70	033	01	002	029	01	541			G. francisc		2
48	70	035	05	031	029	01	541			S. elliptic		2
49	70	066	02	001	029	01	541	3		M. tenuis		2
50	70	066	02	002	029	01	541			V. pavida		2
	70				029	01	541					2
	700				029	01	541					2

CBL- Duguay cbl-1a Scraping

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD		COUNTY	TIDE	WEATH.	REPIT.
R4 - Top													
XIF4518	901207	0949	03	0213997	70	01	11			BA		1	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSS	
394128.	0762150.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE (0 = None Present, 1 = Very Abundant, 2 = Abundant, 3 = Present)	REMARKS		SEQUENCE	NUMBER
1	70	03	03	02	8 02	90 15	40	41		D. leucolen		2
2	70	04	01	00	2 02	90 15	40	41		M. leidyi		2
3	70	04	01	00	3 02	90 15	40	41		H. filiform		2
4	70	04	01	00	8 02	90 15	40	41		M. species		2
5	70	04	01	00	4 02	90 15	40	41	2	N. succinea		2
6	70	04	09	00	1 02	90 15	40	41		S. fragilis		2
7	70	04	01	03	8 02	90 15	40	41		P. gouldi		2
8	70	04	01	01	7 02	90 15	40	41		E. heteropo		2
9	70	04	01	05	7 02	90 15	40	41		P. ligni		2
10	70	04	01	00	5 02	90 15	40	41		S. viridis		2
11	70	04	01	01	8 02	90 15	40	41		S. benedict		2
12	70	04	01	03	9 02	90 15	40	41		H. grayi		2
13	70	04	02	02	9 02	90 15	40	41		L. hoffmeis		2
14	70	04	02	02	3 02	90 15	40	41		P. tubifici		2
15	70	04	01	00	7 02	90 15	40	41		C. capitata		2
16	70	04	05	00	6 02	90 15	40	41		I. recurvus		2
17	70	04	05	00	7 02	90 15	40	41		C. leucopha		2
18	70				02	90 15	40	41		L. species		2
19	70	04	05	00	9 02	90 15	40	41		M. balthica		2
20	70	04	05	01	0 02	90 15	40	41		M. mitchell		2
21	70	04	05	00	8 02	90 15	40	41		R. cuneata		2
22	70	04	05	03	2 02	90 15	40	41		M. arenaria		2
23	70	04	04	01	9 02	90 15	40	41		Hydrobia		2
24	70	04	04	02	1 02	90 15	40	41		S. niger		2
25	70	04	04	02	0 02	90 15	40	41		D. obscura		2

CBL- Duguay cbl-2a Scraping

SAMPLING STATION NO.	DATE	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB	CODE	METHOD		COUNTY	TIDE	WEATH.	REPIT.
R4-Top	YYMMDD													
XIF4518	901207	0949	03	021399977	70	0	0	1	1		BA		1	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSSS	
391428.	0762150.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE (0 = None Present; 1 = Very Abundant; 2 = Abundant; 3 = Present)	REMARKS		SEQUENCE	NUMBER
27	70	053	07	011	029	154	041	2		B. improvis		2
28	70	053	07	012	029	154	041	2		B. subalbid		2
29	70	053	14	054	029	154	041			L. american		2
30	70	053	16	012	029	154	041			C. polita		2
31	70	053	16	030	029	154	041			C. lunifron		2
33	70	053	16	024	029	154	041			E. triloba		2
34	70	053	17	026	029	154	041			N. biarticu		2
35	70	053	17	003	029	154	041			G. palustri		2
36	70	053	17	016	029	154	041			L. plumusos		2
37	70	053	17	013	029	154	041	2		C. lacustre		2
38	70	053	17	033	029	154	041			G. daiberi		2
39	70	053	17	020	029	154	041	3		G. tigrinus		2
40	70	053	17	022	029	154	041			M. nitida		2
41	70	053	16	021	029	154	041			C. almyra		2
42	70	053	17	025	029	154	041			M. edwardsi		2
43	70	054	24	001	029	154	041			C. species		2
44	70	[illegible]	19	014	029	154	041			R. harrisi		2
45	70	053	17	045	029	154	041			G. mucronat		2
46	70	033	01	001	029	154	041	2		C. caspia		2
47	70	033	01	002	029	154	041			G. francisc		2
48	70	035	05	031	029	154	041			S. elliptic		2
49	70	066	02	001	029	154	041			M. tenuis		2
50	70	066	02	002	029	154	041			V. pavida		2
	70				029	154	041					2
	700				029	154	041					2

CBL- Duguay cbl-1a Scraping

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
R4- BOTTOM												
XIF4518	901207	0949	08	02139977	70	01	11		BA		1	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
3914280	0762150	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE (0 = None Present; 1 = Very Abundant; 2 = Abundant; 3 = Present)	REMARKS		SEQUENCE NUMBER
1	70	03	03	02	8 02	90	154	041		D. leucolen	2
2	70	04	01	00	2 02	90	154	041		M. leidyi	2
3	70	04	01	00	3 02	90	154	041		H. filiform	2
4	70	04	01	00	8 02	90	154	041		M. species	2
5	70	04	01	00	4 02	90	154	041	3	N. succinea	2
6	70	04	09	00	1 02	90	154	041		S. fragilis	2
7	70	04	01	03	8 02	90	154	041		P. gouldi	2
8	70	04	01	01	7 02	90	154	041		E. heteropo	2
9	70	04	01	05	7 02	90	154	041		P. ligni	2
10	70	04	01	00	5 02	90	154	041		S. viridis	2
11	70	04	01	01	8 02	90	154	041		S. benedict	2
12	70	04	01	03	9 02	90	154	041		H. grayi	2
13	70	04	02	02	9 02	90	154	041		L. hoffmeis	2
14	70	04	02	02	3 02	90	154	041		P. tubifici	2
15	70	04	01	00	7 02	90	154	041		C. capitata	2
16	70	09	05	00	6 02	90	154	041		I. recurvus	2
17	70	09	05	00	7 02	90	154	041		C. leucopha	2
18	70				02	90	154	041		L. species	2
19	70	04	05	00	9 02	90	154	041		M. balthica	2
20	70	04	05	01	0 02	90	154	041		M. mitchell	2
21	70	04	05	00	8 02	90	154	041		R. cuneata	2
22	70	04	05	03	2 02	90	154	041		M. arenaria	2
23	70	04	04	01	9 02	90	154	041		Hydrobia	2
24	70	04	04	02	1 02	90	154	041		S. niger	2
25	70	04	04	02	0 02	90	154	041		D. obscura	2

CBL- Duguay cbl-2a Scraping

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD		COUNTY	TIDE	WEATH.	REPIT.
XIF451 8 (R4-BOTTOM)	901207	0949	08	0213997	70	01	11			BA		1	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
391428.	0762150.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE (0 = None Present; 1 = Very Abundant; 2 = Abundant; 3 = Present)	REMARKS		SEQUENCE	NUMBER
27	70	05	30	71	029	0154	041	2		B. improvis		2
28	70	05	30	72	029	0154	041			B. subalbid		2
29	70	05	31	45	029	0154	041			L. american		2
30	70	05	31	61	029	0154	041			C. polita		2
31	70	05	31	63	029	0154	041			C. lunifron		2
33	70	05	31	64	029	0154	041			E. triloba		2
34	70	05	31	76	029	0154	041			N. biarticu		2
35	70	05	31	70	029	0154	041			G. palustri		2
36	70	05	31	76	029	0154	041			L. plumusos		2
37	70	05	31	73	029	0154	041	2		C. lacustre		2
38	70	05	31	73	029	0154	041			G. daiberi		2
39	70	05	31	70	029	0154	041			G. tigrinus		2
40	70	05	31	72	029	0154	041			M. nitida		2
41	70	05	31	61	029	0154	041			C. almyra		2
42	70	05	31	75	029	0154	041			M. edwardsi		2
43	70	05	42	40	001	0154	041			C. species		2
44	70	05	21	90	014	0154	041			R. harrisi		2
45	70	05	31	70	45	0154	041			G. mucronat		2
46	70	03	30	10	001	0154	041	3		C. caspia		2
47	70	03	30	10	020	0154	041			G. francisc		2
48	70	03	50	50	031	0154	041			S. elliptic		2
49	70	06	60	20	001	0154	041			M. tenuis		2
50	70	06	60	20	002	0154	041			V. pavida		2
	70				029	0154	041					2
	700				029	0154	041					2

CBL- Duguay cbl-1a Scraping

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD		COUNTY	TIDE	WEATH.	REPIT.
R5-Top													
XIF3638	901207	0932	03	0213997	70	01	11			BA		1	1

LATITUDE (DDMMSS)	LONGITUDE (DDDMMSS)	SEQUENCE NUMBER
391337.	0762347.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE (0 = None Present, 1 = Very Abundant, 2 = Abundant, 3 = Present)	REMARKS		SEQUENCE	NUMBER
1	70	03	03	02	8 02	90 154	04	1		D. leucolen		2
2	70	04	01	00	2 02	90 154	04	1		M. leidyi		2
3	70	04	01	00	3 02	90 154	04	1		H. filiform		2
4	70	04	01	00	8 02	90 154	04	1		M. species		2
5	70	04	01	00	4 02	90 154	04	1		N. succinea		2
6	70	04	09	00	1 02	90 154	04	1		S. fragilis		2
7	70	04	01	03	8 02	90 154	04	1		P. gouldi		2
8	70	04	01	01	7 02	90 154	04	1		E. heteropo		2
9	70	04	01	05	7 02	90 154	04	1		P. ligni		2
10	70	04	01	00	5 02	90 154	04	1		S. viridis		2
11	70	04	01	01	8 02	90 154	04	1		S. benedict		2
12	70	04	01	03	9 02	90 154	04	1		H. grayi		2
13	70	04	02	02	9 02	90 154	04	1		L. hoffmeis		2
14	70	04	02	02	3 02	90 154	04	1		P. tubifici		2
15	70	04	01	00	7 02	90 154	04	1		C. capitata		2
16	70	04	05	00	6 02	90 154	04	1		I. recurvus		2
17	70	04	05	00	7 02	90 154	04	1		C. leucopha		2
18	70	[illegible]			02	90 154	04	1		L. species		2
19	70	04	05	00	9 02	90 154	04	1		M. balthica		2
20	70	04	05	01	0 02	90 154	04	1		M. mitchell		2
21	70	04	05	00	8 02	90 154	04	1		R. cuneata		2
22	70	04	05	03	2 02	90 154	04	1		M. arenaria		2
23	70	04	04	01	9 02	90 154	04	1		Hydrobia		2
24	70	04	04	02	1 02	90 154	04	1		S. niger		2
25	70	04	04	02	0 02	90 154	04	1		D. obscura		2

CBL- Duguay cbl-2a Scraping

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD		COUNTY	TIDE	WEATH.	REPIT.
XIF3638 R5-Top	901207	0932	03	0213997	70	01	11			BA		1	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
3913337.	0762347.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE (0 = None Present, 1 = Very Abundant, 2 = Abundant, 3 = Present)	REMARKS		SEQUENCE	NUMBER
27	70	053	07	01	1 02	90	154	041	3	B. improvis		2
28	70	053	07	01	2 02	90	154	041	1	B. subalbid		2
29	70	053	14	05	4 02	90	154	041		L. american		2
30	70	053	16	01	2 02	90	154	041		C. polita		2
31	70	053	16	03	0 02	90	154	041		C. lunifron		2
33	70	053	16	02	4 02	90	154	041		E. trilcba		2
34	70	053	17	02	6 02	90	154	041		N. biarticu		2
35	70	053	17	00	3 02	90	154	041	3	G. palustri		2
36	70	053	17	01	6 02	90	154	041		L. plumusos		2
37	70	053	17	01	3 02	90	154	041	3	C. lacustre		2
38	70	053	17	03	3 02	90	154	041		G. daiberi		2
39	70	053	17	02	0 02	90	154	041		G. tigrinus		2
40	70	053	17	02	2 02	90	154	041		M. nitida		2
41	70	053	16	02	1 02	90	154	041		C. almyra		2
42	70	053	17	02	5 02	90	154	041		M. edwardsi		2
43	70	054	24	00	1 02	90	154	041		C. species		2
44	[illegible]	[illegible]	19	01	4 02	90	154	041		R. harrisi		2
45	[illegible]	[illegible]	17	04	5 02	90	154	041		G. mucronat		2
46	70	033	01	00	1 02	90	154	041	2	C. caspia		2
47	70	033	01	00	2 02	90	154	041		G. francisc		2
48	70	035	05	03	1 02	90	154	041		S. elliptic		2
49	70	066	02	00	1 02	90	154	041		M. tenuis		2
50	70	066	02	00	2 02	90	154	041		V. pavida		2
	70				02	90	154	041				2
	70				02	90	154	041				2

CBL- Duguay cbl-1a Scraping

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
R5-Bottom												
XIF3638	901207	0932	08	0213997	70	01	11		BA		11	

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSS	
391337.	0762347.	1

RESOURCE MONITORING DATA SHEET

VALUE: 0 = None Present; 1 = Very Abundant; 2 = Abundant; 3 = Present

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE	REMARKS		SEQUENCE	NUMBER
1	70	03	03	028	029	015	041			D. leucolen		2
2	70	04	01	002	029	015	041			M. leidyi		2
3	70	04	01	003	029	015	041			H. filiform		2
4	70	04	01	008	029	015	041			M. species		2
5	70	04	01	004	029	015	041	3		N. succinea		2
6	70	04	09	001	029	015	041			S. fragilis		2
7	70	04	01	038	029	015	041			P. gouldi		2
8	70	04	01	017	029	015	041			E. heteropo		2
9	70	04	01	057	029	015	041			P. ligni		2
10	70	04	01	005	029	015	041			S. viridis		2
11	70	04	01	018	029	015	041			S. benedict		2
12	70	04	01	039	029	015	041			H. grayi		2
13	70	04	02	029	029	015	041			L. hoffmeis		2
14	70	04	02	023	029	015	041			P. tubifici		2
15	70	04	01	007	029	015	041			C. capitata		2
16	70	04	05	006	029	015	041			I. recurvus		2
17	[illegible]	9	05	007	029	015	041			C. leucopha		2
18	70	[illegible]			029	015	041			L. species		2
19	70	04	05	009	029	015	041			M. balthica		2
20	70	04	05	010	029	015	041			M. mitchell		2
21	70	04	05	008	029	015	041			R. cuneata		2
22	70	04	05	032	029	015	041			M. arenaria		2
23	70	04	04	019	029	015	041			Hydrobia		2
24	70	04	04	021	029	015	041			S. niger		2
25	70	04	04	020	029	015	041			D. obscura		2

CBL- Duguay cbl-2a Scraping

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD		COUNTY	TIDE	WEATH.	REPIT.
R5-Bottom													
XIF3638	901207	0932	08	0213997	70	01	11			BA		1	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
3913337.	0762347.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE (0 = None Present; 1 = Very Abundant; 2 = Abundant; 3 = Present)	REMARKS		SEQUENCE	NUMBER
27	70	05	30	7	011	029	015	40	41	3		2
28	70	05	30	7	012	029	015	40	41	3		2
29	70	05	31	4	054	029	015	40	41			2
30	70	05	31	6	012	029	015	40	41			2
31	70	05	31	6	030	029	015	40	41			2
33	70	05	31	6	024	029	015	40	41			2
34	70	05	31	7	026	029	015	40	41			2
35	70	05	31	7	003	029	015	40	41			2
36	70	05	31	7	016	029	015	40	41			2
37	70	05	31	7	013	029	015	40	41	2		2
38	70	05	31	7	033	029	015	40	41			2
39	70	05	31	7	020	029	015	40	41	3		2
40	70	05	31	7	022	029	015	40	41			2
41	70	05	31	6	021	029	015	40	41			2
42	70	05	31	7	025	029	015	40	41			2
43	70	05	42	4	001	029	015	40	41			2
44	70	[illegible]	19	0	014	029	015	40	41			2
45	70	05	3	17045		029	015	40	41			2
46	70	03	30	1	001	029	015	40	41	1		2
47	70	03	30	1	002	029	015	40	41			2
48	70	03	50	5	031	029	015	40	41			2
49	70	06	60	2	001	029	015	40	41	2		2
50	70	06	60	2	002	029	015	40	41			2
	70					029	015	40	41			2
	700					029	015	40	41			2

Species	Sequence	Number
B. improvis		2
B. subalbid		2
L. american		2
C. polita		2
C. lunifron		2
E. triloba		2
N. biarticu		2
G. palustri		2
L. plumusos		2
C. lacustre		2
G. daiberi		2
G. tigrinus		2
M. nitida		2
C. almyra		2
M. edwardsi		2
C. species		2
R. harrisi		2
G. mucronat		2
C. caspia		2
G. francisc		2
S. elliptic		2
M. tenuis		2
V. pavida		2

CEL- Duguay cbl-1 PONAR GRAB

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
XIF5710 51	910408	1515	06	021399977	70	01	11		BAF		2	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
3915393	0762057	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1	GRAB #2	GRAB #3		SEQUENCE	NUMBER
								VALUE					
1	70	03	30	02	80	29	00	64	00	3	D. leucolen		2
2	70	04	00	10	02	02	90	06	40	3	M. leidyi		2
3	70	04	80	10	03	02	90	06	40	3	E. filiform		2
4	70	04	80	10	08	02	90	06	40	3	M. species		2
5	70	04	80	10	04	02	90	06	40	3	N. succinea		2
6	70	04	80	09	01	02	90	06	40	3	S. fragilis		2
7	70	04	80	10	38	02	90	06	40	3	P. gouldi		2
8	70	04	80	10	17	02	90	06	40	3	E. heteropo		2
9	70	04	80	10	57	02	90	06	40	3	P. ligni		2
10	70	04	80	10	05	02	90	06	40	3	S. viridis (GRAB #1: 62; GRAB #2: 39; GRAB #3: 123)		2
11	70	04	80	10	18	02	90	06	40	3	S. benedict		2
12	70	04	80	10	39	02	90	06	40	3	H. grayi		2
13	70	04	80	20	29	02	90	06	40	3	L. hoffmeis		2
14	70	04	80	20	23	02	90	06	40	3	P. tubifici		2
15	70	04	80	10	07	02	90	06	40	3	C. capitata		2
16	70 [redacted]		05	00	06	02	90	06	40	3	I. recurvus		2
17	70 [redacted]		05	00	07	02	90	06	40	3	C. leucopha		2
18	70					02	90	06	40	3	L. species		2
19	70	04	90	50	09	02	90	06	40	3	M. balthica		2
20	70	04	90	50	10	02	90	06	40	3	M. mitchell		2
21	70	04	90	50	08	02	90	06	40	3	R. cuneata		2
22	70	04	90	50	32	02	90	06	40	3	M. arenaria		2
23	70	04	90	40	19	02	90	06	40	3	Hydrobia		2
24	70	04	90	40	21	02	90	06	40	3	S. niger		2
25	70	04	90	40	20	02	90	06	40	3	D. obscura		2

CSL- Duguay cbl-2 Ponar grab

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB	CODE	METHOD		COUNTY	TIDE	WEATH.	REPIT.
51	910408	1515	06	02139977	70	01	11				BA	F	2	1
XIF5710														

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
3915339.	0762057.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1	GRAB #2	GRAB #3		SEQUENCE NUMBER
								VALUE				
27	70	05	30	70	11	02	90	64	00	3	B. improvis	2
28	70	05	30	70	12	02	90	64	00	3	B. subalbid	2
29	70	05	31	40	54	02	90	64	00	3	L. american	2
30	70	05	31	60	12	02	90	64	00	3	C. polita	2
31	70	05	31	60	03	02	90	64	00	3	C. lunifron	2
33	70	05	31	60	24	02	90	64	00	3	E. trilcba	2
34	70	05	31	70	26	02	90	64	00	3	N. biarticu	2
35	70	05	31	70	03	02	90	64	00	3	G. palustri	2
36	70	05	31	70	16	02	90	64	00	3	L. plumuscs	2
37	70	05	31	70	13	02	90	64	00	3	C. labustre	2
38	70	05	31	70	33	02	90	64	00	3	G. daiberi	2
39	70	05	31	70	20	02	90	64	00	3	G. tigrinus	2
40	70	05	31	70	22	02	90	64	00	3	M. nitida	2
41	70	05	31	60	21	02	90	64	00	3	C. almyra	2
42	70	05	31	70	25	02	90	64	00	3	M. edwardsi	2
43	70	05	32	40	01	02	90	64	00	3	C. species	2
44	70	05	31	90	14	02	90	64	00	3	R. harrisi	2
45	70	05	31	70	45	02	90	64	00	3	G. mucronat	2
46	70	03	30	10	01	02	90	64	00	3	C. caspia	2
47	70	03	30	10	02	02	90	64	00	3	G. francisc	2
48	70	03	50	50	31	02	90	64	00	3	S. elliptic	2
49	70	06	60	20	01	02	90	64	00	3	M. tenuis	2
50	70	06	60	20	02	02	90	64	00	3	V. pavida	2
	70					02	90	64	00	3		2
	70	0				02	90	64	00	3		2

CBL- Duguay cbl-1 PONAR GRAB

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
XIF546 S2	910408	1504	11	0213997	70	01	11		BA	F	2	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSSS	
395125	0762035	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1	GRAB #2	GRAB #3		SEQUENCE NUMBER
								VALUE				
1	70	03	30	03	02	90	64	00	3		D. leucolen	2
2	70	04	00	10	00	20	90	64	00	3	M. leidyi	2
3	70	04	80	10	00	30	90	64	00	3	E. filiform	2
4	70	04	80	10	00	80	90	64	00	3	M. species	2
5	70	04	80	10	00	40	90	64	00	3	N. succinea	2
6	70	04	80	90	00	10	90	64	00	3	S. fragilis	2
7	70	04	80	10	03	80	90	64	00	3	P. gouldi	2
8	70	04	80	10	01	70	90	64	00	3	E. heterepo	2
9	70	04	80	10	05	70	90	64	00	3	P. ligni	2
10	70	04	80	10	00	50	90	64	00	3	S. viridis 2 5 3 5	2
11	70	04	80	10	01	80	90	64	00	3	S. benedict	2
12	70	04	80	10	03	90	90	64	00	3	H. grayi	2
13	70	04	80	20	02	90	90	64	00	3	L. hoffmeis	2
14	70	04	80	20	02	30	90	64	00	3	P. tubifici 4 2 4	2
15	70	04	80	10	00	70	90	64	00	3	C. capitata	2
16	[illegible]	[illegible]	90	05	00	60	90	64	00	3	I. recurvus	2
17	[illegible]	[illegible]	90	05	00	70	90	64	00	3	C. leucopha	2
18	70	[illegible]	[illegible]	[illegible]	[illegible]	02	90	64	00	3	L. species	2
19	70	04	90	05	00	90	90	64	00	3	M. balthica	2
20	70	04	90	05	01	00	90	64	00	3	M. mitchell	2
21	70	04	90	05	00	80	90	64	00	3	R. cuneata 1	2
22	70	04	90	05	03	20	90	64	00	3	M. arenaria	2
23	70	04	90	04	01	90	90	64	00	3	Hydrobia	2
24	70	04	90	04	02	10	90	64	00	3	S. niger	2
25	70	04	90	04	02	00	90	64	00	3	D. obscura	2

CSL- Duguay cbl-2 Ponar grab

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATHER	REPITIT.
X I F 5 4 0 6 52	9 1 0 4 0 8	1 5 0 4	1 1	0 2 1 3 9 9 9 7	7 0	0 1	1		B A	F	2	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
3 9 1 5 2 5.	0 7 6 2 0 3 5.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
27	7	0 0 5	3 0 7	0 1 1	0 2 9	0 0 6	4 0 0 3	3	1 0	8	B. improvis	2
28	7	0 0 5	3 0 7	0 1 2	0 2 9	0 0 6	4 0 0 3			1	B. subalbid	2
29	7	0 0 5	3 1 4	0 5 4	0 2 9	0 0 6	4 0 0 3				L. american	2
30	7	0 0 5	3 1 6	0 1 2	0 2 9	0 0 6	4 0 0 3	1	2		C. polita	2
31	7	0 0 5	3 1 6	0 3 0	0 2 9	0 0 6	4 0 0 3		3	1	C. lunifron	2
33	7	0 0 5	3 1 6	0 2 4	0 2 9	0 0 6	4 0 0 3				E. trilcba	2
34	7	0 0 5	3 1 7	0 2 6	0 2 9	0 0 6	4 0 0 3				N. biarticu	2
35	7	0 0 5	3 1 7	0 0 3	0 2 9	0 0 6	4 0 0 3				G. palustri	2
36	7	0 0 5	3 1 7	0 1 6	0 2 9	0 0 6	4 0 0 3			2	L. plumuscs	2
37	7	0 0 5	3 1 7	0 1 3	0 2 9	0 0 6	4 0 0 3	8	3 6	1 5	C. labustre	2
38	7	0 0 5	3 1 7	0 3 3	0 2 9	0 0 6	4 0 0 3				G. daiberi	2
39	7	0 0 5	3 1 7	0 2 0	0 2 9	0 0 6	4 0 0 3		2	2	G. tigrinus	2
40	7	0 0 5	3 1 7	0 2 2	0 2 9	0 0 6	4 0 0 3				M. nitida	2
41	7	0 0 5	3 1 6	0 2 1	0 2 9	0 0 6	4 0 0 3				C. almyra	2
42	7	0 0 5	3 1 7	0 2 5	0 2 9	0 0 6	4 0 0 3				M. edwardsi	2
43	7	0 0 5	4 2 4	0 0 1	0 2 9	0 0 6	4 0 0 3				C. species	2
44	7	0 0 5	3 1 9	0 1 4	0 2 9	0 0 6	4 0 0 3	3			R. harrisi	2
45	7	0 0 5	3 1 7	0 4 5	0 2 9	0 0 6	4 0 0 3				G. mucronat	2
46	7	0 0 3	3 0 1	0 0 1	0 2 9	0 0 6	4 0 0 3				C. caspia	2
47	7	0 0 3	3 0 1	0 0 2	0 2 9	0 0 6	4 0 0 3				G. francisc	2
48	7	0 0 3	5 0 5	0 3 1	0 2 9	0 0 6	4 0 0 3				S. elliptic	2
49	7	0 0 6	6 0 2	0 0 1	0 2 9	0 0 6	4 0 0 3	4 5	3 9	7 0	M. tenuis	2
50	7	0 0 6	6 0 2	0 0 2	0 2 9	0 0 6	4 0 0 3				V. pavida	2
	7	0			0 2 9	0 0 6	4 0 0 3					2
	7	0 0			0 2 9	0 0 6	4 0 0 3					2

CSL- Duguay cbl-1 PCNAR GRAB

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
XIF48 11 53	910408	1424	13	021399977	70	01	11		BA	F	1	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSSS	
391450.	0762107.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
1	70	03	03	02	8 0 2 9	0 6 4	0 0 3				D. leucolen	2
2	70	04	01	00	2 0 2 9	0 6 4	0 0 3			2	M. leidyi	2
3	70	04	01	00	3 0 2 9	0 6 4	0 0 3			5	H. filiform	2
4	70	04	01	00	8 0 2 9	0 6 4	0 0 3				M. species	2
5	70	04	01	00	4 0 2 9	0 6 4	0 0 3				N. succinea	2
6	70	04	09	00	1 0 2 9	0 6 4	0 0 3				S. fragilis	2
7	70	04	01	03	8 0 2 9	0 6 4	0 0 3				P. gouldi	2
8	70	04	01	01	7 0 2 9	0 6 4	0 0 3				E. heterepo	2
9	70	04	01	05	7 0 2 9	0 6 4	0 0 3				P. ligni	2
10	70	04	01	00	5 0 2 9	0 6 4	0 0 3	110	33	3 96	S. viridis	2
11	70	04	01	01	8 0 2 9	0 6 4	0 0 3				S. benedict	2
12	70	04	01	03	9 0 2 9	0 6 4	0 0 3				H. grayi	2
13	70	04	02	02	9 0 2 9	0 6 4	0 0 3				L. hoffmeis	2
14	70	04	02	02	3 0 2 9	0 6 4	0 0 3	15	68	6	P. tubifici	2
15	70	04	01	00	7 0 2 9	0 6 4	0 0 3				C. capitata	2
16	70	04	05	00	6 0 2 9	0 6 4	0 0 3				I. recurvus	2
17	70	[illegible]	05	00	7 0 2 9	0 6 4	0 0 3				C. leucopha	2
18	70				0 2 9	0 6 4	0 0 3				L. species	2
19	70	04	05	00	9 0 2 9	0 6 4	0 0 3			2	M. balthica	2
20	70	04	05	01	0 0 2 9	0 6 4	0 0 3			3	M. mitchell	2
21	70	04	05	00	8 0 2 9	0 6 4	0 0 3	6	13	5	R. cuneata	2
22	70	04	05	03	2 0 2 9	0 6 4	0 0 3				M. arenaria	2
23	70	04	04	01	9 0 2 9	0 6 4	0 0 3				Hydrobia	2
24	70	04	04	02	1 0 2 9	0 6 4	0 0 3				S. niger	2
25	70	04	04	02	0 0 2 9	0 6 4	0 0 3				D. obscura	2

CSL- Duguay ch1-2 Ponar grab

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
XIF48 11 S3	910408	1424	13	02139997	70	01	11		BA	F	1	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
391450.	0762107.	1

RESOURCE MONITORING DATA SHEET

5/15/03 OK

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1	GRAB #2	GRAB #3		SEQUENCE NUMBER
								VALUE				
27	70	05	30	70	11	02	90	64	00	3	B. improvis	2
28	70	05	30	70	12	02	90	64	00	3	B. subalbid	2
29	70	05	31	40	54	02	90	64	00	3	L. american	2
30	70	05	31	60	12	02	90	64	00	3	C. polita	2
31	70	05	31	60	30	02	90	64	00	3	C. lunifron	2
33	70	05	31	60	24	02	90	64	00	3	E. triloba	2
34	70	05	31	70	26	02	90	64	00	3	N. biarticu	2
35	70	05	31	70	03	02	90	64	00	3	G. palustri	2
36	70	05	31	70	16	02	90	64	00	3	L. plumuscs	2
37	70	05	31	70	13	02	90	64	00	3	C. lacustre	2
38	70	05	31	70	33	02	90	64	00	3	G. daiberi	2
39	70	05	31	70	20	02	90	64	00	3	G. tigrinus	2
40	70	05	31	70	22	02	90	64	00	3	M. nitida	2
41	70	05	31	60	21	02	90	64	00	3	C. almyra	2
42	70	05	31	70	25	02	90	64	00	3	M. edwardsi	2
43	70	05	32	40	01	02	90	64	00	3	C. species	2
44	70	05	31	90	14	02	90	64	00	3	R. harrisi	2
45	70	05	31	70	45	02	90	64	00	3	G. mucronat	2
46	70	03	30	10	01	02	90	64	00	3	C. caspia	2
47	70	03	30	10	02	02	90	64	00	3	G. francisc	2
48	70	03	50	50	31	02	90	64	00	3	S. elliptic	2
49	70	06	60	20	01	02	90	64	00	3	M. tenuis	2
50	70	06	60	20	02	02	90	64	00	3	V. pavida	2
	70					02	90	64	00	3		2
	700					02	90	64	00	3		2

CBL- Duquay cbl-1 PONAR GRAB

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
XIF4715 (54)	910408	1321	13	021399977	70	01	11		BA	F	1	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
3914400	0762128	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1	GRAB #2	GRAB #3		SEQUENCE	NUMBER
1	70	03	03	028	029	064	003				D. leucolen		2
2	70	04	01	002	029	064	003		1		M. leidyi		2
3	70	04	01	003	029	064	003				E. filiform		2
4	70	04	01	008	029	064	003				M. species		2
5	70	04	01	004	029	064	003		1		N. succinea		2
6	70	04	09	001	029	064	003				S. fragilis		2
7	70	04	01	038	029	064	003				P. gouldi		2
8	70	04	01	017	029	064	003				E. heteropo		2
9	70	04	01	057	029	064	003			1	P. ligni		2
10	70	04	01	005	029	064	003	95		54	S. viridis		2
11	70	04	01	018	029	064	003				S. benedict		2
12	70	04	01	039	029	064	003				H. grayi		2
13	70	04	02	029	029	064	003				L. hoffmeis		2
14	70	04	02	023	029	064	003	37		15	P. tubifici		2
15	70	04	01	007	029	064	003				C. capitata		2
16	70	[illegible]	05	006	029	064	003				I. recurvus		2
17	70	[illegible]	05	007	029	064	003				C. leucopha		2
18	70				029	064	003				L. species		2
19	70	04	05	009	029	064	003		1	1	M. balthica		2
20	70	04	05	001	029	064	003			2	M. mitchell		2
21	70	04	05	008	029	064	003		2	2	R. cuneata		2
22	70	04	05	032	029	064	003				M. arenaria		2
23	70	04	04	019	029	064	003				Hydrobia		2
24	70	04	04	021	029	064	003				S. niger		2
25	70	04	04	020	029	064	003				D. obscura		2

CSL- Duguay cbl-2 Ponar grab

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD		COUNTY	TIDE	WEATH.	REPIT.	
X I F 4 7 1 5 54	9 1 0 4 0 8	1 3 2 1	1 3	0 2 1 3 9 9 9 7	7 0	0 1	1			B A	F	1	1	

LATITUDE		LONGITUDE		SEQUENCE NUMBER
D D M M S S S		D D D M M S S S		
3 9 1 4 4 0		0 7 6 2 1 2 8		1

5/15/03 OK

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
27	7	0 0	5 3	0 7	0 1 1	0 2 9	0 0 6 4	0 0 3			B. improvis	2
28	7	0 0	5 3	0 7	0 1 2	0 2 9	0 0 6 4	0 0 3			B. subalbid	2
29	7	0 0	5 3	1 4	0 5 4	0 2 9	0 0 6 4	0 0 3			L. american	2
30	7	0 0	5 3	1 6	0 1 2	0 2 9	0 0 6 4	0 0 3	1 5	1 7	9 C. polita	2
31	7	0 0	5 3	1 6	0 3 0	0 2 9	0 0 6 4	0 0 3		1	C. lunifron	2
33	7	0 0	5 3	1 6	0 2 4	0 2 9	0 0 6 4	0 0 3			4 E. trilcka	2
34	7	0 0	5 3	1 7	0 2 6	0 2 9	0 0 6 4	0 0 3			N. biarticu	2
35	7	0 0	5 3	1 7	0 0 3	0 2 9	0 0 6 4	0 0 3			G. palustri	2
36	7	0 0	5 3	1 7	0 1 6	0 2 9	0 0 6 4	0 0 3	3 3	2 7	L. plumusos	2
37	7	0 0	5 3	1 7	0 1 3	0 2 9	0 0 6 4	0 0 3	2 0	1 0	1 5 C. lacustre	2
38	7	0 0	5 3	1 7	0 3 3	0 2 9	0 0 6 4	0 0 3			G. daiberi	2
39	7	0 0	5 3	1 7	0 2 0	0 2 9	0 0 6 4	0 0 3			G. tigrinus	2
40	7	0 0	5 3	1 7	0 2 2	0 2 9	0 0 6 4	0 0 3	1	1	M. nitida	2
41	7	0 0	5 3	1 6	0 2 1	0 2 9	0 0 6 4	0 0 3			C. almyra	2
42	7	0 0	5 3	1 7	0 2 5	0 2 9	0 0 6 4	0 0 3	1	1	4 M. edwardsi	2
43	7	0 0	4 2	4	0 0 1	0 2 9	0 0 6 4	0 0 3			C. species	2
44	7	0 0	3 1	9	0 1 4	0 2 9	0 0 6 4	0 0 3			R. harrisi	2
45	7	0 0	5 3	1 7	0 4 5	0 2 9	0 0 6 4	0 0 3			G. mucronat	2
46	7	0 0	3 3	0 1	0 0 1	0 2 9	0 0 6 4	0 0 3			C. caspia	2
47	7	0 0	3 3	0 1	0 0 2	0 2 9	0 0 6 4	0 0 3			G. francisc	2
48	7	0 0	3 5	0 5	0 3 1	0 2 9	0 0 6 4	0 0 3			S. elliptic	2
49	7	0 0	6 6	0 2	0 0 1	0 2 9	0 0 6 4	0 0 3	1		M. tenuis	2
50	7	0 0	6 6	0 2	0 0 2	0 2 9	0 0 6 4	0 0 3			V. pavida	2
	7	0				0 2 9	0 0 6 4	0 0 3				2
	7	0 0				0 2 9	0 0 6 4	0 0 3				2

CEL- Duguay cbl-1 PONAR GRAB

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD		COUNTY	TIDE	WEATH.	REPLIT.
55	910408	1150	19	021399977	70	01	11			BA	F	1	1
XIF4420													

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSSS	
394423.	0762200.	1

RESOURCE MONITORING DATA SHEET

SPECIMEN #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
1	70	03	03	028	029	006	403				D. leucolena	2
2	70	04	01	002	029	006	403		1		M. leidyi	2
3	70	04	01	003	029	006	403				E. filiform	2
4	70	04	01	008	029	006	403				M. species	2
5	70	04	01	004	029	006	403	2			N. succinea	2
6	70	04	09	001	029	006	403				S. fragilis	2
7	70	04	01	038	029	006	403				P. gouldi	2
8	70	04	01	017	029	006	403				E. heteropo	2
9	70	04	01	057	029	006	403				P. ligni	2
10	70	04	01	005	029	006	403	1	1	5	S. viridis	2
11	70	04	01	018	029	006	403				S. benedict	2
12	70	04	01	039	029	006	403				E. grayi	2
13	70	04	02	029	029	006	403				L. hoffmeis	2
14	70	04	02	023	029	006	403	12	52	80	P. tubifici	2
15	70	04	01	007	029	006	403				C. capitata	2
16	70	04	05	006	029	006	403				I. recurvus	2
17	70	04	05	007	029	006	403				C. leucopha	2
18	70				029	006	403				L. species	2
19	70	04	05	009	029	006	403			3	M. balthica	2
20	70	04	05	010	029	006	403	1	6	5	M. mitchell	2
21	70	04	05	008	029	006	403			2	R. cuneata	2
22	70	04	05	032	029	006	403				M. arenaria	2
23	70	04	04	019	029	006	403	1			Hydrobia	2
24	70	04	04	021	029	006	403				S. niger	2
25	70	04	04	020	029	006	403				D. obscura	2

CBL- Duguay cbl-2 Ponar grab

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
XIF44 20 55	910408	1150	19	02139977	70	01	11		BA	F	1	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
3914 23.	0762 20.	1

5/12/03 OK

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
27	70	05	30	7	11	02	90	64	03		B. improvis	2
28	70	05	30	7	12	02	90	64	03		B. subalbid	2
29	70	05	31	4	54	02	90	64	03		L. american	2
30	70	05	31	6	12	02	90	64	03	1 / 7 / 5	C. polita	2
31	70	05	31	6	03	02	90	64	03		C. lunifron	2
33	70	05	31	6	24	02	90	64	03	1	E. triloba	2
34	70	05	31	7	26	02	90	64	03		N. biarticu	2
35	70	05	31	7	03	02	90	64	03		G. palustri	2
36	70	05	31	7	16	02	90	64	03	5 / 46 / 48	L. plumuscs	2
37	70	05	31	7	13	02	90	64	03	29 / 3 / 4	C. lacustre	2
38	70	05	31	7	33	02	90	64	03		G. daiberi	2
39	70	05	31	7	20	02	90	64	03	1	G. tigrinus	2
40	70	05	31	7	22	02	90	64	03	1	M. nitida	2
41	70	05	31	6	21	02	90	64	03		C. almyra	2
42	70	05	31	7	25	02	90	64	03		M. edwardsi	2
43	70	05	32	4	01	02	90	64	03		C. species	2
44	70	05	31	9	14	02	90	64	03		R. harrisi	2
45	70	05	31	7	45	02	90	64	03		G. mucronat	2
46	70	03	30	1	01	02	90	64	03		C. caspia	2
47	70	03	30	1	02	02	90	64	03		G. francisc	2
48	70	03	35	5	31	02	90	64	03		S. elliptic	2
49	70	06	66	2	01	02	90	64	03	1	M. tenuis	2
50	70	06	66	2	02	02	90	64	03		V. pavida	2
	70					02	90	64	03			2
	70	0				02	90	64	03			2

CEL- Duguay cl-1-1 PONAR GRAB

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
XIF4327 S6	910408	1111	10	02139977	70	00	11		BA	F	1	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
39141 7	076224 1	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
1	70	03	03	02	80	29	00	64	00	3	D. leucolen	2
2	70	04	01	00	20	29	00	64	00	3	M. leidyi	2
3	70	04	01	00	30	29	00	64	00	3	H. filiform	2
4	70	04	01	00	80	29	00	64	00	3	M. species	2
5	70	04	01	00	40	29	00	64	00	3	N. succinea	2
6	70	04	09	00	10	29	00	64	00	3	S. fragilis	2
7	70	04	01	03	80	29	00	64	00	3	P. gouldi	2
8	70	04	01	01	70	29	00	64	00	3	E. heteropo	2
9	70	04	01	05	70	29	00	64	00	3	P. ligni	2
10	70	04	01	00	50	29	00	64	00	3	S. viridis	2
11	70	04	01	01	80	29	00	64	00	3	S. benedict	2
12	70	04	01	03	90	29	00	64	00	3	H. grayi	2
13	70	04	02	02	90	29	00	64	00	3	L. hoffmeis	2
14	70	04	02	02	30	29	00	64	00	3	P. tubifici	2
15	70	04	01	00	70	29	00	64	00	3	C. capitata	2
16	70	04	05	00	60	29	00	64	00	3	I. recurvus	2
17	70	04	05	00	70	29	00	64	00	3	C. leucopha	2
18	70	[illegible]	[illegible]	[illegible]	[illegible]	29	00	64	00	3	L. species	2
19	70	04	05	00	90	29	00	64	00	3	M. balthica	2
20	70	04	05	01	00	29	00	64	00	3	M. mitchell	2
21	70	04	05	00	80	29	00	64	00	3	R. cuneata	2
22	70	04	05	03	20	29	00	64	00	3	M. arenaria	2
23	70	04	04	01	90	29	00	64	00	3	Hydrobia	2
24	70	04	04	02	10	29	00	64	00	3	S. niger	2
25	70	04	04	02	00	29	00	64	00	3	D. obscura	2

CBL- Duguay cbl-2 Ponar grab

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
XIF4327 56	910408	1111	10	02139977	70	01	11		BA	F	1	1

5/19/03 OK

LATITUDE (DDMMSS)	LONGITUDE (DDDMMSS)	SEQUENCE NUMBER
39 14 17.	076 22 41.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
27	70	05	30	07	01	02	90	64	03		B. improvis	2
28	70	05	30	07	02	02	90	64	03		B. subalbid	2
29	70	05	31	04	05	02	90	64	03		L. american	2
30	70	05	31	06	01	02	90	64	03	7 6 6	C. polita	2
31	70	05	31	06	03	02	90	64	03		C. lunifron	2
33	70	05	31	06	02	02	90	64	03	3 1	E. triloba	2
34	70	05	31	07	02	02	90	64	03		N. biarticu	2
35	70	05	31	07	03	02	90	64	03		G. palustri	2
36	70	05	31	07	01	02	90	64	03	3 4 6 4 5 7	L. plumuscs	2
37	70	05	31	07	01	02	90	64	03	2 5 7	C. lacustre	2
38	70	05	31	07	03	02	90	64	03		G. daiberi	2
39	70	05	31	07	02	02	90	64	03		G. tigrinus	2
40	70	05	31	07	02	02	90	64	03		M. nitida	2
41	70	05	31	06	02	02	90	64	03		C. almyra	2
42	70	05	31	07	02	02	90	64	03	1	M. edwardsi	2
43	70	05	32	04	00	02	90	64	03		C. species	2
44	70	05	31	09	01	02	90	64	03		R. harrisi	2
45	70	05	31	07	04	02	90	64	03		G. mucronat	2
46	70	03	30	01	00	02	90	64	03		C. caspia	2
47	70	03	30	01	00	02	90	64	03		G. francisc	2
48	70	03	35	05	03	02	90	64	03		S. elliptic	2
49	70	06	60	02	00	02	90	64	03		M. tenuis	2
50	70	06	60	02	00	02	90	64	03		V. pavida	2
	70					02	90	64	03			2
	700					02	90	64	03			2

CBL- Duguay cbl-1 PCNAR GRAB

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
XIG540 5 7	910408	1437	13	021399977	70	01	11		BAF		1	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSSS	
391523	0762028	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
1	70	03	30	28	029	006	403				D. leucolen	2
2	70	04	01	02	029	006	403	1			M. leidyi	2
3	70	04	01	03	029	006	403		1	2	H. filiform	2
4	70	04	01	08	029	006	403				M. species	2
5	70	04	01	04	029	006	403				N. succinea	2
6	70	04	09	01	029	006	403				S. fragilis	2
7	70	04	01	38	029	006	403				P. gouldi	2
8	70	04	01	17	029	006	403				E. heteropo	2
9	70	04	01	57	029	006	403				P. ligni	2
10	70	04	01	05	029	006	403	232	121	262	S. viridis	2
11	70	04	01	18	029	006	403				S. benedict	2
12	70	04	01	39	029	006	403				H. grayi	2
13	70	04	02	29	029	006	403				L. hoffmeis	2
14	70	04	02	23	029	006	403	1	8	5	P. tubifici	2
15	70	04	01	07	029	006	403				C. capitata	2
16	70	04	05	06	029	006	403				I. recurvus	2
17	[illegible]	[illegible]	05	07	029	006	403				C. leucopha	2
18	70	[illegible]			029	006	403				L. species	2
19	70	04	95	09	029	006	403				M. balthica	2
20	70	04	95	10	029	006	403				M. mitchell	2
21	70	04	95	08	029	006	403	5	9	21	R. cuneata	2
22	70	04	95	32	029	006	403				M. arenaria	2
23	70	04	94	19	029	006	403				Hydrobia	2
24	70	04	94	21	029	006	403				S. niger	2
25	70	04	94	20	029	006	403				D. obscura	2

CHL- Duguay cb1-2 Ponar grab

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPLIT.
X I G 5 4 0 5 S7	9 1 0 4 0 8	1 4 3 7	1 3	0 2 1 3 9 9 9 7	7 0	0 1	1		B A	F	1	1

LATITUDE (DDMMSS)	LONGITUDE (DDDMMSS)	SEQUENCE NUMBER
3 9 1 5 2 3	0 7 6 2 0 2 8	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
27	7	0 0	5 3	0 7	0 1 1	0 2 9	0 0 6 4	0 0 3			B. improvis	2
28	7	0 0	5 3	0 7	0 1 2	0 2 9	0 0 6 4	0 0 3			B. subalbid	2
29	7	0 0	5 3	1 4	0 5 4	0 2 9	0 0 6 4	0 0 3			L. american	2
30	7	0 0	5 3	1 6	0 1 2	0 2 9	0 0 6 4	0 0 3		2 3	C. polita	2
31	7	0 0	5 3	1 6	0 3 0	0 2 9	0 0 6 4	0 0 3			C. lunifron	2
33	7	0 0	5 3	1 6	0 2 4	0 2 9	0 0 6 4	0 0 3			E. trilcba	2
34	7	0 0	5 3	1 7	0 2 6	0 2 9	0 0 6 4	0 0 3			N. biarticu	2
35	7	0 0	5 3	1 7	0 0 3	0 2 9	0 0 6 4	0 0 3			G. palustri	2
36	7	0 0	5 3	1 7	0 1 6	0 2 9	0 0 6 4	0 0 3	2 3	6 2 5	L. plumuscs	2
37	7	0 0	5 3	1 7	0 1 3	0 2 9	0 0 6 4	0 0 3	2	1 2	C. lacustre	2
38	7	0 0	5 3	1 7	0 3 3	0 2 9	0 0 6 4	0 0 3			G. daiberi	2
39	7	0 0	5 3	1 7	0 2 0	0 2 9	0 0 6 4	0 0 3			G. tigrinus	2
40	7	0 0	5 3	1 7	0 2 2	0 2 9	0 0 6 4	0 0 3			M. nitida	2
41	7	0 0	5 3	1 6	0 2 1	0 2 9	0 0 6 4	0 0 3			C. almyra	2
42	7	0 0	5 3	1 7	0 2 5	0 2 9	0 0 6 4	0 0 3	2	1 2	M. edwardsi	2
43	7	0 0	5 3	2 4	0 0 1	0 2 9	0 0 6 4	0 0 3			C. species	2
44	7	0 0	5 3	1 9	0 1 4	0 2 9	0 0 6 4	0 0 3		1	R. harrisi	2
45	7	0 0	5 3	1 7	0 4 5	0 2 9	0 0 6 4	0 0 3			G. mucronat	2
46	7	0 0	3 3	0 1	0 0 1	0 2 9	0 0 6 4	0 0 3			C. caspia	2
47	7	0 0	3 3	0 1	0 0 2	0 2 9	0 0 6 4	0 0 3			G. francisc	2
48	7	0 0	3 5	0 5	0 3 1	0 2 9	0 0 6 4	0 0 3			S. elliptic	2
49	7	0 0	6 6	0 2	0 0 1	0 2 9	0 0 6 4	0 0 3			M. tenuis	2
50	7	0 0	6 6	0 2	0 0 2	0 2 9	0 0 6 4	0 0 3			V. pavida	2
	7	0				0 2 9	0 0 6 4	0 0 3				2
	7	0 0				0 2 9	0 0 6 4	0 0 3				2

CEL- Duguay cbl-1 PONAR GRAB

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD		COUNTY	TIDE	WEATH.	REPIT.
XIF414 S8	910408	1056	13	02139977	70	01	11			BA	F	1	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
3914.08	0762224.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1	GRAB #2	GRAB #3		SEQUENCE	NUMBER
1	70	03	03	02	80	29	00	64	00	03	D. leucolen		2
2	70	04	00	10	02	02	90	06	44	00	M. leidyi		2
3	70	04	80	10	03	02	90	06	44	00	H. filiform		2
4	70	04	80	10	08	02	90	06	44	00	M. species		2
5	70	04	80	10	04	02	90	06	44	00	N. succinea		2
6	70	04	80	09	01	02	90	06	44	00	S. fragilis		2
7	70	04	80	10	38	02	90	06	44	00	P. gouldi		2
8	70	04	80	10	17	02	90	06	44	00	E. heteropo		2
9	70	04	80	10	57	02	90	06	44	00	P. ligni		2
10	70	04	80	10	05	02	90	06	44	00	S. viridis		2
11	70	04	80	10	18	02	90	06	44	00	S. benedict		2
12	70	04	80	10	39	02	90	06	44	00	H. grayi		2
13	70	04	80	20	29	02	90	06	44	00	L. hoffmeis		2
14	70	04	80	20	23	02	90	06	44	00	P. tubifici		2
15	70	04	80	10	07	02	90	06	44	00	C. capitata		2
16	70	[illegible]	05	00	06	02	90	06	44	00	I. recurvus		2
17	70	[illegible]	05	00	07	02	90	06	44	00	C. leucopha		2
18	70					02	90	06	44	00	L. species		2
19	70	04	90	05	09	02	90	06	44	00	M. balthica		2
20	70	04	90	05	10	02	90	06	44	00	M. mitchell		2
21	70	04	90	05	08	02	90	06	44	00	R. cuneata		2
22	70	04	90	05	32	02	90	06	44	00	M. arenaria		2
23	70	04	90	04	19	02	90	06	44	00	Hydrobia		2
24	70	04	90	04	21	02	90	06	44	00	S. niger		2
25	70	04	90	04	20	02	90	06	44	00	D. obscura		2

CSL- Duguay ch1-2 Ponar grab

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
X I F 4 1 2 4 S8	9 1 0 4 0 8	1 0 5 6	1 3	0 2 1 3 9 9 9 7	7	0	0	1 1	B A	F	1	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
3 9 1 4 0 8	0 7 6 2 2 2 4	1

5/14/03 OK

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1	GRAB #2	GRAB #3		SEQUENCE NUMBER
								VALUE				
27	7	0 0	5	3 0 7	0 1 1	0 2 9	0 0 6 4	0 0 3			B. improvis	2
28	7	0 0	5	3 0 7	0 1 2	0 2 9	0 0 6 4	0 0 3			B. subalbid	2
29	7	0 0	5	3 1 4	0 5 4	0 2 9	0 0 6 4	0 0 3			L. american	2
30	7	0 0	5	3 1 6	0 1 2	0 2 9	0 0 6 4	0 0 3	1 0	4 6	C. polita	2
31	7	0 0	5	3 1 6	0 3 0	0 2 9	0 0 6 4	0 0 3			C. lunifron	2
33	7	0 0	5	3 1 6	0 2 4	0 2 9	0 0 6 4	0 0 3	1		E. trilcba	2
34	7	0 0	5	3 1 7	0 2 6	0 2 9	0 0 6 4	0 0 3			N. biarticu	2
35	7	0 0	5	3 1 7	0 0 3	0 2 9	0 0 6 4	0 0 3			G. palustri	2
36	7	0 0	5	3 1 7	0 1 6	0 2 9	0 0 6 4	0 0 3	6 0	8 3 / 8 2	L. plumusos	2
37	7	0 0	5	3 1 7	0 1 3	0 2 9	0 0 6 4	0 0 3	2	2 / 2	C. lacustre	2
38	7	0 0	5	3 1 7	0 3 3	0 2 9	0 0 6 4	0 0 3			G. daiberi	2
39	7	0 0	5	3 1 7	0 2 0	0 2 9	0 0 6 4	0 0 3			G. tigrinus	2
40	7	0 0	5	3 1 7	0 2 2	0 2 9	0 0 6 4	0 0 3	1	1	M. nitida	2
41	7	0 0	5	3 1 6	0 2 1	0 2 9	0 0 6 4	0 0 3			C. almyra	2
42	7	0 0	5	3 1 7	0 2 5	0 2 9	0 0 6 4	0 0 3	2	1 / 1	M. edwardsi	2
43	7	0 0	5	3 2 4	0 0 1	0 2 9	0 0 6 4	0 0 3			C. species	2
44	7	0 0	5	3 1 9	0 1 4	0 2 9	0 0 6 4	0 0 3			R. harrisi	2
45	7	0 0	5	3 1 7	0 4 5	0 2 9	0 0 6 4	0 0 3			G. mucronat	2
46	7	0 0	3	3 0 1	0 0 1	0 2 9	0 0 6 4	0 0 3			C. caspia	2
47	7	0 0	3	3 0 1	0 0 2	0 2 9	0 0 6 4	0 0 3			G. francisc	2
48	7	0 0	3	5 0 5	0 3 1	0 2 9	0 0 6 4	0 0 3			S. elliptic	2
49	7	0 0	6	6 0 2	0 0 1	0 2 9	0 0 6 4	0 0 3			M. tenuis	2
50	7	0 0	6	6 0 2	0 0 2	0 2 9	0 0 6 4	0 0 3			V. pavida	2
	7	0				0 2 9	0 0 6 4	0 0 3				2
	7	0 0				0 2 9	0 0 6 4	0 0 3				2

CBL- Duquay cbl-1 PONAR GRAB

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
XIF6388 #M7	910408	1553	10	021399977	70	01	11		BA	#	2	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
3916150	0762050	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
1	70	03	03	02	80	29	00	64	003		D. leucolen	2
2	70	04	01	00	20	29	00	64	003		M. leidyi	2
3	70	04	01	00	30	29	00	64	003	5	H. filiform	2
4	70	04	01	00	80	29	00	64	003		M. species	2
5	70	04	01	00	40	29	00	64	003		N. succinea	2
6	70	04	09	00	10	29	00	64	003		S. fragilis	2
7	70	04	01	03	80	29	00	64	003		P. gouldi	2
8	70	04	01	01	70	29	00	64	003		E. heteropo	2
9	70	04	01	05	70	29	00	64	003		P. ligni	2
10	70	04	01	00	50	29	00	64	003	3 8 8	S. viridis	2
11	70	04	01	01	80	29	00	64	003		S. benedict	2
12	70	04	01	03	90	29	00	64	003		H. grayi	2
13	70	04	02	02	90	29	00	64	003		L. hoffmeis	2
14	70	04	02	02	30	29	00	64	003	1 6 1 7 2 6	P. tubifici	2
15	70	04	01	00	70	29	00	64	003		C. capitata	2
16	[illegible]	[illegible]	05	00	60	29	00	64	003		I. recurvus	2
17	[illegible]	[illegible]	05	00	70	29	00	64	003		C. leucopha	2
18	70					29	00	64	003		L. species	2
19	70	04	05	00	90	29	00	64	003		M. balthica	2
20	70	04	05	01	00	29	00	64	003	1 2	M. mitchell	2
21	70	04	05	00	80	29	00	64	003	7 5 1 5	R. cuneata	2
22	70	04	05	03	20	29	00	64	003		M. arenaria	2
23	70	04	04	01	90	29	00	64	003		Hydrobia	2
24	70	04	04	02	10	29	00	64	003		S. niger	2
25	70	04	04	02	00	29	00	64	003		D. obscura	2

CEL- Duguay cbl-2 Ponar grab

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
XIF638 8 #M 7	910408	1553	10	021399977	70	01	11	BA	#	2	1	

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
3916150	0762050	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1	GRAB #2	GRAB #3		SEQUENCE NUMBER
								VALUE				
27	70	05	30	70	11	02	90	06	40	03	B. improvis	2
28	70	05	30	70	12	02	90	06	40	03	B. subalbid	2
29	70	05	31	40	54	02	90	06	40	03	L. american	2
30	70	05	31	60	12	02	90	06	40	03	C. polita	2
31	70	05	31	60	03	02	90	06	40	03	C. lunifron	2
33	70	05	31	60	24	02	90	06	40	03	E. trilcba	2
34	70	05	31	70	26	02	90	06	40	03	N. biarticu	2
35	70	05	31	70	03	02	90	06	40	03	G. palustri	2
36	70	05	31	70	16	02	90	06	40	03	L. plumuscs	2
37	70	05	31	70	13	02	90	06	40	03	C. lacustre	2
38	70	05	31	70	33	02	90	06	40	03	G. daiberi	2
39	70	05	31	70	02	02	90	06	40	03	G. tigrinus	2
40	70	05	31	70	22	02	90	06	40	03	M. nitida	2
41	70	05	31	60	21	02	90	06	40	03	C. almyra	2
42	70	05	31	70	25	02	90	06	40	03	M. edwardsi	2
43	70	05	32	40	01	02	90	06	40	03	C. species	2
44	70	05	31	90	14	02	90	06	40	03	R. harrisi	2
45	70	05	33	17	45	02	90	06	40	03	G. mucronat	2
46	70	03	30	10	01	02	90	06	40	03	C. caspia	2
47	70	03	30	10	02	02	90	06	40	03	G. francisc	2
48	70	03	35	05	31	02	90	06	40	03	S. elliptic	2
49	70	06	60	20	01	02	90	06	40	03	M. tenuis	2
50	70	06	60	20	02	02	90	06	40	03	V. pavida	2
	70					02	90	06	40	03		2
	700					02	90	06	40	03		2

CBL- Duguay cbl-1 PONAR GRAB

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
XIF5297 #M9	910408	1450	17	0213997	70	01	11		BA	F	1	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSSS	
391533	0761953	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1	GRAB #2	GRAB #3		SEQUENCE NUMBER
								VALUE				
1	70	03	30	03	02	90	64	00	3		D. leucolen	2
2	70	04	00	10	02	90	64	00	3	2	M. leidyi	2
3	70	04	80	10	03	02	90	64	00	3	2	3	2	E. filiform	2
4	70	04	80	10	08	02	90	64	00	3			M. species	2
5	70	04	80	10	04	02	90	64	00	3			N. succinea	2
6	70	04	80	90	01	02	90	64	00	3			S. fragilis	2
7	70	04	80	10	38	02	90	64	00	3			P. gouldi	2
8	70	04	80	10	17	02	90	64	00	3			E. heteropo	2
9	70	04	80	10	57	02	90	64	00	3			P. ligni	2
10	70	04	80	10	05	02	90	64	00	3	109	130	108	S. viridis	2
11	70	04	80	10	18	02	90	64	00	3			S. benedict	2
12	70	04	80	10	39	02	90	64	00	3			H. grayi	2
13	70	04	80	20	29	02	90	64	00	3			L. hoffmeis	2
14	70	04	80	20	23	02	90	64	00	3	17	20	19	P. tubifici	2
15	70	04	80	10	07	02	90	64	00	3			C. capitata	2
16	70	[illegible]	[illegible]	05	00	06	02	90	64	00	3		I. recurvus	2
17	[illegible]	[illegible]	[illegible]	05	00	07	02	90	64	00	3		C. leucopha	2
18	70					02	90	64	00	3			L. species	2
19	70	04	90	05	00	09	02	90	64	00	3		M. balthica	2
20	70	04	90	05	01	00	02	90	64	00	3		M. mitchell	2
21	70	04	90	05	00	08	02	90	64	00	3	11	7	10	R. cuneata	2
22	70	04	90	05	03	20	02	90	64	00	3		M. arenaria	2
23	70	04	90	04	01	90	02	90	64	00	3		Hydrobia	2
24	70	04	90	04	02	10	02	90	64	00	3		S. niger	2
25	70	04	90	04	02	00	02	90	64	00	3		D. obscura	2

CSL- Duguay cbl-2 Ponar grab

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
XIF5297 #M 9	910481	1450	17	0213997	70	01	11	BAF	1	1		

LATITUDE (DDMMSS)	LONGITUDE (DDDMMSS)	SEQUENCE NUMBER
391533	0761953	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
27	70	05	30	70	11	02	90	64	00	3	2	B. improvis 2
28	70	05	30	70	12	02	90	64	00	3		B. subalbid 2
29	70	05	31	40	54	02	90	64	00	3		L. american 2
30	70	05	31	60	12	02	90	64	00	3	6 7 1 5	C. polita 2
31	70	05	31	60	03	02	90	64	00	3		C. lunifron 2
33	70	05	31	60	24	02	90	64	00	3		E. trilcha 2
34	70	05	31	70	26	02	90	64	00	3		N. biarticu 2
35	70	05	31	70	03	02	90	64	00	3		G. palustri 2
36	70	05	31	70	16	02	90	64	00	3	2 1 3 2 1 5	L. plumuscs 2
37	70	05	31	70	13	02	90	64	00	3	5 8 9	C. lacustre 2
38	70	05	31	70	33	02	90	64	00	3		G. daiberi 2
39	70	05	31	70	20	02	90	64	00	3		G. tigrinus 2
40	70	05	31	70	22	02	90	64	00	3		M. nitida 2
41	70	05	31	60	21	02	90	64	00	3	1	C. almyra 2
42	70	05	31	70	25	02	90	64	00	3	3 1	M. edwardsi 2
43	70	05	42	40	01	02	90	64	00	3		C. species 2
44	70	05	31	90	14	02	90	64	00	3	1	R. harrisi 2
45	70	05	31	70	45	02	90	64	00	3		G. mucronat 2
46	70	03	30	10	01	02	90	64	00	3		C. caspia 2
47	70	03	30	10	02	02	90	64	00	3		G. francisc 2
48	70	03	50	50	31	02	90	64	00	3		S. elliptic 2
49	70	06	60	20	01	02	90	64	00	3	8 1 4	M. tenuis 2
50	70	06	60	20	02	02	90	64	00	3		V. pavida 2
	70					02	90	64	00	3		
	70					02	90	64	00	3		

CEL- Duguay cbl-1 PONAR GRAB

SAMPLING STATION NO.	DATE	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
XIF335 #M16	910408	1029	16	02139977	70	01	11		BA	F	1	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSSS	
391317.	0762230.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
1	70	03	30	028	029	00	64	003			D. leucolen	2
2	70	04	01	002	029	00	64	003	1		M. leidyi	2
3	70	04	01	003	029	00	64	003	6	3 1	H. filiform	2
4	70	04	01	008	029	00	64	003			M. species	2
5	70	04	01	004	029	00	64	003			N. succinea	2
6	70	04	09	001	029	00	64	003			S. fragilis	2
7	70	04	01	038	029	00	64	003			P. gouldi	2
8	70	04	01	017	029	00	64	003			E. heteropo	2
9	70	04	01	057	029	00	64	003			P. ligni	2
10	70	04	01	005	029	00	64	003	1 2	1 2 1 4	S. viridis	2
11	70	04	01	018	029	00	64	003	1	2 4	S. benedict	2
12	70	04	01	039	029	00	64	003			H. grayi	2
13	70	04	02	029	029	00	64	003			L. hoffmeis	2
14	70	04	02	023	029	00	64	003	1 0 4	7 1 2 4 7	P. tubifici	2
15	70	04	01	007	029	00	64	003			C. capitata	2
16	70	04	05	006	029	00	64	003			I. recurvus	2
17	70	04	05	007	029	00	64	003			C. leucopha	2
18	70				029	00	64	003			L. species	2
19	70	04	05	009	029	00	64	003	7	5 1 2	M. balthica	2
20	70	04	05	010	029	00	64	003	1	2 3	M. mitchell	2
21	70	04	05	008	029	00	64	003			R. cuneata	2
22	70	04	05	032	029	00	64	003			M. arenaria	2
23	70	04	04	019	029	00	64	003			Hydrobia	2
24	70	04	04	021	029	00	64	003			S. niger	2
25	70	04	04	020	029	00	64	003			D. obscura	2

CBL- Duguay cbl-2 Ponar grab

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
XIF3325 #M16	910408	1029	16	02139977	70	01	11		BA	F	1	1

5/14/03
OK

LATITUDE (DDMMSS.S)	LONGITUDE (DDDMMSS.S)	SEQUENCE NUMBER
391317.	076223 0.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1	GRAB #2	GRAB #3		SEQUENCE NUMBER
								VALUE				
27	70	05	30	70	11	02	90	06	40	03	B. improvis	2
28	70	05	30	70	12	02	90	06	40	03	B. subalbid	2
29	70	05	31	40	54	02	90	06	40	03	L. american	2
30	70	05	31	60	12	02	90	06	40	03	C. polita (15; 11; 13)	2
31	70	05	31	60	03	02	90	06	40	03	C. lunifron	2
33	70	05	31	60	24	02	90	06	40	03	E. trilcba (1)	2
34	70	05	31	70	26	02	90	06	40	03	N. biartica	2
35	70	05	31	70	03	02	90	06	40	03	G. palustri	2
36	70	05	31	70	16	02	90	06	40	03	L. plumuscs (129; 140; 101)	2
37	70	05	31	70	13	02	90	06	40	03	C. lacustre (3; 1; 5)	2
38	70	05	31	70	33	02	90	06	40	03	G. daiberi	2
39	70	05	31	70	20	02	90	06	40	03	G. tigrinus	2
40	70	05	31	70	22	02	90	06	40	03	M. nitida (3; 1)	2
41	70	05	31	60	21	02	90	06	40	03	C. almyra	2
42	70	05	31	70	25	02	90	06	40	03	M. edwardsi	2
43	70	05	42	40	01	02	90	06	40	03	C. species	2
44	70	05	31	90	14	02	90	06	40	03	R. harrisi	2
45	70	05	31	70	45	02	90	06	40	03	G. mucronat	2
46	70	03	30	10	01	02	90	06	40	03	C. caspia	2
47	70	03	30	10	02	02	90	06	40	03	G. francisc	2
48	70	03	50	50	31	02	90	06	40	03	S. elliptic	2
49	70	06	60	20	01	02	90	06	40	03	M. tenuis (4; 7; 16)	2
50	70	06	60	20	02	02	90	06	40	03	V. pavida	2
	70					02	90	06	40	03		2
	70	0				02	90	06	40	03		2

CEL- Duguay cbl-1 PONAR GRAB

SAMPLING STATION NO.	DATE	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
XIG768 9 #M22	910408	1535	12	021399	70	01		11	BA	#	2	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSSS	
392658	0761851	1

RESOURCE MONITORING DATA SHEET

SPECIMEN #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
1	70	03	03	028	029	064	003				D. leucolen	2
2	70	04	01	002	029	064	003	2	1		M. leidyi	2
3	70	04	01	003	029	064	003	1			E. filiform	2
4	70	04	01	008	029	064	003				M. species	2
5	70	04	01	004	029	064	003				N. succinea	2
6	70	04	09	001	029	064	003				S. fragilis	2
7	70	04	01	038	029	064	003				P. gouldi	2
8	70	04	01	017	029	064	003				E. heteropo	2
9	70	04	01	057	029	064	003				P. ligni	2
10	70	04	01	005	029	064	003	7	8	10	S. viridis	2
11	70	04	01	018	029	064	003				S. benedict	2
12	70	04	01	039	029	064	003				E. grayi	2
13	70	04	02	029	029	064	003				L. hoffmeis	2
14	70	04	02	023	029	064	003	7	9	7	P. tubifici	2
15	70	04	01	007	029	064	003				C. capitata	2
16	70	04	05	006	029	064	003				I. recurvus	2
17	70	04	05	007	029	064	003				C. leucopha	2
18	70				029	064	003				L. species	2
19	70	04	05	009	029	064	003				M. balthica	2
20	70	04	05	010	029	064	003	3		1	M. mitchell	2
21	70	04	05	008	029	064	003	16	21	13	R. cuneata	2
22	70	04	05	032	029	064	003				M. arenaria	2
23	70	04	04	019	029	064	003				Hydrobia	2
24	70	04	04	021	029	064	003				S. niger	2
25	70	04	04	020	029	064	003				D. obscura	2

CSL- Duguay ch1-2 Ponar grab

SAMPLING STATION NO. #M 22	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD		COUNTY	TIDE	WEATH.	REPIT.
XFG768 9	910408	1535	12	0213997	70	01	11			BA	#	2	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSSS	
392658.	0761851.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
27	70	05	30	71	02	90	64	00	3		B. improvis	2
28	70	05	30	71	02	90	64	00	3		B. subalbid	2
29	70	05	31	45	02	90	64	00	3		L. american	2
30	70	05	31	61	02	90	64	00	3	3 / 2 / 6	C. polita	2
31	70	05	31	60	02	90	64	00	3		C. lunifron	2
33	70	05	31	62	02	90	64	00	3		E. trilcba	2
34	70	05	31	72	02	90	64	00	3		N. biarticu	2
35	70	05	31	70	02	90	64	00	3		G. palustri	2
36	70	05	31	71	02	90	64	00	3	36 / 23 / 24	L. plumusos	2
37	70	05	31	71	02	90	64	00	3	2 / 6	C. lacustre	2
38	70	05	31	73	02	90	64	00	3		G. daiberi	2
39	70	05	31	72	02	90	64	00	3		G. tigrinus	2
40	70	05	31	72	02	90	64	00	3		M. nitida	2
41	70	05	31	61	02	90	64	00	3		C. almyra	2
42	70	05	31	72	02	90	64	00	3	1 / 2	M. edwardsi	2
43	70	05	42	40	02	90	64	00	3		C. species	2
44	70	05	31	94	02	90	64	00	3		R. harrisi	2
45	70	05	31	70	02	90	64	00	3		G. mucronat	2
46	70	03	30	10	02	90	64	00	3		C. caspia	2
47	70	03	30	10	02	90	64	00	3		G. francisc	2
48	70	03	50	50	02	90	64	00	3		S. elliptic	2
49	70	06	60	20	02	90	64	00	3		M. tenuis	2
50	70	06	60	20	02	90	64	00	3		V. pavida	2
	70				02	90	64	00	3			2
	700				02	90	64	00	3			2

CEL- Duguay cbl-1 PONAR GRAB

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
#M 26												
XIF514 5	910408	1619	14	021399977	70	01	11		BA	#	2	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSSS	
391439	076235 5	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
1	70	03	30	28	02	90	64	00	3		D. leucolen	2
2	70	04	01	00	02	90	64	00	3	2 / 2	M. leidyi	2
3	70	04	01	03	02	90	64	00	3		E. filiform	2
4	70	04	01	08	02	90	64	00	3		M. species	2
5	70	04	01	04	02	90	64	00	3		N. succinea	2
6	70	04	09	01	02	90	64	00	3		S. fragilis	2
7	70	04	01	38	02	90	64	00	3		P. gouldi	2
8	70	04	01	17	02	90	64	00	3		E. heteropo	2
9	70	04	01	57	02	90	64	00	3	2	P. ligni	2
10	70	04	01	05	02	90	64	00	3	1 5 / 6 / 3	S. viridis	2
11	70	04	01	18	02	90	64	00	3		S. benedict	2
12	70	04	01	39	02	90	64	00	3		E. grayi	2
13	70	04	02	29	02	90	64	00	3		L. hoffmeis	2
14	70	04	02	23	02	90	64	00	3	5 0 / 8 6 / 2 5	P. tubifici	2
15	70	04	01	07	02	90	64	00	3		C. capitata	2
16	70	04	05	06	02	90	64	00	3		I. recurvus	2
17	70	04	05	07	02	90	64	00	3		C. leucopha	2
18	70				02	90	64	00	3		L. species	2
19	70	04	05	09	02	90	64	00	3		M. balthica	2
20	70	04	05	10	02	90	64	00	3	1	M. mitchell	2
21	70	04	05	08	02	90	64	00	3	4 / 8 / 7	R. cuneata	2
22	70	04	05	32	02	90	64	00	3		M. arenaria	2
23	70	04	04	19	02	90	64	00	3		Hydrobia	2
24	70	04	04	21	02	90	64	00	3		S. niger	2
25	70	04	04	20	02	90	64	00	3		D. obscura	2

CHL- Duguay cbl-2 Ponar grab

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPLIT.
XHF514 5 #M26	910408	1619	14	021399977	70	01	11		BA	#	2	1

LATITUDE (DDMMSS)	LONGITUDE (DDDMMSS)	SEQUENCE NUMBER
391439	0762355	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
27	70	05	30	70	02	90	64	00	03		B. improvis	2
28	70	05	30	70	02	90	64	00	03		B. subalbid	2
29	70	05	31	40	02	90	64	00	03		L. american	2
30	70	05	31	60	02	90	64	00	03	4 7 5	C. polita	2
31	70	05	31	60	02	90	64	00	03		C. lunifron	2
33	70	05	31	60	02	90	64	00	03	1	E. triloba	2
34	70	05	31	70	02	90	64	00	03		N. biarticu	2
35	70	05	31	70	02	90	64	00	03		G. palustri	2
36	70	05	31	70	02	90	64	00	03	28 22 18	L. plumuso	2
37	70	05	31	70	02	90	64	00	03	4 3 1	C. lacustre	2
38	70	05	31	70	02	90	64	00	03		G. daiberi	2
39	70	05	31	70	02	90	64	00	03	2 1	G. tigrinus	2
40	70	05	31	70	02	90	64	00	03	1	M. nitida	2
41	70	05	31	60	02	90	64	00	03		C. almyra	2
42	70	05	31	70	02	90	64	00	03	1	M. edwardsi	2
43	70	05	42	40	02	90	64	00	03		G. species	2
44	70	05	31	90	02	90	64	00	03		R. harrisi	2
45	70	05	31	70	02	90	64	00	03		G. mucronat	2
46	70	03	30	10	02	90	64	00	03		C. caspia	2
47	70	03	30	10	02	90	64	00	03		G. francisc	2
48	70	03	50	50	02	90	64	00	03		S. elliptic	2
49	70	06	60	20	02	90	64	00	03		M. tenuis	2
50	70	06	60	20	02	90	64	00	03		V. pavida	2
	70				02	90	64	00	03			2
	700				02	90	64	00	03			2

CEL- Duguay cbl-1 PONAR GRAB

SAMPLING STATION NO.	DATE	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPHT.
X I F 5 8 0 5 (HM 12)	9 1 0 4 0 8	1 2 2 8	1 5	0 2 1 3 9 9 9 7	7 0	0 1	1 1		B A	F	1	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
D D M M S S S	D D D M M S S S	
3 9 1 4 0 5	0 7 6 2 0 2 1	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1	GRAB #2	GRAB #3		SEQUENCE NUMBER
								VALUE				
1	7	0 0 3 3	0 3	0 2 8	0 2 9	0 0 6 4	0 0 3				D. leucolen	2
2	7	0 0 4 0	0 1	0 0 2	0 2 9	0 0 6 4	0 0 3	2	2	4	M. leidyi	2
3	7	0 0 4 8	0 1	0 0 3	0 2 9	0 0 6 4	0 0 3	1	3	1	E. filiform	2
4	7	0 0 4 8	0 1	0 0 8	0 2 9	0 0 6 4	0 0 3				M. species	2
5	7	0 0 4 8	0 1	0 0 4	0 2 9	0 0 6 4	0 0 3		2	3	N. succinea	2
6	7	0 0 4 8	0 9	0 0 1	0 2 9	0 0 6 4	0 0 3				S. fragilis	2
7	7	0 0 4 8	0 1	0 3 8	0 2 9	0 0 6 4	0 0 3				P. gouldi	2
8	7	0 0 4 8	0 1	0 1 7	0 2 9	0 0 6 4	0 0 3				E. heteropo	2
9	7	0 0 4 8	0 1	0 5 7	0 2 9	0 0 6 4	0 0 3				P. ligni	2
10	7	0 0 4 8	0 1	0 0 5	0 2 9	0 0 6 4	0 0 3	1 6	1 2	3 5	S. viridis	2
11	7	0 0 4 8	0 1	0 1 8	0 2 9	0 0 6 4	0 0 3				S. benedict	2
12	7	0 0 4 8	0 1	0 3 9	0 2 9	0 0 6 4	0 0 3				H. grayi	2
13	7	0 0 4 8	0 2	0 2 9	0 2 9	0 0 6 4	0 0 3				L. hoffmeis	2
14	7	0 0 4 8	0 2	0 2 3	0 2 9	0 0 6 4	0 0 3	3 1	3 2	5 0	P. tubifici	2
15	7	0 0 4 8	0 1	0 0 7	0 2 9	0 0 6 4	0 0 3				C. capitata	2
16	7	0 0 4 9	0 5	0 0 6	0 2 9	0 0 6 4	0 0 3				I. recurvus	2
17	7	0 0 4 9	0 5	0 0 7	0 2 9	0 0 6 4	0 0 3				C. leucopha	2
18	7	0			0 2 9	0 0 6 4	0 0 3				L. species	2
19	7	0 0 4 9	0 5	0 0 9	0 2 9	0 0 6 4	0 0 3	2	4		M. balthica	2
20	7	0 0 4 9	0 5	0 1 0	0 2 9	0 0 6 4	0 0 3	1	3	1	M. mitchell	2
21	7	0 0 4 9	0 5	0 0 8	0 2 9	0 0 6 4	0 0 3	2 5	1 1	9	R. cuneata	2
22	7	0 0 4 9	0 5	0 3 2	0 2 9	0 0 6 4	0 0 3				M. arenaria	2
23	7	0 0 4 9	0 4	0 1 9	0 2 9	0 0 6 4	0 0 3				Hydrobia	2
24	7	0 0 4 9	0 4	0 2 1	0 2 9	0 0 6 4	0 0 3				S. niger	2
25	7	0 0 4 9	0 4	0 2 0	0 2 9	0 0 6 4	0 0 3				D. obscura	2

CEL- Duguay cbl-2 Ponar grab

SAMPLING STATION NO.	DATE	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
HM 12	YYMMDD											
XIF580 5	910408	1228	15	021399977	70	01	11		BA	F	1	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSSS	
391405	0762021	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1	GRAB #2	GRAB #3		SEQUENCE	NUMBER
								VALUE					
27	70	05	307	01	02	90	64	003	2	1	B. improvis		2
28	70	05	307	02	02	90	64	003			B. subalbid		2
29	70	05	314	05	02	90	64	003			L. american		2
30	70	05	316	01	02	90	64	003	4	10	C. polita		2
31	70	05	316	03	02	90	64	003			C. lunifron		2
33	70	05	316	02	02	90	64	003	1		E. trilcba		2
34	70	05	317	02	02	90	64	003			N. biarticu		2
35	70	05	317	00	02	90	64	003			G. palustri		2
36	70	05	317	01	02	90	64	003	25	37	22	L. plumusos	2
37	70	05	317	01	02	90	64	003	3	1	3	C. lacustre	2
38	70	05	317	03	02	90	64	003				G. daiberi	2
39	70	05	317	02	02	90	64	003			2	G. tigrinus	2
40	70	05	317	02	02	90	64	003				M. nitida	2
41	70	05	316	02	02	90	64	003				C. almyra	2
42	70	05	317	02	02	90	64	003	1	2	4	M. edwardsi	2
43	70	05	424	00	02	90	64	003				C. species	2
44	70	05	319	01	02	90	64	003		1	1	R. harrisi	2
45	70	05	317	04	02	90	64	003				G. mucronat	2
46	70	03	301	00	02	90	64	003				C. caspia	2
47	70	03	301	00	02	90	64	003				G. francisc	2
48	70	03	505	03	02	90	64	003				S. elliptic	2
49	70	06	602	00	02	90	64	003	1			M. tenuis	2
50	70	06	602	00	02	90	64	003				V. pavida	2
	70				02	90	64	003					2
	700				02	90	64	003					2

CEL- Duguay cbl-1 PONAR GRAB

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
X I F 4 2 2 1 G5	9 1 0 4 0 8	1 1 3 0	1 5	0 2 1 3 9 9 9 7	7 0	0 1	1		B A	F	1	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
D D M M S S S	D D D M M S S S	
3 9 1 4 2 5	0 7 6 2 2 3 6	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
1	7	0 0 3	3 0 3	0 2 8	0 2 9	0 0 6	4 0 0 3				D. leucolen	2
2	7	0 0 4	0 0 1	0 0 2	0 2 9	0 0 6	4 0 0 3		1		M. leidyi	2
3	7	0 0 4	8 0 1	0 0 3	0 2 9	0 0 6	4 0 0 3				H. filiform	2
4	7	0 0 4	8 0 1	0 0 8	0 2 9	0 0 6	4 0 0 3				M. species	2
5	7	0 0 4	8 0 1	0 0 4	0 2 9	0 0 6	4 0 0 3				N. succinea	2
6	7	0 0 4	8 0 9	0 0 1	0 2 9	0 0 6	4 0 0 3				S. fragilis	2
7	7	0 0 4	8 0 1	0 3 8	0 2 9	0 0 6	4 0 0 3				P. gouldi	2
8	7	0 0 4	8 0 1	0 1 7	0 2 9	0 0 6	4 0 0 3				E. heteropo	2
9	7	0 0 4	8 0 1	0 5 7	0 2 9	0 0 6	4 0 0 3				P. ligni	2
10	7	0 0 4	8 0 1	0 0 5	0 2 9	0 0 6	4 0 0 3	1 1	1 3	9	S. viridis	2
11	7	0 0 4	8 0 1	0 1 8	0 2 9	0 0 6	4 0 0 3				S. benedict	2
12	7	0 0 4	8 0 1	0 3 9	0 2 9	0 0 6	4 0 0 3				H. grayi	2
13	7	0 0 4	8 0 2	0 2 9	0 2 9	0 0 6	4 0 0 3				L. hoffmeis	2
14	7	0 0 4	8 0 2	0 2 3	0 2 9	0 0 6	4 0 0 3	5 2	7 4	2 8	P. tubifici	2
15	7	0 0 4	8 0 1	0 0 7	0 2 9	0 0 6	4 0 0 3				C. capitata	2
16	7	0 0 4	9 0 5	0 0 6	0 2 9	0 0 6	4 0 0 3				I. recurvus	2
17	7	0 0 4	9 0 5	0 0 7	0 2 9	0 0 6	4 0 0 3				C. leucopha	2
18	7	0			0 2 9	0 0 6	4 0 0 3				L. species	2
19	7	0 0 4	9 0 5	0 0 9	0 2 9	0 0 6	4 0 0 3				M. balthica	2
20	7	0 0 4	9 0 5	0 1 0	0 2 9	0 0 6	4 0 0 3	1	6	1	M. mitchell	2
21	7	0 0 4	9 0 5	0 0 8	0 2 9	0 0 6	4 0 0 3	9	1		R. cuneata	2
22	7	0 0 4	9 0 5	0 3 2	0 2 9	0 0 6	4 0 0 3				M. arenaria	2
23	7	0 0 4	9 0 4	0 1 9	0 2 9	0 0 6	4 0 0 3				Hydrobia	2
24	7	0 0 4	9 0 4	0 2 1	0 2 9	0 0 6	4 0 0 3				S. niger	2
25	7	0 0 4	9 0 4	0 2 0	0 2 9	0 0 6	4 0 0 3				D. obscura	2

CBL- Duguay cbl-2 Ponar grab

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
XIF422 1 G5	910408	1130	15	021399977	70	00	11		BA	F	1	1

5/14/03 OK

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSSS	
39 14 25	076 22 36	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1	GRAB #2	GRAB #3		SEQUENCE NUMBER
								VALUE				
27	70	05	30	70	11	02	90	06	40	03	B. improvis	
28	70	05	30	70	12	02	90	06	40	03	B. subalbid	
29	70	05	31	40	54	02	90	06	40	03	L. american	
30	70	05	31	60	12	02	90	06	40	03	C. polita	5 9 6
31	70	05	31	60	30	02	90	06	40	03	C. lunifron	
33	70	05	31	60	24	02	90	06	40	03	E. trilcba	
34	70	05	31	70	26	02	90	06	40	03	N. biarticu	
35	70	05	31	70	03	02	90	06	40	03	G. palustri	
36	70	05	31	70	16	02	90	06	40	03	L. plumuscs	105 81 85
37	70	05	31	70	13	02	90	06	40	03	C. lacustre	4 3 3
38	70	05	31	70	33	02	90	06	40	03	G. daiberi	
39	70	05	31	70	20	02	90	06	40	03	G. tigrinus	
40	70	05	31	70	22	02	90	06	40	03	M. nitida	1 1
41	70	05	31	60	21	02	90	06	40	03	C. almyra	
42	70	05	31	70	25	02	90	06	40	03	M. edwardsi	2 1
43	70	05	42	40	01	02	90	06	40	03	C. species	
44	70	05	31	90	14	02	90	06	40	03	R. harrisi	
45	70	05	31	70	45	02	90	06	40	03	G. mucronat	
46	70	03	30	10	01	02	90	06	40	03	C. caspia	
47	70	03	30	10	02	02	90	06	40	03	G. francisc	
48	70	03	50	50	31	02	90	06	40	03	S. elliptic	
49	70	06	60	20	01	02	90	06	40	03	M. tenuis	3 1
50	70	06	60	20	02	02	90	06	40	03	V. pavida	
	70					02	90	06	40	03		
	70	0				02	90	06	40	03		

CEL- Duguay cb1-1 PONAR GRAB

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
G 25	910408	1205	16	02139977	70		01	1	BA	F	1	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
3914421	0762110	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE	NUMBER
1	70	03	03	028	029	06	403				D. leucolen		2
2	70	04	01	002	029	06	403		1		M. leidyi		2
3	70	04	01	003	029	06	403	1	2	1	H. filiform		2
4	70	04	01	008	029	06	403				M. species		2
5	70	04	01	004	029	06	403	1	1		N. succinea		2
6	70	04	09	001	029	06	403				S. fragilis		2
7	70	04	01	038	029	06	403				P. gouldi		2
8	70	04	01	017	029	06	403				E. heteropo		2
9	70	04	01	057	029	06	403				P. ligni		2
10	70	04	01	005	029	06	403	64	31	31	S. viridis		2
11	70	04	01	018	029	06	403				S. benedict		2
12	70	04	01	039	029	06	403				H. grayi		2
13	70	04	02	029	029	06	403				L. hoffmeis		2
14	70	04	02	023	029	06	403				P. tubifici		2
15	70	04	01	007	029	06	403				C. capitata		2
16	70	04	05	006	029	06	403				I. recurvus		2
17	70	04	05	007	029	06	403				C. leucopha		2
18	70				029	06	403				L. species		2
19	70	04	05	009	029	06	403			1	M. balthica		2
20	70	04	05	010	029	06	403		1	1	M. mitchell		2
21	70	04	05	008	029	06	403	5	4	5	R. cuneata		2
22	70	04	05	032	029	06	403				M. arenaria		2
23	70	04	04	019	029	06	403				Hydrobia		2
24	70	04	04	021	029	06	403				S. niger		2
25	70	04	04	020	029	06	403				D. obscura		2

CSL- Duguay ch1-2 Ponar grab

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
XIF445 G25	910408	1205	16	021399977	70	01	11		BA	F	1	1

LATITUDE (DDMMSS)	LONGITUDE (DDDMMSS)	SEQUENCE NUMBER
391442.	0762110.	1

5/14/03 OK

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
27	70	05	30	70	11	02	90	06	40	03	2	B. improvis
28	70	05	30	70	12	02	90	06	40	03		B. subalbid
29	70	05	31	40	54	02	90	06	40	03		L. american
30	70	05	31	60	12	02	90	06	40	03	10 / 16 / 6	C. polita
31	70	05	31	60	30	02	90	06	40	03		C. lunifron
33	70	05	31	60	24	02	90	06	40	03	1	E. triloba
34	70	05	31	70	26	02	90	06	40	03		N. biarticu
35	70	05	31	70	03	02	90	06	40	03		G. palustri
36	70	05	31	70	16	02	90	06	40	03	36 / 20 / 53	L. plumuscs
37	70	05	31	70	13	02	90	06	40	03	31 / 8 / 4	C. lacustre
38	70	05	31	70	33	02	90	06	40	03		G. daiberi
39	70	05	31	70	20	02	90	06	40	03	4 / 3	G. tigrinus
40	70	05	31	70	22	02	90	06	40	03	6 / 2	M. nitida
41	70	05	31	60	21	02	90	06	40	03		C. almyra
42	70	05	31	70	25	02	90	06	40	03	1	M. edwardsi
43	70	05	42	40	01	02	90	06	40	03		C. species
44	70	05	31	90	14	02	90	06	40	03	2 / 7	R. harrisi
45	70	05	31	70	45	02	90	06	40	03		G. mucronat
46	70	03	30	10	01	02	90	06	40	03		C. caspia
47	70	03	30	10	02	02	90	06	40	03		G. francisc
48	70	03	50	50	31	02	90	06	40	03		S. elliptic
49	70	06	60	20	01	02	90	06	40	03	7 / 28 / 3	M. tenuis
50	70	06	60	20	02	02	90	06	40	03		V. pavida
	70					02	90	06	40	03		
	700					02	90	06	40	03		

CBL- Duguay cbl-1 PONAR GRAB

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
X G84	910408	1252	17	0213997	70	01	11		BA	F	1	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
3912900	0761660	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
1	70	03	03	028	029	006	403				D. leucolen	2
2	70	04	01	002	029	006	403	3	3		M. leidyi	2
3	70	04	01	003	029	006	403	30	24	28	H. filiform	2
4	70	04	01	008	029	006	403				M. species	2
5	70	04	01	004	029	006	403		1		N. succinea	2
6	70	04	09	001	029	006	403				S. fragilis	2
7	70	04	01	038	029	006	403				P. gouldi	2
8	70	04	01	017	029	006	403				E. heteropo	2
9	70	04	01	057	029	006	403				P. ligni	2
10	70	04	01	005	029	006	403	17	12	12	S. viridis	2
11	70	04	01	018	029	006	403	5	2	1	S. benedict	2
12	70	04	01	039	029	006	403				H. grayi	2
13	70	04	02	029	029	006	403				L. hoffmeis	2
14	70	04	02	023	029	006	403	125	56	105	P. tubifici	2
15	70	04	01	007	029	006	403				C. capitata	2
16	70	04	05	006	029	006	403				I. recurvus	2
17	70	04	05	007	029	006	403				C. leucopha	2
18	70				029	006	403				L. species	2
19	70	04	05	009	029	006	403	25	28	27	M. balthica	2
20	70	04	05	010	029	006	403	2	4		M. mitchell	2
21	70	04	05	008	029	006	403				R. cuneata	2
22	70	04	05	032	029	006	403				M. arenaria	2
23	70	04	04	019	029	006	403				Hydrobia	2
24	70	04	04	021	029	006	403				S. niger	2
25	70	04	04	020	029	006	403				D. obscura	2

CEL- Duguay cbl-2 Ponar grab

SAMPLING STATION NO.	DATE	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
X G84	Y Y M M D D											
	9 1 0 4 0 8	1 2 5 2	1 7	0 2 1 3 9 9 9 7	7 0		0 1	1	B A	F	1	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
D D M M S S S	D D D M M S S S	
3 9 1 2 9 0.	0 7 6 1 6 6 0.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
27	7 0	0 5	3 0	7 0 1	1 0 2	9 0 0	6 4 0	0 3			B. improvis	2
28	7 0	0 5	3 0	7 0 1	2 0 2	9 0 0	6 4 0	0 3			B. subalbid	2
29	7 0	0 5	3 1	4 0 5	4 0 2	9 0 0	6 4 0	0 3			L. american	2
30	7 0	0 5	3 1	6 0 1	2 0 2	9 0 0	6 4 0	0 3	1 1	2 2	2 7	C. polita 2
31	7 0	0 5	3 1	6 0 3	0 0 2	9 0 0	6 4 0	0 3			C. lunifron	2
33	7 0	0 5	3 1	6 0 2	4 0 2	9 0 0	6 4 0	0 3	1	1	2	E. trilcha 2
34	7 0	0 5	3 1	7 0 2	6 0 2	9 0 0	6 4 0	0 3			N. biartica	2
35	7 0	0 5	3 1	7 0 0	3 0 2	9 0 0	6 4 0	0 3			G. palustri	2
36	7 0	0 5	3 1	7 0 1	6 0 2	9 0 0	6 4 0	0 3	1 4 3	1 7 7	1 4 3	L. plumiscos 2
37	7 0	0 5	3 1	7 0 1	3 0 2	9 0 0	6 4 0	0 3			C. lacustre	2
38	7 0	0 5	3 1	7 0 3	3 0 2	9 0 0	6 4 0	0 3			G. daiberi	2
39	7 0	0 5	3 1	7 0 2	0 0 2	9 0 0	6 4 0	0 3			G. tigrinus	2
40	7 0	0 5	3 1	7 0 2	2 0 2	9 0 0	6 4 0	0 3	4	3	M. nitida	2
41	7 0	0 5	3 1	6 0 2	1 0 2	9 0 0	6 4 0	0 3			C. almyra	2
42	7 0	0 5	3 1	7 0 2	5 0 2	9 0 0	6 4 0	0 3	2	1	M. edwardsi	2
43	7 0	0 5	4 2	4 0 0	1 0 2	9 0 0	6 4 0	0 3			C. species	2
44	7 0	0 5	3 1	9 0 1	4 0 2	9 0 0	6 4 0	0 3			R. harrisi	2
45	7 0	0 5	3 1	7 0 4	5 0 2	9 0 0	6 4 0	0 3			G. mucronat	2
46	7 0	0 3	3 0	1 0 0	1 0 2	9 0 0	6 4 0	0 3			C. caspia	2
47	7 0	0 3	3 0	1 0 0	2 0 2	9 0 0	6 4 0	0 3			G. francisc	2
48	7 0	0 3	5 0	5 0 3	1 0 2	9 0 0	6 4 0	0 3			S. elliptic	2
49	7 0	0 6	6 0	2 0 0	1 0 2	9 0 0	6 4 0	0 3			M. tenuis	2
50	7 0	0 6	6 0	2 0 0	2 0 2	9 0 0	6 4 0	0 3			V. pavida	2
	7 0				0 2	9 0 0	6 4 0	0 3				2
	7 0	0			0 2	9 0 0	6 4 0	0 3				2

CBL- Duguay cbl-1a Scraping

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
R2-Top	910408	1652	03	02139997	70	01	11		BA		1	1
XIF4813												

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
39146.	076211 6.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE (0 = None Present; 1 = Very Abundant; 2 = Abundant; 3 = Present)	REMARKS		SEQUENCE	NUMBER
1	70	03	03	028	029	154	041			D. leucolen		2
2	70	04	01	002	029	154	041			M. leidyi		2
3	70	04	01	003	029	154	041			H. filiform		2
4	70	04	01	008	029	154	041			M. species		2
5	70	04	01	004	029	154	041			N. succinea		2
6	70	04	09	001	029	154	041			S. fragilis		2
7	70	04	01	038	029	154	041			P. gouldi		2
8	70	04	01	017	029	154	041			E. heteropo		2
9	70	04	01	057	029	154	041			P. ligni		2
10	70	04	01	005	029	154	041			S. viridis		2
11	70	04	01	018	029	154	041			S. benedict		2
12	70	04	01	039	029	154	041			H. grayi		2
13	70	04	02	029	029	154	041			L. hoffmeis		2
14	70	04	02	023	029	154	041	3		P. tubifici		2
15	70	04	01	007	029	154	041			C. capitata		2
16	70	04	05	006	029	154	041			I. recurvus		2
17	70	04	05	007	029	154	041			C. leucopha		2
18	70				029	154	041			L. species		2
19	70	04	05	009	029	154	041			M. balthica		2
20	70	04	05	010	029	154	041			M. mitchell		2
21	70	04	05	008	029	154	041			R. cuneata		2
22	70	04	05	032	029	154	041			M. arenaria		2
23	70	04	04	019	029	154	041			Hydrobia		2
24	70	04	04	021	029	154	041			S. niger		2
25	70	04	04	020	029	154	041			D. obscura		2

CBL- Duguay cbl-2a Scraping

SAMPLING STATION NO. R2 - TOP	DATE YY	DATE MM	DATE DD	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
XIF4813	91	04	08	1652	03	02139997	70	01	11		BA		1	1

LATITUDE DDMMSS	LONGITUDE DDDMMSS	SEQUENCE NUMBER
391446.	0762116.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE (0 = None Present; 1 = Very Abundant; 2 = Abundant; 3 = Present)	REMARKS		SEQUENCE	NUMBER
27	70	05	30	7	011	029	0154	041		B. improvis		2
28	70	05	30	7	012	029	0154	041		B. subalbid		2
29	70	05	31	4	054	029	0154	041		L. american		2
30	70	05	31	6	012	029	0154	041		C. polita		2
31	70	05	31	6	030	029	0154	041		C. lunifron		2
33	70	05	31	6	024	029	0154	041		E. trilcba		2
34	70	05	31	7	026	029	0154	041		N. biarticu		2
35	70	05	31	7	003	029	0154	041		G. palustri		2
36	70	05	31	7	016	029	0154	041		L. plumusos		2
37	70	05	31	7	013	029	0154	041	2	C. lacustre		2
38	70	05	31	7	033	029	0154	041		G. daiberi		2
39	70	05	31	7	020	029	0154	041	3	G. tigrinus		2
40	70	05	31	7	022	029	0154	041	3	M. nitida		2
41	70	05	31	6	021	029	0154	041		C. almyra		2
42	70	05	31	7	025	029	0154	041		M. edwardsi		2
43	70	05	42	4	001	029	0154	041	3	C. species		2
44	70	05	31	9	014	029	0154	041	3	R. harrisi		2
45	70	05	31	7	045	029	0154	041		G. mucronat		2
46	70	03	30	1	001	029	0154	041	3	C. caspia		2
47	70	03	30	1	002	029	0154	041		G. francisc		2
48	70	03	50	5	031	029	0154	041		S. elliptic		2
49	70	06	60	2	001	029	0154	041	3	M. tenuis		2
50	70	06	60	2	002	029	0154	041	3	V. pavida		2
	70					029	0154	041				2
	70	0				029	0154	041				2

CBL- Duguay cbl-1a Scraping

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD		COUNTY	TIDE	WEATH.	REPIT.
XIF4813 (R2-Bottom)	910408	1652	08	0213997	70	01	11			BA		1	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
3914446.	0762116.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE (0 = None Present, 1 = Very Abundant, 2 = Abundant, 3 = Present)	REMARKS		SEQUENCE NUMBER
1	70	03	03	028	029	154	041			D. leucolen	2
2	70	04	01	002	029	154	041			M. leidyi	2
3	70	04	01	003	029	154	041			H. filiform	2
4	70	04	01	008	029	154	041			M. species	2
5	70	04	01	004	029	154	041	3		N. succinea	2
6	70	04	09	001	029	154	041			S. fragilis	2
7	70	04	01	038	029	154	041			P. gouldi	2
8	70	04	01	017	029	154	041			E. heteropo	2
9	70	04	01	057	029	154	041			P. ligni	2
10	70	04	01	005	029	154	041	3		S. viridis	2
11	70	04	01	018	029	154	041			S. benedict	2
12	70	04	01	039	029	154	041			H. grayi	2
13	70	04	02	029	029	154	041			L. hoffmeis	2
14	70	04	02	023	029	154	041			P. tubifici	2
15	70	04	01	007	029	154	041			C. capitata	2
16	70	04	05	006	029	154	041			I. recurvus	2
17	70	04	05	007	029	154	041	3		C. leucopha	2
18	70				029	154	041			L. species	2
19	70	04	05	009	029	154	041			M. balthica	2
20	70	04	05	010	029	154	041			M. mitchell	2
21	70	04	05	008	029	154	041			R. cuneata	2
22	70	04	05	032	029	154	041			M. arenaria	2
23	70	04	04	019	029	154	041			Hydrobia	2
24	70	04	04	021	029	154	041			S. niger	2
25	70	04	04	020	029	154	041			D. obscura	2

CBL- Duguay cbl-2a Scraping

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD		COUNTY	TIDE	WEATH.	REPIT.
R2-Bottom													
XIF48 13	910408	1652	08	02139997	70	01	11			BA		1	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
391446.	0762116.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE (0 = None Present, 1 = Very Abundant, 2 = Abundant, 3 = Present)	REMARKS		SEQUENCE	NUMBER
27	70	05	30	71	02	90	15	41			B. improvis	2
28	70	05	30	72	02	90	15	41	3		B. subalbid	2
29	70	05	31	44	02	90	15	41			L. american	2
30	70	05	31	66	02	90	15	41			C. polita	2
31	70	05	31	60	02	90	15	41			C. lunifron	2
33	70	05	31	64	02	90	15	41			E. triloba	2
34	70	05	31	76	02	90	15	41			N. biartica	2
35	70	05	31	70	02	90	15	41			G. palustri	2
36	70	05	31	76	02	90	15	41			L. plumusos	2
37	70	05	31	73	02	90	15	41	1		C. lacustre	2
38	70	05	31	73	02	90	15	41			G. daiberi	2
39	70	05	31	70	02	90	15	41	2		G. tigrinus	2
40	70	05	31	72	02	90	15	41	3		M. nitida	2
41	70	05	31	61	02	90	15	41			C. almyra	2
42	70	05	31	75	02	90	15	41			M. edwardsi	2
43	70	05	42	40	01	90	15	41			C. species	2
44	70	05	31	94	02	90	15	41	3		R. harrisi	2
45	70	05	31	70	02	90	15	41			G. mucronat	2
46	70	03	30	10	01	90	15	41	1		C. caspia	2
47	70	03	30	10	02	90	15	41			G. francisc	2
48	70	03	50	50	31	90	15	41			S. elliptic	2
49	70	06	60	20	01	90	15	41	2		M. tenuis	2
50	70	06	60	20	02	90	15	41	3		V. pavida	2
	70				02	90	15	41				2
	700				02	90	15	41				2

CBL- Duguay cbl-1a Scraping

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
R3 - Top	910408	1713	03	0213997	70	01	11		BA		1	1

LATITUDE (DDMMSS)	LONGITUDE (DDDMMSS)	SEQUENCE NUMBER
394132.	0762123.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE (0 = None Present; 1 = Very Abundant; 2 = Abundant; 3 = Present)	REMARKS		SEQUENCE	NUMBER
1	70	03	03	028	029	01	541			D. leucolen		2
2	70	04	01	002	029	01	541			M. leidyi		2
3	70	04	01	003	029	01	541			H. filiform		2
4	70	04	01	008	029	01	541			M. species		2
5	70	04	01	004	029	01	541			N. succinea		2
6	70	04	09	001	029	01	541			S. fragilis		2
7	70	04	01	038	029	01	541			P. gouldi		2
8	70	04	01	017	029	01	541			E. heteropo		2
9	70	04	01	057	029	01	541			P. ligni		2
10	70	04	01	005	029	01	541	3		S. viridis		2
11	70	04	01	018	029	01	541			S. benedict		2
12	70	04	01	039	029	01	541			H. grayi		2
13	70	04	02	029	029	01	541			L. hoffmeis		2
14	70	04	02	023	029	01	541			P. tubifici		2
15	70	04	01	007	029	01	541			C. capitata		2
16	70	04	05	006	029	01	541			I. recurvus		2
17	~~70~~	~~04~~	05	007	029	01	541			C. leucopha		2
18	~~70~~				029	01	541			L. species		2
19	70	04	05	009	029	01	541			M. balthica		2
20	70	04	05	010	029	01	541			M. mitchell		2
21	70	04	05	008	029	01	541			R. cuneata		2
22	70	04	05	032	029	01	541			M. arenaria		2
23	70	04	04	019	029	01	541			Hydrobia		2
24	70	04	04	021	029	01	541			S. niger		2
25	70	04	04	020	029	01	541			D. obscura		2

CBL- Duguay cbl-2a Scraping

SAMPLING STATION NO.	DATE						TIME OF SAMPLE				DEPTH	FT.	BASIN SEGMENT								MEDIA	CLASS	SUB	CODE	METHOD		COUNTY		TIDE	WEATH.	REPIT.
R3-Top	Y	Y	M	M	D	D																									
X I F 4 5 1 4	9	1	0	4	0	8	1	7	1	3	0	3	0	2	1	3	9	9	9	7	7	0	0	1	1		B	A		1	1

LATITUDE							LONGITUDE								SEQUENCE NUMBER
D	D	M	M	S	S	S	D	D	D	M	M	S	S	S	
3	9	1	4	3	2.		0	7	6	2	1	2	3.		1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE (0 = None Present; 1 = Very Abundant; 2 = Abundant; 3 = Present)	REMARKS		SEQUENCE	NUMBER
27	7	0 0 5 3	0 7	0 1 1	0 2 9 0	1 5 4	0 4 1	3		B. improvis		2
28	7	0 0 5 3	0 7	0 1 2	0 2 9 0	1 5 4	0 4 1			B. subalbid		2
29	7	0 0 5 3	1 4	0 5 4	0 2 9 0	1 5 4	0 4 1			L. american		2
30	7	0 0 5 3	1 6	0 1 2	0 2 9 0	1 5 4	0 4 1			C. polita		2
31	7	0 0 5 3	1 6	0 3 0	0 2 9 0	1 5 4	0 4 1			C. lunifron		2
33	7	0 0 5 3	1 6	0 2 4	0 2 9 0	1 5 4	0 4 1			E. trilcba		2
34	7	0 0 5 3	1 7	0 2 6	0 2 9 0	1 5 4	0 4 1			N. biarticu		2
35	7	0 0 5 3	1 7	0 0 3	0 2 9 0	1 5 4	0 4 1			G. palustri		2
36	7	0 0 5 3	1 7	0 1 6	0 2 9 0	1 5 4	0 4 1			L. plumuscs		2
37	7	0 0 5 3	1 7	0 1 3	0 2 9 0	1 5 4	0 4 1	2		C. lacustre		2
38	7	0 0 5 3	1 7	0 3 3	0 2 9 0	1 5 4	0 4 1			G. daiberi		2
39	7	0 0 5 3	1 7	0 2 0	0 2 9 0	1 5 4	0 4 1	2		G. tigrinus		2
40	7	0 0 5 3	1 7	0 2 2	0 2 9 0	1 5 4	0 4 1	3		M. nitida		2
41	7	0 0 5 3	1 6	0 2 1	0 2 9 0	1 5 4	0 4 1			C. almyra		2
42	7	0 0 5 3	1 7	0 2 5	0 2 9 0	1 5 4	0 4 1			M. edwardsi		2
43	7	0 0 5 4	2 4	0 0 1	0 2 9 0	1 5 4	0 4 1	3		C. species		2
44	7	0 0 5 3	1 9	0 1 4	0 2 9 0	1 5 4	0 4 1			R. harrisi		2
45	7	0 0 5 3	1 7	0 4 5	0 2 9 0	1 5 4	0 4 1			G. mucronat		2
46	7	0 0 3 3	0 1	0 0 1	0 2 9 0	1 5 4	0 4 1	2		C. caspia		2
47	7	0 0 3 3	0 1	0 0 2	0 2 9 0	1 5 4	0 4 1			G. francisc		2
48	7	0 0 3 5	0 5	0 3 1	0 2 9 0	1 5 4	0 4 1			S. elliptic		2
49	7	0 0 6 6	0 2	0 0 1	0 2 9 0	1 5 4	0 4 1			M. tenuis		2
50	7	0 0 6 6	0 2	0 0 2	0 2 9 0	1 5 4	0 4 1			V. pavida		2
	7	0			0 2 9 0	1 5 4	0 4 1					2
	7	0 0			0 2 9 0	1 5 4	0 4 1					2

CBL- Duguay cbl-1a Scraping

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
R3-BOTTOM												
XIF451 4	910408	1713	08	0213997	70		01	11	BA		1	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSSS	
394132	0762123	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE (0 = None Present; 1 = Very Abundant; 2 = Abundant; 3 = Present)	REMARKS		SEQUENCE	NUMBER
1	70	03	03	028	029	154	041			D. leucolen		2
2	70	04	01	002	029	154	041			M. leidyi		2
3	70	04	01	003	029	154	041			H. filiform		2
4	70	04	01	008	029	154	041			M. species		2
5	70	04	01	004	029	154	041			N. succinea		2
6	70	04	09	001	029	154	041			S. fragilis		2
7	70	04	01	038	029	154	041			P. gouldi		2
8	70	04	01	017	029	154	041			E. heteropo		2
9	70	04	01	057	029	154	041	3		P. ligni		2
10	70	04	01	005	029	154	041	3		S. viridis		2
11	70	04	01	018	029	154	041			S. benedict		2
12	70	04	01	039	029	154	041			H. grayi		2
13	70	04	02	029	029	154	041			L. hoffmeis		2
14	70	04	02	023	029	154	041			P. tubifici		2
15	70	04	01	007	029	154	041			C. capitata		2
16	70	04	05	006	029	154	041			I. recurvus		2
17	70	04	05	007	029	154	041			C. leucopha		2
18	70				029	154	041			L. species		2
19	70	04	05	009	029	154	041			M. balthica		2
20	70	04	05	010	029	154	041			M. mitchell		2
21	70	04	05	008	029	154	041			R. cuneata		2
22	70	04	05	032	029	154	041			M. arenaria		2
23	70	04	04	019	029	154	041			Hydrobia		2
24	70	04	04	021	029	154	041			S. niger		2
25	70	04	04	020	029	154	041			D. obscura		2

CBL- Duguay cbl-2a Scraping

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
R3 - BOTTOM												
XIF451 4	910408	1713	08	02139997	70	01	1		BA		1	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
3914432	0762123	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE (0 = None Present, 1 = Very Abundant, 2 = Abundant, 3 = Present)	REMARKS		SEQUENCE	NUMBER
27	700	53	07	01	1 02	90	154	041	3	B. improvis		2
28	700	53	07	01	2 02	90	154	041		B. subalbid		2
29	700	53	14	05	4 02	90	154	041		L. american		2
30	700	53	16	01	2 02	90	154	041		C. polita		2
31	700	53	16	03	0 02	90	154	041		C. lunifron		2
33	700	53	16	02	4 02	90	154	041		E. trilcba		2
34	700	53	17	02	6 02	90	154	041		N. biarticu		2
35	700	53	17	00	3 02	90	154	041		G. palustri		2
36	700	53	17	01	6 02	90	154	041		L. plumusos		2
37	700	53	17	01	3 02	90	154	041	1	C. lacustre		2
38	700	53	17	03	3 02	90	154	041		G. daiberi		2
39	700	53	17	02	0 02	90	154	041	2	G. tigrinus		2
40	700	53	17	02	2 02	90	154	041		M. nitida		2
41	700	53	16	02	1 02	90	154	041		C. almyra		2
42	700	53	17	02	5 02	90	154	041		M. edwardsi		2
43	700	54	24	00	1 02	90	154	041		C. species		2
44	700	53	19	01	4 02	90	154	041	3	R. harrisi		2
45	700	53	17	04	5 02	90	154	041		G. mucronat		2
46	700	33	01	00	1 02	90	154	041	1	C. caspia		2
47	700	33	01	00	2 02	90	154	041		G. francisc		2
48	700	35	05	03	1 02	90	154	041		S. elliptic		2
49	700	66	02	00	1 02	90	154	041	3	M. tenuis		2
50	700	66	02	00	2 02	90	154	041	3	V. pavida		2
	70				02	90	154	041				2
	700				02	90	154	041				2

CBL- Duguay cbl-1a Scraping

SAMPLING STATION NO.	DATE	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
R4-Top	YYMMDD											
XIF4518	910408	1727	03	02139997	70	01	11		BA		1	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSS	
391428.	0762150.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE (0 = None Present; 1 = Very Abundant; 2 = Abundant; 3 = Present)	REMARKS		SEQUENCE	NUMBER
1	70	03	03	028	029	154	041			D. leucolen		2
2	70	04	01	002	029	154	041			M. leidyi		2
3	70	04	01	003	029	154	041			H. filiform		2
4	70	04	01	008	029	154	041			M. species		2
5	70	04	01	004	029	154	041	3		N. succinea		2
6	70	04	09	001	029	154	041			S. fragilis		2
7	70	04	01	038	029	154	041			P. gouldi		2
8	70	04	01	017	029	154	041			E. heteropo		2
9	70	04	01	057	029	154	041			P. ligni		2
10	70	04	01	005	029	154	041			S. viridis		2
11	70	04	01	018	029	154	041			S. benedict		2
12	70	04	01	039	029	154	041			H. grayi		2
13	70	04	02	029	029	154	041			L. hoffmeis		2
14	70	04	02	023	029	154	041	3		P. tubifici		2
15	70	04	01	007	029	154	041			C. capitata		2
16	70	04	05	006	029	154	041			I. recurvus		2
17	70	04	05	007	029	154	041			C. leucopha		2
18	70				029	154	041			L. species		2
19	70	04	05	009	029	154	041			M. balthica		2
20	70	04	05	010	029	154	041			M. mitchell		2
21	70	04	05	008	029	154	041			R. cuneata		2
22	70	04	05	032	029	154	041			M. arenaria		2
23	70	04	04	019	029	154	041			Hydrobia		2
24	70	04	04	021	029	154	041			S. niger		2
25	70	04	04	020	029	154	041			D. obscura		2

CBL- Duguay cbl-2a Scraping

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
R4-Top												
XIF4518	910408	1727	03	02139997	70	01	11		BA		1	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSSS	
391428.	0762150.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE (0 = None Present, 1 = Very Abundant, 2 = Abundant, 3 = Present)	REMARKS		SEQUENCE NUMBER
27	70	053	07	011	029	01	541	2		B. improvis	2
28	70	053	07	012	029	01	541	2		B. subalbid	2
29	70	053	14	054	029	01	541			L. american	2
30	70	053	16	012	029	01	541			C. polita	2
31	70	053	16	030	029	01	541			C. lunifron	2
33	70	053	16	024	029	01	541			E. triloba	2
34	70	053	17	026	029	01	541			N. biarticu	2
35	70	053	17	003	029	01	541			G. palustri	2
36	70	053	17	016	029	01	541			L. plumusos	2
37	70	053	17	013	029	01	541	1		C. lacustre	2
38	70	053	17	033	029	01	541			G. daiberi	2
39	70	053	17	020	029	01	541	1		G. tigrinus	2
40	70	053	17	022	029	01	541	3		M. nitida	2
41	70	053	16	021	029	01	541			C. almyra	2
42	70	053	17	025	029	01	541			M. edwardsi	2
43	70	054	24	001	029	01	541	3		C. species	2
44	70	053	19	014	029	01	541			R. harrisi	2
45	70	053	17	045	029	01	541			G. mucronat	2
46	70	033	01	001	029	01	541	1		C. caspia	2
47	70	033	01	002	029	01	541			G. francisc	2
48	70	035	05	031	029	01	541			S. elliptic	2
49	70	066	02	001	029	01	541			M. tenuis	2
50	70	066	02	002	029	01	541	3		V. pavida	2
	70				029	01	541				2
	700				029	01	541				2

CBL- Duguay cbl-1a Scraping

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
R4- Bottom												
XIF4518	910408	1727	08	0213999 7	70	01	11		BA		1	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
3914128.	0762150.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE (0 = None Present; 1 = Very Abundant; 2 = Abundant; 3 = Present)	REMARKS		SEQUENCE NUMBER
1	70	03	30	28	02	90	154	041		D. leucolen	2
2	70	04	01	02	02	90	154	041		M. leidyi	2
3	70	04	01	03	02	90	154	041		H. filiform	2
4	70	04	01	08	02	90	154	041		M. species	2
5	70	04	01	04	02	90	154	041	3	N. succinea	2
6	70	04	09	001	02	90	154	041		S. fragilis	2
7	70	04	01	38	02	90	154	041		P. gouldi	2
8	70	04	01	17	02	90	154	041		E. heteropo	2
9	70	04	01	57	02	90	154	041	3	P. ligni	2
10	70	04	01	05	02	90	154	041	3	S. viridis	2
11	70	04	01	18	02	90	154	041		S. benedict	2
12	70	04	01	39	02	90	154	041		H. grayi	2
13	70	04	02	29	02	90	154	041		L. hoffmeis	2
14	70	04	02	23	02	90	154	041	3	P. tubifici	2
15	70	04	01	07	02	90	154	041		C. capitata	2
16	70	04	05	06	02	90	154	041	3	I. recurvus	2
17	70	04	05	07	02	90	154	041		C. leucopha	2
18	70				02	90	154	041		L. species	2
19	70	04	05	09	02	90	154	041		M. balthica	2
20	70	04	05	10	02	90	154	041		M. mitchell	2
21	70	04	05	08	02	90	154	041		R. cuneata	2
22	70	04	05	32	02	90	154	041		M. arenaria	2
23	70	04	04	19	02	90	154	041		Hydrobia	2
24	70	04	04	21	02	90	154	041		S. niger	2
25	70	04	04	20	02	90	154	041		D. obscura	2

CBL- Duguay cbl-2a Scraping

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
R4- Bottom												
XIF4518	910408	1727	08	0213999 7	70	01	11		BA		1	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSSS	
391428.	0762150.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE (0 = None Present, 1 = Very Abundant, 2 = Abundant, 3 = Present)	REMARKS		SEQUENCE	NUMBER
27	70	053	07	01	02	90	154	041	1	B. improvis		2
28	70	053	07	01	02	90	154	041	2	B. subalbid		2
29	70	053	14	05	40	29	01	54	041	L. american		2
30	70	053	16	01	20	29	01	54	041	C. polita		2
31	70	053	16	03	00	29	01	54	041	C. lunifron		2
33	70	053	16	02	40	29	01	54	041	E. trilcba		2
34	70	053	17	02	60	29	01	54	041	N. biarticu		2
35	70	053	17	00	30	29	01	54	041	3	G. palustri	2
36	70	053	17	01	60	29	01	54	041	L. plumusos		2
37	70	053	17	01	30	29	01	54	041	1	C. lacustre	2
38	70	053	17	03	30	29	01	54	041	G. daiberi		2
39	70	053	17	02	00	29	01	54	041	2	G. tigrinus	2
40	70	053	17	02	20	29	01	54	041	M. nitida		2
41	70	053	16	02	10	29	01	54	041	C. almyra		2
42	70	053	17	02	50	29	01	54	041	M. edwardsi		2
43	70	054	24	00	10	29	01	54	041	3	C. species	2
44	70	053	19	01	40	29	01	54	041	3	R. harrisi	2
45	70	053	17	04	50	29	01	54	041		G. mucronat	2
46	70	033	01	00	10	29	01	54	041	1	C. caspia	2
47	70	033	01	00	20	29	01	54	041		G. francisc	2
48	70	035	05	03	10	29	01	54	041		S. elliptic	2
49	70	066	02	00	10	29	01	54	041	3	M. tenuis	2
50	70	066	02	00	20	29	01	54	041	3	V. pavida	2
	70				02	90	15	40	41			2
	700				02	90	15	40	41			2

CBL- Duguay cbl-1a Scraping

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD		COUNTY	TIDE	WEATH.	REPIT.
R5 - Top													
XIF3638	910408	1748	03	02139997	70	01	11			BA		1	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
391337.	0762347.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE (0 = None Present; 1 = Very Abundant; 2 = Abundant; 3 = Present)	REMARKS		SEQUENCE NUMBER
1	70	03	03	02	8 02	90	154	04	1	D. leucolen	2
2	70	04	01	00	2 02	90	154	04	1	M. leidyi	2
3	70	04	01	00	3 02	90	154	04	1	H. filiform	2
4	70	04	01	00	8 02	90	154	04	1	M. species	2
5	70	04	01	00	4 02	90	154	04	1	2 N. succinea	2
6	70	04	09	00	1 02	90	154	04	1	S. fragilis	2
7	70	04	01	03	8 02	90	154	04	1	P. gouldi	2
8	70	04	01	01	7 02	90	154	04	1	E. heteropo	2
9	70	04	01	05	7 02	90	154	04	1	3 P. ligni	2
10	70	04	01	00	5 02	90	154	04	1	S. viridis	2
11	70	04	01	01	8 02	90	154	04	1	S. benedict	2
12	70	04	01	03	9 02	90	154	04	1	H. grayi	2
13	70	04	02	02	9 02	90	154	04	1	L. hoffmeis	2
14	70	04	02	02	3 02	90	154	04	1	P. tubifici	2
15	70	04	01	00	7 02	90	154	04	1	C. capitata	2
16	70	04	05	00	6 02	90	154	04	1	I. recurvus	2
17	70	04	05	00	7 02	90	154	04	1	C. leucopha	2
18	70				02	90	154	04	1	L. species	2
19	70	04	05	00	9 02	90	154	04	1	M. balthica	2
20	70	04	05	01	0 02	90	154	04	1	M. mitchell	2
21	70	04	05	00	8 02	90	154	04	1	R. cuneata	2
22	70	04	05	03	2 02	90	154	04	1	M. arenaria	2
23	70	04	04	01	9 02	90	154	04	1	Hydrobia	2
24	70	04	04	02	1 02	90	154	04	1	S. niger	2
25	70	04	04	02	0 02	90	154	04	1	D. obscura	2

CBL- Duguay cbl-2a Scraping

SAMPLING STATION NO.	DATE	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
R5 - Top	YYMMDD											
XIF3638	910408	1748	03	02139997	70	01		11	BA		1	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSSS	
391337.	0762347.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE (0 = None Present, 1 = Very Abundant, 2 = Abundant, 3 = Present)	REMARKS		SEQUENCE	NUMBER
27	70	05	30	70	12	02	90	154	041	3		2
28	70	05	30	70	12	02	90	154	041	2		2
29	70	05	31	40	54	02	90	154	041			2
30	70	05	31	60	12	02	90	154	041			2
31	70	05	31	60	30	02	90	154	041			2
33	70	05	31	60	24	02	90	154	041			2
34	70	05	31	70	26	02	90	154	041			2
35	70	05	31	70	03	02	90	154	041			2
36	70	05	31	70	16	02	90	154	041			2
37	70	05	31	70	13	02	90	154	041	1		2
38	70	05	31	70	33	02	90	154	041			2
39	70	05	31	70	20	02	90	154	041			2
40	70	05	31	70	22	02	90	154	041			2
41	70	05	31	60	21	02	90	154	041			2
42	70	05	31	70	25	02	90	154	041			2
43	70	05	42	40	01	02	90	154	041	3		2
44	70	05	31	90	14	02	90	154	041			2
45	70	05	31	70	45	02	90	154	041			2
46	70	03	30	10	01	02	90	154	041	2		2
47	70	03	30	10	02	02	90	154	041			2
48	70	03	50	50	31	02	90	154	041			2
49	70	06	60	20	01	02	90	154	041			2
50	70	06	60	20	02	02	90	154	041	1		2
	70					02	90	154	041			2
	700					02	90	154	041			2

27	B. improvis
28	B. subalbid
29	L. american
30	C. polita
31	C. lunifron
33	E. trilcba
34	N. biarticu
35	G. palustri
36	L. plumusos
37	C. lacustre
38	G. daiberi
39	G. tigrinus
40	M. nitida
41	C. almyra
42	M. edwardsi
43	C. species
44	R. harrisi
45	G. mucronat
46	C. caspia
47	G. francisc
48	S. elliptic
49	M. tenuis
50	V. pavida

CBL- Duguay cbl-1a Scraping

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD		COUNTY	TIDE	WEATH.	REPIT.	
R5 - BOTTOM														
XIF3638	910408	1748	08	0213997	70	01	11			BA		1	1	

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSS	
391337.	0762347.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE (0 = None Present; 1 = Very Abundant; 2 = Abundant; 3 = Present)	REMARKS		SEQUENCE	NUMBER
1	70	03	03	02	8 02	90	154	04	1	D. leucolen		2
2	70	04	00	10	02	90	154	04	1	M. leidyi		2
3	70	04	80	10	03	02	90	154	04	1	H. filiform	2
4	70	04	80	10	08	02	90	154	04	1	M. species	2
5	70	04	80	10	04	02	90	154	04	1	3	N. succinea	2
6	70	04	80	90	01	02	90	154	04	1	S. fragilis	2
7	70	04	80	10	38	02	90	154	04	1	P. gouldi	2
8	70	04	80	10	17	02	90	154	04	1	E. heteropo	2
9	70	04	80	10	57	02	90	154	04	1	3	P. ligni	2
10	70	04	80	10	05	02	90	154	04	1	3	S. viridis	2
11	70	04	80	10	18	02	90	154	04	1	S. benedict	2
12	70	04	80	10	39	02	90	154	04	1	H. grayi	2
13	70	04	80	20	29	02	90	154	04	1	L. hoffmeis	2
14	70	04	80	20	23	02	90	154	04	1	3	P. tubifici	2
15	70	04	80	10	07	02	90	154	04	1	C. capitata	2
16	70	04	90	05	06	02	90	154	04	1	I. recurvus	2
17	70	04	90	05	07	02	90	154	04	1	C. leucopha	2
18	78					02	90	154	04	1	L. species	2
19	70	04	90	05	09	02	90	154	04	1	M. balthica	2
20	70	04	90	05	10	02	90	154	04	1	M. mitchell	2
21	70	04	90	05	08	02	90	154	04	1	R. cuneata	2
22	70	04	90	05	32	02	90	154	04	1	M. arenaria	2
23	70	04	90	04	19	02	90	154	04	1	Hydrobia	2
24	70	04	90	04	21	02	90	154	04	1	S. niger	2
25	70	04	90	04	20	02	90	154	04	1	D. obscura	2

CBL- Duguay cbl-2a Scraping

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
R5- Bottom												
XIF3638	910409	1748	08	0213999 7	70	01	11		BA		1	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSSS	
391337.	0762347.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE (0 = None Present, 1 = Very Abundant, 2 = Abundant, 3 = Present)	REMARKS		SEQUENCE NUMBER
27	70	053	07	011	029	01	541	2		B. improvis	2
28	70	053	07	012	029	01	541	3		B. subalbid	2
29	70	053	14	054	029	01	541			L. american	2
30	70	053	16	012	029	01	541			C. polita	2
31	70	053	16	030	029	01	541			C. lunifron	2
33	70	053	16	024	029	01	541			E. triloba	2
34	70	053	17	026	029	01	541			N. biarticu	2
35	70	053	17	003	029	01	541			G. palustri	2
36	70	053	17	016	029	01	541			L. plumusos	2
37	70	053	17	013	029	01	541	1		C. ladustre	2
38	70	053	17	033	029	01	541			G. daiberi	2
39	70	053	17	020	029	01	541	3		G. tigrinus	2
40	70	053	17	022	029	01	541			M. nitida	2
41	70	053	16	021	029	01	541			C. almyra	2
42	70	053	17	025	029	01	541			M. edwardsi	2
43	70	054	24	001	029	01	541	3		C. species	2
44	70	053	19	014	029	01	541			R. harrisi	2
45	70	053	17	045	029	01	541			G. mucronat	2
46	70	033	01	001	029	01	541	1		C. caspia	2
47	70	033	01	002	029	01	541			G. francisc	2
48	70	035	05	031	029	01	541			S. elliptic	2
49	70	066	02	001	029	01	541	2		M. tenuis	2
50	70	066	02	002	029	01	541	3		V. pavida	2
	70				029	01	541				2
	700				029	01	541				2

CEL- Duguay cbl-1 PONAR GRAB

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
XIF5710 51	910812	1513	06	0213997	70	01	11		BAE		1	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSSS	
39153.9	076205.7	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE	NUMBER
1	70	03	03	028	029	06	403				D. leucolen		2
2	70	04	01	002	029	06	403				M. leidyi		2
3	70	04	01	003	029	06	403				E. filiform		2
4	70	04	01	008	029	06	403				M. species		2
5	70	04	01	004	029	06	403		4		N. succinea		2
6	70	04	09	001	029	06	403				S. fragilis		2
7	70	04	01	038	029	06	403				P. gouldi		2
8	70	04	01	017	029	06	403				E. heterop		2
9	70	04	01	057	029	06	403				P. ligni		2
10	70	04	01	005	029	06	403	6	4		S. viridis		2
11	70	04	01	018	029	06	403				S. benedict		2
12	70	04	01	039	029	06	403				H. grayi		2
13	70	04	02	029	029	06	403				L. hoffmeis		2
14	70	04	02	023	029	06	403				P. tubifici		2
15	70	04	01	007	029	06	403				C. capitata		2
16	70	04	05	006	029	06	403				I. recurvus		2
17	70	04	05	007	029	06	403				C. leucopha		2
18	70				029	06	403				L. species		2
19	70	04	05	009	029	06	403	1			M. balthica		2
20	70	04	05	010	029	06	403		1		M. mitchell		2
21	70	04	05	008	029	06	403	15	8	6	R. cuneata		2
22	70	04	05	032	029	06	403				M. arenaria		2
23	70	04	04	019	029	06	403				Hydrobia		2
24	70	04	04	021	029	06	403				S. niger		2
25	70	04	04	020	029	06	403				D. obscura		2

CEL- Duguay cbl-2 Ponar grab

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPITT.
S1												
XIF5710	910812	1306	06	0213997	70	01	11		BA	E	1	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSS	
391539.	0762057.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
27	70	05	30	7	11	02	90	064	003		B. improvis	2
28	70	05	30	7	12	02	90	064	003		B. subalbid	2
29	70	05	31	4	54	02	90	064	003		L. american	2
30	70	05	31	6	12	02	90	064	003	1 1	C. polita	2
31	70	05	31	6	03	02	90	064	003		C. lunifron	2
33	70	05	31	6	24	02	90	064	003		E. triloba	2
34	70	05	31	7	26	02	90	064	003		N. biarticu	2
35	70	05	31	7	03	02	90	064	003		G. palustri	2
36	70	05	31	7	16	02	90	064	003	1	L. plumusos	2
37	70	05	31	7	13	02	90	064	003		C. lacustre	2
38	70	05	31	7	33	02	90	064	003		G. daiberi	2
39	70	05	31	7	20	02	90	064	003		G. tigrinus	2
40	70	05	31	7	22	02	90	064	003		M. nitida	2
41	70	05	31	6	21	02	90	064	003	2 1 2	C. almyra	2
42	70	05	31	7	25	02	90	064	003		M. edwardsi	2
43	70	05	42	4	01	02	90	064	003		C. species	2
44	70	05	31	9	14	02	90	064	003		R. harrisi	2
45	70	05	31	7	45	02	90	064	003		G. mucronat	2
46	70	03	30	1	01	02	90	064	003		C. caspia	2
47	70	03	30	1	02	02	90	064	003		G. francisc	2
48	70	03	35	5	31	02	90	064	003		S. elliptic	2
49	70	06	60	2	01	02	90	064	003	2	M. tenuis	2
50	70	06	60	2	02	02	90	064	003	1	V. pavida	2
	70					02	90	064	003			2
	700					02	90	064	003			2

CBL- Duguay cbl-1 PONAR GRAB

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
52												
XIF5406	910812	1459	12	02139977	70	01	11		BA	E	1	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSSS	
391525	0762035	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
1	70	03	30	28	02	90	06	40	03		D. leucolen	2
2	70	04	01	02	02	90	06	40	03		M. leidyi	2
3	70	04	80	10	03	02	90	06	40	03	E. filiform	2
4	70	04	80	10	08	02	90	06	40	03	M. species	2
5	70	04	80	10	04	02	90	06	40	03	N. succinea	2
6	70	04	80	09	01	02	90	06	40	03	S. fragilis	2
7	70	04	80	10	03	02	90	06	40	03	P. gouldi	2
8	70	04	80	10	17	02	90	06	40	03	E. heteropo	2
9	70	04	80	10	57	02	90	06	40	03	P. ligni	2
10	70	04	80	10	05	02	90	06	40	03	S. viridis	2
11	70	04	80	10	18	02	90	06	40	03	S. benedict	2
12	70	04	80	10	39	02	90	06	40	03	E. grayi	2
13	70	04	80	20	29	02	90	06	40	03	L. hoffmeis	2
14	70	04	80	20	23	02	90	06	40	03	P. tubifici	2
15	70	04	80	10	07	02	90	06	40	03	C. capitata	2
16	70	04	90	05	06	02	90	06	40	03	I. recurvus	2
17	70	04	90	05	07	02	90	06	40	03	C. leucopha	2
18	70					02	90	06	40	03	L. species	2
19	70	04	90	05	09	02	90	06	40	03	M. balthica	2
20	70	04	90	05	10	02	90	06	40	03	M. mitchell	2
21	70	04	90	05	08	02	90	06	40	03	R. cuneata	2
22	70	04	90	05	32	02	90	06	40	03	M. arenaria	2
23	70	04	90	04	19	02	90	06	40	03	Hydrobia	2
24	70	04	90	04	21	02	90	06	40	03	S. niger	2
25	70	04	90	04	20	02	90	06	40	03	D. obscura	2

CSL- Duguay ch1-2 Ponar grab

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPHT.
XIF540 6 S2	910812	1459	12	021399977	70	01	11		BA	E	1	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSS	
391525	0762035	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
27	70	05	30	71	02	90	64	00	3		B. improvis	2
28	70	05	30	72	02	90	64	00	3		B. subalbid	2
29	70	05	31	45	02	90	64	00	3		L. american	2
30	70	05	31	62	02	90	64	00	3	6 6 10	C. polita	2
31	70	05	31	60	02	90	64	00	3		C. lunifron	2
33	70	05	31	62	02	90	64	00	3	1	E. trilcba	2
34	70	05	31	72	02	90	64	00	3		N. biarticu	2
35	70	05	31	70	02	90	64	00	3		G. palustri	2
36	70	05	31	71	02	90	64	00	3		L. plumuscs	2
37	70	05	31	73	02	90	64	00	3	21 11 24	C. lacustre	2
38	70	05	31	73	02	90	64	00	3		G. daiberi	2
39	70	05	31	70	02	90	64	00	3		G. tigrinus	2
40	70	05	31	72	02	90	64	00	3		M. nitida	2
41	70	05	31	61	02	90	64	00	3		C. almyra	2
42	70	05	31	72	02	90	64	00	3		M. edwardsi	2
43	70	05	42	40	01	02	90	64	00	3	C. species	2
44	70	05	31	90	14	02	90	64	00	3 2	R. harrisi	2
45	70	05	31	70	45	02	90	64	00	3	G. mucronat	2
46	70	03	30	10	01	02	90	64	00	3	C. caspia	2
47	70	03	30	10	02	02	90	64	00	3	G. francisc	2
48	70	03	50	50	31	02	90	64	00	3	S. elliptic	2
49	70	06	60	20	01	02	90	64	00	3 15 17 20	M. tenuis	2
50	70	06	60	20	02	02	90	64	00	3	V. pavida	2
	70					02	90	64	00	3		2
	70	0				02	90	64	00	3		2

CEL- Duguay cbl-1 PONAR GRAB

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
XIF48 11 53	910812	1429	15	021399977	70	01	11		BA	E	1	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSSS	
39 14 50.	076 21 07.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1	GRAB #2	GRAB #3		SEQUENCE	NUMBER
								VALUE					
1	70	03	30	28	02	90	64	03			D. leucolen		2
2	70	04	00	12	02	90	64	03	3	3	M. leidyi		2
3	70	04	80	13	02	90	64	03	2	4 4	E. filiform		2
4	70	04	80	18	02	90	64	03			M. species		2
5	70	04	80	14	02	90	64	03			N. succinea		2
6	70	04	80	91	02	90	64	03			S. fragilis		2
7	70	04	80	18	02	90	64	03			P. gouldi		2
8	70	04	80	17	02	90	64	03			E. heterepo		2
9	70	04	80	57	02	90	64	03			P. ligni		2
10	70	04	80	05	02	90	64	03	3	7 1 0	S. viridis		2
11	70	04	80	18	02	90	64	03	1	1	S. benedict		2
12	70	04	80	39	02	90	64	03			H. grayi		2
13	70	04	80	29	02	90	64	03			L. hoffmeis		2
14	70	04	80	23	02	90	64	03			P. tubifici		2
15	70	04	80	07	02	90	64	03			C. capitata		2
16	70	04	90	06	02	90	64	03			I. recurvus		2
17	70	04	90	07	02	90	64	03			C. leucopha		2
18	70				02	90	64	03			L. species		2
19	70	04	90	09	02	90	64	03		4	M. balthica		2
20	70	04	90	10	02	90	64	03		6 1	M. mitchell		2
21	70	04	90	08	02	90	64	03	44	1 7 5 5 7	R. cuneata		2
22	70	04	90	32	02	90	64	03			M. arenaria		2
23	70	04	90	19	02	90	64	03		2 1	Hydrobia		2
24	70	04	90	21	02	90	64	03			S. niger		2
25	70	04	90	20	02	90	64	03			D. obscura		2

CEL- Duguay cbl-2 Ponar grab

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
XIF48 11 53	910812	1429	15	02139977	70	01	11		BA	E	1	1

LATITUDE (DDMMSS)	LONGITUDE (DDDMMSS)	SEQUENCE NUMBER
391450	0762107	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
27	70	05	30	70	29	64	03				B. improvis	2
28	70	05	30	70	29	64	03				B. subalbid	2
29	70	05	31	40	29	64	03				L. american	2
30	70	05	31	60	29	64	03	4	5	7	C. polita	2
31	70	05	31	60	29	64	03				C. lunifron	2
33	70	05	31	60	29	64	03				E. trilcba	2
34	70	05	31	70	29	64	03				N. biarticu	2
35	70	05	31	70	29	64	03				G. palustri	2
36	70	05	31	70	29	64	03	2			L. plumusos	2
37	70	05	31	70	29	64	03				C. lacustre	2
38	70	05	31	70	29	64	03				G. daiberi	2
39	70	05	31	70	29	64	03				G. tigrinus	2
40	70	05	31	70	29	64	03				M. nitida	2
41	70	05	31	60	29	64	03				C. almyra	2
42	70	05	31	70	29	64	03				M. edwardsi	2
43	70	05	42	40	29	64	03				C. species	2
44	70	05	31	90	29	64	03				R. harrisi	2
45	70	05	31	70	29	64	03				G. mucronat	2
46	70	03	30	10	29	64	03				C. caspia	2
47	70	03	30	10	29	64	03				G. francisc	2
48	70	03	50	50	29	64	03				S. elliptic	2
49	70	06	60	20	29	64	03				M. tenuis	2
50	70	06	60	20	29	64	03				V. pavida	2
	70				29	64	03					2
	700				29	64	03					2

5/15/03 OK

CEL- Duguay cbl-1 PONAR GRAB

SAMPLING STATION NO.	DATE	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
XIF4715 54	910812	1411	11	0213997	70	01	11		BA	E	1	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSSS	
39144 0.	076212 8.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
1	70	03	30	28	02	90	64	00	3		D. leucolen	2
2	70	04	01	00	02	90	64	00	3		M. leidyi	2
3	70	04	81	03	02	90	64	00	3		H. filiform	2
4	70	04	81	08	02	90	64	00	3		M. species	2
5	70	04	81	04	02	90	64	00	3		N. succinea	2
6	70	04	80	90	00	1	02	90	64	00	3	S. fragilis	2
7	70	04	81	03	82	90	64	00	3		P. gouldi	2
8	70	04	81	01	72	90	64	00	3		E. heterepo	2
9	70	04	81	05	72	90	64	00	3		P. ligni	2
10	70	04	81	00	52	90	64	00	3	9 1	S. viridis	2
11	70	04	81	01	82	90	64	00	3	1	S. benedict	2
12	70	04	81	03	92	90	64	00	3		H. grayi	2
13	70	04	82	02	92	90	64	00	3		L. hoffmeis	2
14	70	04	82	02	32	90	64	00	3		P. tubifici	2
15	70	04	81	00	72	90	64	00	3		C. capitata	2
16	70	04	91	05	00	6	02	90	64	00	3	I. recurvus	2
17	70	04	91	05	00	7	02	90	64	00	3	C. leucopha	2
18	70						02	90	64	00	3	L. species	2
19	70	04	91	05	00	9	02	90	64	00	3	1 3	M. balthica	2
20	70	04	91	05	01	00	02	90	64	00	3	2 1	M. mitchell	2
21	70	04	91	05	00	8	02	90	64	00	3	56 52	45	R. cuneata	2
22	70	04	91	05	03	2	02	90	64	00	3	M. arenaria	2
23	70	04	91	04	01	9	02	90	64	00	3	1	Hydrobia	
24	70	04	91	04	02	1	02	90	64	00	3	S. niger	
25	70	04	91	04	02	0	02	90	64	00	3	D. obscura	

CSL- Duguay cbl-2 Ponar grab

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
XIF475 (S4)	910812	1411	11	0213997	70	01	11		BA	E	1	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSSS	
391440.	0762128.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1	GRAB #2	GRAB #3		SEQUENCE NUMBER
								VALUE				
27	70	05	30	70	29	06	40	03			B. improvis	2
28	70	05	30	70	29	06	40	03			B. subalbid	2
29	70	05	31	40	29	06	40	03			L. american	2
30	70	05	31	60	29	06	40	03	1	3 1	C. polita	2
31	70	05	31	60	29	06	40	03			C. lunifron	2
33	70	05	31	60	29	06	40	03			E. trilcba	2
34	70	05	31	70	29	06	40	03			N. biartica	2
35	70	05	31	70	29	06	40	03			G. palustri	2
36	70	05	31	70	29	06	40	03	1	1 3	L. plumuscs	2
37	70	05	31	70	29	06	40	03			C. lacustra	2
38	70	05	31	70	29	06	40	03			G. daiberi	2
39	70	05	31	70	29	06	40	03			G. tigrinus	2
40	70	05	31	70	29	06	40	03			M. nitida	2
41	70	05	31	60	29	06	40	03			C. almyra	2
42	70	05	31	70	29	06	40	03			M. edwardsi	2
43	70	05	34	24	29	06	40	03			C. species	2
44	70	05	31	90	29	06	40	03			R. harrisi	2
45	70	05	31	70	29	06	40	03			G. mucronat	2
46	70	03	30	10	29	06	40	03			C. caspia	2
47	70	03	30	10	29	06	40	03			G. francisc	2
48	70	03	50	50	29	06	40	03			S. elliptic	2
49	70	06	60	20	29	06	40	03	7	6	M. tenuis	2
50	70	06	60	20	29	06	40	03			V. pavida	2
	70				29	06	40	03				2
	700				29	06	40	03				2

5/15/03
OK

CEL- Duguay cbl-1 PONAR GRAB

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
XIF44 20 55	910812	1205	18	0213997	70	01	11	BA	E	1	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
391423	0762200	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1	GRAB #2	GRAB #3		SEQUENCE	NUMBER
1	70	03	30	02	80	29	00	64	00	3	D. leucolen		2
2	70	04	01	00	20	29	00	64	00	3	M. leidyi		2
3	70	04	01	00	30	29	00	64	00	3	H. filiform		2
4	70	04	01	00	80	29	00	64	00	3	M. species		2
5	70	04	01	00	40	29	00	64	00	3	N. succinea		2
6	70	04	09	00	01	29	00	64	00	3	S. fragilis		2
7	70	04	01	03	80	29	00	64	00	3	P. gouldi		2
8	70	04	01	01	70	29	00	64	00	3	E. heteropo		2
9	70	04	01	05	70	29	00	64	00	3	P. ligni		2
10	70	04	01	00	50	29	00	64	00	3	S. viridis		2
11	70	04	01	01	80	29	00	64	00	3	S. benedict		2
12	70	04	01	03	90	29	00	64	00	3	H. grayi		2
13	70	04	02	02	90	29	00	64	00	3	L. hoffmeis		2
14	70	04	02	02	30	29	00	64	00	3	P. tubifici		2
15	70	04	01	00	70	29	00	64	00	3	C. capitata		2
16	70	04	05	00	60	29	00	64	00	3	I. recurvus		2
17	70	04	05	00	70	29	00	64	00	3	C. leuccpha		2
18	70				02	29	00	64	00	3	L. species		2
19	70	04	05	00	90	29	00	64	00	3	M. balthica		2
20	70	04	05	01	00	29	00	64	00	3	M. mitchell		2
21	70	04	05	00	80	29	00	64	00	3	R. cuneata		2
22	70	04	05	03	20	29	00	64	00	3	M. arenaria		2
23	70	04	04	01	90	29	00	64	00	3	Hydrobia		2
24	70	04	04	02	10	29	00	64	00	3	S. niger		2
25	70	04	04	02	00	29	00	64	00	3	D. obscura		2

Species #	Grab #1	Grab #2	Grab #3
2	3	1	3
19	3		
21	118	72	27
23	2		2

CSL- Duguay cbl-2 Ponar grab

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
S5	910812	1205	18	02139997	70	00	11		BA	E	1	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSSS	
3914230	0762200	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
27	70	05	30	71	02	90	64	00			B. improvis	2
28	70	05	30	72	02	90	64	00			B. subalbid	2
29	70	05	31	45	02	90	64	00			L. american	2
30	70	05	31	62	02	90	64	00	3 6 4		C. polita	2
31	70	05	31	60	02	90	64	00			C. lunifron	2
33	70	05	31	62	02	90	64	00			E. trilcba	2
34	70	05	31	76	02	90	64	00			N. biarticu	2
35	70	05	31	70	02	90	64	00			G. palustri	2
36	70	05	31	76	02	90	64	00	3		L. plumuscs	2
37	70	05	31	73	02	90	64	00			C. lacustre	2
38	70	05	31	73	02	90	64	00			G. daiberi	2
39	70	05	31	70	02	90	64	00			G. tigrinus	2
40	70	05	31	72	02	90	64	00			M. nitida	2
41	70	05	31	61	02	90	64	00			C. almyra	2
42	70	05	31	75	02	90	64	00			M. edwardsi	2
43	70	05	34	24	00	90	64	00			C. species	2
44	70	05	31	94	02	90	64	00			R. harrisi	2
45	70	05	31	70	45	90	64	00			G. mucronat	2
46	70	03	30	10	01	90	64	00			C. caspia	2
47	70	03	30	10	02	90	64	00			G. francisc	2
48	70	03	50	50	31	90	64	00			S. elliptic	2
49	70	06	60	20	01	90	64	00	24	1 00 1	M. tenuis	2
50	70	06	60	20	02	90	64	00			V. pavida	2
	70					02	90	64	00			2
	700					02	90	64	00			2

5/15/03 OK

CEL- Duguay cb1-1 PONAR GRAB

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
S6												
XIF432 7	910812	1126	10	021399977	70	01	11		BAE		1	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSSS	
391417.	076224 1.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1	GRAB #2 VALUE	GRAB #3		SEQUENCE NUMBER
1	70	033	03	028	029	064	003				D. leucolen	2
2	70	040	01	002	029	064	003		1	1	M. leidyi	2
3	70	048	01	003	029	064	003		2	2	E. filiform	2
4	70	048	01	008	029	064	003				M. species	2
5	70	048	01	004	029	064	003				N. succinea	2
6	70	048	09	001	029	064	003				S. fragilis	2
7	70	048	01	038	029	064	003				P. gouldi	2
8	70	048	01	017	029	064	003				E. heteropo	2
9	70	048	01	057	029	064	003				P. ligni	2
10	70	048	01	005	029	064	003	3	1	2	S. viridis	2
11	70	048	01	018	029	064	003		1		S. benedict	2
12	70	048	01	039	029	064	003				H. grayi	2
13	70	048	02	029	029	064	003				L. hoffmeis	2
14	70	048	02	023	029	064	003				P. tubifici	2
15	70	048	01	007	029	064	003				C. capitata	2
16	70	049	05	006	029	064	003				I. recurvus	2
17	70	049	05	007	029	064	003				C. leucopha	2
18	70				029	064	003				L. species	2
19	70	049	05	009	029	064	003	1	2		M. balthica	2
20	70	049	05	010	029	064	003	1	1	4	M. mitchell	2
21	70	049	05	008	029	064	003				R. cuneata	2
22	70	049	05	032	029	064	003				M. arenaria	2
23	70	049	04	019	029	064	003			4	Hydrobia	2
24	70	049	04	021	029	064	003				S. niger	2
25	70	049	04	020	029	064	003				D. obscura	

CEL- Duguay cbl-2 Ponar grab

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATHER	REPLIC.
X I F 4 3 2 7 56	9 1 0 8 1 2	1 1 2 6	1 0	0 2 1 3 9 9 9 7	7 0	0 1	1		B A	E	1	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
3 9 1 4 1 7.	0 7 6 2 2 4 1.	1

RESOURCE MONITORING DATA SHEET

5/15/03 OK

SPECIMEN #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
27	70	05	30	71	02	90	64	03			B. improvis	2
28	70	05	30	72	02	90	64	03			B. subalbid	2
29	70	05	31	45	02	90	64	03			L. american	2
30	70	05	31	62	02	90	64	03	2	1	3 C. polita	2
31	70	05	31	63	02	90	64	03			C. lunifron	2
33	70	05	31	64	02	90	64	03			E. trilcba	2
34	70	05	31	72	02	90	64	03			N. biarticu	2
35	70	05	31	73	02	90	64	03			G. palustri	2
36	70	05	31	76	02	90	64	03	6	2	3 L. plumuscs	2
37	70	05	31	73	02	90	64	03			C. lacustra	2
38	70	05	31	73	02	90	64	03			G. daiberi	2
39	70	05	31	72	02	90	64	03			G. tigrinus	2
40	70	05	31	72	02	90	64	03			M. nitida	2
41	70	05	31	61	02	90	64	03			C. almyra	2
42	70	05	31	75	02	90	64	03			M. edwardsi	2
43	70	05	42	41	02	90	64	03			C. species	2
44	70	05	31	94	02	90	64	03			R. harrisi	2
45	70	05	31	70	04	90	64	03			G. mucronat	2
46	70	03	30	10	02	90	64	03			C. caspia	2
47	70	03	30	10	02	90	64	03			G. francisc	2
48	70	03	50	50	02	90	64	03			S. elliptic	2
49	70	06	60	20	02	90	64	03			M. tenuis	2
50	70	06	60	20	02	90	64	03			V. pavida	2
	70				02	90	64	03				2
	70				02	90	64	03				2

CBL- Duguay cbl-1 PONAR GRAB

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPLIT.
XIG540 5	910812	1442	11	0213997	70	01	11		BA	E	1	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
391523	0762028	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE	NUMBER
1	70	03	03	02	80290	64	003				D. leucolen		2
2	70	04	01	00	20290	64	003				M. leidyi		2
3	70	04	01	00	30290	64	003	2	1	1	H. filiform		2
4	70	04	01	00	80290	64	003				M. species		2
5	70	04	01	00	40290	64	003				N. succinea		2
6	70	04	09	00	10290	64	003				S. fragilis		2
7	70	04	01	03	80290	64	003				P. gouldi		2
8	70	04	01	01	70290	64	003			1	E. heteropo		2
9	70	04	01	05	70290	64	003				P. ligni		2
10	70	04	01	00	50290	64	003	3	9	3	S. viridis		2
11	70	04	01	01	80290	64	003	1			S. benedict		2
12	70	04	01	03	90290	64	003				H. grayi		2
13	70	04	02	02	90290	64	003				L. hoffmeis		2
14	70	04	02	02	30290	64	003				P. tubifici		2
15	70	04	01	00	70290	64	003				C. capitata		2
16	70	04	05	00	60290	64	003				I. recurvus		2
17	70	04	05	00	70290	64	003				C. leucopha		2
18	70				02900	64	003				L. species		2
19	70	04	05	00	90290	64	003	1	1		M. balthica		2
20	70	04	05	01	00290	64	003	3		1	M. mitchell		2
21	70	04	05	00	80290	64	003	19	38	24	R. cuneata		2
22	70	04	05	03	20290	64	003				M. arenaria		2
23	70	04	04	01	90290	64	003			2	Hydrobia		2
24	70	04	04	02	10290	64	003				S. niger		2
25	70	04	04	02	00290	64	003				D. obscura		2

CSL- Duguay cbl-2 Ponar grab

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPTH.
XIG540S57	910812	1442	11	0213997	70	01	11		BA	E	1	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
391523	0762028	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
27	70	05	30	70	11	02	90	06	40	03	B. improvis	2
28	70	05	30	70	12	02	90	06	40	03	B. subalbid	2
29	70	05	31	40	54	02	90	06	40	03	L. american	2
30	70	05	31	60	12	02	90	06	40	03	C. polita	2
31	70	05	31	60	30	02	90	06	40	03	C. lunifron	2
33	70	05	31	60	24	02	90	06	40	03	E. triloba	2
34	70	05	31	70	26	02	90	06	40	03	N. biarticu	2
35	70	05	31	70	03	02	90	06	40	03	G. palustri	2
36	70	05	31	70	16	02	90	06	40	03	L. plumuscs	2
37	70	05	31	70	13	02	90	06	40	03	C. lacustre	2
38	70	05	31	70	33	02	90	06	40	03	G. daiberi	2
39	70	05	31	70	20	02	90	06	40	03	G. tigrinus	2
40	70	05	31	70	22	02	90	06	40	03	M. nitida	2
41	70	05	31	60	21	02	90	06	40	03	C. almyra	2
42	70	05	31	70	25	02	90	06	40	03	M. edwardsi	2
43	70	05	34	24	01	02	90	06	40	03	C. species	2
44	70	05	31	90	14	02	90	06	40	03	R. harrisi	2
45	70	05	31	70	45	02	90	06	40	03	G. mucronat	2
46	70	03	30	10	01	02	90	06	40	03	C. caspia	2
47	70	03	30	10	02	02	90	06	40	03	G. francisc	2
48	70	03	50	50	31	02	90	06	40	03	S. elliptic	2
49	70	06	60	20	01	02	90	06	40	03	M. tenuis	2
50	70	06	60	20	02	02	90	06	40	03	V. pavida	2
	70					02	90	06	40	03		2
	700					02	90	06	40	03		2

CEL- Duguay cbl-1 PCNAR GRAB

SAMPLING STATION NO.	DATE	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD		COUNTY	TIDE	WEATH.	REPHT.	
X I F 4 1 2 4 S8	9 1 0 8 1 2	1 1 0 4	1 4	0 2 1 3 9 9 9 7	7 0	0 1	1			B A	E	1	1	

LATITUDE	LONGITUDE	SEQUENCE NUMBER
D D M M S S S	D D D M M S S S	
3 9 1 4 0 8	0 7 6 2 2 2 4	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1	GRAB #2	GRAB #3		SEQUENCE NUMBER
								VALUE				
1	7	0 0 3	3 0 3	0 2 8	0 2 9	0 0 6	4 0 0 3				D. leucolen	2
2	7	0 0 4	0 0 1	0 0 2	0 2 9	0 0 6	4 0 0 3				M. leidyi	2
3	7	0 0 4	8 0 1	0 0 3	0 2 9	0 0 6	4 0 0 3				E. filiform	2
4	7	0 0 4	8 0 1	0 0 8	0 2 9	0 0 6	4 0 0 3				M. species	2
5	7	0 0 4	8 0 1	0 0 4	0 2 9	0 0 6	4 0 0 3				N. succinea	2
6	7	0 0 4	8 0 9	0 0 1	0 2 9	0 0 6	4 0 0 3				S. fragilis	2
7	7	0 0 4	8 0 1	0 3 8	0 2 9	0 0 6	4 0 0 3				P. gouldi	2
8	7	0 0 4	8 0 1	0 1 7	0 2 9	0 0 6	4 0 0 3				E. heterupo	2
9	7	0 0 4	8 0 1	0 5 7	0 2 9	0 0 6	4 0 0 3				P. ligni	2
10	7	0 0 4	8 0 1	0 0 5	0 2 9	0 0 6	4 0 0 3		1	1	S. viridis	2
11	7	0 0 4	8 0 1	0 1 8	0 2 9	0 0 6	4 0 0 3				S. benedict	2
12	7	0 0 4	8 0 1	0 3 9	0 2 9	0 0 6	4 0 0 3				H. grayi	2
13	7	0 0 4	8 0 2	0 2 9	0 2 9	0 0 6	4 0 0 3				L. hoffmeis	2
14	7	0 0 4	8 0 2	0 2 3	0 2 9	0 0 6	4 0 0 3				P. tubifici	2
15	7	0 0 4	8 0 1	0 0 7	0 2 9	0 0 6	4 0 0 3				C. capitata	2
16	7	0 0 4	9 0 5	0 0 6	0 2 9	0 0 6	4 0 0 3				I. recurvus	2
17	7	0 0 4	9 0 5	0 0 7	0 2 9	0 0 6	4 0 0 3				C. leucopha	2
18	7	0			0 2 9	0 0 6	4 0 0 3				L. species	2
19	7	0 0 4	9 0 5	0 0 9	0 2 9	0 0 6	4 0 0 3		1	1	M. balthica	2
20	7	0 0 4	9 0 5	0 1 0	0 2 9	0 0 6	4 0 0 3		3		M. mitchell	2
21	7	0 0 4	9 0 5	0 0 8	0 2 9	0 0 6	4 0 0 3	88	1 1 5	3 4	R. cuneata	2
22	7	0 0 4	9 0 5	0 3 2	0 2 9	0 0 6	4 0 0 3				M. arenaria	2
23	7	0 0 4	9 0 4	0 1 9	0 2 9	0 0 6	4 0 0 3				Hydrobia	2
24	7	0 0 4	9 0 4	0 2 1	0 2 9	0 0 6	4 0 0 3				S. niger	2
25	7	0 0 4	9 0 4	0 2 0	0 2 9	0 0 6	4 0 0 3				D. obscura	2

CSL- Duguay cbl-2 Ponar grab

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
X I F 4 1 2 4 S8	9 1 0 8 1 2	1 1 0 4	1 4	0 2 1 3 9 9 9 7	7 0	0 1	1		B A	E	1	1

LATITUDE (DDMMSS)	LONGITUDE (DDDMMSS)	SEQUENCE NUMBER
3 9 1 4 0 8	0 7 6 2 2 2 4	1

RESOURCE MONITORING DATA SHEET

5/15/03 OK

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1	GRAB #2	GRAB #3		SEQUENCE	NUMBER
								VALUE					
27	70	05	30	07	01	02	90	06	40	03	B. improvis		2
28	70	05	30	07	02	02	90	06	40	03	B. subalbid		2
29	70	05	31	04	05	02	90	06	40	03	L. american		2
30	70	05	31	06	01	02	90	06	40	03	C. polita		2
31	70	05	31	06	03	02	90	06	40	03	C. lunifron		2
33	70	05	31	06	02	02	90	06	40	03	E. trilcba		2
34	70	05	31	07	02	02	90	06	40	03	N. biarticu		2
35	70	05	31	07	03	02	90	06	40	03	G. palustri		2
36	70	05	31	07	01	02	90	06	40	03	L. plumusos		2
37	70	05	31	07	01	02	90	06	40	03	C. lacustre		2
38	70	05	31	07	03	02	90	06	40	03	G. daiberi		2
39	70	05	31	07	02	02	90	06	40	03	G. tigrinus		2
40	70	05	31	07	02	02	90	06	40	03	M. nitida		2
41	70	05	31	06	02	02	90	06	40	03	C. almyra		2
42	70	05	31	07	02	02	90	06	40	03	M. edwardsi		2
43	70	05	42	40	01	02	90	06	40	03	C. species		2
44	70	05	31	09	01	02	90	06	40	03	R. harrisi		2
45	70	05	31	07	04	02	90	06	40	03	G. mucronat		2
46	70	03	30	01	00	02	90	06	40	03	C. caspia		2
47	70	03	30	01	00	02	90	06	40	03	G. francisc		2
48	70	03	50	05	03	02	90	06	40	03	S. elliptic		2
49	70	06	60	02	00	02	90	06	40	03	M. tenuis		2
50	70	06	60	02	00	02	90	06	40	03	V. pavida		2
	70					02	90	06	40	03			2
	70	0				02	90	06	40	03			2

CEL- Duguay cbl-1 PONAR GRAB

SAMPLING STATION NO.	DATE	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
XIF6388 #M 7	91 08 12	1559	10	02139997	70	01	1		BA	E	1	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSSS	
391615	0762050	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1	GRAB #2 VALUE	GRAB #3		SEQUENCE NUMBER
1	70	03	33	02	80	29	00	64	003		D. leucolen	2
2	70	04	00	10	02	02	90	64	003	4	M. leidyi	2
3	70	04	80	10	03	02	90	64	003	1 1	E. filiform	2
4	70	04	80	10	08	02	90	64	003		M. species	2
5	70	04	80	10	04	02	90	64	003	3 1	N. succinea	2
6	70	04	80	90	01	02	90	64	003		S. fragilis	2
7	70	04	80	10	38	02	90	64	003		P. gouldi	2
8	70	04	80	10	17	02	90	64	003		E. heterepo	2
9	70	04	80	10	57	02	90	64	003		P. ligni	2
10	70	04	80	10	05	02	90	64	003	1 4	S. viridis	2
11	70	04	80	10	18	02	90	64	003		S. benedict	2
12	70	04	80	10	39	02	90	64	003		H. grayi	2
13	70	04	80	20	29	02	90	64	003		L. hoffmeis	2
14	70	04	80	20	23	02	90	64	003	1	P. tubifici	2
15	70	04	80	10	07	02	90	64	003		C. capitata	2
16	70	04	90	50	06	02	90	64	003		I. recurvus	2
17	70	04	90	50	07	02	90	64	003		C. leucopha	2
18	70					02	90	64	003		L. species	2
19	70	04	90	50	09	02	90	64	003		M. balthica	2
20	70	04	90	50	10	02	90	64	003		M. mitchell	2
21	70	04	90	50	08	02	90	64	003	18 2 2 2 1 1 7 7	R. cuneata	2
22	70	04	90	50	32	02	90	64	003		M. arenaria	2
23	70	04	90	40	19	02	90	64	003	2 4	Hydrobia	2
24	70	04	90	40	21	02	90	64	003		S. niger	2
25	70	04	90	40	20	02	90	64	003		D. obscura	2

CEL- Duguay cbl-2 Ponar grab

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
XIF638 8 #M 7	910812	1559	10	0213997	70	00	11		BA	E	1	1

LATITUDE (DDMMSS)	LONGITUDE (DDDMMSS)	SEQUENCE NUMBER
391615	0762050	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
27	70	05	30	70	11	02	90	06	40	03	B. improvis	2
28	70	05	30	70	12	02	90	06	40	03	B. subalbid	2
29	70	05	31	40	54	02	90	06	40	03	L. american	2
30	70	05	31	60	12	02	90	06	40	03	C. polita	2
31	70	05	31	60	30	02	90	06	40	03	C. lunifron	2
33	70	05	31	60	24	02	90	06	40	03	E. trilcba	2
34	70	05	31	70	26	02	90	06	40	03	N. biarticu	2
35	70	05	31	70	03	02	90	06	40	03	G. palustri	2
36	70	05	31	70	16	02	90	06	40	03	L. plumuscs	2
37	70	05	31	70	13	02	90	06	40	03	C. lacustre	2
38	70	05	31	70	33	02	90	06	40	03	G. daiberi	2
39	70	05	31	70	20	02	90	06	40	03	G. tigrinus	2
40	70	05	31	70	22	02	90	06	40	03	M. nitida	2
41	70	05	31	60	21	02	90	06	40	03	C. almyra	2
42	70	05	31	70	25	02	90	06	40	03	M. edwardsi	2
43	70	05	42	40	01	02	90	06	40	03	C. species	2
44	70	05	31	90	14	02	90	06	40	03	R. harrisi	2
45	70	05	31	70	45	02	90	06	40	03	G. mucronat	2
46	70	03	30	10	01	02	90	06	40	03	C. caspia	2
47	70	03	30	10	02	02	90	06	40	03	G. francisc	2
48	70	03	50	50	31	02	90	06	40	03	S. elliptic	2
49	70	06	60	20	01	02	90	06	40	03	M. tenuis	2
50	70	06	60	20	02	02	90	06	40	03	V. pavida	2
	70					02	90	06	40	03		2
	70					02	90	06	40	03		2

SPECIES #	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE
30	2	3	2
36	4	8	4
49			2

CBL- Duguay cbl-1 PCNAR GRAB

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD		COUNTY	TIDE	WEATH.	REPIT.	
XFF5297 #M9	910812	1450	15	021399977	70	01	11			BA	E	1	1	

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
3915333	0761953	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
1	70	03	03	02	8029	0064	003				D. leucolen	2
2	70	04	01	00	2029	0064	003	2	1		M. leidyi	2
3	70	04	01	00	3029	0064	003	6	4	2	H. filiform	2
4	70	04	01	00	8029	0064	003				M. species	2
5	70	04	01	00	4029	0064	003	14	22	10	N. succinea	2
6	70	04	09	00	1029	0064	003				S. fragilis	2
7	70	04	01	03	8029	0064	003				P. gouldi	2
8	70	04	01	01	7029	0064	003				E. hetercpo	2
9	70	04	01	05	7029	0064	003				P. ligni	2
10	70	04	01	00	5029	0064	003	13	1	7	S. viridis	2
11	70	04	01	01	8029	0064	003				S. benedict	2
12	70	04	01	03	9029	0064	003				H. grayi	2
13	70	04	02	02	9029	0064	003				L. hoffmeis	2
14	70	04	02	02	3029	0064	003		1	2	P. tubifici	2
15	70	04	01	00	7029	0064	003				C. capitata	2
16	70	04	05	00	6029	0064	003				I. recurvus	2
17	70	04	05	00	7029	0064	003				C. leucopha	2
18	70				029	0064	003				L. species	2
19	70	04	05	00	9029	0064	003				M. balthica	2
20	70	04	05	01	0029	0064	003				M. mitchell	2
21	70	04	05	00	8029	0064	003	292	454	421	R. cuneata	2
22	70	04	05	03	2029	0064	003				M. arenaria	2
23	70	04	04	01	9029	0064	003				Hydrobia	2
24	70	04	04	02	1029	0064	003				S. niger	
25	70	04	04	02	0029	0064	003				D. obscura	

CSL- Duguay cbl-2 Ponar grab

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
XIF5297 #M9	910812	1450	15	02139997	70	01	11	BA	E	1	1	

LATITUDE	LONGITUDE	SEQUENCE NUMBER
39153.	076195.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
27	70	05	30	71	02	90	64	03		1	B. improvis	2
28	70	05	30	71	02	90	64	03			B. subalbid	2
29	70	05	31	45	02	90	64	03			L. american	2
30	70	05	31	61	02	90	64	03	7	3	12 C. polita	2
31	70	05	31	60	02	90	64	03			C. lunifron	2
33	70	05	31	62	02	90	64	03			1 E. trilcba	2
34	70	05	31	76	02	90	64	03			N. biartica	2
35	70	05	31	70	02	90	64	03			G. palustri	2
36	70	05	31	71	02	90	64	03			L. plumuscs	2
37	70	05	31	73	02	90	64	03	6	4	3 C. lacustre	2
38	70	05	31	73	02	90	64	03			G. daiberi	2
39	70	05	31	70	02	90	64	03			G. tigrinus	2
40	70	05	31	72	02	90	64	03	1		M. nitida	2
41	70	05	31	61	02	90	64	03			C. almyra	2
42	70	05	31	75	02	90	64	03			M. edwardsi	2
43	70	05	42	40	02	90	64	03			C. species	2
44	70	05	31	94	02	90	64	03	1		R. harrisi	2
45	70	05	31	74	02	90	64	03			G. mucronat	2
46	70	03	30	10	02	90	64	03			C. caspia	2
47	70	03	30	20	02	90	64	03			G. francisc	2
48	70	03	50	50	02	90	64	03			S. elliptic	2
49	70	06	60	20	02	90	64	03	13	16	2 4 M. tenuis	2
50	70	06	60	20	02	90	64	03			2 V. pavida	2
	70				02	90	64	03				2
	70	0			02	90	64	03				2

CEL- Duguay cbl-1 PONAR GRAB

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
XCF3325 #M16	910812	1033	17	0213997	70	01	11		BA	E	1	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSSS	
391317.	0762230.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1	GRAB #2	GRAB #3		SEQUENCE NUMBER
								VALUE				
1	70	03	30	28	02	90	64	00	3		D. leucolen	2
2	70	04	00	10	02	90	64	00	3	1	M. leidyi	2
3	70	04	80	10	02	90	64	00	3	1	E. filiform	2
4	70	04	80	18	02	90	64	00	3		M. species	2
5	70	04	80	10	02	90	64	00	3		N. succinea	2
6	70	04	80	90	02	90	64	00	3		S. fragilis	2
7	70	04	80	10	02	90	64	00	3		P. gouldi	2
8	70	04	80	10	02	90	64	00	3		E. heteropo	2
9	70	04	80	10	02	90	64	00	3		P. ligni	2
10	70	04	80	10	02	90	64	00	3	1	S. viridis	2
11	70	04	80	10	02	90	64	00	3		S. benedict	2
12	70	04	80	10	02	90	64	00	3		H. grayi	2
13	70	04	80	20	02	90	64	00	3		L. hoffmeis	2
14	70	04	80	20	02	90	64	00	3		P. tubifici	2
15	70	04	80	10	02	90	64	00	3		C. capitata	2
16	70	04	90	50	02	90	64	00	3		I. recurvus	2
17	70	04	90	50	02	90	64	00	3		C. leucopha	2
18	70				02	90	64	00	3		L. species	2
19	70	04	90	50	02	90	64	00	3	2 1	M. balthica	2
20	70	04	90	51	02	90	64	00	3	2 2	M. mitchell	2
21	70	04	90	50	02	90	64	00	3	53 56 24	R. cuneata	2
22	70	04	90	50	02	90	64	00	3		M. arenaria	2
23	70	04	90	40	02	90	64	00	3		Hydrobia	2
24	70	04	90	40	02	90	64	00	3		S. niger	2
25	70	04	90	40	02	90	64	00	3		D. obscura	2

CSL- Duguay cbl-2 Ponar grab

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD		COUNTY	TIDE	WEATH.	REPHT.
XIF3325 #M16	910812	1033	17	021399977	70	01	11			BA	E	1	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
391317	0762230	1

RESOURCE MONITORING DATA SHEET

5/15/03 OK

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
27	70	05	30	71	02	90	64	00	3		B. improvis	2
28	70	05	30	72	02	90	64	00	3		B. subalbid	2
29	70	05	31	45	02	90	64	00	3		L. american	2
30	70	05	31	62	02	90	64	00	3	5 2 2	C. polita	2
31	70	05	31	63	02	90	64	00	3		C. lunifron	2
33	70	05	31	62	02	90	64	00	3		E. trilcba	2
34	70	05	31	72	02	90	64	00	3		N. biarticu	2
35	70	05	31	70	02	90	64	00	3		G. palustri	2
36	70	05	31	71	02	90	64	00	3	2 1 3	L. plumuscs	2
37	70	05	31	71	02	90	64	00	3		C. lacustre	2
38	70	05	31	73	02	90	64	00	3		G. daiberi	2
39	70	05	31	72	02	90	64	00	3		G. tigrinus	2
40	70	05	31	72	02	90	64	00	3		M. nitida	2
41	70	05	31	61	02	90	64	00	3		C. almyra	2
42	70	05	31	72	02	90	64	00	3		M. edwardsi	2
43	70	05	42	40	02	90	64	00	3		C. species	2
44	70	05	31	91	02	90	64	00	3		R. harrisi	2
45	70	05	31	70	04	90	64	00	3		G. mucronat	2
46	70	03	30	10	02	90	64	00	3		C. caspia	2
47	70	03	30	10	02	90	64	00	3		G. francisc	2
48	70	03	50	50	02	90	64	00	3		S. elliptic	2
49	70	06	60	20	02	90	64	00	3	3 2 4 7	M. tenuis	2
50	70	06	60	20	02	90	64	00	3		V. pavida	2
	70				02	90	64	00	3			2
	70				02	90	64	00	3			2

CEL- Duguay cbl-1 PONAR GRAB

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
XIG76891 #M 22	910812	1534	10	02139997	70	01	11		BA	E	1	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSSS	
392658.	0761851.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1	GRAB #2	GRAB #3		SEQUENCE	NUMBER
								VALUE					
1	70	03	03	02	80	29	00	64	00	3	D. leucolen		2
2	70	04	01	00	20	29	00	64	00	3	M. leidyi		2
3	70	04	01	00	30	29	00	64	00	3	E. filiform		2
4	70	04	01	00	80	29	00	64	00	3	M. species		2
5	70	04	01	00	40	29	00	64	00	3	N. succinea		2
6	70	04	09	00	10	29	00	64	00	3	S. fragilis		2
7	70	04	01	03	80	29	00	64	00	3	P. gouldi		2
8	70	04	01	01	70	29	00	64	00	3	E. heteropo		2
9	70	04	01	05	70	29	00	64	00	3	P. ligni		2
10	70	04	01	00	50	29	00	64	00	3	S. viridis		2
11	70	04	01	01	80	29	00	64	00	3	S. benedict		2
12	70	04	01	03	90	29	00	64	00	3	H. grayi		2
13	70	04	02	02	90	29	00	64	00	3	L. hoffmeis		2
14	70	04	02	02	30	29	00	64	00	3	P. tubifici		2
15	70	04	01	00	70	29	00	64	00	3	C. capitata		2
16	70	04	05	00	60	29	00	64	00	3	I. recurvus		2
17	70	04	05	00	70	29	00	64	00	3	C. leucopha		2
18	70				0	29	00	64	00	3	L. species		2
19	70	04	05	00	90	29	00	64	00	3	M. balthica		2
20	70	04	05	01	00	29	00	64	00	3	M. mitchell		2
21	70	04	05	00	80	29	00	64	00	3	R. cuneata		2
22	70	04	05	03	20	29	00	64	00	3	M. arenaria		2
23	70	04	04	01	90	29	00	64	00	3	Hydrobia		2
24	70	04	04	02	10	29	00	64	00	3	S. niger		2
25	70	04	04	02	00	29	00	64	00	3	D. obscura		2

CSL- Duguay cbl-2 Ponar grab

SAMPLING STATION NO.	DATE	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
HM 22	YYMMDD											
XIG768 9	910812	1534	10	021399977	70	01	11		BAE		1	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSSS	
392658.	0761851.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1	GRAB #2	GRAB #3		SEQUENCE NUMBER
								VALUE				
27	70	05	30	70	11	02	90	064	003		B. improvis	2
28	70	05	30	70	12	02	90	064	003		B. subalbid	2
29	70	05	31	40	54	02	90	064	003		L. american	2
30	70	05	31	60	12	02	90	064	003	2 3 2	C. polita	2
31	70	05	31	60	30	02	90	064	003		C. lunifron	2
33	70	05	31	60	24	02	90	064	003		E. trilcba	2
34	70	05	31	70	26	02	90	064	003		N. biarticu	2
35	70	05	31	70	03	02	90	064	003		G. palustri	2
36	70	05	31	70	16	02	90	064	003	2 3 2	L. plumusos	2
37	70	05	31	70	13	02	90	064	003		C. lacustre	2
38	70	05	31	70	33	02	90	064	003		G. daiberi	2
39	70	05	31	70	20	02	90	064	003		G. tigrinus	2
40	70	05	31	70	22	02	90	064	003		M. nitida	2
41	70	05	31	60	21	02	90	064	003		C. almyra	2
42	70	05	31	70	25	02	90	064	003		M. edwardsi	2
43	70	05	42	40	01	02	90	064	003		C. species	2
44	70	05	31	90	14	02	90	064	003		R. barrisi	2
45	70	05	31	70	45	02	90	064	003		G. mucronat	2
46	70	03	30	10	01	02	90	064	003		C. caspia	2
47	70	03	30	10	02	02	90	064	003		G. francisc	2
48	70	03	50	50	31	02	90	064	003		S. elliptic	2
49	70	06	60	20	01	02	90	064	003	2	M. tenuis	2
50	70	06	60	20	02	02	90	064	003		V. pavida	2
	70					02	90	064	003			2
	70					02	90	064	003			2

CEL- Puguay cbl-1 PONAR GRAB

SAMPLING STATION NO.	DATE	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPETIT.
XIF5145 HM 26	910812	1628	12	021399977	70	01	11		BAE		2	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSSS	
391433	076235	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1	GRAB #2 VALUE	GRAB #3		SEQUENCE NUMBER
1	70	03	30	28	02	90	64	03			D. leucolen	2
2	70	04	01	02	02	90	64	03			M. leidyi	2
3	70	04	01	03	02	90	64	03			H. filiform	2
4	70	04	01	08	02	90	64	03			M. species	2
5	70	04	01	04	02	90	64	03	1	2 3	N. succinea	2
6	70	04	09	01	02	90	64	03			S. fragilis	2
7	70	04	01	38	02	90	64	03			P. gouldi	2
8	70	04	01	17	02	90	64	03			E. heteropo	2
9	70	04	01	57	02	90	64	03			P. ligni	2
10	70	04	01	05	02	90	64	03	2		S. viridis	2
11	70	04	01	18	02	90	64	03			S. benedict	2
12	70	04	01	39	02	90	64	03			H. grayi	2
13	70	04	02	29	02	90	64	03			L. hoffmeis	2
14	70	04	02	23	02	90	64	03			P. tubifici	2
15	70	04	01	07	02	90	64	03			C. capitata	2
16	70	04	05	06	02	90	64	03			I. recurvus	2
17	70	04	05	07	02	90	64	03			C. leucopha	2
18	70				02	90	64	03			L. species	2
19	70	04	05	09	02	90	64	03			M. balthica	2
20	70	04	05	10	02	90	64	03	5	2	M. mitchell	2
21	70	04	05	08	02	90	64	03	1	1 1	R. cuneata	2
22	70	04	05	32	02	90	64	03			M. arenaria	2
23	70	04	04	19	02	90	64	03			Hydrobia	2
24	70	04	04	21	02	90	64	03			S. niger	2
25	70	04	04	20	02	90	64	03			D. obscura	2

CEL- Duguay cbl-2 Petar grab

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD		COUNTY	TIDE	WEATH.	REPIT.
XIF514 5 (HM 26)	910812	1628	12	0213997	70	01	11			BA	E	2	1

LATITUDE (DDMMSS)	LONGITUDE (DDDMMSS)	SEQUENCE NUMBER
391439.	076235 5.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	M. METHOD	UNITS	GRAB #1	GRAB #2	GRAB #3		SEQUENCE NUMBER
27	70	05	30	70	11	02	90	06	40	03	B. improvis	2
28	70	05	30	70	12	02	90	06	40	03	B. subalbid	2
29	70	05	31	40	54	02	90	06	40	03	L. american	2
30	70	05	31	60	12	02	90	06	40	03	C. polita	2
31	70	05	31	60	30	02	90	06	40	03	C. lunifron	2
33	70	05	31	60	24	02	90	06	40	03	E. trilcba	2
34	70	05	31	70	26	02	90	06	40	03	N. biarticu	2
35	70	05	31	70	03	02	90	06	40	03	G. palustri	2
36	70	05	31	70	16	02	90	06	40	03	L. plumuscs	2
37	70	05	31	70	13	02	90	06	40	03	C. lacustre	2
38	70	05	31	70	33	02	90	06	40	03	G. daiberi	2
39	70	05	31	70	20	02	90	06	40	03	G. tigrinus	2
40	70	05	31	70	22	02	90	06	40	03	M. nitida	2
41	70	05	31	60	21	02	90	06	40	03	C. almyra	2
42	70	05	31	70	25	02	90	06	40	03	M. edwardsi	2
43	70	05	42	40	01	02	90	06	40	03	C. species	2
44	70	05	31	90	14	02	90	06	40	03	R. harrisi	2
45	70	05	31	70	45	02	90	06	40	03	G. mucronat	2
46	70	03	30	10	01	02	90	06	40	03	C. caspia	2
47	70	03	30	10	02	02	90	06	40	03	G. francisc	2
48	70	03	50	50	31	02	90	06	40	03	S. elliptic	2
49	70	06	60	20	01	02	90	06	40	03	M. tenuis	2
50	70	06	60	20	02	02	90	06	40	03	V. pavida	2
	70					02	90	06	40	03		2
	70	0				02	90	06	40	03		2

VALUE

GRAB #1	GRAB #2	GRAB #3
6	8	
12	14	13

CEL- Duguay cb1-1 PONAR GRAB

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
XIF5805 #M 12	910812	1239	15	021399977	70	01	11		BA	E	1	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSSS	
39 14 05.	076 20 21.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1	GRAB #2	GRAB #3		SEQUENCE NUMBER
								VALUE				
1	70	03	30	02	80	29	00	64	00	3	D. leucolen	2
2	70	04	00	10	02	80	29	00	64	00	3	M. leidyi	2
3	70	04	80	10	03	00	29	00	64	00	3	E. filiform	2
4	70	04	80	10	08	00	29	00	64	00	3	M. species	2
5	70	04	80	10	04	00	29	00	64	00	3	N. succinea	2
6	70	04	80	90	01	00	29	00	64	00	3	S. fragilis	2
7	70	04	80	10	38	00	29	00	64	00	3	P. gouldi	2
8	70	04	80	10	17	00	29	00	64	00	3	E. heteropo	2
9	70	04	80	10	57	00	29	00	64	00	3	P. ligni	2
10	70	04	80	10	05	00	29	00	64	00	3	S. viridis	2
11	70	04	80	10	18	00	29	00	64	00	3	S. benedict	2
12	70	04	80	10	39	00	29	00	64	00	3	H. grayi	2
13	70	04	80	20	29	00	29	00	64	00	3	L. hoffmeis	2
14	70	04	80	20	23	00	29	00	64	00	3	P. tubifici	2
15	70	04	80	10	07	00	29	00	64	00	3	C. capitata	2
16	70	04	90	50	06	00	29	00	64	00	3	I. recurvus	2
17	70	04	90	50	07	00	29	00	64	00	3	C. leucopha	2
18	70						29	00	64	00	3	L. species	2
19	70	04	90	50	09	00	29	00	64	00	3	M. balthica	2
20	70	04	90	50	10	00	29	00	64	00	3	M. mitchell	2
21	70	04	90	50	08	00	29	00	64	00	3	R. cuneata	2
22	70	04	90	50	32	00	29	00	64	00	3	M. arenaria	2
23	70	04	90	40	19	00	29	00	64	00	3	Hydrobia	2
24	70	04	90	40	21	00	29	00	64	00	3	S. niger	2
25	70	04	90	40	20	00	29	00	64	00	3	D. obscura	2

SPECIES #	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE
1			
2	1	1	1
3			2
4			
5	1	5	14
6			
7			
8			
9			
10	2	4	4
11			
12			
13			
14			
15			
16			
17			
18			
19	2		4
20	1		
21	52	138	242
22			
23			2
24			
25			

CEL- Duguay cbl-2 Ponar grab

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD		COUNTY	TIDE	WEATH.	REPIT.	
XIF580 5 #M 12	910812	1239	15	021399977	70	00	11			BA	E	1	1	

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)		SEQUENCE NUMBER
3914055	0762021		1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1	GRAB #2	GRAB #3		SEQUENCE NUMBER
27	70	05	30	70	11	02	90	64	00	03	1	B. improvis 2
28	70	05	30	70	12	02	90	64	00	03		B. subalbid 2
29	70	05	31	40	54	02	90	64	00	03		L. american 2
30	70	05	31	60	12	02	90	64	00	03	2 5 1 2	C. polita 2
31	70	05	31	60	03	02	90	64	00	03		C. lunifron 2
33	70	05	31	60	24	02	90	64	00	03		E. triloba 2
34	70	05	31	70	26	02	90	64	00	03		N. biarticu 2
35	70	05	31	70	03	02	90	64	00	03		G. palustri 2
36	70	05	31	70	16	02	90	64	00	03	2	L. plumuso 2
37	70	05	31	70	13	02	90	64	00	03	1	C. lacustre 2
38	70	05	31	70	33	02	90	64	00	03		G. daiberi 2
39	70	05	31	70	20	02	90	64	00	03		G. tigrinus 2
40	70	05	31	70	22	02	90	64	00	03	1	M. nitida 2
41	70	05	31	60	21	02	90	64	00	03		C. almyra 2
42	70	05	31	70	25	02	90	64	00	03		M. edwardsi 2
43	70	05	42	40	01	02	90	64	00	03		C. species 2
44	70	05	31	90	14	02	90	64	00	03		R. harrisi 2
45	70	05	31	70	45	02	90	64	00	03		G. mucronat 2
46	70	03	30	10	01	02	90	64	00	03		C. caspia 2
47	70	03	30	10	02	02	90	64	00	03		G. francisc 2
48	70	03	50	50	31	02	90	64	00	03		S. elliptic 2
49	70	06	60	20	01	02	90	64	00	03	1	M. tenuis 2
50	70	06	60	20	02	02	90	64	00	03		V. pavida 2
	70					02	90	64	00	03		2
	700					02	90	64	00	03		2

CEL- Duguay cbl-1 PONAR GRAB

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPLIT.
XIF4221 G5	910812	1149	15	021399977	70	01	11		BA	E	1	1

LATITUDE (DDMMSS)	LONGITUDE (DDDMMSS)	SEQUENCE NUMBER
391425	0762236	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
1	70	03	30	28	02	90	64	003			D. leucolen	2
2	70	04	01	00	02	90	64	003	2	1	M. leidyi	2
3	70	04	01	48	02	90	64	003			H. filiform	2
4	70	04	01	08	02	90	64	003			M. species	2
5	70	04	01	04	02	90	64	003			N. succinea	2
6	70	04	09	00	02	90	64	003			S. fragilis	2
7	70	04	01	38	02	90	64	003			P. gouldi	2
8	70	04	01	17	02	90	64	003			E. heteropo	2
9	70	04	01	57	02	90	64	003			P. ligni	2
10	70	04	01	05	02	90	64	003	1	1 1	S. viridis	2
11	70	04	01	18	02	90	64	003			S. benedict	2
12	70	04	01	39	02	90	64	003			H. grayi	2
13	70	04	02	29	02	90	64	003			L. hoffmeis	2
14	70	04	02	23	02	90	64	003			P. tubifici	2
15	70	04	01	07	02	90	64	003			C. capitata	2
16	70	04	05	06	02	90	64	003			I. recurvus	2
17	70	04	05	07	02	90	64	003			C. leucopha	2
18	70				02	90	64	003			L. species	2
19	70	04	05	09	02	90	64	003			M. balthica	2
20	70	04	05	10	02	90	64	003	1	1	M. mitchell	2
21	70	04	05	08	02	90	64	003	83	1 54	R. cuneata	2
22	70	04	05	32	02	90	64	003			M. arenaria	2
23	70	04	04	19	02	90	64	003			Hydrobia	2
24	70	04	04	21	02	90	64	003			S. niger	2
25	70	04	04	20	02	90	64	003			D. obscura	2

CHL- Duguay cbl-2 Ponar grab

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD		COUNTY	TIDE	WEATH.	REPIT.
XFF422 G5	910812	1149	15	021399977	70	01	11			BA	E	1	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
39142 5.	076223 6.	1

RESOURCE MONITORING DATA SHEET

5/15/03 OK

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
27	70	05	30	70	02	90	64	00	3	1	B. improvis	2
28	70	05	30	70	02	90	64	00	3		B. subalbid	2
29	70	05	31	40	02	90	64	00	3		L. american	2
30	70	05	31	60	02	90	64	00	3	3 3 2	C. polita	2
31	70	05	31	60	02	90	64	00	3		C. lunifron	2
33	70	05	31	60	02	90	64	00	3		E. triloba	2
34	70	05	31	70	02	90	64	00	3		N. biarticu	2
35	70	05	31	70	02	90	64	00	3		G. palustri	2
36	70	05	31	70	02	90	64	00	3	1 2 1 2 2	L. plumusos	2
37	70	05	31	70	02	90	64	00	3		C. lacustre	2
38	70	05	31	70	02	90	64	00	3		G. daiberi	2
39	70	05	31	70	02	90	64	00	3		G. tigrinus	2
40	70	05	31	70	02	90	64	00	3		M. nitida	2
41	70	05	31	60	02	90	64	00	3		C. almyra	2
42	70	05	31	70	02	90	64	00	3		M. edwardsi	2
43	70	05	42	40	02	90	64	00	3		C. species	2
44	70	05	31	90	02	90	64	00	3		R. harrisi	2
45	70	05	31	70	02	90	64	00	3		G. mucronat	2
46	70	03	30	10	02	90	64	00	3		C. caspia	2
47	70	03	30	10	02	90	64	00	3		G. francisc	2
48	70	03	50	50	02	90	64	00	3		S. elliptic	2
49	70	06	60	20	02	90	64	00	3	5	M. tenuis	2
50	70	06	60	20	02	90	64	00	3		V. pavida	2
	70				02	90	64	00	3			2
	700				02	90	64	00	3			2

CEL- Duquay cbl-1 PCNAR GRAB

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
G25	910812	1221	15	0213997	70	01	01		BA	E	1	1
XIF445												

LATITUDE (DDMMSS.S)	LONGITUDE (DDDMMSS.S)	SEQUENCE NUMBER
391442.	076211 0.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
1	70	03	03	02	8	029	00	64	003		D. leucolen	2
2	70	04	01	00	2	029	00	64	003	2	M. leidyi	2
3	70	04	01	00	3	029	00	64	003	1	E. filiform	2
4	70	04	01	00	8	029	00	64	003		M. species	2
5	70	04	01	00	4	029	00	64	003	5	N. succinea	2
6	70	04	09	00	1	029	00	64	003		S. fragilis	2
7	70	04	01	03	8	029	00	64	003		P. gouldi	2
8	70	04	01	01	7	029	00	64	003		E. heteropo	2
9	70	04	01	05	7	029	00	64	003		P. ligni	2
10	70	04	01	00	5	029	00	64	003	7	S. viridis	2
11	70	04	01	01	8	029	00	64	003		S. benedict	2
12	70	04	01	03	9	029	00	64	003		H. grayi	2
13	70	04	02	02	9	029	00	64	003		L. hoffmeis	2
14	70	04	02	02	3	029	00	64	003		P. tubifici	2
15	70	04	01	00	7	029	00	64	003		C. capitata	2
16	70	04	05	00	6	029	00	64	003		I. recurvus	2
17	70	04	05	00	7	029	00	64	003		C. leucopha	2
18	70				0	029	00	64	003		L. species	2
19	70	04	05	00	9	029	00	64	003	1	M. balthica	2
20	70	04	05	01	0	029	00	64	003	2	M. mitchell	2
21	70	04	05	00	8	029	00	64	003	65	R. cuneata	2
22	70	04	05	03	2	029	00	64	003		M. arenaria	2
23	70	04	04	01	9	029	00	64	003		Hydrobia	2
24	70	04	04	02	1	029	00	64	003		S. niger	2
25	70	04	04	02	0	029	00	64	003	2	D. obscura	2

CSL- Duguay cbl-2 Ponar grab

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD		COUNTY	TIDE	WEATHER	REPITT.	
G25														
XIF440 5	910812	1221	15	0213997	70	01	11			BA	E	1	1	

LATITUDE (DDMMSS)	LONGITUDE (DDDMMSS)		SEQUENCE NUMBER
391442	0762110		1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
27	70	05	30	7	01	1	029	006	400	3	1	2	B. improvis	2
28	70	05	30	7	01	2	029	006	400	3			B. subalbid	2
29	70	05	31	4	05	4	029	006	400	3			L. american	2
30	70	05	31	6	01	2	029	006	400	3	2	9	5	C. polita	2
31	70	05	31	6	03	0	029	006	400	3				C. lunifron	2
33	70	05	31	6	02	4	029	006	400	3				E. triloba	2
34	70	05	31	7	02	6	029	006	400	3				N. biarticu	2
35	70	05	31	7	00	3	029	006	400	3				G. palustri	2
36	70	05	31	7	01	6	029	006	400	3	7	1		L. plumuscs	2
37	70	05	31	7	01	3	029	006	400	3			2	C. lacustra	2
38	70	05	31	7	03	3	029	006	400	3				G. daiberi	2
39	70	05	31	7	02	0	029	006	400	3				G. tigrinus	2
40	70	05	31	7	02	2	029	006	400	3			3	M. nitida	2
41	70	05	31	6	02	1	029	006	400	3				C. almyra	2
42	70	05	31	7	02	5	029	006	400	3				M. edwardsi	2
43	70	05	42	4	00	1	029	006	400	3				C. species	2
44	70	05	31	9	01	4	029	006	400	3		1	7	R. harrisi	2
45	70	05	31	7	04	5	029	006	400	3				G. mucronat	2
46	70	03	30	1	00	1	029	006	400	3				C. caspia	2
47	70	03	30	1	00	2	029	006	400	3				G. francisc	2
48	70	03	50	5	03	1	029	006	400	3				S. elliptic	2
49	70	06	60	2	00	1	029	006	400	3	2	2	10	23	M. tenuis	2
50	70	06	60	2	00	2	029	006	400	3		1			V. pavida	2
	70						029	006	400	3						2
	70	0					029	006	400	3						2

5/15/03 OK

CEL- Duguay cbl-1 PONAR GRAB

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATHER	REFFIT.
X G84	910812	1305	16	0213997	70	01	11		BA	E	1	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
3912905	0761665	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1 VALUE	GRAB #2 VALUE	GRAB #3 VALUE		SEQUENCE NUMBER
1	70	03	03	02	80	29	00	64	003		D. leucolen	2
2	70	04	01	00	20	29	00	64	003	2 / 1 / 4	M. leidyi	2
3	70	04	01	00	30	29	00	64	003	2 / 4 / 1	E. filiform	2
4	70	04	01	00	80	29	00	64	003		M. species	2
5	70	04	01	00	40	29	00	64	003	1 / 1	N. succinea	2
6	70	04	09	00	01	29	00	64	003		S. fragilis	2
7	70	04	01	03	80	29	00	64	003		P. gouldi	2
8	70	04	01	01	70	29	00	64	003		E. hetercpo	2
9	70	04	01	05	70	29	00	64	003		P. ligni	2
10	70	04	01	00	50	29	00	64	003	4 / 6 / 2	S. viridis	2
11	70	04	01	01	80	29	00	64	003		S. benedict	2
12	70	04	01	03	90	29	00	64	003		H. grayi	2
13	70	04	02	02	90	29	00	64	003		L. hoffmeis	2
14	70	04	02	02	30	29	00	64	003		P. tubifici	2
15	70	04	01	00	70	29	00	64	003		C. capitata	2
16	70	04	05	00	60	29	00	64	003		I. recurvus	2
17	70	04	05	00	70	29	00	64	003		C. leucopha	2
18	70					29	00	64	003		L. species	2
19	70	04	05	00	90	29	00	64	003	48 / 53 / 40	M. balthica	2
20	70	04	05	01	00	29	00	64	003	1 / 1	M. mitchell	2
21	70	04	05	00	80	29	00	64	003	15 / 11 / 13	R. cuneata	2
22	70	04	05	03	20	29	00	64	003		M. arenaria	2
23	70	04	04	01	90	29	00	64	003		Hydrobia	2
24	70	04	04	02	10	29	00	64	003		S. niger	2
25	70	04	04	02	00	29	00	64	003		D. obscura	2

CHL- Duquay cbl-2 Ponar grab

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD		COUNTY	TIDE	WEATH.	REPIT.
X G84	910812	1305	16	0213997	7	0	01	1		BA	E	1	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
3912900	0761660	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	GRAB #1	GRAB #2	GRAB #3		SEQUENCE NUMBER
27	7	005	307	011	029	0064	003				B. improvis	2
28	7	005	307	012	029	0064	003				B. subalbid	2
29	7	005	314	054	029	0064	003				L. american	2
30	7	005	316	012	029	0064	003	11	10	12	C. polita	2
31	7	005	316	030	029	0064	003				C. lunifron	2
33	7	005	316	024	029	0064	003				E. trilcba	2
34	7	005	317	026	029	0064	003				N. biarticu	2
35	7	005	317	003	029	0064	003				G. palustri	2
36	7	005	317	016	029	0064	003	19	16	12	L. plumuscs	2
37	7	005	317	013	029	0064	003				C. lacustre	2
38	7	005	317	033	029	0064	003				G. daiberi	2
39	7	005	317	020	029	0064	003				G. tigrinus	2
40	7	005	317	022	029	0064	003				M. nitida	2
41	7	005	316	021	029	0064	003				C. almyra	2
42	7	005	317	025	029	0064	003				M. edwardsi	2
43	7	005	424	001	029	0064	003				C. species	2
44	7	005	319	014	029	0064	003				R. harrisi	2
45	7	005	317	045	029	0064	003				G. mucronat	2
46	7	003	301	001	029	0064	003				C. caspia	2
47	7	003	301	002	029	0064	003				G. francisc	2
48	7	003	505	031	029	0064	003				S. elliptic	2
49	7	006	602	001	029	0064	003				M. tenuis	2
50	7	006	602	002	029	0064	003				V. pavida	2
	70				029	0064	003					2
	700				029	0064	003					2

CBL- Duguay cbl-1a Scraping

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
R2 - Top	910812	1707	03	0213997	70	01	11		BA		2	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
3914446.	0762116.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE (0 = None Present; 1 = Very Abundant; 2 = Abundant; 3 = Present)	REMARKS		SEQUENCE NUMBER
1	70	03	03	028	029	015	041			D. leucolen	2
2	70	04	01	002	029	015	041			M. leidyi	2
3	70	04	01	003	029	015	041			H. filiform	2
4	70	04	01	008	029	015	041			M. species	2
5	70	04	01	004	029	015	041	2		N. succinea	2
6	70	04	09	001	029	015	041			S. fragilis	2
7	70	04	01	038	029	015	041			P. gouldi	2
8	70	04	01	017	029	015	041			E. heteropo	2
9	70	04	01	057	029	015	041	3		P. ligni	2
10	70	04	01	005	029	015	041			S. viridis	2
11	70	04	01	018	029	015	041			S. benedict	2
12	70	04	01	039	029	015	041			H. grayi	2
13	70	04	02	029	029	015	041			L. hoffmeis	2
14	70	04	02	023	029	015	041			P. tubifici	2
15	70	04	01	007	029	015	041			C. capitata	2
16	70	04	05	006	029	015	041			I. recurvus	
17	70	04	05	007	029	015	041	3		C. leucopha	
18	70				029	015	041			L. species	
19	70	04	05	009	029	015	041			M. balthica	
20	70	04	05	010	029	015	041			M. mitchell	
21	70	04	05	008	029	015	041			R. cuneata	
22	70	04	05	032	029	015	041			M. arenaria	
23	70	04	04	019	029	015	041			Hydrobia	
24	70	04	04	021	029	015	041			S. niger	
25	70	04	04	020	029	015	041			D. obscura	

CSL- Duguay cbl-2a Scraping

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
R2 - Top	910812	1707	03	0213997	70		01	1	BA		2	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
3914446	0762116	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE (0 = None Present; 1 = Very Abundant; 2 = Abundant; 3 = Present)	REMARKS		SEQUENCE	NUMBER
27	70	053	07	011	029	154	041	3		B. improvis		2
28	70	053	07	012	029	154	041	3		B. subalbid		2
29	70	053	14	054	029	154	041			L. american		2
30	70	053	16	012	029	154	041			C. polita		2
31	70	053	16	030	029	154	041			C. lunifron		2
33	70	053	16	024	029	154	041			E. triloba		2
34	70	053	17	026	029	154	041			N. biarticu		2
35	70	053	17	003	029	154	041			G. palustri		2
36	70	053	17	016	029	154	041			L. plumusos		2
37	70	053	17	013	029	154	041	1		C. lacustre		2
38	70	053	17	033	029	154	041			G. daiberi		2
39	70	053	17	020	029	154	041			G. tigrinus		2
40	70	053	17	022	029	154	041			M. nitida		2
41	70	053	16	021	029	154	041			C. almyra		2
42	70	053	17	025	029	154	041			M. edwardsi		2
43	70	054	24	001	029	154	041			C. species		2
44	70	053	19	014	029	154	041	2		R. harrisi		2
45	70	05317045			029	154	041			G. mucronat		2
46	70	033	01	001	029	154	041			C. caspia		2
47	70	033	01	002	029	154	041	1		G. francisc		2
48	70	035	05	031	029	154	041	3		S. elliptic		2
49	70	066	02	001	029	154	041	3		M. tenuis		2
50	70	066	02	002	029	154	041	2		V. pavida		2
	70				029	154	041					2
	700				029	154	041					2

CBL- Duguay cbl-1a Scraping

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
R2 - Bottom												
XCF4813	910812	1707	08	0213999770			01	11	BA		2	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
3914446.	0762116.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE (0 = None Present, 1 = Very Abundant, 2 = Abundant, 3 = Present)	REMARKS		SEQUENCE NUMBER
1	70	03	30	28	02	90	154	041		D. leucolen	2
2	70	04	00	12	02	90	154	041		M. leidyi	2
3	70	04	80	13	02	90	154	041		H. filiform	2
4	70	04	80	18	02	90	154	041		M. species	2
5	70	04	80	14	02	90	154	041	2	N. succinea	2
6	70	04	80	91	00	91	154	041		S. fragilis	2
7	70	04	80	38	02	90	154	041		P. gouldi	2
8	70	04	80	17	02	90	154	041		E. heteropo	2
9	70	04	80	57	02	90	154	041	2	P. ligni	2
10	70	04	80	05	02	90	154	041		S. viridis	2
11	70	04	80	18	02	90	154	041		S. benedict	2
12	70	04	80	39	02	90	154	041		H. grayi	2
13	70	04	80	29	02	90	154	041		L. hoffmeis	2
14	70	04	80	23	02	90	154	041		P. tubifici	2
15	70	04	80	07	02	90	154	041		C. capitata	2
16	70	04	90	06	02	90	154	041		I. recurvus	2
17	70	04	90	07	02	90	154	041	2	C. leucopha	2
18	70				02	90	154	041		L. species	2
19	70	04	90	09	02	90	154	041		M. balthica	2
20	70	04	90	10	02	90	154	041		M. mitchell	2
21	70	04	90	08	02	90	154	041		R. cuneata	2
22	70	04	90	32	02	90	154	041		M. arenaria	2
23	70	04	90	19	02	90	154	041		Hydrobia	2
24	70	04	90	21	02	90	154	041		S. niger	2
25	70	04	90	20	02	90	154	041		D. obscura	2

CSL- Duguay cbl-2a Scraping

SAMPLING STATION NO.	DATE	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPLIT.
R2-Bottom	YYMMDD											
XIF4813	910812	1707	08	021399977	70	01	11		BA		2	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSS	
391446.	0762116.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE (0 = None Present, 1 = Very Abundant, 2 = Abundant, 3 = Present)	REMARKS		SEQUENCE NUMBER
27	70	05	30	7	011	029	01	54	04	1	3		B. improvis	2
28	70	05	30	7	012	029	01	54	04	1	3		B. subalbid	2
29	70	05	31	4	054	029	01	54	04	1			L. american	2
30	70	05	31	6	012	029	01	54	04	1			C. polita	2
31	70	05	31	6	030	029	01	54	04	1			C. lunifron	2
33	70	05	31	6	024	029	01	54	04	1			E. triloba	2
34	70	05	31	7	026	029	01	54	04	1			N. biarticu	2
35	70	05	31	7	003	029	01	54	04	1			G. palustri	2
36	70	05	31	7	016	029	01	54	04	1			L. plumusos	2
37	70	05	31	7	013	029	01	54	04	1	1		C. lacustre	2
38	70	05	31	7	033	029	01	54	04	1			G. daiberi	2
39	70	05	31	7	020	029	01	54	04	1			G. tigrinus	2
40	70	05	31	7	022	029	01	54	04	1			M. nitida	2
41	70	05	31	6	021	029	01	54	04	1			C. almyra	2
42	70	05	31	7	025	029	01	54	04	1			M. edwardsi	2
43	70	05	42	4	001	029	01	54	04	1			C. species	2
44	70	05	31	9	014	029	01	54	04	1	2		R. harrisi	2
45	70	05	31	7	045	029	01	54	04	1			G. mucronat	2
46	70	03	30	1	001	029	01	54	04	1			C. caspia	2
47	70	03	30	1	002	029	01	54	04	1	1		G. francisc	2
48	70	03	50	5	031	029	01	54	04	1	3		S. elliptic	2
49	70	06	60	2	001	029	01	54	04	1	2		M. tenuis	2
50	70	06	60	2	002	029	01	54	04	1	2		V. pavida	2
	70					029	01	54	04	1				2
	700					029	01	54	04	1				2

CBL- Duguay cbl-1a Scraping

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
R3 - TOP												
XIF4514	910812	1727	03	021399977	70	01	11		BA		2	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSSS	
391432.	076213.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE (0 = None Present, 1 = Very Abundant, 2 = Abundant, 3 = Present)	REMARKS		SEQUENCE NUMBER
1	70	033	03	028	029	01	541			D. leucolen	2
2	70	040	01	002	029	01	541			M. leidyi	2
3	70	048	01	003	029	01	541			H. filiform	2
4	70	048	01	008	029	01	541			M. species	2
5	70	048	01	004	029	01	541	2		N. succinea	2
6	70	04	09	001	029	01	541			S. fragilis	2
7	70	048	01	038	029	01	541			P. gouldi	2
8	70	048	01	017	029	01	541			E. heteropo	2
9	70	048	01	057	029	01	541			P. ligni	2
10	70	048	01	005	029	01	541			S. viridis	2
11	70	048	01	018	029	01	541			S. benedict	2
12	70	048	01	039	029	01	541			H. grayi	2
13	70	048	02	029	029	01	541			L. hoffmeis	2
14	70	048	02	023	029	01	541			P. tubifici	2
15	70	048	01	007	029	01	541			C. capitata	2
16	70	049	05	006	029	01	541			I. recurvus	2
17	70	049	05	007	029	01	541			C. leucopha	2
18	70				029	01	541			L. species	2
19	70	049	05	009	029	01	541			M. balthica	2
20	70	049	05	010	029	01	541			M. mitchell	2
21	70	049	05	008	029	01	541			R. cuneata	2
22	70	049	05	032	029	01	541			M. arenaria	2
23	70	049	04	019	029	01	541			Hydrobia	2
24	70	049	04	021	029	01	541			S. niger	
25	70	049	04	020	029	01	541			D. obscura	

CBL- Duguay cbl-2a Scraping

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
R3-Top												
XIF451 4	910812	1727	03	021399977	70		01	11	BA		2	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSSS	
391432.	076212 3.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE (0 = None Present; 1 = Very Abundant; 2 = Abundant; 3 = Present)	REMARKS		SEQUENCE NUMBER
27	70	053	07	01	1 02	90	154	041	3	B. improvis	2
28	70	053	07	01	2 02	90	154	041	2	B. subalbid	2
29	70	053	14	05	4 02	90	154	041		L. american	2
30	70	053	16	01	2 02	90	154	041		C. polita	2
31	70	053	16	03	0 02	90	154	041		C. lunifron	2
33	70	053	16	02	4 02	90	154	041		E. triloba	2
34	70	053	17	02	6 02	90	154	041		N. biarticu	2
35	70	053	17	00	3 02	90	154	041		G. palustri	2
36	70	053	17	01	6 02	90	154	041		L. plumuscos	2
37	70	053	17	01	3 02	90	154	041	1	C. lacustre	2
38	70	053	17	03	3 02	90	154	041		G. daiberi	2
39	70	053	17	02	0 02	90	154	041		G. tigrinus	2
40	70	053	17	02	2 02	90	154	041		M. nitida	2
41	70	053	16	02	1 02	90	154	041		C. almyra	2
42	70	053	17	02	5 02	90	154	041		M. edwardsi	2
43	70	054	24	00	1 02	90	154	041		C. species	2
44	70	053	19	01	4 02	90	154	041	3	R. harrisi	2
45	70	053	17	04	5 02	90	154	041		G. mucronat	2
46	70	033	01	00	1 02	90	154	041	3	C. caspia	2
47	70	033	01	00	2 02	90	154	041	3	G. francisc	2
48	70	035	05	03	1 02	90	154	041		S. elliptic	2
49	70	066	02	00	1 02	90	154	041	3	M. tenuis	2
50	70	066	02	00	2 02	90	154	041	1	V. pavida	2
	70				02	90	154	041			2
	700				02	90	154	041			2

CBL- Duguay cbl-1a Scraping

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
R3- Bottom												
XIF451	910812	1727	08	0213999 7	70	01	11		BA		2	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSSS	
39 1432	076212 3	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE (0 = None Present; 1 = Very Abundant; 2 = Abundant; 3 = Present)	REMARKS		SEQUENCE NUMBER
1	70	03	03	02	80	29	01	54	04		D. leucolen	2
2	70	04	01	00	20	29	01	54	04		M. leidyi	2
3	70	04	01	00	30	29	01	54	04		H. filiform	2
4	70	04	01	00	80	29	01	54	04		M. species	2
5	70	04	01	00	40	29	01	54	04	2	N. succinea	2
6	70	04	09	00	1	29	01	54	04		S. fragilis	2
7	70	04	01	03	80	29	01	54	04		P. gouldi	2
8	70	04	01	01	70	29	01	54	04		E. heteropo	2
9	70	04	01	05	70	29	01	54	04	2	P. ligni	2
10	70	04	01	00	50	29	01	54	04		S. viridis	2
11	70	04	01	01	80	29	01	54	04		S. benedict	2
12	70	04	01	03	90	29	01	54	04		H. grayi	2
13	70	04	02	02	90	29	01	54	04		L. hoffmeis	2
14	70	04	02	02	30	29	01	54	04		P. tubifici	2
15	70	04	01	00	70	29	01	54	04		C. capitata	2
16	70	04	05	00	60	29	01	54	04		I. recurvus	2
17	70	04	05	00	70	29	01	54	04	3	C. leucopha	2
18	70					29	01	54	04		L. species	2
19	70	04	05	00	90	29	01	54	04		M. balthica	2
20	70	04	05	01	00	29	01	54	04		M. mitchell	2
21	70	04	05	00	80	29	01	54	04		R. cuneata	2
22	70	04	05	03	20	29	01	54	04		M. arenaria	2
23	70	04	04	01	90	29	01	54	04		Hydrobia	2
24	70	04	04	02	10	29	01	54	04		S. niger	2
25	70	04	04	02	00	29	01	54	04		D. obscura	2

CBL- Duguay cbl-2a Scraping

SAMPLING STATION NO. R3-Bottom	DATE YY MM DD	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD		COUNTY	TIDE	WEATH.	REPIT.
XIF4514	910812	1727	08	0213999 7	70	01	1			BA		2	1

LATITUDE DDMMSS	LONGITUDE DDDMMSS		SEQUENCE NUMBER
394432	0762123		1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE (0 = None Present, 1 = Very Abundant, 2 = Abundant, 3 = Present)	REMARKS		SEQUENCE NUMBER
27	70	05	30	7	01	02	90	154	041	3	B. improvis 2
28	70	05	30	7	02	02	90	154	041	3	B. subalbid 2
29	70	05	31	4	05	02	90	154	041		L. american 2
30	70	05	31	6	01	02	90	154	041		C. polita 2
31	70	05	31	6	03	02	90	154	041		C. lunifron 2
33	70	05	31	6	02	02	90	154	041		E. trilcba 2
34	70	05	31	7	02	02	90	154	041		N. biarticu 2
35	70	05	31	7	00	02	90	154	041		G. palustri 2
36	70	05	31	7	01	02	90	154	041		L. plumusos 2
37	70	05	31	7	01	02	90	154	041	1	C. lacustre 2
38	70	05	31	7	03	02	90	154	041		G. daiberi 2
39	70	05	31	7	02	02	90	154	041		G. tigrinus 2
40	70	05	31	7	02	02	90	154	041		M. nitida 2
41	70	05	31	6	02	02	90	154	041		C. almyra 2
42	70	05	31	7	02	02	90	154	041		M. edwardsi 2
43	70	05	42	4	00	02	90	154	041		C. species 2
44	70	05	31	9	01	02	90	154	041	2	R. harrisi 2
45	70	05	31	7	04	02	90	154	041		G. mucronat 2
46	70	03	30	1	00	02	90	154	041	3	C. caspia 2
47	70	03	30	1	00	02	90	154	041	2	G. francisc 2
48	70	03	50	5	03	02	90	154	041		S. elliptic 2
49	70	06	60	2	00	02	90	154	041	2	M. tenuis 2
50	70	06	60	2	00	02	90	154	041	2	V. pavida 2
	70					02	90	154	041		2
	700					02	90	154	041		2

CBL- Duguay cbl-1a Scraping

SAMPLING STATION NO.	DATE	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
R4-Top	YYMMDD											
XIF4518	910812	1743	03	02139977	70		01		BA		2	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSS	
391428.	076215o.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE (0 = None Present, 1 = Very Abundant, 2 = Abundant, 3 = Present)	REMARKS		SEQUENCE	NUMBER
1	70	03	03	028	029	154	041			D. leucolen		2
2	70	04	01	002	029	154	041			M. leidyi		2
3	70	04	01	003	029	154	041			H. filiform		2
4	70	04	01	008	029	154	041			M. species		2
5	70	04	01	004	029	154	041	2		N. succinea		2
6	70	04	09	001	029	154	041			S. fragilis		2
7	70	04	01	038	029	154	041			P. gouldi		2
8	70	04	01	017	029	154	041			E. heterop		2
9	70	04	01	057	029	154	041	2		P. ligni		2
10	70	04	01	005	029	154	041			S. viridis		2
11	70	04	01	018	029	154	041			S. benedict		2
12	70	04	01	039	029	154	041			H. grayi		2
13	70	04	02	029	029	154	041			L. hoffmeis		2
14	70	04	02	023	029	154	041			P. tubifici		2
15	70	04	01	007	029	154	041			C. capitata		2
16	70	04	05	006	029	154	041			I. recurvus		2
17	70	04	05	007	029	154	041			C. leucopha		2
18	70				029	154	041			L. species		2
19	70	04	05	009	029	154	041			M. balthica		2
20	70	04	05	010	029	154	041			M. mitchell		2
21	70	04	05	008	029	154	041			R. cuneata		2
22	70	04	05	032	029	154	041			M. arenaria		2
23	70	04	04	019	029	154	041			Hydrobia		2
24	70	04	04	021	029	154	041			S. niger		2
25	70	04	04	020	029	154	041			D. obscura		2

CBL- Duguay cbl-2a Scraping

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
XIF4518 R4 - Top	910912	1743	03	0213997	70	01	11		BA		2	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
3914 28.	0762150.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE (0 = None Present, 1 = Very Abundant, 2 = Abundant, 3 = Present)	REMARKS		SEQUENCE	NUMBER
27	70	05	307	01	02	90	154	041	3	B. improvis		2
28	70	05	307	02	02	90	154	041	3	B. subalbid		2
29	70	05	314	05	02	90	154	041		L. american		2
30	70	05	316	01	02	90	154	041		C. polita		2
31	70	05	316	03	02	90	154	041		C. lunifron		2
33	70	05	316	02	02	90	154	041		E. trilcba		2
34	70	05	317	02	02	90	154	041		N. biarticu		2
35	70	05	317	00	02	90	154	041		G. palustri		2
36	70	05	317	01	02	90	154	041		L. plumusos		2
37	70	05	317	01	02	90	154	041	1	C. laqustre		2
38	70	05	317	03	02	90	154	041		G. daiberi		2
39	70	05	317	02	02	90	154	041		G. tigrinus		2
40	70	05	317	02	02	90	154	041		M. nitida		2
41	70	05	316	02	02	90	154	041		C. almyra		2
42	70	05	317	02	02	90	154	041		M. edwardsi		2
43	70	05	424	00	02	90	154	041		C. species		2
44	70	05	319	01	02	90	154	041		R. harrisi		2
45	70	05	317	045	02	90	154	041		G. mucronat		2
46	70	03	301	00	02	90	154	041	3	C. caspia		2
47	70	03	301	00	02	90	154	041	3	G. francisc		2
48	70	03	505	03	02	90	154	041	3	S. elliptic		2
49	70	06	602	00	02	90	154	041		M. tenuis		2
50	70	06	602	00	02	90	154	041	1	V. pavida		2
	70				02	90	154	041				2
	700				02	90	154	041				2

CBL- Duguay cbl-1a Scraping

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD		COUNTY	TIDE	WEATH.	REPIT.	
R4 - Bottom														
XIF4518	910912	1743	09	02139977	70	01	11			BA		2	1	

LATITUDE (DDMMSS)	LONGITUDE (DDDMMSS)	SEQUENCE NUMBER
394128.	076215 0.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE (0 = None Present, 1 = Very Abundant, 2 = Abundant, 3 = Present)	REMARKS		SEQUENCE	NUMBER
1	70	03	30	28	02	90	154	04	1	D. leucolen		2
2	70	04	01	02	02	90	154	04	1	M. leidyi		2
3	70	04	80	03	02	90	154	04	1	H. filiform		2
4	70	04	80	08	02	90	154	04	1	M. species		2
5	70	04	80	04	02	90	154	04	1	N. succinea (2)		2
6	70	04	80	04	02	90	154	04	1	S. fragilis		2
7	70	04	80	38	02	90	154	04	1	P. gouldi		2
8	70	04	80	17	02	90	154	04	1	E. heteropo		2
9	70	04	80	57	02	90	154	04	1	P. ligni (2)		2
10	70	04	80	05	02	90	154	04	1	S. viridis		2
11	70	04	80	18	02	90	154	04	1	S. benedict		2
12	70	04	80	39	02	90	154	04	1	H. grayi		2
13	70	04	82	02	02	90	154	04	1	L. hoffmeis		2
14	70	04	82	03	02	90	154	04	1	P. tubifici		2
15	70	04	80	07	02	90	154	04	1	C. capitata		2
16	70	04	90	06	02	90	154	04	1	I. recurvus		2
17	70	04	90	07	02	90	154	04	1	C. leucopha		2
18	70				02	90	154	04	1	L. species		2
19	70	04	90	09	02	90	154	04	1	M. balthica		2
20	70	04	90	10	02	90	154	04	1	M. mitchell		2
21	70	04	90	08	02	90	154	04	1	R. cuneata		2
22	70	04	90	32	02	90	154	04	1	M. arenaria		2
23	70	04	90	19	02	90	154	04	1	Hydrobia		2
24	70	04	90	21	02	90	154	04	1	S. niger		2
25	70	04	90	20	02	90	154	04	1	D. obscura		2

CBL- Duguay cbl-2a Scraping

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB	CODE	METHOD		COUNTY	TIDE	WEATH.	REPIT.	
XIF4518 R4-Bottom	910812	1743	08	02139977	70	0	0	1	1		BA		2	1	

LATTITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
3914280	0762150	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE (0 = None Present; 1 = Very Abundant; 2 = Abundant; 3 = Present)	REMARKS		SEQUENCE NUMBER
27	70	05	30	70	29	01	541	3		B. improvis	2
28	70	05	30	72	29	01	541	2		B. subalbid	2
29	70	05	31	40	29	01	541			L. american	2
30	70	05	31	60	29	01	541			C. polita	2
31	70	05	31	60	29	01	541			C. lunifron	2
33	70	05	31	60	29	01	541			E. triloba	2
34	70	05	31	70	29	01	541			N. biarticu	2
35	70	05	31	70	29	01	541			G. palustri	2
36	70	05	31	70	29	01	541			L. plumusos	2
37	70	05	31	70	29	01	541	1		C. lacustre	2
38	70	05	31	70	29	01	541			G. daiberi	2
39	70	05	31	70	29	01	541			G. tigrinus	2
40	70	05	31	70	29	01	541			M. nitida	2
41	70	05	31	60	29	01	541			C. almyra	2
42	70	05	31	70	29	01	541			M. edwardsi	2
43	70	05	42	40	29	01	541			C. species	2
44	70	05	31	90	29	01	541			R. harrisi	2
45	70	05	31	70	29	01	541			G. mucronat	2
46	70	03	30	10	29	01	541	2		C. caspia	2
47	70	03	30	10	29	01	541			G. francisc	2
48	70	03	50	50	29	01	541	3		S. elliptic	2
49	70	06	60	20	29	01	541			M. tenuis	2
50	70	06	60	20	29	01	541	1		V. pavida	2
	70				29	01	541				2
	700				29	01	541				2

CBL- Duguay cbl-1a Scraping

SAMPLING STATION NO.	DATE	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB	CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
R5 - Top	YYMMDD												
XIF3638	910812	1800	03	02139997	70		01		11	BA		2	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSSS	
391337.	0762347.	1

RESOURCE MONITORING DATA SHEET

VALUE
0 = None Present
1 = Very Abundant
2 = Abundant
3 = Present

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE	REMARKS		SEQUENCE NUMBER
1	70	03	03	02	8 0290	154	041			D. leucolen	2
2	70	04	01	00	2 0290	154	041			M. leidyi	2
3	70	04	01	00	3 0290	154	041			H. filiform	2
4	70	04	01	00	8 0290	154	041			M. species	2
5	70	04	01	00	4 0290	154	041			N. succinea	2
6	70	04	09	04	1 0290	154	041			S. fragilis	2
7	70	04	01	03	8 0290	154	041			P. gouldi	2
8	70	04	01	01	7 0290	154	041			E. heteropo	2
9	70	04	01	05	7 0290	154	041			P. ligni	2
10	70	04	01	00	5 0290	154	041			S. viridis	2
11	70	04	01	01	8 0290	154	041			S. benedict	2
12	70	04	01	03	9 0290	154	041			H. grayi	2
13	70	04	02	02	9 0290	154	041			L. hoffmeis	2
14	70	04	02	02	3 0290	154	041			P. tubifici	2
15	70	04	01	00	7 0290	154	041			C. capitata	2
16	70	04	05	00	6 0290	154	041			I. recurvus	2
17	70	04	05	00	7 0290	154	041			C. leucopha	2
18	70				... 0290	154	041			L. species	2
19	70	04	05	00	9 0290	154	041			M. balthica	2
20	70	04	05	01	0 0290	154	041			M. mitchell	2
21	70	04	05	00	8 0290	154	041			R. cuneata	2
22	70	04	05	03	2 0290	154	041			M. arenaria	2
23	70	04	04	01	9 0290	154	041			Hydrobia	2
24	70	04	04	02	1 0290	154	041			S. niger	2
25	70	04	04	02	0 0290	154	041			D. obscura	2

CBL- Duguay cbl-2a Scraping

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD		COUNTY	TIDE	WEATH.	REPIT.
R5-Top													
XIF3638	910812	1800	03	0213997	70	01	11			BA		2	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSSS)	SEQUENCE NUMBER
3913337.	0762347.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE (0 = None Present, 1 = Very Abundant, 2 = Abundant, 3 = Present)	REMARKS		SEQUENCE	NUMBER
27	70	05	30	7	011	02	90	154	041		B. improvis	2
28	70	05	30	7	012	02	90	154	041		B. subalbid	2
29	70	05	31	4	054	02	90	154	041		L. american	2
30	70	05	31	6	012	02	90	154	041		C. polita	2
31	70	05	31	6	030	02	90	154	041		C. lunifron	2
33	70	05	31	6	024	02	90	154	041		E. triloba	2
34	70	05	31	7	026	02	90	154	041		N. biarticu	2
35	70	05	31	7	003	02	90	154	041		G. palustri	2
36	70	05	31	7	016	02	90	154	041		L. plumusos	2
37	70	05	31	7	013	02	90	154	041	2	C. lacustre	2
38	70	05	31	7	033	02	90	154	041		G. daiberi	2
39	70	05	31	7	020	02	90	154	041	3	G. tigrinus	2
40	70	05	31	7	022	02	90	154	041		M. nitida	2
41	70	05	31	6	021	02	90	154	041		C. almyra	2
42	70	05	31	7	025	02	90	154	041		M. edwardsi	2
43	70	05	42	4	001	02	90	154	041	3	C. species	2
44	70	05	31	9	014	02	90	154	041	3	R. harrisi	2
45	70	05	31	7	045	02	90	154	041		G. mucronat	2
46	70	03	30	1	001	02	90	154	041	3	C. caspia	2
47	70	03	30	1	002	02	90	154	041		G. francisc	2
48	70	03	50	5	031	02	90	154	041		S. elliptic	2
49	70	06	60	2	001	02	90	154	041		M. tenuis	2
50	70	06	60	2	002	02	90	154	041		V. pavida	2
	70					02	90	154	041			2
	700					02	90	154	041			2

CBL- Duguay cbl-1a Scraping

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB CODE	METHOD	COUNTY	TIDE	WEATH.	REPIT.
R5 - Bottom												
XIF3638	910812	1900	08	0213999	7	0	01	1	BA		2	1

LATITUDE	LONGITUDE	SEQUENCE NUMBER
DDMMSSS	DDDMMSS	
391337.	0762347.	1

RESOURCE MONITORING DATA SHEET

VALUE: 0 = None Present; 1 = Very Abundant; 2 = Abundant; 3 = Present

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE	REMARKS		SEQUENCE	NUMBER
1	70	03	03	02	80	29	01	54	04	1		2
2	70	04	01	00	20	29	01	54	04	1		2
3	70	04	01	00	30	29	01	54	04	1		2
4	70	04	01	00	80	29	01	54	04	1		2
5	70	04	01	00	40	29	01	54	04	1	2	2
6	70	04	09	00	41	29	01	54	04	1		2
7	70	04	01	03	80	29	01	54	04	1		2
8	70	04	01	01	70	29	01	54	04	1		2
9	70	04	01	05	70	29	01	54	04	1	2	2
10	70	04	01	00	50	29	01	54	04	1		2
11	70	04	01	01	80	29	01	54	04	1		2
12	70	04	01	03	90	29	01	54	04	1		2
13	70	04	02	02	90	29	01	54	04	1		2
14	70	04	02	02	30	29	01	54	04	1		2
15	70	04	01	00	70	29	01	54	04	1		2
16	70	04	05	00	60	29	01	54	04	1		2
17	70	04	05	00	70	29	01	54	04	1		2
18	70					29	01	54	04	1		2
19	70	04	05	00	90	29	01	54	04	1		2
20	70	04	05	01	00	29	01	54	04	1		2
21	70	04	05	00	80	29	01	54	04	1		2
22	70	04	05	03	20	29	01	54	04	1		2
23	70	04	04	01	90	29	01	54	04	1		2
24	70	04	04	02	10	29	01	54	04	1		2
25	70	04	04	02	00	29	01	54	04	1		2

SPECIES #	SPECIES
1	D. leucolen
2	M. leidyi
3	H. filiform
4	M. species
5	N. succinea
6	S. fragilis
7	P. gouldi
8	E. heteropo
9	P. ligni
10	S. viridis
11	S. benedict
12	H. grayi
13	L. hoffmeis
14	P. tubifici
15	C. capitata
16	I. recurvus
17	C. leucopha
18	L. species
19	M. balthica
20	M. mitchell
21	R. cuneata
22	M. arenaria
23	Hydrobia
24	S. niger
25	D. obscura

CBL- Duguay cbl-2a Scraping

SAMPLING STATION NO.	DATE (YYMMDD)	TIME OF SAMPLE	DEPTH FT.	BASIN SEGMENT	MEDIA	CLASS	SUB	CODE	METHOD		COUNTY	TIDE	WEATH.	REPIT.
R5 - BOTTOM														
XHF3638	910812	1800	09	0213999 7	7	0	0	1	1		BA		2	1

LATITUDE (DDMMSSS)	LONGITUDE (DDDMMSS)	SEQUENCE NUMBER
3913337.	0762347.	1

RESOURCE MONITORING DATA SHEET

SPECIES #	MEDIA	PHYLUM	CLASS	SPECIES	VARIABLE	METHOD	UNITS	VALUE (0 = None Present; 1 = Very Abundant; 2 = Abundant; 3 = Present)	REMARKS		SEQUENCE	NUMBER
27	70	05	30	7	011	029	015	4	041	3	B. improvis	2
28	70	05	30	7	012	029	015	4	041		B. subalbid	2
29	70	05	31	4	054	029	015	4	041		L. american	2
30	70	05	31	6	012	029	015	4	041		C. polita	2
31	70	05	31	6	030	029	015	4	041		C. lunifron	2
33	70	05	31	6	024	029	015	4	041		E. trilcba	2
34	70	05	31	7	026	029	015	4	041		N. biarticu	2
35	70	05	31	7	003	029	015	4	041		G. palustri	2
36	70	05	31	7	016	029	015	4	041		L. plumusos	2
37	70	05	31	7	013	029	015	4	041	1	C. laqustre	2
38	70	05	31	7	033	029	015	4	041		G. daiberi	2
39	70	05	31	7	020	029	015	4	041		G. tigrinus	2
40	70	05	31	7	022	029	015	4	041		M. nitida	2
41	70	05	31	6	021	029	015	4	041		C. almyra	2
42	70	05	31	7	025	029	015	4	041		M. edwardsi	2
43	70	05	42	4	001	029	015	4	041		C. species	2
44	70	05	31	9	014	029	015	4	041		R. harrisi	2
45	70	05	31	7	045	029	015	4	041		G. mucronat	2
46	70	03	30	1	001	029	015	4	041	1	C. caspia	2
47	70	03	30	1	002	029	015	4	041	3	G. francisc	2
48	70	03	50	5	031	029	015	4	041		S. elliptic	2
49	70	06	60	2	001	029	015	4	041		M. tenuis	2
50	70	06	60	2	002	029	015	4	041	1	V. pavida	2
	70					029	015	4	041			2
	700					029	015	4	041			2

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore Maryland 21204 (301) 825-7780 Facsimile (301) 821-7134
6320 North Belt Suite 111 Houston Texas 77096 (713) 447-4965
Capital Airport Springfield Illinois 62707 (217) 522-2009

Martel Lab Number: 08387

Certificate of Laboratory Analysis

Log Identification: W-2961

Samples received by Martel.
P.O. number 90036
MGS / MHI samples.

Maryland Environmental Service
2020 Industrial Drive
Annapolis, Maryland 21401
Attention: CeCe Donovan

December 21, 1990

Client Identification: MES

Analytical Parameter	Method	Result	Units
Log Identification: W-2961			
Date Received: 08/14/90			
Sample ID: 1. #3, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	35	mg/kg
Cadmium	EPA 213.1	1.0	mg/kg
Selenium	EPA 270.2	5	mg/kg
Arsenic	EPA 206.2	9	mg/kg
Beryllium	EPA 200.7	3	mg/kg
Silver	EPA 272.1	<1.0	mg/kg
Sample ID: 2. #4, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	58	mg/kg
Cadmium	EPA 213.1	<1.0	mg/kg
Selenium	EPA 270.2	10	mg/kg
Arsenic	EPA 206.2	6	mg/kg
Beryllium	EPA 200.7	4	mg/kg
Silver	EPA 272.1	<1.0	mg/kg

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore Maryland 21204 (301) 825-7790 Fassimile 301-821-0118
5920 North Belt Suite 111 Houston Texas 77396 (713) 441-4965
Capital Airport Springfield, Illinois 62707 (217) 522-3009

Client Identification: MES
Log Identification: W-2961
December 21, 1990

Certificate of Laboratory Analysis

Analytical Parameter	Method	Result	Units
Sample ID: 3. #5, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	102	mg/kg
Cadmium	EPA 213.1	<1.0	mg/kg
Selenium	EPA 270.2	17	mg/kg
Arsenic	EPA 206.2	12	mg/kg
Beryllium	EPA 200.7	5	mg/kg
Silver	EPA 272.1	<1.0	mg/kg
Sample ID: 4. #6, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	39	mg/kg
Cadmium	EPA 213.1	<1.0	mg/kg
Selenium	EPA 270.2	13	mg/kg
Arsenic	EPA 206.2	8	mg/kg
Beryllium	EPA 200.7	4	mg/kg
Silver	EPA 272.1	<1.0	mg/kg
Sample ID: 5. #7, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	94	mg/kg
Cadmium	EPA 213.1	<1.0	mg/kg
Selenium	EPA 270.2	19	mg/kg
Arsenic	EPA 206.2	13	mg/kg
Beryllium	EPA 200.7	5	mg/kg
Silver	EPA 272.1	<1.0	mg/kg

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore Maryland 21239-[illegible] (301) 825-[illegible] Fax (301) [illegible]
1900 North Belt Suite [illegible] Houston Texas 77096 (713) 847-[illegible]
[illegible] (617) 322-[illegible]

Client Identification: MES
Log Identification: W-2961
December 21, 1990
Page 3

Certificate of Laboratory Analysis

Analytical Parameter	Method	Result	Units
Sample ID: 6. #8A-1, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	46	mg/kg
Cadmium	EPA 213.1	1.0	mg/kg
Selenium	EPA 270.2	11	mg/kg
Arsenic	EPA 206.2	8	mg/kg
Beryllium	EPA 200.7	4	mg/kg
Silver	EPA 272.1	<1.0	mg/kg
Sample ID: 7. #9, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	110	mg/kg
Cadmium	EPA 213.1	1.0	mg/kg
Selenium	EPA 270.2	21	mg/kg
Arsenic	EPA 206.2	15	mg/kg
Beryllium	EPA 200.7	5	mg/kg
Silver	EPA 272.1	<1.0	mg/kg
Sample ID: 8. #10, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	16	mg/kg
Cadmium	EPA 213.1	<1.0	mg/kg
Selenium	EPA 270.2	2	mg/kg
Arsenic	EPA 206.2	2	mg/kg
Beryllium	EPA 200.7	3	mg/kg
Silver	EPA 272.1	<1.0	mg/kg

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Facsimile
5920 North Bell, Suite 111 Houston, Texas 77096 (713) 541-4985
Capital Airport Springfield, Illinois 62707 (217) 522-2009

Client Identification: MES
Log Identification: W-2961
December 21, 1990

Certificate of Laboratory Analysis

Analytical Parameter	Method	Result	Units
Sample ID: 9. #11-1, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	17	mg/kg
Cadmium	EPA 213.1	<1.0	mg/kg
Selenium	EPA 270.2	2	mg/kg
Arsenic	EPA 206.2	3	mg/kg
Beryllium	EPA 200.7	4	mg/kg
Silver	EPA 272.1	<1.0	mg/kg
Sample ID: 10. #12-1, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	54	mg/kg
Cadmium	EPA 213.1	<1.0	mg/kg
Selenium	EPA 270.2	12	mg/kg
Arsenic	EPA 206.2	9	mg/kg
Beryllium	EPA 200.7	4	mg/kg
Silver	EPA 272.1	<1.0	mg/kg
Sample ID: 11. #13, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	14	mg/kg
Cadmium	EPA 213.1	<1.0	mg/kg
Selenium	EPA 270.2	2	mg/kg
Arsenic	EPA 206.2	2	mg/kg
Beryllium	EPA 200.7	2	mg/kg
Silver	EPA 272.1	<1.0	mg/kg

MARTEL

MARTEL LABORATORY SERVICES, INC.

Client Identification: MES
Log Identification: W-2961
December 21, 1990
Page 5

Certificate of Laboratory Analysis

Analytical Parameter	Method	Result	Units
Sample ID: 12. #14, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	69	mg/kg
Cadmium	EPA 213.1	<1.0	mg/kg
Selenium	EPA 270.2	18	mg/kg
Arsenic	EPA 206.2	15	mg/kg
Beryllium	EPA 200.7	3	mg/kg
Silver	EPA 272.1	<1.0	mg/kg
Sample ID: 13. #15, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	73	mg/kg
Cadmium	EPA 213.1	<1.0	mg/kg
Selenium	EPA 270.2	18	mg/kg
Arsenic	EPA 206.2	10	mg/kg
Beryllium	EPA 200.7	5	mg/kg
Silver	EPA 272.1	<1.0	mg/kg
Sample ID: 14. #16-1, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	47	mg/kg
Cadmium	EPA 213.1	1.0	mg/kg
Selenium	EPA 270.2	7	mg/kg
Arsenic	EPA 206.2	7	mg/kg
Beryllium	EPA 200.7	3	mg/kg
Silver	EPA 272.1	<1.0	mg/kg

MARTEL MARTEL LABORATORY SERVICES, INC.

1128 Crosman Bridge Road Baltimore Maryland 21204 (301) 825-7790 Facsimile (301) 821-
1222 North Belt Suite 111 Houston Texas 77090 (713) 447-4988
Springfield Springfield (413) 737-[illegible] (413) 525-[illegible]

Client Identification: MES
Log Identification: W-2961
December 21, 1990
Page 6

Certificate of Laboratory Analysis

Analytical Parameter	Method	Result	Units
Sample ID: 15. #17, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	94	mg/kg
Cadmium	EPA 213.1	1.0	mg/kg
Selenium	EPA 270.2	22	mg/kg
Arsenic	EPA 206.2	13	mg/kg
Beryllium	EPA 200.7	4	mg/kg
Silver	EPA 272.1	<1.0	mg/kg
Sample ID: 16. #18, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	82	mg/kg
Cadmium	EPA 213.1	1.0	mg/kg
Selenium	EPA 270.2	17	mg/kg
Arsenic	EPA 206.2	10	mg/kg
Beryllium	EPA 200.7	4	mg/kg
Silver	EPA 272.1	<1.0	mg/kg
Sample ID: 17. #19, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	88	mg/kg
Cadmium	EPA 213.1	1.1	mg/kg
Selenium	EPA 270.2	22	mg/kg
Arsenic	EPA 206.2	17	mg/kg
Beryllium	EPA 200.7	5	mg/kg
Silver	EPA 272.1	<1.0	mg/kg

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore Maryland 21204 (301) 825-7775 Fax (301) [illegible]
9930 North Belt Suite [illegible] Houston Texas 77080 (713) [illegible]
[illegible]

Client Identification: MES
Log Identification: W-296i
December 21, 1990
Page 7

Certificate of Laboratory Analysis

Analytical Parameter	Method	Result	Units
Sample ID: 18. #20, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	90	mg/kg
Cadmium	EPA 213.1	<1.0	mg/kg
Selenium	EPA 270.2	24	mg/kg
Arsenic	EPA 206.2	12	mg/kg
Beryllium	EPA 200.7	5	mg/kg
Silver	EPA 272.1	<1.0	mg/kg
Sample ID: 19. #21B, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	10	mg/kg
Cadmium	EPA 213.1	<1.0	mg/kg
Selenium	EPA 270.2	<2	mg/kg
Arsenic	EPA 206.2	1	mg/kg
Beryllium	EPA 200.7	4	mg/kg
Silver	EPA 272.1	<1.0	mg/kg
Sample ID: 20. #22, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	20	mg/kg
Cadmium	EPA 213.1	<1.0	mg/kg
Selenium	EPA 270.2	5	mg/kg
Arsenic	EPA 206.2	6	mg/kg
Beryllium	EPA 200.7	4	mg/kg
Silver	EPA 272.1	<1.0	mg/kg

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore Maryland 21204 (301) 828-1790 Rosamond (301) 621-
4320 North Belt Suite 111 Houston Texas 77090 (713) 447-4988
Dallas Airport Southlake Texas 76092 (817) 329-4202

Client Identification: MES
Log Identification: W-2961
December 21, 1990
Page 8

Certificate of Laboratory Analysis

Analytical Parameter	Method	Result	Units
Sample ID: 21. #23, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	54	mg/kg
Cadmium	EPA 213.1	1.0	mg/kg
Selenium	EPA 270.2	8	mg/kg
Arsenic	EPA 206.2	8	mg/kg
Beryllium	EPA 200.7	3	mg/kg
Silver	EPA 272.1	<1.0	mg/kg
Sample ID: 22. #24-1, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	27	mg/kg
Cadmium	EPA 213.1	<1.0	mg/kg
Selenium	EPA 270.2	7	mg/kg
Arsenic	EPA 206.2	5	mg/kg
Beryllium	EPA 200.7	4	mg/kg
Silver	EPA 272.1	<1.0	mg/kg
Sample ID: 23. #25-1, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	86	mg/kg
Cadmium	EPA 213.1	1.0	mg/kg
Selenium	EPA 270.2	23	mg/kg
Arsenic	EPA 206.2	17	mg/kg
Beryllium	EPA 200.7	4	mg/kg
Silver	EPA 272.1	<1.0	mg/kg

MARTEL

MARTEL LABORATORY SERVICES, INC.

125 Chesnut Ridge Road, Baltimore, Maryland 21204 (301) 828-0780 Facsimile (301) [illegible]
4822 North Beltline, Suite [illegible], Houston, Texas 77038 (713) [illegible]
[illegible] (617) 826-[illegible]

Client Identification: MES
Log Identification: W-2961
December 21, 1990

Certificate of Laboratory Analysis

Analytical Parameter	Method	Result	Units
Sample ID: 24. #26, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	170	mg/kg
Cadmium	EPA 213.1	3.2	mg/kg
Selenium	EPA 270.2	11	mg/kg
Arsenic	EPA 206.2	17	mg/kg
Beryllium	EPA 200.7	2	mg/kg
Silver	EPA 272.1	<1.0	mg/kg
Sample ID: 25. #27, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	92	mg/kg
Cadmium	EPA 213.1	<1.0	mg/kg
Selenium	EPA 270.2	10	mg/kg
Arsenic	EPA 206.2	6	mg/kg
Beryllium	EPA 200.7	14	mg/kg
Silver	EPA 272.1	<1.0	mg/kg
Sample ID: 26. #28-1, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	68	mg/kg
Cadmium	EPA 213.1	1.0	mg/kg
Selenium	EPA 270.2	8	mg/kg
Arsenic	EPA 206.2	10	mg/kg
Beryllium	EPA 200.7	5	mg/kg
Silver	EPA 272.1	<1.0	mg/kg

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Chesapeake Bridge Road Baltimore Maryland 21204 (301) 825-7730 Facsimile (301) 321-
6920 North Belt Suite 111 Houston Texas 77086 (713) 447-9455
Dublin Ireland Dublin 2 (01) 822-1003

Client Identification: MES
Log Identification: W-2961
December 21, 1990
Page 10

Certificate of Laboratory Analysis

Analytical Parameter	Method	Result	Units
Sample ID: 27. #30, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	57	mg/kg
Cadmium	EPA 213.1	1.1	mg/kg
Selenium	EPA 270.2	21	mg/kg
Arsenic	EPA 206.2	14	mg/kg
Beryllium	EPA 200.7	5	mg/kg
Silver	EPA 272.1	<1.0	mg/kg
Sample ID: 28. #31, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	63	mg/kg
Cadmium	EPA 213.1	1.0	mg/kg
Selenium	EPA 270.2	16	mg/kg
Arsenic	EPA 206.2	12	mg/kg
Beryllium	EPA 200.7	6	mg/kg
Silver	EPA 272.1	<1.0	mg/kg
Sample ID: 29. #32, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	64	mg/kg
Cadmium	EPA 213.1	1.1	mg/kg
Selenium	EPA 270.2	15	mg/kg
Arsenic	EPA 206.2	12	mg/kg
Beryllium	EPA 200.7	5	mg/kg
Silver	EPA 272.1	<1.0	mg/kg

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Conway Bridge Road Baltimore Maryland 21204 301-825-7790 Facsimile 301-[illegible]
5310 North Bell Suite 111 Houston Texas 77096 713-[illegible]
[illegible] Springfield [illegible] 217-[illegible]

Client Identification: MES
Log Identification: W-2961
December 21, 1990

Certificate of Laboratory Analysis

Analytical Parameter	Method	Result	Units
Sample ID: 30. #33, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	82	mg/kg
Cadmium	EPA 213.1	1.0	mg/kg
Selenium	EPA 270.2	17	mg/kg
Arsenic	EPA 206.2	13	mg/kg
Beryllium	EPA 200.7	7	mg/kg
Silver	EPA 272.1	<1.0	mg/kg
Sample ID: 31. #34, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	78	mg/kg
Cadmium	EPA 213.1	1.0	mg/kg
Selenium	EPA 270.2	16	mg/kg
Arsenic	EPA 206.2	15	mg/kg
Beryllium	EPA 200.7	5	mg/kg
Silver	EPA 272.1	<1.0	mg/kg
Sample ID: 32. #35, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	83	mg/kg
Cadmium	EPA 213.1	1.0	mg/kg
Selenium	EPA 270.2	24	mg/kg
Arsenic	EPA 206.2	16	mg/kg
Beryllium	EPA 200.7	5	mg/kg
Silver	EPA 272.1	<1.0	mg/kg

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore Maryland 21204 301 825-7790 Facsimile (301 [illegible]
1220 North Belt Suite [illegible] Houston Texas 77396 713 [illegible]
[illegible]

Client Identification: MES
Log Identification: W-2961
December 21, 1990

Certificate of Laboratory Analysis

Analytical Parameter	Method	Result	Units
Sample ID: 33. #36, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	51	mg/kg
Cadmium	EPA 213.1	1.0	mg/kg
Selenium	EPA 270.2	22	mg/kg
Arsenic	EPA 206.2	19	mg/kg
Beryllium	EPA 200.7	4	mg/kg
Silver	EPA 272.1	<1.0	mg/kg
Sample ID: 34. #51, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	15	mg/kg
Cadmium	EPA 213.1	1.0	mg/kg
Selenium	EPA 270.2	4	mg/kg
Arsenic	EPA 206.2	19	mg/kg
Beryllium	EPA 200.7	4	mg/kg
Silver	EPA 272.1	<1.0	mg/kg
Sample ID: 35. #52, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	28	mg/kg
Cadmium	EPA 213.1	1.0	mg/kg
Selenium	EPA 270.2	8	mg/kg
Arsenic	EPA 206.2	13	mg/kg
Beryllium	EPA 200.7	4	mg/kg
Silver	EPA 272.1	<1.0	mg/kg

MARTEL

MARTEL LABORATORY SERVICES, INC.

Client Identification: MES
Log Identification: W-2961
December 21, 1990
Page 13

Certificate of Laboratory Analysis

Analytical Parameter	Method	Result	Units
Sample ID: 36. #53, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	64	mg/kg
Cadmium	EPA 213.1	1.1	mg/kg
Selenium	EPA 270.2	15	mg/kg
Arsenic	EPA 206.2	20	mg/kg
Beryllium	EPA 200.7	5	mg/kg
Silver	EPA 272.1	<1.0	mg/kg
Sample ID: 37. #59, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	24	mg/kg
Cadmium	EPA 213.1	1.0	mg/kg
Selenium	EPA 270.2	7	mg/kg
Arsenic	EPA 206.2	11	mg/kg
Beryllium	EPA 200.7	3	mg/kg
Silver	EPA 272.1	<1.0	mg/kg
Sample ID: 38. #60, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	64	mg/kg
Cadmium	EPA 213.1	1.0	mg/kg
Selenium	EPA 270.2	9	mg/kg
Arsenic	EPA 206.2	21	mg/kg
Beryllium	EPA 200.7	4	mg/kg
Silver	EPA 272.1	<1.0	mg/kg

MARTEL

MARTEL LABORATORY SERVICES, INC.

1225 Cromwell Bridge Road Baltimore Maryland 21204 (301) 825-7790 Pasadena (301) [illegible]
5920 North Belt Suite 111 Houston Texas 77086 (713) 441-[illegible]965
Southwestern Springfield Illinois 62707 (217) 522-[illegible]

Client Identification: MES
Log Identification: W-2961
December 21, 1990

Certificate of Laboratory Analysis

Analytical Parameter	Method	Result	Units
Sample ID: 39. #61, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	69	mg/kg
Cadmium	EPA 213.1	1.0	mg/kg
Selenium	EPA 270.2	11	mg/kg
Arsenic	EPA 206.2	14	mg/kg
Beryllium	EPA 200.7	5	mg/kg
Silver	EPA 272.1	<1.0	mg/kg
Sample ID: 40. #63, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	110	mg/kg
Cadmium	EPA 213.1	1.9	mg/kg
Selenium	EPA 270.2	14	mg/kg
Arsenic	EPA 206.2	23	mg/kg
Beryllium	EPA 200.7	6	mg/kg
Silver	EPA 272.1	<1.0	mg/kg
Sample ID: 41. #64, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	83	mg/kg
Cadmium	EPA 213.1	1.0	mg/kg
Selenium	EPA 270.2	10	mg/kg
Arsenic	EPA 206.2	25	mg/kg
Beryllium	EPA 200.7	6	mg/kg
Silver	EPA 272.1	<1.0	mg/kg

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore Maryland 21204 (301) 825-7790 Facsimile (301) 825-7794
5920 North Belt Suite 111 Houston Texas 77086 (713) 441-4966
Central Illinois Springfield Illinois 62707 (217) 522-0209

Client Identification: MES
Log Identification: W-2961
December 21, 1990

Certificate of Laboratory Analysis

Analytical Parameter	Method	Result	Units
Sample ID: 42. #65, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	70	mg/kg
Cadmium	EPA 213.1	1.0	mg/kg
Selenium	EPA 270.2	10	mg/kg
Arsenic	EPA 206.2	18	mg/kg
Beryllium	EPA 200.7	5	mg/kg
Silver	EPA 272.1	<1.0	mg/kg
Sample ID: 43. #67, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	73	mg/kg
Cadmium	EPA 213.1	1.1	mg/kg
Selenium	EPA 270.2	11	mg/kg
Arsenic	EPA 206.2	16	mg/kg
Beryllium	EPA 200.7	6	mg/kg
Silver	EPA 272.1	<1.0	mg/kg
Sample ID: 44. #69, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	71	mg/kg
Cadmium	EPA 213.1	1.1	mg/kg
Selenium	EPA 270.2	13	mg/kg
Arsenic	EPA 206.2	16	mg/kg
Beryllium	EPA 200.7	5	mg/kg
Silver	EPA 272.1	<1.0	mg/kg

MARTEL

MARTEL LABORATORY SERVICES, INC.

1205 Clarmiwell Bridge Road Baltimore Maryland 21204 [illegible]
8920 North Belt, Suite [illegible] Houston Texas 77036 [illegible]
Capital Airport Springfield Illinois 62707 [illegible]

Client Identification: MES
Log Identification: W-2961
December 21, 1990
Page 16

Certificate of Laboratory Analysis

Analytical Parameter	Method	Result	Units
Sample ID: 45. #70, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	75	mg/kg
Cadmium	EPA 213.1	1.0	mg/kg
Selenium	EPA 270.2	10	mg/kg
Arsenic	EPA 206.2	15	mg/kg
Beryllium	EPA 200.7	5	mg/kg
Silver	EPA 272.1	<1.0	mg/kg
Sample ID: 46. #71, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	76	mg/kg
Cadmium	EPA 213.1	1.0	mg/kg
Selenium	EPA 270.2	10	mg/kg
Arsenic	EPA 206.2	19	mg/kg
Beryllium	EPA 200.7	5	mg/kg
Silver	EPA 272.1	<1.0	mg/kg
Sample ID: 47. #80, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	75	mg/kg
Cadmium	EPA 213.1	1.0	mg/kg
Selenium	EPA 270.2	10	mg/kg
Arsenic	EPA 206.2	16	mg/kg
Beryllium	EPA 200.7	6	mg/kg
Silver	EPA 272.1	<1.0	mg/kg

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore Maryland 21204 (301) 825-7790 Facsimile (301) 825-7791
4920 North Belt Suite 111 Houston Texas 77026 (713) 441-4988
Toll Free (800) Summit 1 (800 786 6487) (217) 352-0089

Client Identification: MES
Log Identification: W-2961
December 21, 1990
Page 17

Certificate of Laboratory Analysis

Analytical Parameter	Method	Result	Units
Sample ID: 48. #81, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	59	mg/kg
Cadmium	EPA 213.1	1.1	mg/kg
Selenium	EPA 270.2	15	mg/kg
Arsenic	EPA 206.2	11	mg/kg
Beryllium	EPA 200.7	5	mg/kg
Silver	EPA 272.1	<1.0	mg/kg
Sample ID: 49. #85, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	6	mg/kg
Cadmium	EPA 213.1	1.1	mg/kg
Selenium	EPA 270.2	<2	mg/kg
Arsenic	EPA 206.2	<1	mg/kg
Beryllium	EPA 200.7	1	mg/kg
Silver	EPA 272.1	<1.0	mg/kg
Sample ID: 50. #87, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	90	mg/kg
Cadmium	EPA 213.1	1.0	mg/kg
Selenium	EPA 270.2	21	mg/kg
Arsenic	EPA 206.2	24	mg/kg
Beryllium	EPA 200.7	4	mg/kg
Silver	EPA 272.1	<1.0	mg/kg

MARTEL

MARTEL LABORATORY SERVICES, INC.

1925 Cromwell Bridge Road Baltimore Maryland 21204 (301) 828-7790 Facsimile (301) 821-
5920 North Belt, Suite 111 Houston Texas 77396 (713) 441-4965
Central Airport Carrollton Texas 75007 (214) 620-0009

Client Identification: MES
Log Identification: W-2961
December 21, 1990
Page 18

Certificate of Laboratory Analysis

Analytical Parameter	Method	Result	Units
Sample ID: 51. #98, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	61	mg/kg
Cadmium	EPA 213.1	<1.0	mg/kg
Selenium	EPA 270.2	15	mg/kg
Arsenic	EPA 206.2	13	mg/kg
Beryllium	EPA 200.7	5	mg/kg
Silver	EPA 272.1	<1.0	mg/kg
Sample ID: 52. #BC-3, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	23	mg/kg
Cadmium	EPA 213.1	1.1	mg/kg
Selenium	EPA 270.2	10	mg/kg
Arsenic	EPA 206.2	7.6	mg/kg
Beryllium	EPA 200.7	5	mg/kg
Silver	EPA 272.1	<1.0	mg/kg
Sample ID: 53. #BC4, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	99	mg/kg
Cadmium	EPA 213.1	1.0	mg/kg
Selenium	EPA 270.2	17	mg/kg
Arsenic	EPA 206.2	20	mg/kg
Beryllium	EPA 200.7	7	mg/kg
Silver	EPA 272.1	<1.0	mg/kg

MARTEL

MARTEL LABORATORY SERVICES, INC.

1925 Commerce Bridge Road, Baltimore, Maryland 21224 (301) 285-7730 Fax (410) 633-1992
1920 North Belt, Suite 100, Houston, Texas 77090 (713) 447-4965
South Hobart Street, Dallas, Texas 75227 (214) 388-9779

Client Identification: MES
Log Identification: W-2961
December 21, 1990
Page 19

Certificate of Laboratory Analysis

Analytical Parameter	Method	Result	Units
Sample ID: 54. #BC6, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	96	mg/kg
Cadmium	EPA 213.1	1.1	mg/kg
Selenium	EPA 270.2	20	mg/kg
Arsenic	EPA 206.2	15	mg/kg
Beryllium	EPA 200.7	5	mg/kg
Silver	EPA 272.1	<1.0	mg/kg
Sample ID: 55. #BC9, HMI-TM			
Sampling Date: 04/19/90			
Lead	EPA 239.2	76	mg/kg
Cadmium	EPA 213.1	<1.0	mg/kg
Selenium	EPA 270.2	16	mg/kg
Arsenic	EPA 206.2	21	mg/kg
Beryllium	EPA 200.7	5	mg/kg
Silver	EPA 272.1	<1.0	mg/kg

All procedures used are in accordance with the following methods:
EPA-600/4-79-020, "Methods for Chemical Analysis of Water and Wastes".
SW-846, "Test Methods for Evaluating Solid Waste", 1986.

Mary R.T. Hancock
QC Approval

12-21-90
Date

Helen Gorman
Laboratory Approval

12-21-90
Date

MARTEL

MARTEL LABORATORY SERVICES, INC.

1725 Dorsey Bridge Road Baltimore Md. 21224 (301) 426-7790 Pasadena (301) 437-4
8820 North Beltline Suite 111 Irving Texas 75063 (214) 641-4848
Capital Airport Springfield Illinois 62707 (217) 522-4333

Certificate of Laboratory Analysis

Page No. 1
12/21/90

Analytical Information
Dates, Times, Analysts
(dates may refer to date begun or date approved)

Log Number	Test Code	Date Performed	Time Performed	Analyst Initials
** Sample ID: 1. #3, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/13/90	15:06	MDI
2961	AS	12/05/90	12:30	BAB
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 2. #4, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/13/90	15:06	MDI
2961	AS	12/03/90	16:40	MDI
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 3. #5, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/13/90	15:06	MDI
2961	AS	12/03/90	16:40	MDI
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 4. #6, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/13/90	15:06	MDI
2961	AS	12/03/90	16:40	MDI
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 5. #7, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/13/90	15:06	MDI
2961	AS	12/03/90	16:40	MDI
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 6. #8A-1, HMI-TM				
2961	PB2	11/06/90	16:00	MDI

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road, Baltimore, Maryland 21204 (301) 828-7790 Facsimile 301-[illegible]
5920 North Belt, Suite [illegible], Houston, Texas 77036 (713) 441-4988
[illegible] (617) 332-0009

Certificate of Laboratory Analysis

12/21/90

Analytical Information
Dates, Times, Analysts
(dates may refer to date begun or date approved)

Log Number	Test Code	Date Performed	Time Performed	Analyst Initials
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI
2961	AS	12/03/90	16:40	MDI
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 7. #9, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/20/90	10:00	MDI
2961	AS	12/04/90	10:40	MDI
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 8. #10, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI
2961	AS	12/04/90	15:17	MDI
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 9. #11-1, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI
2961	AS	12/04/90	15:17	MDI
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 10. #12-1, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI
2961	AS	12/04/90	10:40	MDI
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 11. #13, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI

MARTEL

MARTEL LABORATORY SERVICES, INC.

1925 Clemville Bridge Road Baltimore Maryland 21204 (301) 435-7790 Facsimile (301) [illegible]
1920 North Bell Suite [illegible] Houston Texas 77036 (713) 441-[illegible]
Dublin Ohio [illegible] (614) 822-[illegible]

Certificate of Laboratory Analysis

12/21/90

Analytical Information
Dates, Times, Analysts
(dates may refer to date begun or date approved)

Log Number	Test Code	Date Performed	Time Performed	Analyst Initials
2961	AS	12/04/90	15:17	MDI
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 12. #14, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI
2961	AS	12/04/90	15:17	MDI
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 13. #15, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI
2961	AS	12/04/90	15:17	MDI
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 14. #16-1, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI
2961	AS	12/04/90	15:17	MDI
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 15. #17, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI
2961	AS	12/04/90	15:17	MDI
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 16. #18, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI
2961	AS	12/04/90	15:17	MDI
2961	BE	11/01/90	15:30	BAB

MARTEL

MARTEL LABORATORY SERVICES, INC.

[illegible] Baltimore Maryland [illegible] [illegible]
[illegible] North Bell Suite [illegible] Houston Texas [illegible]
[illegible]

Certificate of Laboratory Analysis

12/21/90

Analytical Information
Dates, Times, Analysts
(dates may refer to date begun or date approved)

Log Number	Test Code	Date Performed	Time Performed	Analyst Initials
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 17. #19, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI
2961	AS	12/04/90	15:17	MDI
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 18. #20, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI
2961	AS	12/04/90	15:17	MDI
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 19. #21B, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI
2961	AS	12/04/90	15:17	MDI
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 20. #22, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI
2961	AS	12/04/90	15:17	MDI
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 21. #23, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI
2961	AS	12/04/90	15:17	MDI
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB

MARTEL

MARTEL LABORATORY SERVICES, INC.

[illegible] Cromwell Bridge Road Baltimore Maryland [illegible] [illegible] [illegible]
[illegible] North Belt Suite [illegible] Houston Texas [illegible] [illegible]
[illegible]

Certificate of Laboratory Analysis

12/21/90

Analytical Information
Dates, Times, Analysts
(dates may refer to date begun or date approved)

Log Number	Test Code	Date Performed	Time Performed	Analyst Initials
** Sample ID: 22. #24-1, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI
2961	AS	12/04/90	15:17	MDI
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 23. #25-1, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI
2961	AS	12/04/90	15:17	MDI
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 24. #26, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI
2961	AS	12/04/90	15:17	MDI
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 25. #27, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI
2961	AS	12/04/90	15:17	MDI
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 26. #28-1, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI
2961	AS	12/04/90	15:17	MDI
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 27. #30, HMI-TM				
2961	PB2	11/06/90	16:00	MDI

MARTEL MARTEL LABORATORY SERVICES, INC.

1125 Dorsey Bridge Road Baltimore Maryland 21204 (301) 1937730 Fax (301) 1937141
1920 North Belt Suite 111 Houston Texas 77090 (713) 4274366
Cuelar Airport Sunnyvale California 92707 (714) 3224028

Certificate of Laboratory Analysis

12/21/90

Analytical Information
Dates, Times, Analysts
(dates may refer to date begun or date approved)

Log Number	Test Code	Date Performed	Time Performed	Analyst Initials
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI
2961	AS	12/04/90	15:17	MDI
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 28. #31, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI
2961	AS	12/04/90	15:17	MDI
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 29. #32, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI
2961	AS	12/04/90	15:17	MDI
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 30. #33, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI
2961	AS	12/04/90	15:17	MDI
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 31. #34, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI
2961	AS	12/04/90	15:17	MDI
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 32. #35, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore Maryland 21204 (301) 828-1720 Facsimile (301) [illegible]
5331 North Belt, Suite [illegible] Houston Texas 77036 (713) 641-4966
[illegible] (215) 522-5000

Certificate of Laboratory Analysis

12/21/90

Analytical Information
Dates, Times, Analysts
(dates may refer to date begun or date approved)

Log Number	Test Code	Date Performed	Time Performed	Analyst Initials
2961	AS	12/04/90	15:17	MDI
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 33. #36, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI
2961	AS	12/04/90	15:17	MDI
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 34. #51, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI
2961	AS	12/04/90	15:17	MDI
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 35. #52, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI
2961	AS	12/05/90	09:30	BAB
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 36. #53, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI
2961	AS	12/05/90	09:30	BAB
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 37. #59, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI
2961	AS	12/05/90	09:30	BAB
2961	BE	11/01/90	15:30	BAB

MARTEL

MARTEL LABORATORY SERVICES, INC.

1725 Cromwell Bridge Road Baltimore Maryland 21234 (301) 823-7730 Fax (301) [illegible]
9927 North Belt Suite [illegible] Houston Texas 77396 (713) 441-4985
Tuscan Vegas Zionsville Illinois 46077 (317) 873-[illegible]

Certificate of Laboratory Analysis

12/21/90

Analytical Information
Dates, Times, Analysts
(dates may refer to date begun or date approved)

Log Number	Test Code	Date Performed	Time Performed	Analyst Initials
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 38. #60, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI
2961	AS	12/05/90	09:30	BAB
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 39. #61, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI
2961	AS	12/05/90	09:30	BAB
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 40. #63, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI
2961	AS	12/05/90	09:30	BAB
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 41. #64, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI
2961	AS	12/05/90	09:30	BAB
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 42. #65, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI
2961	AS	12/05/90	09:30	BAB
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB

MARTEL

MARTEL LABORATORY SERVICES, INC.

1725 Dishmeen Bridge Road Baltimore Maryland 21204 [illegible] Phone [illegible]
1520 North Belt, Suite [illegible] Houston Texas 77090 [illegible]
[illegible]

Certificate of Laboratory Analysis

12/21/90

Analytical Information
Dates, Times, Analysts
(dates may refer to date begun or date approved)

Log Number	Test Code	Date Performed	Time Performed	Analyst Initials
** Sample ID: 43. #67, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI
2961	AS	12/05/90	09:30	BAB
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 44. #69, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI
2961	AS	12/05/90	09:30	BAB
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 45. #70, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI
2961	AS	12/05/90	09:30	BAB
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 46. #71, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI
2961	AS	12/05/90	09:30	BAB
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 47. #80, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI
2961	AS	12/05/90	09:30	BAB
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 48. #81, HMI-TM				
2961	PB2	11/06/90	16:00	MDI

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore Maryland 21204 301 [illegible] Facsimile 301 [illegible]
5920 North Bell Suite [illegible] Houston Texas 77096 713 [illegible]
Dunlap Airport Springfield Illinois 62707 217 [illegible]

Certificate of Laboratory Analysis

Analytical Information
Dates, Times, Analysts
(dates may refer to date begun or date approved)

Log Number	Test Code	Date Performed	Time Performed	Analyst Initials
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI
2961	AS	12/05/90	09:30	BAB
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 49. #85, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI
2961	AS	12/06/90	16:00	MDI
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 50. #87, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI
2961	AS	12/05/90	09:30	BAB
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 51. #98, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI
2961	AS	12/05/90	09:30	BAB
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 52. #BC-3, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI
2961	AS	12/05/90	09:30	BAB
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 53. #BC4, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI

MARTEL

MARTEL LABORATORY SERVICES, INC.

1225 Clipper Bridge Road Baltimore, Maryland 21224 (301) 327-1190 Fax (301) 327-1191
4920 North Belt, Suite 111 Houston, Texas 77018 (713) 447-4465
Dallas, Texas Dallas, Texas (214) 522-0008

Certificate of Laboratory Analysis

Analytical Information
Dates, Times, Analysts
(dates may refer to date begun or date approved)

Log Number	Test Code	Date Performed	Time Performed	Analyst Initials
2961	AS	12/05/90	09:30	BAB
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 54. #BC6, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI
2961	AS	12/05/90	09:30	BAB
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB
** Sample ID: 55. #BC9, HMI-TM				
2961	PB2	11/06/90	16:00	MDI
2961	CD2	11/06/90	16:00	MDI
2961	SE	12/14/90	10:50	MDI
2961	AS	12/05/90	09:30	BAB
2961	BE	11/01/90	15:30	BAB
2961	AG2	11/06/90	16:00	BAB

MARTEL

MARTEL LABORATORY SERVICES, INC.

1125 Cromwell Bridge Road Baltimore Maryland 21204 (301) 825-7790 Facsimile (301) [illegible]
5922 North Belt Suite [illegible] Houston Texas 77096 (713) 441-4965
Dallas Airport Dallas [illegible] 522-0209

Martel Lab Number: 08381

Certificate of Laboratory Analysis

Log Identification: W-5550

Samples received by Martel.
P.O. Number 90036
Project Id: 32-1605 / Hart Miller Island

Maryland Environmental Service
2020 Industrial Drive
Annapolis, Maryland 21401
Attention: CeCe Donovan

December 20, 1990

Client Identification: MES

Analytical Parameter	Method	Result	Units
Log Identification: W-5550			
Date Received: 11/30/90			
Sample ID: 1. 901274, XIV3430			
Sampling Date: 11/07/90			
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached
Sample ID: 2. 901275, XIF3430			
Sampling Date: 11/07/90			
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached
Sample ID: 3. 901276, XIF3620			
Sampling Date: 11/07/90			
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached

MARTEL

MARTEL LABORATORY SERVICES, INC.

1925 Cromwell Bridge Road Baltimore Maryland 21234 (301) 825-7790 Facsimile (301) [illegible]
8320 North Belt Suite [illegible] Houston Texas 77096 (713) 441-4965
[illegible] Springs [illegible] 322-[illegible]

Client Identification: MES
Log Identification: W-5550
December 20, 1990
Page 2

Certificate of Laboratory Analysis

Analytical Parameter	Method	Result	Units
Sample ID: 4. 901277, XIF3620			
Sampling Date: 11/07/90			
Pesticides/PCB's	EPA 8080	see	attachec
Base/Neutral Extractables	EPA 8270	see	attachec
Sample ID: 5. 901278, XIF3620			
Sampling Date: 11/07/90			
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached
Sample ID: 6. 901279, XIF4405			
Sampling Date: 11/07/90			
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached
Sample ID: 7. 901280, XIF4405			
Sampling Date: 11/07/90			
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached
Sample ID: 8. 901281, XIF4405			
Sampling Date: 11/07/90			
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7730 Facsimile (301) [illegible]
6920 North Belt, Suite [illegible] Houston, Texas 77396 (713) 441-4965
Suburban Court, Downingtown, PA 19335 (215) 524-1009

Client Identification: MES
Log Identification: W-5550
December 20, 1990

Certificate of Laboratory Analysis

Analytical Parameter	Method	Result	Units
Sample ID: 9. 901282, XIF4615			
Sampling Date: 11/07/90			
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached
Sample ID: 10. 901283, XIF4615			
Sampling Date: 11/07/90			
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached
Sample ID: 11. 901284, XIF4615			
Sampling Date: 11/07/90			
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached
Sample ID: 12. 901285, XIF5302			
Sampling Date: 11/07/90			
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached
Sample ID: 13. 901286, XIF5302			
Sampling Date: 11/07/90			
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore Maryland 21204 (301) 828-7700 Facsimile (301) [illegible]
4100 North Belt Suite [illegible] Houston Texas 77066 (713) 444-4945
Lombard Airport Schaumburg Illinois 60707 (312) 922-0033

Client Identification: MES
Log Identification: W-5550
December 20, 1990
Page 4

Certificate of Laboratory Analysis

Analytical Parameter	Method	Result	Units
Sample ID: 14. 901287, XIF5302			
Sampling Date: 11/07/90			
Pesticides/PCB's	EPA 8080	see	attache
Base/Neutral Extractables	EPA 8270	see	attache
Sample ID: 15. 901288, XIF5699			
Sampling Date: 11/07/90			
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached
Sample ID: 16. 901289, XIF5699			
Sampling Date: 11/07/90			
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached
Sample ID: 17. 901290, XIF5699			
Sampling Date: 11/07/90			
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached
Sample ID: 18. 901291, XIF5505			
Sampling Date: 11/07/90			
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore Maryland 21204 (301) 825-7790 Facsimile (301) 825-1794
5920 North Belt Suite 111 Houston Texas 77035 (713) 441-4565
Capital Airport Springfield Illinois 62707 (217) 522-0909

Client Identification: MES
Log Identification: W-5550
December 20, 1990
Page 5

Certificate of Laboratory Analysis

Analytical Parameter	Method	Result	Units
Sample ID: 19. 901292, XIF5925			
Sampling Date: 11/07/90			
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached
Sample ID: 20. 901293, XIF5925			
Sampling Date: 11/07/90			
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached
Sample ID: 21. 901294, XIF5925			
Sampling Date: 11/07/90			
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached
Sample ID: 22. 901295, XIF4642			
Sampling Date: 11/07/90			
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore Maryland 21204 (301) 825-7790 Facsimile (301) [illegible]
5920 North Belt Suite 111 Houston Texas 77096 (713) 441-4985
Capital Airport Springfield Illinois 62707 (217) 522-3009

Client Identification: MES
Log Identification: W-5550
December 20, 1990
Page 6

Certificate of Laboratory Analysis

All procedures used are in accordance with the following methods:
EPA-600/4-79-020, "Methods for Chemical Analysis of Water and Wastes".
SW-846, "Test Methods for Evaluating Solid Waste", 1986.

QC Approval	Laboratory Approval
12-21-90	12-21-90
Date	Date

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore Maryland 21204 (301) 825-7190 Facsimile (301) [illegible]
5920 North Belt Suite [illegible] Houston Texas 77096 (713) 447-4985
Dallas Airport Dallas [illegible] (214) 522-[illegible]

Certificate of Laboratory Analysis

Log Id: 5550 Sample Id: 1. 901274

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	1000	ND
a-BHC	1000	ND
Atrazine	1000	ND
b-BHC	1000	ND
g-BHC (Lindane)	1000	ND
Chlordane	1000	ND
4,4'-DDD	1000	ND
4,4'-DDE	1000	ND
4,4'-DDT	1000	ND
Diazinon	1000	ND
Dieldrin	1000	ND
Endrin	1000	ND
Ethyl parathion	1000	ND
Heptachlor	1000	ND
Heptachlor Epoxide	1000	ND
Linuron	1000	ND
Malathion	1000	ND
Methyl parathion	1000	ND
Toxaphene	1000	ND
Trifluraline	1000	ND
PCB's (total)	1000	ND
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	100	ND
Di-n-octyl phthalate	100	ND
Bis (2-ethylhexyl) phthalate	1000	ND
Di-n-butyl-phthalate	100	ND
Diethyl phthalate	100	ND
Dimethylphthalate	100	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	100	ND
Acenaphthylene	100	ND
Benzo (a) anthracene	100	ND
Benzo (g,h,i) perylene	200	ND
Chrysene	100	ND
Fluoranthene	100	ND
Indeno (1,2,3-cd) pyrene	200	ND
Phenanthrene	100	ND
Acenaphthene	100	ND
Anthracene	100	ND
Benzo (a) pyrene	100	ND
Benzo (k) fluoranthene	100	ND
Dibenzo (a,h) anthracene	200	ND
Fluorene	100	ND
Naphthalene	100	ND
Pyrene	100	ND
Surrogate Spike Recoveries (%):		
Dibutylchlorendate	108	
2-Fluorobiphenyl	44	

MARTEL

MARTEL LABORATORY SERVICES, INC.

1128 Cromwell Bridge Road Baltimore, Maryland 21204 301 825-7790 Facsimile (301 [illegible]
9930 North Beltline Suite [illegible] Houston, Texas 77036 713 441-4965
Capital Airport Springfield, Illinois 62707 217 522-3009

Certificate of Laboratory Analysis

Log Id: 5550 Sample Id: 2. 901275

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	1000	ND
a-BHC	1000	ND
Atrazine	1000	ND
b-BHC	1000	ND
g-BHC (Lindane)	1000	ND
Chlordane	1000	ND
4,4'-DDD	1000	ND
4,4'-DDE	1000	ND
4,4'-DDT	1000	ND
Diazinon	1000	ND
Dieldrin	1000	ND
Endrin	1000	ND
Ethyl parathion	1000	ND
Heptachlor	1000	ND
Heptachlor Epoxide	1000	ND
Linuron	1000	ND
Malathion	1000	ND
Methyl parathion	1000	ND
Toxaphene	1000	ND
Trifluraline	1000	ND
PCB's (total)	1000	ND
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	100	ND
Di-n-octyl phthalate	100	ND
Bis (2-ethylhexyl) phthalate	1000	ND
Di-n-butyl-phthalate	100	ND
Diethyl phthalate	100	ND
Dimethylphthalate	100	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	100	ND
Acenaphthylene	100	ND
Benzo (a) anthracene	100	ND
Benzo (g,h,i) perylene	200	ND
Chrysene	100	ND
Fluoranthene	100	ND
Indeno (1,2,3-cd) pyrene	200	ND
Phenanthrene	100	ND
Acenaphthene	100	ND
Anthracene	100	ND
Benzo (a) pyrene	100	ND
Benzo (k) fluoranthene	100	ND
Dibenzo (a,h) anthracene	200	ND
Fluorene	100	ND
Naphthalene	100	ND
Pyrene	100	ND
Surrogate Spike Recoveries (%):		
Dibutylchlorendate	115	
2-Fluorobiphenyl	42	

MARTEL

MARTEL LABORATORY SERVICES, INC.

1225 Cromwell Bridge Road Baltimore Maryland 21204 (301) 825-7790 Facsimile (301) 825-[illegible]
9225 North Belt, Suite 1[illegible] Houston Texas 77036 (713) 441-4965
Capital Airport Springfield [illegible] (217) 522-0009

Certificate of Laboratory Analysis

Log Id: 5550 Sample Id: 3. 901276

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	2000	ND
a-BHC	2000	ND
Atrazine	2000	ND
b-BHC	2000	ND
g-BHC (Lindane)	2000	ND
Chlordane	2000	ND
4,4'-DDD	2000	ND
4,4'-DDE	2000	ND
4,4'-DDT	2000	ND
Diazinon	2000	ND
Dieldrin	2000	ND
Endrin	2000	ND
Ethyl parathion	2000	ND
Heptachlor	2000	ND
Heptachlor Epoxide	2000	ND
Linuron	2000	ND
Malathion	2000	ND
Methyl parathion	2000	ND
Toxaphene	2000	ND
Trifluraline	2000	ND
PCB's (total)	2000	ND
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	100	ND
Di-n-octyl phthalate	100	ND
Bis (2-ethylhexyl) phthalate	1000	ND
Di-n-butyl-phthalate	100	ND
Diethyl phthalate	100	ND
Dimethylphthalate	100	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	100	ND
Acenaphthylene	100	ND
Benzo (a) anthracene	100	ND
Benzo (g,h,i) perylene	200	ND
Chrysene	100	ND
Fluoranthene	100	ND
Indeno (1,2,3-cd) pyrene	200	ND
Phenanthrene	100	ND
Acenaphthene	100	ND
Anthracene	100	ND
Benzo (a) pyrene	100	ND
Benzo (k) fluoranthene	100	ND
Dibenzo (a,h) anthracene	200	ND
Fluorene	100	ND
Naphthalene	100	ND
Pyrene	100	ND
Surrogate Spike Recoveries (%):		
Dibutylchlorendate	113	
2-Fluorobiphenyl	39	

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore Maryland 21204 (301) 825-7790 Facsimile (301) 821-
3500 North Belt, Suite 111 Houston Texas 77066 (713) 441-4965
Subsidiary: Lancaster Laboratories Inc. (717) 656-2009

Certificate of Laboratory Analysis

Log Id: 5550 Sample Id: 4. 901277

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	1000	ND
a-BHC	1000	ND
Atrazine	1000	ND
b-BHC	1000	ND
g-BHC (Lindane)	1000	ND
Chlordane	1000	ND
4,4'-DDD	1000	ND
4,4'-DDE	1000	ND
4,4'-DDT	1000	ND
Diazinon	1000	ND
Dieldrin	1000	ND
Endrin	1000	ND
Ethyl parathion	1000	ND
Heptachlor	1000	ND
Heptachlor Epoxide	1000	ND
Linuron	1000	ND
Malathion	1000	ND
Methyl parathion	1000	ND
Toxaphene	1000	ND
Trifluraline	1000	ND
PCB's (total)	1000	ND
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	100	ND
Di-n-octyl phthalate	100	ND
Bis (2-ethylhexyl) phthalate	1000	ND
Di-n-butyl-phthalate	100	ND
Diethyl phthalate	100	ND
Dimethylphthalate	100	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	100	ND
Acenaphthylene	100	ND
Benzo (a) anthracene	100	ND
Benzo (g,h,i) perylene	200	ND
Chrysene	100	ND
Fluoranthene	100	ND
Indeno (1,2,3-cd) pyrene	200	ND
Phenanthrene	100	ND
Acenaphthene	100	ND
Anthracene	100	ND
Benzo (a) pyrene	100	ND
Benzo (k) fluoranthene	100	ND
Dibenzo (a,h) anthracene	200	ND
Fluorene	100	ND
Naphthalene	100	ND
Pyrene	100	ND
Surrogate Spike Recoveries (%):		
Dibutylchlorendate	117	
2-Fluorobiphenyl	42	

MARTEL

MARTEL LABORATORY SERVICES, INC.

1325 Cromwell Bridge Road Baltimore Maryland 21204 (301) 825-7790 Facsimile (301) [illegible]
5920 North Belt Suite [illegible] Houston Texas 77066 (713) 441-4965
Dallas Airport [illegible] (214) 522-0009

Certificate of Laboratory Analysis

Log Id: 5550 Sample Id: 5. 901278

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	1000	ND
a-BHC	1000	ND
Atrazine	1000	ND
b-BHC	1000	ND
g-BHC (Lindane)	1000	ND
Chlordane	1000	ND
4,4'-DDD	1000	ND
4,4'-DDE	1000	ND
4,4'-DDT	1000	ND
Diazinon	1000	ND
Dieldrin	1000	ND
Endrin	1000	ND
Ethyl parathion	1000	ND
Heptachlor	1000	ND
Heptachlor Epoxide	1000	ND
Linuron	1000	ND
Malathion	1000	ND
Methyl parathion	1000	ND
Toxaphene	1000	ND
Trifluraline	1000	ND
PCB's (total)	1000	ND
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	100	ND
Di-n-octyl phthalate	100	ND
Bis (2-ethylhexyl) phthalate	1000	ND
Di-n-butyl-phthalate	100	ND
Diethyl phthalate	100	ND.
Dimethylphthalate	100	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	100	ND
Acenaphthylene	100	ND
Benzo (a) anthracene	100	ND
Benzo (g,h,i) perylene	200	ND
Chrysene	100	ND
Fluoranthene	100	ND
Indeno (1,2,3-cd) pyrene	200	ND
Phenanthrene	100	ND
Acenaphthene	100	ND
Anthracene	100	ND
Benzo (a) pyrene	100	ND
Benzo (k) fluoranthene	100	ND
Dibenzo (a,h) anthracene	200	ND
Fluorene	100	ND
Naphthalene	100	ND
Pyrene	100	ND
Surrogate Spike Recoveries (%):		
Dibutylchlorendate	106	
2-Fluorobiphenyl	43	

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore Maryland 21204 (301) 825-7790 Fax (301) 825-
5920 North Belt, Suite 111 Houston Texas 77396 (713) 441-4966
Springfield Airport Springfield Illinois 62707 (217) 522-2309

Certificate of Laboratory Analysis

Log Id: 5550 Sample Id: 6. 901279

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	5000	ND
a-BHC	5000	ND
Atrazine	5000	ND
b-BHC	5000	ND
g-BHC (Lindane)	5000	ND
Chlordane	5000	ND
4,4'-DDD	5000	ND
4,4'-DDE	5000	ND
4,4'-DDT	5000	ND
Diazinon	5000	ND
Dieldrin	5000	ND
Endrin	5000	ND
Ethyl parathion	5000	ND
Heptachlor	5000	ND
Heptachlor Epoxide	5000	ND
Linuron	5000	ND
Malathion	5000	ND
Methyl parathion	5000	ND
Toxaphene	5000	ND
Trifluraline	5000	ND
PCB's (total)	5000	ND
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	100	ND
Di-n-octyl phthalate	100	ND
Bis (2-ethylhexyl) phthalate	1000	ND
Di-n-butyl-phthalate	100	ND
Diethyl phthalate	100	ND
Dimethylphthalate	100	ND.
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	100	ND
Acenaphthylene	100	ND
Benzo (a) anthracene	100	ND
Benzo (g,h,i) perylene	200	ND
Chrysene	100	ND
Fluoranthene	100	ND
Indeno (1,2,3-cd) pyrene	200	ND
Phenanthrene	100	ND
Acenaphthene	100	ND
Anthracene	100	ND
Benzo (a) pyrene	100	ND
Benzo (k) fluoranthene	100	ND
Dibenzo (a,h) anthracene	200	ND
Fluorene	100	ND
Naphthalene	100	ND
Pyrene	100	ND
Surrogate Spike Recoveries (%):		
Dibutylchlorendate	100	
2-Fluorobiphenyl	41	

MARTEL

MARTEL LABORATORY SERVICES, INC.

1925 Cromwell Bridge Road Baltimore Maryland 21204 (301) 825-7780 Facsimile (301) [illegible]
5220 North Belt, Suite [illegible] Houston Texas 77396 (713) 447-4965
Capital Airport Springfield [illegible] (217) 522-[illegible]

Certificate of Laboratory Analysis

Log Id: 5550 Sample Id: 7. 901280

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	5000	ND
a-BHC	5000	ND
Atrazine	5000	ND
b-BHC	5000	ND
g-BHC (Lindane)	5000	ND
Chlordane	5000	ND
4,4'-DDD	5000	ND
4,4'-DDE	5000	ND
4,4'-DDT	5000	ND
Diazinon	5000	ND
Dieldrin	5000	ND
Endrin	5000	ND
Ethyl parathion	5000	ND
Heptachlor	5000	ND
Heptachlor Epoxide	5000	ND
Linuron	5000	ND
Malathion	5000	ND
Methyl parathion	5000	ND
Toxaphene	5000	ND
Trifluraline	5000	ND
PCB's (total)	5000	ND
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	100	ND
Di-n-octyl phthalate	100	ND
Bis (2-ethylhexyl) phthalate	1000	ND
Di-n-butyl-phthalate	100	ND
Diethyl phthalate	100	ND
Dimethylphthalate	100	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	100	ND
Acenaphthylene	100	ND
Benzo (a) anthracene	100	ND
Benzo (g,h,i) perylene	200	ND
Chrysene	100	ND
Fluoranthene	100	ND
Indeno (1,2,3-cd) pyrene	200	ND
Phenanthrene	100	ND
Acenaphthene	100	ND
Anthracene	100	ND
Benzo (a) pyrene	100	ND
Benzo (k) fluoranthene	100	ND
Dibenzo (a,h) anthracene	200	ND
Fluorene	100	ND
Naphthalene	100	ND
Pyrene	100	ND
Surrogate Spike Recoveries (%):		
Dibutylchlorendate	105	
2-Fluorobiphenyl	33	

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore Maryland 21204 (301) 825-7790 Facsimile (301) 821-7134
5920 North Belt, Suite 111 Houston, Texas 77396 (713) 441-4965
Capitol Heights, Springfield, Virginia 22151 (217) 522-2009

Certificate of Laboratory Analysis

Log Id: 5550 Sample Id: 8. 901281

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	1000	ND
a-BHC	1000	ND
Atrazine	1000	ND
b-BHC	1000	ND
g-BHC (Lindane)	1000	ND
Chlordane	1000	ND
4,4'-DDD	1000	ND
4,4'-DDE	1000	ND
4,4'-DDT	1000	ND
Diazinon	1000	ND
Dieldrin	1000	ND
Endrin	1000	ND
Ethyl parathion	1000	ND
Heptachlor	1000	ND
Heptachlor Epoxide	1000	ND
Linuron	1000	ND
Malathion	1000	ND
Methyl parathion	1000	ND
Toxaphene	1000	ND
Trifluraline	1000	ND
PCB's (total)	1000	ND
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	100	ND
Di-n-octyl phthalate	100	ND
Bis (2-ethylhexyl) phthalate	1000	ND
Di-n-butyl-phthalate	100	ND
Diethyl phthalate	100	ND
Dimethylphthalate	100	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	100	ND
Acenaphthylene	100	ND
Benzo (a) anthracene	100	ND
Benzo (g,h,i) perylene	200	ND
Chrysene	100	ND
Fluoranthene	100	ND
Indeno (1,2,3-cd) pyrene	200	ND
Phenanthrene	100	ND
Acenaphthene	100	ND
Anthracene	100	ND
Benzo (a) pyrene	100	ND
Benzo (k) fluoranthene	100	ND
Dibenzo (a,h) anthracene	200	ND
Fluorene	100	ND
Naphthalene	100	ND
Pyrene	100	ND
Surrogate Spike Recoveries (%):		
Dibutylchlorendate	108	
2-Fluorobiphenyl	38	

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore Maryland 21204 (301) 825-7796 Facsimile (301) 821-54
8920 North Belt, Suite 111 Houston Texas 77096 (713) 481-4965
Capital Airport Springfield Illinois 62707 (217) 522-0009

Certificate of Laboratory Analysis

Log Id: 5550 Sample Id: 9. 901282

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	1000	ND
a-BHC	1000	ND
Atrazine	1000	ND
b-BHC	1000	ND
g-BHC (Lindane)	1000	ND
Chlordane	1000	ND
4,4'-DDD	1000	ND
4,4'-DDE	1000	ND
4,4'-DDT	1000	ND
Diazinon	1000	ND
Dieldrin	1000	ND
Endrin	1000	ND
Ethyl parathion	1000	ND
Heptachlor	1000	ND
Heptachlor Epoxide	1000	ND
Linuron	1000	ND
Malathion	1000	ND
Methyl parathion	1000	ND
Toxaphene	1000	ND
Trifluraline	1000	ND
PCB's (total)	1000	ND
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	100	ND
Di-n-octyl phthalate	100	ND
Bis (2-ethylhexyl) phthalate	1000	ND
Di-n-butyl-phthalate	100	ND
Diethyl phthalate	100	ND
Dimethylphthalate	100	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	100	ND
Acenaphthylene	100	ND
Benzo (a) anthracene	100	ND
Benzo (g,h,i) perylene	200	ND
Chrysene	100	ND
Fluoranthene	100	ND
Indeno (1,2,3-cd) pyrene	200	ND
Phenanthrene	100	ND
Acenaphthene	100	ND
Anthracene	100	ND
Benzo (a) pyrene	100	ND
Benzo (k) fluoranthene	100	ND
Dibenzo (a,h) anthracene	200	ND
Fluorene	100	ND
Naphthalene	100	ND
Pyrene	100	ND
Surrogate Spike Recoveries (%):		
Dibutylchlorendate	105	
2-Fluorobiphenyl	41	

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Fax (301) 301-1179
9920 North Belt Suite 111 Houston, Texas 77096 (713) 481-4985
Capital Airport Springfield, Illinois 62707 (217) 522-2003

Certificate of Laboratory Analysis

Log Id: 5550 Sample Id: 10. 901283

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	5000	ND
a-BHC	5000	ND
Atrazine	5000	ND
b-BHC	5000	ND
g-BHC (Lindane)	5000	ND
Chlordane	5000	ND
4,4'-DDD	5000	ND
4,4'-DDE	5000	ND
4,4'-DDT	5000	ND
Diazinon	5000	ND
Dieldrin	5000	ND
Endrin	5000	ND
Ethyl parathion	5000	ND
Heptachlor	5000	ND
Heptachlor Epoxide	5000	ND
Linuron	5000	ND
Malathion	5000	ND
Methyl parathion	5000	ND
Toxaphene	5000	ND
Trifluraline	5000	ND
PCB's (total)	5000	ND
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	100	ND
Di-n-octyl phthalate	100	ND
Bis (2-ethylhexyl) phthalate	1000	ND
Di-n-butyl-phthalate	100	ND
Diethyl phthalate	100	ND
Dimethylphthalate	100	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	100	ND
Acenaphthylene	100	ND
Benzo (a) anthracene	100	ND
Benzo (g,h,i) perylene	200	ND
Chrysene	100	ND
Fluoranthene	100	ND
Indeno (1,2,3-cd) pyrene	200	ND
Phenanthrene	100	ND
Acenaphthene	100	ND
Anthracene	100	ND
Benzo (a) pyrene	100	ND
Benzo (k) fluoranthene	100	ND
Dibenzo (a,h) anthracene	200	ND
Fluorene	100	ND
Naphthalene	100	ND
Pyrene	100	ND
Surrogate Spike Recoveries (%):		
Dibutylchlorendate	94	
2-Fluorobiphenyl	75	

MARTEL MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Facsimile (301) [illegible]
5320 North Belt Suite 111 Houston, Texas 77396 (713) 447-4965
Capital Airport Springfield, Illinois 62707 (217) 522-0009

Certificate of Laboratory Analysis

Log Id: 5550 Sample Id: 11. 901284

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	1000	ND
a-BHC	1000	ND
Atrazine	1000	ND
b-BHC	1000	ND
g-BHC (Lindane)	1000	ND
Chlordane	1000	ND
4,4'-DDD	1000	ND
4,4'-DDE	1000	ND
4,4'-DDT	1000	ND
Diazinon	1000	ND
Dieldrin	1000	ND
Endrin	1000	ND
Ethyl parathion	1000	ND
Heptachlor	1000	ND
Heptachlor Epoxide	1000	ND
Linuron	1000	ND
Malathion	1000	ND
Methyl parathion	1000	ND
Toxaphene	1000	ND
Trifluraline	1000	ND
PCB's (total)	1000	ND
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	100	ND
Di-n-octyl phthalate	100	ND
Bis (2-ethylhexyl) phthalate	1000	ND
Di-n-butyl-phthalate	100	ND
Diethyl phthalate	100	ND
Dimethylphthalate	100	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	100	ND
Acenaphthylene	100	ND
Benzo (a) anthracene	100	ND
Benzo (g,h,i) perylene	200	ND
Chrysene	100	ND
Fluoranthene	100	ND
Indeno (1,2,3-cd) pyrene	200	ND
Phenanthrene	100	ND
Acenaphthene	100	ND
Anthracene	100	ND
Benzo (a) pyrene	100	ND
Benzo (k) fluoranthene	100	ND
Dibenzo (a,h) anthracene	200	ND
Fluorene	100	ND
Naphthalene	100	ND
Pyrene	100	ND
Surrogate Spike Recoveries (%):		
Dibutylchlorendate	92	
2-Fluorobiphenyl	113	

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore Maryland 21204 301 825-7790 Facsimile (301) [illegible]
5320 North Belt Suite [illegible] Houston Texas 77096 (713) 447-4865
Capital Airport Springfield Illinois 62707 217 522-3009

Certificate of Laboratory Analysis

Log Id: 5550 Sample Id: 12. 901285

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	2000	ND
a-BHC	2000	ND
Atrazine	2000	ND
b-BHC	2000	ND
g-BHC (Lindane)	2000	ND
Chlordane	2000	ND
4,4'-DDD	2000	ND
4,4'-DDE	2000	ND
4,4'-DDT	2000	ND
Diazinon	2000	ND
Dieldrin	2000	ND
Endrin	2000	ND
Ethyl parathion	2000	ND
Heptachlor	2000	ND
Heptachlor Epoxide	2000	ND
Linuron	2000	ND
Malathion	2000	ND
Methyl parathion	2000	ND
Toxaphene	2000	ND
Trifluraline	2000	ND
PCB's (total)	2000	ND
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	100	ND
Di-n-octyl phthalate	100	ND
Bis (2-ethylhexyl) phthalate	1000	ND
Di-n-butyl-phthalate	100	ND
Diethyl phthalate	100	ND
Dimethylphthalate	100	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	100	ND
Acenaphthylene	100	ND
Benzo (a) anthracene	100	ND
Benzo (g,h,i) perylene	200	ND
Chrysene	100	ND
Fluoranthene	100	ND
Indeno (1,2,3-cd) pyrene	200	ND
Phenanthrene	100	ND
Acenaphthene	100	ND
Anthracene	100	ND
Benzo (a) pyrene	100	ND
Benzo (k) fluoranthene	100	ND
Dibenzo (a,h) anthracene	200	ND
Fluorene	100	ND
Naphthalene	100	ND
Pyrene	100	ND
Surrogate Spike Recoveries (%):		
Dibutylchlorendate	95	
2-Fluorobiphenyl	92	

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore Maryland 21204 301 825-7790 Facsimile 301-
3920 North Belt, Suite 111 Houston Texas 77036 713.441-4965
Capital Airport Springfield Illinois 62707 217 522-0009

Certificate of Laboratory Analysis

Log Id: 5550 Sample Id: 13. 901286

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	5000	ND
a-BHC	5000	ND
Atrazine	5000	ND
b-BHC	5000	ND
g-BHC (Lindane)	5000	ND
Chlordane	5000	ND
4,4'-DDD	5000	ND
4,4'-DDE	5000	ND
4,4'-DDT	5000	ND
Diazinon	5000	ND
Dieldrin	5000	ND
Endrin	5000	ND
Ethyl parathion	5000	ND
Heptachlor	5000	ND
Heptachlor Epoxide	5000	ND
Linuron	5000	ND
Malathion	5000	ND
Methyl parathion	5000	ND
Toxaphene	5000	ND
Trifluraline	5000	ND
PCB's (total)	5000	ND
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	100	ND
Di-n-octyl phthalate	100	ND
Bis (2-ethylhexyl) phthalate	1000	ND
Di-n-butyl-phthalate	100	ND
Diethyl phthalate	100	ND
Dimethylphthalate	100	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	100	ND
Acenaphthylene	100	ND
Benzo (a) anthracene	100	ND
Benzo (g,h,i) perylene	200	ND
Chrysene	100	ND
Fluoranthene	100	ND
Indeno (1,2,3-cd) pyrene	200	ND
Phenanthrene	100	ND
Acenaphthene	100	ND
Anthracene	100	ND
Benzo (a) pyrene	100	ND
Benzo (k) fluoranthene	100	ND
Dibenzo (a,h) anthracene	200	ND
Fluorene	100	ND
Naphthalene	100	ND
Pyrene	100	ND
Surrogate Spike Recoveries (%):		
Dibutylchlorendate	87	
2-Fluorobiphenyl	45	

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore Maryland 21204 (301) 825-7730 Facsimile (301) [illegible]
8320 North Belt Suite 111 Houston, Texas 77096 (713) 441-4965
Capital Airport Springfield Illinois 62707 (217) 522-2009

Certificate of Laboratory Analysis

Log Id: 5550 Sample Id: 14. 901287

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	5000	ND
a-BHC	5000	ND
Atrazine	5000	ND
b-BHC	5000	ND
g-BHC (Lindane)	5000	ND
Chlordane	5000	ND
4,4'-DDD	5000	ND
4,4'-DDE	5000	ND
4,4'-DDT	5000	ND
Diazinon	5000	ND
Dieldrin	5000	ND
Endrin	5000	ND
Ethyl parathion	5000	ND
Heptachlor	5000	ND
Heptachlor Epoxide	5000	ND
Linuron	5000	ND
Malathion	5000	ND
Methyl parathion	5000	ND
Toxaphene	5000	ND
Trifluraline	5000	ND
PCB's (total)	5000	ND
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	100	ND
Di-n-octyl phthalate	100	ND
Bis (2-ethylhexyl) phthalate	1000	ND
Di-n-butyl-phthalate	100	ND
Diethyl phthalate	100	ND
Dimethylphthalate	100	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	100	ND
Acenaphthylene	100	ND
Benzo (a) anthracene	100	ND
Benzo (g,h,i) perylene	200	ND
Chrysene	100	ND
Fluoranthene	100	ND
Indeno (1,2,3-cd) pyrene	200	ND
Phenanthrene	100	ND
Acenaphthene	100	ND
Anthracene	100	ND
Benzo (a) pyrene	100	ND
Benzo (k) fluoranthene	100	ND
Dibenzo (a,h) anthracene	200	ND
Fluorene	100	ND
Naphthalene	100	ND
Pyrene	100	ND
Surrogate Spike Recoveries (%):		
Dibutylchlorendate	91	
2-Fluorobiphenyl	101	

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore Maryland 21204 301 [illegible]
5920 North Belt Suite 111 Houston Texas 77396 713 [illegible]
Capital Airport Springfield Illinois 62707 217 [illegible]

Certificate of Laboratory Analysis

Log Id: 5550 Sample Id: 15. 901288

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	2000	ND
a-BHC	2000	ND
Atrazine	2000	ND
b-BHC	2000	ND
g-BHC (Lindane)	2000	ND
Chlordane	2000	ND
4,4'-DDD	2000	ND
4,4'-DDE	2000	ND
4,4'-DDT	2000	ND
Diazinon	2000	ND
Dieldrin	2000	ND
Endrin	2000	ND
Ethyl parathion	2000	ND
Heptachlor	2000	ND
Heptachlor Epoxide	2000	ND
Linuron	2000	ND
Malathion	2000	ND
Methyl parathion	2000	ND
Toxaphene	2000	ND
Trifluraline	2000	ND
PCB's (total)	2000	ND
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	100	ND
Di-n-octyl phthalate	100	ND
Bis (2-ethylhexyl) phthalate	1000	ND
Di-n-butyl-phthalate	100	ND
Diethyl phthalate	100	ND.
Dimethylphthalate	100	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	100	ND
Acenaphthylene	100	ND
Benzo (a) anthracene	100	ND
Benzo (g,h,i) perylene	200	ND
Chrysene	100	ND
Fluoranthene	100	ND
Indeno (1,2,3-cd) pyrene	200	ND
Phenanthrene	100	ND
Acenaphthene	100	ND
Anthracene	100	ND
Benzo (a) pyrene	100	ND
Benzo (k) fluoranthene	100	ND
Dibenzo (a,h) anthracene	200	ND
Fluorene	100	ND
Naphthalene	100	ND
Pyrene	100	ND
Surrogate Spike Recoveries (%):		
Dibutylchlorendate	95	
2-Fluorobiphenyl	115	

MARTEL

MARTEL LABORATORY SERVICES, INC.

1825 Cromwell Bridge Road Baltimore Maryland 21204 (301) 825-7790 Facsimile (301) 821-[illegible]
5823 North Belt Suite 111 Houston Texas 77396 (713) 441-4965
Capital Airport Springfield Illinois 62707 (217) 522-5009

Certificate of Laboratory Analysis

Log Id: 5550 Sample Id: 16. 901289

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	5000	ND
a-BHC	5000	ND
Atrazine	5000	ND
b-BHC	5000	ND
g-BHC (Lindane)	5000	ND
Chlordane	5000	ND
4,4'-DDD	5000	ND
4,4'-DDE	5000	ND
4,4'-DDT	5000	ND
Diazinon	5000	ND
Dieldrin	5000	ND
Endrin	5000	ND
Ethyl parathion	5000	ND
Heptachlor	5000	ND
Heptachlor Epoxide	5000	ND
Linuron	5000	ND
Malathion	5000	ND
Methyl parathion	5000	ND
Toxaphene	5000	ND
Trifluraline	5000	ND
PCB's (total)	5000	ND
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	100	ND
Di-n-octyl phthalate	100	ND
Bis (2-ethylhexyl) phthalate	1000	ND
Di-n-butyl-phthalate	100	ND
Diethyl phthalate	100	ND
Dimethylphthalate	100	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	100	ND
Acenaphthylene	100	ND
Benzo (a) anthracene	100	ND
Benzo (g,h,i) perylene	200	ND
Chrysene	100	ND
Fluoranthene	100	ND
Indeno (1,2,3-cd) pyrene	200	ND
Phenanthrene	100	ND
Acenaphthene	100	ND
Anthracene	100	ND
Benzo (a) pyrene	100	ND
Benzo (k) fluoranthene	100	ND
Dibenzo (a,h) anthracene	200	ND
Fluorene	100	ND
Naphthalene	100	ND
Pyrene	100	ND
Surrogate Spike Recoveries (%):		
Dibutylchlorendate	85	
2-Fluorobiphenyl	89	

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore Maryland 21204 301 [illegible] Fax [illegible]
5920 North Belt Suite 111 Houston Texas 77096 713 [illegible]
Capital Airport Springfield Illinois 62707 217 [illegible]

Certificate of Laboratory Analysis

Log Id: 5550 Sample Id: 17. 901290

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	1000	ND
a-BHC	1000	ND
Atrazine	1000	ND
b-BHC	1000	ND
g-BHC (Lindane)	1000	ND
Chlordane	1000	ND
4,4'-DDD	1000	ND
4,4'-DDE	1000	ND
4,4'-DDT	1000	ND
Diazinon	1000	ND
Dieldrin	1000	ND
Endrin	1000	ND
Ethyl parathion	1000	ND
Heptachlor	1000	ND
Heptachlor Epoxide	1000	ND
Linuron	1000	ND
Malathion	1000	ND
Methyl parathion	1000	ND
Toxaphene	1000	ND
Trifluraline	1000	ND
PCB's (total)	1000	ND
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	100	ND
Di-n-octyl phthalate	100	ND
Bis (2-ethylhexyl) phthalate	1000	ND
Di-n-butyl-phthalate	100	ND
Diethyl phthalate	100	ND.
Dimethylphthalate	100	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	100	ND
Acenaphthylene	100	ND
Benzo (a) anthracene	100	ND
Benzo (g,h,i) perylene	200	ND
Chrysene	100	ND
Fluoranthene	100	ND
Indeno (1,2,3-cd) pyrene	200	ND
Phenanthrene	100	ND
Acenaphthene	100	ND
Anthracene	100	ND
Benzo (a) pyrene	100	ND
Benzo (k) fluoranthene	100	ND
Dibenzo (a,h) anthracene	200	ND
Fluorene	100	ND
Naphthalene	100	ND
Pyrene	100	ND
Surrogate Spike Recoveries (%):		
Dibutylchlorendate	104	
2-Fluorobiphenyl	88	

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Facsimile (301) 821-[illegible]
5920 North Belt, Suite [illegible] Houston, Texas 77396 (713) 441-4965
Capital Airport Springfield, Illinois 62707 (217) 522-2009

Certificate of Laboratory Analysis

Log Id: 5550 Sample Id: 18. 901291

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	1000	ND
a-BHC	1000	ND
Atrazine	1000	ND
b-BHC	1000	ND
g-BHC (Lindane)	1000	ND
Chlordane	1000	ND
4,4'-DDD	1000	ND
4,4'-DDE	1000	ND
4,4'-DDT	1000	ND
Diazinon	1000	ND
Dieldrin	1000	ND
Endrin	1000	ND
Ethyl parathion	1000	ND
Heptachlor	1000	ND
Heptachlor Epoxide	1000	ND
Linuron	1000	ND
Malathion	1000	ND
Methyl parathion	1000	ND
Toxaphene	1000	ND
Trifluraline	1000	ND
PCB's (total)	1000	ND
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	100	ND
Di-n-octyl phthalate	100	ND
Bis (2-ethylhexyl) phthalate	1000	ND
Di-n-butyl-phthalate	100	ND
Diethyl phthalate	100	ND
Dimethylphthalate	100	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	100	ND
Acenaphthylene	100	ND
Benzo (a) anthracene	100	ND
Benzo (g,h,i) perylene	200	ND
Chrysene	100	ND
Fluoranthene	100	ND
Indeno (1,2,3-cd) pyrene	200	ND
Phenanthrene	100	ND
Acenaphthene	100	ND
Anthracene	100	ND
Benzo (a) pyrene	100	ND
Benzo (k) fluoranthene	100	ND
Dibenzo (a,h) anthracene	200	ND
Fluorene	100	ND
Naphthalene	100	ND
Pyrene	100	ND
Surrogate Spike Recoveries (%):		
Dibutylchlorendate	86	
2-Fluorobiphenyl	86	

MARTEL MARTEL LABORATORY SERVICES, INC.

1225 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Facsimile (301) 821-0754
8920 North Belt, Suite 111 Houston, Texas 77096 (713) 721-4365
Capital Airport Springfield, Illinois 62707 (217) 522-7109

Certificate of Laboratory Analysis

Log Id: 5550 Sample Id: 19. 901292

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	1000	ND
a-BHC	1000	ND
Atrazine	1000	ND
b-BHC	1000	ND
g-BHC (Lindane)	1000	ND
Chlordane	1000	ND
4,4'-DDD	1000	ND
4,4'-DDE	1000	ND
4,4'-DDT	1000	ND
Diazinon	1000	ND
Dieldrin	1000	ND
Endrin	1000	ND
Ethyl parathion	1000	ND
Heptachlor	1000	ND
Heptachlor Epoxide	1000	ND
Linuron	1000	ND
Malathion	1000	ND
Methyl parathion	1000	ND
Toxaphene	1000	ND
Trifluraline	1000	ND
PCB's (total)	1000	ND
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	100	ND
Di-n-octyl phthalate	100	ND
Bis (2-ethylhexyl) phthalate	1000	ND
Di-n-butyl-phthalate	100	ND
Diethyl phthalate	100	ND
Dimethylphthalate	100	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	100	ND
Acenaphthylene	100	ND
Benzo (a) anthracene	100	ND
Benzo (g,h,i) perylene	200	ND
Chrysene	100	ND
Fluoranthene	100	ND
Indeno (1,2,3-cd) pyrene	200	ND
Phenanthrene	100	ND
Acenaphthene	100	ND
Anthracene	100	ND
Benzo (a) pyrene	100	ND
Benzo (k) fluoranthene	100	ND
Dibenzo (a,h) anthracene	200	ND
Fluorene	100	ND
Naphthalene	100	ND
Pyrene	100	ND
Surrogate Spike Recoveries (%):		
Dibutylchlorendate	95	
2-Fluorobiphenyl	64	

MARTEL MARTEL LABORATORY SERVICES, INC.

1225 Cromwell Bridge Road Baltimore Maryland 21204 (301) 825-7790 Facsimile (301) 821-[illegible]
5920 North Belt Suite 111 Houston Texas 77396 (713) 441-4965
Capital Airport Springfield Illinois 62707 (217) 522-0009

Certificate of Laboratory Analysis

Log Id: 5550 Sample Id: 20. 901293

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	1000	ND
a-BHC	1000	ND
Atrazine	1000	ND
b-BHC	1000	ND
g-BHC (Lindane)	1000	ND
Chlordane	1000	ND
4,4'-DDD	1000	ND
4,4'-DDE	1000	ND
4,4'-DDT	1000	ND
Diazinon	1000	ND
Dieldrin	1000	ND
Endrin	1000	ND
Ethyl parathion	1000	ND
Heptachlor	1000	ND
Heptachlor Epoxide	1000	ND
Linuron	1000	ND
Malathion	1000	ND
Methyl parathion	1000	ND
Toxaphene	1000	ND
Trifluraline	1000	ND
PCB's (total)	1000	ND
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	100	ND
Di-n-octyl phthalate	100	ND
Bis (2-ethylhexyl) phthalate	1000	ND
Di-n-butyl-phthalate	100	ND
Diethyl phthalate	100	ND
Dimethylphthalate	100	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	100	ND
Acenaphthylene	100	ND
Benzo (a) anthracene	100	ND
Benzo (g,h,i) perylene	200	ND
Chrysene	100	ND
Fluoranthene	100	ND
Indeno (1,2,3-cd) pyrene	200	ND
Phenanthrene	100	ND
Acenaphthene	100	ND
Anthracene	100	ND
Benzo (a) pyrene	100	ND
Benzo (k) fluoranthene	100	ND
Dibenzo (a,h) anthracene	200	ND
Fluorene	100	ND
Naphthalene	100	ND
Pyrene	100	ND
Surrogate Spike Recoveries (%):		
Dibutylchlorendate	91	
2-Fluorobiphenyl	115	

MARTEL MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore Maryland 21204 (301) 825-7790
5320 North Belt Suite [illegible] Houston Texas 77396 (713) [illegible]
Capital Airport Springfield, Illinois 62707 (217) 522-[illegible]

Certificate of Laboratory Analysis

Log Id: 5550 Sample Id: 21. 901294

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	2000	ND
a-BHC	2000	ND
Atrazine	2000	ND
b-BHC	2000	ND
g-BHC (Lindane)	2000	ND
Chlordane	2000	ND
4,4'-DDD	2000	ND
4,4'-DDE	2000	ND
4,4'-DDT	2000	ND
Diazinon	2000	ND
Dieldrin	2000	ND
Endrin	2000	ND
Ethyl parathion	2000	ND
Heptachlor	2000	ND
Heptachlor Epoxide	2000	ND
Linuron	2000	ND
Malathion	2000	ND
Methyl parathion	2000	ND
Toxaphene	2000	ND
Trifluraline	2000	ND
PCB's (total)	2000	ND
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	100	ND
Di-n-octyl phthalate	100	ND
Bis (2-ethylhexyl) phthalate	1000	ND
Di-n-butyl-phthalate	100	ND
Diethyl phthalate	100	ND
Dimethylphthalate	100	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	100	ND
Acenaphthylene	100	ND
Benzo (a) anthracene	100	ND
Benzo (g,h,i) perylene	200	ND
Chrysene	100	ND
Fluoranthene	100	ND
Indeno (1,2,3-cd) pyrene	200	ND
Phenanthrene	100	ND
Acenaphthene	100	ND
Anthracene	100	ND
Benzo (a) pyrene	100	ND
Benzo (k) fluoranthene	100	ND
Dibenzo (a,h) anthracene	200	ND
Fluorene	100	ND
Naphthalene	100	ND
Pyrene	100	ND
Surrogate Spike Recoveries (%):		
Dibutylchlorendate	95	
2-Fluorobiphenyl	94	

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore Maryland 21204 (301) 825-7790 Facsimile (301) [illegible]
5332 North Belt Suite 111 Houston Texas 77036 (713) 441-4965
Capital Airport Springfield Illinois 62707 (217) 522-2009

Certificate of Laboratory Analysis

Log Id: 5550 Sample Id: 22. 901295

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	2000	ND
a-BHC	2000	ND
Atrazine	2000	ND
b-BHC	2000	ND
g-BHC (Lindane)	2000	ND
Chlordane	2000	ND
4,4'-DDD	2000	ND
4,4'-DDE	2000	ND
4,4'-DDT	2000	ND
Diazinon	2000	ND
Dieldrin	2000	ND
Endrin	2000	ND
Ethyl parathion	2000	ND
Heptachlor	2000	ND
Heptachlor Epoxide	2000	ND
Linuron	2000	ND
Malathion	2000	ND
Methyl parathion	2000	ND
Toxaphene	2000	ND
Trifluraline	2000	ND
PCB's (total)	2000	ND
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	100	ND
Di-n-octyl phthalate	100	ND
Bis (2-ethylhexyl) phthalate	1000	ND
Di-n-butyl-phthalate	100	ND
Diethyl phthalate	100	ND
Dimethylphthalate	100	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	100	ND
Acenaphthylene	100	ND
Benzo (a) anthracene	100	ND
Benzo (g,h,i) perylene	200	ND
Chrysene	100	ND
Fluoranthene	100	ND
Indeno (1,2,3-cd) pyrene	200	ND
Phenanthrene	100	ND
Acenaphthene	100	ND
Anthracene	100	ND
Benzo (a) pyrene	100	ND
Benzo (k) fluoranthene	100	ND
Dibenzo (a,h) anthracene	200	ND
Fluorene	100	ND
Naphthalene	100	ND
Pyrene	100	ND
Surrogate Spike Recoveries (%):		
Dibutylchlorendate	97	
2-Fluorobiphenyl	108	

MARTEL

MARTEL LABORATORY SERVICES, INC.

1125 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Facsimile 301-
5320 North Belt, Suite [illegible] Houston, Texas 77096 713-441-4985
Capital Airport Springfield, Illinois 62707 217-522-2009

Page No. 1
12/20/90

Certificate of Laboratory Analysis

Analytical Information
Dates, Times, Analysts
(dates may refer to date begun or date approved)

Log Number	Test Code	Date Performed	Time Performed	Analyst Initials
** Sample ID: 1. 901274, XIV3430				
5550	PPPEST	12/13/90	21:17	RLC
5550	PPBN	12/08/90	00:41	FJS
** Sample ID: 2. 901275, XIF3430				
5550	PPPEST	12/13/90	22:19	RLC
5550	PPBN	12/08/90	01:41	FJS
** Sample ID: 3. 901276, XIF3620				
5550	PPPEST	12/13/90	23:20	RLC
5550	PPBN	12/08/90	02:41	FJS
** Sample ID: 4. 901277, XIF3620				
5550	PPPEST	12/13/90	00:22	RLC
5550	PPBN	12/08/90	03:41	FJS
** Sample ID: 5. 901278, XIF3620				
5550	PPPEST	12/14/90	01:24	RLC
5550	PPBN	12/08/90	04:41	FJS
** Sample ID: 6. 901279, XIF4405				
5550	PPPEST	12/14/90	02:26	RLC
5550	PPBN	12/08/90	05:41	FJS
** Sample ID: 7. 901280, XIF4405				
5550	PPPEST	12/14/90	03:29	RLC
5550	PPBN	12/08/90	06:42	FJS
** Sample ID: 8. 901281, XIF4405				
5550	PPPEST	12/14/90	04:31	RLC
5550	PPBN	12/08/90	07:42	FJS
** Sample ID: 9. 901282, XIF4615				
5550	PPPEST	12/14/90	05:32	RLC
5550	PPBN	12/08/90	08:42	FJS
** Sample ID: 10. 901283, XIF4615				
5550	PPPEST	12/14/90	19:57	RLC
5550	PPBN	12/11/90	16:32	FJS
** Sample ID: 11. 901284, XIF4615				
5550	PPPEST	12/12/90	20:59	RLC

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Facsimile (301) 821-1135
5920 North Belt Suite 111 Houston, Texas 77396 (713) 441-4955
Capital Airport Springfield, Illinois 62707 (217) 522-3009

Certificate of Laboratory Analysis

Analytical Information
Dates, Times, Analysts
(dates may refer to date begun or date approved)

Log Number	Test Code	Date Performed	Time Performed	Analyst Initials
5550	PPBN	12/11/90	17:32	FJS
** Sample ID: 12. 901285, XIF5302				
5550	PPPEST	12/12/90	22:01	RLC
5550	PPBN	12/11/90	18:32	FJS
** Sample ID: 13. 901286, XIF5302				
5550	PPPEST	12/12/90	23:03	RLC
5550	PPBN	12/11/90	19:32	FJS
** Sample ID: 14. 901287, XIF5302				
5550	PPPEST	12/13/90	00:05	RLC
5550	PPBN	12/11/90	20:31	FJS
** Sample ID: 15. 901288, XIF5699				
5550	PPPEST	12/13/90	01:07	RLC
5550	PPBN	12/11/90	21:31	FJS
** Sample ID: 16. 901289, XIF5699				
5550	PPPEST	12/13/90	02:09	RLC
5550	PPBN	12/11/90	22:31	FJS
** Sample ID: 17. 901290, XIF5699				
5550	PPPEST	12/13/90	06:16	RLC
5550	PPBN	12/11/90	23:31	FJS
** Sample ID: 18. 901291, XIF5505				
5550	PPPEST	12/13/90	07:19	RLC
5550	PPBN	12/12/90	00:31	FJS
** Sample ID: 19. 901292, XIF5925				
5550	PPPEST	12/13/90	08:21	RLC
5550	PPBN	12/12/90	02:31	FJS
** Sample ID: 20. 901293, XIF5925				
5550	PPPEST	12/13/90	09:23	RLC
5550	PPBN	12/12/90	03:30	FJS
** Sample ID: 21. 901294, XIF5925				
5550	PPPEST	12/13/90	10:25	RLC
5550	PPBN	12/12/90	04:30	FJS

MARTEL

MARTEL LABORATORY SERVICES, INC

1025 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Fax (301) [illegible]
5920 North Belt Suite [illegible] Houston, Texas 77396 (713) 441-4965
Capitol Airport Springfield, Illinois 62707 (217) 522-3003

Certificate of Laboratory Analysis

12/20/90

Analytical Information
Dates, Times, Analysts
(dates may refer to date begun or date approved)

Log Number	Test Code	Date Performed	Time Performed	Analyst Initials
** Sample ID: 22. 901295, XIF4642				
5550	PPPEST	12/13/90	11:27	RLC
5550	PPBN	12/12/90	05:31	FJS

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Facsimile (301) 821-1054
5920 North Belt, Suite 111 Houston, Texas 77396 (713) 441-4965
Capital Airport Springfield, Illinois 62707 (217) 522-0009

Martel Lab Number: 08605

Certificate of Laboratory Analysis

Log Identification: W-5915

Samples picked up by Martel Laboratory Services.
P.O. Number 90036
Project Id: 32-1605 / Hart-Miller Island WRA Monitoring

Maryland Environmental Service
2020 Industrial Drive
Annapolis, Maryland 21401
Attention: CeCe Donovan

January 11, 1991

Client Identification: MES

Analytical Parameter	Method	Result	Units

Log Identification: W-5915
Date Received: 12/14/90

Sample ID: 1. 901351, Macoma Balthica
Sampling Date: 12/06/90 Time: 11:45

Chromium	EPA 200.7	<0.1	mg/kg
Iron	EPA 200.7	5.8	mg/kg
Manganese	EPA 200.7	3.0	mg/kg
Zinc	EPA 200.7	0.17	mg/kg
Nickel	EPA 200.7	<0.2	mg/kg
Copper	EPA 200.7	<0.1	mg/kg
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached
Weight of sample used / organic analysis		10.25	g
Weight of sample used/inorganic analysis		0.9993	g

Sample ID: 2. 901352, Cyathura
Sampling Date: 12/06/90 Time: 11:45

Chromium	EPA 200.7	<2	mg/kg
Iron	EPA 200.7	150	mg/kg
Manganese	EPA 200.7	96	mg/kg
Zinc	EPA 200.7	32	mg/kg
Nickel	EPA 200.7	<4	mg/kg
Copper	EPA 200.7	20	mg/kg

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Facsimile (301) 821-1054
5920 North Belt, Suite 111 Houston, Texas 77356 (713) 441-4965
Capital Airport Springfield, Illinois 62707 (217) 522-0009

Client Identification: MES
Log Identification: W-5915
January 11, 1991
Page 2

Certificate of Laboratory Analysis

Analytical Parameter	Method	Result	Units
Sample ID: 2. 901352, Cyathura			
Sampling Date: 12/06/90 Time: 11:45			
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached
Weight of sample used / organic analysis		0.52	g
Weight of sample used/inorganic analysis		0.5200	g
Sample ID: 3. 901353, Large Rangia			
Sampling Date: 12/06/90 Time: 12:42			
Chromium	EPA 200.7	<1	mg/kg
Iron	EPA 200.7	220	mg/kg
Manganese	EPA 200.7	38	mg/kg
Zinc	EPA 200.7	33	mg/kg
Nickel	EPA 200.7	15	mg/kg
Copper	EPA 200.7	2.5	mg/kg
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached
Weight of sample used / organic analysis		1.82	g
Weight of sample used/inorganic analysis		0.9139	g
Sample ID: 4. 901354, Small Rangia			
Sampling Date: 12/06/90 Time: 12:42			
Chromium	EPA 200.7	<0.1	mg/kg
Iron	EPA 200.7	2.1	mg/kg
Manganese	EPA 200.7	0.61	mg/kg
Zinc	EPA 200.7	<0.1	mg/kg
Nickel	EPA 200.7	<0.2	mg/kg
Copper	EPA 200.7	<0.1	mg/kg
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached
Weight of sample used / organic analysis		9.29	g
Weight of sample used/inorganic analysis		1.1155	g

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Facsimile (301) 821-1054
5920 North Belt, Suite 111 Houston, Texas 77396 (713) 441-4965
Capital Airport Springfield, Illinois 62707 (217) 522-0009

Client Identification: MES
Log Identification: W-5915
January 11, 1991

Certificate of Laboratory Analysis

Analytical Parameter	Method	Result	Units
Sample ID: 5. 901355, Cyathrua			
Sampling Date: 12/06/90 Time: 12:42			
Chromium	EPA 200.7	<7	mg/kg
Iron	EPA 200.7	250	mg/kg
Manganese	EPA 200.7	180	mg/kg
Zinc	EPA 200.7	70	mg/kg
Nickel	EPA 200.7	14	mg/kg
Copper	EPA 200.7	33	mg/kg
Pesticides/PCB's	EPA 8080	QNS	
Base/Neutral Extractables	EPA 8270	QNS	
Weight of sample used / organic analysis		QNS	
Weight of sample used/inorganic analysis		0.1359	g
Sample ID: 6. 901356, Macoma Balthica			
Sampling Date: 12/06/90 Time: 13:04			
Chromium	EPA 200.7	<0.1	mg/kg
Iron	EPA 200.7	5.1	mg/kg
Manganese	EPA 200.7	1.6	mg/kg
Zinc	EPA 200.7	0.38	mg/kg
Nickel	EPA 200.7	<0.2	mg/kg
Copper	EPA 200.7	0.12	mg/kg
Pesticides/PCB's	EPA 8080	QNS	
Base/Neutral Extractables	EPA 8270	QNS	
Weight of sample used / organic analysis		QNS	
Weight of sample used/inorganic analysis		1.4282	g
Sample ID: 7. 901357, Cyathura			
Sampling Date: 12/06/90 Time: 13:04			
Chromium	EPA 200.7	<4	mg/kg
Iron	EPA 200.7	150	mg/kg
Manganese	EPA 200.7	76	mg/kg
Zinc	EPA 200.7	50	mg/kg
Nickel	EPA 200.7	<8	mg/kg

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Facsimile (301) 821-105-
5920 North Bell, Suite 111 Houston, Texas 77096 (713) 441-4965
Capital Airport Springfield, Illinois 62707 (217) 522-0009

Client Identification: MES
Log Identification: W-5915
January 11, 1991
Page 4

Certificate of Laboratory Analysis

Analytical Parameter	Method	Result	Units
Sample ID: 7. 901357, Cyathura			
Sampling Date: 12/06/90 Time: 13:04			
Copper	EPA 200.7	37	mg/kg
Pesticides/PCB's	EPA 8080	QNS	
Base/Neutral Extractables	EPA 8270	QNS	
Weight of sample used / organic analysis		QNS	
Weight of sample used/inorganic analysis		0.2487	g
Sample ID: 8. 901358, Rangia			
Sampling Date: 12/06/90 Time: 13:04			
Chromium	EPA 200.7	<1	mg/kg
Iron	EPA 200.7	20	mg/kg
Manganese	EPA 200.7	4.6	mg/kg
Zinc	EPA 200.7	22	mg/kg
Nickel	EPA 200.7	11	mg/kg
Copper	EPA 200.7	1.7	mg/kg
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached
Weight of sample used / organic analysis		1.93	g
Weight of sample used/inorganic analysis		1.0488	g
Sample ID: 9. 901359, Rangia			
Sampling Date: 12/06/90 Time: 14:45			
Chromium	EPA 200.7	<1	mg/kg
Iron	EPA 200.7	450	mg/kg
Manganese	EPA 200.7	71	mg/kg
Zinc	EPA 200.7	33	mg/kg
Nickel	EPA 200.7	6.7	mg/kg
Copper	EPA 200.7	2.1	mg/kg
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached
Weight of sample used / organic analysis		5.86	g
Weight of sample used/inorganic analysis		1.1264	g

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Facsimile (301) 821-1064
5920 North Belt, Suite 111 Houston, Texas 77396 (713) 441-4965
Capital Airport Springfield, Illinois 62707 (217) 522-0009

Client Identification: MES
Log Identification: W-5915
January 11, 1991
Page 5

Certificate of Laboratory Analysis

Analytical Parameter	Method	Result	Units
Sample ID: 10. 901360, Macoma Balthica			
Sampling Date: 12/06/90 Time: 15:11			
Chromium	EPA 200.7	<1	mg/kg
Iron	EPA 200.7	5.3	mg/kg
Manganese	EPA 200.7	1.2	mg/kg
Zinc	EPA 200.7	<0.1	mg/kg
Nickel	EPA 200.7	<0.2	mg/kg
Copper	EPA 200.7	<0.1	mg/kg
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached
Weight of sample used / organic analysis		6.36	g
Weight of sample used/inorganic analysis		0.9288	g
Sample ID: 11. 901361, Cyathura			
Sampling Date: 12/06/90 Time: 15:11			
Chromium	EPA 200.7	<2	mg/kg
Iron	EPA 200.7	100	mg/kg
Manganese	EPA 200.7	62	mg/kg
Zinc	EPA 200.7	46	mg/kg
Nickel	EPA 200.7	<4	mg/kg
Copper	EPA 200.7	28	mg/kg
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached
Weight of sample used / organic analysis		0.35	g
Weight of sample used/inorganic analysis		0.4256	g
Sample ID: 12. 901362, Large Rangia			
Sampling Date: 12/06/90 Time: 15:11			
Chromium	EPA 200.7	<1	mg/kg
Iron	EPA 200.7	350	mg/kg
Manganese	EPA 200.7	51	mg/kg
Zinc	EPA 200.7	18	mg/kg
Nickel	EPA 200.7	4.4	mg/kg

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Facsimile (301) 821-1054
5920 North Belt, Suite 111 Houston, Texas 77396 (713) 441-4965
Capital Airport Springfield, Illinois 62707 (217) 522-3009

Client Identification: MES
Log Identification: W-5915
January 11, 1991
Page 6

Certificate of Laboratory Analysis

Analytical Parameter	Method	Result	Units
Sample ID: 12. 901362, Large Rangia			
Sampling Date: 12/06/90 Time: 15:11			
Copper	EPA 200.7	2.5	mg/kg
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached
Weight of sample used / organic analysis		2.36	g
Weight of sample used/inorganic analysis		1.0957	g
Sample ID: 13. 901363, Cyathrua			
Sampling Date: 12/06/90 Time: 15:43			
Chromium	EPA 200.7	<15	mg/kg
Iron	EPA 200.7	220	mg/kg
Manganese	EPA 200.7	140	mg/kg
Zinc	EPA 200.7	150	mg/kg
Nickel	EPA 200.7	<30	mg/kg
Copper	EPA 200.7	13	mg/kg
Pesticides/PCB's	EPA 8080	QNS	
Base/Neutral Extractables	EPA 8270	QNS	
Weight of sample used / organic analysis		QNS	
Weight of sample used/inorganic analysis		0.0657	g
Sample ID: 14. 901364, Rangia			
Sampling Date: 12/06/90 Time: 15:43			
Chromium	EPA 200.7	<1	mg/kg
Iron	EPA 200.7	190	mg/kg
Manganese	EPA 200.7	19	mg/kg
Zinc	EPA 200.7	22	mg/kg
Nickel	EPA 200.7	3.3	mg/kg
Copper	EPA 200.7	3.9	mg/kg
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached
Weight of sample used / organic analysis		8.30	g
Weight of sample used/inorganic analysis		1.0206	g

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Facsimile (301) 821-10
5920 North Belt Suite 111 Houston Texas 77296 (713) 441-4965
Capital Airport Springfield, Illinois 62707 (217) 522-0009

Client Identification: MES
Log Identification: W-5915
January 11, 1991
Page 7

Certificate of Laboratory Analysis

Analytical Parameter	Method	Result	Units
Sample ID: 15. 901365, Rangia			
Sampling Date: 12/06/90 Time: 17:14			
Chromium	EPA 200.7	<1	mg/kg
Iron	EPA 200.7	470	mg/kg
Manganese	EPA 200.7	62	mg/kg
Zinc	EPA 200.7	28	mg/kg
Nickel	EPA 200.7	5.3	mg/kg
Copper	EPA 200.7	1.9	mg/kg
Pesticides/PCB's	EPA 8080	see	attache
Base/Neutral Extractables	EPA 8270	see	attache
Weight of sample used / organic analysis		7.37	g
Weight of sample used/inorganic analysis		0.9989	g
Sample ID: 16. 901366, Yellow Perch			
Sampling Date: 12/07/90 Time: 08:02			
Chromium	EPA 200.7	<1	mg/kg
Iron	EPA 200.7	6.4	mg/kg
Manganese	EPA 200.7	13	mg/kg
Zinc	EPA 200.7	16	mg/kg
Nickel	EPA 200.7	<2	mg/kg
Copper	EPA 200.7	2.0	mg/kg
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached
Weight of sample used / organic analysis		6.86	g
Weight of sample used/inorganic analysis		1.1039	g
Sample ID: 17. 901367, Yellow Perch			
Sampling Date: 12/07/90 Time: 08:24			
Chromium	EPA 200.7	<1	mg/kg
Iron	EPA 200.7	8.4	mg/kg
Manganese	EPA 200.7	3.1	mg/kg
Zinc	EPA 200.7	13	mg/kg
Nickel	EPA 200.7	<2	mg/kg

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Facsimile (301) 821-1054
5920 North Belt, Suite 111 Houston, Texas 77396 (713) 441-4965
Capital Airport Springfield, Illinois 62707 (217) 522-0009

Client Identification: MES
Log Identification: W-5915
January 11, 1991

Certificate of Laboratory Analysis

Analytical Parameter	Method	Result	Units
Sample ID: 17. 901367, Yellow Perch			
Sampling Date: 12/07/90 Time: 08:24			
Copper	EPA 200.7	1.4	mg/kg
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached
Weight of sample used / organic analysis		8.56	g
Weight of sample used/inorganic analysis		0.9828	g
Sample ID: 18. 901368, White Perch			
Sampling Date: 12/07/90 Time: 08:24			
Chromium	EPA 200.7	<1	mg/kg
Iron	EPA 200.7	9.9	mg/kg
Manganese	EPA 200.7	7.1	mg/kg
Zinc	EPA 200.7	19	mg/kg
Nickel	EPA 200.7	<2	mg/kg
Copper	EPA 200.7	9.8	mg/kg
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached
Weight of sample used / organic analysis		12.08	g
Weight of sample used/inorganic analysis		0.9481	g
Sample ID: 19. 901369, White Perch			
Sampling Date: 12/07/90 Time: 08:24			
Chromium	EPA 200.7	<8	mg/kg
Iron	EPA 200.7	170	mg/kg
Manganese	EPA 200.7	71	mg/kg
Zinc	EPA 200.7	130	mg/kg
Nickel	EPA 200.7	<16	mg/kg
Copper	EPA 200.7	11	mg/kg
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached
Weight of sample used / organic analysis		12.27	g
Weight of sample used/inorganic analysis		0.1268	g

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Facsimile (301) 821-1054
5920 North Belt, Suite 111 Houston Texas 77355 (713) 441-4965
Capital Aircort Springfield, Illinois 62707 (217) 522-3009

Client Identification: MES
Log Identification: W-5915
January 11, 1991

Certificate of Laboratory Analysis

Analytical Parameter	Method	Result	Units
Sample ID: 20. 901370, White Perch			
Sampling Date: 12/07/90 Time: 08:48			
Chromium	EPA 200.7	<1	mg/kg
Iron	EPA 200.7	19	mg/kg
Manganese	EPA 200.7	11	mg/kg
Zinc	EPA 200.7	19	mg/kg
Nickel	EPA 200.7	<2	mg/kg
Copper	EPA 200.7	1.1	mg/kg
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached
Weight of sample used / organic analysis		12.16	g
Weight of sample used/inorganic analysis		1.2409	g
Sample ID: 21. 901371, White Perch			
Sampling Date: 12/07/90 Time: 08:48			
Chromium	EPA 200.7	1.2	mg/kg
Iron	EPA 200.7	7.2	mg/kg
Manganese	EPA 200.7	6.1	mg/kg
Zinc	EPA 200.7	13	mg/kg
Nickel	EPA 200.7	<2	mg/kg
Copper	EPA 200.7	2.5	mg/kg
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached
Weight of sample used / organic analysis		9.93	g
Weight of sample used/inorganic analysis		1.0511	g
Sample ID: 22. 901372, Yellow Perch			
Sampling Date: 12/07/90 Time: 09:08			
Chromium	EPA 200.7	1.3	mg/kg
Iron	EPA 200.7	9.8	mg/kg
Manganese	EPA 200.7	19	mg/kg
Zinc	EPA 200.7	25	mg/kg
Nickel	EPA 200.7	<2	mg/kg

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Facsimile (301) 821-1054
5920 North Belt, Suite 111 Houston, Texas 77396 (713) 441-4965
Capital Airport Springfield, Illinois 62707 (217) 522-0009

Client Identification: MES
Log Identification: W-5915
January 11, 1991

Certificate of Laboratory Analysis

Analytical Parameter	Method	Result	Units
Sample ID: 22. 901372, Yellow Perch			
Sampling Date: 12/07/90 Time: 09:08			
Copper	EPA 200.7	4.2	mg/kg
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached
Weight of sample used / organic analysis		9.30	g
Weight of sample used/inorganic analysis		0.9554	g
Sample ID: 23. 901373, White Perch			
Sampling Date: 12/07/90 Time: 09:08			
Chromium	EPA 200.7	<1	mg/kg
Iron	EPA 200.7	8.3	mg/kg
Manganese	EPA 200.7	2.1	mg/kg
Zinc	EPA 200.7	15	mg/kg
Nickel	EPA 200.7	<2	mg/kg
Copper	EPA 200.7	1.0	mg/kg
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached
Weight of sample used / organic analysis		11.07	g
Weight of sample used/inorganic analysis		1.3281	g
Sample ID: 24. 901374, Yellow Perch			
Sampling Date: 12/07/90 Time: 08:02			
Chromium	EPA 200.7	<1	mg/kg
Iron	EPA 200.7	17	mg/kg
Manganese	EPA 200.7	8.9	mg/kg
Zinc	EPA 200.7	13	mg/kg
Nickel	EPA 200.7	<2	mg/kg
Copper	EPA 200.7	1.3	mg/kg
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached
Weight of sample used / organic analysis		10.14	g
Weight of sample used/inorganic analysis		1.0099	g

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Facsimile (301) 821-1054
5920 North Belt, Suite 111 Houston, Texas 77096 (713) 441-4965
Capital Airport Springfield, Illinois 62707 (217) 522-0009

Client Identification: MES
Log Identification: W-5915
January 11, 1991
Page 11

Certificate of Laboratory Analysis

All procedures used are in accordance with the following methods:
EPA-600/4-79-020, "Methods for Chemical Analysis of Water and Wastes".
SW-846, "Test Methods for Evaluating Solid Waste", 1986.

Mary E. T. Stanovage
QC Approval

1-25-91
Date

Helen Gemmen
Laboratory Approval

1-25-91
Date

June
Mai

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Facsimile (301) 821-1054
5920 North Belt, Suite 111 Houston, Texas 77398 (713) 441-4965
Capital Airport Springfield, Illinois 62707 (217) 522-0009

Certificate of Laboratory Analysis

Log Id: 5915 Sample Id: 1. 901351, Macoma

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	50	ND
a-BHC	50	ND
Atrazine	200	ND
b-BHC	50	ND
g-BHC (Lindane)	50	ND
Chlordane	500	ND
4,4'-DDD	50	ND
4,4'-DDE	50	ND
4,4'-DDT	50	ND
Diazinon	500	ND
Dieldrin	50	ND
Endrin	50	ND
Ethyl parathion	500	ND
Heptachlor	50	ND
Heptachlor Epoxide	50	ND
Linuron	500	ND
Malathion	500	ND
Methyl parathion	500	ND
Toxaphene	500	ND
Trifluraline	500	ND
PCB's (total)	20	112
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	100	ND
Di-n-octyl phthalate	100	ND
Bis (2-ethylhexyl) phthalate	1000	ND
Di-n-butyl-phthalate	100	ND
Diethyl phthalate	100	ND
Dimethylphthalate	100	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	100	ND
Acenaphthylene	100	ND
Benzo (a) anthracene	100	ND
Benzo (g,h,i) perylene	200	ND
Chrysene	100	ND
Fluoranthene	100	ND
Indeno (1,2,3-cd) pyrene	200	ND
Phenanthrene	100	ND
Acenaphthene	100	ND
Anthracene	100	ND
Benzo (a) pyrene	100	ND
Benzo (k) fluoranthene	100	ND
Dibenzo (a,h) anthracene	200	ND
Fluorene	100	ND
Naphthalene	100	ND
Pyrene	100	ND
Surrogate Spike Recoveries (%):		
2-Fluorobiphenyl	22	

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Facsimile (301) 821-1054
5920 North Belt Suite 111 Houston, Texas 77396 (713) 441-4965
Capital Airport Springfield, Illinois 62707 (217) 522-0009

Certificate of Laboratory Analysis

Log Id: 59015 Sample Id: 2. 9001352, Cyathura

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	1000	ND
a-BHC	1000	ND
Atrazine	4000	ND
b-BHC	1000	ND
g-BHC (Lindane)	1000	ND
Chlordane	10000	ND
4,4'-DDD	1000	ND
4,4'-DDE	1000	ND
4,4'-DDT	1000	ND
Diazinon	10000	ND
Dieldrin	1000	ND
Endrin	1000	ND
Ethyl parathion	10000	ND
Heptachlor	1000	ND
Heptachlor Epoxide	1000	ND
Linuron	10000	ND
Malathion	10000	ND
Methyl parathion	10000	ND
Toxaphene	10000	ND
Trifluraline	10000	ND
PCB's (total)	400	2600
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	2000	ND
Di-n-octyl phthalate	2000	ND
Bis (2-ethylhexyl) phthalate	20000	ND
Di-n-butyl-phthalate	2000	ND
Diethyl phthalate	2000	ND
Dimethylphthalate	2000	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 6200, ug/kg		
Benzo (b) fluoranthene	2000	ND
Acenaphthylene	2000	ND
Benzo (a) anthracene	2000	ND
Benzo (g,h,i) perylene	4000	ND
Chrysene	2000	ND
Fluoranthene	2000	ND
Indeno (1,2,3-cd) pyrene	4000	ND
Phenanthrene	2000	ND
Acenaphthene	2000	ND
Anthracene	2000	ND
Benzo (a) pyrene	2000	ND
Benzo (k) fluoranthene	2000	ND
Dibenzo (a,h) anthracene	4000	ND
Fluorene	2000	ND
Naphthalene	2000	ND
Pyrene	2000	ND
Surrogate Spike Recoveries (%):		
2-Fluorobiphenyl	22	

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Facsimile (301) 821-1054
5920 North Belt, Suite 111 Houston, Texas 77396 (713) 441-4965
Capital Airport Springfield, Illinois 62707 (217) 522-0009

Certificate of Laboratory Analysis

Log Id: 5915 Sample Id: 3. 901353, Large Rangia

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	250	ND
a-BHC	250	ND
Atrazine	1000	ND
b-BHC	250	ND
g-BHC (Lindane)	250	ND
Chlordane	2500	ND
4,4'-DDD	250	ND
4,4'-DDE	250	ND
4,4'-DDT	250	ND
Diazinon	2500	ND
Dieldrin	250	ND
Endrin	250	ND
Ethyl parathion	2500	ND
Heptachlor	250	ND
Heptachlor Epoxide	250	ND
Linuron	2500	ND
Malathion	2500	ND
Methyl parathion	2500	ND
Toxaphene	2500	ND
Trifluraline	2500	ND
PCB's (total)	100	340
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	1000	ND
Di-n-octyl phthalate	1000	ND
Bis (2-ethylhexyl) phthalate	10000	ND
Di-n-butyl-phthalate	1000	ND
Diethyl phthalate	1000	ND
Dimethylphthalate	1000	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	1000	ND
Acenaphthylene	1000	ND
Benzo (a) anthracene	1000	ND
Benzo (g,h,i) perylene	2000	ND
Chrysene	1000	ND
Fluoranthene	1000	ND
Indeno (1,2,3-cd) pyrene	2000	ND
Phenanthrene	1000	ND
Acenaphthene	1000	ND
Anthracene	1000	ND
Benzo (a) pyrene	1000	ND
Benzo (k) fluoranthene	1000	ND
Dibenzo (a,h) anthracene	2000	ND
Fluorene	1000	ND
Naphthalene	1000	ND
Pyrene	1000	ND
Surrogate Spike Recoveries (%):		
2-Fluorobiphenyl	24	

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Facsimile (301) 821-1054
5920 North Belt, Suite 111 Houston, Texas 77396 (713) 441-4965
Capital Airport Springfield, Illinois 62707 (217) 522-0009

Certificate of Laboratory Analysis

Log Id: 5915 Sample Id: 4. 901354, Small Rangia

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	50	ND
a-BHC	50	ND
Atrazine	200	ND
b-BHC	50	ND
g-BHC (Lindane)	50	ND
Chlordane	500	ND
4,4'-DDD	50	ND
4,4'-DDE	50	ND
4,4'-DDT	50	ND
Diazinon	500	ND
Dieldrin	50	ND
Endrin	50	ND
Ethyl parathion	500	ND
Heptachlor	50	ND
Heptachlor Epoxide	50	ND
Linuron	500	ND
Malathion	500	ND
Methyl parathion	500	ND
Toxaphene	500	ND
Trifluraline	500	ND
PCB's (total)	20	65
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	100	ND
Di-n-octyl phthalate	100	ND
Bis (2-ethylhexyl) phthalate	1000	ND
Di-n-butyl-phthalate	100	ND
Diethyl phthalate	100	ND
Dimethylphthalate	100	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	100	ND
Acenaphthylene	100	ND
Benzo (a) anthracene	100	ND
Benzo (g,h,i) perylene	200	ND
Chrysene	100	ND
Fluoranthene	100	ND
Indeno (1,2,3-cd) pyrene	200	ND
Phenanthrene	100	ND
Acenaphthene	100	ND
Anthracene	100	ND
Benzo (a) pyrene	100	ND
Benzo (k) fluoranthene	100	ND
Dibenzo (a,h) anthracene	200	ND
Fluorene	100	ND
Naphthalene	100	ND
Pyrene	100	ND
Surrogate Spike Recoveries (%):		
2-Fluorobiphenyl	22	

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Facsimile (301) 821-1054
6300 North Belt, Suite 111 Houston, Texas 77086 (713) 444-1966
Chicago Area: Burnsville, Illinois 60707 (217) 522-4009

Certificate of Laboratory Analysis

Log Id: 5915 Sample Id: 8. 901358, Rangia

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	250	ND
a-BHC	250	ND
Atrazine	1000	ND
b-BHC	250	ND
g-BHC (Lindane)	250	ND
Chlordane	2500	ND
4,4'-DDD	250	ND
4,4'-DDE	250	ND
4,4'-DDT	250	ND
Diazinon	2500	ND
Dieldrin	250	ND
Endrin	250	ND
Ethyl parathion	2500	ND
Heptachlor	250	ND
Heptachlor Epoxide	250	ND
Linuron	2500	ND
Malathion	2500	ND
Methyl parathion	2500	ND
Toxaphene	2500	ND
Trifluraline	2500	ND
PCB's (total)	100	200
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	2000	ND
Di-n-octyl phthalate	2000	ND
Bis (2-ethylhexyl) phthalate	20000	ND
Di-n-butyl-phthalate	2000	ND
Diethyl phthalate	2000	ND
Dimethylphthalate	2000	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	2000	ND
Acenaphthylene	2000	ND
Benzo (a) anthracene	2000	ND
Benzo (g,h,i) perylene	4000	ND
Chrysene	2000	ND
Fluoranthene	2000	ND
Indeno (1,2,3-cd) pyrene	4000	ND
Phenanthrene	2000	ND
Acenaphthene	2000	ND
Anthracene	2000	ND
Benzo (a) pyrene	2000	ND
Benzo (k) fluoranthene	2000	ND
Dibenzo (a,h) anthracene	4000	ND
Fluorene	2000	ND
Naphthalene	2000	ND
Pyrene	2000	ND
Surrogate Spike Recoveries (%):		
2-Fluorobiphenyl	24	

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road

Certificate of Laboratory Analysis

Log Id: 5915 Sample Id: 9. 901359, Rangia

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	100	ND
a-BHC	100	ND
Atrazine	400	ND
b-BHC	100	ND
g-BHC (Lindane)	100	ND
Chlordane	1000	ND
4,4'-DDD	100	ND
4,4'-DDE	100	ND
4,4'-DDT	100	130
Diazinon	1000	ND
Dieldrin	100	ND
Endrin	100	ND
Ethyl parathion	1000	ND
Heptachlor	100	ND
Heptachlor Epoxide	100	ND
Linuron	1000	ND
Malathion	1000	ND
Methyl parathion	1000	ND
Toxaphene	1000	ND
Trifluraline	1000	ND
PCB's (total)	40	75
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	200	ND
Di-n-octyl phthalate	200	ND
Bis (2-ethylhexyl) phthalate	2000	ND
Di-n-butyl-phthalate	200	ND
Diethyl phthalate	200	ND
Dimethylphthalate	200	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	200	ND
Acenaphthylene	200	ND
Benzo (a) anthracene	200	ND
Benzo (g,h,i) perylene	400	ND
Chrysene	200	ND
Fluoranthene	200	ND
Indeno (1,2,3-cd) pyrene	400	ND
Phenanthrene	200	ND
Acenaphthene	200	ND
Anthracene	200	ND
Benzo (a) pyrene	200	ND
Benzo (k) fluoranthene	200	ND
Dibenzo (a,h) anthracene	400	ND
Fluorene	200	ND
Naphthalene	200	ND
Pyrene	200	ND
Surrogate Spike Recoveries (%):		
2-Fluorobiphenyl	24	

MARTEL

MARTEL LABORATORY SERVICES, INC.

Certificate of Laboratory Analysis

Log Id: 5915 Sample Id: 10. 901360, Macoma

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	75	ND
a-BHC	75	ND
Atrazine	300	ND
b-BHC	75	ND
g-BHC (Lindane)	75	ND
Chlordane	750	ND
4,4'-DDD	75	ND
4,4'-DDE	75	ND
4,4'-DDT	75	ND
Diazinon	750	ND
Dieldrin	75	ND
Endrin	75	ND
Ethyl parathion	750	ND
Heptachlor	75	ND
Heptachlor Epoxide	75	ND
Linuron	750	ND
Malathion	750	ND
Methyl parathion	750	ND
Toxaphene	750	ND
Trifluraline	750	ND
PCB's (total)	30	190
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	200	ND
Di-n-octyl phthalate	200	ND
Bis (2-ethylhexyl) phthalate	2000	ND
Di-n-butyl-phthalate	200	ND
Diethyl phthalate	200	ND
Dimethylphthalate	200	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	200	ND
Acenaphthylene	200	ND
Benzo (a) anthracene	200	ND
Benzo (g,h,i) perylene	400	ND
Chrysene	200	ND
Fluoranthene	200	ND
Indeno (1,2,3-cd) pyrene	400	ND
Phenanthrene	200	ND
Acenaphthene	200	ND
Anthracene	200	ND
Benzo (a) pyrene	200	ND
Benzo (k) fluoranthene	200	ND
Dibenzo (a,h) anthracene	400	ND
Fluorene	200	ND
Naphthalene	200	ND
Pyrene	200	ND
Surrogate Spike Recoveries (%):		
2-Fluorobiphenyl	27	

MARTEL

MARTEL LABORATORY SERVICES, INC.

Certificate of Laboratory Analysis

Log Id: 5915 Sample Id: 11. 901361, Cyathura

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	1500	ND
a-BHC	1500	ND
Atrazine	6000	ND
b-BHC	1500	ND
g-BHC (Lindane)	1500	ND
Chlordane	15000	ND
4,4'-DDD	1500	ND
4,4'-DDE	1500	ND
4,4'-DDT	1500	ND
Diazinon	15000	ND
Dieldrin	1500	ND
Endrin	1500	ND
Ethyl parathion	15000	ND
Heptachlor	1500	ND
Heptachlor Epoxide	1500	ND
Linuron	15000	ND
Malathion	15000	ND
Methyl parathion	15000	ND
Toxaphene	15000	ND
Trifluraline	15000	ND
PCB's (total)	600	ND
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	6000	ND
Di-n-octyl phthalate	6000	ND
Bis (2-ethylhexyl) phthalate	60000	ND
Di-n-butyl-phthalate	6000	ND
Diethyl phthalate	6000	ND
Dimethylphthalate	6000	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	6000	ND
Acenaphthylene	6000	ND
Benzo (a) anthracene	6000	ND
Benzo (g,h,i) perylene	1200	ND
Chrysene	6000	ND
Fluoranthene	6000	ND
Indeno (1,2,3-cd) pyrene	1200	ND
Phenanthrene	6000	ND
Acenaphthene	6000	ND
Anthracene	6000	ND
Benzo (a) pyrene	6000	ND
Benzo (k) fluoranthene	6000	ND
Dibenzo (a,h) anthracene	1200	ND
Fluorene	6000	ND
Naphthalene	6000	ND
Pyrene	6000	ND
Surrogate Spike Recoveries (%):		
2-Fluorobiphenyl	35	

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road, Baltimore, Maryland 21204 (301) 825-7750 Facsimile (301) 821-1054

Certificate of Laboratory Analysis

Log Id: 5915 Sample Id: 12. 901362, Large Rangia

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	250	ND
a-BHC	250	ND
Atrazine	1000	ND
b-BHC	250	ND
g-BHC (Lindane)	250	ND
Chlordane	2500	ND
4,4'-DDD	250	ND
4,4'-DDE	250	ND
4,4'-DDT	250	ND
Diazinon	2500	ND
Dieldrin	250	ND
Endrin	250	ND
Ethyl parathion	2500	ND
Heptachlor	250	ND
Heptachlor Epoxide	250	ND
Linuron	2500	ND
Malathion	2500	ND
Methyl parathion	2500	ND
Toxaphene	2500	ND
Trifluraline	2500	ND
PCB's (total)	100	370
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	1000	ND
Di-n-octyl phthalate	1000	ND
Bis (2-ethylhexyl) phthalate	10000	ND
Di-n-butyl-phthalate	1000	ND
Diethyl phthalate	1000	ND
Dimethylphthalate	1000	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	1000	ND
Acenaphthylene	1000	ND
Benzo (a) anthracene	1000	ND
Benzo (g,h,i) perylene	2000	ND
Chrysene	1000	ND
Fluoranthene	1000	ND
Indeno (1,2,3-cd) pyrene	2000	ND
Phenanthrene	1000	ND
Acenaphthene	1000	ND
Anthracene	1000	ND
Benzo (a) pyrene	1000	ND
Benzo (k) fluoranthene	1000	ND
Dibenzo (a,h) anthracene	2000	ND
Fluorene	1000	ND
Naphthalene	1000	ND
Pyrene	1000	ND
Surrogate Spike Recoveries (%):		
2-Fluorobiphenyl	30	

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road [illegible]
[illegible]
Capital Airport [illegible]

Certificate of Laboratory Analysis

Log Id: 5915 Sample Id: 14. 901364, Rangia

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	75	ND
a-BHC	75	ND
Atrazine	300	ND
b-BHC	75	ND
g-BHC (Lindane)	75	ND
Chlordane	750	ND
4,4'-DDD	75	ND
4,4'-DDE	75	ND
4,4'-DDT	75	ND
Diazinon	750	ND
Dieldrin	75	ND
Endrin	75	ND
Ethyl parathion	750	ND
Heptachlor	75	ND
Heptachlor Epoxide	75	ND
Linuron	750	ND
Malathion	750	ND
Methyl parathion	750	ND
Toxaphene	750	ND
Trifluraline	750	ND
PCB's (total)	30	83
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	100	ND
Di-n-octyl phthalate	100	ND
Bis (2-ethylhexyl) phthalate	1000	ND
Di-n-butyl-phthalate	100	ND
Diethyl phthalate	100	ND
Dimethylphthalate	100	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	100	ND
Acenaphthylene	100	ND
Benzo (a) anthracene	100	ND
Benzo (g,h,i) perylene	200	ND
Chrysene	100	ND
Fluoranthene	100	ND
Indeno (1,2,3-cd) pyrene	200	ND
Phenanthrene	100	ND
Acenaphthene	100	ND
Anthracene	100	ND
Benzo (a) pyrene	100	ND
Benzo (k) fluoranthene	100	ND
Dibenzo (a,h) anthracene	200	ND
Fluorene	100	ND
Naphthalene	100	ND
Pyrene	100	ND
Surrogate Spike Recoveries (%):		
2-Fluorobiphenyl	33	

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Facsimile (301) 321-1054
5920 North Belt, Suite 111 Houston, Texas 77396 (713) 441-4965
Capital Airport Springfield, Illinois 62707 (217) 522-0009

Certificate of Laboratory Analysis

Log Id: 5915 Sample Id: 15. 901365, Rangia

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	75	ND
a-BHC	75	ND
Atrazine	300	ND
b-BHC	75	ND
g-BHC (Lindane)	75	ND
Chlordane	750	ND
4,4'-DDD	75	ND
4,4'-DDE	75	ND
4,4'-DDT	75	ND
Diazinon	750	ND
Dieldrin	75	ND
Endrin	75	ND
Ethyl parathion	750	ND
Heptachlor	75	ND
Heptachlor Epoxide	75	ND
Linuron	750	ND
Malathion	750	ND
Methyl parathion	750	ND
Toxaphene	750	ND
Trifluraline	750	ND
PCB's (total)	30	100
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	100	ND
Di-n-octyl phthalate	100	ND
Bis (2-ethylhexyl) phthalate	1000	ND
Di-n-butyl-phthalate	100	ND
Diethyl phthalate	100	ND
Dimethylphthalate	100	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	100	ND
Acenaphthylene	100	ND
Benzo (a) anthracene	100	ND
Benzo (g,h,i) perylene	200	ND
Chrysene	100	ND
Fluoranthene	100	ND
Indeno (1,2,3-cd) pyrene	200	ND
Phenanthrene	100	ND
Acenaphthene	100	ND
Anthracene	100	ND
Benzo (a) pyrene	100	ND
Benzo (k) fluoranthene	100	ND
Dibenzo (a,h) anthracene	200	ND
Fluorene	100	ND
Naphthalene	100	ND
Pyrene	100	ND
Surrogate Spike Recoveries (%):		
2-Fluorobiphenyl	26	

MARTEL

MARTEL LABORATORY SERVICES, INC.

1625 Cromwell Bridge Road Baltimore Maryland 21204 (301) 825-7750 Facsimile (301) 821-1084
[illegible]
Chicago Airport Bensenville Illinois 60106 [illegible]

Certificate of Laboratory Analysis

Log Id: 5915 Sample Id: 16. 901366, Yellow Perch

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	50	ND
a-BHC	50	ND
Atrazine	200	ND
b-BHC	50	ND
g-BHC (Lindane)	50	ND
Chlordane	500	ND
4,4'-DDD	50	ND
4,4'-DDE	50	ND
4,4'-DDT	50	ND
Diazinon	500	ND
Dieldrin	50	ND
Endrin	50	ND
Ethyl parathion	500	ND
Heptachlor	50	ND
Heptachlor Epoxide	50	ND
Linuron	500	ND
Malathion	500	ND
Methyl parathion	500	ND
Toxaphene	500	ND
Trifluraline	500	ND
PCB's (total)	20	290
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	100	ND
Di-n-octyl phthalate	100	ND
Bis (2-ethylhexyl) phthalate	1000	ND
Di-n-butyl-phthalate	100	ND
Diethyl phthalate	100	ND
Dimethylphthalate	100	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	100	ND
Acenaphthylene	100	ND
Benzo (a) anthracene	100	ND
Benzo (g,h,i) perylene	200	ND
Chrysene	100	ND
Fluoranthene	100	ND
Indeno (1,2,3-cd) pyrene	200	ND
Phenanthrene	100	ND
Acenaphthene	100	ND
Anthracene	100	ND
Benzo (a) pyrene	100	ND
Benzo (k) fluoranthene	100	ND
Dibenzo (a,h) anthracene	200	ND
Fluorene	100	ND
Naphthalene	100	ND
Pyrene	100	ND
Surrogate Spike Recoveries (%):		
2-Fluorobiphenyl	31	

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore [illegible]
5920 North Belt [illegible]
Capital Airport [illegible]

Certificate of Laboratory Analysis

Log Id: 5915 Sample Id: 17. 901367, Yellow Perch

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	75	ND
a-BHC	75	ND
Atrazine	300	ND
b-BHC	75	ND
g-BHC (Lindane)	75	ND
Chlordane	750	ND
4,4'-DDD	75	ND
4,4'-DDE	75	ND
4,4'-DDT	75	ND
Diazinon	750	ND
Dieldrin	75	ND
Endrin	75	ND
Ethyl parathion	750	ND
Heptachlor	75	ND
Heptachlor Epoxide	75	ND
Linuron	750	ND
Malathion	750	ND
Methyl parathion	750	ND
Toxaphene	750	ND
Trifluraline	750	ND
PCB's (total)	30	135
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	100	ND
Di-n-octyl phthalate	100	ND
Bis (2-ethylhexyl) phthalate	1000	ND
Di-n-butyl-phthalate	100	ND
Diethyl phthalate	100	ND
Dimethylphthalate	100	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	100	ND
Acenaphthylene	100	ND
Benzo (a) anthracene	100	ND
Benzo (g,h,i) perylene	200	ND
Chrysene	100	ND
Fluoranthene	100	ND
Indeno (1,2,3-cd) pyrene	200	ND
Phenanthrene	100	ND
Acenaphthene	100	ND
Anthracene	100	ND
Benzo (a) pyrene	100	ND
Benzo (k) fluoranthene	100	ND
Dibenzo (a,h) anthracene	200	ND
Fluorene	100	ND
Naphthalene	100	ND
Pyrene	100	ND
Surrogate Spike Recoveries (%):		
2-Fluorobiphenyl	31	

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore Maryland 21234
5920 North Belt Suite 111 Houston Texas
Capital Airport Springfield, Illinois

Certificate of Laboratory Analysis

Log Id: 5915 Sample Id: 18. 901368, White Perch

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	50	ND
a-BHC	50	ND
Atrazine	200	ND
b-BHC	50	ND
g-BHC (Lindane)	50	ND
Chlordane	500	ND
4,4'-DDD	50	ND
4,4'-DDE	50	ND
4,4'-DDT	50	ND
Diazinon	500	ND
Dieldrin	50	ND
Endrin	50	ND
Ethyl parathion	500	ND
Heptachlor	50	ND
Heptachlor Epoxide	50	ND
Linuron	500	ND
Malathion	500	ND
Methyl parathion	500	ND
Toxaphene	500	ND
Trifluraline	500	ND
PCB's (total)	20	275
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	100	ND
Di-n-octyl phthalate	100	ND
Bis (2-ethylhexyl) phthalate	1000	ND
Di-n-butyl-phthalate	100	ND
Diethyl phthalate	100	ND
Dimethylphthalate	100	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	100	ND
Acenaphthylene	100	ND
Benzo (a) anthracene	100	ND
Benzo (g,h,i) perylene	200	ND
Chrysene	100	ND
Fluoranthene	100	ND
Indeno (1,2,3-cd) pyrene	200	ND
Phenanthrene	100	ND
Acenaphthene	100	ND
Anthracene	100	ND
Benzo (a) pyrene	100	ND
Benzo (k) fluoranthene	100	ND
Dibenzo (a,h) anthracene	200	ND
Fluorene	100	ND
Naphthalene	100	ND
Pyrene	100	ND
Surrogate Spike Recoveries (%):		
2-Fluorobiphenyl	30	

MARTEL

MARTEL LABORATORY SERVICES, INC.

[illegible] Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Facsimile [illegible]
[illegible] North Belt, Suite 111 Houston, Texas 77396 [illegible]
Capital Airport Springfield, Illinois 62707 (217) [illegible]

Certificate of Laboratory Analysis

Log Id: 5915 Sample Id: 19. 901369, White Perch

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	25	ND
a-BHC	25	ND
Atrazine	100	ND
b-BHC	25	ND
g-BHC (Lindane)	25	ND
Chlordane	250	ND
4,4'-DDD	25	25
4,4'-DDE	25	38
4,4'-DDT	25	39
Diazinon	250	ND
Dieldrin	25	ND
Endrin	25	ND
Ethyl parathion	250	ND
Heptachlor	25	ND
Heptachlor Epoxide	25	ND
Linuron	250	ND
Malathion	250	ND
Methyl parathion	250	ND
Toxaphene	250	ND
Trifluraline	250	ND
PCB's (total)	10	530
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	100	ND
Di-n-octyl phthalate	100	ND
Bis (2-ethylhexyl) phthalate	1000	ND
Di-n-butyl-phthalate	100	ND
Diethyl phthalate	100	ND
Dimethylphthalate	100	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	100	ND
Acenaphthylene	100	ND
Benzo (a) anthracene	100	ND
Benzo (g,h,i) perylene	200	ND
Chrysene	100	ND
Fluoranthene	100	ND
Indeno (1,2,3-cd) pyrene	200	ND
Phenanthrene	100	ND
Acenaphthene	100	ND
Anthracene	100	ND
Benzo (a) pyrene	100	ND
Benzo (k) fluoranthene	100	ND
Dibenzo (a,h) anthracene	200	ND
Fluorene	100	ND
Naphthalene	100	ND
Pyrene	100	ND
Surrogate Spike Recoveries (%):		
2-Fluorobiphenyl	26	

MARTEL

MARTEL LABORATORY SERVICES, INC.

1035 Cromwell Bridge Road, Baltimore, Maryland 21204 (301) 825-7790 Facsimile (301) 821-1054
1320 North Post, Suite [illegible], Houston, Texas [illegible]
[illegible] Avenue, Springfield, Illinois [illegible]

Certificate of Laboratory Analysis

Log Id: 5915 Sample Id: 20. 901370, White Perch

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	25	ND
a-BHC	25	ND
Atrazine	100	ND
b-BHC	25	ND
g-BHC (Lindane)	25	ND
Chlordane	250	ND
4,4'-DDD	25	ND
4,4'-DDE	25	ND
4,4'-DDT	25	25
Diazinon	250	ND
Dieldrin	25	ND
Endrin	25	ND
Ethyl parathion	250	ND
Heptachlor	25	ND
Heptachlor Epoxide	25	ND
Linuron	250	ND
Malathion	250	ND
Methyl parathion	250	ND
Toxaphene	250	ND
Trifluraline	250	ND
PCB's (total)	10	180
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	100	ND
Di-n-octyl phthalate	100	ND
Bis (2-ethylhexyl) phthalate	1000	ND
Di-n-butyl-phthalate	100	ND
Diethyl phthalate	100	ND
Dimethylphthalate	100	ND.
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	100	ND
Acenaphthylene	100	ND
Benzo (a) anthracene	100	ND
Benzo (g,h,i) perylene	200	ND
Chrysene	100	ND
Fluoranthene	100	ND
Indeno (1,2,3-cd) pyrene	200	ND
Phenanthrene	100	ND
Acenaphthene	100	ND
Anthracene	100	ND
Benzo (a) pyrene	100	ND
Benzo (k) fluoranthene	100	ND
Dibenzo (a,h) anthracene	200	ND
Fluorene	100	ND
Naphthalene	100	ND
Pyrene	100	ND
Surrogate Spike Recoveries (%):		
2-Fluorobiphenyl	23	

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road, Baltimore, Maryland 21204 (301) 825-7790 Facsimile (301) 821-1054

Certificate of Laboratory Analysis

Log Id: 5915 Sample Id: 21. 901371, White Perch

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	25	ND
a-BHC	25	ND
Atrazine	100	ND
b-BHC	25	ND
g-BHC (Lindane)	25	ND
Chlordane	250	ND
4,4'-DDD	25	36
4,4'-DDE	25	69
4,4'-DDT	25	40
Diazinon	250	ND
Dieldrin	25	ND
Endrin	25	ND
Ethyl parathion	250	ND
Heptachlor	25	ND
Heptachlor Epoxide	25	ND
Linuron	250	ND
Malathion	250	ND
Methyl parathion	250	ND
Toxaphene	250	ND
Trifluraline	250	ND
PCB's (total)	10	420
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	100	ND
Di-n-octyl phthalate	100	ND
Bis (2-ethylhexyl) phthalate	1000	ND
Di-n-butyl-phthalate	100	ND
Diethyl phthalate	100	ND
Dimethylphthalate	100	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	100	ND
Acenaphthylene	100	ND
Benzo (a) anthracene	100	ND
Benzo (g,h,i) perylene	200	ND
Chrysene	100	ND
Fluoranthene	100	ND
Indeno (1,2,3-cd) pyrene	200	ND
Phenanthrene	100	ND
Acenaphthene	100	ND
Anthracene	100	ND
Benzo (a) pyrene	100	ND
Benzo (k) fluoranthene	100	ND
Dibenzo (a,h) anthracene	200	ND
Fluorene	100	ND
Naphthalene	100	ND
Pyrene	100	ND
Surrogate Spike Recoveries (%):		
2-Fluorobiphenyl	16	

MARTEL

MARTEL LABORATORY SERVICES, INC.

1835 Cromwell Bridge Road, Baltimore, Maryland 21234 (301) 823-7700 Facsimile (301) 821-1584

Certificate of Laboratory Analysis

Log Id: 5915 Sample Id: 22. 901372, Yellow Perch

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	25	ND
a-BHC	25	ND
Atrazine	100	ND
b-BHC	25	ND
g-BHC (Lindane)	25	ND
Chlordane	250	ND
4,4'-DDD	25	ND
4,4'-DDE	25	ND
4,4'-DDT	25	ND
Diazinon	250	ND
Dieldrin	25	ND
Endrin	25	ND
Ethyl parathion	250	ND
Heptachlor	25	ND
Heptachlor Epoxide	25	ND
Linuron	250	ND
Malathion	250	ND
Methyl parathion	250	ND
Toxaphene	250	ND
Trifluraline	250	ND
PCB's (total)	10	200
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	100	ND
Di-n-octyl phthalate	100	ND
Bis (2-ethylhexyl) phthalate	1000	ND
Di-n-butyl-phthalate	100	ND
Diethyl phthalate	100	ND
Dimethylphthalate	100	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	100	ND
Acenaphthylene	100	ND
Benzo (a) anthracene	100	ND
Benzo (g,h,i) perylene	200	ND
Chrysene	100	ND
Fluoranthene	100	ND
Indeno (1,2,3-cd) pyrene	200	ND
Phenanthrene	100	ND
Acenaphthene	100	ND
Anthracene	100	ND
Benzo (a) pyrene	100	ND
Benzo (k) fluoranthene	100	ND
Dibenzo (a,h) anthracene	200	ND
Fluorene	100	ND
Naphthalene	100	ND
Pyrene	100	ND
Surrogate Spike Recoveries (%):		
2-Fluorobiphenyl	22	

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Facsimile (301) 821-1054
8320 North Belt, Suite 111 Houston, Texas 77396 (713) 441-4965
Capital Airport Springfield, Illinois 62707 (217) 522-0009

Certificate of Laboratory Analysis

Log Id: 5915 Sample Id: 23. 901373, White Perch

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	25	ND
a-BHC	25	ND
Atrazine	100	ND
b-BHC	25	ND
g-BHC (Lindane)	25	ND
Chlordane	250	ND
4,4'-DDD	25	ND
4,4'-DDE	25	ND
4,4'-DDT	25	ND
Diazinon	250	ND
Dieldrin	25	ND
Endrin	25	ND
Ethyl parathion	250	ND
Heptachlor	25	ND
Heptachlor Epoxide	25	ND
Linuron	250	ND
Malathion	250	ND
Methyl parathion	250	ND
Toxaphene	250	ND
Trifluraline	250	ND
PCB's (total)	10	190
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	100	ND
Di-n-octyl phthalate	100	ND
Bis (2-ethylhexyl) phthalate	1000	ND
Di-n-butyl-phthalate	100	ND
Diethyl phthalate	100	ND
Dimethylphthalate	100	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	100	ND
Acenaphthylene	100	ND
Benzo (a) anthracene	100	ND
Benzo (g,h,i) perylene	200	ND
Chrysene	100	ND
Fluoranthene	100	ND
Indeno (1,2,3-cd) pyrene	200	ND
Phenanthrene	100	ND
Acenaphthene	100	ND
Anthracene	100	ND
Benzo (a) pyrene	100	ND
Benzo (k) fluoranthene	100	ND
Dibenzo (a,h) anthracene	200	ND
Fluorene	100	ND
Naphthalene	100	ND
Pyrene	100	ND
Surrogate Spike Recoveries (%):		
2-Fluorobiphenyl	24	

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore Maryland 21204 (301) [illegible] Facsimile (301) 821-1084
[illegible]
[illegible]

Certificate of Laboratory Analysis

Log Id: 5915 Sample Id: 24. 901374, Yellow Perch

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	25	ND
a-BHC	25	ND
Atrazine	100	ND
b-BHC	25	ND
g-BHC (Lindane)	25	ND
Chlordane	250	ND
4,4'-DDD	25	ND
4,4'-DDE	25	ND
4,4'-DDT	25	ND
Diazinon	250	ND
Dieldrin	25	ND
Endrin	25	ND
Ethyl parathion	250	ND
Heptachlor	25	ND
Heptachlor Epoxide	25	ND
Linuron	250	ND
Malathion	250	ND
Methyl parathion	250	ND
Toxaphene	250	ND
Trifluraline	250	ND
PCB's (total)	10	240
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	100	ND
Di-n-octyl phthalate	100	ND
Bis (2-ethylhexyl) phthalate	1000	ND
Di-n-butyl-phthalate	100	ND
Diethyl phthalate	100	ND
Dimethylphthalate	100	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	100	ND
Acenaphthylene	100	ND
Benzo (a) anthracene	100	ND
Benzo (g,h,i) perylene	200	ND
Chrysene	100	ND
Fluoranthene	100	ND
Indeno (1,2,3-cd) pyrene	200	ND
Phenanthrene	100	ND
Acenaphthene	100	ND
Anthracene	100	ND
Benzo (a) pyrene	100	ND
Benzo (k) fluoranthene	100	ND
Dibenzo (a,h) anthracene	200	ND
Fluorene	100	ND
Naphthalene	100	ND
Pyrene	100	ND
Surrogate Spike Recoveries (%):		
2-Fluorobiphenyl	14	

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Facsimile (301) 821-1054
8330 North Belt, Suite 111 Houston, Texas 77036 (713) 441-4955
Capital Airport Springfield, Illinois 62707 (217) 522-0009

Certificate of Laboratory Analysis

Log Id: 5915 Sample Id: QC: Blank 1

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	25	ND
a-BHC	25	ND
Atrazine	100	ND
b-BHC	25	ND
g-BHC (Lindane)	25	ND
Chlordane	250	ND
4,4'-DDD	25	ND
4,4'-DDE	25	ND
4,4'-DDT	25	ND
Diazinon	250	ND
Dieldrin	25	ND
Endrin	25	ND
Ethyl parathion	250	ND
Heptachlor	25	ND
Heptachlor Epoxide	25	ND
Linuron	250	ND
Malathion	250	ND
Methyl parathion	250	ND
Toxaphene	250	ND
Trifluraline	250	ND
PCB's (total)	10	ND

Surrogate Spike Recoveries (%):

MARTEL

MARTEL LABORATORY SERVICES, INC.

1135 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Facsimile (301) 821-1081
5220 North Belt, Suite 111 Houston, Texas 77396 (713) 441-4565
Capital Airport Springfield, Illinois 62707 (217) 522-0009

Certificate of Laboratory Analysis

Log Id: 5915 Sample Id: QC: Blank 2

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	25	ND
a-BHC	25	ND
Atrazine	100	ND
b-BHC	25	ND
g-BHC (Lindane)	25	ND
Chlordane	250	ND
4,4'-DDD	25	ND
4,4'-DDE	25	ND
4,4'-DDT	25	ND
Diazinon	250	ND
Dieldrin	25	ND
Endrin	25	ND
Ethyl parathion	250	ND
Heptachlor	25	ND
Heptachlor Epoxide	25	ND
Linuron	250	ND
Malathion	250	ND
Methyl parathion	250	ND
Toxaphene	250	ND
Trifluraline	250	ND
PCB's (total)	10	ND

Surrogate Spike Recoveries (%):

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road, Baltimore, Maryland 21204 (301) 825-7770 Facsimile (301) 821-1054
[illegible] Houston, Texas [illegible] (713) [illegible]
[illegible] Springfield, Illinois 62[illegible] (217) 522-[illegible]

Certificate of Laboratory Analysis

Log Id: 5915 Sample Id: QC: Blank 3

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	25	ND
a-BHC	25	ND
Atrazine	100	ND
b-BHC	25	ND
g-BHC (Lindane)	25	ND
Chlordane	250	ND
4,4'-DDD	25	ND
4,4'-DDE	25	ND
4,4'-DDT	25	ND
Diazinon	250	ND
Dieldrin	25	ND
Endrin	25	ND
Ethyl parathion	250	ND
Heptachlor	25	ND
Heptachlor Epoxide	25	ND
Linuron	250	ND
Malathion	250	ND
Methyl parathion	250	ND
Toxaphene	250	ND
Trifluraline	250	ND
PCB's (total)	10	ND

Surrogate Spike Recoveries (%):

MARTEL

MARTEL LABORATORY SERVICES, INC.

1035 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7790
5920 North Belt, Suite 111 Houston, Texas 77036
Capital Airport Springfield, Illinois 62707 (217) 522-5009

Certificate of Laboratory Analysis

Log Id: 5915 Sample Id: QC: Blank + Matrix Spike 1

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
*Aldrin	25	172
*a-BHC	25	186
Atrazine	100	ND
*b-BHC	25	180
*g-BHC (Lindane)	25	176
Chlordane	250	ND
*4,4'-DDD	25	180
*4,4'-DDE	25	164
*4,4'-DDT	25	192
Diazinon	250	ND
Dieldrin	25	ND
Endrin	25	ND
Ethyl parathion	250	ND
*Heptachlor	25	148
*Heptachlor Epoxide	25	174
Linuron	250	ND
Malathion	250	ND
Methyl parathion	250	ND
Toxaphene	250	ND
Trifluraline	250	ND
PCB's (total)	10	ND

Surrogate Spike Recoveries (%):

*Matrix Spikes = 200 ug/kg

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore Maryland 21204 (301) 825-7790 Facsimile (301) 821-1054
[illegible] North Belt Suite 111 Houston Texas 77036 [illegible]
Capital Airport Springfield Illinois 62707 [illegible]

Certificate of Laboratory Analysis

Log Id: 5915 Sample Id: QC: Blank + Matrix Spike 2

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
*Aldrin	25	188
*a-BHC	25	208
Atrazine	100	ND
*b-BHC	25	196
*g-BHC (Lindane)	25	192
Chlordane	250	ND
*4,4'-DDD	25	198
*4,4'-DDE	25	180
*4,4'-DDT	25	216
Diazinon	250	ND
Dieldrin	25	ND
Endrin	25	ND
Ethyl parathion	250	ND
*Heptachlor	25	162
*Heptachlor Epoxide	25	190
Linuron	250	ND
Malathion	250	ND
Methyl parathion	250	ND
Toxaphene	250	ND
Trifluraline	250	ND
PCB's (total)	10	ND

Surrogate Spike Recoveries (%):

*Matrix Spikes = 200 ug/kg

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Facsimile (301) 821-1054
5920 North Belt, Suite 111 Houston, Texas 77028 (713) 441-4965
Capital Airport Springfield, Illinois 62707 (217) 522-0009

Certificate of Laboratory Analysis

Log Id: 5915 Sample Id: QC: 16. 901366 + Matrix Spike

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
*Aldrin	50	176
*a-BHC	50	172
Atrazine	200	ND
*b-BHC	50	182
*g-BHC (Lindane)	50	176
Chlordane	500	ND
*4,4'-DDD	50	174
*4,4'-DDE	50	170
*4,4'-DDT	50	208
Diazinon	500	ND
Dieldrin	50	ND
Endrin	50	ND
Ethyl parathion	500	ND
*Heptachlor	50	170
*Heptachlor Epoxide	50	174
Linuron	500	ND
Malathion	500	ND
Methyl parathion	500	ND
Toxaphene	500	ND
Trifluraline	500	ND
PCB's (total)	20	290

Surrogate Spike Recoveries (%):

*Matrix Spikes = 200 ug/kg

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Facsimile (301) 821-1054
5920 North Belt, Suite 111 Houston, Texas 77035 (713) 441-4965
Capital Airport Springfield, Illinois 62707 (217) 522-0009

Certificate of Laboratory Analysis

Log Id: 5915 Sample Id: QC: 15. 901365, Replicate

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	75	ND
a-BHC	75	ND
Atrazine	300	ND
b-BHC	75	ND
g-BHC (Lindane)	75	ND
Chlordane	750	ND
4,4'-DDD	75	ND
4,4'-DDE	75	ND
4,4'-DDT	75	ND
Diazinon	750	ND
Dieldrin	75	ND
Endrin	75	ND
Ethyl parathion	750	ND
Heptachlor	75	ND
Heptachlor Epoxide	75	ND
Linuron	750	ND
Malathion	750	ND
Methyl parathion	750	ND
Toxaphene	750	ND
Trifluraline	750	ND
PCB's (total)	30	97
Surrogate Spike Recoveries (%):		

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Facsimile (301) 821-1054
5920 North BHG, Suite 111 Houston, Texas 77036 (713) 441-4955
Capital Airport Springfield, Illinois 62707 (217) 522-3029

Certificate of Laboratory Analysis

Log Id: 5915 Sample Id: QC. Blank 1

Compound	Detection Limit	Result
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	1	ND
Di-n-octyl phthalate	1	ND
Bis (2-ethylhexyl) phthalate	10	ND
Di-n-butyl-phthalate	1	ND
Diethyl phthalate	1	ND
Dimethylphthalate	1	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	1	ND
Acenaphthylene	1	ND
Benzo (a) anthracene	1	ND
Benzo (g,h,i) perylene	2	ND
Chrysene	1	ND
Fluoranthene	1	ND
Indeno (1,2,3-cd) pyrene	2	ND
Phenanthrene	1	ND
Acenaphthene	1	ND
Anthracene	1	ND
Benzo (a) pyrene	1	ND
Benzo (k) fluoranthene	1	ND
Dibenzo (a,h) anthracene	2	ND
Fluorene	1	ND
Naphthalene	1	ND
Pyrene	1	ND
Surrogate Spike Recoveries (%):		
2-Fluorobiphenyl	21	

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Facsimile (301) 821-1054
5320 North Belt, Suite [illegible] Houston, Texas [illegible] (713) 441-4965
Capital Airport Springfield, Illinois 62707 (217) 522-2009

Certificate of Laboratory Analysis

Log Id: 5915 Sample Id: QC. Blank 2

Compound	Detection Limit	Result
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	1	ND
Di-n-octyl phthalate	1	ND
Bis (2-ethylhexyl) phthalate	10	ND
Di-n-butyl-phthalate	1	ND
Diethyl phthalate	1	ND
Dimethylphthalate	1	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	1	ND
Acenaphthylene	1	ND
Benzo (a) anthracene	1	ND
Benzo (g,h,i) perylene	2	ND
Chrysene	1	ND
Fluoranthene	1	ND
Indeno (1,2,3-cd) pyrene	2	ND
Phenanthrene	1	ND
Acenaphthene	1	ND
Anthracene	1	ND
Benzo (a) pyrene	1	ND
Benzo (k) fluoranthene	1	ND
Dibenzo (a,h) anthracene	2	ND
Fluorene	1	ND
Naphthalene	1	ND
Pyrene	1	ND
Surrogate Spike Recoveries (%):		
2-Fluorobiphenyl	10	

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore, Maryland 21204 (301) [illegible] Fax (301) 821-1054
5920 North Belt Suite 111 Houston, Texas [illegible]
Capital Airport Springfield, Illinois [illegible]

Certificate of Laboratory Analysis

Log Id: 5915 Sample Id: QC. Blank 3

Compound	Detection Limit	Result
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	1	ND
Di-n-octyl phthalate	1	ND
Bis (2-ethylhexyl) phthalate	10	ND
Di-n-butyl-phthalate	1	ND
Diethyl phthalate	1	ND
Dimethylphthalate	1	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	1	ND
Acenaphthylene	1	ND
Benzo (a) anthracene	1	ND
Benzo (g,h,i) perylene	2	ND
Chrysene	1	ND
Fluoranthene	1	ND
Indeno (1,2,3-cd) pyrene	2	ND
Phenanthrene	1	ND
Acenaphthene	1	ND
Anthracene	1	ND
Benzo (a) pyrene	1	ND
Benzo (k) fluoranthene	1	ND
Dibenzo (a,h) anthracene	2	ND
Fluorene	1	ND
Naphthalene	1	ND
Pyrene	1	ND
Surrogate Spike Recoveries (%):		
2-Fluorobiphenyl	7	

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Facsimile (301) 821-1054

Certificate of Laboratory Analysis

Log Id: 5915 Sample Id: QC. 15. 901365, Rangia, Replicate

Compound	Detection Limit	Result
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	100	ND
Di-n-octyl phthalate	100	ND
Bis (2-ethylhexyl) phthalate	1000	ND
Di-n-butyl-phthalate	100	ND
Diethyl phthalate	100	ND
Dimethylphthalate	100	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	100	ND
Acenaphthylene	100	ND
Benzo (a) anthracene	100	ND
Benzo (g,h,i) perylene	200	ND
Chrysene	100	ND
Fluoranthene	100	ND
Indeno (1,2,3-cd) pyrene	200	ND
Phenanthrene	100	ND
Acenaphthene	100	ND
Anthracene	100	ND
Benzo (a) pyrene	100	ND
Benzo (k) fluoranthene	100	ND
Dibenzo (a,h) anthracene	200	ND
Fluorene	100	ND
Naphthalene	100	ND
Pyrene	100	ND
Surrogate Spike Recoveries (%):		
2-Fluorobiphenyl	22	

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore Maryland 21204 (301) 825-7790 Facsimile (301) 821-1054
2020 North Bell Suite 111 Houston Texas 77036 (713) 441-4985
Capital Airport Springfield, Illinois 62707 (217) 522-0009

Certificate of Laboratory Analysis

01/11/91

Analytical Information
Dates, Times, Analysts
(dates may refer to date begun or date approved)

Log Number	Test Code	Date Performed	Time Performed	Analyst Initials
** Sample ID: 1. 901351, Macoma Balthica				
5915	CR	01/04/91	09:00	BAB
5915	FE	01/04/91	09:00	BAB
5915	MN	01/04/91	09:00	BAB
5915	ZN	01/04/91	09:00	BAB
5915	NI	01/04/91	09:00	BAB
5915	CU	01/04/91	09:00	BAB
5915	PPPEST	12/29/90	03:30	RLC
5915	PPBN	12/31/90	11:30	FJS
5915	WEIGHTP	12/19/90	17:00	RLC
5915	WEIGHTB	12/26/90	09:00	RAD
** Sample ID: 2. 901352, Cyathura				
5915	CR	12/31/90	13:00	BAB
5915	FE	12/31/90	13:00	BAB
5915	MN	12/31/90	13:00	BAB
5915	ZN	12/31/90	13:00	BAB
5915	NI	12/31/90	13:00	BAB
5915	CU	12/31/90	13:00	BAB
5915	PPPEST	12/29/90	04:32	RLC
5915	PPBN	12/31/90	12:27	FJS
5915	WEIGHTP	12/19/90	17:00	RLC
5915	WEIGHTB	12/26/90	09:00	RAD
** Sample ID: 3. 901353, Large Rangia				
5915	CR	12/31/90	13:00	BAB
5915	FE	12/31/90	13:00	BAB
5915	MN	12/31/90	13:00	BAB
5915	ZN	12/31/90	13:00	BAB
5915	NI	12/31/90	13:00	BAB
5915	CU	12/31/90	13:00	BAB
5915	PPPEST	12/29/90	05:34	RLC
5915	PPBN	12/31/90	13:23	FJS
5915	WEIGHTP	12/19/90	17:00	RLC
5915	WEIGHTB	12/26/90	09:00	RAD
** Sample ID: 4. 901354, Small Rangia				
5915	CR	01/04/91	09:00	BAB
5915	FE	01/04/91	09:00	BAB
5915	MN	01/04/91	09:00	BAB
5915	ZN	01/04/91	09:00	BAB
5915	NI	01/04/91	09:00	BAB

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Facsimile (301) 821-1054
5920 North Belt, Suite 111 Houston, Texas 77036 (713) 441-4955
Capital Airport Springfield, Illinois 62707 (217) 522-3009

01/11/91

Certificate of Laboratory Analysis

Analytical Information
Dates, Times, Analysts
(dates may refer to date begun or date approved)

Log Number	Test Code	Date Performed	Time Performed	Analyst Initials
5915	CU	01/04/91	09:00	BAB
5915	PPPEST	12/29/90	06:36	RLC
5915	PPBN	12/31/90	14:21	FJS
5915	WEIGHTP	12/19/90	17:00	RLC
5915	WEIGHTB	12/26/90	09:00	RAD
** Sample ID: 5. 901355, Cyathrua				
5915	CR	12/31/90	13:00	BAB
5915	FE	12/31/90	13:00	BAB
5915	MN	12/31/90	13:00	BAB
5915	ZN	12/31/90	13:00	BAB
5915	NI	12/31/90	13:00	BAB
5915	CU	12/31/90	13:00	BAB
5915	PPPEST	/ /		
5915	PPBN	/ /		
5915	WEIGHTP	/ /		
5915	WEIGHTB	12/26/90	09:00	RAD
** Sample ID: 6. 901356, Macoma Balthica				
5915	CR	01/04/91	09:00	BAB
5915	FE	01/04/91	09:00	BAB
5915	MN	01/04/91	09:00	BAB
5915	ZN	01/04/91	09:00	BAB
5915	NI	01/04/91	09:00	BAB
5915	CU	01/04/91	09:00	BAB
5915	PPPEST	/ /		
5915	PPBN	/ /		
5915	WEIGHTP	/ /		
5915	WEIGHTB	12/26/90	09:00	RAD
** Sample ID: 7. 901357, Cyathura				
5915	CR	12/31/90	13:00	BAB
5915	FE	12/31/90	13:00	BAB
5915	MN	12/31/90	13:00	BAB
5915	ZN	12/31/90	13:00	BAB
5915	NI	12/31/90	13:00	BAB
5915	CU	12/31/90	13:00	BAB
5915	PPPEST	/ /		
5915	PPBN	/ /		
5915	WEIGHTP	/ /		
5915	WEIGHTB	12/26/90	09:00	RAD

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Facsimile (301) 821-1054
[illegible] Houston, Texas [illegible] (713) [illegible]
[illegible] Springfield, Illinois 62707 (217) [illegible]

Certificate of Laboratory Analysis

01/11/91

Analytical Information
Dates, Times, Analysts
(dates may refer to date begun or date approved)

Log Number	Test Code	Date Performed	Time Performed	Analyst Initials
** Sample ID: 8. 901358, Rangia				
5915	CR	12/31/90	13:00	BAB
5915	FE	12/31/90	13:00	BAB
5915	MN	12/31/90	13:00	BAB
5915	ZN	12/31/90	13:00	BAB
5915	NI	12/31/90	13:00	BAB
5915	CU	12/31/90	13:00	BAB
5915	PPPEST	12/29/90	07:39	RLC
5915	PPBN	12/31/90	16:16	FJS
5915	WEIGHTP	12/19/90	17:00	RLC
5915	WEIGHTB	12/26/90	09:00	RAD
** Sample ID: 9. 901359, Rangia				
5915	CR	12/31/90	13:00	BAB
5915	FE	12/31/90	13:00	BAB
5915	MN	12/31/90	13:00	BAB
5915	ZN	12/31/90	13:00	BAB
5915	NI	12/31/90	13:00	BAB
5915	CU	12/31/90	13:00	BAB
5915	PPPEST	12/29/90	08:41	RLC
5915	PPBN	12/31/90	19:25	FJS
5915	WEIGHTP	12/19/90	17:00	RLC
5915	WEIGHTB	12/26/90	09:00	RAD
** Sample ID: 10. 901360, Macoma Balthica				
5915	CR	12/31/90	13:00	BAB
5915	FE	01/04/91	09:00	BAB
5915	MN	01/04/91	09:00	BAB
5915	ZN	01/04/91	09:00	BAB
5915	NI	01/04/91	09:00	BAB
5915	CU	01/04/91	09:00	BAB
5915	PPPEST	12/29/90	09:43	RLC
5915	PPBN	12/31/90	20:21	FJS
5915	WEIGHTP	12/19/90	17:00	RLC
5915	WEIGHTB	12/26/90	09:00	RAD
** Sample ID: 11. 901361, Cyathura				
5915	CR	12/31/90	13:00	BAB
5915	FE	12/31/90	13:00	BAB
5915	MN	12/31/90	13:00	BAB
5915	ZN	12/31/90	13:00	BAB
5915	NI	12/31/90	13:00	BAB

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Facsimile (301) 821-1054
5920 North Belt Suite 111 Houston, Texas 77036 (713) 441-4965
Capital Airport Springfield, Illinois 62707 (217) 522-0009

Certificate of Laboratory Analysis

01/11/91

Analytical Information
Dates, Times, Analysts
(dates may refer to date begun or date approved)

Log Number	Test Code	Date Performed	Time Performed	Analyst Initials
5915	CU	12/31/90	13:00	BAB
5915	PPPEST	12/29/90	12:49	RLC
5915	PPBN	12/31/90	21:17	FJS
5915	WEIGHTP	12/20/90	17:00	RLC
5915	WEIGHTB	12/26/90	09:00	RAD
** Sample ID: 12. 901362, Large Rangia				
5915	CR	12/31/90	13:00	BAB
5915	FE	12/31/90	13:00	BAB
5915	MN	12/31/90	13:00	BAB
5915	ZN	12/31/90	13:00	BAB
5915	NI	12/31/90	13:00	BAB
5915	CU	12/31/90	13:00	BAB
5915	PPPEST	12/29/90	13:51	RLC
5915	PPBN	12/31/90	22:15	FJS
5915	WEIGHTP	12/20/90	17:00	RLC
5915	WEIGHTB	12/26/90	09:00	RAD
** Sample ID: 13. 901363, Cyathrua				
5915	CR	12/31/90	13:00	BAB
5915	FE	12/31/90	13:00	BAB
5915	MN	12/31/90	13:00	BAB
5915	ZN	12/31/90	13:00	BAB
5915	NI	12/31/90	13:00	BAB
5915	CU	12/31/90	13:00	BAB
5915	PPPEST	/ /		
5915	PPBN	/ /		
5915	WEIGHTP	/ /		
5915	WEIGHTB	12/26/90	09:00	RAD
** Sample ID: 14. 901364, Rangia				
5915	CR	12/31/90	13:00	BAB
5915	FE	12/31/90	13:00	BAB
5915	MN	12/31/90	13:00	BAB
5915	ZN	12/31/90	13:00	BAB
5915	NI	12/31/90	13:00	BAB
5915	CU	12/31/90	13:00	BAB
5915	PPPEST	12/29/90	14:53	RLC
5915	PPBN	12/31/90	23:12	FJS
5915	WEIGHTP	12/20/90	17:00	RLC
5915	WEIGHTB	12/26/90	09:00	RAD

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Facsimile (301) 821-1054
5920 North Belt, Suite 111 Houston, Texas 77036 (713) 441-4965
Capital Airport Springfield, Illinois 62707 (217) 522-0009

Certificate of Laboratory Analysis

01/11/91

Analytical Information
Dates, Times, Analysts
(dates may refer to date begun or date approved)

Log Number	Test Code	Date Performed	Time Performed	Analyst Initials
** Sample ID: 15. 901365, Rangia				
5915	CR	12/31/90	13:00	BAB
5915	FE	12/31/90	13:00	BAB
5915	MN	12/31/90	13:00	BAB
5915	ZN	12/31/90	13:00	BAB
5915	NI	12/31/90	13:00	BAB
5915	CU	12/31/90	13:00	BAB
5915	PPPEST	12/29/90	15:55	RLC
5915	PPBN	01/01/91	00:08	FJS
5915	WEIGHTP	12/20/90	17:00	RLC
5915	WEIGHTB	12/26/90	09:00	RAD
** Sample ID: 16. 901366, Yellow Perch				
5915	CR	12/31/90	13:00	BAB
5915	FE	12/31/90	13:00	BAB
5915	MN	12/31/90	13:00	BAB
5915	ZN	12/31/90	13:00	BAB
5915	NI	12/31/90	13:00	BAB
5915	CU	12/31/90	13:00	BAB
5915	PPPEST	12/29/90	18:00	RLC
5915	PPBN	01/01/91	02:00	FJS
5915	WEIGHTP	12/20/90	17:00	RLC
5915	WEIGHTB	12/26/90	09:00	RAD
** Sample ID: 17. 901367, Yellow Perch				
5915	CR	12/31/90	13:00	BAB
5915	FE	12/31/90	13:00	BAB
5915	MN	12/31/90	13:00	BAB
5915	ZN	12/31/90	13:00	BAB
5915	NI	12/31/90	13:00	BAB
5915	CU	12/31/90	13:00	BAB
5915	PPPEST	12/29/90	19:02	RLC
5915	PPBN	01/01/91	03:55	FJS
5915	WEIGHTP	12/20/90	17:00	RLC
5915	WEIGHTB	12/26/90	09:00	RAD
** Sample ID: 18. 901368, White Perch				
5915	CR	12/31/90	13:00	BAB
5915	FE	12/31/90	13:00	BAB
5915	MN	12/31/90	13:00	BAB
5915	ZN	12/31/90	13:00	BAB
5915	NI	12/31/90	13:00	BAB

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Facsimile (301) 821-1054
5920 North Belt, Suite 111 Houston, Texas 77036 (713) 441-4965
Capital Airport Springfield, Illinois 62707 (217) 522-2309

Certificate of Laboratory Analysis

01/11/91

Analytical Information
Dates, Times, Analysts
(dates may refer to date begun or date approved)

Log Number	Test Code	Date Performed	Time Performed	Analyst Initials
5915	CU	12/31/90	13:00	BAB
5915	PPPEST	12/29/90	20:04	RLC
5915	PPBN	01/01/91	04:51	FJS
5915	WEIGHTP	12/20/90	17:00	RLC
5915	WEIGHTB	12/26/90	09:00	RAD
** Sample ID: 19. 901369, White Perch				
5915	CR	12/31/90	13:00	BAB
5915	FE	12/31/90	13:00	BAB
5915	MN	12/31/90	13:00	BAB
5915	ZN	12/31/90	13:00	BAB
5915	NI	12/31/90	13:00	BAB
5915	CU	12/31/90	13:00	BAB
5915	PPPEST	12/29/90	21:06	RLC
5915	PPBN	01/01/91	05:47	FJS
5915	WEIGHTP	12/21/90	17:00	RLC
5915	WEIGHTB	12/26/90	09:00	RAD
** Sample ID: 20. 901370, White Perch				
5915	CR	12/31/90	13:00	BAB
5915	FE	12/31/90	13:00	BAB
5915	MN	12/31/90	13:00	BAB
5915	ZN	12/31/90	13:00	BAB
5915	NI	12/31/90	13:00	BAB
5915	CU	12/31/90	13:00	BAB
5915	PPPEST	12/29/90	22:08	RLC
5915	PPBN	01/01/91	06:43	FJS
5915	WEIGHTP	12/21/90	17:00	RLC
5915	WEIGHTB	12/26/90	09:00	RAD
** Sample ID: 21. 901371, White Perch				
5915	CR	12/31/90	13:00	BAB
5915	FE	12/31/90	13:00	BAB
5915	MN	12/31/90	13:00	BAB
5915	ZN	12/31/90	13:00	BAB
5915	NI	12/31/90	13:00	BAB
5915	CU	12/31/90	13:00	BAB
5915	PPPEST	12/30/90	01:15	RLC
5915	PPBN	01/01/91	07:41	FJS
5915	WEIGHTP	12/21/90	17:00	RLC
5915	WEIGHTB	12/26/90	09:00	RAD

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Facsimile (301) 821-1054
5920 North Belt, Suite 111 Houston, Texas 77396 (713) 441-4965
Capital Airport Springfield, Illinois 62707 (217) 522-0009

Certificate of Laboratory Analysis

Analytical Information
Dates, Times, Analysts
(dates may refer to date begun or date approved)

Log Number	Test Code	Date Performed	Time Performed	Analyst Initials
** Sample ID: 22. 901372, Yellow Perch				
5915	CR	12/31/90	13:00	BAB
5915	FE	12/31/90	13:00	BAB
5915	MN	12/31/90	13:00	BAB
5915	ZN	12/31/90	13:00	BAB
5915	NI	12/31/90	13:00	BAB
5915	CU	12/31/90	13:00	BAB
5915	PPPEST	12/30/90	02:17	RLC
5915	PPBN	01/01/91	08:38	FJS
5915	WEIGHTP	12/21/90	17:00	RLC
5915	WEIGHTB	12/26/90	09:00	RAD
** Sample ID: 23. 901373, White Perch				
5915	CR	12/31/90	13:00	BAB
5915	FE	12/31/90	13:00	BAB
5915	MN	12/31/90	13:00	BAB
5915	ZN	01/02/91	09:00	BAB
5915	NI	12/31/90	13:00	BAB
5915	CU	12/31/90	13:00	BAB
5915	PPPEST	12/30/90	03:19	RLC
5915	PPBN	01/01/91	09:35	FJS
5915	WEIGHTP	12/21/90	17:00	RLC
5915	WEIGHTB	12/26/90	09:00	RAD
** Sample ID: 24. 901374, Yellow Perch				
5915	CR	01/02/91	09:00	BAB
5915	FE	12/31/90	13:00	BAB
5915	MN	12/31/90	13:00	BAB
5915	ZN	12/31/90	09:00	BAB
5915	NI	12/31/90	13:00	BAB
5915	CU	12/31/90	13:00	BAB
5915	PPPEST	12/30/90	04:21	RLC
5915	PPBN	01/01/91	10:31	FJS
5915	WEIGHTP	12/21/90	17:00	RLC
5915	WEIGHTB	12/26/90	09:00	RAD

MARTEL

MARTEL LABORATORY SERVICES, INC.

[illegible] Baltimore, Maryland 21204 (301) 825-7790 Facsimile [illegible]
1520 North Belt, Suite 111 Houston, Texas 77396 (713) 441-4965
Capital Airport Springfield, Illinois 62707 (217) 522-0009

Martel Lab Number: 10837

Certificate of Laboratory Analysis

Log Identification: W-10002

Samples picked up by Martel.
P.O. Number 90036
Project Identification: 32-1605, Hart-Miller Island, Benthics

Maryland Environmental Service
2020 Industrial Drive
Annapolis, Maryland 21401
Attention: CeCe Donovan

June 29, 1991

Client Identification: MES

Analytical Parameter	Method	Result	Units
Log Identification: W-10002			
Date Received: 06/14/91			
Sample ID: 1. 910160, HMI 2-2, Cyathura			
Sampling Date: 04/08/91 Time: 12:28			
Chromium	EPA 200.7	QNS [1]	
Iron	EPA 200.7	QNS	
Manganese	EPA 200.7	QNS	
Zinc	EPA 200.7	QNS	
Nickel	EPA 200.7	QNS	
Copper	EPA 200.7	QNS	
Pesticides/PCB's	EPA 8080	QNS	
Base/Neutral Extractables	EPA 8270	QNS	
Weight of sample used/inorganic analysis		0.07 *	g
Weight of sample used / organic analysis		0.03 *	g
Sample ID: 2. 910161, G84-1, Cyathura			
Sampling Date: 04/08/91 Time: 12:53			
Chromium	EPA 200.7	<2	ppm
Iron	EPA 200.7	280	ppm
Manganese	EPA 200.7	190	ppm
Zinc	EPA 200.7	36	ppm
Nickel	EPA 200.7	<4	ppm

MARTEL

MARTEL LABORATORY SERVICES, INC.

25 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Facsimile
5920 North Belt, Suite 111 Houston, Texas 77396 (713) 441-965
Capital Airport Springfield, Illinois 62707 (217) 522-0009

Certificate of Laboratory Analysis

Client Identification: MES
Log Identification: W-10002
June 29, 1991

Analytical Parameter	Method	Result	Units
Sample ID: 2. 910161, G84-1, Cyathura			
Sampling Date: 04/08/91 Time: 12:53			
Copper	EPA 200.7	11	ppm
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached
Weight of sample used/inorganic analysis		0.41	g
Weight of sample used / organic analysis		0.40	g
Sample ID: 3. 910162, G84-2, Macoma			
Sampling Date: 04/08/91 Time: 12:53			
Chromium	EPA 200.7	8.2	ppm
Iron	EPA 200.7	1600	ppm
Manganese	EPA 200.7	180	ppm
Zinc	EPA 200.7	130	ppm
Nickel	EPA 200.7	3.6	ppm
Copper	EPA 200.7	15	ppm
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached
Weight of sample used/inorganic analysis		0.77	g
Weight of sample used / organic analysis		6.55	g
Sample ID: 4. 910163, S4-1, Rangia			
Sampling Date: 04/08/91 Time: 13:21			
Chromium	EPA 200.7	QNS	
Iron	EPA 200.7	QNS	
Manganese	EPA 200.7	QNS	
Zinc	EPA 200.7	QNS	
Nickel	EPA 200.7	QNS	
Copper	EPA 200.7	QNS	
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached

MARTEL

MARTEL LABORATORY SERVICES, INC.

[illegible] Baltimore, Maryland 21224 (301) 625-7790 Facsimile (301) 624-[illegible]
[illegible] North Belt, Suite [illegible] Houston, Texas 77396 (713) 441-4965
Capital Airport, Springfield, Illinois 62707 (217) 522-0009

Certificate of Laboratory Analysis

Client Identification: MES
Log Identification: W-10002
June 29, 1991

Analytical Parameter	Method	Result	Units
Sample ID: 4. 910163, S4-1, Rangia			
Sampling Date: 04/08/91 Time: 13:21			
Weight of sample used/inorganic analysis		0.02 *	g
Weight of sample used / organic analysis		0.70	g
Sample ID: 5. 910164, S1-1, Rangia			
Sampling Date: 04/08/91 Time: 15:15			
Chromium	EPA 200.7	2.9	ppm
Iron	EPA 200.7	77	ppm
Manganese	EPA 200.7	11	ppm
Zinc	EPA 200.7	43	ppm
Nickel	EPA 200.7	12	ppm
Copper	EPA 200.7	1.3	ppm
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached
Weight of sample used/inorganic analysis		1.30	g
Weight of sample used / organic analysis		1.27	g
Sample ID: 6. 910165, HM22-1, Rangia			
Sampling Date: 04/08/91 Time: 15:35			
Chromium	EPA 200.7	66	ppm
Iron	EPA 200.7	110	ppm
Manganese	EPA 200.7	69	ppm
Zinc	EPA 200.7	19	ppm
Nickel	EPA 200.7	<18	ppm
Copper	EPA 200.7	<9	ppm
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached
Weight of sample used/inorganic analysis		0.11	g
Weight of sample used / organic analysis		2.88	g

MARTEL

MARTEL LABORATORY SERVICES, INC.

[illegible] Bridge Road Baltimore, Maryland [illegible] (301) 625-7790 Facsimile [illegible]
2320 North Belt, Suite 111 Houston, Texas 77036 (713) 441-4965
Capital Airport Springfield, Illinois 62707 (217) 522-6009

Certificate of Laboratory Analysis

Client Identification: MES
Log Identification: W-10002
June 29, 1991

Analytical Parameter	Method	Result	Units
Sample ID: 7. 910166, HMI6-1, Cyathura			
Sampling Date: 04/08/91 Time: 10:29			
Chromium	EPA 200.7	<3	ppm
Iron	EPA 200.7	230	ppm
Manganese	EPA 200.7	140	ppm
Zinc	EPA 200.7	35	ppm
Nickel	EPA 200.7	<5	ppm
Copper	EPA 200.7	22	ppm
Pesticides/PCB's	EPA 8080	seeults	attached
Base/Neutral Extractables	EPA 8270	see	attached
Weight of sample used/inorganic analysis		0.36	g
Weight of sample used / organic analysis		0.39	g
Sample ID: 8. 910167, HMI6-2, Macoma			
Sampling Date: 04/08/91 Time: 10:29			
Chromium	EPA 200.7	6.5	ppm
Iron	EPA 200.7	1100	ppm
Manganese	EPA 200.7	120	ppm
Zinc	EPA 200.7	96	ppm
Nickel	EPA 200.7	<2	ppm
Copper	EPA 200.7	13	ppm
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached
Weight of sample used/inorganic analysis		1.01	g
Weight of sample used / organic analysis		6.76	g
Sample ID: 9. 910168, S6-1, Cyathura			
Sampling Date: 04/08/91 Time: 10:29			
Chromium	EPA 200.7	<7	ppm
Iron	EPA 200.7	310	ppm
Manganese	EPA 200.7	270	ppm

MARTEL

MARTEL LABORATORY SERVICES, INC.

Baltimore, Maryland 21224 (301) 525-7790 Facsimile (301) 82[illegible]
1330 North Belt, Suite 11[illegible] Houston, Texas 77086 (713) 441-4966
Capital Airport Springfield, Illinois 62707 (217) 522-0009

Certificate of Laboratory Analysis

Client Identification: MES
Log Identification: W-10002
June 29, 1991

Analytical Parameter	Method	Result	Units
Sample ID: 9. 910168, S6-1, Cyathura			
Sampling Date: 04/08/91 Time: 10:29			
Zinc	EPA 200.7	51	ppm
Nickel	EPA 200.7	<13	ppm
Copper	EPA 200.7	24	ppm
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached
Weight of sample used/inorganic analysis		0.15	g
Weight of sample used / organic analysis		0.19	g
Sample ID: 10. 910169, GS-1, Cyathura			
Sampling Date: 04/08/91 Time: 11:30			
Chromium	EPA 200.7	<3	ppm
Iron	EPA 200.7	380	ppm
Manganese	EPA 200.7	360	ppm
Zinc	EPA 200.7	55	ppm
Nickel	EPA 200.7	<6	ppm
Copper	EPA 200.7	38	ppm
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached
Weight of sample used/inorganic analysis		0.35	g
Weight of sample used / organic analysis		0.23	g
Sample ID: 11. 910170, GS-2, Macoma			
Sampling Date: 04/08/91 Time: 11:30			
Chromium	EPA 200.7	QNS	
Iron	EPA 200.7	QNS	
Manganese	EPA 200.7	QNS	
Zinc	EPA 200.7	QNS	
Nickel	EPA 200.7	QNS	
Copper	EPA 200.7	QNS	

MARTEL

MARTEL LABORATORY SERVICES, INC.

[illegible] Cromwell Bridge Road Baltimore, Maryland [illegible] (301) 825-7730 Facsimile [illegible]
5920 North Belt, Suite [illegible] Houston, Texas 77396 (713) 441-4965
Capital Airport Springfield, Illinois 62707 (217) 522-0009

Certificate of Laboratory Analysis

Client Identification: MES
Log Identification: W-10002
June 29, 1991

Analytical Parameter	Method	Result	Units
Sample ID: 11. 910170, GS-2, Macoma			
Sampling Date: 04/08/91 Time: 11:30			
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached
Weight of sample used/inorganic analysis		QNS *	
Weight of sample used / organic analysis		3.53	g
Sample ID: 12. 910171, G25-1, Rangia			
Sampling Date: 04/08/91 Time: 12:05			
Chromium	EPA 200.7	24	ppm
Iron	EPA 200.7	120	ppm
Manganese	EPA 200.7	17	ppm
Zinc	EPA 200.7	15	ppm
Nickel	EPA 200.7	<10	ppm
Copper	EPA 200.7	<5	ppm
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached
Weight of sample used/inorganic analysis		0.21	g
Weight of sample used / organic analysis		3.64	g
Sample ID: 13. 910172, HMI2, Rangia			
Sampling Date: 04/08/91 Time: 12:28			
Chromium	EPA 200.7	17	ppm
Iron	EPA 200.7	150	ppm
Manganese	EPA 200.7	76	ppm
Zinc	EPA 200.7	11	ppm
Nickel	EPA 200.7	<8	ppm
Copper	EPA 200.7	<4	ppm
Pesticides/PCB's	EPA 8080	see	attached
Base/Neutral Extractables	EPA 8270	see	attached
Weight of sample used/inorganic analysis		0.25	g

MARTEL

MARTEL LABORATORY SERVICES, INC.

[illegible] Baltimore, Maryland 21224 (301) 425-7750 Facsimile (301) [illegible]
[illegible] North Belt, Suite [illegible] Houston, Texas 77066 (713) 441-4965
Tutorial Airport Springfield, Illinois 62707 (217) 522-0009

Certificate of Laboratory Analysis

Client Identification: MES
Log Identification: W-10002
June 29, 1991
Page 7

Analytical Parameter	Method	Result	Units
Sample ID: 13. 910172, HMI2, Rangia			
Sampling Date: 04/08/91 Time: 12:28			
Weight of sample used / organic analysis		2.94	g

All procedures used are in accordance with the following methods:
EPA-600/4-79-020, "Methods for Chemical Analysis of Water and Wastes".
SW-846, "Test Methods for Evaluating Solid Waste", 1986.
*Some sample weights were considered too small for significant results.

QC Approval

6/29/91
Date

Laboratory Approval

6-29-91
Date

MARTEL

MARTEL LABORATORY SERVICES, INC.

[illegible] Cromwell Bridge Road [illegible]more [illegible] 21204 (301) 825-7750 Facsimile (301) [illegible]
1920 North Belt, Suite 111 [illegible]ston, Texas 77396 (713) 441-4965
Capital Airport Springfield, Illinois 62707 (217) 522-2009

Certificate of Laboratory Analysis

Log Id: 10002 Sample Id: 2. 910161, G84-1, Cyathura

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	3000	ND
a-BHC	3000	ND
Atrazine	3000	ND
b-BHC	3000	ND
g-BHC (Lindane)	3000	ND
Chlordane	3000	ND
4,4'-DDD	3000	ND
4,4'-DDE	3000	ND
4,4'-DDT	3000	ND
Diazinon	3000	ND
Dieldrin	3000	ND
Endrin	3000	ND
Ethyl parathion	3000	ND
Heptachlor	3000	ND
Heptachlor Epoxide	3000	ND
Linuron	3000	ND
Malathion	3000	ND
Methyl parathion	3000	ND
Toxaphene	3000	ND
Trifluraline	3000	ND
PCB's (total)	400	ND
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	5000	ND
Di-n-octyl phthalate	5000	ND
Bis (2-ethylhexyl) phthalate	5000	ND
Di-n-butyl-phthalate	5000	ND
Diethyl phthalate	5000	ND
Dimethylphthalate	5000	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	5000	ND
Acenaphthylene	5000	ND
Benzo (a) anthracene	5000	ND
Benzo (g,h,i) perylene	5000	ND
Chrysene	5000	ND
Fluoranthene	5000	ND
Indeno (1,2,3-cd) pyrene	5000	ND
Phenanthrene	5000	ND
Acenaphthene	5000	ND
Anthracene	5000	ND
Benzo (a) pyrene	5000	ND
Benzo (k) fluoranthene	5000	ND
Dibenzo (a,h) anthracene	5000	ND
Fluorene	5000	ND
Naphthalene	5000	ND
Pyrene	5000	ND
Surrogate Spike Recoveries (%):		
2,4,5,6-Tetrachloro-m-xylene		109
2-Fluorobiphenyl		97

MARTEL

MARTEL LABORATORY SERVICES, INC.

[illegible] Baltimore [illegible] Maryland 21224 [illegible] 633-7790 Facsimile (301) 921-[illegible]
[illegible] North Belt, Suite [illegible] Houston, Texas 77036 (713) 441-[illegible]
Midwest Airport Springfield, Illinois 62707 (217) 522-5009

Certificate of Laboratory Analysis

Log Id: 10002 Sample Id: 3. 910162, G84-2, Macoma

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	200	ND
a-BHC	200	ND
Atrazine	200	ND
b-BHC	200	ND
g-BHC (Lindane)	200	ND
Chlordane	200	ND
4,4'-DDD	200	ND
4,4'-DDE	200	ND
4,4'-DDT	200	ND
Diazinon	200	ND
Dieldrin	200	ND
Endrin	200	ND
Ethyl parathion	200	ND
Heptachlor	200	ND
Heptachlor Epoxide	200	ND
Linuron	200	ND
Malathion	200	ND
Methyl parathion	200	ND
Toxaphene	200	ND
Trifluraline	200	ND
PCB's (total)	40	ND
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	300	ND
Di-n-octyl phthalate	300	ND
Bis (2-ethylhexyl) phthalate	300	ND
Di-n-butyl-phthalate	300	ND
Diethyl phthalate	300	ND
Dimethylphthalate	300	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	300	ND
Acenaphthylene	300	ND
Benzo (a) anthracene	300	ND
Benzo (g,h,i) perylene	300	ND
Chrysene	300	ND
Fluoranthene	300	ND
Indeno (1,2,3-cd) pyrene	300	ND
Phenanthrene	300	ND
Acenaphthene	300	ND
Anthracene	300	ND
Benzo (a) pyrene	300	ND
Benzo (k) fluoranthene	300	ND
Dibenzo (a,h) anthracene	300	ND
Fluorene	300	ND
Naphthalene	300	ND
Pyrene	300	ND
Surrogate Spike Recoveries (%):		
2,4,5,6-Tetrachloro-m-xylene		91
2-Fluorobiphenyl		94

79 0 29' 90 30'' 30' 39

MARTEL

MARTEL LABORATORY SERVICES, INC.

[illegible] Cromwell Bridge Road Baltimore, Maryland 21204 (301) 823-7790 Facsimile (301) [illegible]
9320 North Ball, Suite 111 Houston, Texas 77396 (713) 441-9965
Capital Airport Springfield, Illinois 62707 (217) 522-0009

Certificate of Laboratory Analysis

Log Id: 10002 Sample Id: 4. 910163, S4-1, Rangia

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	1000	ND
a-BHC	1000	ND
Atrazine	1000	ND
b-BHC	1000	ND
g-BHC (Lindane)	1000	ND
Chlordane	1000	ND
4,4'-DDD	1000	ND
4,4'-DDE	1000	ND
4,4'-DDT	1000	ND
Diazinon	1000	ND
Dieldrin	1000	ND
Endrin	1000	ND
Ethyl parathion	1000	ND
Heptachlor	1000	ND
Heptachlor Epoxide	1000	ND
Linuron	1000	ND
Malathion	1000	ND
Methyl parathion	1000	ND
Toxaphene	1000	ND
Trifluraline	1000	ND
PCB's (total)	20	ND
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	3000	ND
Di-n-octyl phthalate	3000	ND
Bis (2-ethylhexyl) phthalate	3000	ND
Di-n-butyl-phthalate	3000	ND
Diethyl phthalate	3000	ND
Dimethylphthalate	3000	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	3000	ND
Acenaphthylene	3000	ND
Benzo (a) anthracene	3000	ND
Benzo (g,h,i) perylene	3000	ND
Chrysene	3000	ND
Fluoranthene	3000	ND
Indeno (1,2,3-cd) pyrene	3000	ND
Phenanthrene	3000	ND
Acenaphthene	3000	ND
Anthracene	3000	ND
Benzo (a) pyrene	3000	ND
Benzo (k) fluoranthene	3000	ND
Dibenzo (a,h) anthracene	3000	ND
Fluorene	3000	ND
Naphthalene	3000	ND
Pyrene	3000	ND
Surrogate Spike Recoveries (%):		
2,4,5,6-Tetrachloro-m-xylene		108
2-Fluorobiphenyl		73

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Facsimile (301) 821-
5920 North Belt, Suite 117 Houston, Texas 77036 (713) 441-4965
Capital Airport Springfield, Illinois 62707 (217) 522-0009

Certificate of Laboratory Analysis

Log Id: 10002 Sample Id: 5. 910164, S1-1, Rangia

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	800	ND
a-BHC	800	ND
Atrazine	800	ND
b-BHC	800	ND
g-BHC (Lindane)	800	ND
Chlordane	800	ND
4,4'-DDD	800	ND
4,4'-DDE	800	ND
4,4'-DDT	800	ND
Diazinon	800	ND
Dieldrin	800	ND
Endrin	800	ND
Ethyl parathion	800	ND
Heptachlor	800	ND
Heptachlor Epoxide	800	ND
Linuron	800	ND
Malathion	800	ND
Methyl parathion	800	ND
Toxaphene	800	ND
Trifluraline	800	ND
PCB's (total)	20	ND
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	2000	ND
Di-n-octyl phthalate	2000	ND
Bis (2-ethylhexyl) phthalate	2000	ND
Di-n-butyl-phthalate	2000	ND
Diethyl phthalate	2000	ND
Dimethylphthalate	2000	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	2000	ND
Acenaphthylene	2000	ND
Benzo (a) anthracene	2000	ND
Benzo (g,h,i) perylene	2000	ND
Chrysene	2000	ND
Fluoranthene	2000	ND
Indeno (1,2,3-cd) pyrene	2000	ND
Phenanthrene	2000	ND
Acenaphthene	2000	ND
Anthracene	2000	ND
Benzo (a) pyrene	2000	ND
Benzo (k) fluoranthene	2000	ND
Dibenzo (a,h) anthracene	2000	ND
Fluorene	2000	ND
Naphthalene	2000	ND
Pyrene	2000	ND
Surrogate Spike Recoveries (%):		
2,4,5,6-Tetrachloro-m-xylene		83
2-Fluorobiphenyl		113

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Clipper Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Facsimile (301) 821-
5920 North Belt, Suite 111 Houston, Texas 77396 (713) 441-4966
Capital Airport Springfield, Illinois 62707 (217) 522-0039

Certificate of Laboratory Analysis

Log Id: 10002 Sample Id: 6. 910165, HM22-1, Rangia

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	400	ND
a-BHC	400	ND
Atrazine	400	ND
b-BHC	400	ND
g-BHC (Lindane)	400	ND
Chlordane	400	ND
4,4'-DDD	400	ND
4,4'-DDE	400	ND
4,4'-DDT	400	ND
Diazinon	400	ND
Dieldrin	400	ND
Endrin	400	ND
Ethyl parathion	400	ND
Heptachlor	400	ND
Heptachlor Epoxide	400	ND
Linuron	400	ND
Malathion	400	ND
Methyl parathion	400	ND
Toxaphene	400	ND
Trifluraline	400	ND
PCB's (total)	60	ND
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	1000	ND
Di-n-octyl phthalate	1000	ND
Bis (2-ethylhexyl) phthalate	1000	ND
Di-n-butyl-phthalate	1000	ND
Diethyl phthalate	1000	ND
Dimethylphthalate	1000	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	1000	ND
Acenaphthylene	1000	ND
Benzo (a) anthracene	1000	ND
Benzo (g,h,i) perylene	1000	ND
Chrysene	1000	ND
Fluoranthene	1000	ND
Indeno (1,2,3-cd) pyrene	1000	ND
Phenanthrene	1000	ND
Acenaphthene	1000	ND
Anthracene	1000	ND
Benzo (a) pyrene	1000	ND
Benzo (k) fluoranthene	1000	ND
Dibenzo (a,h) anthracene	1000	ND
Fluorene	1000	ND
Naphthalene	1000	ND
Pyrene	1000	ND
Surrogate Spike Recoveries (%):		
2,4,5,6-Tetrachloro-m-xylene		94
2-Fluorobiphenyl		95

MARTEL

MARTEL LABORATORY SERVICES, INC.

[illegible] Fax [illegible]
[illegible] Texas [illegible] [illegible]
Global Airport [illegible] Illinois 62707 217/522-0009

Certificate of Laboratory Analysis

Log Id: 10002 Sample Id: 7. 910166, HMI6-1, Cyathura

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	3000	ND
a-BHC	3000	ND
Atrazine	3000	ND
b-BHC	3000	ND
g-BHC (Lindane)	3000	ND
Chlordane	3000	ND
4,4'-DDD	3000	ND
4,4'-DDE	3000	ND
4,4'-DDT	3000	ND
Diazinon	3000	ND
Dieldrin	3000	ND
Endrin	3000	ND
Ethyl parathion	3000	ND
Heptachlor	3000	ND
Heptachlor Epoxide	3000	ND
Linuron	3000	ND
Malathion	3000	ND
Methyl parathion	3000	ND
Toxaphene	3000	ND
Trifluraline	3000	ND
PCB's (total)	50	ND
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	5000	ND
Di-n-octyl phthalate	5000	ND
Bis (2-ethylhexyl) phthalate	5000	ND
Di-n-butyl-phthalate	5000	ND
Diethyl phthalate	5000	ND
Dimethylphthalate	5000	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	5000	ND
Acenaphthylene	5000	ND
Benzo (a) anthracene	5000	ND
Benzo (g,h,i) perylene	5000	ND
Chrysene	5000	ND
Fluoranthene	5000	ND
Indeno (1,2,3-cd) pyrene	5000	ND
Phenanthrene	5000	ND
Acenaphthene	5000	ND
Anthracene	5000	ND
Benzo (a) pyrene	5000	ND
Benzo (k) fluoranthene	5000	ND
Dibenzo (a,h) anthracene	5000	ND
Fluorene	5000	ND
Naphthalene	5000	ND
Pyrene	5000	ND
Surrogate Spike Recoveries (%):		
2,4,5,6-Tetrachloro-m-xylene		101
2-Fluorobiphenyl		77

MARTEL

MARTEL LABORATORY SERVICES, INC.

1123 Cromwell Bridge Road Baltimore Maryland 21204 (301) 823-7730 Facsimile (301) 821-
5320 North Belt, Suite 11 Houston, Texas 77396 (713) 441-4965
Capital Airport Springfield, Illinois 62707 (217) 522-0009

Certificate of Laboratory Analysis

Log Id: 10002 Sample Id: 8. 910167, HMI6-2, Macoma

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	200	ND
a-BHC	200	ND
Atrazine	200	ND
b-BHC	200	ND
g-BHC (Lindane)	200	ND
Chlordane	200	ND
4,4'-DDD	200	ND
4,4'-DDE	200	ND
4,4'-DDT	200	ND
Diazinon	200	ND
Dieldrin	200	ND
Endrin	200	ND
Ethyl parathion	200	ND
Heptachlor	200	ND
Heptachlor Epoxide	200	ND
Linuron	200	ND
Malathion	200	ND
Methyl parathion	200	ND
Toxaphene	200	ND
Trifluralina	200	ND
PCB's (total)	40	ND
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	300	ND
Di-n-octyl phthalate	300	ND
Bis (2-ethylhexyl) phthalate	300	ND
Di-n-butyl-phthalate	300	ND
Diethyl phthalate	300	ND
Dimethylphthalate	300	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	300	ND
Acenaphthylene	300	ND
Benzo (a) anthracene	300	ND
Benzo (g,h,i) perylene	300	ND
Chrysene	300	ND
Fluoranthene	300	ND
Indeno (1,2,3-cd) pyrene	300	ND
Phenanthrene	300	ND
Acenaphthene	300	ND
Anthracene	300	ND
Benzo (a) pyrene	300	ND
Benzo (k) fluoranthene	300	ND
Dibenzo (a,h) anthracene	300	ND
Fluorene	300	ND
Naphthalene	300	ND
Pyrene	300	ND
Surrogate Spike Recoveries (%):		
2,4,5,6-Tetrachloro-m-xylene		86
2-Fluorobiphenyl		94

MARTEL

MARTEL LABORATORY SERVICES, INC.

[illegible] Cromwell Bridge Road Baltimore, Maryland 21204 (301) 823-7730 Facsimile (301) 821-[illegible]
320 North Belt Suite [illegible] Houston, Texas 77396 (713) 441-4985
Capital Airport Springfield, Illinois 62707 (217) 522-0069

Certificate of Laboratory Analysis

Log Id: 10002 Sample Id: 9. 910168, S6-1, Cyathura

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	5000	ND
a-BHC	5000	ND
Atrazine	5000	ND
b-BHC	5000	ND
g-BHC (Lindane)	5000	ND
Chlordane	5000	ND
4,4'-DDD	5000	ND
4,4'-DDE	5000	ND
4,4'-DDT	5000	ND
Diazinon	5000	ND
Dieldrin	5000	ND
Endrin	5000	ND
Ethyl parathion	5000	ND
Heptachlor	5000	ND
Heptachlor Epoxide	5000	ND
Linuron	5000	ND
Malathion	5000	ND
Methyl parathion	5000	ND
Toxaphene	5000	ND
Trifluraline	5000	ND
PCB's (total)	100	ND
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	11000	ND
Di-n-octyl phthalate	11000	ND
Bis (2-ethylhexyl) phthalate	11000	ND
Di-n-butyl-phthalate	11000	ND
Diethyl phthalate	11000	ND
Dimethylphthalate	11000	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	11000	ND
Acenaphthylene	11000	ND
Benzo (a) anthracene	11000	ND
Benzo (g,h,i) perylene	11000	ND
Chrysene	11000	ND
Fluoranthene	11000	ND
Indeno (1,2,3-cd) pyrene	11000	ND
Phenanthrene	11000	ND
Acenaphthene	11000	ND
Anthracene	11000	ND
Benzo (a) pyrene	11000	ND
Benzo (k) fluoranthene	11000	ND
Dibenzo (a,h) anthracene	11000	ND
Fluorene	11000	ND
Naphthalene	11000	ND
Pyrene	11000	ND
Surrogate Spike Recoveries (%):		
2,4,5,6-Tetrachloro-m-xylene		113
2-Fluorobiphenyl		108

MARTEL

MARTEL LABORATORY SERVICES, INC.

1125 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Facsimile (301) 821-
1920 North Belt, Suite 111 Houston, Texas 77336 (713) 441-4965
Capital Airport Springfield, Illinois 62707 (217) 522-0309

Certificate of Laboratory Analysis

Log Id: 10002 Sample Id: 10. 910169, GS-1, Cyathura

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	5000	ND
a-BHC	5000	ND
Atrazine	5000	ND
b-BHC	5000	ND
g-BHC (Lindane)	5000	ND
Chlordane	5000	ND
4,4'-DDD	5000	ND
4,4'-DDE	5000	ND
4,4'-DDT	5000	ND
Diazinon	5000	ND
Dieldrin	5000	ND
Endrin	5000	ND
Ethyl parathion	5000	ND
Heptachlor	5000	ND
Heptachlor Epoxide	5000	ND
Linuron	5000	ND
Malathion	5000	ND
Methyl parathion	5000	ND
Toxaphene	5000	ND
Trifluraline	5000	ND
PCB's (total)	100	ND
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	9000	ND
Di-n-octyl phthalate	9000	ND
Bis (2-ethylhexyl) phthalate	9000	ND
Di-n-butyl-phthalate	9000	ND
Diethyl phthalate	9000	ND
Dimethylphthalate	9000	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	9000	ND
Acenaphthylene	9000	ND
Benzo (a) anthracene	9000	ND
Benzo (g,h,i) perylene	9000	ND
Chrysene	9000	ND
Fluoranthene	9000	ND
Indeno (1,2,3-cd) pyrene	9000	ND
Phenanthrene	9000	ND
Acenaphthene	9000	ND
Anthracene	9000	ND
Benzo (a) pyrene	9000	ND
Benzo (k) fluoranthene	9000	ND
Dibenzo (a,h) anthracene	9000	ND
Fluorene	9000	ND
Naphthalene	9000	ND
Pyrene	9000	ND
Surrogate Spike Recoveries (%):		
2,4,5,6-Tetrachloro-m-xylene		128
2-Fluorobiphenyl		99

MARTEL

MARTEL LABORATORY SERVICES, INC.

Baltimore, Maryland 21204 (301) 825-7790 Facsimile (301) 821-[illegible]
Houston, Texas 77036 (713) 441-4985
Capital Airport Springfield, Illinois 62707 (217) 522-2009

Certificate of Laboratory Analysis

Log Id: 10002 Sample Id: 11. 910170, GS-2, Macoma

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	400	ND
a-BHC	400	ND
Atrazine	400	ND
b-BHC	400	ND
g-BHC (Lindane)	400	ND
Chlordane	400	ND
4,4'-DDD	400	ND
4,4'-DDE	400	ND
4,4'-DDT	400	ND
Diazinon	400	ND
Dieldrin	400	ND
Endrin	400	ND
Ethyl parathion	400	ND
Heptachlor	400	ND
Heptachlor Epoxide	400	ND
Linuron	400	ND
Malathion	400	ND
Methyl parathion	400	ND
Toxaphene	400	ND
Trifluraline	400	ND
PCB's (total)	60	ND
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	500	ND
Di-n-octyl phthalate	500	ND
Bis (2-ethylhexyl) phthalate	500	ND
Di-n-butyl-phthalate	500	ND
Diethyl phthalate	500	ND
Dimethylphthalate	500	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	500	ND
Acenaphthylene	500	ND
Benzo (a) anthracene	500	ND
Benzo (g,h,i) perylene	500	ND
Chrysene	500	ND
Fluoranthene	500	ND
Indeno (1,2,3-cd) pyrene	500	ND
Phenanthrene	500	ND
Acenaphthene	500	ND
Anthracene	500	ND
Benzo (a) pyrene	500	ND
Benzo (k) fluoranthene	500	ND
Dibenzo (a,h) anthracene	500	ND
Fluorene	500	ND
Naphthalene	500	ND
Pyrene	500	ND
Surrogate Spike Recoveries (%):		
2,4,5,6-Tetrachloro-m-xylene		101
2-Fluorobiphenyl		100

MARTEL

MARTEL LABORATORY SERVICES, INC.

1125 Cromwell Bridge Road Baltimore Maryland 21204 (301) 825-7790 Facsimile (301) 821-0154
8920 North Belt, Suite 111 Houston, Texas 77096 (713) 441-4955
Capital Airport Springfield, Illinois 62707 (217) 522-0009

Certificate of Laboratory Analysis

Log Id: 10002 Sample Id: 12. 910171, G25-1, Rangia

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	400	ND
a-BHC	400	ND
Atrazine	400	ND
b-BHC	400	ND
g-BHC (Lindane)	400	ND
Chlordane	400	ND
4,4'-DDD	400	ND
4,4'-DDE	400	ND
4,4'-DDT	400	ND
Diazinon	400	ND
Dieldrin	400	ND
Endrin	400	ND
Ethyl parathion	400	ND
Heptachlor	400	ND
Heptachlor Epoxide	400	ND
Linuron	400	ND
Malathion	400	ND
Methyl parathion	400	ND
Toxaphene	400	ND
Trifluraline	400	ND
PCB's (total)	60	220
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	500	ND
Di-n-octyl phthalate	500	ND
Bis (2-ethylhexyl) phthalate	500	ND
Di-n-butyl-phthalate	500	ND
Diethyl phthalate	500	ND
Dimethylphthalate	500	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	500	ND
Acenaphthylene	500	ND
Benzo (a) anthracene	500	ND
Benzo (g,h,i) perylene	500	ND
Chrysene	500	ND
Fluoranthene	500	ND
Indeno (1,2,3-cd) pyrene	500	ND
Phenanthrene	500	ND
Acenaphthene	500	ND
Anthracene	500	ND
Benzo (a) pyrene	500	ND
Benzo (k) fluoranthene	500	ND
Dibenzo (a,h) anthracene	500	ND
Fluorene	500	ND
Naphthalene	500	ND
Pyrene	500	ND
Surrogate Spike Recoveries (%):		
2,4,5,6-Tetrachloro-m-xylene		126
2-Fluorobiphenyl		104

MARTEL

MARTEL LABORATORY SERVICES, INC.

925 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Facsimile (301) 821-0134
1920 North Belt Suite 111 Houston, Texas 77036 (713) 441-4965
Capital Airport Springfield, Illinois 62707 (217) 522-5009

Certificate of Laboratory Analysis

Log Id: 10002 Sample Id: 13. 910172, HMI2, Rangia

Compound	Detection Limit	Result
Pesticides, Herbicides, and PCB's, EPA Method 608, ug/kg		
Aldrin	400	ND
a-BHC	400	ND
Atrazine	400	ND
b-BHC	400	ND
g-BHC (Lindane)	400	ND
Chlordane	400	ND
4,4'-DDD	400	ND
4,4'-DDE	400	ND
4,4'-DDT	400	ND
Diazinon	400	ND
Dieldrin	400	ND
Endrin	400	ND
Ethyl parathion	400	ND
Heptachlor	400	ND
Heptachlor Epoxide	400	ND
Linuron	400	ND
Malathion	400	ND
Methyl parathion	400	ND
Toxaphene	400	ND
Trifluraline	400	ND
PCB's (total)	60	ND
Phthalates, EPA Method 606, ug/kg		
Butyl benzyl phthalate	1000	ND
Di-n-octyl phthalate	1000	ND
Bis (2-ethylhexyl) phthalate	1000	ND
Di-n-butyl-phthalate	1000	ND
Diethyl phthalate	1000	ND
Dimethylphthalate	1000	ND
Polynuclear Aromatic Hydrocarbons, EPA Method 610, ug/kg		
Benzo (b) fluoranthene	1000	ND
Acenaphthylene	1000	ND
Benzo (a) anthracene	1000	ND
Benzo (g,h,i) perylene	1000	ND
Chrysene	1000	ND
Fluoranthene	1000	ND
Indeno (1,2,3-cd) pyrene	1000	ND
Phenanthrene	1000	ND
Acenaphthene	1000	ND
Anthracene	1000	ND
Benzo (a) pyrene	1000	ND
Benzo (k) fluoranthene	1000	ND
Dibenzo (a,h) anthracene	1000	ND
Fluorene	1000	ND
Naphthalene	1000	ND
Pyrene	1000	ND
Surrogate Spike Recoveries (%):		
2,4,5,6-Tetrachloro-m-xylene		113
2-Fluorobiphenyl		95

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Facsimile (301) [illegible]
5920 North Belt, Suite 111 Houston, Texas 77296 (713) 441-4965
Capital Airport Springfield, Illinois 62707 (217) 522-3009

Certificate of Laboratory Analysis

06/29/91

Analytical Information
Dates, Times, Analysts
(dates may refer to date begun or date approved)

Log Number	Test Code	Date Performed	Time Performed	Analyst Initials
** Sample Id: 1. 910160, HMI 2-2, Cyathura				
10002	CR	/ /		
10002	FE	/ /		
10002	MN	/ /		
10002	ZN	/ /		
10002	NI	/ /		
10002	CU	/ /		
10002	PPPEST	/ /		
10002	PPBN	/ /	:	
10002	WEIGHTB	06/24/91	16:00	BES
10002	WEIGHTP	06/18/91	15:00	RLC
** Sample Id: 2. 910161, G84-1, Cyathura				
10002	CR	06/26/91	12:00	BAB
10002	FE	06/26/91	12:00	BAB
10002	MN	06/26/91	12:00	BAB
10002	ZN	06/26/91	12:00	BAB
10002	NI	06/26/91	12:00	BAB
10002	CU	06/26/91	12:00	BAB
10002	PPPEST	06/22/91	21:15	RLC
10002	PPBN	06/21/91	19:32	FJS
10002	WEIGHTB	06/24/91	16:00	BES
10002	WEIGHTP	06/18/91	15:00	RLC
** Sample Id: 3. 910162, G84-2, Macoma				
10002	CR	06/26/91	12:00	BAB
10002	FE	06/26/91	12:00	BAB
10002	MN	06/26/91	12:00	BAB
10002	ZN	06/26/91	12:00	BAB
10002	NI	06/26/91	12:00	BAB
10002	CU	06/26/91	12:00	BAB
10002	PPPEST	06/23/91	23:02	RLC
10002	PPBN	06/21/91	20:30	FJS
10002	WEIGHTB	06/24/91	16:00	BES
10002	WEIGHTP	06/18/91	15:00	RLC
** Sample Id: 4. 910163, S4-1, Rangia				

MARTEL

MARTEL LABORATORY SERVICES, INC.

1325 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7730 Facsimile (301) 821-[illegible]
1920 North Belt, Suite [illegible] Houston, Texas 77396 (713) 441-4965
Capital Airport Springfield, Illinois 62707 (217) 522-0009

Certificate of Laboratory Analysis

06/29/91

Analytical Information
Dates, Times, Analysts
(dates may refer to date begun or date approved)

Log Number	Test Code	Date Performed	Time Performed	Analyst Initials
10002	CR	/ /		
10002	FE	/ /		
10002	MN	/ /		
10002	ZN	/ /		
10002	NI	/ /		
10002	CU	/ /		
10002	PPPEST	06/23/91	00:49	RLC
10002	PPBN	06/21/91	21:29	FJS
10002	WEIGHTB	06/24/91	16:00	BES
10002	WEIGHTP	06/18/91	15:00	RLC
** Sample Id: 5. 910164, S1-1, Rangia				
10002	CR	06/26/91	12:00	BAB
10002	FE	06/26/91	12:00	BAB
10002	MN	06/26/91	12:00	BAB
10002	ZN	06/26/91	12:00	BAB
10002	NI	06/26/91	12:00	BAB
10002	CU	06/26/91	12:00	BAB
10002	PPPEST	06/23/91	02:36	RLC
10002	PPBN	06/21/91	22:27	FJS
10002	WEIGHTB	06/24/91	16:00	BES
10002	WEIGHTP	06/18/91	15:00	RLC
** Sample Id: 6. 910165, HM22-1, Rangia				
10002	CR	06/26/91	12:00	BAB
10002	FE	06/26/91	12:00	BAB
10002	MN	06/26/91	12:00	BAB
10002	ZN	06/26/91	12:00	BAB
10002	NI	06/26/91	12:00	BAB
10002	CU	06/26/91	12:00	BAB
10002	PPPEST	06/23/91	04:23	RLC
10002	PPBN	06/21/91	23:26	FJS
10002	WEIGHTB	06/24/91	16:00	BES
10002	WEIGHTP	06/18/91	15:00	RLC
** Sample Id: 7. 910166, HMI6-1, Cyathura				
10002	CR	06/26/91	12:00	BAB

MARTEL

MARTEL LABORATORY SERVICES, INC.

1025 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Facsimile (301) 621-
5520 North Belt, Suite 111 Houston, Texas 77396 (713) 441-2965
Capital Airport Springfield, Illinois 62707 (217) 522-0009

Certificate of Laboratory Analysis

06/29/91

Analytical Information
Dates, Times, Analysts
(dates may refer to date begun or date approved)

Log Number	Test Code	Date Performed	Time Performed	Analyst Initials
10002	FE	06/26/91	12:00	BAB
10002	MN	06/26/91	12:00	BAB
10002	ZN	06/26/91	12:00	BAB
10002	NI	06/26/91	12:00	BAB
10002	CU	06/26/91	12:00	BAB
10002	PPPEST	06/23/91	06:11	RLC
10002	PPBN	06/22/91	00:24	FJS
10002	WEIGHTB	06/24/91	16:00	BES
10002	WEIGHTP	06/18/91	15:00	RLC
** Sample Id: 8. 910167, HMI6-2, Macoma				
10002	CR	06/26/91	12:00	BAB
10002	FE	06/26/91	12:00	BAB
10002	MN	06/26/91	12:00	BAB
10002	ZN	06/26/91	12:00	BAB
10002	NI	06/26/91	12:00	BAB
10002	CU	06/26/91	12:00	BAB
10002	PPPEST	06/23/91	07:58	RLC
10002	PPBN	06/22/91	01:22	FJS
10002	WEIGHTB	06/24/91	16:00	BES
10002	WEIGHTP	06/18/91	15:00	RLC
** Sample Id: 9. 910168, S6-1, Cyathura				
10002	CR	06/26/91	12:00	BAB
10002	FE	06/26/91	12:00	BAB
10002	MN	06/26/91	12:00	BAB
10002	ZN	06/26/91	12:00	BAB
10002	NI	06/26/91	12:00	BAB
10002	CU	06/26/91	12:00	BAB
10002	PPPEST	06/23/91	09:44	RLC
10002	PPBN	06/22/91	02:20	FJS
10002	WEIGHTB	06/24/91	16:00	BES
10002	WEIGHTP	06/18/91	15:00	RLC
** Sample Id: 10. 910169, GS-1, Cyathura				
10002	CR	06/26/91	12:00	BAB
10002	FE	06/26/91	12:00	BAB

MARTEL

MARTEL LABORATORY SERVICES, INC.

1125 Cromwell Bridge Road Baltimore, Maryland 21204 (301) 825-7790 Facsimile (301) 821-[illegible]
1920 North Belt, Suite 111 Houston, Texas 77396 (713) 441-4965
Capital Airport Springfield, Illinois 62707 (217) 522-0009

Certificate of Laboratory Analysis

06/29/91

Analytical Information
Dates, Times, Analysts
(dates may refer to date begun or date approved)

Log Number	Test Code	Date Performed	Time Performed	Analyst Initials
10002	MN	06/26/91	12:00	BAB
10002	ZN	06/26/91	12:00	BAB
10002	NI	06/26/91	12:00	BAB
10002	CU	06/26/91	12:00	BAB
10002	PPPEST	06/23/91	13:18	RLC
10002	PPBN	06/22/91	03:18	FJS
10002	WEIGHTB	06/24/91	16:00	BES
10002	WEIGHTP	06/18/91	15:00	RLC
** Sample Id: 11. 910170, GS-2, Macoma				
10002	CR	/ /		
10002	FE	/ /		
10002	MN	/ /		
10002	ZN	/ /		
10002	NI	/ /		
10002	CU	/ /		
10002	PPPEST	06/23/91	15:05	RLC
10002	PPBN	06/22/91	04:15	FJS
10002	WEIGHTB	06/24/91	16:00	BES
10002	WEIGHTP	06/19/91	15:00	RLC
** Sample Id: 12. 910171, G25-1, Rangia				
10002	CR	06/26/91	12:00	BAB
10002	FE	06/26/91	12:00	BAB
10002	MN	06/26/91	12:00	BAB
10002	ZN	06/26/91	12:00	BAB
10002	NI	06/26/91	12:00	BAB
10002	CU	06/26/91	12:00	BAB
10002	PPPEST	06/23/91	16:52	RLC
10002	PPBN	06/22/91	05:13	FJS
10002	WEIGHTB	06/24/91	16:00	BES
10002	WEIGHTP	06/19/91	15:00	RLC
** Sample Id: 13. 910172, HMI2, Rangia				
10002	CR	06/26/91	12:00	BAB
10002	FE	06/26/91	12:00	BAB
10002	MN	06/26/91	12:00	BAB