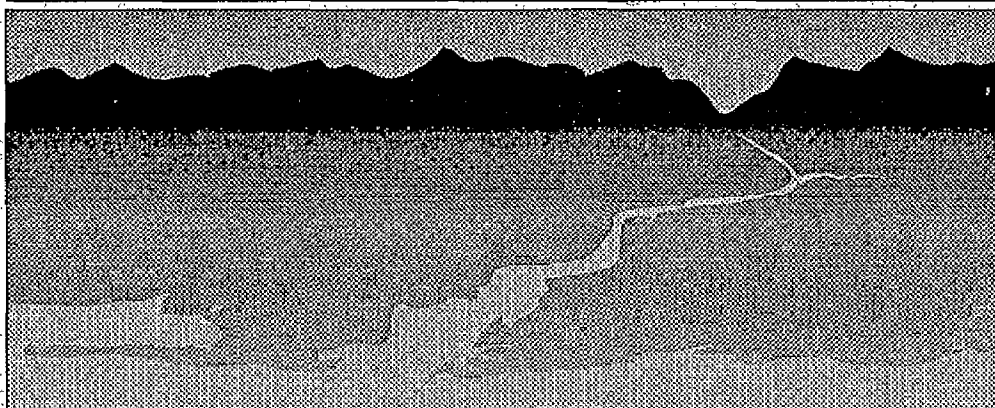

FINAL REPORT
VOLUME 3: DATA TABLES
APPENDICES B, C, D, & E

LOWER COLUMBIA RIVER



BI-STATE PROGRAM

RECONNAISSANCE SURVEY OF THE LOWER COLUMBIA RIVER

TASK 6: RECONNAISSANCE REPORT

JANUARY 1993

Prepared By:

TETRA TECH

In Association With:

**EVS CONSULTANTS
DAVID EVANS & ASSOCIATES**

TETRA TECH

TC 8526-06
FINAL REPORT
VOLUME 3: DATA TABLES
APPENDICES B, C, D, & E

RECONNAISSANCE SURVEY OF THE LOWER COLUMBIA RIVER

TASK 6 RECONNAISSANCE REPORT

JANUARY 1993

Prepared For:

**The Lower Columbia River
Bi-State Water Quality Program**

Prepared By:

**TETRA TECH
11820 NORTHUP WAY, SUITE 100E
BELLEVUE, WA 98005**

**In Association With
EVS CONSULTANTS
DAVID EVANS & ASSOCIATES**

TABLE OF CONTENTS

APPENDIX B. WATER PARAMETERS DATA

APPENDIX C. SEDIMENT CHEMISTRY DATA

APPENDIX D. TISSUE BIOACCUMULATION DATA

APPENDIX E. BENTHIC COMMUNITY DATA

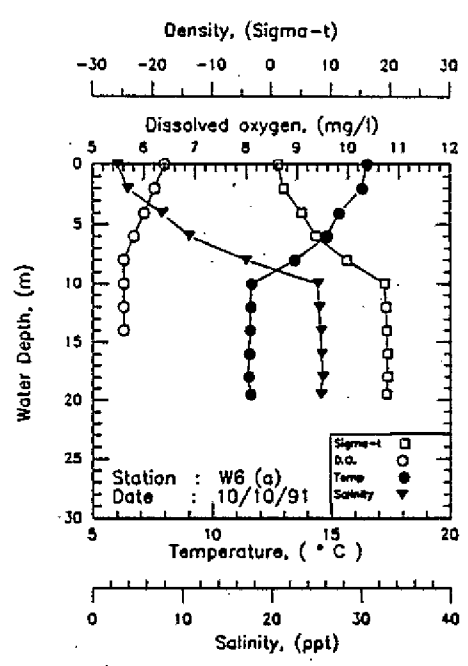
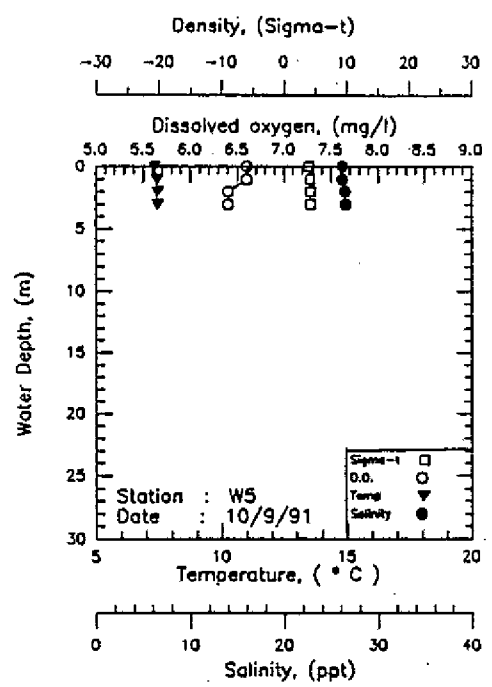
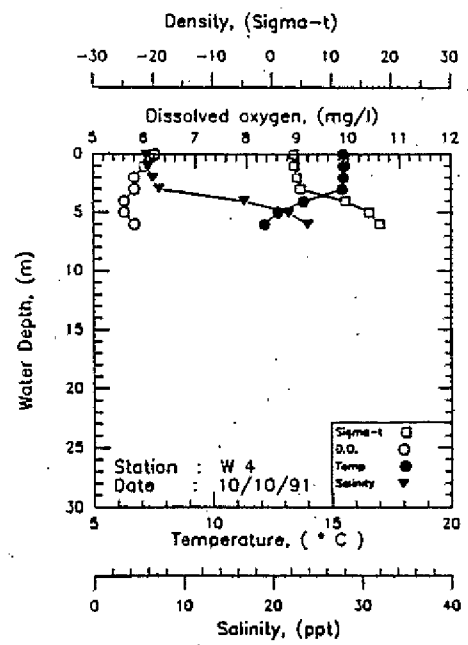
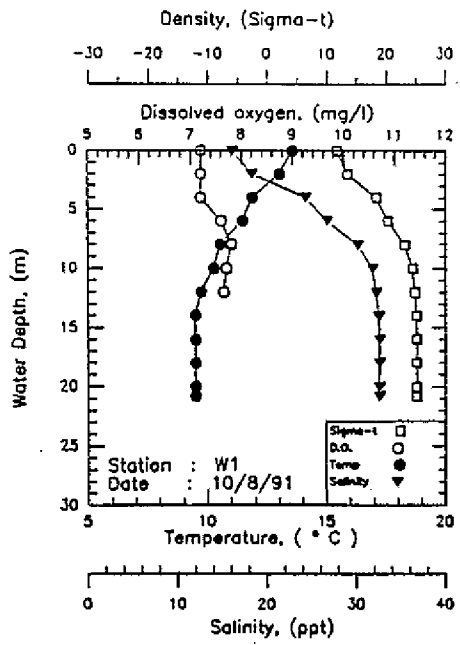
APPENDIX B

WATER PARAMETERS DATA

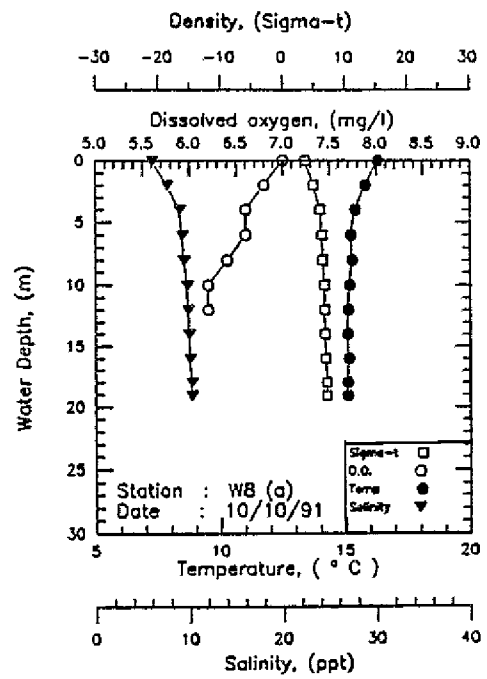
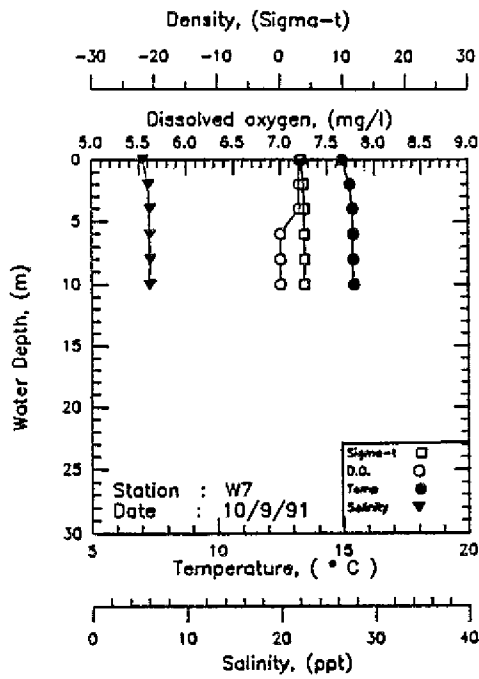
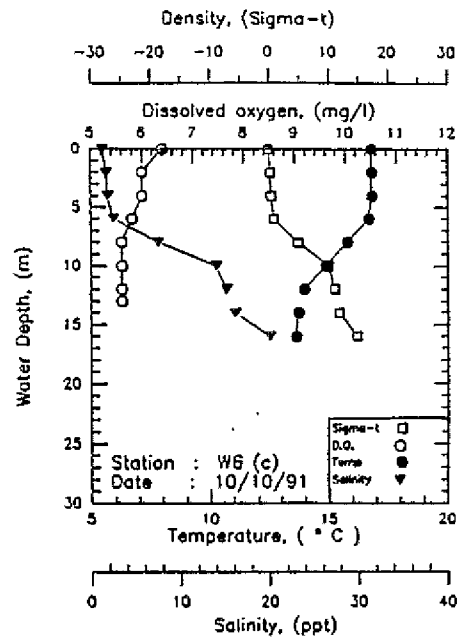
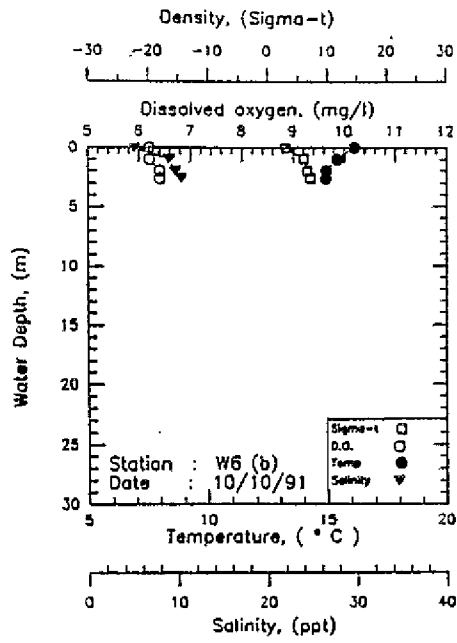
APPENDIX B: WATER PARAMETERS DATA

- B-1. WATER QUALITY PROFILES
- B-2. WATER QUALITY PROFILE DATA
- B-3. WATER QUALITY FIELD DATA
- B-4. NUTRIENTS AND MISCELLANEOUS PARAMETERS
- B-5. PHYTOPLANKTON
- B-6. BACTERIA
- B-7. METALS IN WATER
- B-8. PHENOLIC COMPOUNDS IN WATER
- B-9. SEMIVOLATILES IN WATER: HALOGENATED ETHERS
- B-10. SEMIVOLATILES IN WATER: NITROAROMATICS
- B-11. SEMIVOLATILES IN WATER: NITROSAMINES
- B-12. SEMIVOLATILES IN WATER: NAPHTHALENES
- B-13. SEMIVOLATILES IN WATER: POLYNUCLEAR AROMATICS
- B-14. SEMIVOLATILES IN WATER: CHLORINATED BENZENES
- B-15. SEMIVOLATILES IN WATER: BENZIDINES
- B-16. SEMIVOLATILES IN WATER: PHTHALATE ESTERS
- B-17. VOLATILES IN WATER
- B-18. PESTICIDES IN WATER
- B-19. PCBs IN WATER
- B-20. AOX IN WATER

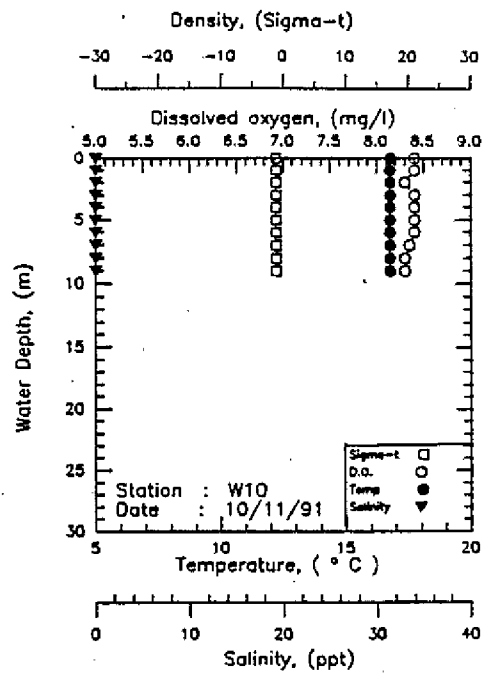
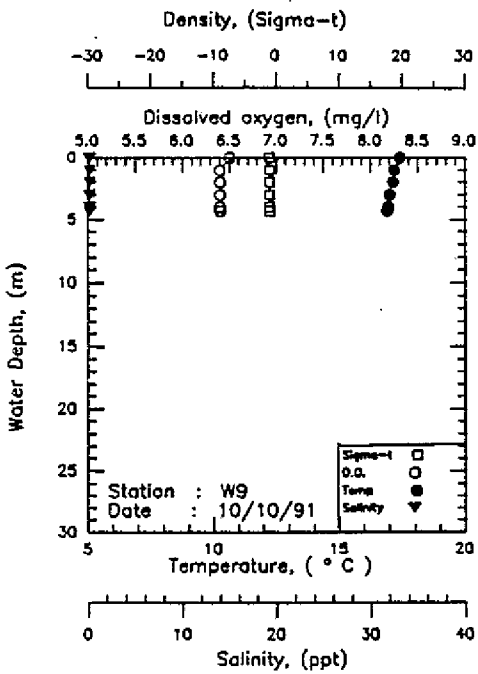
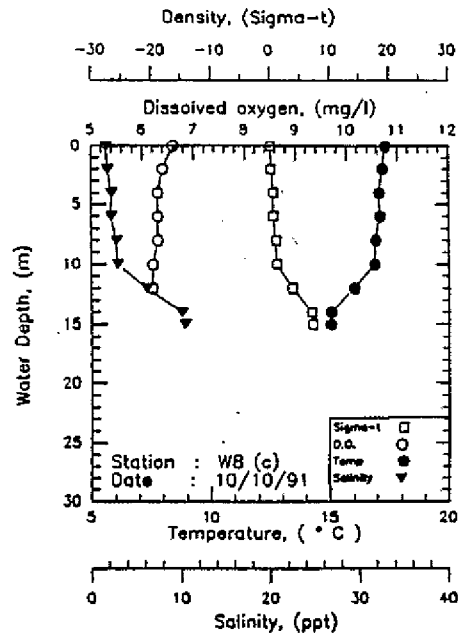
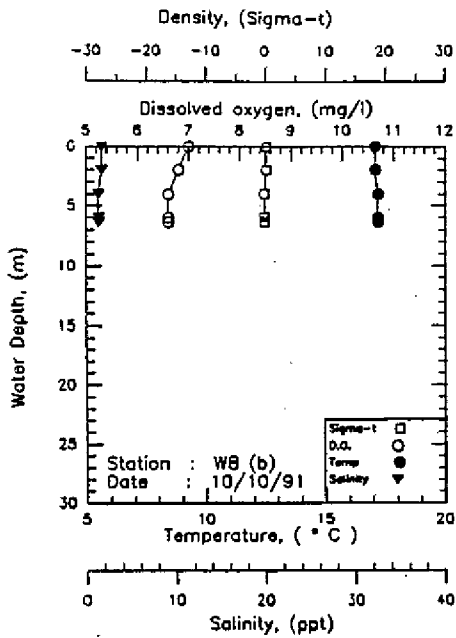
APPENDIX B-1



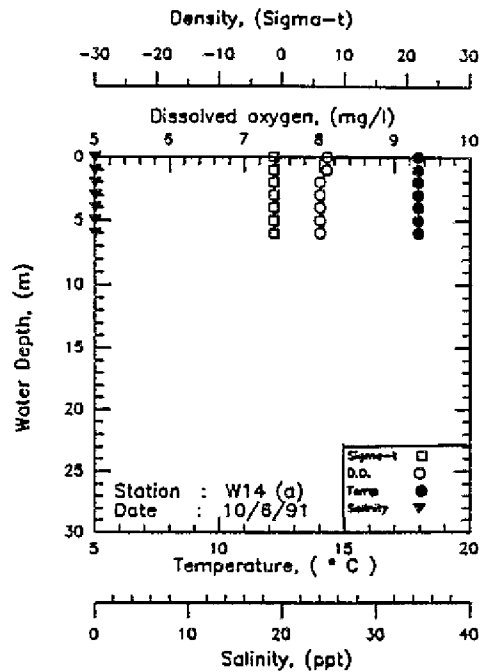
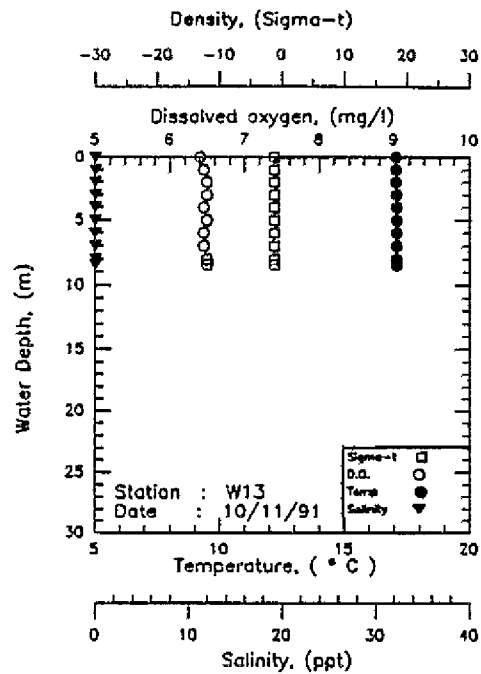
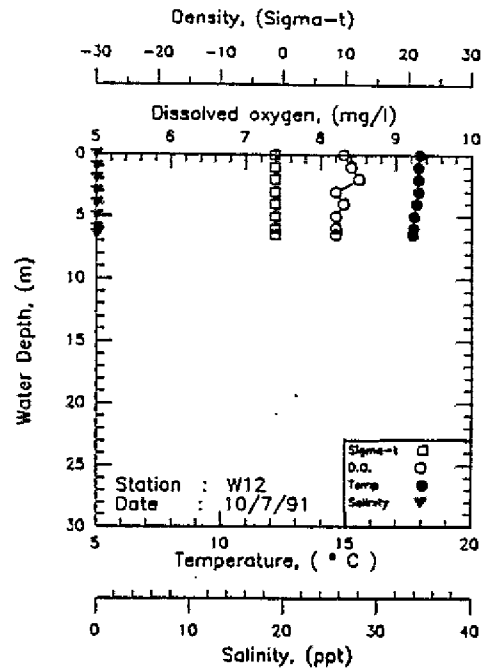
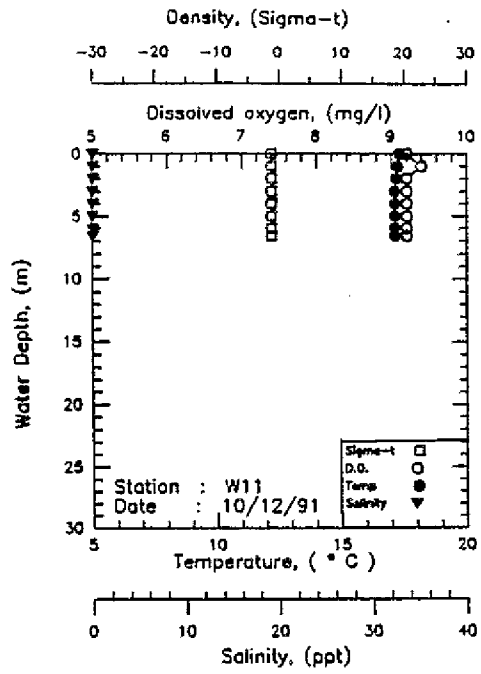
APPENDIX B-1



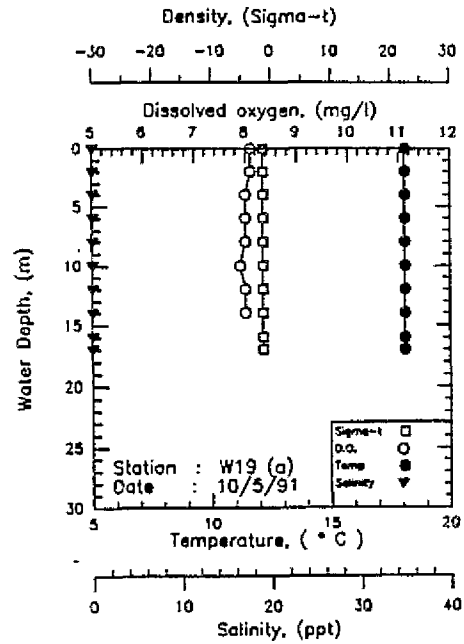
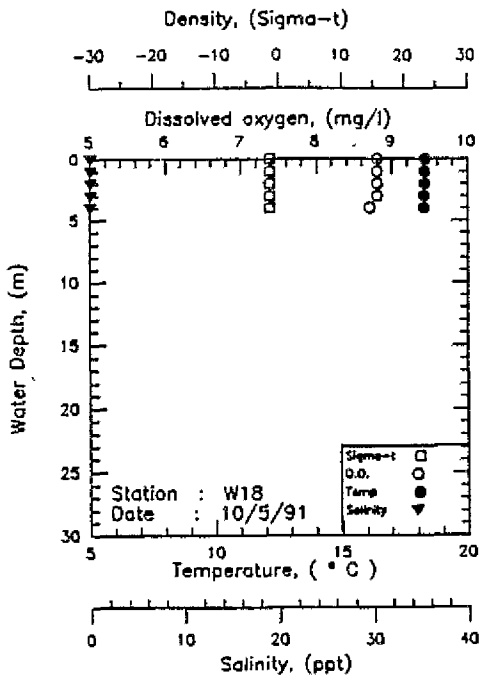
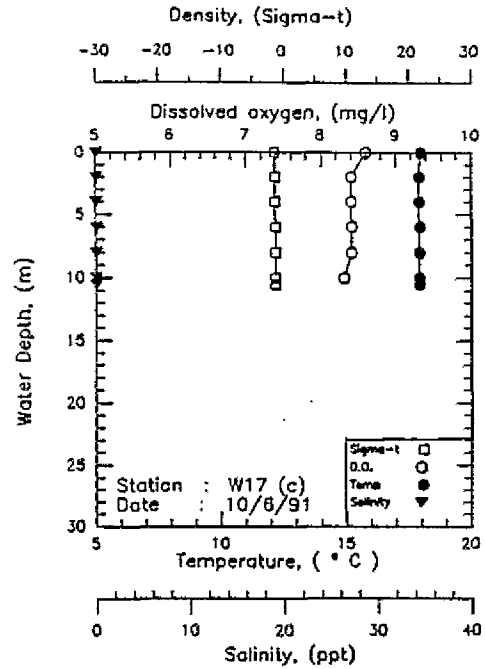
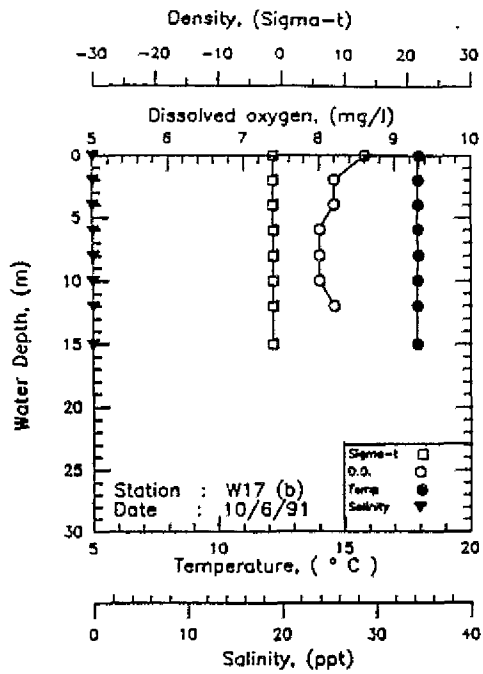
APPENDIX B-1



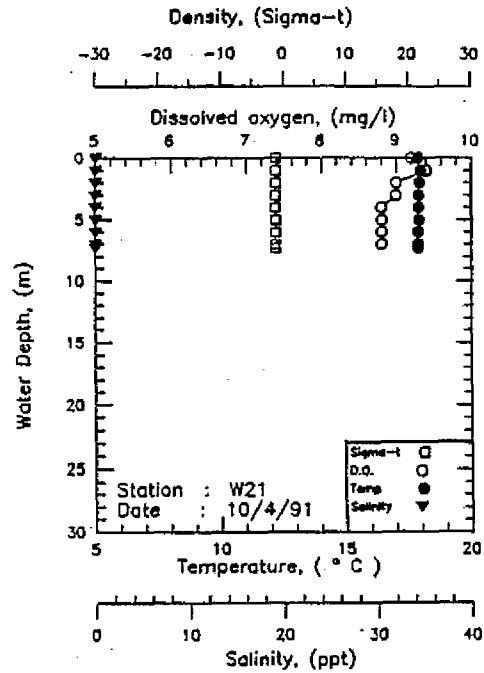
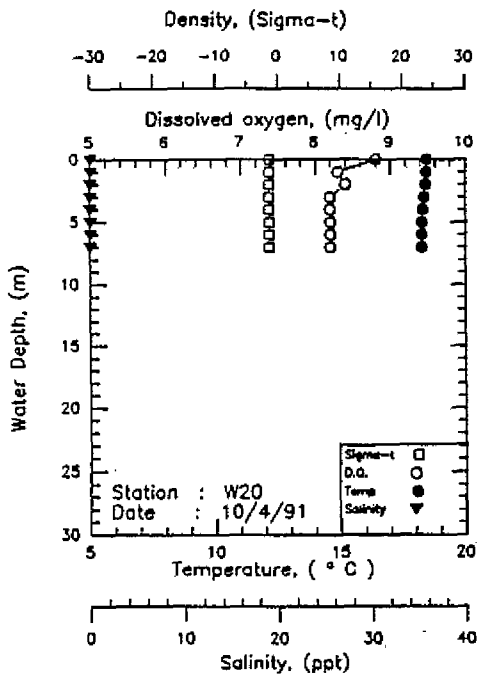
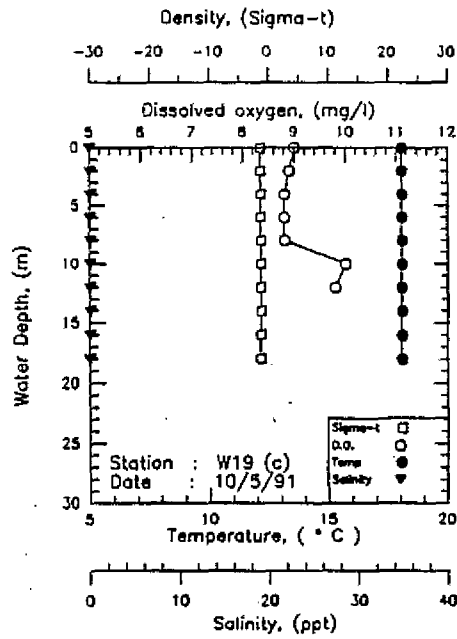
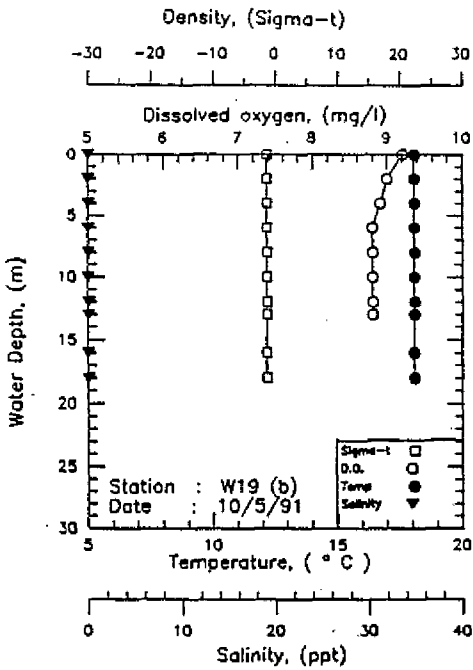
APPENDIX B-1



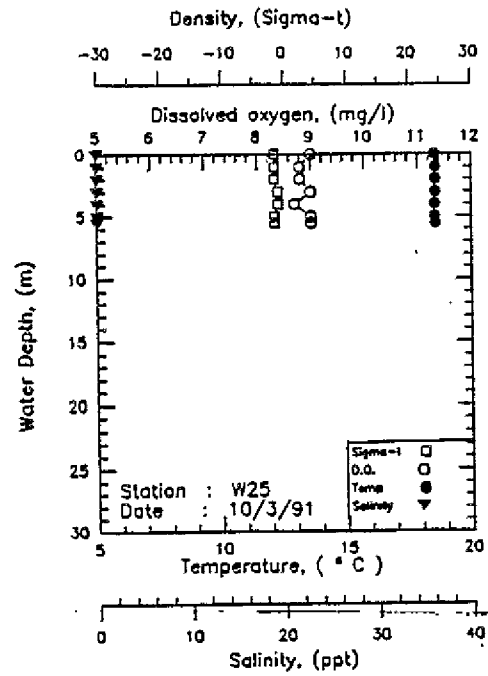
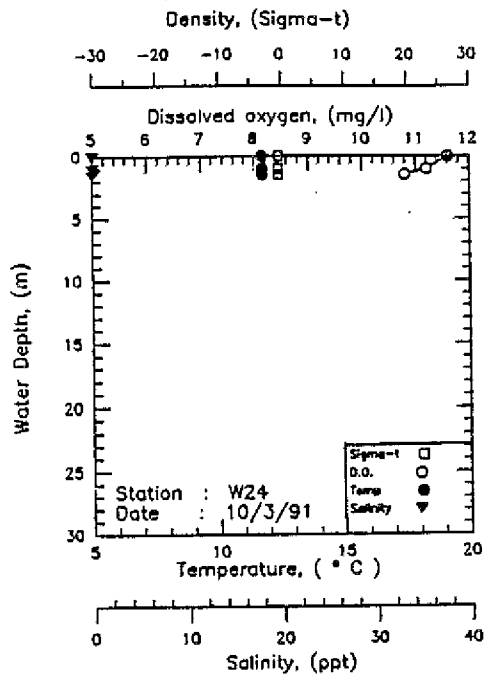
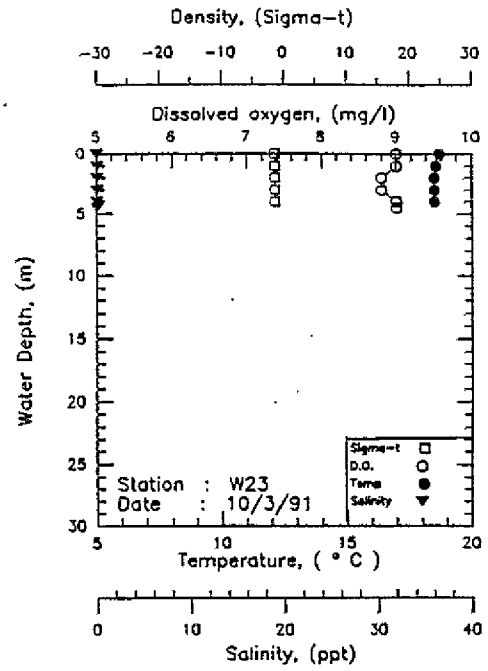
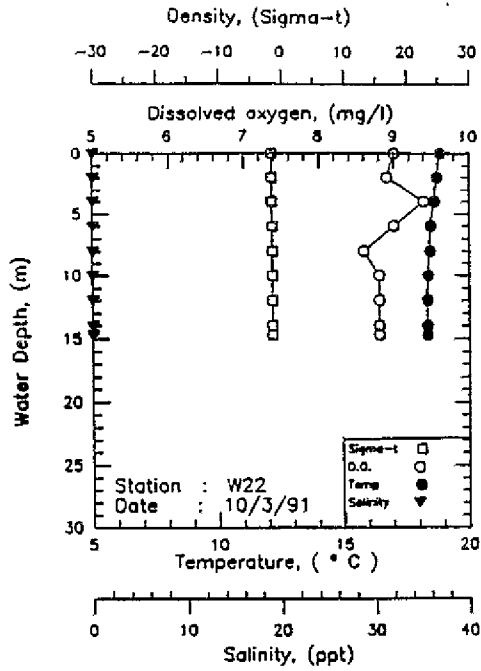
APPENDIX B-1



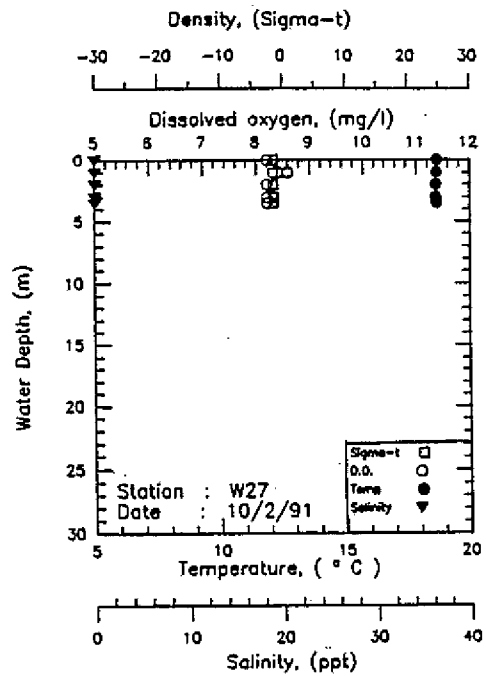
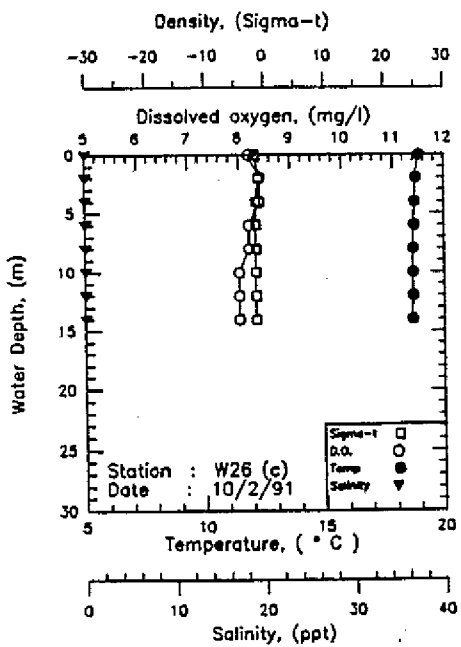
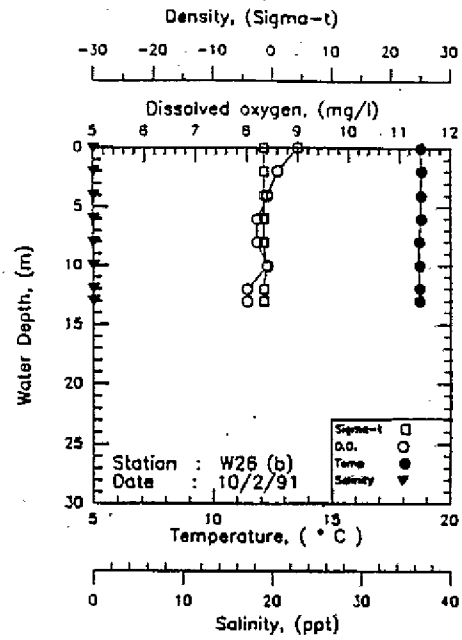
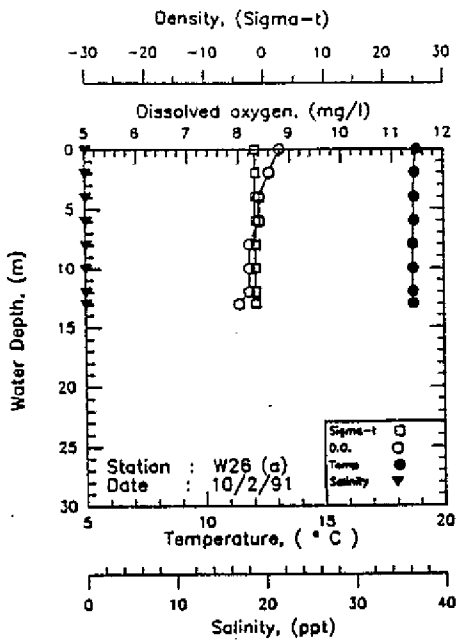
APPENDIX B-1



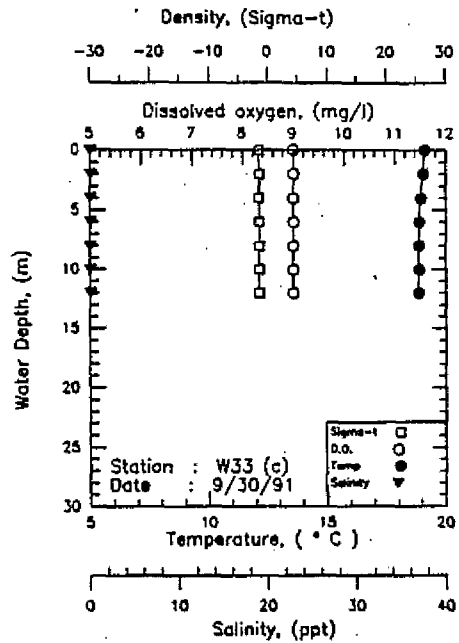
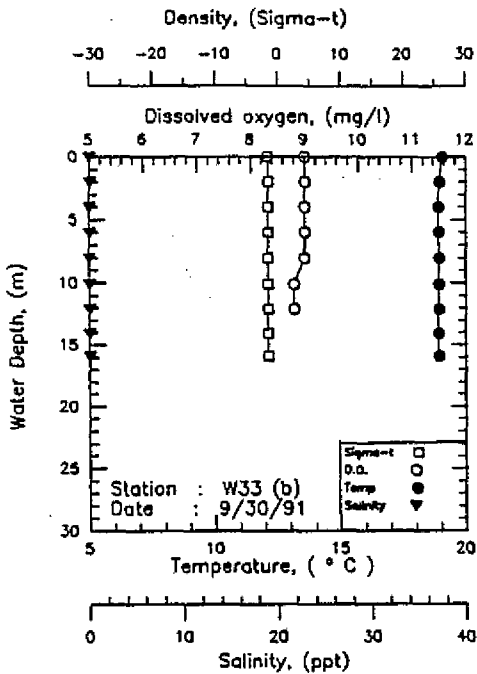
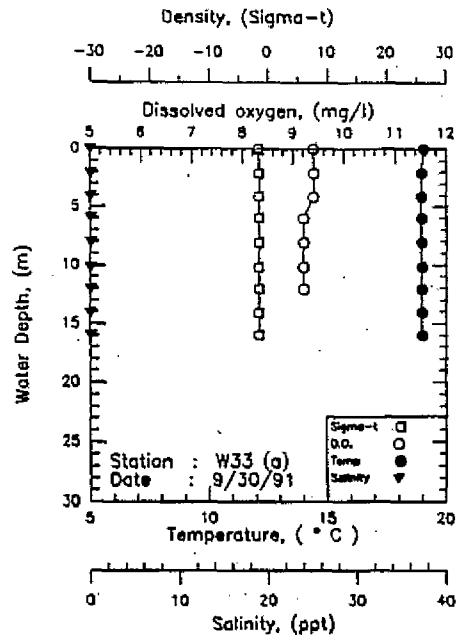
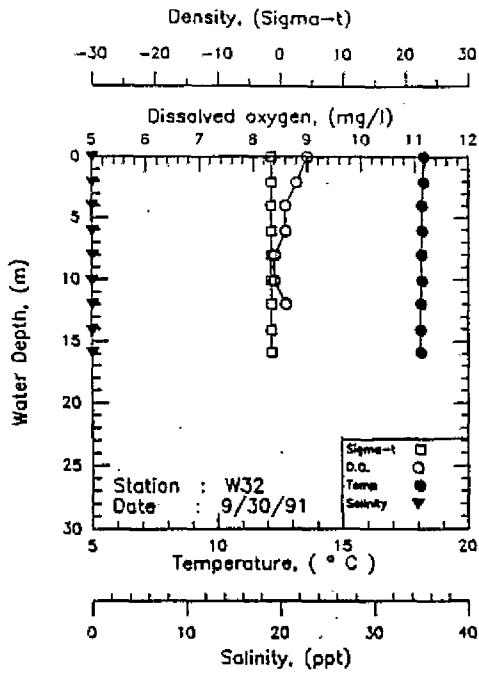
APPENDIX B-1



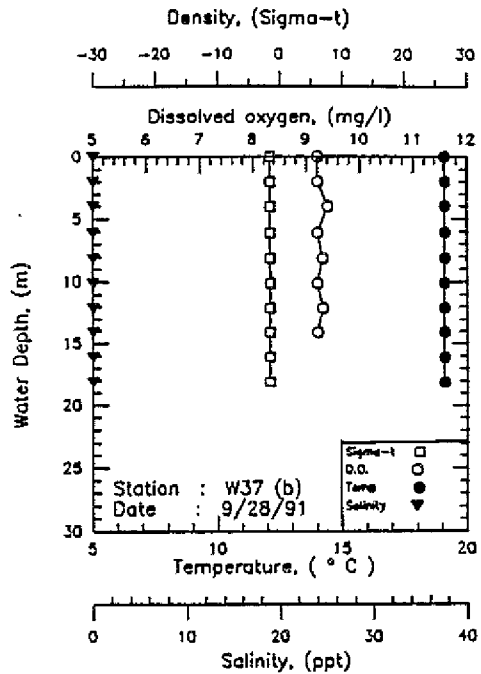
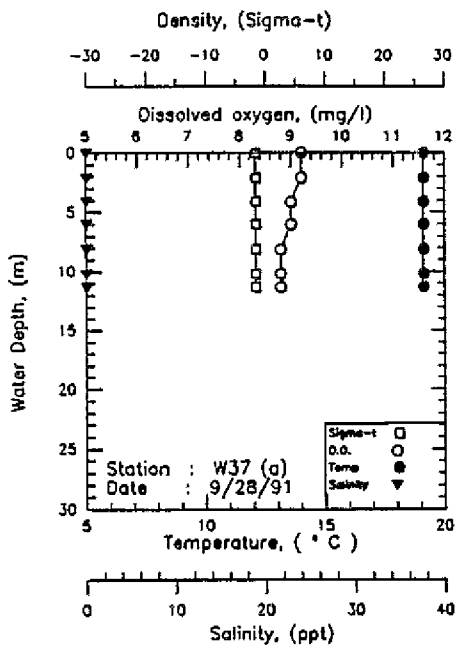
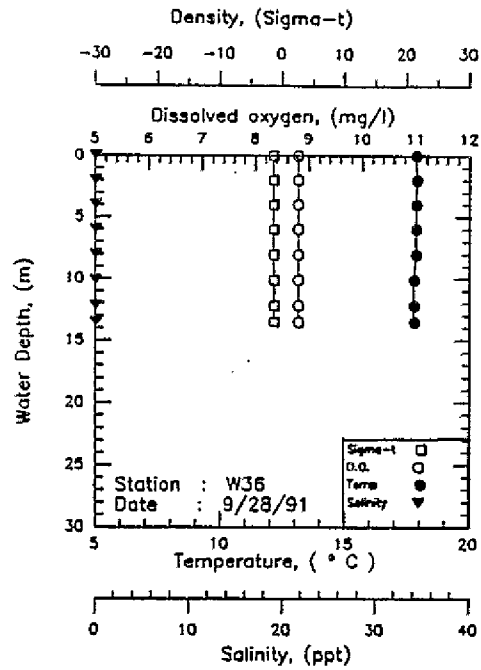
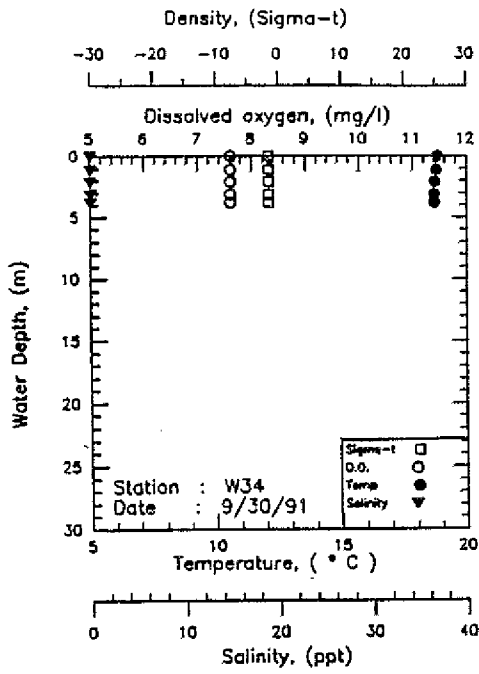
APPENDIX B-1



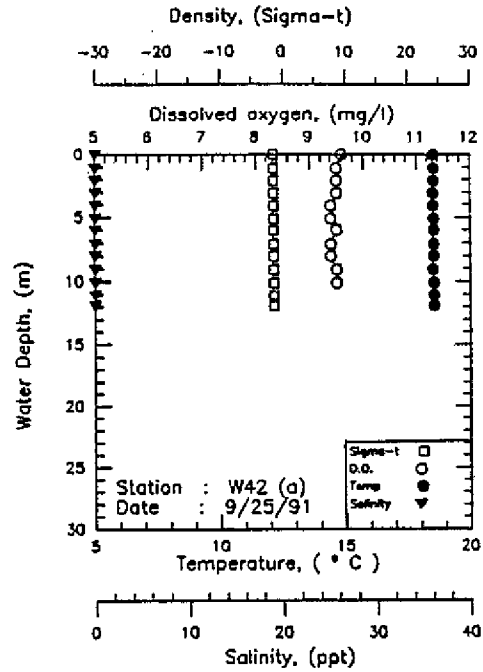
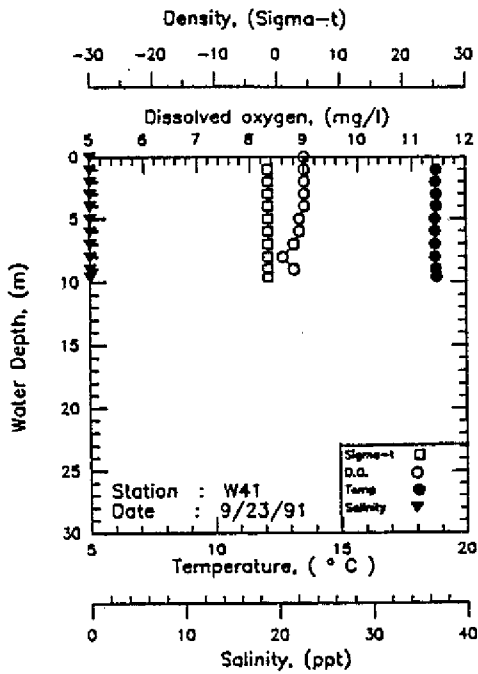
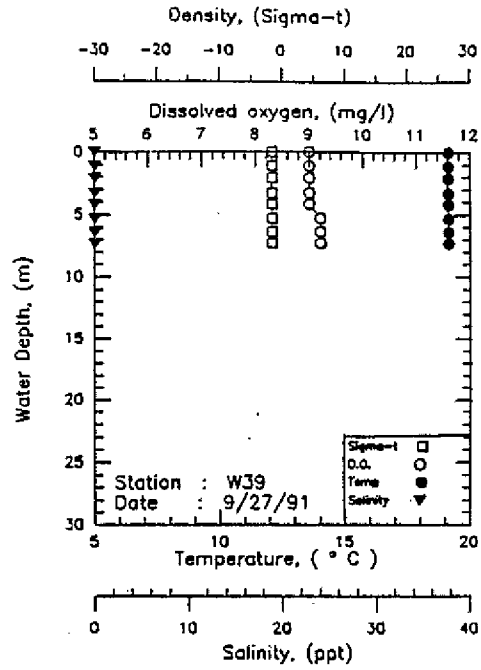
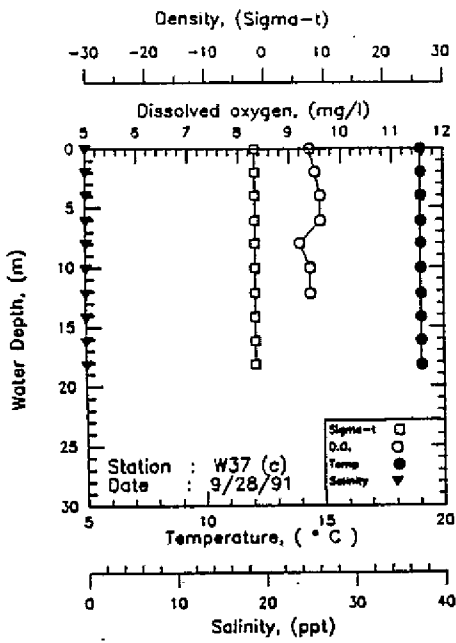
APPENDIX B-1



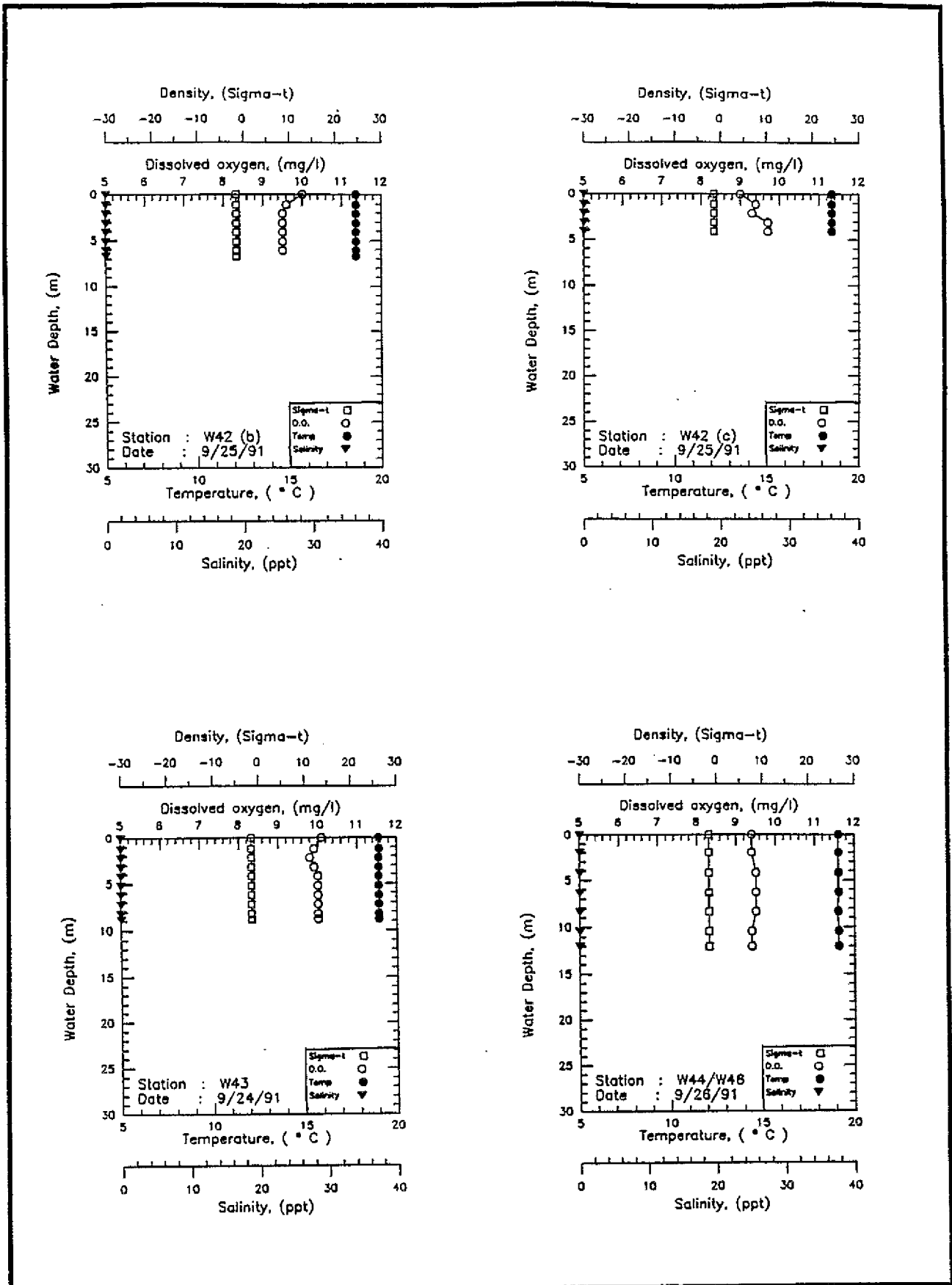
APPENDIX B-1



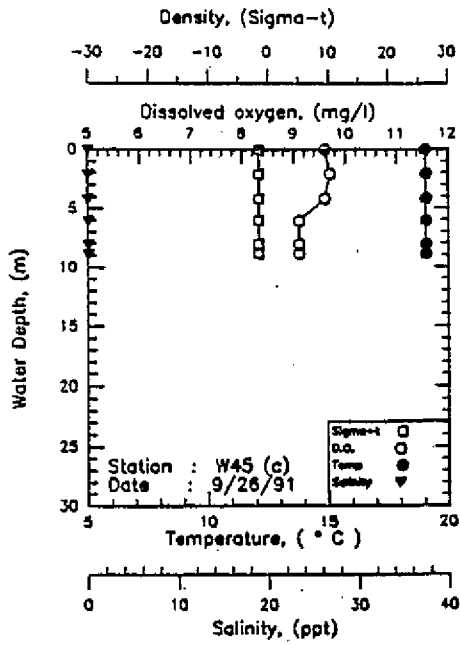
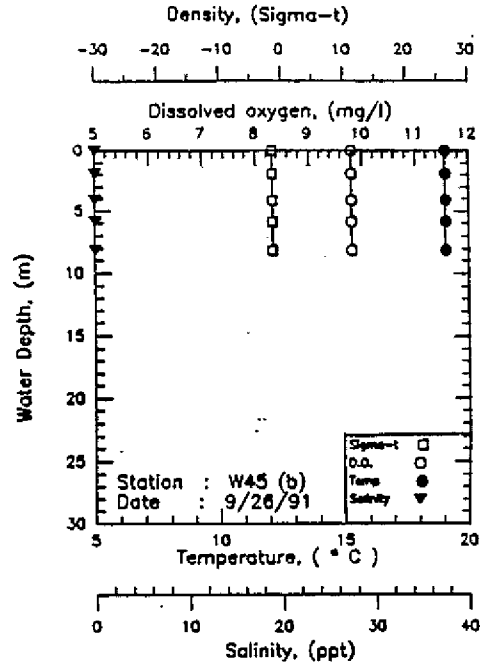
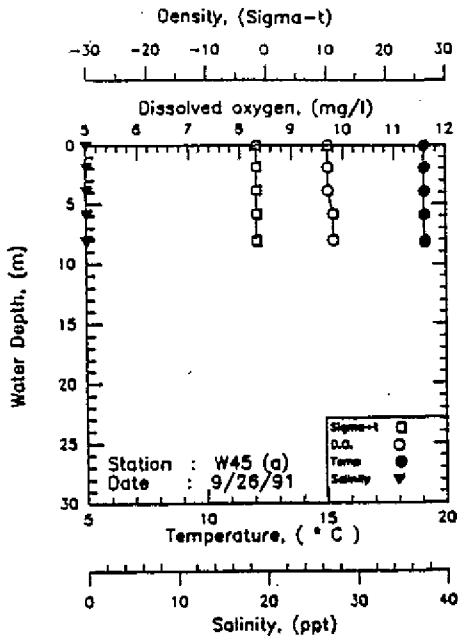
APPENDIX B-1



APPENDIX B-1



APPENDIX B-1



APPENDIX B-2

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | | |
|--|-----------------------------|-------------------|--------------|---------------------|
| DATE: 10/8/91 STATION: W1 | | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | Salinity (ppt) | DO (mg/L) | Temperature (°C) |
| 0 | 20.50 | 16.06 | 7.2 | 13.54 |
| 2 | 22.72 | 18.24 | 7.2 | 13.00 |
| 4 | 28.63 | 24.25 | 7.2 | 11.86 |
| 6 | 30.92 | 26.71 | 7.6 | 11.44 |
| 8 | 33.69 | 30.12 | 7.8 | 10.50 |
| 10 | 35.13 | 31.78 | 7.7 | 10.24 |
| 12 | 35.07 | 32.19 | 7.65 | 9.71 |
| 14 | 35.10 | 32.45 | | 9.46 |
| 16 | 35.19 | 32.54 | | 9.46 |
| 18 | 35.18 | 32.53 | | 9.46 |
| 20 | 35.17 | 32.51 | | 9.47 |
| 20.8 | 35.17 | 32.51 | | 9.47 |

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | | |
|--|-----------------------------|-------------------|--------------|---------------------|
| DATE: 10/10/91 STATION: W4 | | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | Salinity (ppt) | DO (mg/L) | Temperature (°C) |
| 0 | 8.55 | 5.91 | 6.2 | 15.46 |
| 1 | 8.71 | 6.03 | 6.0 | 15.47 |
| 28 | 9.4 | 6.55 | 6.0 | 15.47 |
| 3 | 10.34 | 7.27 | 5.8 | 15.41 |
| 4 | 21.42 | 16.75 | 5.6 | 13.78 |
| 5 | 26.5 | 21.77 | 5.6 | 12.71 |
| 6 | 28.42 | 23.88 | 5.4 | 12.13 |

APPENDIX B-2

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | |
|---|-----------------------------|--------------|---------------------|
| DATE: 10/11/91 STATION: W4 - Resampled for DO only | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
| 0 | -- | 6.2 | -- |
| 1 | -- | 6.0 | -- |
| 2 | -- | 5.8 | -- |
| 3 | -- | 5.8 | -- |
| 4 | -- | 5.6 | -- |
| 5 | -- | 5.6 | -- |
| 6 | -- | 5.8 | -- |

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | | |
|--|-----------------------------|-------------------|--------------|---------------------|
| DATE: 10/9/91 STATION: W5 | | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | Salinity (ppt) | DO (mg/L) | Temperature (°C) |
| 0 | 8.71 | 6.14 | 6.6 | 14.79 |
| 1 | 9.10 | 6.43 | 6.6 | 14.80 |
| 2 | 9.2 | 6.49 | 6.4 | 14.90 |
| 3 | 9.2 | 6.49 | 6.4 | 14.93 |

APPENDIX B-2

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | | |
|--|--------------------------|----------------|---------------------------|------------------|
| DATE: 10/10/91 | | | STATION: W6 - Oregon Side | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | Salinity (ppt) | DO (mg/L) | Temperature (°C) |
| 0 | 2.1 | 1.27 | 6.4 | 16.8 |
| 2 | 2.7 | 1.66 | 6.0 | 16.8 |
| 4 | 2.98 | 1.85 | 6.0 | 16.8 |
| 6 | 3.89 | 2.47 | 5.8 | 16.67 |
| 8 | 10.7 | 7.47 | 5.6 | 15.76 |
| 10 | 18.6 | 13.96 | 5.6 | 14.84 |
| 12 | 19.57 | 15.12 | 5.6 | 13.95 |
| 13 | -- | -- | 5.6 | -- |
| 14 | 20.6 | 16.08 | | 13.7 |
| 16 | 25.0 | 19.94 | | 13.6 |

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | | |
|--|--------------------------|----------------|-------------------------------|------------------|
| DATE: 10/10/91 | | | STATION: W6 - Washington Side | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | Salinity (ppt) | DO (mg/L) | Temperature (°C) |
| 0 | 4.27 | 2.74 | 6.4 | 16.47 |
| 2 | 5.85 | 3.86 | 6.2 | 16.28 |
| 4 | 10.80 | 7.64 | 6.0 | 15.30 |
| 6 | 14.5 | 10.65 | 5.8 | 14.80 |
| 8 | 21.6 | 17.07 | 5.6 | 13.42 |
| 10 | 29.36 | 25.09 | 5.6 | 11.62 |
| 12 | 29.55 | 25.30 | 5.6 | 11.58 |
| 14 | 29.73 | 25.49 | 5.6 | 11.55 |
| 16 | 29.79 | 25.56 | | 11.53 |
| 18 | 29.86 | 25.66 | | 11.49 |
| 19.5 | 29.78 | 25.51 | | 11.50 |

APPENDIX B-2

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | | |
|--|-----------------------------|-------------------|--------------|---------------------|
| DATE: 10/10/91 | | | | |
| STATION: W6 - Mid-Channel | | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | Salinity (ppt) | DO (mg/L) | Temperature (°C) |
| 0 | 7.6 | 5.13 | 6.2 | 16.1 |
| 1 | 12.6 | 9.00 | 6.2 | 15.4 |
| 2 | 13.3 | 9.66 | 6.4 | 14.94 |
| 2.6 | 14.12 | 10.32 | 6.4 | 14.9 |

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | | |
|--|-----------------------------|-------------------|--------------|---------------------|
| DATE: 10/9/91 | | | | |
| STATION: W7 | | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | Salinity (ppt) | DO (mg/L) | Temperature (°C) |
| 0 | 7.77 | 5.41 | 7.2 | 14.94 |
| 2 | 8.60 | 5.98 | 7.2 | 15.26 |
| 4 | 8.83 | 6.14 | 7.2 | 15.37 |
| 6 | 8.85 | 6.15 | 7.0 | 15.38 |
| 8 | 8.87 | 6.16 | 7.0 | 15.39 |
| 10 | 8.88 | 6.11 | 7.0 | 15.40 |

APPENDIX B-2

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | | |
|--|-----------------------------|-------------------|--------------|---------------------|
| DATE: 10/10/91 | | | | |
| STATION: W8 - Mid-Channel | | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | Salinity (ppt) | DO (mg/L) | Temperature (°C) |
| 0 | 2.74 | 1.68 | 7.0 | 17.08 |
| 2 | 2.72 | 1.66 | 6.8 | 17.07 |
| 4 | 2.23 | 1.34 | 6.6 | 17.17 |
| 6 | 2.23 | 1.34 | 6.6 | 17.17 |
| 6.4 | 2.25 | 1.35 | 6.6 | 17.17 |

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | | |
|--|-----------------------------|-------------------|--------------|---------------------|
| DATE: 10/10/91 | | | | |
| STATION: W8 - Washington Side | | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | Salinity (ppt) | DO (mg/L) | Temperature (°C) |
| 0 | 8.9 | 6.04 | 7.0 | 16.31 |
| 2 | 10.91 | 7.63 | 6.8 | 15.78 |
| 4 | 12.49 | 8.92 | 6.6 | 15.38 |
| 6 | 12.79 | 9.20 | 6.6 | 15.21 |
| 8 | 13.05 | 9.39 | 6.4 | 15.26 |
| 10 | 13.44 | 9.72 | 6.2 | 15.15 |
| 12 | 13.55 | 9.82 | 6.2 | 15.11 |
| 14 | 13.65 | 9.90 | | 15.09 |
| 16 | 13.81 | 10.02 | | 15.12 |
| 18 | 14.07 | 10.23 | | 15.09 |
| 19.1 | 14.05 | 10.22 | | 15.09 |

APPENDIX B-2

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | | |
|--|--------------------------|----------------|-----------|------------------|
| DATE: 10/10/91 | | | | |
| STATION: W8 - Oregon Side | | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | Salinity (ppt) | DO (mg/L) | Temperature (°C) |
| 0 | 2.72 | 1.65 | 6.6 | 17.33 |
| 2 | 2.94 | 1.80 | 6.4 | 17.21 |
| 4 | 3.58 | 2.24 | 6.3 | 17.07 |
| 6 | 3.52 | 2.19 | 6.3 | 17.09 |
| 8 | 4.35 | 2.77 | 6.3 | 16.91 |
| 10 | 4.55 | 2.90 | 6.2 | 16.87 |
| 12 | 8.94 | 6.12 | 6.18 | 16.00 |
| 14 | 13.80 | 10.03 | | 15.05 |
| 15 | 14.2 | 10.35 | | 15.02 |

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | | |
|--|--------------------------|----------------|-----------|------------------|
| DATE: 10/10/91 | | | | |
| STATION: W9 | | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | Salinity (ppt) | DO (mg/L) | Temperature (°C) |
| 0 | 0.37 | 0.14 | 6.5 | 17.39 |
| 1 | 0.40 | 0.16 | 6.4 | 17.17 |
| 2 | 0.38 | 0.15 | 6.4 | 17.11 |
| 3 | 0.36 | 0.14 | 6.4 | 17.0 |
| 4 | 0.35 | 0.13 | 6.4 | 16.94 |
| 4.3 | 0.35 | 0.13 | 6.4 | 16.90 |

APPENDIX B-2

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | |
|--|-----------------------------|--------------|---------------------|
| DATE: 10/11/91 STATION: W10 | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
| 0 | 0.08 | 8.4 | 16.79 |
| 1 | 0.09 | 8.4 | 16.76 |
| 2 | 0.09 | 8.3 | 16.76 |
| 3 | 0.09 | 8.4 | 16.76 |
| 4 | 0.09 | 8.4 | 16.76 |
| 5 | 0.09 | 8.4 | 16.77 |
| 6 | 0.09 | 8.4 | 16.76 |
| 7 | 0.09 | 8.35 | 16.76 |
| 8 | 0.09 | 8.3 | 16.76 |
| 9 | 0.09 | 8.3 | 16.76 |

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | |
|--|-----------------------------|--------------|---------------------|
| DATE: 10/12/91 STATION: W11 | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
| 0 | 0.09 | 9.2 | 17.29 |
| 1 | 0.09 | 9.4 | 17.22 |
| 2 | 0.09 | 9.2 | 17.17 |
| 3 | 0.09 | 9.2 | 17.13 |
| 4 | 0.09 | 9.2 | 17.12 |
| 5 | 0.09 | 9.2 | 17.12 |
| 6 | 0.09 | 9.2 | 17.11 |
| 6.6 | 0.09 | 9.2 | 17.11 |

APPENDIX B-2

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | |
|--|-----------------------------|--------------|---------------------|
| DATE: 10/7/91 STATION: W12 | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
| 0 | 0.08 | 8.3 | 17.90 |
| 1 | 0.09 | 8.4 | 17.87 |
| 2 | 0.09 | 8.5 | 17.86 |
| 3 | 0.09 | 8.2 | 17.86 |
| 4 | 0.09 | 8.3 | 17.77 |
| 5 | 0.09 | 8.2 | 17.68 |
| 6 | 0.08 | 8.2 | 17.66 |
| 6.5 | 0.08 | 8.2 | 17.63 |

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | |
|--|-----------------------------|--------------|---------------------|
| DATE: 10/11/91 STATION: W13 | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
| 0 | 0.08 | 6.40 | 17.03 |
| 1 | 0.09 | 6.45 | 17.05 |
| 2 | 0.09 | 6.50 | 17.05 |
| 3 | 0.09 | 6.50 | 17.06 |
| 4 | 0.09 | 6.45 | 17.06 |
| 5 | 0.09 | 6.50 | 17.06 |
| 6 | 0.09 | 6.45 | 17.06 |
| 7 | 0.09 | 6.45 | 17.07 |
| 8 | 0.09 | 6.50 | 17.06 |
| 8.4 | 0.09 | 6.50 | 17.07 |

APPENDIX B-2

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | |
|--|-----------------------------|--------------|---------------------|
| DATE: 10/6/91 | | | |
| STATION: W14 - Washington Side | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
| 0 | 0.08 | 8.1 | 17.91 |
| 1 | 0.08 | 8.1 | 17.92 |
| 2 | 0.08 | 8.0 | 17.92 |
| 3 | 0.08 | 8.0 | 17.92 |
| 4 | 0.08 | 8.0 | 17.92 |
| 5 | 0.08 | 8.0 | 17.92 |
| 6 | 0.08 | 8.0 | 17.92 |

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | |
|--|-----------------------------|--------------|---------------------|
| DATE: 10/6/91 | | | |
| STATION: W14 - Mid-Channel | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
| 0 | 0.08 | 8.5 | 17.98 |
| 2 | 0.08 | 8.5 | 17.99 |
| 4 | 0.08 | 8.5 | 17.98 |
| 6 | 0.08 | 8.5 | 17.97 |
| 8 | 0.08 | 8.6 | 17.98 |
| 10 | 0.08 | 8.4 | 17.97 |
| 12 | 0.08 | 8.6 | 17.98 |
| 13.5 | 0.08 | | 17.98 |

APPENDIX B-2

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | |
|---|-----------------------------|--------------|---------------------|
| DATE: 10/6/91 STATION: W14 - Oregon Side | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
| 0 | 0.08 | 8.5 | 18.04 |
| 1 | 0.09 | 8.4 | 18.04 |
| 2 | 0.09 | 8.4 | 18.04 |
| 3 | 0.09 | 8.3 | 18.04 |
| 4 | 0.09 | 8.4 | 18.04 |
| 5 | 0.09 | 8.3 | 18.04 |
| 6 | 0.09 | 8.2 | 18.04 |
| 7 | 0.09 | 8.2 | 18.04 |

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | |
|--|-----------------------------|--------------|---------------------|
| DATE: 10/6/91 STATION: W15 | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
| 0 | 0.09 | 9.0 | 17.93 |
| 2 | 0.09 | 9.1 | 17.92 |
| 4 | 0.09 | 9.1 | 17.88 |
| 6 | 0.09 | 9.1 | 17.92 |
| 8 | 0.09 | 9.1 | 17.91 |
| 10 | 0.09 | 9.1 | 17.90 |
| 12 | 0.09 | 9.1 | 17.89 |
| 14 | 0.09 | | 17.89 |
| 16 | 0.09 | | 17.89 |

APPENDIX B-2

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | |
|--|-----------------------------|--------------|---------------------|
| DATE: 10/6/91 | | | |
| STATION: W17 - Washington Side | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
| 0 | 0.09 | 9.0 | 18.0 |
| 1 | 0.09 | 8.2 | 18.01 |
| 2 | 0.09 | 8.2 | 17.99 |
| 3 | 0.09 | 8.2 | 17.99 |
| 4 | 0.09 | 8.0 | 17.98 |
| 5 | 0.09 | 8.0 | 17.97 |
| 6 | 0.09 | 8.0 | 17.97 |
| 6.5 | 0.09 | | 17.98 |

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | |
|--|-----------------------------|--------------|---------------------|
| DATE: 10/6/91 | | | |
| STATION: W17 - Mid-Channel | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
| 0 | 0.09 | 8.6 | 17.93 |
| 2 | 0.09 | 8.2 | 17.91 |
| 4 | 0.09 | 8.2 | 17.90 |
| 6 | 0.09 | 8.0 | 17.89 |
| 8 | 0.09 | 8.0 | 17.90 |
| 10 | 0.09 | 8.0 | 17.89 |
| 12 | 0.09 | 8.2 | 17.89 |
| 15 | 0.09 | | 17.89 |

APPENDIX B-2

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | |
|---|-----------------------------|--------------|---------------------|
| DATE: 10/6/91 STATION: W17 - Oregon Side | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
| 0 | 0.09 | 8.6 | 17.98 |
| 2 | 0.09 | 8.4 | 17.90 |
| 4 | 0.09 | 8.4 | 17.91 |
| 6 | 0.09 | 8.4 | 17.90 |
| 8 | 0.09 | 8.4 | 17.90 |
| 10 | 0.09 | 8.3 | 17.90 |
| 10.5 | 0.09 | | 17.90 |

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | |
|--|-----------------------------|--------------|---------------------|
| DATE: 10/5/91 STATION: W18 | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
| 0 | 0.08 | 8.8 | 18.29 |
| 1 | 0.08 | 8.8 | 18.27 |
| 2 | 0.08 | 8.8 | 18.26 |
| 3 | 0.08 | 8.8 | 18.24 |
| 4 | 0.08 | 8.7 | 18.25 |

APPENDIX B-2

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | |
|--|-----------------------------|--------------|---------------------|
| DATE: 10/5/91 | | | |
| STATION: W19 - Oregon Side | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
| 0 | 0.08 | 9.0 | 18.05 |
| 2 | 0.09 | 8.9 | 18.06 |
| 4 | 0.09 | 8.8 | 18.06 |
| 6 | 0.09 | 8.8 | 18.06 |
| 8 | 0.09 | 8.8 | 18.06 |
| 10 | 0.09 | 10.0 | 18.06 |
| 12 | 0.09 | 9.8 | 18.06 |
| 14 | 0.09 | | 18.06 |
| 16 | 0.09 | | 18.06 |
| 18 | 0.09 | | 18.06 |

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | |
|--|-----------------------------|--------------|---------------------|
| DATE: 10/5/91 | | | |
| STATION: W19 - Mid-Channel | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
| 0 | 0.09 | 9.2 | 18.05 |
| 2 | 0.09 | 9.0 | 18.06 |
| 4 | 0.09 | 8.9 | 18.05 |
| 6 | 0.09 | 8.8 | 18.05 |
| 8 | 0.09 | 8.8 | 18.05 |
| 10 | 0.09 | 8.8 | 18.06 |
| 12 | 0.09 | 8.8 | 18.06 |
| 13 | 0.09 | 8.8 | 18.06 |
| 16 | 0.09 | | 18.05 |
| 18 | 0.09 | | 18.06 |

APPENDIX B-2

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | |
|--|-----------------------------|--------------|---------------------|
| DATE: 10/5/91 | | | |
| STATION: W19 - Washington Side | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
| 0 | 0.09 | 8.1 | 18.09 |
| 2 | 0.09 | 8.1 | 18.09 |
| 4 | 0.09 | 8.0 | 18.09 |
| 6 | 0.09 | 8.0 | 18.09 |
| 8 | 0.09 | 8.0 | 18.08 |
| 10 | 0.09 | 7.9 | 18.08 |
| 12 | 0.09 | 8.0 | 18.08 |
| 14 | 0.09 | 8.0 | 18.08 |
| 16 | 0.09 | | 18.08 |
| 17 | 0.09 | | 18.08 |

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | |
|--|-----------------------------|--------------|---------------------|
| DATE: 10/4/91 | | | |
| STATION: W20 | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
| 0 | 0.09 | 8.8 | 18.45 |
| 1 | 0.09 | 8.3 | 18.42 |
| 2 | 0.09 | 8.4 | 18.39 |
| 3 | 0.09 | 8.2 | 18.34 |
| 4 | 0.09 | 8.2 | 18.29 |
| 5 | 0.09 | 8.2 | 18.25 |
| 6 | 0.09 | 8.2 | 18.25 |
| 7 | 0.09 | 8.2 | 18.25 |

APPENDIX B-2

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | |
|--|-----------------------------|--------------|---------------------|
| DATE: 10/4/91 STATION: W21 | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
| 0 | 0.09 | 9.2 | 17.85 |
| 1 | 0.09 | 9.4 | 17.97 |
| 2 | 0.09 | 9.0 | 17.90 |
| 3 | 0.09 | 9.0 | 17.89 |
| 4 | 0.09 | 8.8 | 17.89 |
| 5 | 0.09 | 8.8 | 17.88 |
| 6 | 0.09 | 8.8 | 17.87 |
| 7 | 0.09 | 8.8 | 17.85 |
| 7.3 | 0.09 | | 17.85 |

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | |
|--|-----------------------------|--------------|---------------------|
| DATE: 10/3/91 STATION: W22 | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
| 0 | 0.08 | 9.0 | 18.82 |
| 2 | 0.08 | 8.9 | 18.69 |
| 4 | 0.08 | 9.4 | 18.60 |
| 6 | 0.08 | 9.0 | 18.46 |
| 8 | 0.08 | 8.6 | 18.42 |
| 10 | 0.09 | 8.8 | 18.35 |
| 12 | 0.09 | 8.8 | 18.31 |
| 14 | 0.09 | 8.8 | 18.32 |
| 14.7 | 0.09 | 8.8 | 18.32 |

APPENDIX B-2

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | |
|--|-----------------------------|--------------|---------------------|
| DATE: 10/3/91 STATION: W23 | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
| 0 | 0.08 | 9.0 | 18.70 |
| 1 | 0.08 | 9.0 | 18.55 |
| 2 | 0.08 | 8.8 | 18.50 |
| 3 | 0.08 | 8.8 | 18.50 |
| 4 | 0.08 | 9.0 | 18.50 |
| 4.5 | | 9.0 | |

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | |
|--|-----------------------------|--------------|---------------------|
| DATE: 10/3/91 STATION: W24 | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
| 0 | 0.04 | 11.6 | 11.72 |
| 1 | 0.05 | 11.2 | 11.73 |
| 1.5 | 0.05 | 10.8 | 11.73 |

APPENDIX B-2

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | |
|--|-----------------------------|--------------|---------------------|
| DATE: 10/3/91 STATION: W25 | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
| 0 | 0.08 | 9.0 | 18.52 |
| 1 | 0.08 | 8.8 | 18.54 |
| 2 | 0.08 | 8.8 | 18.55 |
| 3 | 0.08 | 9.0 | 18.54 |
| 4 | 0.08 | 8.7 | 18.53 |
| 5 | 0.08 | 9.0 | 18.53 |
| 5.5 | 0.08 | 8.8 | 18.54 |

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | |
|---|-----------------------------|--------------|---------------------|
| DATE: 10/2/91 STATION: W26 - Oregon Side | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
| 0 | 0.08 | 8.2 | 18.95 |
| 2 | 0.08 | 8.4 | 18.82 |
| 4 | 0.08 | 8.4 | 18.76 |
| 6 | 0.08 | 8.2 | 18.74 |
| 8 | 0.08 | 8.2 | 18.68 |
| 10 | 0.08 | 8.0 | 18.68 |
| 12 | 0.08 | 8.0 | 18.67 |
| 14 | 0.08 | 8.0 | 18.66 |

APPENDIX B-2

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | |
|--|-----------------------------|--------------|---------------------|
| DATE: 10/2/91 | | | |
| STATION: W26 - Mid-Channel | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
| 0 | 0.08 | 9.0 | 18.74 |
| 2 | 0.08 | 8.6 | 18.75 |
| 4 | 0.08 | 8.4 | 18.73 |
| 6 | 0.08 | 8.2 | 18.73 |
| 8 | 0.08 | 8.2 | 18.66 |
| 10 | 0.08 | 8.4 | 18.65 |
| 12 | 0.08 | 8.0 | 18.66 |
| 13 | 0.08 | 8.0 | 18.66 |

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | |
|--|-----------------------------|--------------|---------------------|
| DATE: 10/2/91 | | | |
| STATION: W26 - Washington Side | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
| 0 | 0.08 | 8.8 | 18.85 |
| 2 | 0.08 | 8.6 | 18.77 |
| 4 | 0.08 | 8.4 | 18.73 |
| 6 | 0.08 | 8.4 | 18.73 |
| 8 | 0.08 | 8.2 | 18.69 |
| 10 | 0.08 | 8.2 | 18.69 |
| 12 | 0.08 | 8.2 | 18.69 |
| 13 | 0.08 | 8.0 | 18.69 |

APPENDIX B-2

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | |
|--|-----------------------------|--------------|---------------------|
| DATE: 10/2/91 STATION: W27 | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
| 0 | 0.08 | 8.2 | 18.67 |
| 1 | 0.09 | 8.6 | 18.64 |
| 2 | 0.09 | 8.2 | 18.63 |
| 3 | 0.09 | 8.2 | 18.63 |
| 3.5 | 0.09 | 8.2 | 18.64 |

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | |
|--|-----------------------------|--------------|---------------------|
| DATE: 10/1/91 STATION: W28 | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
| 0 | 0.08 | 8.6 | 19.01 |
| 2 | 0.08 | 8.8 | 18.97 |
| 4 | 0.08 | 10.4 | 18.97 |
| 6 | 0.08 | 10.4 | 18.97 |
| 8 | 0.08 | 10.4 | 18.99 |
| 10 | 0.08 | 10.6 | 18.98 |
| 12 | 0.08 | 10.8 | 18.98 |
| 14 | 0.08 | | 18.97 |
| 16 | 0.08 | | 18.97 |
| 18 | 0.08 | | 18.97 |
| 20 | 0.08 | | 18.96 |
| 21 | 0.08 | | 18.96 |

APPENDIX B-2

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | |
|--|-----------------------------|--------------|---------------------|
| DATE: 10/1/91 STATION: W29 | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
| 0 | 0.08 | 7.8 | 18.43 |
| 1 | 0.08 | 8.0 | 18.46 |
| 2 | 0.08 | 7.9 | 18.44 |
| 3 | 0.08 | 7.8 | 18.41 |
| 4 | 0.08 | 9.4 | 18.42 |
| 5 | 0.08 | 10.1 | 18.40 |
| 5.5 | 0.08 | | 18.40 |

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | |
|--|-----------------------------|--------------|---------------------|
| DATE: 10/1/91 STATION: W30 | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
| 0 | 0.08 | 9.0 | 18.88 |
| 2 | 0.09 | 9.0 | 18.87 |
| 4 | 0.09 | 9.2 | 18.85 |
| 6 | 0.08 | 9.2 | 18.76 |
| 8 | 0.08 | 9.8 | 18.76 |
| 10 | 0.08 | 9.0 | 18.75 |
| 12 | 0.08 | 10.8 | 18.76 |
| 14 | 0.08 | | 18.75 |

APPENDIX B-2

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | |
|--|-----------------------------|--------------|---------------------|
| DATE: 9/30/91 STATION: W31 | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
| 0 | 0.02 | 8.2 | 15.64 |
| 1 | 0.01 | 8.6 | 15.61 |
| 1.6 | 0.01 | 8.6 | 15.61 |

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | |
|--|-----------------------------|--------------|---------------------|
| DATE: 9/30/91 STATION: W32 | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
| 0 | 0.03 | 9.0 | 18.21 |
| 2.1 | 0.04 | 8.8 | 18.19 |
| 4 | 0.03 | 8.6 | 18.13 |
| 6.1 | 0.03 | 8.6 | 18.13 |
| 8 | 0.03 | 8.4 | 18.11 |
| 10.1 | 0.03 | 8.4 | 18.13 |
| 12 | 0.03 | 8.6 | 18.10 |
| 14.1 | 0.03 | | 18.09 |
| 15.9 | 0.03 | | 18.09 |

APPENDIX B-2

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | |
|--|-----------------------------|--------------|---------------------|
| DATE: 9/30/91 | | | |
| STATION: W33 - Oregon Side | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
| 0 | 0.08 | 9.0 | 19.12 |
| 2 | 0.09 | 9.0 | 19.02 |
| 4 | 0.09 | 9.0 | 18.96 |
| 6 | 0.08 | 9.0 | 18.88 |
| 8 | 0.09 | 9.0 | 18.86 |
| 10 | 0.08 | 9.0 | 18.86 |
| 12 | 0.08 | 9.0 | 18.84 |

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | |
|--|-----------------------------|--------------|---------------------|
| DATE: 9/30/91 | | | |
| STATION: W33 - Mid-Channel | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
| 0 | 0.08 | 9.0 | 19.05 |
| 2 | 0.08 | 9.0 | 18.94 |
| 4 | 0.09 | 9.0 | 18.91 |
| 6 | 0.09 | 9.0 | 18.90 |
| 8 | 0.09 | 9.0 | 18.92 |
| 10.1 | 0.09 | 8.8 | 18.90 |
| 12.1 | 0.08 | 8.8 | 18.90 |
| 14.1 | 0.09 | | 18.90 |
| 15.9 | 0.09 | | 18.90 |

APPENDIX B-2

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | |
|--|-----------------------------|--------------|---------------------|
| DATE: 9/30/91 | | | |
| STATION: W33 - Washington Side | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
| 0 | 0.08 | 9.4 | 19.06 |
| 2.1 | 0.09 | 9.4 | 18.96 |
| 4.1 | 0.09 | 9.4 | 18.96 |
| 6 | 0.09 | 9.2 | 18.96 |
| 8.1 | 0.09 | 9.2 | 18.96 |
| 10.2 | 0.09 | 9.2 | 18.97 |
| 12.1 | 0.09 | 9.2 | 18.96 |
| 14.1 | 0.09 | | 18.97 |
| 16 | 0.09 | | 18.97 |

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | |
|--|-----------------------------|--------------|---------------------|
| DATE: 9/30/91 | | | |
| STATION: W34 | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
| 0 | 0.10 | 7.6 | 18.82 |
| 1.1 | 0.10 | 7.6 | 18.77 |
| 2.1 | 0.11 | 7.6 | 18.72 |
| 3.1 | 0.11 | 7.6 | 18.71 |
| 3.8 | 0.11 | 7.6 | 18.69 |

APPENDIX B-2

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | |
|--|-----------------------------|--------------|---------------------|
| DATE: 9/28/91 STATION: W36 | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
| 0 | 0.02 | 8.8 | 17.86 |
| 2 | 0.02 | 8.8 | 17.88 |
| 4 | 0.02 | 8.8 | 17.87 |
| 6 | 0.02 | 8.8 | 17.87 |
| 8 | 0.02 | 8.8 | 17.87 |
| 10.1 | 0.03 | 8.8 | 17.78 |
| 12.2 | 0.03 | 8.8 | 17.77 |
| 13.5 | 0.03 | 8.8 | 17.77 |

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | |
|---|-----------------------------|--------------|---------------------|
| DATE: 9/28/91 STATION: W37 - Oregon Side | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
| 0 | 0.08 | 9.4 | 19.04 |
| 2 | 0.08 | 9.5 | 19.04 |
| 4 | 0.09 | 9.6 | 19.04 |
| 6.1 | 0.09 | 9.6 | 19.04 |
| 8 | 0.09 | 9.2 | 19.04 |
| 10.1 | 0.08 | 9.4 | 19.04 |
| 12.2 | 0.08 | 9.4 | 19.04 |
| 14.2 | 0.08 | | 19.04 |
| 16.2 | 0.08 | | 19.04 |
| 18.2 | 0.08 | | 19.04 |

APPENDIX B-2

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | |
|--|-----------------------------|--------------|---------------------|
| DATE: 9/28/91 | | | |
| STATION: W37 - Mid-Channel | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
| 0 | 0.08 | 9.2 | 19.10 |
| 2 | 0.09 | 9.2 | 19.11 |
| 4 | 0.09 | 9.4 | 19.11 |
| 6.1 | 0.08 | 9.2 | 19.11 |
| 8.1 | 0.09 | 9.3 | 19.11 |
| 10.1 | 0.09 | 9.2 | 19.08 |
| 12.1 | 0.08 | 9.3 | 19.08 |
| 14.1 | 0.08 | 9.2 | 19.08 |
| 16.1 | 0.08 | | 19.08 |
| 18.1 | 0.08 | | 19.08 |

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | |
|--|-----------------------------|--------------|---------------------|
| DATE: 9/28/91 | | | |
| STATION: W37 - Washington Side | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
| 0 | 0.08 | 9.2 | 19.11 |
| 2.1 | 0.09 | 9.2 | 19.12 |
| 4.1 | 0.09 | 9.0 | 19.12 |
| 6 | 0.09 | 9.0 | 19.12 |
| 8.1 | 0.08 | 8.8 | 19.12 |
| 10.2 | 0.08 | 8.8 | 19.12 |
| 11.3 | 0.09 | 8.8 | 19.12 |

APPENDIX B-2

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | |
|--|-----------------------------|--------------|---------------------|
| DATE: 9/27/91 STATION: W39 | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
| 0 | 0.08 | 9.0 | 19.15 |
| 1.1 | 0.08 | 9.0 | 19.15 |
| 2.1 | 0.08 | 9.0 | 19.15 |
| 3.3 | 0.09 | 9.0 | 19.15 |
| 4.2 | 0.08 | 9.0 | 19.15 |
| 5.3 | 0.08 | 9.2 | 19.15 |
| 6.4 | 0.08 | 9.2 | 19.15 |
| 7.3 | 0.08 | 9.2 | 19.15 |

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | |
|--|-----------------------------|--------------|---------------------|
| DATE: 9/23/91 STATION: W41 | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
| 0 | | 9.0 | |
| 1 | 0.08 | 9.0 | 18.79 |
| 2 | 0.08 | 9.0 | 18.78 |
| 3 | 0.08 | 9.0 | 18.81 |
| 4 | 0.08 | 9.0 | 18.79 |
| 5 | 0.08 | 8.9 | 18.76 |
| 6 | 0.08 | 8.9 | 18.76 |
| 7 | 0.08 | 8.8 | 18.76 |
| 8 | 0.08 | 8.6 | 18.76 |
| 9 | 0.08 | 8.8 | 18.77 |
| 9.6 | 0.08 | | 18.79 |

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | |
|---|-----------------------------|--------------|---------------------|
| DATE: 9/25/91 STATION: W42 - Oregon Side | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
| 0 | 0.08 | 9.6 | 18.51 |
| 1.1 | 0.08 | 9.5 | 18.51 |
| 2.1 | 0.08 | 9.5 | 18.51 |
| 3.1 | 0.08 | 9.5 | 18.50 |
| 4.1 | 0.08 | 9.4 | 18.50 |
| 5.1 | 0.08 | 9.4 | 18.51 |
| 6 | 0.08 | 9.5 | 18.51 |
| 7.1 | 0.08 | 9.4 | 18.51 |
| 8 | 0.08 | 9.4 | 18.52 |
| 9.1 | 0.08 | 9.5 | 18.50 |
| 10.1 | 0.08 | 9.5 | 18.51 |
| 11.1 | 0.08 | | 18.51 |
| 11.9 | 0.08 | | 18.51 |
| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | |
| DATE: 9/25/91 STATION: W42 - Mid-Channel | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
| 0 | 0.08 | 10.0 | 18.59 |
| 1.1 | 0.08 | 9.6 | 18.59 |
| 2.1 | 0.08 | 9.5 | 18.60 |
| 3.1 | 0.08 | 9.5 | 18.59 |
| 4.1 | 0.08 | 9.5 | 18.59 |
| 5.1 | 0.08 | 9.5 | 18.59 |
| 6.1 | 0.08 | 9.5 | 18.59 |
| 6.7 | 0.08 | | 18.59 |

APPENDIX B-2

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | |
|--|-----------------------------|--------------|---------------------|
| DATE: 9/25/91 | | | |
| STATION: W42 - Washington Side | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
| 0 | 0.08 | 9.0 | 18.51 |
| 1.1 | 0.08 | 9.4 | 18.51 |
| 2.1 | 0.08 | 9.3 | 18.51 |
| 3.1 | 0.08 | 9.7 | 18.51 |
| 4.1 | 0.08 | 9.6 | 18.52 |

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | |
|--|-----------------------------|--------------|---------------------|
| DATE: 9/24/91 | | | |
| STATION: W43 | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
| 0 | 0.08 | 10.1 | 19.01 |
| 1.2 | 0.08 | 9.9 | 19.03 |
| 2.2 | 0.08 | 9.8 | 19.02 |
| 3.2 | 0.08 | 9.9 | 19.02 |
| 4.2 | 0.08 | 10.0 | 19.02 |
| 5.2 | 0.08 | 10.0 | 19.02 |
| 6.2 | 0.08 | 10.0 | 19.02 |
| 7.2 | 0.08 | 10.0 | 19.02 |
| 8.2 | 0.08 | 10.0 | 19.02 |
| 8.8 | 0.08 | 10.0 | 19.02 |

| |
|--|
| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA |
|--|

| |
|-------------------------------|
| DATE: 9/26/91 STATION: W44 |
|-------------------------------|

| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
|--------------------------|-----------------------------|--------------|---------------------|
| 0 | 0.08 | 9.4 | 19.13 |
| 2 | 0.08 | 9.4 | 19.13 |
| 4.2 | 0.08 | 9.5 | 19.13 |
| 6.3 | 0.08 | 9.5 | 19.13 |
| 8.3 | 0.08 | 9.5 | 19.12 |
| 10.4 | 0.08 | 9.4 | 19.13 |
| 12 | 0.08 | 9.4 | 19.13 |

| |
|--|
| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA |
|--|

| |
|---|
| DATE: 9/26/91 STATION: W45 - Oregon Side |
|---|

| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
|--------------------------|-----------------------------|--------------|---------------------|
| 0 | 0.08 | 9.6 | 19.04 |
| 2.1 | 0.08 | 9.7 | 19.05 |
| 4.2 | 0.08 | 9.6 | 19.06 |
| 6.1 | 0.08 | 9.1 | 19.06 |
| 8.1 | 0.08 | 9.1 | 19.06 |
| 8.9 | 0.08 | 9.2 | 19.06 |

APPENDIX B-2

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | |
|--|-----------------------------|--------------|---------------------|
| DATE: 9/26/91 | | | |
| STATION: W45 - Mid-Channel | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
| 0 | 0.08 | 9.8 | 19.06 |
| 1.9 | 0.08 | 9.8 | 19.07 |
| 4.1 | 0.08 | 9.8 | 19.07 |
| 5.8 | 0.08 | 9.8 | 19.07 |
| 8.1 | 0.08 | 9.9 | 19.07 |

| CONDUCTIVITY, TEMPERATURE, DO PROFILE DATA | | | |
|--|-----------------------------|--------------|---------------------|
| DATE: 9/26/91 | | | |
| STATION: W45 - Washington Side | | | |
| Sample Depth (meters) | Conductivity (m Mhos/cm) | DO (mg/L) | Temperature (°C) |
| 0 | 0.08 | 9.7 | 19.08 |
| 1.9 | 0.08 | 9.7 | 19.09 |
| 3.9 | 0.08 | 9.7 | 19.09 |
| 5.9 | 0.08 | 9.8 | 19.09 |
| 8.1 | 0.08 | 9.8 | 19.10 |
| 8.2 | 0.08 | | 19.10 |

TABLE B-3. FIELD WATER QUALITY PARAMETERS

| River Segment | Station | pH | Turbidity (NTU) | DO (mg/L) | DO (% sat) | Temp. (deg. C) | Conduc. (mMhos/cm) | Salinity (ppt) | Sigma-t | TSS (mg/L) |
|---------------|---------|-----|-----------------|-----------|------------|----------------|--------------------|----------------|---------|------------|
| 1A | W1 - T | 8.0 | 2.7 | 7.50 | 67.4 | 10.6 | 32 | 28.49 | 22 | 13 |
| 1A | W2 | 7.8 | 6.2 | 7.20 | 69.9 | 14.0 | 20 | 15.44 | 11.196 | 27.5 |
| 1A | W3 | 8.4 | 8.9 | 12.20 | 128.9 | 18.0 | 12.22 | 15.51 | 10.47 | 80 |
| 1A | W4 | 7.7 | 13.1 | 5.80 | 58.3 | 14.0 | 16 | 13 | 9 | 19.5 |
| 1A | W5 | 7.8 | 11.9 | 6.50 | 64.5 | 15.0 | 9.1 | 6.4 | 4.1 | 18.8 |
| 1B | W7 | 7.8 | 12.0 | 7.10 | 70.9 | 15.3 | 8.62 | 5.99 | 3.72 | 20.3 |
| 1B | W6 - T | 7.9 | 20.3 | 5.99 | 59.1 | 14.8 | 14.73 | 11.43 | 7.99 | 30 |
| 1C | W8 - T | 8.0 | 6.7 | 6.53 | 66.6 | 16.3 | 7.2 | 5.04 | 2.81 | 16.8 |
| 1C | W9 | 8.1 | 16.0 | 6.42 | 66.0 | 17.1 | 0.0368 | 0.142 | -1.07 | 12.5 |
| 1C | W10 | 7.7 | 4.0 | 8.36 | 88.1 | 16.8 | 0.089 | 0 | -1.15 | 5.3 |
| 1C | W11 | 7.7 | 3.1 | 9.23 | 95.9 | 17.2 | 0.09 | 0 | -1.21 | 4 |
| 1C | W12 | 8.1 | 1.0 | 8.29 | 87.2 | 17.8 | 0.08 | 0 | -1.33 | 3.8 |
| 1C | W13 | 7.8 | 3.5 | 8.47 | 87.1 | 17.1 | 0.089 | 0 | -1.2 | 5 |
| 1C | W14 - T | 7.7 | 4.7 | 8.29 | 87.5 | 18.0 | 0.08 | 0 | -1.37 | 5.8 |
| 2A | W15 | 7.6 | 4.6 | 9.09 | 95.8 | 17.9 | 0.09 | 0 | -1.35 | 3.3 |
| 2A | W16 | 8.4 | 8.5 | 9.30 | 98.2 | 18.0 | 0.13 | 0 | -1.39 | 45.8 |
| 2B | W17 - T | 7.6 | 4.7 | 8.27 | 87.2 | 17.9 | 0.09 | 0 | -1.35 | 5.8 |
| 2B | W18 | 7.6 | 6.5 | 8.78 | 93.3 | 18.3 | 0.08 | 0 | -1.42 | 8.8 |
| 2B | W19 - T | 7.4 | 6.6 | 8.68 | 91.9 | 18.1 | 0.09 | 0 | -1.38 | 9 |
| 2C | W20 | 7.6 | 5.6 | 8.31 | 88.3 | 18.3 | 0.09 | 0 | -1.43 | 0.5 |
| 2C | W21 | 7.8 | 3.9 | 8.98 | 94.6 | 17.9 | 0.09 | 0 | -1.34 | 14.3 |
| 2C | W22 | 7.5 | 4.4 | 8.90 | 95.0 | 18.5 | 0.084 | 0 | -1.46 | 5.5 |
| 2C | W23 | 7.5 | 4.0 | 8.93 | 95.5 | 18.6 | 0.08 | 0 | -1.48 | 3.8 |
| 2C | W24 | 7.2 | 5.3 | 11.20 | 103.2 | 11.7 | 0.046 | 0 | -0.451 | 3.5 |
| 2C | W25 | 7.7 | 5.0 | 8.90 | 93.4 | 17.7 | 0.08 | 0 | -1.32 | 5.8 |
| 2C | W26 - T | 8.1 | 4.7 | 8.29 | 88.4 | 18.5 | 0.08 | 0 | -1.45 | 4.3 |
| 3A | W27 | 8.1 | 4.7 | 8.28 | 88.5 | 18.6 | 0.09 | 0 | -1.49 | 4.3 |
| 3A | W28 | 7.5 | 5.7 | 10.00 | 107.8 | 19.0 | 0.08 | 0 | -1.56 | 6.3 |
| 3A | W29 | 7.6 | 6.6 | 8.50 | 90.5 | 18.4 | 0.08 | 0 | -1.45 | 7.5 |
| 3A | W30 | 8.4 | 4.5 | 9.43 | 101.2 | 18.8 | 0.082 | 0 | -1.52 | 5 |
| 3A | W31 | 7.2 | 16.0 | 8.47 | 85.1 | 15.6 | 0.013 | 0 | -1.52 | 1.3 |
| 3A | W32 | 7.2 | 7.4 | 8.63 | 91.3 | 18.1 | 0.0311 | 0 | -1.42 | 7.5 |
| 3B | W33 - T | 7.9 | | 9.07 | 97.6 | 18.9 | 0.09 | 0 | -1.55 | 4.3 |
| 3B | W34 | 7.6 | 34.5 | 7.60 | 81.4 | 18.7 | 0.106 | 0 | -1.5 | 29.2 |
| 3B | W35 | 8.4 | 7.9 | 9.30 | 95.8 | 16.8 | 0.122 | 0 | -1.145 | 6.8 |
| 4A | W36 | 7.4 | 4.4 | 8.80 | 92.6 | 17.8 | 0.0238 | 0 | -1.37 | 9 |
| 4A | W37 - T | 8.2 | 4.8 | 9.22 | 99.5 | 19.1 | 0.0838 | 0 | -1.58 | 7.9 |
| 4A | W38 | 7.4 | 5.6 | 9.00 | 93.1 | 17.0 | 0.14 | 0 | -1.183 | 5.3 |
| 4A | W39 | 8.1 | 4.5 | 9.08 | 98.3 | 19.2 | 0.0812 | 0 | -1.59 | 6.5 |
| 4A | W40 | 7.3 | 6.2 | 10.20 | 104.4 | 16.5 | 0.13 | 0 | -1.081 | 18 |
| 4A | W41 | 7.9 | 5.6 | 8.90 | 95.6 | 18.8 | 0.08 | 0 | -1.52 | 8 |
| 4A | W42 - T | 7.3 | | 9.49 | 101.3 | 18.5 | 0.08 | 0 | -1.47 | 5 |
| 4B | W43 | 7.6 | 1.8 | 9.97 | 107.5 | 19.0 | 0.08 | 0 | -1.57 | 3.5 |
| 4B | W44 | 7.5 | 8.0 | 9.47 | 102.3 | 19.1 | 0.08 | 0 | -1.59 | 6.8 |
| 4B | W45 - T | 7.5 | 3.2 | 9.64 | 104.1 | 19.1 | 0.08 | 0 | -1.58 | 7 |

FW Chronic Water Quality Criteria

6.5-8.5

8.00

90.0

20.0

SW Chronic Water Quality Criteria

7.0-8.5

6.00

T = Transect station

TABLE B-4. NUTRIENTS AND MISCELLANEOUS PARAMETERS IN WATER

| River Segment | Station | Chloride (mg/L) | Qualifier Code | Fluoride (mg/L) | Qualifier Code | Nitrate/Nitrite (mg/L) | Qualifier Code | Sulfate (mg/L) | Qualifier Code |
|---------------|--------------------|-----------------|----------------|-----------------|----------------|------------------------|----------------|----------------|----------------|
| 1A | W1 | 14380 | | 0.5 | U | 24.9 | | 1780 | |
| 1A | W2 | 8220 | | 0.5 | U | 12.2 | R | 1070 | |
| 1A | W3 | 4430 | | 0.5 | U | 13 | R | 585 | |
| 1A | W4 | 6350 | | 0.5 | U | 0.5 | U/R | 850 | |
| 1A | W5 | 2810 | | 0.5 | U | 0.5 | U/R | 362 | |
| 1B | W6 | 8700 | | 0.5 | U | 10 | R | 1080 | |
| 1B | W7 | 3290 | | 0.5 | U | 0.5 | U/R | 431 | |
| 1C | W8 | 2577 | | 0.5 | U | 0.5 | U/R | 393 | |
| 1C | W50 (Dupe for W8) | 3023 | | 0.5 | U | 0.5 | U/R | 383 | |
| 1C | W9 | 129 | | 0.5 | U | 0.5 | U/R | 29 | |
| 1C | W10 | 7.8 | | 0.5 | U | 0.5 | U/R | 12 | |
| 1C | W11 | 7.6 | | 0.5 | U | 0.5 | U/R | 13 | |
| 1C | W12 | 5.5 | | 0.5 | U | 0.5 | U/R | 11 | |
| 1C | W13 | 7.4 | | 0.5 | U | 0.5 | U/R | 13 | |
| 1C | W14 | 4.9 | | 0.5 | U | 0.5 | U/R | 11 | |
| 2A | W15 | 0.8 | | 0.5 | U | 0.5 | U/R | 1.5 | |
| 2A | W16 | 5.5 | | 0.5 | U | 0.5 | U/R | 11 | |
| 2B | W17 | 6.1 | | 0.5 | U | 0.5 | U/R | 12 | |
| 2B | W18 | 4.1 | | 0.5 | U | 0.5 | U/R | 10 | |
| 2B | W19 | 5.9 | | 0.5 | U | 0.5 | U/R | 12 | |
| 2C | W20 | 5.6 | | 0.5 | U | 0.5 | U/R | 13 | |
| 2C | W21 | 0.5 | U | 0.5 | U | 0.5 | U/R | 9 | |
| 2C | W49 (Dupe for W21) | 5.2 | | 0.5 | U | 0.5 | U/R | 12 | |
| 2C | W22 | 5.9 | | 0.5 | U | 0.5 | U/R | 12 | |
| 2C | W23 | 3.7 | | 0.5 | U | 0.5 | U/R | 9.3 | |
| 2C | W24 | 7.7 | | 0.5 | U | 0.5 | U/R | 18 | |
| 2C | W25 | 3.6 | | 0.5 | U | 0.5 | U/R | 11 | |
| 2C | W26 | 3.5 | | 0.5 | U | 0.5 | U/R | 10 | |
| 2C | W52 (Dupe for W26) | 3.6 | | 0.5 | U | 0.5 | U/R | 10 | |
| 3A | W27 | 4.7 | | 0.5 | U | 0.5 | U/R | 9.5 | |
| 3A | W28 | 4.3 | | 0.5 | U | 0.5 | U/R | 8.6 | |
| 3A | W29 | 3.3 | | 0.5 | U | 0.5 | U/R | 9.7 | |
| 3A | W30 | 3.5 | | 0.5 | U | 0.5 | U/R | 10 | |
| 3A | W48 (Dupe for W30) | 3.5 | | 0.5 | U | 0.5 | U/R | 10 | |
| 3A | W31 | 1.9 | | 0.5 | U | 0.5 | U/R | 2 | |
| 3A | W32 | 7.4 | | 0.5 | U | 1.2 | R | 4.6 | |
| 3B | W33 | 2.8 | | 0.5 | U | 0.5 | U/R | 11 | |
| 3B | W34 | 3.6 | | 0.5 | U | 0.6 | R | 9.2 | |
| 3B | W35 | 4.3 | | 0.5 | U | 0.5 | U/R | 11 | |
| 4A | W36 | 6.3 | | 0.5 | U | 1 | R | 4.1 | |
| 4A | W37 | 2.5 | | 0.5 | U | 0.5 | U/R | 11 | |
| 4A | W38 | 2.9 | | 0.5 | U | 0.5 | U/R | 12 | |
| 4A | W39 | 2.1 | | 0.5 | U | 0.5 | U/R | 9.5 | |
| 4A | W40 | 3.4 | | 0.5 | U | 0.5 | U/R | 12 | |
| 4A | W41 | 1.6 | | 0.5 | U | 0.5 | U/R | 8.8 | |
| 4A | W42 | 1.8 | | 0.5 | U | 0.5 | U/R | 9.7 | |
| 4B | W43 | 1.9 | | 0.5 | U | 0.5 | U/R | 10 | |
| 4B | W44 | 1.9 | | 0.5 | U | 0.5 | U/R | 8.8 | |
| 4B | W46 (Dupe for W44) | 2 | | 0.5 | U | 0.5 | U/R | 8.6 | |
| 4B | W45 | 2 | | 0.5 | U | 0.5 | U/R | 10 | |

ND = No data.

R = Data are unusable

Z = Value is corrected for blank contribution

U = Substance not detected. Value given is lower quantification limit.

| River Segment | Station | Ammonia (mg/L) | Qualifier Code | TKN (mg/L) | Qualifier Code | Total P (mg/L) | Qualifier Code |
|---------------|--------------------|----------------|----------------|------------|----------------|----------------|----------------|
| 1A | W1 | 0.1 | R | 0.3 | R | 0.2 | U/R |
| 1A | W2 | 0.1 | R | 0.2 | U/R | 0.2 | U/R |
| 1A | W3 | 0.2 | R | 0.2 | U/R | 0.2 | U/R |
| 1A | W4 | 0.1 | R | 0.2 | U/R | 0.2 | U/R |
| 1A | W5 | 0.1 | R | 0.2 | U/R | 0.2 | U/R |
| 1B | W6 | 0.1 | R | 0.3 | R | 0.2 | U/R |
| 1B | W7 | 0.1 | R | 0.2 | U/R | 0.2 | U/R |
| 1C | W8 | 0.1 | R | 0.2 | U/R | 0.2 | U/R |
| 1C | W50 (Dupe for W8) | 0.1 | R | 0.2 | U/R | 0.2 | U/R |
| 1C | W9 | 0.1 | R | 0.2 | U/R | 0.2 | U/R |
| 1C | W10 | 0.2 | R | 0.4 | R | 0.2 | U/R |
| 1C | W11 | 0.1 | R | 0.2 | U/R | 0.2 | U/R |
| 1C | W12 | 0.1 | R | 0.2 | U/R | 0.2 | U/R |
| 1C | W13 | 0.1 | R | 0.2 | U/R | 0.2 | U/R |
| 1C | W14 | 0.1 | R | 0.2 | U/R | 0.2 | U/R |
| 2A | W15 | 0.1 | R | 0.2 | U/R | 0.2 | U/R |
| 2A | W16 | 0.1 | R | 0.2 | U/R | 0.2 | U/R |
| 2B | W17 | 0.1 | R | 0.2 | U/R | 0.2 | U/R |
| 2B | W18 | 0.1 | R | 0.3 | R | 0.2 | U/R |
| 2B | W19 | 0.1 | R | 0.2 | U/R | 0.2 | U/R |
| 2C | W20 | 0.1 | R | 0.2 | U/R | 0.2 | U/R |
| 2C | W21 | 0.1 | R | 0.3 | R | 0.2 | U/R |
| 2C | W49 (Dupe for W21) | 0.1 | R | 0.2 | U/R | 0.2 | U/R |
| 2C | W22 | 0.1 | R | 0.2 | U/R | 0.2 | R |
| 2C | W23 | 0.1 | R | 0.2 | U/R | 0.2 | U/R |
| 2C | W24 | 0.1 | R | 0.2 | U/R | 0.2 | U/R |
| 2C | W25 | 0.1 | U/R | 0.2 | U/R | 0.2 | R |
| 2C | W26 | 0.1 | U/R | 0.2 | U/R | 0.2 | U/R |
| 2C | W52 (Dupe for W26) | 0.1 | R | 0.2 | U/R | 0.2 | U/R |
| 3A | W27 | 0.1 | R | 0.2 | U/R | 0.2 | U/R |
| 3A | W28 | 0.1 | R | 0.2 | U/R | 0.2 | U/R |
| 3A | W29 | 0.1 | R | 0.2 | U/R | 0.2 | U/R |
| 3A | W30 | 0.1 | R | 0.2 | U/R | 0.2 | U/R |
| 3A | W48 (Dupe for W30) | 0.1 | R | 0.2 | U/R | 0.2 | U/R |
| 3A | W31 | 0.1 | R | 0.2 | U/R | 0.2 | U/R |
| 3A | W32 | 0.1 | R | 0.2 | U/R | 0.2 | U/R |
| 3B | W33 | 0.1 | R | 0.2 | U/R | 0.2 | R |
| 3B | W34 | 0.1 | R | 0.2 | U/R | 0.2 | U/R |
| 3B | W35 | 0.1 | R | 0.2 | U/R | 0.2 | U/R |
| 4A | W36 | 0.1 | R | 0.2 | U/R | 0.2 | U/R |
| 4A | W37 | 0.1 | R | 0.2 | U/R | 0.2 | U/R |
| 4A | W38 | 0.1 | R | 0.2 | U/R | 0.2 | U/R |
| 4A | W39 | 0.1 | R | 0.2 | U/R | 0.2 | U/R |
| 4A | W40 | 0.1 | R | 0.2 | U/R | 0.2 | U/R |
| 4A | W41 | 0.1 | R | 0.2 | U/R | 0.2 | U/R |
| 4A | W42 | 0.1 | R | 0.2 | U/R | 0.2 | U/R |
| 4B | W43 | 0.1 | U/R | 0.3 | R | 0.2 | R |
| 4B | W44 | 0.1 | R | 0.2 | U/R | 0.2 | U/R |
| 4B | W46 (Dupe for W44) | 0.1 | U/R | 0.3 | R | 0.2 | U/R |
| 4B | W45 | 0.1 | R | 0.2 | U/R | 0.2 | U/R |

| River Segment | Station | TSS (mg/L) | Qualifier Code | Hardness (mg/L) | Qualifier Code | TOC (mg/L) | Qualifier Code |
|---------------|--------------------|------------|----------------|-----------------|----------------|------------|----------------|
| 1A | W1 | 13 | | 5292 | | | |
| 1A | W2 | 27.5 | | 2626 | | | |
| 1A | W3 | 60 | | 1497 | R | | |
| 1A | W4 | 19.5 | | ND | | | |
| 1A | W5 | 18.8 | | 1487 | | | |
| 1B | W6 | 30 | | 2359 | R | 0.75 | Z |
| 1B | W7 | 20.3 | | 1108 | | | |
| 1C | W8 | 16.8 | | 989 | R | | |
| 1C | W50 (Dupe for W8) | 16.3 | | 985 | | | |
| 1C | W9 | 12.5 | | 92 | | | |
| 1C | W10 | 5.3 | | 57 | | | |
| 1C | W11 | 4 | | 62 | | | |
| 1C | W12 | 3.8 | | 51 | | | |
| 1C | W13 | 5 | | 55 | | | |
| 1C | W14 | 5.8 | | 57 | | 2.41 | U/Z |
| 2A | W15 | 3.3 | | 59 | | | |
| 2A | W16 | 45.8 | | 59 | | | |
| 2B | W17 | 5.8 | | 64 | | | |
| 2B | W18 | 8.8 | | 57 | | | |
| 2B | W19 | 9 | | 53 | | | |
| 2C | W20 | 0.5 | | 62 | | | |
| 2C | W21 | 14.3 | | 57 | | | |
| 2C | W49 (Dupe for W21) | 4 | | 57 | | | |
| 2C | W22 | 5.5 | | 53 | | | |
| 2C | W23 | 3.8 | | 53 | | | |
| 2C | W24 | 3.5 | | 35 | | | |
| 2C | W25 | 5.8 | | 55 | | | |
| 2C | W26 | 4.3 | | 66 | | 2.41 | U/Z |
| 2C | W52 (Dupe for W26) | 3.3 | | 57 | | | |
| 3A | W27 | 4.3 | | 62 | | | |
| 3A | W28 | 6.3 | | 62 | | | |
| 3A | W29 | 7.5 | | 66 | | | |
| 3A | W30 | 5 | | 53 | | | |
| 3A | W48 (Dupe for W30) | 4.5 | | 57 | | | |
| 3A | W31 | 1.3 | | 10 | | | |
| 3A | W32 | 7.5 | | 21 | | | |
| 3B | W33 | 4.3 | | 57 | | | |
| 3B | W34 | 29.2 | | 68 | | | |
| 3B | W35 | 6.8 | | 51 | | | |
| 4A | W36 | 9 | | 23 | | | |
| 4A | W37 | 7.8 | | 53 | | 2.41 | U/Z |
| 4A | W38 | 5.3 | | 62 | | | |
| 4A | W39 | 6.5 | | 55 | | | |
| 4A | W40 | 18 | | 62 | | | |
| 4A | W41 | 8 | | 59 | | | |
| 4A | W42 | 5 | | 57 | | | |
| 4B | W43 | 3.5 | | 53 | | | |
| 4B | W44 | 6.8 | | 57 | | | |
| 4B | W46 (Dupe for W44) | 6.8 | | 53 | | | |
| 4B | W45 | 7 | | 62 | | 2.41 | UZ |

APPENDIX B-5,

PHYTOPLANKTON SAMPLE ANALYSIS

SAMPLE: Columbia River, W1

SAMPLE DATE: 91-10-08

TOTAL DENSITY (#/mL): 1,072

TOTAL BIOVOLUME (cu. uM/mL): 718,564

| Code | Taxa | Density ((#/mL) | Relative Density (%) | Biovolume (cu. uM/mL) | Relative Biovolume (%) |
|------|----------------------------------|--------------------|----------------------------|--------------------------|------------------------------|
| D | <i>Nitzschia seriata</i> | 241 | 22.4 | 336747 | 46.9 |
| D | <i>Thalassiosira</i> sp. | 491 | 45.8 | 226515 | 31.5 |
| D | <i>Coscinodiscus</i> sp. | 110 | 10.3 | 82683 | 11.5 |
| D | <i>Chaetoceros</i> sp. | 130 | 12.1 | 19061 | 2.7 |
| D | <i>Melosira italica</i> | 10 | 0.9 | 18882 | 2.6 |
| D | <i>Stephanodiscus hantzschii</i> | 20 | 1.9 | 2405 | 0.3 |
| D | Unident. centric diatom | 10 | 0.9 | 2004 | 0.3 |
| | | 1012 | 94.3 | 688297 | 95.8 |
| G | Unident. green alga | 20 | 1.9 | 12027 | 1.7 |
| G | <i>Nephrocytium</i> sp. | 10 | 0.9 | 3808 | 0.5 |
| | | 30 | 2.8 | 15835 | 2.2 |
| Y | <i>Cryptomonas erosa</i> | 20 | 1.9 | 10423 | 1.5 |
| Y | <i>Cryptomonas</i> sp. | 10 | 0.9 | 4009 | 0.6 |
| | | 30 | 2.8 | 14432 | 2.1 |
| | TOTAL | 1072 | 99.9 | 718564 | 100.1 |

D = Bacillariophyceae (Diatoms)

G = Chlorophyta (Green algae)

Y = Cryptophyta

PHYTOPLANKTON SAMPLE ANALYSIS

SAMPLE: Columbia River, W5

APPENDIX B-5

SAMPLE DATE: 91-09-10

TOTAL DENSITY (#/mL): 622

TOTAL BIOVOLUME (cu. uM/mL): 265,426

| Code | Taxa | Density (#/mL) | Relative Density (%) | Biovolume (cu. uM/mL) | Relative Biovolume (%) |
|------|--|-------------------|----------------------------|--------------------------|------------------------------|
| B | <i>Aphanizomenon flos-aquae</i> | 7 | 1.1 | 4195 | 1.6 |
| D | <i>Thalassiosira sp.</i> | 140 | 22.5 | 69922 | 26.3 |
| D | <i>Navicula capitata</i> | 49 | 7.9 | 23494 | 8.9 |
| D | <i>Melosira italica</i> | 21 | 3.4 | 19760 | 7.4 |
| D | <i>Melosira granulata</i> | 35 | 5.6 | 19229 | 7.2 |
| D | <i>Melosira ambigua</i> | 7 | 1.1 | 16474 | 6.2 |
| D | <i>Synedra ulna</i> | 7 | 1.1 | 13915 | 5.2 |
| D | <i>Diatoma vulgare</i> | 7 | 1.1 | 13705 | 5.2 |
| D | <i>Hannaea arcus</i> | 7 | 1.1 | 12236 | 4.6 |
| D | <i>Nitzschia hungarica</i> | 21 | 3.4 | 11118 | 4.2 |
| D | <i>Stephanodiscus astraea minutula</i> | 28 | 4.5 | 9789 | 3.7 |
| D | <i>Coscinodiscus sp.</i> | 7 | 1.1 | 5244 | 2 |
| D | <i>Stephanodiscus hantzschii</i> | 42 | 6.7 | 5034 | 1.9 |
| D | <i>Asterionella formosa</i> | 14 | 2.2 | 3077 | 1.2 |
| D | <i>Cymbella minuta</i> | 7 | 1.1 | 2587 | 1 |
| D | <i>Cyclotella meneghiniana</i> | 7 | 1.1 | 2657 | 1 |
| D | <i>Fragilaria construens</i> | 21 | 3.4 | 2349 | 0.9 |
| D | <i>Navicula cryptocephala veneta</i> | 21 | 3.4 | 1993 | 0.8 |
| D | <i>Navicula sp.</i> | 14 | 2.2 | 2098 | 0.8 |
| D | <i>Nitzschia acicularis</i> | 7 | 1.1 | 1958 | 0.7 |
| D | <i>Diploneis puella</i> | 7 | 1.1 | 1818 | 0.7 |
| D | <i>Nitzschia sp.</i> | 14 | 2.2 | 1678 | 0.6 |
| D | <i>Gomphonema angustatum</i> | 7 | 1.1 | 1259 | 0.5 |
| D | <i>Nitzschia palea</i> | 7 | 1.1 | 1259 | 0.5 |
| D | <i>Navicula meniscus upsaliensis</i> | 7 | 1.1 | 1433 | 0.5 |
| D | <i>Cymbella sinuata</i> | 7 | 1.1 | 979 | 0.4 |
| D | <i>Achnanthes minutissima</i> | 14 | 2.2 | 699 | 0.3 |
| D | <i>Achnanthes lewisiana</i> | 7 | 1.1 | 874 | 0.3 |
| D | <i>Nitzschia sp.</i> | 7 | 1.1 | 839 | 0.3 |
| D | <i>Amphora coffeiformes</i> | 7 | 1.1 | 664 | 0.3 |
| D | <i>Fragilaria pinnata</i> | 7 | 1.1 | 420 | 0.2 |
| D | <i>Crucigenia quadrata</i> | 7 | 1.1 | 594 | 0.2 |
| D | <i>Fragilaria construens venter</i> | 7 | 1.1 | 336 | 0.1 |
| D | <i>Navicula minima</i> | 7 | 1.1 | 308 | 0.1 |
| | | 574 | 91.6 | 249799 | 94.2 |
| G | <i>Ankistrodesmus falcatus</i> | 21 | 3.4 | 524 | 0.2 |
| Y | <i>Cryptomonas erosa</i> | 21 | 3.4 | 10908 | 4.1 |
| | TOTAL | 623 | 99.5 | 265426 | 100.1 |

B = Cyanophyta (Blue-green algae)

D = Bacillariophyceae (Diatoms)

G = Chlorophyta (Green algae)

Y = Cryptophyta

PHYTOPLANKTON SAMPLE ANALYSIS

APPENDIX B-5

SAMPLE: Columbia River, W6

SAMPLE DATE: 91-10-10

TOTAL DENSITY (#/mL): 867

TOTAL BIOVOLUME (cu. uM/mL): 451,855

| Code | Taxa | Density (#/mL) | Relative Density (%) | Biovolume (cu. uM/mL) | Relative Biovolume (%) |
|-------|--|-------------------|----------------------------|--------------------------|------------------------------|
| D | <i>Nitzschia seriata</i> | 140 | 16.2 | 196163 | 43.4 |
| D | <i>Thalassiosira</i> sp. | 184 | 21.2 | 66665 | 14.8 |
| D | <i>Coscinodiscus</i> sp. | 44 | 5.1 | 32840 | 7.3 |
| D | <i>Fragilaria crotonensis</i> | 9 | 1 | 22068 | 4.9 |
| D | <i>Melosira granulata</i> | 35 | 4 | 19266 | 4.3 |
| D | <i>Cymbella affinis</i> | 9 | 1 | 15763 | 3.5 |
| D | <i>Stephanodiscus astraea minutula</i> | 26 | 3 | 9195 | 2 |
| D | <i>Navicula capitata</i> | 18 | 2 | 8407 | 1.9 |
| D | <i>Melosira italica</i> | 9 | 1 | 8249 | 1.8 |
| D | <i>Diatoma hiemale mesodon</i> | 9 | 1 | 7006 | 1.6 |
| D | <i>Chaetoceros</i> sp. | 44 | 5.1 | 6656 | 1.5 |
| D | <i>Fragilaria construens</i> | 26 | 3 | 4914 | 1.1 |
| D | <i>Melosira ambigua</i> | 9 | 1 | 5158 | 1.1 |
| D | <i>Stephanodiscus hantzschii</i> | 35 | 4 | 4203 | 0.9 |
| D | <i>Asterionella formosa</i> | 18 | 2 | 3853 | 0.9 |
| D | <i>Fragilaria construens venter</i> | 35 | 4 | 3783 | 0.8 |
| D | <i>Stephanodiscus subsalsus</i> | 26 | 3 | 2995 | 0.7 |
| D | <i>Synedra radians</i> | 9 | 1 | 3153 | 0.7 |
| D | <i>Cymbella minuta</i> | 9 | 1 | 3240 | 0.7 |
| D | <i>Nitzschia acicularis</i> | 9 | 1 | 2452 | 0.5 |
| D | <i>Navicula cryptocephala</i> | 9 | 1 | 1620 | 0.4 |
| D | Unident. pennate diatom | 9 | 1 | 1533 | 0.3 |
| D | <i>Achnanthes lanceolata</i> | 9 | 1 | 1576 | 0.3 |
| D | <i>Navicula pseudoscutiformis</i> | 9 | 1 | 1533 | 0.3 |
| D | <i>Achnanthes</i> sp. | 9 | 1 | 1051 | 0.2 |
| D | <i>Nitzschia</i> sp. | 9 | 1 | 1051 | 0.2 |
| D | <i>Achnanthes minutissima</i> | 9 | 1 | 438 | 0.1 |
| D | <i>Cyclotella atomus</i> | 9 | 1 | 175 | 0 |
| | | 775 | 88.6 | 435006 | 96.2 |
| G | <i>Chlamydomonas</i> sp. | 18 | 2 | 5692 | 1.3 |
| G | <i>Scenedesmus quadricauda</i> | 18 | 2 | 2277 | 0.5 |
| G | <i>Planktosphaeria gelatinosa</i> | 9 | 1 | 1962 | 0.4 |
| G | <i>Tetraedron minimum</i> | 9 | 1 | 1576 | 0.3 |
| G | <i>Selenastrum minutum</i> | 18 | 2 | 350 | 0.1 |
| G | <i>Ankistrodesmus falcatus</i> | 18 | 2 | 438 | 0.1 |
| | | 90 | 10 | 12295 | 2.7 |
| Y | <i>Cryptomonas erosa</i> | 9 | 1 | 4554 | 1 |
| TOTAL | | 874 | 99.6 | 451855 | 99.9 |

D = Bacillariophyceae (Diatoms)

G = Chlorophyta (Green algae)

Y = Cryptophyta

PHYTOPLANKTON SAMPLE ANALYSIS

APPENDIX B-5

SAMPLE: Columbia River, W8

SAMPLE DATE: 91-10-10

TOTAL DENSITY (#/mL): 510

TOTAL BIOVOLUME (cu. uM/ mL): 303,623

| Code | Taxa | Density (#/mL) | Relative Density (%) | Biovolume (cu. uM/mL) | Relative Biovolume (%) |
|-------|--|-------------------|----------------------------|--------------------------|------------------------------|
| D | <i>Fragilaria crotonensis</i> | 20 | 3.8 | 54849 | 18.1 |
| D | <i>Stephanodiscus astra</i> | 7 | 1.3 | 52564 | 17.3 |
| D | <i>Nitzschia seriata</i> | 33 | 6.4 | 45754 | 15.1 |
| D | <i>Thalassiosira</i> sp. | 72 | 14.1 | 36758 | 12.1 |
| D | <i>Melosira granulata</i> | 39 | 7.7 | 32354 | 10.7 |
| D | <i>Melosira italica</i> | 13 | 2.6 | 12314 | 4.1 |
| D | <i>Coscinodiscus</i> sp. | 13 | 2.6 | 9804 | 3.2 |
| D | <i>Stephanodiscus hantzschii</i> | 46 | 9 | 5490 | 1.8 |
| D | <i>Stephanodiscus astra</i> minutula | 13 | 2.6 | 4575 | 1.5 |
| D | <i>Melosira ambigua</i> | 7 | 1.3 | 3850 | 1.3 |
| D | <i>Chaetoceros</i> sp. | 20 | 3.8 | 3726 | 1.2 |
| D | <i>Navicula capitata</i> | 7 | 1.3 | 3137 | 1 |
| D | <i>Asterionella formosa</i> | 13 | 2.6 | 2876 | 0.9 |
| D | <i>Nitzschia capitellata</i> | 7 | 1.3 | 2353 | 0.8 |
| D | <i>Stephanodiscus subsalsus</i> | 26 | 5.1 | 1863 | 0.6 |
| D | <i>Nitzschia acicularis</i> | 7 | 1.3 | 1830 | 0.6 |
| D | <i>Melosira granulata angustissima</i> | 7 | 1.3 | 1634 | 0.5 |
| D | <i>Fragilaria bicapitata</i> | 7 | 1.3 | 1177 | 0.4 |
| D | <i>Nitzschia frustulum</i> | 7 | 1.3 | 784 | 0.3 |
| D | <i>Achnanthes clevei</i> | 7 | 1.3 | 980 | 0.3 |
| D | <i>Nitzschia</i> sp. | 7 | 1.3 | 784 | 0.3 |
| D | <i>Fragilaria construens venter</i> | 7 | 1.3 | 314 | 0.1 |
| D | <i>Navicula minuscula</i> | 7 | 1.3 | 294 | 0.1 |
| D | <i>Fragilaria pinnata</i> | 7 | 1.3 | 392 | 0.1 |
| D | <i>Cyclotella atomus</i> | 7 | 1.3 | 131 | 0 |
| | | 406 | 78.5 | 280587 | 92.4 |
| G | <i>Mougeotia</i> sp. | 7 | 1.3 | 3471 | 1.1 |
| G | <i>Scenedesmus quadricauda</i> | 13 | 2.6 | 2974 | 1 |
| G | <i>Chodatella wratislawiensis</i> | 13 | 2.6 | 784 | 0.3 |
| G | <i>Sphaerocystis schroeteri</i> | 7 | 1.3 | 915 | 0.3 |
| G | <i>Ankistrodesmus falcatus</i> | 13 | 2.6 | 327 | 0.1 |
| G | <i>Pediastrum duplex</i> | 7 | 1.3 | 444 | 0.1 |
| | | 60 | 11.7 | 8915 | 2.9 |
| Y | <i>Cryptomonas erosa</i> | 26 | 5.1 | 13595 | 4.5 |
| Y | <i>Rhodomonas minuta</i> | 26 | 5.1 | 523 | 0.2 |
| | | 52 | 10.2 | 14118 | 4.7 |
| TOTAL | | 518 | 100 | 303620 | 100 |

D = Bacillariophyceae (Diatoms)

G = Chlorophyta (Green algae)

Y = Cryptophyta

APPENDIX B-5

PHYTOPLANKTON SAMPLE ANALYSIS

SAMPLE: Columbia River, W9

SAMPLE DATE: 91-10-10

TOTAL DENSITY (#/mL): 537

TOTAL BIOVOLUME (cu. μ M/mL): 135,200

| Code | Taxa | Density (#/mL) | Relative Density (%) | Biovolume (cu. μ m/mL) | Relative Biovolume (%) |
|------|--|-------------------|----------------------------|-------------------------------|------------------------------|
| D | <i>Melosira italica</i> | 14 | 2.6 | 19458 | 14.4 |
| D | <i>Amphora ovalis</i> | 28 | 5.1 | 15919 | 11.8 |
| D | <i>Coscinodiscus</i> sp. | 21 | 3.8 | 15492 | 11.5 |
| D | <i>Synedra ulna</i> | 7 | 1.3 | 13702 | 10.1 |
| D | <i>Cymbella affinis</i> | 7 | 1.3 | 12394 | 9.2 |
| D | <i>Navicula capitata</i> | 21 | 3.8 | 9915 | 7.3 |
| D | <i>Stephanodiscus astraea minutula</i> | 21 | 3.8 | 7230 | 5.3 |
| D | <i>Cocconeis placentula</i> | 14 | 2.6 | 6335 | 4.7 |
| D | <i>Cyclotella atomus</i> | 207 | 38.5 | 4131 | 3.1 |
| D | <i>Stephanodiscus hantzschii</i> | 34 | 6.4 | 4131 | 3.1 |
| D | <i>Thalassiosira</i> sp. | 7 | 1.3 | 3443 | 2.5 |
| D | <i>Nitzschia capitellata</i> | 7 | 1.3 | 2479 | 1.8 |
| D | <i>Fragilaria construens venter</i> | 21 | 3.8 | 1319 | 1 |
| D | <i>Gomphonema angustatum</i> | 7 | 1.3 | 1239 | 0.9 |
| D | <i>Achnanthes lanceolata</i> | 7 | 1.3 | 1239 | 0.9 |
| D | <i>Navicula</i> sp. | 7 | 1.3 | 1033 | 0.8 |
| D | <i>Nitzschia paleacea</i> | 7 | 1.3 | 675 | 0.5 |
| D | <i>Navicula minima</i> | 14 | 2.6 | 606 | 0.4 |
| D | <i>Fragilaria pinnata</i> | 7 | 1.3 | 413 | 0.3 |
| D | <i>Achnanthes minutissima</i> | 7 | 1.3 | 344 | 0.3 |
| | | 465 | 86 | 121497 | 89.9 |
| G | <i>Chlamydomonas</i> sp. | 7 | 1.3 | 2238 | 1.7 |
| G | <i>Ulothrix</i> sp. | 7 | 1.3 | 3305 | 2.4 |
| G | <i>Ankistrodesmus falcatus</i> | 7 | 1.3 | 172 | 0.1 |
| | | 21 | 3.9 | 5715 | 4.2 |
| Y | <i>Cryptomonas erosa</i> | 14 | 2.6 | 7161 | 5.3 |
| Y | <i>Rhodomonas minuta</i> | 41 | 7.7 | 826 | 0.6 |
| | | 55 | 10.3 | 7987 | 5.9 |
| | TOTAL | 541 | 100.2 | 135199 | 100 |

D = Bacillariophyceae (Diatoms)

G = Chlorophyta (Green algae)

Y = Cryptophyta

APPENDIX B-5

PHYTOPLANKTON SAMPLE ANALYSIS

SAMPLE: Columbia River, W10

SAMPLE DATE: 91-10-11

TOTAL DENSITY (#/mL): 1,030

TOTAL BIOVOLUME (cu. uM/mL): 278,939

| Code | Taxa | Density (/#mL) | Relative Density (%) | Biovolume (cu. uM/mL) | Relative Biovolume (%) |
|-------|--|-------------------|----------------------------|--------------------------|------------------------------|
| D | <i>Melosira ambigua</i> | 17 | 1.7 | 45109 | 16.2 |
| D | <i>Melosira granulata</i> | 43 | 4.1 | 42122 | 15.1 |
| D | <i>Cyclotella meneghiniana</i> | 94 | 9.1 | 35569 | 12.8 |
| D | <i>Stephanodiscus hantzschii</i> | 221 | 21.5 | 26549 | 9.5 |
| D | <i>Stephanodiscus astraea minutula</i> | 68 | 6.6 | 23826 | 8.5 |
| D | <i>Synedra delicatissima</i> | 26 | 2.5 | 16849 | 6 |
| D | <i>Fragilaria construens</i> | 9 | 0.8 | 7624 | 2.7 |
| D | <i>Stephanodiscus subsalsus</i> | 60 | 5.8 | 6791 | 2.4 |
| D | <i>Melosira granulata angustissima</i> | 9 | 0.8 | 4255 | 1.5 |
| D | <i>Pinnularia</i> sp. | 9 | 0.8 | 3404 | 1.2 |
| D | <i>Cyclotella atomus</i> | 85 | 8.3 | 1702 | 0.6 |
| D | <i>Nitzschia frustulum</i> | 9 | 0.8 | 1021 | 0.4 |
| D | <i>Nitzschia</i> sp. | 9 | 0.8 | 1021 | 0.4 |
| D | <i>Navicula minima</i> | 17 | 1.7 | 749 | 0.3 |
| D | <i>Gomphonema clevei</i> | 9 | 0.8 | 766 | 0.3 |
| D | <i>Nitzschia paleacea</i> | 9 | 0.8 | 834 | 0.3 |
| | | 694 | 66.9 | 218191 | 78.2 |
| G | <i>Pediastrum duplex</i> | 9 | 0.8 | 4629 | 1.7 |
| G | <i>Sphaerocystis schroeteri</i> | 17 | 1.7 | 2680 | 1 |
| G | <i>Chlamydomonas</i> sp. | 9 | 0.8 | 2766 | 1 |
| G | <i>Scenedesmus abundans</i> | 9 | 0.8 | 1702 | 0.6 |
| G | <i>Ankistrodesmus falcatus</i> | 26 | 2.5 | 638 | 0.2 |
| G | <i>Chodatella wratislawiensis</i> | 9 | 0.8 | 511 | 0.2 |
| | | 79 | 7.4 | 12926 | 4.7 |
| Y | <i>Cryptomonas erosa</i> | 85 | 8.3 | 44249 | 15.9 |
| Y | <i>Rhodomonas minuta</i> | 179 | 17.4 | 3574 | 1.3 |
| | | 264 | 25.7 | 47823 | 17.2 |
| TOTAL | | 1037 | 100 | 278940 | 100.1 |

D = Bacillariophyceae (Diatoms)

G = Chlorophyta (Green algae)

Y = Cryptophyta

APPENDIX B-5

PHYTOPLANKTON SAMPLE ANALYSIS

SAMPLE: Columbia River, W12

SAMPLE DATE: 91-10-07

TOTAL DENSITY (#/mL): 1,270

TOTAL BIOVOLUME (cu. uM/mL): 410,901

| Code | Taxa | Density (#/mL) | Relative Density (%) | Biovolume (cu. uM/mL) | Relative Biovolume (%) |
|------|--|-------------------|----------------------------|--------------------------|------------------------------|
| D | <i>Fragilaria crotonensis</i> | 24 | 1.9 | 119634 | 29.1 |
| D | <i>Melosira granulata</i> | 47 | 3.7 | 52221 | 12.7 |
| D | <i>Melosira italica</i> | 12 | 0.9 | 44720 | 10.9 |
| D | <i>Melosira ambigua</i> | 24 | 1.9 | 27962 | 6.8 |
| D | <i>Synedra ulna</i> | 12 | 0.9 | 23618 | 5.7 |
| D | <i>Navicula capitata</i> | 24 | 1.9 | 11394 | 2.8 |
| D | <i>Stephanodiscus hantzschii</i> | 71 | 5.6 | 9998 | 2.4 |
| D | <i>Stephanodiscus subsalsus</i> | 95 | 7.5 | 8118 | 2 |
| D | <i>Synedra delicatissima</i> | 12 | 0.9 | 7833 | 1.9 |
| D | <i>Cyclotella atomus</i> | 368 | 29 | 7358 | 1.8 |
| D | <i>Melosira granulata angustissima</i> | 12 | 0.9 | 5934 | 1.4 |
| D | <i>Cymbella minuta</i> | 12 | 0.9 | 4391 | 1.1 |
| D | <i>Stephanodiscus astraea minutula</i> | 12 | 0.9 | 4154 | 1 |
| D | <i>Diploneis puella</i> | 12 | 0.9 | 3086 | 0.8 |
| D | <i>Chodatella wratislawiensis</i> | 36 | 2.8 | 2136 | 0.5 |
| D | <i>Nitzschia palea</i> | 12 | 0.9 | 2136 | 0.5 |
| D | <i>Cyclotella stelligera</i> | 24 | 1.9 | 1306 | 0.3 |
| D | <i>Fragilaria construens venter</i> | 12 | 0.9 | 1139 | 0.3 |
| D | <i>Navicula cryptocephala veneta</i> | 12 | 0.9 | 1128 | 0.3 |
| D | <i>Nitzschia sp.</i> | 12 | 0.9 | 1424 | 0.3 |
| D | <i>Cyclotella pseudostelligera</i> | 12 | 0.9 | 771 | 0.2 |
| D | <i>Navicula mutica</i> | 12 | 0.9 | 653 | 0.2 |
| | | 869 | 67.9 | 341114 | 83 |
| G | <i>Chlamydomonas sp.</i> | 36 | 2.8 | 11572 | 2.8 |
| G | <i>Mougeotia sp.</i> | 12 | 0.9 | 4201 | 1 |
| G | <i>Scenedesmus quadricauda</i> | 12 | 0.9 | 3086 | 0.8 |
| G | <i>Oocystis pusilla</i> | 12 | 0.9 | 2564 | 0.6 |
| G | <i>Ankistrodesmus falcatus</i> | 36 | 2.8 | 890 | 0.2 |
| | | 108 | 8.3 | 22313 | 5.4 |
| Y | <i>Cryptomonas erosa</i> | 83 | 6.5 | 43201 | 10.5 |
| Y | <i>Rhodomonas minuta</i> | 214 | 16.8 | 4273 | 1 |
| | | 297 | 23.3 | 47474 | 11.5 |
| | TOTAL | 1274 | 99.5 | 410901 | 99.9 |

D = Bacillariophyceae (Diatoms)

G = Chlorophyta (Green algae)

Y = Cryptophyta

APPENDIX B-5

PHYTOPLANKTON SAMPLE ANALYSIS

SAMPLE: Columbia River, W13

SAMPLE DATE: 91-10-12

TOTAL DENSITY (#/mL): 1,466

TOTAL BIOVOLUME (cu. uM/mL): 905,894

| Code | Taxa | Density (#/mL) | Relative Density (%) | Biovolume (cu. uM/mL) | Relative Biovolume (%) |
|-------|--|-------------------|----------------------------|--------------------------|------------------------------|
| D | <i>Fragilaria crotonensis</i> | 25 | 1.7 | 526167 | 58.1 |
| D | <i>Melosira granulata</i> | 75 | 5.1 | 82683 | 9.1 |
| D | <i>Cyclotella meneghiniana</i> | 175 | 12 | 66648 | 7.4 |
| D | <i>Melosira ambigua</i> | 13 | 0.9 | 51652 | 5.7 |
| D | <i>Stephanodiscus hantzschii</i> | 313 | 21.4 | 37583 | 4.1 |
| D | <i>Stephanodiscus astraea minutula</i> | 75 | 5.1 | 26308 | 2.9 |
| D | <i>Melosira granulata angustissima</i> | 25 | 1.7 | 15660 | 1.7 |
| D | <i>Stephanodiscus subsalsus</i> | 88 | 6 | 10697 | 1.2 |
| D | <i>Cymbella minuta</i> | 25 | 1.7 | 9271 | 1 |
| D | <i>Cyclotella atomus</i> | 163 | 11.1 | 3257 | 0.4 |
| D | <i>Melosira distans</i> | 13 | 0.9 | 2481 | 0.3 |
| D | <i>Gomphonema olivaceum</i> | 13 | 0.9 | 2819 | 0.3 |
| D | <i>Cyclotella pseudostelligera</i> | 25 | 1.7 | 1629 | 0.2 |
| D | <i>Achnanthes linearis</i> | 13 | 0.9 | 1654 | 0.2 |
| D | <i>Fragilaria construens</i> | 13 | 0.9 | 1403 | 0.2 |
| D | <i>Fragilaria pinnata</i> | 13 | 0.9 | 752 | 0.1 |
| D | <i>Cyclotella stelligera</i> | 13 | 0.9 | 689 | 0.1 |
| D | <i>Navicula minima</i> | 13 | 0.9 | 551 | 0.1 |
| | | 1093 | 74.7 | 841904 | 93.1 |
| G | <i>Mougeotia</i> sp. | 13 | 0.9 | 8870 | 1 |
| G | <i>Scenedesmus quadricauda</i> | 13 | 0.9 | 3257 | 0.4 |
| G | <i>Chlamydomonas</i> sp. | 13 | 0.9 | 4072 | 0.4 |
| G | <i>Ankistrodesmus falcatus</i> | 38 | 2.6 | 940 | 0.1 |
| | | 77 | 5.3 | 17139 | 1.9 |
| Y | <i>Cryptomonas erosa</i> | 63 | 4.3 | 32572 | 3.6 |
| Y | <i>Cryptomonas</i> sp. | 25 | 1.7 | 10022 | 1.1 |
| Y | <i>Rhodomonas minuta</i> | 213 | 14.5 | 4259 | 0.5 |
| | | 301 | 20.5 | 46853 | 5.2 |
| TOTAL | | 1471 | 100.5 | 905896 | 100.2 |

D = Bacillariophyceae (Diatoms)

G = Chlorophyta (Green algae)

Y = Cryptophyta

APPENDIX B-5

PHYTOPLANKTON SAMPLE ANALYSIS

SAMPLE: Columbia River, W14

SAMPLE DATE: 91-10-06

TOTAL DENSITY (#/mL): 1,403

TOTAL BIOVOLUME (cu. uM/mL): 480,388

| Code | Taxa | Density (#/mL) | Relative Density (%) | Biovolume (cu. uM/mL) | Relative Biovolume (%) |
|-------|--|-------------------|----------------------------|--------------------------|------------------------------|
| D | <i>Melosira granulata</i> | 150 | 10.7 | 158752 | 33 |
| D | <i>Stephanodiscus astraea minutula</i> | 288 | 20.5 | 100849 | 21 |
| D | <i>Melosira italica</i> | 13 | 0.9 | 47205 | 9.8 |
| D | <i>Melosira ambigua</i> | 25 | 1.8 | 36894 | 7.7 |
| D | <i>Melosira granulata angustissima</i> | 50 | 3.6 | 34451 | 7.2 |
| D | <i>Fragilaria construens</i> | 13 | 0.9 | 11225 | 2.3 |
| D | <i>Stephanodiscus subsalsus</i> | 88 | 6.2 | 10697 | 2.2 |
| D | <i>Stephanodiscus hantzschii</i> | 63 | 4.5 | 7517 | 1.6 |
| D | <i>Cyclotella atomus</i> | 263 | 18.7 | 5262 | 1.1 |
| D | <i>Cymbella minuta</i> | 13 | 0.9 | 4635 | 1 |
| D | <i>Cyclotella meneghiniana</i> | 13 | 0.9 | 4761 | 1 |
| D | <i>Synedra radians</i> | 13 | 0.9 | 4510 | 0.9 |
| D | <i>Asterionella formosa</i> | 13 | 0.9 | 2756 | 0.6 |
| D | <i>Melosira distans</i> | 13 | 0.9 | 2481 | 0.5 |
| D | <i>Cyclotella stelligera</i> | 38 | 2.7 | 2067 | 0.4 |
| D | <i>Navicula minuscula</i> | 38 | 2.7 | 1691 | 0.4 |
| | | 1094 | 77.7 | 435753 | 90.7 |
| G | <i>Mougeotia</i> sp. | 13 | 0.9 | 8870 | 1.8 |
| G | <i>Scenedesmus quadricauda</i> | 25 | 1.8 | 6514 | 1.4 |
| G | <i>Scenedesmus bijuga</i> | 25 | 1.8 | 5262 | 1.1 |
| G | <i>Ankistrodesmus falcatus</i> | 38 | 2.7 | 940 | 0.2 |
| G | <i>Selenastrum minutum</i> | 25 | 1.8 | 501 | 0.1 |
| | | 126 | 9 | 22087 | 4.6 |
| Y | <i>Cryptomonas erosa</i> | 38 | 2.7 | 19543 | 4.1 |
| Y | <i>Rhodomonas minuta</i> | 150 | 10.7 | 3007 | 0.6 |
| | | 188 | 13.4 | 22550 | 4.7 |
| TOTAL | | 1408 | 100.1 | 480390 | 100 |

D = Bacillariophyceae (Diatoms)

G = Chlorophyta (Green algae)

Y = Cryptophyta

APPENDIX B-5

PHYTOPLANKTON SAMPLE ANALYSIS

SAMPLE: Columbia River, W17

SAMPLE DATE: 91-10-06

TOTAL DENSITY (#/mL): 918

TOTAL BIOVOLUME (cu. μ m/mL): 474,858

| Code | Taxa | Density (#/mL) | Relative Density (%) | Biovolume (cu. μ m/mL) | Relative Biovolume (%) |
|-------|--|-------------------|----------------------------|-------------------------------|------------------------------|
| D | <i>Melosira granulata</i> | 261 | 28.4 | 278599 | 58.7 |
| D | <i>Melosira ambigua</i> | 47 | 5.2 | 46697 | 9.8 |
| D | <i>Stephanodiscus astraea minutula</i> | 63 | 6.9 | 22154 | 4.7 |
| D | <i>Stephanodiscus hantzschii</i> | 135 | 14.7 | 16141 | 3.4 |
| D | <i>Cyclotella meneghiniana</i> | 40 | 4.3 | 15033 | 3.2 |
| D | <i>Hannaea arcus</i> | 8 | 0.9 | 13846 | 2.9 |
| D | <i>Navicula tripunctata</i> | 8 | 0.9 | 8862 | 1.9 |
| D | <i>Melosira granulata angustissima</i> | 16 | 1.7 | 5934 | 1.2 |
| D | <i>Synedra delicatissima</i> | 8 | 0.9 | 5222 | 1.1 |
| D | <i>Fragilaria construens</i> | 8 | 0.9 | 5317 | 1.1 |
| D | <i>Stephanodiscus subsalsus</i> | 24 | 2.6 | 3613 | 0.8 |
| D | <i>Synedra radians</i> | 8 | 0.9 | 2848 | 0.6 |
| D | <i>Nitzschia capitellata</i> | 8 | 0.9 | 2848 | 0.6 |
| D | <i>Achnanthes linearis</i> | 16 | 1.7 | 2089 | 0.4 |
| D | <i>Gomphonema olivaceum</i> | 8 | 0.9 | 1780 | 0.4 |
| D | <i>Cyclotella pseudostelligera</i> | 16 | 1.7 | 1029 | 0.2 |
| D | <i>Achnanthes exigua</i> | 8 | 0.9 | 886 | 0.2 |
| D | <i>Cyclotella atomus</i> | 24 | 2.6 | 475 | 0.1 |
| D | <i>Navicula minima</i> | 16 | 1.7 | 696 | 0.1 |
| D | <i>Achnanthes minutissima</i> | 8 | 0.9 | 396 | 0.1 |
| D | <i>Navicula biconica</i> | 8 | 0.9 | 475 | 0.1 |
| | | 738 | 80.5 | 434940 | 91.6 |
| G | <i>Chlamydomonas</i> sp. | 16 | 1.7 | 5143 | 1.1 |
| G | <i>Chodatella wratislawiensis</i> | 16 | 1.7 | 949 | 0.2 |
| G | <i>Ankistrodesmus falcatus</i> | 24 | 2.6 | 593 | 0.1 |
| G | <i>Selenastrum minutum</i> | 8 | 0.9 | 158 | 0 |
| | | 64 | 6.9 | 6843 | 1.4 |
| Y | <i>Cryptomonas erosa</i> | 55 | 6 | 28801 | 6.1 |
| Y | <i>Cryptomonas</i> sp. | 8 | 0.9 | 3165 | 0.7 |
| Y | <i>Rhodomonas minuta</i> | 55 | 6 | 1108 | 0.2 |
| | | 118 | 12.9 | 33074 | 7 |
| TOTAL | | 920 | 100.3 | 474857 | 100 |

D = Bacillariophyceae (Diatoms)

G = Chlorophyta (Green algae)

Y = Cryptophyta

PHYTOPLANKTON SAMPLE ANALYSIS

APPENDIX B-5

SAMPLE: Columbia River, W18

SAMPLE DATE: 91-10-05

TOTAL DENSITY (#/mL): 698

TOTAL BIOVOLUME (cu. uM/mL): 345,487

| Code | Taxa | Density (#/mL) | Relative Density (%) | Biovolume (cu. um/mL) | Relative Biovolume (%) |
|-------|--|-------------------|----------------------------|--------------------------|------------------------------|
| D | <i>Fragilaria crotonensis</i> | 6 | 0.9 | 129740 | 37.6 |
| D | <i>Melosira granulata</i> | 80 | 11.5 | 60959 | 17.6 |
| D | <i>Melosira ambigua</i> | 43 | 6.2 | 50944 | 14.7 |
| D | <i>Stephanodiscus hantzschii</i> | 124 | 17.7 | 14827 | 4.3 |
| D | <i>Stephanodiscus subsalsus</i> | 117 | 16.8 | 14787 | 4.3 |
| D | <i>Stephanodiscus astraea minutula</i> | 37 | 5.3 | 12974 | 3.8 |
| D | <i>Cyclotella meneghiniana</i> | 19 | 2.7 | 7043 | 2 |
| D | <i>Navicula tripunctata</i> | 6 | 0.9 | 6919 | 2 |
| D | <i>Melosira distans</i> | 12 | 1.8 | 4893 | 1.4 |
| D | <i>Fragilaria construens</i> | 6 | 0.9 | 2768 | 0.8 |
| D | <i>Cocconeis klamathensis</i> | 6 | 0.9 | 1730 | 0.5 |
| D | <i>Nitzschia acicularis</i> | 6 | 0.9 | 1730 | 0.5 |
| D | <i>Cyclotella stelligera</i> | 19 | 2.7 | 1019 | 0.3 |
| D | <i>Navicula gregaria</i> | 6 | 0.9 | 1081 | 0.3 |
| D | <i>Achnanthes lanceolata</i> | 6 | 0.9 | 1112 | 0.3 |
| D | <i>Nitzschia palea</i> | 6 | 0.9 | 1112 | 0.3 |
| D | <i>Fragilaria construens venter</i> | 6 | 0.9 | 1186 | 0.3 |
| D | <i>Nitzschia frustulum</i> | 6 | 0.9 | 741 | 0.2 |
| D | <i>Cyclotella atomus</i> | 12 | 1.8 | 247 | 0.1 |
| | | 523 | 75.5 | 315812 | 91.3 |
| F | Unident. dinoflagellate | 6 | 0.9 | 3089 | 0.9 |
| G | <i>Mougeotia</i> sp. | 12 | 1.8 | 4374 | 1.3 |
| G | <i>Scenedesmus quadricauda</i> | 12 | 1.8 | 2409 | 0.7 |
| G | <i>Chlamydomonas</i> sp. | 6 | 0.9 | 2008 | 0.6 |
| G | <i>Ankistrodesmus falcatus</i> | 25 | 3.5 | 618 | 0.2 |
| G | <i>Selenastrum minutum</i> | 12 | 1.8 | 247 | 0.1 |
| G | <i>Chodatella wratislawiensis</i> | 6 | 0.9 | 371 | 0.1 |
| | | 73 | 10.7 | 10027 | 3 |
| Y | <i>Cryptomonas erosa</i> | 25 | 3.5 | 12850 | 3.7 |
| Y | <i>Cryptomonas</i> sp. | 6 | 0.9 | 2471 | 0.7 |
| Y | <i>Rhodomonas minuta</i> | 62 | 8.8 | 1236 | 0.4 |
| | | 93 | 13.2 | 16557 | 4.8 |
| TOTAL | | 695 | 100.3 | 345485 | 100 |

D = Bacillariophyceae (Diatoms)
 F = Pyrrophyta (Dinoflagellates)
 G = Chlorophyta (Green algae)
 Y = Cryptophyta

APPENDIX B-5

PHYTOPLANKTON SAMPLE ANALYSIS

SAMPLE: Columbia River, W20

SAMPLE DATE: 91-10-04

TOTAL DENSITY (#/mL): 1,054

TOTAL BIOVOLUME (cu. uM/mL): 572,962

| Code | Taxa | Density (/mL) | Relative Density (%) | Biovolume (cu. uM/mL) | Relative Biovolume (%) |
|-------|--|------------------|----------------------------|--------------------------|------------------------------|
| D | <i>Cymatopleura solea</i> | 10 | 1 | 164184 | 28.7 |
| D | <i>Melosira granulata</i> | 162 | 15.4 | 150725 | 26.3 |
| D | <i>Melosira ambigua</i> | 41 | 3.8 | 65664 | 11.5 |
| D | <i>Melosira granulata angustissima</i> | 41 | 3.8 | 35472 | 6.2 |
| D | <i>Stephanodiscus astraea minutula</i> | 91 | 8.7 | 31925 | 5.6 |
| D | <i>Melosira italica</i> | 10 | 1 | 19094 | 3.3 |
| D | <i>Cyclotella meneghiniana</i> | 41 | 3.8 | 15405 | 2.7 |
| D | <i>Stephanodiscus hantzschii</i> | 101 | 9.6 | 12162 | 2.1 |
| D | <i>Nitzschia sigmoidea</i> | 10 | 1 | 8615 | 1.5 |
| D | <i>Nitzschia acicularis</i> | 20 | 1.9 | 5676 | 1 |
| D | <i>Stephanodiscus subsalsus</i> | 30 | 2.9 | 4627 | 0.8 |
| D | <i>Navicula capitata</i> | 10 | 1 | 4865 | 0.8 |
| D | <i>Melosira distans</i> | 10 | 1 | 4013 | 0.7 |
| D | <i>Cymbella minuta</i> | 10 | 1 | 3750 | 0.7 |
| D | <i>Cyclotella atomus</i> | 122 | 11.5 | 2432 | 0.4 |
| D | <i>Navicula cryptocephala</i> | 10 | 1 | 1875 | 0.3 |
| D | <i>Amphora perpusilla</i> | 10 | 1 | 1682 | 0.3 |
| D | <i>Nitzschia frustulum</i> | 10 | 1 | 1216 | 0.2 |
| D | <i>Achnanthes linearis</i> | 10 | 1 | 1338 | 0.2 |
| D | <i>Achnanthes minutissima</i> | 10 | 1 | 507 | 0.1 |
| D | <i>Navicula contenta biceps</i> | 10 | 1 | 811 | 0.1 |
| D | <i>Cyclotella pseudostelligera</i> | 10 | 1 | 659 | 0.1 |
| D | <i>Navicula minima</i> | 10 | 1 | 446 | 0.1 |
| D | <i>Ankistrodesmus falcatus</i> | 10 | 1 | 253 | 0 |
| | | 799 | 76.4 | 537396 | 93.7 |
| G | <i>Scenedesmus quadricauda</i> | 30 | 2.9 | 6581 | 1.1 |
| G | Unident. desmid | 10 | 1 | 1672 | 0.3 |
| G | <i>Chodatella wratislawiensis</i> | 20 | 1.9 | 1216 | 0.2 |
| G | <i>Selenastrum minutum</i> | 20 | 1.9 | 405 | 0.1 |
| | | 80 | 7.7 | 9874 | 1.7 |
| K | <i>Chrysococcus rufescens</i> | 30 | 2.9 | 2584 | 0.5 |
| Y | <i>Cryptomonas erosa</i> | 41 | 3.8 | 21080 | 3.7 |
| Y | <i>Rhodomonas minuta</i> | 101 | 9.6 | 2027 | 0.4 |
| | | 142 | 13.4 | 23107 | 4.1 |
| TOTAL | | 1051 | 100.4 | 572961 | 100 |

D = Bacillariophyceae (Diatoms)

G = Chlorophyta (Green algae)

K = Chrysophyta

Y = Cryptophyta

APPENDIX B-5

PHYTOPLANKTON SAMPLE ANALYSIS

SAMPLE: Columbia River, W22

SAMPLE DATE: 91-10-03

TOTAL DENSITY (#/mL): 691

TOTAL BIOVOLUME (cu. uM/mL): 426,127

| Code | Taxa | Density (#/mL) | Relative Density (%) | Biovolume (cu. uM/mL) | Relative Biovolume (%) |
|-------|--|-------------------|----------------------------|--------------------------|------------------------------|
| D | <i>Melosira granulata</i> | 198 | 28.6 | 162953 | 38.2 |
| D | <i>Fragilaria crotonensis</i> | 13 | 1.9 | 55305 | 13 |
| D | <i>Stephanodiscus astraea</i> | 7 | 1 | 52948 | 12.4 |
| D | <i>Melosira granulata angustissima</i> | 53 | 7.6 | 37792 | 8.9 |
| D | <i>Melosira ambigua</i> | 26 | 3.8 | 27146 | 6.4 |
| D | <i>Navicula tripunctata</i> | 13 | 1.9 | 14748 | 3.5 |
| D | <i>Stephanodiscus hantzschii</i> | 92 | 13.3 | 12610 | 3 |
| D | <i>Cymbella affinis</i> | 7 | 1 | 11851 | 2.8 |
| D | <i>Stephanodiscus astraea minutula</i> | 33 | 4.8 | 11522 | 2.7 |
| D | <i>Nitzschia linearis</i> | 7 | 1 | 10034 | 2.4 |
| D | <i>Nitzschia holsatica</i> | 7 | 1 | 2897 | 0.7 |
| D | <i>Cyclotella meneghiniana</i> | 7 | 1 | 2502 | 0.6 |
| D | <i>Diploneis smithii</i> | 7 | 1 | 2765 | 0.6 |
| D | <i>Melosira distans</i> | 7 | 1 | 1304 | 0.3 |
| D | <i>Asterionella formosa</i> | 7 | 1 | 1448 | 0.3 |
| D | <i>Cyclotella atomus</i> | 33 | 4.8 | 658 | 0.2 |
| D | <i>Fragilaria pinnata</i> | 7 | 1 | 790 | 0.2 |
| D | <i>Navicula sp.</i> | 7 | 1 | 988 | 0.2 |
| D | <i>Cyclotella stelligera</i> | 7 | 1 | 362 | 0.1 |
| | | 538 | 77.7 | 410623 | 96.5 |
| G | <i>Oocystis pusilla</i> | 7 | 1 | 2844 | 0.7 |
| G | <i>Chlamydomonas sp.</i> | 7 | 1 | 2140 | 0.5 |
| G | <i>Pediastrum duplex</i> | 7 | 1 | 448 | 0.1 |
| G | <i>Chodatella wratislawiensis</i> | 7 | 1 | 395 | 0.1 |
| G | <i>Crucigenia quadrata</i> | 7 | 1 | 560 | 0.1 |
| G | <i>Selenastrum minutum</i> | 7 | 1 | 132 | 0 |
| G | <i>Ankistrodesmus falcatus</i> | 7 | 1 | 165 | 0 |
| | | 49 | 7 | 6684 | 1.5 |
| Y | <i>Cryptomonas erosa</i> | 13 | 1.9 | 6847 | 1.6 |
| Y | <i>Rhodomonas minuta</i> | 99 | 14.3 | 1975 | 0.5 |
| | | 112 | 16.2 | 8822 | 2.1 |
| TOTAL | | 699 | 100.9 | 426129 | 100.1 |

D = Bacillariophyceae (Diatoms)

G = Chlorophyta (Green algae)

Y = Cryptophyta

APPENDIX B-5

PHYTOPLANKTON SAMPLE ANALYSIS

SAMPLE: Columbia River, W25

SAMPLE DATE: 91-10-03

TOTAL DENSITY (#/mL): 533

TOTAL BIOVOLUME (cu. uM/mL): 456,550

| Code | Taxa | Density (#/mL) | Relative Density (%) | Biovolume (cu. uM/mL) | Relative Biovolume (%) |
|-------|--|-------------------|----------------------------|--------------------------|------------------------------|
| D | <i>Melosira granulata</i> | 233 | 43.6 | 216364 | 47.4 |
| D | <i>Fragilaria crotonensis</i> | 5 | 0.9 | 122206 | 26.8 |
| D | <i>Melosira ambigua</i> | 44 | 8.2 | 45758 | 10 |
| D | <i>Melosira granulata angustissima</i> | 24 | 4.5 | 18185 | 4 |
| D | <i>Stephanodiscus astraea minutula</i> | 29 | 5.5 | 10184 | 2.2 |
| D | <i>Synedra delicatissima</i> | 10 | 1.8 | 6401 | 1.4 |
| D | <i>Nitzschia holsatica</i> | 5 | 0.9 | 6401 | 1.4 |
| D | <i>Stephanodiscus hantzschii</i> | 39 | 7.3 | 4655 | 1 |
| D | <i>Fragilaria capucina mesolepta</i> | 5 | 0.9 | 1237 | 0.3 |
| D | <i>Nitzschia acicularis</i> | 5 | 0.9 | 1358 | 0.3 |
| D | <i>Stephanodiscus subsalsus</i> | 10 | 1.8 | 1106 | 0.2 |
| D | <i>Gomphonema angustatum</i> | 5 | 0.9 | 873 | 0.2 |
| D | <i>Synedra rumpens</i> | 5 | 0.9 | 679 | 0.1 |
| D | <i>Fragilaria construens venter</i> | 5 | 0.9 | 233 | 0.1 |
| D | <i>Achnanthes linearis</i> | 5 | 0.9 | 640 | 0.1 |
| | | 429 | 79.9 | 436280 | 95.5 |
| G | <i>Scenedesmus quadricauda</i> | 34 | 6.4 | 6928 | 1.5 |
| G | <i>Mougeotia</i> sp. | 5 | 0.9 | 2575 | 0.6 |
| G | <i>Tetraedron minimum</i> | 5 | 0.9 | 873 | 0.2 |
| G | <i>Ankistrodesmus falcatus</i> | 19 | 3.6 | 485 | 0.1 |
| G | <i>Selenastrum minutum</i> | 5 | 0.9 | 97 | 0 |
| | | 68 | 12.7 | 10958 | 2.4 |
| Y | <i>Cryptomonas erosa</i> | 10 | 1.8 | 5043 | 1.1 |
| Y | <i>Cryptomonas</i> sp. | 10 | 1.8 | 3880 | 0.8 |
| Y | <i>Rhodomonas minuta</i> | 19 | 3.6 | 388 | 0.1 |
| | | 39 | 7.2 | 9311 | 2 |
| TOTAL | | 536 | 99.8 | 456549 | 99.9 |

D = Bacillariophyceae (Diatoms)

G = Chlorophyta (Green algae)

Y = Cryptophyta

APPENDIX B-5

PHYTOPLANKTON SAMPLE ANALYSIS

SAMPLE: Columbia River, W28

SAMPLE DATE: 91-10-01

TOTAL DENSITY (#/mL): 1,080

TOTAL BIOVOLUME (cu. μ M/mL): 588,456

| Code | Taxa | Density (#/mL) | Relative Density (%) | Biovolume (cu. μ m/mL) | Relative Biovolume (%) |
|-------|--|-------------------|----------------------------|-------------------------------|------------------------------|
| D | <i>Melosira granulata</i> | 307 | 28.4 | 278852 | 47.4 |
| D | <i>Melosira ambigua</i> | 59 | 5.5 | 157632 | 26.8 |
| D | <i>Fragilaria crotonensis</i> | 20 | 1.8 | 58283 | 9.9 |
| D | <i>Synedra ulna</i> | 10 | 0.9 | 19725 | 3.4 |
| D | <i>Melosira italica</i> | 10 | 0.9 | 9337 | 1.6 |
| D | <i>Melosira granulata angustissima</i> | 20 | 1.8 | 7434 | 1.3 |
| D | <i>Stephanodiscus hantzschii</i> | 59 | 5.5 | 7137 | 1.2 |
| D | <i>Diploneis smithii</i> | 10 | 0.9 | 4163 | 0.7 |
| D | <i>Stephanodiscus subsalsus</i> | 40 | 3.7 | 3390 | 0.6 |
| D | <i>Navicula pupula</i> | 10 | 0.9 | 2676 | 0.5 |
| D | <i>Fragilaria leptostauron</i> | 10 | 0.9 | 1824 | 0.3 |
| D | <i>Fragilaria construens</i> | 10 | 0.9 | 1110 | 0.2 |
| D | <i>Cyclotella atomus</i> | 20 | 1.8 | 396 | 0.1 |
| D | <i>Cyclotella pseudostelligera</i> | 10 | 0.9 | 644 | 0.1 |
| D | <i>Navicula minima</i> | 10 | 0.9 | 436 | 0.1 |
| | | 605 | 55.7 | 553039 | 94.2 |
| G | <i>Sphaerocystis schroeteri</i> | 10 | 0.9 | 2775 | 0.5 |
| G | <i>Oocystis pusilla</i> | 10 | 0.9 | 2141 | 0.4 |
| G | <i>Scenedesmus quadricauda</i> | 10 | 0.9 | 2577 | 0.4 |
| G | <i>Microactinium pusillum</i> | 10 | 0.9 | 2181 | 0.4 |
| G | <i>Mougeotia</i> sp. | 10 | 0.9 | 1754 | 0.3 |
| G | <i>Ankistrodesmus falcatus</i> | 40 | 3.7 | 991 | 0.2 |
| G | <i>Selenastrum minutum</i> | 20 | 1.8 | 396 | 0.1 |
| G | <i>Chodatella wratislawiensis</i> | 10 | 0.9 | 595 | 0.1 |
| | | 120 | 10.9 | 13410 | 2.4 |
| Y | <i>Cryptomonas erosa</i> | 30 | 2.8 | 15463 | 2.6 |
| Y | <i>Rhodomonas minuta</i> | 327 | 30.3 | 6542 | 1.1 |
| | | 357 | 33.1 | 22005 | 3.7 |
| TOTAL | | 1082 | 99.7 | 588454 | 100.3 |

D = Bacillariophyceae (Diatoms)

G = Chlorophyta (Green algae)

Y = Cryptophyta

PHYTOPLANKTON SAMPLE ANALYSIS

APPENDIX B-5

SAMPLE: Columbia River, W29

SAMPLE DATE: 91-10-01

TOTAL DENSITY (#/mL): 921

TOTAL BIOVOLUME (cu. uM/mL): 514,856

| Code | Taxa | Density (#/mL) | Relative Density (%) | Biovolume (cu. uM/mL) | Relative Biovolume (%) |
|-------|--|-------------------|----------------------------|--------------------------|------------------------------|
| D | <i>Melosira granulata</i> | 144 | 15.6 | 195537 | 38 |
| D | <i>Melosira ambigua</i> | 29 | 3.1 | 84778 | 16.5 |
| D | <i>Stephanodiscus astraea</i> | 10 | 1 | 77169 | 15 |
| D | <i>Melosira granulata angustissima</i> | 29 | 3.1 | 19215 | 3.7 |
| D | <i>Stephanodiscus astraea minutula</i> | 38 | 4.2 | 13434 | 2.6 |
| D | <i>Amphora ovalis</i> | 19 | 2.1 | 11093 | 2.2 |
| D | <i>Stephanodiscus hantzschii</i> | 67 | 7.3 | 8060 | 1.6 |
| D | <i>Diatoma tenue elongatum</i> | 10 | 1 | 6909 | 1.3 |
| D | <i>Neidium sp.</i> | 10 | 1 | 4798 | 0.9 |
| D | <i>Cymbella minuta</i> | 10 | 1 | 3550 | 0.7 |
| D | <i>Nitzschia capitellata</i> | 10 | 1 | 3454 | 0.7 |
| D | <i>Cyclotella meneghiniana</i> | 10 | 1 | 3646 | 0.7 |
| D | <i>Synedra socia</i> | 10 | 1 | 3167 | 0.6 |
| D | <i>Fragilaria construens</i> | 10 | 1 | 3224 | 0.6 |
| D | <i>Nitzschia acicularis</i> | 10 | 1 | 2687 | 0.5 |
| D | <i>Melosira distans</i> | 10 | 1 | 1900 | 0.4 |
| D | <i>Navicula decussis</i> | 10 | 1 | 1842 | 0.4 |
| D | <i>Amphora perpusilla</i> | 10 | 1 | 1593 | 0.3 |
| D | <i>Nitzschia paleacea</i> | 10 | 1 | 940 | 0.2 |
| D | <i>Cyclotella atomus</i> | 29 | 3.1 | 576 | 0.1 |
| | | 485 | 51.5 | 447572 | 87 |
| G | <i>Crucigenia quadrata</i> | 29 | 3.1 | 4894 | 1 |
| G | <i>Crucigenia tetrapedia</i> | 29 | 3.1 | 3254 | 0.6 |
| G | <i>Chodatella wratislawiensis</i> | 38 | 4.2 | 2303 | 0.4 |
| G | <i>Ankistrodesmus falcatus</i> | 58 | 6.2 | 1684 | 0.3 |
| G | <i>Mougeotia sp.</i> | 10 | 1 | 1698 | 0.3 |
| G | <i>Sphaerocystis schroeteri</i> | 10 | 1 | 1343 | 0.3 |
| G | <i>Selenastrum minutum</i> | 58 | 6.2 | 1151 | 0.2 |
| | | 232 | 24.8 | 16327 | 3.1 |
| K | <i>Chrysococcus rufescens</i> | 38 | 4.2 | 3263 | 0.6 |
| K | <i>Dinobryon sp.</i> | 10 | 1 | 2399 | 0.6 |
| | | 48 | 5.2 | 5662 | 1.2 |
| Y | <i>Cryptomonas erosa</i> | 77 | 8.3 | 39918 | 7.8 |
| Y | <i>Cryptomonas sp.</i> | 10 | 1 | 3838 | 0.7 |
| Y | <i>Rhodomonas minuta</i> | 77 | 8.3 | 1535 | 0.3 |
| | | 164 | 17.6 | 45291 | 8.8 |
| TOTAL | | 929 | 99.1 | 514852 | 100.1 |

D = Bacillariophyceae (Diatoms)

G = Chlorophyta (Green algae)

K = Chrysophyta

Y = Cryptophyta

APPENDIX B-5

PHYTOPLANKTON SAMPLE ANALYSIS

SAMPLE: Columbia River, W33

SAMPLE DATE: 91-09-30

TOTAL DENSITY (#/mL): 1,177

TOTAL BIOVOLUME (cu. uM/mL): 818,059

| Code | Taxa | Density (#/mL) | Relative Density (%) | Biovolume (cu. um/mL) | Relative Biovolume (%) |
|-------|--|-------------------|----------------------------|--------------------------|------------------------------|
| D | <i>Melosira granulata</i> | 649 | 55.1 | 581829 | 71.1 |
| D | <i>Stephanodiscus astraea</i> | 11 | 0.9 | 88462 | 10.8 |
| D | <i>Fragilaria crotonensis</i> | 55 | 4.7 | 64680 | 7.9 |
| D | <i>Melosira granulata angustissima</i> | 33 | 2.8 | 13777 | 1.7 |
| D | <i>Stephanodiscus astraea minutula</i> | 22 | 1.9 | 7700 | 0.9 |
| D | <i>Stephanodiscus hantzschii</i> | 55 | 4.7 | 6600 | 0.8 |
| D | <i>Melosira ambigua</i> | 11 | 0.9 | 6479 | 0.8 |
| D | <i>Amphora ovalis</i> | 11 | 0.9 | 6358 | 0.8 |
| D | <i>Asterionella formosa</i> | 22 | 1.9 | 4840 | 0.6 |
| D | <i>Nitzschia acicularis</i> | 11 | 0.9 | 3080 | 0.4 |
| D | <i>Achnanthes peragalli</i> | 11 | 0.9 | 1540 | 0.2 |
| D | <i>Fragilaria construens venter</i> | 11 | 0.9 | 1056 | 0.1 |
| D | <i>Cyclotella stelligera</i> | 11 | 0.9 | 605 | 0.1 |
| | | 913 | 77.4 | 787006 | 96.2 |
| G | <i>Scenedesmus quadricauda</i> | 44 | 3.7 | 10010 | 1.2 |
| G | <i>Oocystis pusilla</i> | 11 | 0.9 | 2376 | 0.3 |
| G | <i>Mougeotia</i> sp. | 11 | 0.9 | 1947 | 0.2 |
| G | <i>Ankistrodesmus falcatus</i> | 33 | 2.8 | 825 | 0.1 |
| G | <i>Chlorella</i> sp. | 11 | 0.9 | 660 | 0.1 |
| G | <i>Chodatella wratislawiensis</i> | 11 | 0.9 | 660 | 0.1 |
| G | <i>Selenastrum minutum</i> | 11 | 0.9 | 220 | 0 |
| | | 132 | 11 | 16698 | 2 |
| K | <i>Ochromonas</i> sp. | 11 | 0.9 | 935 | 0.1 |
| Y | <i>Cryptomonas erosa</i> | 22 | 1.9 | 11440 | 1.4 |
| Y | <i>Rhodomonas minuta</i> | 99 | 8.4 | 1980 | 0.2 |
| | | 121 | 10.3 | 13420 | 1.6 |
| TOTAL | | 1177 | 99.6 | 818059 | 99.9 |

D = Bacillariophyceae (Diatoms)

G = Chlorophyta (Green algae)

K = Chrysophyta

Y = Cryptophyta

APPENDIX B-5

PHYTOPLANKTON SAMPLE ANALYSIS

SAMPLE: Columbia River, W36

SAMPLE DATE: 91-09-28

TOTAL DENSITY (#/mL): 1,726

TOTAL BIOVOLUME (cu. uM/mL): 502,181

| Code | Taxa | Density (/mL) | Relative Density (%) | Biovolume (cu. uM/mL) | Relative Biovolume (%) |
|------|--|------------------|----------------------------|--------------------------|------------------------------|
| D | <i>Stephanodiscus astraea</i> | 16 | 0.9 | 125067 | 24.9 |
| D | <i>Melosira granulata</i> | 78 | 4.5 | 102641 | 20.4 |
| D | <i>Synedra ulna</i> | 16 | 0.9 | 30948 | 6.2 |
| D | <i>Cyclotella meneghiniana</i> | 78 | 4.5 | 29548 | 5.9 |
| D | <i>Melosira italica</i> | 16 | 0.9 | 29299 | 5.8 |
| D | <i>Melosira ambigua</i> | 16 | 0.9 | 18320 | 3.6 |
| D | <i>Stephanodiscus subsalsus</i> | 156 | 9 | 16843 | 3.4 |
| D | <i>Stephanodiscus astraea minutula</i> | 47 | 2.7 | 16329 | 3.3 |
| D | <i>Stephanodiscus hantzschii</i> | 124 | 7.2 | 14930 | 3 |
| D | <i>Cocconeis placentula</i> | 31 | 1.8 | 14308 | 2.8 |
| D | <i>Cymbella minuta</i> | 31 | 1.8 | 11508 | 2.3 |
| D | <i>Cyclotella atomus</i> | 513 | 29.7 | 10264 | 2 |
| D | <i>Fragilaria construens</i> | 16 | 0.9 | 6967 | 1.4 |
| D | <i>Achnanthes lanceolata</i> | 31 | 1.8 | 5599 | 1.1 |
| D | <i>Cymbella sinuata</i> | 31 | 1.8 | 4354 | 0.9 |
| D | <i>Achnanthes minutissima</i> | 78 | 4.5 | 3888 | 0.8 |
| D | <i>Cyclotella pseudostelligera</i> | 62 | 3.6 | 4043 | 0.8 |
| D | <i>Achnanthes linearis</i> | 31 | 1.8 | 4106 | 0.8 |
| D | <i>Navicula cryptocephala</i> | 16 | 0.9 | 2877 | 0.6 |
| D | <i>Nitzschia frustulum</i> | 16 | 0.9 | 1866 | 0.4 |
| D | <i>Rhoicosphenia curvata</i> | 16 | 0.9 | 1820 | 0.4 |
| D | <i>Achnanthes hauckiana</i> | 31 | 1.8 | 1493 | 0.3 |
| D | <i>Nitzschia amphibia</i> | 16 | 0.9 | 1493 | 0.3 |
| | | 1466 | 84.6 | 458511 | 91.4 |
| G | <i>Chlorella</i> sp. | 16 | 0.9 | 933 | 0.2 |
| G | <i>Ankistrodesmus falcatus</i> | 16 | 0.9 | 389 | 0.1 |
| | | 32 | 1.8 | 1322 | 0.3 |
| K | <i>Kephyrion</i> sp. | 16 | 0.9 | 980 | 0.2 |
| Y | <i>Cryptomonas erosa</i> | 62 | 3.6 | 32348 | 6.4 |
| Y | <i>Cryptomonas</i> sp. | 16 | 0.9 | 6221 | 1.2 |
| Y | <i>Rhodomonas minuta</i> | 140 | 8.1 | 2799 | 0.6 |
| | | 218 | 12.6 | 41368 | 8.2 |
| | TOTAL | 1732 | 99.9 | 502181 | 100.1 |

D = Bacillariophyceae (Diatoms)

G = Chlorophyta (Green algae)

K = Chrysophyta

Y = Cryptophyta

APPENDIX B-5

PHYTOPLANKTON SAMPLE ANALYSIS

SAMPLE: Columbia River, W37

SAMPLE DATE: 91-09-28

TOTAL DENSITY (#/mL): 1,659

TOTAL BIOVOLUME (cu. μ m/mL): 1,414,212

| Code | Taxa | Density (#/mL) | Relative Density (%) | Biovolume (cu. μ m/mL) | Relative Biovolume (%) |
|-------|--|-------------------|----------------------------|-------------------------------|------------------------------|
| D | <i>Melosira granulata</i> | 1266 | 76.3 | 1134709 | 80.2 |
| D | <i>Stephanodiscus astraea</i> | 15 | 0.9 | 116998 | 8.3 |
| D | <i>Fragilaria crotonensis</i> | 58 | 3.5 | 85545 | 6 |
| D | <i>Synedra ulna</i> | 15 | 0.9 | 28951 | 2 |
| D | <i>Stephanodiscus astraea minutula</i> | 29 | 1.8 | 10184 | 0.7 |
| D | <i>Stephanodiscus hantzschii</i> | 73 | 4.4 | 8729 | 0.6 |
| D | <i>Navicula decussis</i> | 15 | 0.9 | 2793 | 0.2 |
| D | <i>Navicula sp.</i> | 15 | 0.9 | 2182 | 0.2 |
| | | 1486 | 89.6 | 1390091 | 98.2 |
| G | <i>Mougeotia sp.</i> | 29 | 1.8 | 10300 | 0.7 |
| G | <i>Scenedesmus quadricauda</i> | 15 | 0.9 | 3783 | 0.3 |
| G | <i>Ankistrodesmus falcatus</i> | 29 | 1.8 | 727 | 0.1 |
| G | <i>Selenastrum minutum</i> | 15 | 0.9 | 291 | 0 |
| | | 88 | 5.4 | 15101 | 1.1 |
| Y | <i>Cryptomonas erosa</i> | 15 | 0.9 | 7565 | 0.5 |
| Y | <i>Rhodomonas minuta</i> | 73 | 4.4 | 1455 | 0.1 |
| | | 88 | 5.3 | 9020 | 0.6 |
| TOTAL | | 1662 | 100.3 | 1414212 | 99.9 |

D = Bacillariophyceae (Diatoms)

G = Chlorophyta (Green algae)

Y = Cryptophyta

APPENDIX B-5

PHYTOPLANKTON SAMPLE ANALYSIS

SAMPLE: Columbia River, W39

SAMPLE DATE: 91-09-27

TOTAL DENSITY (#/mL): 1,428

TOTAL BIOVOLUME (cu. uM/mL): 1,322,311

| Code | Taxa | Density (/mL) | Relative Density (%) | Biovolume (cu. uM/mL) | Relative Biovolume (%) |
|------|---------------------------------|------------------|----------------------------|--------------------------|------------------------------|
| B | <i>Aphanizomenon flos-aquae</i> | 13 | 0.9 | 15033 | 1.1 |
| D | <i>Melosira granulata</i> | 1153 | 80.7 | 1083979 | 82 |
| D | <i>Stephanodiscus astraea</i> | 13 | 0.9 | 100748 | 7.6 |
| D | <i>Melosira ambigua</i> | 88 | 6.1 | 88325 | 6.7 |
| D | <i>Navicula radiosa</i> | 13 | 0.9 | 4072 | 0.3 |
| D | <i>Achnanthese linearis</i> | 13 | 0.9 | 1654 | 0.1 |
| | | 1280 | 89.5 | 1278778 | 96.7 |
| G | <i>Scenedesmus quadricauda</i> | 13 | 0.9 | 814 | 0.1 |
| G | <i>Ankistrodesmus falcatus</i> | 25 | 1.8 | 626 | 0 |
| | | 38 | 2.7 | 1440 | 0.1 |
| Y | <i>Cryptomonas erosa</i> | 50 | 3.5 | 26058 | 2 |
| Y | <i>Rhodomonas minuta</i> | 50 | 3.5 | 1002 | 0.1 |
| | | 100 | 7 | 27060 | 2.1 |
| | TOTAL | 1431 | 100.1 | 1322311 | 100 |

B = Cyanophyta (Blue-green algae)

D = Bacillariophyceae (Diatoms)

G = Chlorophyta (Green algae)

Y = Cryptophyta

APPENDIX B-5

PHYTOPLANKTON SAMPLE ANALYSIS

SAMPLE: Columbia River, W43

SAMPLE DATE: 91-09-24

TOTAL DENSITY (#/mL): 1,128

TOTAL BIOVOLUME (cu. uM/mL): 1,161,494

| Code | Taxa | Density (#/mL) | Relative Density (%) | Biovolume (cu. uM/mL) | Relative Biovolume (%) |
|------|-----------------------------------|-------------------|----------------------------|--------------------------|------------------------------|
| D | <i>Melosira granulata</i> | 883 | 78.3 | 937526 | 80.7 |
| D | <i>Melosira italica</i> | 19 | 1.7 | 115061 | 9.9 |
| D | <i>Stephanodiscus astraea</i> | 9 | 0.8 | 75561 | 6.5 |
| D | <i>Synedra ulna</i> | 9 | 0.8 | 18698 | 1.6 |
| D | <i>Synedra delicatissima</i> | 9 | 0.8 | 6201 | 0.5 |
| D | <i>Nitzschia sp.</i> | 9 | 0.8 | 1128 | 0.1 |
| | | 938 | 83.2 | 1154175 | 99.3 |
| G | <i>Mougeotia sp.</i> | 9 | 0.8 | 3326 | 0.3 |
| G | <i>Ankistrodesmus falcatus</i> | 9 | 0.8 | 235 | 0 |
| G | <i>Chodatella wratislawiensis</i> | 9 | 0.8 | 564 | 0 |
| | | 27 | 2.4 | 4125 | 0.3 |
| Y | <i>Rhodomonas minuta</i> | 160 | 14.2 | 3195 | 0.3 |
| | TOTAL | 1125 | 99.8 | 1161495 | 99.9 |

D = Bacillariophyceae (Diatoms)

G = Chlorophyta (Green algae)

Y = Cryptophyta

APPENDIX B-5

PHYTOPLANKTON SAMPLE ANALYSIS

SAMPLE: Columbia River, W45

SAMPLE DATE: 91-09-26

TOTAL DENSITY (#/mL): 1,853

TOTAL BIOVOLUME (cu. uM/mL): 1,968,935

| Code | Taxa | Density (/mL) | Relative Density (%) | Biovolume (cu. um/mL) | Relative Biovolume (%) |
|------|---------------------------------|------------------|----------------------------|--------------------------|------------------------------|
| B | <i>Aphanizomenon flos-aquae</i> | 16 | 0.9 | 9840 | 0.5 |
| D | <i>Melosira granulata</i> | 1607 | 86.7 | 1617647 | 82.2 |
| D | <i>Stephanodiscus astraea</i> | 33 | 1.8 | 263778 | 13.4 |
| D | <i>Melosira itaica</i> | 33 | 1.8 | 46346 | 2.4 |
| D | <i>Melosira ambigua</i> | 16 | 0.9 | 19319 | 1 |
| D | <i>Nitzschia acicularis</i> | 16 | 0.9 | 4592 | 0.2 |
| D | <i>Stephanodiscus subsalsus</i> | 16 | 0.9 | 935 | 0 |
| | | 1721 | 93 | 1952617 | 99.2 |
| G | <i>Scenedesmus quadricauda</i> | 33 | 1.8 | 4264 | 0.2 |
| G | <i>Ankistrodesmus falcatus</i> | 33 | 1.8 | 1230 | 0.1 |
| | | 66 | 3.6 | 5494 | 0.3 |
| Y | <i>Rhodomonas minuta</i> | 49 | 2.7 | 984 | 0 |
| | TOTAL | 1852 | 100.2 | 1968935 | 100 |

B = Cyanophyta (Blue-green algae)

D = Bacillariophyceae (Diatoms)

G = Chlorophyta (Green algae)

Y = Cryptophyta

PHYTOPLANKTON SAMPLE ANALYSIS

SAMPLE: Columbia River, W50 - field replicate for W8 APPENDIX B-5

SAMPLE DATE: 91-10-10

TOTAL DENSITY (#/mL): 395

TOTAL BIOVOLUME (cu. uM/mL): 304,620

| Code | Taxa | Density (#/mL) | Relative Density (%) | Biovolume (cu. uM/mL) | Relative Biovolume (%) |
|--------------|--|-------------------|----------------------------|--------------------------|------------------------------|
| D | <i>Fragilaria crotonensis</i> | 22 | 5.6 | 149665 | 49.1 |
| D | <i>Melosira granulata</i> | 39 | 9.9 | 30654 | 10.1 |
| D | <i>Nitzschia seriata</i> | 17 | 4.2 | 23385 | 7.7 |
| D | <i>Thalassiosira</i> sp. | 28 | 7 | 17400 | 5.7 |
| D | <i>Stephanodiscus hantzschii</i> | 72 | 18.3 | 11379 | 3.7 |
| D | <i>Synedra ulna</i> | 6 | 1.4 | 11080 | 3.6 |
| D | <i>Stephanodiscus astraea minutula</i> | 22 | 5.6 | 7795 | 2.6 |
| D | <i>Melosira italica</i> | 6 | 1.4 | 5245 | 1.7 |
| D | <i>Gomphonema ventricosum</i> | 6 | 1.4 | 4733 | 1.6 |
| D | <i>Diatoma hiemale mesodon</i> | 6 | 1.4 | 4454 | 1.5 |
| D | <i>Melosira granulata angustissima</i> | 11 | 2.8 | 4176 | 1.4 |
| D | <i>Cocconeis placentula</i> | 6 | 1.4 | 2581 | 0.8 |
| D | <i>Cyclotella meneghiniana</i> | 6 | 1.4 | 2116 | 0.7 |
| D | <i>Cymbella minuta</i> | 6 | 1.4 | 2060 | 0.7 |
| D | <i>Nitzschia dissipata</i> | 6 | 1.4 | 1498 | 0.5 |
| D | <i>Chaetoceros</i> sp. | 6 | 1.4 | 1587 | 0.5 |
| D | <i>Cocconeis klamathensis</i> | 6 | 1.4 | 1559 | 0.5 |
| D | <i>Fragilaria vaucheria</i> | 6 | 1.4 | 1804 | 0.5 |
| D | <i>Navicula pupula</i> | 6 | 1.4 | 1503 | 0.5 |
| D | <i>Stephanodiscus subsalsus</i> | 11 | 2.8 | 1269 | 0.4 |
| D | <i>Gomphonema angustatum</i> | 6 | 1.4 | 1002 | 0.3 |
| D | <i>Nitzschia frustulum</i> | 6 | 1.4 | 668 | 0.2 |
| D | <i>Cyclotella ocellata</i> | 6 | 1.4 | 696 | 0.2 |
| D | <i>Achnanthes linearis</i> | 6 | 1.4 | 735 | 0.2 |
| D | <i>Fragilaria construens</i> | 6 | 1.4 | 624 | 0.2 |
| D | <i>Fragilaria pinnata</i> | 6 | 1.4 | 334 | 0.1 |
| D | <i>Navicula mutica</i> | 6 | 1.4 | 306 | 0.1 |
| | | 336 | 82.8 | 290088 | 95.1 |
| G | <i>Chlamydomonas</i> sp. | 6 | 1.4 | 1810 | 0.6 |
| G | <i>Scenedesmus quadricauda</i> | 11 | 2.8 | 1448 | 0.5 |
| G | <i>Scenedesmus bijuga</i> | 6 | 1.4 | 1559 | 0.5 |
| G | <i>Micractinium pusillum</i> | 6 | 1.4 | 1225 | 0.4 |
| G | <i>Selenastrum minutum</i> | 11 | 2.8 | 223 | 0.1 |
| G | <i>Ankistrodesmus falcatus</i> | 6 | 1.4 | 139 | 0 |
| | | 46 | 11.2 | 6404 | 2.1 |
| Y | <i>Cryptomonas erosa</i> | 11 | 2.8 | 5791 | 1.9 |
| Y | <i>Cryptomonas</i> sp. | 6 | 1.4 | 2227 | 0.7 |
| Y | <i>Rhodomonas minuta</i> | 6 | 1.4 | 111 | 0 |
| | | 23 | 5.6 | 8129 | 2.6 |
| TOTAL | | 405 | 99.6 | 304621 | 99.8 |
| D = | Bacillariophyceae (Diatoms) | | | | |
| G = | Chlorophyta (Green algae) | | | | |
| Y = | Cryptophyta | | | | |

APPENDIX B-6

| SUMMARY BACTERIA DATA FROM THE LOWER COLUMBIA RIVER RECONNAISSANCE SURVEY | | | | | |
|--|---------------|--|--------------------------------------|--|-------------------------|
| Station | Sampling Date | Fecal Coliform Counts (Colonies per 100 mL) | Geometric Mean ^a (n=5) | Enterococcus Counts (Colonies per 100 mL) | Geometric Mean (n=5) |
| W2 | 10/15/91 | 5, 5 | 4 | 175, 145 | 44 |
| | 10/22/91 | ND, ND | | 95, 120 | |
| | 11/1/91 | 3, 5 | | 8, 8 | |
| | 11/7/91 | 7, 8 | | 63, 68 | |
| | 11/13/91 | 3, 5 | | 15, 20 | |
| W3 | 10/15/91 | 265, 305 | 36 | 400, 600 | 113 |
| | 10/22/91 | 35, 25 | | 170, 125 | |
| | 11/1/91 | 30, 23 | | 37, 35 | |
| | 11/7/91 | 12, 10 | | 32, 33 | |
| | 11/13/91 | 26, 23 | | 210, 220 | |
| W16 | 10/15/91 | 50, 60 | 32 | 1300, 700 | 82 |
| | 10/22/91 | 85, 80 | | 375, 355 | |
| | 11/1/91 | 15, 19 | | 30, 34 | |
| | 11/7/91 | 17, 12 | | 16, 9 | |
| | 11/13/91 | 28, 32 | | 23, 27 | |
| W35 | 10/16/91 | ND, ND | 28 | 93, 101 | 96 |
| | 10/23/91 | 30, 35 | | 415, 385 | |
| | 11/1/91 | 21, 25 | | 31, 31 | |
| | 11/7/91 | 97, 106 | | 21, 24 | |
| | 11/14/91 | 214, 227 | | 285, 310 | |
| W38 | 10/16/91 | 3, ND | 31 | 180, 200 | 113 |
| | 10/23/91 | 205, 195 | | 220, 250 | |
| | 11/2/91 | 40, 35 | | 65, 70 | |
| | 11/8/91 | 22, 17 | | 19, 16 | |
| | 11/14/91 | 99, 109 | | 325, 360 | |
| W40 | 10/16/91 | 3, 4 | 10 | 160, 180 | 99 |
| | 10/23/91 | 71, 79 | | 265, 330 | |
| | 11/2/91 | ND, ND | | 85, 95 | |
| | 11/8/91 | 11, 16 | | 27, 22 | |
| | 11/14/91 | 36, 31 | | 75, 95 | |

ND = No colonies detected.

^a Geometric means for fecal coliforms were calculated using ND = 1 (i.e., the detection limit).

TABLE B-7. METALS IN WATER

| River Segment | Station | Aluminum Measured Conc. (ug/l) | Qualifier Code | Antimony Measured Conc. (ug/l) | Qualifier Code | Arsenic Measured Conc. (ug/l) | Qualifier Code | Barium Measured Conc. (ug/l) | Qualifier Code |
|---|--------------------|--------------------------------|----------------|--------------------------------|----------------|-------------------------------|----------------|------------------------------|----------------|
| 1A | W1 | 120 | U/E | 150 | U/E | 5 | U/E | 14 | E |
| 1A | W2 | 270 | U/E | 150 | U/E | 5 | U/E | 19 | E |
| 1A | W3 | 1300 | E | 150 | U/E | 5 | U/E | 22 | E |
| 1A | W4 | 370 | U/E | 150 | U/E | 5 | U/E | 23 | E |
| 1A | W5 | 450 | E | 150 | U/E | 5 | U/E | 42 | E |
| 1B | W6 | 450 | E | 150 | U/E | 5 | U/E | 20 | E |
| 1B | W7 | 480 | E | 150 | U/E | 5 | U/E | 38 | E |
| 1C | W8 | 340 | U/E | 150 | U/E | 5 | U/E | 24 | E |
| 1C | W50 (Dupe for W8) | 400 | U/E | 150 | U/E | 5 | U/E | 27 | E |
| 1C | W9 | 400 | E | 15 | U/E | 5 | U/E | 17 | E |
| 1C | W10 | 220 | U/E | 15 | U/E | 5 | U/E | 25 | E |
| 1C | W11 | 220 | U/E | 15 | U/E | 5 | U/E | 26 | E |
| 1C | W12 | 160 | U/E | 15 | U/E | 5 | U/E | 13 | E |
| 1C | W13 | 240 | U/E | 15 | U/E | 5 | U/E | 25 | E |
| 1C | W14 | 250 | U/E | 15 | U/E | 6 | U/E | 28 | E |
| 2A | W15 | 230 | U/E | 15 | U/E | 5 | U/E | 28 | E |
| 2A | W16 | 1100 | E | 15 | U/E | 5 | U/E | 32 | E |
| 2B | W17 | 270 | U/E | 15 | U/E | 5 | U/E | 27 | E |
| 2B | W18 | 260 | U/E | 15 | U/E | 5 | U/E | 28 | E |
| 2B | W19 | 340 | U/E | 15 | U/E | 6 | U/E | 27 | E |
| 2C | W20 | 340 | U/E | 15 | U/E | 5 | U/E | 26 | E |
| 2C | W21 | 230 | U/E | 15 | U/E | 6 | U/E | 12 | E |
| 2C | W49 (Dupe for W21) | 220 | U/E | 150 | U/E | 5 | U/E | 24 | E |
| 2C | W22 | 220 | U/E | 15 | U/E | 5 | U/E | 29 | E |
| 2C | W23 | 230 | U/E | 15 | U/E | 5 | U/E | 29 | E |
| 2C | W24 | 210 | U/E | 15 | U/E | 5 | U/E | 10 | U/E |
| 2C | W25 | 240 | U/E | 15 | U/E | 6 | U/E | 31 | E |
| 2C | W26 | 210 | U/E | 15 | U/E | 5 | U/E | 30 | E |
| 2C | W52 (Dupe for W26) | 190 | U/E | 15 | U/E | 6 | U/E | 30 | E |
| 3A | W27 | 230 | U/E | 15 | U/E | 5 | U/E | 30 | E |
| 3A | W28 | 250 | U/E | 15 | U/E | 5 | U/E | 28 | E |
| 3A | W29 | 270 | U/E | 15 | U/E | 5 | U/E | 31 | E |
| 3A | W30 | 210 | U/E | 15 | U/E | 5 | U/E | 34 | E |
| 3A | W48 (Dupe for W30) | 220 | U/E | 15 | U/E | 5 | U/E | 36 | E |
| 3A | W31 | 540 | E | 15 | U/E | 5 | U/E | 8 | E |
| 3A | W32 | 240 | E | 15 | U/E | 5 | U/E | 15 | E |
| 3B | W33 | 220 | U/E | 15 | U/E | 5 | U/E | 25 | E |
| 3B | W34 | 220 | U/E | 15 | U/E | 5 | U/E | 26 | E |
| 3B | W35 | 260 | U/E | 15 | U/E | 5 | U/E | 21 | E |
| 4A | W36 | 370 | U/E | 150 | U/E | 5 | U/E | 23 | E |
| 4A | W37 | 150 | E | 150 | U/E | 5 | U/E | 20 | E |
| 4A | W38 | 220 | U/E | 15 | U/E | 5 | U/E | 28 | E |
| 4A | W39 | 250 | U/E | 15 | U/E | 5 | U/E | 27 | E |
| 4A | W40 | 250 | U/E | 15 | U/E | 5 | U/E | 27 | E |
| 4A | W41 | 260 | U/E | 15 | U/E | 5 | U/E | 21 | E |
| 4A | W42 | 1100 | E | 15 | U/E | 5 | U/E | 32 | E |
| 4B | W43 | 1300 | E | 150 | U/E | 5 | U/E | 22 | E |
| 4B | W44 | 250 | U/E | 15 | U/E | 5 | U/E | 27 | E |
| 4B | W46 (Dupe for W44) | 220 | U/E | 15 | U/E | 5 | U/E | 28 | E |
| 4B | W45 | 270 | U/E | 15 | U/E | 5 | U/E | 28 | E |
| Freshwater Chronic Water Quality Criteria * | | 87 | | 1600 | | 48 | | na*** | |
| Marine Chronic Water Quality Criteria ** | | na*** | | na*** | | 13 | | na*** | |

U = Compound was not detected. Value given is the lower quantification limit.

E = Estimated value.

* Freshwater criteria used for Stations W9-W52, excluding Station W50.

** Marine criteria used for Stations W1-W8 and W50.

*** Chronic Water Quality Criteria not available.

| River Segment | Station | Beryllium Measured Conc. (ug/l) | Beryllium Qualifier Code | Cadmium Measured Conc. (ug/l) | Cadmium Qualifier Code | Chromium Measured Conc. (ug/l) | Chromium Qualifier Code | Copper Measured Conc. (ug/l) | Copper Qualifier Code |
|---|--------------------|---------------------------------|--------------------------|-------------------------------|------------------------|--------------------------------|-------------------------|------------------------------|-----------------------|
| 1A | W1 | 5 | U/E | 0.5 | U/E | 7 | E | 5 | U/E |
| 1A | W2 | 5 | U/E | 5 | U/E | 5 | U/E | 11 | E |
| 1A | W3 | 5 | U/E | 5 | U/E | 5 | U/E | 5 | U/E |
| 1A | W4 | 5 | U/E | 5 | U/E | 5 | U/E | 5 | U/E |
| 1A | W5 | 5 | U/E | 0.5 | U/E | 5 | U/E | 5 | U/E |
| 1B | W6 | 5 | U/E | 5 | U/E | 5.5 | E | 5 | U/E |
| 1B | W7 | 5 | U/E | 0.5 | U/E | 5 | U/E | 5 | U/E |
| 1C | W8 | 5 | U/E | 5 | U/E | 5 | U/E | 5 | U/E |
| 1C | W50 (Dupe for W8) | 5 | U/E | 5 | U/E | 5 | U/E | 5 | U/E |
| 1C | W9 | 5 | U/E | 5 | U/E | 5 | U/E | 5 | U/E |
| 1C | W10 | 5 | U/E | 0.5 | U/E | 5 | U/E | 5 | U/E |
| 1C | W11 | 5 | U/E | 0.5 | U/E | 5 | U/E | 5 | U/E |
| 1C | W12 | 5 | U/E | 0.5 | U/E | 5 | U/E | 5 | U/E |
| 1C | W13 | 5 | U/E | 5 | U/E | 5 | U/E | 10 | E |
| 1C | W14 | 5 | U/E | 0.5 | U/E | 5 | U/E | 5 | U/E |
| 2A | W15 | 5 | U/E | 0.5 | U/E | 5 | U/E | 5 | U/E |
| 2A | W16 | 5 | U/E | 0.5 | U/E | 5 | U/E | 5 | U/E |
| 2B | W17 | 5 | U/E | 0.5 | U/E | 5 | U/E | 5 | U/E |
| 2B | W18 | 5 | U/E | 0.5 | U/E | 5 | U/E | 5 | U/E |
| 2B | W19 | 5 | U/E | 0.5 | U/E | 5 | U/E | 5 | U/E |
| 2C | W20 | 5 | U/E | 0.5 | U/E | 5 | U/E | 5 | U/E |
| 2C | W21 | 5 | U/E | 0.5 | U/E | 5 | U/E | 9 | E |
| 2C | W49 (Dupe for W21) | 5 | U/E | 0.5 | U/E | 5 | U/E | 10 | E |
| 2C | W22 | 5 | U/E | 1.2 | E | 5 | U/E | 5 | U/E |
| 2C | W23 | 5 | U/E | 0.5 | U/E | 5 | U/E | 8 | E |
| 2C | W24 | 5 | U/E | 0.5 | U/E | 5 | U/E | 5 | U/E |
| 2C | W25 | 5 | U/E | 0.5 | U/E | 5 | U/E | 5 | U/E |
| 2C | W26 | 5 | U/E | 0.5 | U/E | 5 | U/E | 7 | E |
| 2C | W52 (Dupe for W26) | 5 | U/E | 0.5 | U/E | 5 | U/E | 5 | U/E |
| 3A | W27 | 5 | U/E | 0.5 | U/E | 5 | U/E | 5 | U/E |
| 3A | W28 | 5 | U/E | 2.9 | E | 5 | U/E | 54 | E |
| 3A | W29 | 5 | U/E | 0.5 | U/E | 5 | U/E | 5 | E |
| 3A | W30 | 5 | U/E | 0.5 | U/E | 5 | U/E | 11 | E |
| 3A | W48 (Dupe for W30) | 5 | U/E | 0.5 | U/E | 5 | U/E | 6 | E |
| 3A | W31 | 5 | U/E | 0.5 | U/E | 5 | U/E | 4 | U/E |
| 3A | W32 | 5 | U/E | 0.5 | U/E | 5 | U/E | 4 | U/E |
| 3B | W33 | 5 | U/E | 0.5 | U/E | 5 | U/E | 5 | U/E |
| 3B | W34 | 5 | U/E | 0.5 | U/E | 5 | U/E | 5 | U/E |
| 3B | W35 | 5 | U/E | 0.5 | U/E | 5 | U/E | 5 | U/E |
| 4A | W36 | 5 | U/E | 0.5 | U/E | 5 | U/E | 5 | U/E |
| 4A | W37 | 5 | U/E | 1.5 | E | 5.5 | E | 5 | U/E |
| 4A | W38 | 5 | U/E | 0.5 | U/E | 5 | U/E | 5 | U/E |
| 4A | W39 | 5 | U/E | 0.5 | U/E | 5 | U/E | 13 | E |
| 4A | W40 | 5 | U/E | 0.5 | U/E | 5 | U/E | 5 | U/E |
| 4A | W41 | 5 | U/E | 0.5 | U/E | 5 | U/E | 5 | U/E |
| 4A | W42 | 5 | U/E | 0.5 | U/E | 5 | U/E | 5 | U/E |
| 4B | W43 | 5 | U/E | 0.5 | U/E | 5 | U/E | 6 | E |
| 4B | W44 | 5 | U/E | 0.5 | U/E | 5 | U/E | 5 | U/E |
| 4B | W46 (Dupe for W44) | 5 | U/E | 0.5 | U/E | 5 | U/E | 5 | U/E |
| 4B | w45 | 5 | U/E | 0.5 | U/E | 5 | U/E | 5 | U/E |
| Freshwater Chronic Water Quality Criteria * | | 5.3 | | 0.7 | | 11 | | 7.3 | |
| Marine Chronic Water Quality Criteria ** | | na*** | | 9.3 | | 50 | | 2.9 | |

| River Segment | Station | Cyanide | | Iron | | Lead | | Mercury | |
|---|--------------------|-----------------------|----------------|-----------------------|----------------|-----------------------|----------------|-----------------------|----------------|
| | | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code |
| 1A | W1 | 2 | U/E | 100 | U/E | 1 | U/E | 0.5 | U/E |
| 1A | W2 | 2 | U/E | 370 | U/E | 20 | U/E | 0.5 | U/E |
| 1A | W3 | 2 | U/E | 1800 | E | 20 | U/E | 0.5 | U/E |
| 1A | W4 | 2 | U/E | 460 | U/E | 20 | U/E | 0.5 | U/E |
| 1A | W5 | 2 | U/E | 570 | E | 1 | U/E | 0.5 | U/E |
| 1B | W6 | 2 | U/E | 500 | U/E | 1 | U/E | 0.5 | U/E |
| 1B | W7 | 2 | U/E | 580 | E | 20 | U/E | 0.5 | U/E |
| 1C | W8 | 2 | U/E | 420 | U/E | 1 | U/E | 0.5 | U/E |
| 1C | W50 (Dupe for W8) | 2 | U/E | 450 | U/E | 1 | U/E | 0.5 | U/E |
| 1C | W9 | 2 | U/E | 520 | U/E | 1 | U/E | 0.5 | U/E |
| 1C | W10 | 2 | U/E | 160 | U/E | 1 | U/E | 0.5 | U/E |
| 1C | W11 | 2 | U/E | 110 | U/E | 1 | U/E | 0.5 | U/E |
| 1C | W12 | 2 | U/E | 100 | U/E | 1 | U/E | 0.5 | U/E |
| 1C | W13 | 2 | U/E | 210 | U/E | 1 | U/E | 0.5 | U/E |
| 1C | W14 | 2 | U/E | 510 | U/E | 2.4 | E | 0.5 | U/E |
| 2A | W15 | 2 | U/E | 520 | U/E | 5 | E | 0.5 | U/E |
| 2A | W16 | 2 | U/E | 1500 | E | 2 | E | 0.5 | U/E |
| 2B | W17 | 2 | U/E | 580 | E | 12 | E | 0.5 | U/E |
| 2B | W18 | 2 | U/E | 530 | U/E | 5.5 | E | 0.5 | U/E |
| 2B | W19 | 2 | U/E | 430 | U/E | 8.1 | E | 0.5 | U/E |
| 2C | W20 | 2 | U/E | 400 | U/E | 4 | E | 0.5 | U/E |
| 2C | W21 | 2 | U/E | 220 | U/E | 3.9 | E | 0.5 | U/E |
| 2C | W49 (Dupe for W21) | 2 | U/E | 300 | U/E | 3 | E | 0.5 | U/E |
| 2C | W22 | 2 | U/E | 400 | U/E | 2.3 | E | 0.5 | U/E |
| 2C | W23 | 2 | U/E | 560 | E | 3.8 | E | 0.5 | U/E |
| 2C | W24 | 2 | U/E | 410 | U/E | 2.2 | E | 0.5 | U/E |
| 2C | W25 | 2 | U/E | 410 | U/E | 3.2 | E | 0.5 | U/E |
| 2C | W26 | 2 | U/E | 550 | U/E | 9 | E | 0.5 | U/E |
| 2C | W52 (Dupe for W26) | 2 | U/E | 460 | U/E | 6 | E | 0.5 | U/E |
| 3A | W27 | 2 | U/E | 370 | U/E | 4 | E | 0.5 | U/E |
| 3A | W28 | 2 | U/E | 470 | U/E | 3.9 | E | 0.5 | U/E |
| 3A | W29 | 2 | U/E | 570 | E | 4 | E | 0.5 | U/E |
| 3A | W30 | 2 | U/E | 620 | E | 5.1 | E | 0.5 | U/E |
| 3A | W48 (Dupe for W30) | 2 | U/E | 510 | U/E | 4.3 | E | 0.5 | U/E |
| 3A | W31 | 2 | U/E | 150 | U/E | 1 | E | 0.5 | U/E |
| 3A | W32 | 2 | U/E | 600 | E | 1.5 | E | 0.5 | U/E |
| 3B | W33 | 2 | U/E | 160 | U/E | 1.6 | E | 0.5 | U/E |
| 3B | W34 | 2 | U/E | 110 | U/E | 2.1 | E | 0.5 | U/E |
| 3B | W35 | 2 | U/E | 250 | U/E | 1 | U/E | 0.5 | U/E |
| 4A | W36 | 2 | U/E | 460 | U/E | 1 | U/E | 0.5 | U/E |
| 4A | W37 | 2 | U/E | 500 | U/E | 1.5 | E | 0.5 | U/E |
| 4A | W38 | 2 | U/E | 300 | U/E | 1 | U/E | 0.5 | U/E |
| 4A | W39 | 2 | U/E | 190 | U/E | 1.2 | E | 0.5 | U/E |
| 4A | W40 | 2 | U/E | 320 | U/E | 1 | U/E | 0.5 | U/E |
| 4A | W41 | 2 | U/E | 250 | U/E | 2 | E | 0.5 | U/E |
| 4A | W42 | 2 | U/E | 1300 | E | 1 | U/E | 0.5 | U/E |
| 4B | W43 | 2 | U/E | 1600 | E | 1 | U/E | 0.5 | U/E |
| 4B | W44 | 2 | U/E | 320 | U/E | 1 | U/E | 0.5 | U/E |
| 4B | W46 (Dupe for W44) | 2 | U/E | 300 | U/E | 1 | E | 0.5 | U/E |
| 4B | w45 | 2 | U/E | 310 | U/E | 1 | U/E | 0.5 | U/E |
| Freshwater Chronic Water Quality Criteria * | | 5.2 | | 1000 | | 1.6 | | 0.012 | |
| Marine Chronic Water Quality Criteria ** | | 1 | | na*** | | 5.6 | | 0.025 | |

| River Segment | Station | Nickel | | Selenium | | Silver | | Thallium | |
|---|--------------------|-----------------------|----------------|-----------------------|----------------|-----------------------|----------------|-----------------------|----------------|
| | | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code |
| 1A | W1 | 40 | U/E | 100 | U/E | 2 | U/E | 360 | U/E |
| 1A | W2 | 40 | U/E | 100 | U/E | 2 | U/E | 360 | U/E |
| 1A | W3 | 40 | U/E | 100 | U/E | 2 | U/E | 360 | U/E |
| 1A | W4 | 40 | U/E | 5 | U/E | 2 | U/E | 360 | U/E |
| 1A | W5 | 40 | U/E | 100 | U/E | 2 | U/E | 360 | U/E |
| 1B | W6 | 40 | U/E | 100 | U/E | 2 | U/E | 360 | U/E |
| 1B | W7 | 40 | U/E | 100 | U/E | 2 | U/E | 360 | U/E |
| 1C | W8 | 40 | U/E | 100 | U/E | 2 | U/E | 360 | U/E |
| 1C | W50 (Dupe for W8) | 40 | U/E | 100 | U/E | 20 | U/E | 360 | U/E |
| 1C | W9 | 40 | U/E | 100 | U/E | 2 | U/E | 36 | U/E |
| 1C | W10 | 40 | U/E | 100 | U/E | 2 | U/E | 36 | U/E |
| 1C | W11 | 40 | U/E | 100 | U/E | 2 | U/E | 36 | U/E |
| 1C | W12 | 40 | U/E | 5 | U/E | 2 | U/E | 36 | U/E |
| 1C | W13 | 40 | U/E | 100 | U/E | 2 | U/E | 36 | U/E |
| 1C | W14 | 40 | U/E | 5 | U/E | 2 | U/E | 36 | U/E |
| 2A | W15 | 40 | U/E | 5 | U/E | 2 | U/E | 36 | U/E |
| 2A | W16 | 40 | U/E | 5 | U/E | 2 | U/E | 36 | U/E |
| 2B | W17 | 40 | U/E | 5 | U/E | 2 | U/E | 36 | U/E |
| 2B | W18 | 40 | U/E | 5 | U/E | 2 | U/E | 36 | U/E |
| 2B | W19 | 40 | U/E | 5 | U/E | 2 | U/E | 36 | U/E |
| 2C | W20 | 40 | U/E | 5 | U/E | 2 | U/E | 36 | U/E |
| 2C | W21 | 40 | U/E | 5 | U/E | 2 | U/E | 36 | U/E |
| 2C | W49 (Dupe for W21) | 40 | U/E | 5 | U/E | 2 | U/E | 360 | U/E |
| 2C | W22 | 40 | U/E | 5 | U/E | 2 | U/E | 36 | U/E |
| 2C | W23 | 40 | U/E | 16 | E | 2 | U/E | 36 | U/E |
| 2C | W24 | 40 | U/E | 5 | U/E | 2 | U/E | 36 | U/E |
| 2C | W25 | 40 | U/E | 5 | U/E | 2 | U/E | 36 | U/E |
| 2C | W26 | 40 | U/E | 31.7 | E | 2 | U/E | 36 | U/E |
| 2C | W52 (Dupe for W26) | 40 | U/E | 11.5 | E | 2 | U/E | 36 | U/E |
| 3A | W27 | 40 | U/E | 5 | U/E | 2 | U/E | 36 | U/E |
| 3A | W28 | 40 | U/E | 5 | U/E | 2 | U/E | 36 | U/E |
| 3A | W29 | 40 | U/E | 5 | U/E | 2 | U/E | 36 | U/E |
| 3A | W30 | 40 | U/E | 5.9 | E | 2 | U/E | 36 | U/E |
| 3A | W48 (Dupe for W30) | 40 | U/E | 5.6 | E | 2 | U/E | 36 | U/E |
| 3A | W31 | 3 | U/E | 5 | U/E | 2 | U/E | 36 | U/E |
| 3A | W32 | 3 | U/E | 5 | U/E | 2 | U/E | 36 | U/E |
| 3B | W33 | 40 | U/E | 5 | U/E | 2 | U/E | 36 | U/E |
| 3B | W34 | 40 | U/E | 5 | U/E | 2 | U/E | 36 | U/E |
| 3B | W35 | 40 | U/E | 5 | U/E | 2 | U/E | 36 | U/E |
| 4A | W36 | 40 | U/E | 5 | U/E | 2 | U/E | 360 | U/E |
| 4A | W37 | 40 | U/E | 5 | U/E | 2 | U/E | 360 | U/E |
| 4A | W38 | 40 | U/E | 5 | U/E | 2 | U/E | 36 | U/E |
| 4A | W39 | 40 | U/E | 5 | U/E | 2 | U/E | 36 | U/E |
| 4A | W40 | 40 | U/E | 5 | U/E | 2 | U/E | 36 | U/E |
| 4A | W41 | 40 | U/E | 5 | U/E | 2 | U/E | 36 | U/E |
| 4A | W42 | 40 | U/E | 5 | U/E | 2 | U/E | 36 | U/E |
| 4B | W43 | 40 | U/E | 5 | U/E | 2 | U/E | 360 | U/E |
| 4B | W44 | 40 | U/E | 5 | U/E | 2 | U/E | 36 | U/E |
| 4B | W46 (Dupe for W44) | 40 | U/E | 5 | U/E | 2 | U/E | 36 | U/E |
| 4B | w45 | 40 | U/E | 5 | U/E | 2 | U/E | 36 | U/E |
| Freshwater Chronic Water Quality Criteria * | | 98 | | 5 | | 0.12 | | 40 | |
| Marine Chronic Water Quality Criteria ** | | 8.3 | | 71 | | na*** | | na*** | |

| River Segment | Station | Zinc | |
|---|--------------------|-----------------------|----------------|
| | | Measured Conc. (ug/l) | Qualifier Code |
| 1A | W1 | 20 | U/E |
| 1A | W2 | 20 | U/E |
| 1A | W3 | 20 | U/E |
| 1A | W4 | 20 | E |
| 1A | W5 | 20 | U/E |
| 1B | W6 | 20 | U/E |
| 1B | W7 | 20 | U/E |
| 1C | W8 | 20 | U/E |
| 1C | W50 (Dupe for W8) | 20 | U/E |
| 1C | W9 | 34 | E |
| 1C | W10 | 20 | U/E |
| 1C | W11 | 27 | E |
| 1C | W12 | 20 | U/E |
| 1C | W13 | 20 | U/E |
| 1C | W14 | 20 | U/E |
| 2A | W15 | 20 | U/E |
| 2A | W16 | 77 | E |
| 2B | W17 | 20 | U/E |
| 2B | W18 | 20 | U/E |
| 2B | W19 | 20 | U/E |
| 2C | W20 | 20 | U/E |
| 2C | W21 | 20 | U/E |
| 2C | W49 (Dupe for W21) | 20 | U/E |
| 2C | W22 | 20 | U/E |
| 2C | W23 | 20 | U/E |
| 2C | W24 | 20 | U/E |
| 2C | W25 | 20 | U/E |
| 2C | W26 | 20 | U/E |
| 2C | W52 (Dupe for W26) | 20 | U/E |
| 3A | W27 | 20 | U/E |
| 3A | W28 | 20 | U/E |
| 3A | W29 | 20 | U/E |
| 3A | W30 | 20 | U/E |
| 3A | W48 (Dupe for W30) | 20 | U/E |
| 3A | W31 | 21 | E |
| 3A | W32 | 54 | E |
| 3B | W33 | 20 | U/E |
| 3B | W34 | 27 | E |
| 3B | W35 | 20 | U/E |
| 4A | W36 | 20 | E |
| 4A | W37 | 20 | U/E |
| 4A | W38 | 33 | E |
| 4A | W39 | 61 | E |
| 4A | W40 | 20 | U/E |
| 4A | W41 | 20 | U/E |
| 4A | W42 | 77 | E |
| 4B | W43 | 20 | U/E |
| 4B | W44 | 20 | U/E |
| 4B | W46 (Dupe for W44) | 33 | E |
| 4B | w45 | 20 | U/E |
| Freshwater Chronic Water Quality Criteria * | | 66 | |
| Marine Chronic Water Quality Criteria ** | | 86 | |

TABLE B-8. PHENOLIC COMPOUNDS IN WATER

| River Segment | Station | Phenol | | 2-Methylphenol | | 4-Methylphenol | |
|---|--------------------|-----------------------|----------------|-----------------------|----------------|-----------------------|----------------|
| | | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code |
| 1B | W6 | 2 | R | 4 | R | 4 | R |
| 1C | W14 | 2 | U | 4 | U | 4 | U |
| 2C | W26 | 2 | U | 4 | U | 4 | U |
| 2C | W52 (Dupe for W26) | 2 | U | 4 | U | 4 | U |
| 4A | W37 | 2 | U | 4 | U | 4 | U |
| 4B | W45 | 2 | U | 4 | U | 4 | U |
| | W47 (Carboy blank) | 2 | U | 4 | U | 4 | U |
| | W51 (Carboy blank) | 2 | U | 4 | U | 4 | U |
| Freshwater Chronic Water Quality Criteria * | | 2560 | | na*** | | na*** | |
| Marine Chronic Water Quality Criteria ** | | na*** | | na*** | | na*** | |

U = Compound was not detected. Value given is the lower quantification limit.
R = Data unusable.
* Freshwater criteria used for Stations W9-W52, excluding Station W50.
** Marine criteria used for Stations W1-W8 and W50.
*** Chronic Water Quality Criteria not available.

| River Segment | Station | 2,4-Dimethylphenol | | Pentachlorophenol | | 2-Chlorophenol | |
|---|--------------------|-----------------------|----------------|-----------------------|----------------|-----------------------|----------------|
| | | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code |
| 1B | W6 | 2 | R | 20 | R | 2 | R |
| 1C | W14 | 2 | U | 20 | U | 2 | U |
| 2C | W26 | 2 | U | 20 | U | 2 | U |
| 2C | W52 (Dupe for W26) | 2 | U | 20 | U | 2 | U |
| 4A | W37 | 2 | U | 20 | U | 2 | U |
| 4B | W45 | 2 | U | 20 | U | 2 | U |
| | W47 (Carboy blank) | 2 | U | 20 | U | 2 | U |
| | W51 (Carboy blank) | 2 | U | 20 | U | 2 | U |
| Freshwater Chronic Water Quality Criteria * | | na*** | | 6-16 | | 2000 | |
| Marine Chronic Water Quality Criteria ** | | na*** | | 7.9 | | na*** | |

| River Segment | Station | 2,4-Dichlorophenol | | 4-Chloro-3-methylphenol | | 2,4-Dinitrophenol | |
|---|--------------------|-----------------------|----------------|-------------------------|----------------|-----------------------|----------------|
| | | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code |
| 1B | W6 | 4 | R | 4 | R | 20 | R |
| 1C | W14 | 4 | U | 4 | U | 20 | U |
| 2C | W26 | 4 | U | 4 | U | 20 | U |
| 2C | W52 (Dupe for W26) | 4 | U | 4 | U | 20 | U |
| 4A | W37 | 4 | U | 4 | U | 20 | U |
| 4B | W45 | 4 | U | 4 | U | 20 | U |
| | W47 (Carboy blank) | 4 | U | 4 | U | 20 | U |
| | W51 (Carboy blank) | 4 | U | 4 | U | 20 | U |
| Freshwater Chronic Water Quality Criteria * | | 365 | | na*** | | na*** | |
| Marine Chronic Water Quality Criteria ** | | na*** | | na*** | | na*** | |

| River Segment | Station | 2-Nitrophenol | | 4-Nitrophenol | | 2,4,6-Trichlorophenol | |
|---|--------------------|-----------------------|----------------|-----------------------|----------------|-----------------------|----------------|
| | | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code |
| 1B | W6 | 4 | R | 20 | R | 4 | R |
| 1C | W14 | 4 | U | 20 | U | 4 | U |
| 2C | W26 | 4 | U | 20 | U | 4 | U |
| 2C | W52 (Dupe for W26) | 4 | U | 20 | U | 4 | U |
| 4A | W37 | 4 | U | 20 | U | 4 | U |
| 4B | W45 | 4 | U | 20 | U | 4 | U |
| | W47 (Carboy blank) | 4 | U | 20 | U | 4 | U |
| | W51 (Carboy blank) | 4 | U | 20 | U | 4 | U |
| Freshwater Chronic Water Quality Criteria * | | 150 | | 150 | | 970 | |
| Marine Chronic Water Quality Criteria ** | | na*** | | na*** | | na*** | |

TABLE B-9. SEMIVOLATILES IN WATER: HALOGENATED ETHERS

| River Segment | Station | bis(2-Chloroethyl) ether | | bis(2-Chloroethoxy) methane | | bis(2-Chloroisopropyl) ether | |
|---|--------------------|--------------------------|----------------|-----------------------------|----------------|------------------------------|----------------|
| | | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code |
| 1B | W6 | 2 | U | 2 | U | 2 | U |
| 1C | W14 | 2 | U | 2 | U | 2 | U |
| 2C | W26 | 2 | U | 2 | U | 2 | U |
| 2C | W52 (Dupe for W26) | 2 | U | 2 | U | 2 | U |
| 4A | W37 | 2 | U | 2 | U | 2 | U |
| 4B | W45 | 2 | U | 2 | U | 2 | U |
| | W47 (Carboy blank) | 2 | U | 2 | U | 2 | U |
| | W51 (Carboy blank) | 2 | U | 2 | U | 2 | U |
| Freshwater Chronic Water Quality Criteria * | | na*** | | na*** | | na*** | |
| Marine Chronic Water Quality Criteria ** | | na*** | | na*** | | na*** | |

U = Compound was not detected. Value given is the lower quantification limit.
R = Data unusable.
* Freshwater criteria used for Stations W9-W52, excluding Station W50.
** Marine criteria used for Stations W1-W8 and W50.
*** Chronic Water Quality Criteria not available.

| River Segment | Station | 4-Bromophenyl phenylether | | 4-Chlorophenyl phenylether | |
|---|--------------------|---------------------------|----------------|----------------------------|----------------|
| | | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code |
| 1B | W6 | 4 | U | 2 | U |
| 1C | W14 | 4 | U | 2 | U |
| 2C | W26 | 4 | U | 2 | U |
| 2C | W52 (Dupe for W26) | 4 | U | 2 | U |
| 4A | W37 | 4 | U | 2 | U |
| 4B | W45 | 4 | U | 2 | U |
| | W47 (Carboy blank) | 4 | U | 2 | U |
| | W51 (Carboy blank) | 4 | U | 2 | U |
| Freshwater Chronic Water Quality Criteria * | | na*** | | na*** | |
| Marine Chronic Water Quality Criteria ** | | na*** | | na*** | |

TABLE B-10. SEMIVOLATILES IN WATER: NITROAROMATICS

| River Segment | Station | 2,4-Dinitrotoluene | | 2,6-Dinitrotoluene | | Nitrobenzene | |
|---|--------------------|-----------------------|----------------|-----------------------|----------------|-----------------------|----------------|
| | | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code |
| 1B | W6 | 2 | U | 2 | U | 2 | U |
| 1C | W14 | 2 | U | 2 | U | 2 | U |
| 2C | W26 | 2 | U | 2 | U | 2 | U |
| 2C | W52 (Dupe for W26) | 2 | U | 2 | U | 2 | U |
| 4A | W37 | 2 | U | 2 | U | 2 | U |
| 4B | W45 | 2 | U | 2 | U | 2 | U |
| | W47 (Carboy blank) | 2 | U | 2 | U | 2 | U |
| | W51 (Carboy blank) | 2 | U | 2 | U | 2 | U |
| Freshwater Chronic Water Quality Criteria * | | 230 | | na*** | | na*** | |
| Marine Chronic Water Quality Criteria ** | | 370 | | 370 | | na*** | |

U = Compound was not detected. Value given is the lower quantification limit.

R = Data unusable.

* Freshwater criteria used for Stations W9-W52, excluding Station W50

** Marine criteria used for Stations W1-W8 and W50

*** Chronic Water Quality Criteria not available

TABLE B-11. SEMIVOLATILES IN WATER: NITROSAMINES

| River Segment | Station | N-Nitrosodi-n-propylamine | | N-Nitrosodiphenylamine | |
|---|--------------------|---------------------------|----------------|------------------------|----------------|
| | | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code |
| 1B | W6 | 2 | U | 2 | U |
| 1C | W14 | 2 | U | 2 | U |
| 2C | W26 | 2 | U | 2 | U |
| 2C | W52 (Dupe for W26) | 2 | U | 2 | U |
| 4A | W37 | 2 | U | 2 | U |
| 4B | W45 | 2 | U | 2 | U |
| | W47 (Carboy blank) | 2 | U | 2 | U |
| | W51 (Carboy blank) | 2 | U | 2 | U |
| Freshwater Chronic Water Quality Criteria * | | na*** | | na*** | |
| Marine Chronic Water Quality Criteria ** | | na*** | | na*** | |

U = Compound was not detected. Value given is the lower quantification limit.

R = Data unusable.

* Freshwater criteria used for Stations W9-W52, excluding Station W50.

** Marine criteria used for Stations W1-W8 and W50.

*** Chronic Water Quality Criteria not available.

TABLE B-12. SEMIVOLATILES IN WATER: NAPHTHALENES

| River Segment | Station | 2-Chloronaphthalene | | 2-Methylnaphthalene | |
|---|--------------------|-----------------------|----------------|-----------------------|----------------|
| | | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code |
| 1B | W6 | 2 | U | 2 | U |
| 1C | W14 | 2 | U | 2 | U |
| 2C | W26 | 2 | U | 2 | U |
| 2C | W52 (Dupe for W26) | 2 | U | 2 | U |
| 4A | W37 | 2 | U | 2 | U |
| 4B | W45 | 2 | U | 2 | U |
| | W47 (Carboy blank) | 2 | U | 2 | U |
| | W51 (Carboy blank) | 2 | U | 2 | U |
| Freshwater Chronic Water Quality Criteria * | | na*** | | na*** | |
| Marine Chronic Water Quality Criteria ** | | na*** | | na*** | |

U = Compound was not detected. Value given is the lower quantification limit.

R = Data unusable.

* Freshwater criteria used for Stations W9-W52, excluding Station W50.

** Marine criteria used for Stations W1-W8 and W50.

*** Chronic Water Quality Criteria not available.

TABLE B-13. SEMIVOLATILES IN WATER: POLYNUCLEAR AROMATICS

| River Segment | Station | Acenaphthene | | Acenaphthylene | | Anthracene | |
|---|--------------------|-----------------------|----------------|-----------------------|----------------|-----------------------|----------------|
| | | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code |
| 1B | W6 | 2 | U | 2 | U | 2 | U |
| 1C | W14 | 2 | U | 2 | U | 2 | U |
| 2C | W26 | 2 | U | 2 | U | 2 | U |
| 2C | W52 (Dupe for W26) | 2 | U | 2 | U | 2 | U |
| 4A | W37 | 2 | U | 2 | U | 2 | U |
| 4B | W45 | 2 | U | 2 | U | 2 | U |
| | W47 (Carboy blank) | 2 | U | 2 | U | 2 | U |
| | W51 (Carboy blank) | 2 | U | 2 | U | 2 | U |
| Freshwater Chronic Water Quality Criteria * | | 520 | | na*** | | na*** | |
| Marine Chronic Water Quality Criteria ** | | 710 | | na*** | | na*** | |

U = Compound was not detected. Value given is the lower quantification limit.

R = Data unusable.

* Freshwater criteria used for Stations W9-W52, excluding Station W50

** Marine criteria used for Stations W1-W8 and W50

*** Chronic Water Quality Criteria not available

| River Segment | Station | Benzo(a)anthracene | | Benzo(b)fluoranthene | | Benzo(k)fluoranthene | |
|---|--------------------|-----------------------|----------------|-----------------------|----------------|-----------------------|----------------|
| | | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code |
| 1B | W6 | 2 | U | 4 | U | 4 | U |
| 1C | W14 | 2 | U | 4 | U | 4 | U |
| 2C | W26 | 2 | U | 4 | U | 4 | U |
| 2C | W52 (Dupe for W26) | 2 | U | 4 | U | 4 | U |
| 4A | W37 | 2 | U | 4 | U | 4 | U |
| 4B | W45 | 2 | U | 4 | U | 4 | U |
| | W47 (Carboy blank) | 2 | U | 4 | U | 4 | U |
| | W51 (Carboy blank) | 2 | U | 4 | U | 4 | U |
| Freshwater Chronic Water Quality Criteria * | | na*** | | na*** | | na*** | |
| Marine Chronic Water Quality Criteria ** | | na*** | | na*** | | na*** | |

| River Segment | Station | Benzo(a)pyrene | | Benzo(g,h,i)perylene | | Chrysene | |
|---|--------------------|-----------------------|----------------|-----------------------|----------------|-----------------------|----------------|
| | | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code |
| 1B | W6 | 4 | U | 4 | U | 2 | U |
| 1C | W14 | 4 | U | 4 | U | 2 | U |
| 2C | W26 | 4 | U | 4 | U | 2 | U |
| 2C | W52 (Dupe for W26) | 4 | U | 4 | U | 2 | U |
| 4A | W37 | 4 | U | 4 | U | 2 | U |
| 4B | W45 | 4 | U | 4 | U | 2 | U |
| | W47 (Carboy blank) | 4 | U | 4 | U | 2 | U |
| | W51 (Carboy blank) | 4 | U | 4 | U | 2 | U |
| Freshwater Chronic Water Quality Criteria * | | na*** | | na*** | | na*** | |
| Marine Chronic Water Quality Criteria ** | | na*** | | na*** | | na*** | |

| River Segment | Station | Dibenzo(a,h)anthracene | | Fluoranthene | | Fluorene | |
|---|--------------------|------------------------|----------------|-----------------------|----------------|-----------------------|----------------|
| | | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code |
| 1B | W6 | 4 | U | 2 | U | 2 | U |
| 1C | W14 | 4 | U | 2 | U | 2 | U |
| 2C | W26 | 4 | U | 2 | U | 2 | U |
| 2C | W52 (Dupe for W26) | 4 | U | 2 | U | 2 | U |
| 4A | W37 | 4 | U | 2 | U | 2 | U |
| 4B | W45 | 4 | U | 2 | U | 2 | U |
| | W47 (Carboy blank) | 4 | U | 2 | U | 2 | U |
| | W51 (Carboy blank) | 4 | U | 2 | U | 2 | U |
| Freshwater Chronic Water Quality Criteria * | | na*** | | na*** | | na*** | |
| Marine Chronic Water Quality Criteria ** | | na*** | | 16 | | na*** | |

| River Segment | Station | Indeno(1,2,3-c,d)pyrene | | Naphthalene | | Phenanthrene | |
|---|--------------------|-------------------------|----------------|-----------------------|----------------|-----------------------|----------------|
| | | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code |
| 1B | W6 | 4 | U | 2 | U | 2 | U |
| 1C | W14 | 4 | U | 2 | U | 2 | U |
| 2C | W26 | 4 | U | 2 | U | 2 | U |
| 2C | W52 (Dupe for W26) | 4 | U | 2 | U | 2 | U |
| 4A | W37 | 4 | U | 2 | U | 2 | U |
| 4B | W45 | 4 | U | 2 | U | 2 | U |
| | W47 (Carboy blank) | 4 | U | 2 | U | 2 | U |
| | W51 (Carboy blank) | 4 | U | 2 | U | 2 | U |
| Freshwater Chronic Water Quality Criteria * | | na*** | | 620 | | na*** | |
| Marine Chronic Water Quality Criteria ** | | na*** | | na*** | | na*** | |

| River Segment | Station | Pyrene | |
|---|--------------------|-----------------------|----------------|
| | | Measured Conc. (ug/l) | Qualifier Code |
| 1B | W6 | 2 | U |
| 1C | W14 | 2 | U |
| 2C | W26 | 2 | U |
| 2C | W52 (Dupe for W26) | 2 | U |
| 4A | W37 | 2 | U |
| 4B | W45 | 2 | U |
| | W47 (Carboy blank) | 2 | U |
| | W51 (Carboy blank) | 2 | U |
| Freshwater Chronic Water Quality Criteria * | | na*** | |
| Marine Chronic Water Quality Criteria ** | | na*** | |

TABLE B-14. SEMIVOLATILES IN WATER: CHLORINATED BENZENES

| River Segment | Station | 1,3-Dichlorobenzene | | 1,2-Dichlorobenzene | | 1,4-Dichlorobenzene | | 1,2,4-Trichlorobenzene | |
|---|--------------------|-----------------------|----------------|-----------------------|----------------|-----------------------|----------------|------------------------|----------------|
| | | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code |
| 1B | W6 | 2 | U | 2 | U | 2 | U | 4 | U |
| 1C | W14 | 2 | U | 2 | U | 2 | U | 4 | U |
| 2C | W26 | 2 | U | 2 | U | 2 | U | 4 | U |
| 2C | W52 (Dupe for W26) | 2 | U | 2 | U | 2 | U | 4 | U |
| 4A | W37 | 2 | U | 2 | U | 2 | U | 4 | U |
| 4B | W45 | 2 | U | 2 | U | 2 | U | 4 | U |
| | W47 (Carboy blank) | 2 | U | 2 | U | 2 | U | 4 | U |
| | W51 (Carboy blank) | 2 | U | 2 | U | 2 | U | 4 | U |
| Freshwater Chronic Water Quality Criteria * | | 763 | | 763 | | 763 | | na*** | |
| Marine Chronic Water Quality Criteria ** | | na*** | | na*** | | na*** | | na*** | |

U = Compound was not detected. Value given is the lower quantification limit.

R = Data unusable.

* Freshwater criteria used for Stations W9-W52, excluding Station W50

** Marine criteria used for Stations W1-W8 and W50

*** Chronic Water Quality Criteria not available

| River Segment | Station | Hexachlorobenzene | | Hexachlorobutadiene | | Hexachloroethane | | Hexachlorocyclopentadiene | |
|---|--------------------|-----------------------|----------------|-----------------------|----------------|-----------------------|----------------|---------------------------|----------------|
| | | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code |
| 1B | W6 | 4 | U | 2 | U | 4 | U | 10 | U |
| 1C | W14 | 4 | U | 2 | U | 4 | U | 10 | U |
| 2C | W26 | 4 | U | 2 | U | 4 | U | 10 | U |
| 2C | W52 (Dupe for W26) | 4 | U | 2 | U | 4 | U | 10 | U |
| 4A | W37 | 4 | U | 2 | U | 4 | U | 10 | U |
| 4B | W45 | 4 | U | 2 | U | 4 | U | 10 | U |
| | W47 (Carboy blank) | 4 | U | 2 | U | 4 | U | 10 | U |
| | W51 (Carboy blank) | 4 | U | 2 | U | 4 | U | 10 | U |
| Freshwater Chronic Water Quality Criteria * | | na*** | | 9.3 | | 540 | | 5.2 | |
| Marine Chronic Water Quality Criteria ** | | na*** | | na*** | | na*** | | na*** | |

TABLE B-15. SEMIVOLATILES IN WATER: BENZIDINES

| River Segment | Station | 3,3'-Dichlorobenzidine | |
|---|--------------------|------------------------|----------------|
| | | Measured Conc. (ug/l) | Qualifier Code |
| 1B | W6 | 20 | U |
| 1C | W14 | 20 | U |
| 2C | W26 | 20 | U |
| 2C | W52 (Dupe for W26) | 20 | U |
| 4A | W37 | 20 | U |
| 4B | W45 | 20 | U |
| | W47 (Carboy blank) | 20 | U |
| | W51 (Carboy blank) | 20 | U |
| Freshwater Chronic Water Quality Criteria * | | na*** | |
| Marine Chronic Water Quality Criteria ** | | na*** | |

U = Compound was not detected. Value given is the lower quantification limit.

R = Data unusable.

* Freshwater criteria used for Stations W9-W52, excluding Station W50

** Marine criteria used for Stations W1-W8 and W50

*** Chronic Water Quality Criteria not available

| TABLE B-16. SEMIVOLATILES IN WATER: PHTHALATE ESTERS | | | | | | | |
|--|--------------------|-----------------------|----------------|-----------------------|----------------|-----------------------|----------------|
| River Segment | Station | Dimethyl phthalate | | Diethyl phthalate | | Di-n-butyl phthalate | |
| | | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code |
| 1B | W6 | 2 | U | 4 | U | 2 | U |
| 1C | W14 | 2 | U | 4 | U | 2 | U |
| 2C | W26 | 2 | U | 4 | U | 2 | U |
| 2C | W52 (Dupe for W26) | 2 | U | 4 | U | 2 | U |
| 4A | W37 | 2 | U | 4 | U | 2 | U |
| 4B | W45 | 2 | U | 4 | U | 2 | U |
| | W47 (Carboy blank) | 2 | U | 4 | U | 2 | U |
| | W51 (Carboy blank) | 2 | U | 4 | U | 2 | U |
| Freshwater Chronic Water Quality Criteria * | | na*** | | na*** | | na*** | |
| Marine Chronic Water Quality Criteria ** | | na*** | | na*** | | na*** | |
| U = Compound was not detected. Value given is the lower quantification limit. R = Data unusable. * Freshwater criteria used for Stations W9-W52, excluding Station W50 ** Marine criteria used for Stations W1-W8 and W50 *** Chronic Water Quality Criteria not available | | | | | | | |

| River Segment | Station | Benzyl butyl phthalate | | bis(2-Ethylhexyl) phthalate | | Di-n-octyl phthalate | |
|---|--------------------|------------------------|----------------|-----------------------------|----------------|-----------------------|----------------|
| | | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code |
| 1B | W6 | 2 | U | 4.4 | U | 4 | U |
| 1C | W14 | 2 | U | 2 | U | 4 | U |
| 2C | W26 | 2 | U | 9 | | 4 | U |
| 2C | W52 (Dupe for W26) | 2 | U | 15 | | 4 | U |
| 4A | W37 | 2 | U | 18 | | 4 | U |
| 4B | W45 | 2 | U | 2 | U | 4 | U |
| | W47 (Carboy blank) | 2 | U | 2 | U | 4 | U |
| | W51 (Carboy blank) | 2 | U | 2 | U | 4 | U |
| Freshwater Chronic Water Quality Criteria * | | na*** | | na*** | | na*** | |
| Marine Chronic Water Quality Criteria ** | | na*** | | na*** | | na*** | |

TABLE B-17. VOLATILES IN WATER

| River Segment | Station | Chloromethane | | Vinyl chloride | | Methylene chloride | | 1,1-Dichloroethane | | Chloroform | |
|---|--------------------|-----------------------|----------------|-----------------------|----------------|-----------------------|----------------|-----------------------|----------------|-----------------------|----------------|
| | | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code |
| 1B | W6 | 1 | U | 1 | U | 10 | U | 1 | U | 1 | U |
| 1C | W14 | 1 | U | 1 | U | 16 | U | 1 | U | 1 | U |
| 2C | W26 | 1 | U | 1 | U | 10 | U | 1 | U | 1 | U |
| 2C | W52 (Dupe for W26) | 1 | U | 1 | U | 10 | U | 1 | U | 1 | U |
| 4A | W37 | 1 | U | 1 | U | 10 | U | 1 | U | 1 | U |
| 4B | W45 | 1 | U | 1 | U | 10 | U | 1 | U | 1 | U |
| | W47 (Carboy blank) | 1 | U | 1 | U | 10 | U | 1 | U | 1 | U |
| | W51 (Carboy blank) | 1 | U | 1 | U | 10 | U | 1 | U | 1 | U |
| Freshwater Chronic Water Quality Criteria * | | na*** | | na*** | | na*** | | na*** | | 1240 | |
| Marine Chronic Water Quality Criteria ** | | na*** | | na*** | | na*** | | na*** | | na*** | |

U = Compound was not detected. Value given is the lower quantification limit.
 * Freshwater criteria used for Stations W9-W52, excluding Station W50
 ** Marine criteria used for Stations W1-W6 and W50
 *** Chronic Water Quality Criteria not available

B-17:1

| River Segment | Station | 1,1,1-Trichloroethane | | Bromodichloromethane | | trans-1,3-Dichloropropene | | Chlorodibromomethane | | Benzene | |
|---|--------------------|-----------------------|----------------|-----------------------|----------------|---------------------------|----------------|-----------------------|----------------|-----------------------|----------------|
| | | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code |
| 1B | W6 | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U |
| 1C | W14 | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U |
| 2C | W26 | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U |
| 2C | W52 (Dupe for W26) | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U |
| 4A | W37 | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U |
| 4B | W45 | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U |
| | W47 (Carboy blank) | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U |
| | W51 (Carboy blank) | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U |
| Freshwater Chronic Water Quality Criteria * | | na*** | | na*** | | 244 | | na*** | | na*** | |
| Marine Chronic Water Quality Criteria ** | | na*** | | na*** | | na*** | | na*** | | 700 | |

B-17:2

| River Segment | Station | Bromoform | | Tetrachloroethene | | Chlorobenzene | | o-Xylene | | m,p-Xylene | |
|---|--------------------|-----------------------|----------------|-----------------------|----------------|-----------------------|----------------|-----------------------|----------------|-----------------------|----------------|
| | | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code |
| 1B | W6 | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U |
| 1C | W14 | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U |
| 2C | W26 | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U |
| 2C | W52 (Dupe for W26) | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U |
| 4A | W37 | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U |
| 4B | W45 | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U |
| | W47 (Carboy blank) | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U |
| | W51 (Carboy blank) | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U |
| Freshwater Chronic Water Quality Criteria * | | na*** | | 840 | | 50 | | na*** | | na*** | |
| Marine Chronic Water Quality Criteria ** | | na*** | | 450 | | 129 | | na*** | | na*** | |

| River Segment | Station | Bromomethane | | Chloroethane | | 1,1-Dichloroethene | | trans-1,2-Dichloroethene | | 1,2-Dichloroethane | |
|---|--------------------|-----------------------|----------------|-----------------------|----------------|-----------------------|----------------|--------------------------|----------------|-----------------------|----------------|
| | | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code |
| 1B | W6 | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U |
| 1C | W14 | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U |
| 2C | W26 | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U |
| 2C | W52 (Dupe for W26) | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U |
| 4A | W37 | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U |
| 4B | W45 | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U |
| | W47 (Carboy blank) | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U |
| | W51 (Carboy blank) | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U |
| Freshwater Chronic Water Quality Criteria * | | na*** | | na*** | | na*** | | na*** | | 20000 | |
| Marine Chronic Water Quality Criteria ** | | na*** | | na*** | | na*** | | na*** | | na*** | |

B-17.3

| River Segment | Station | Carbon tetrachloride | | 1,2-Dichloropropane | | Trichloroethene | | 1,1,2-Trichloroethane | | cis-1,3-Dichloropropane | |
|---|--------------------|-----------------------|----------------|-----------------------|----------------|-----------------------|----------------|-----------------------|----------------|-------------------------|----------------|
| | | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code |
| 1B | W6 | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U |
| 1C | W14 | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U |
| 2C | W26 | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U |
| 2C | W52 (Dupe for W26) | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U |
| 4A | W37 | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U |
| 4B | W45 | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U |
| | W47 (Carboy blank) | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U |
| | W51 (Carboy blank) | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U |
| Freshwater Chronic Water Quality Criteria * | | na*** | | 5700 | | 2000 | | 9400 | | 244 | |
| Marine Chronic Water Quality Criteria ** | | na*** | | 3040 | | na*** | | na*** | | na*** | |

| River Segment | Station | 1,1,2,2-Tetrachloroethane | | Toluene | | Ethylbenzene | |
|---|--------------------|---------------------------|----------------|-----------------------|----------------|-----------------------|----------------|
| | | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code |
| 1B | W6 | 1 | U | 1 | U | 1 | U |
| 1C | W14 | 1 | U | 1 | U | 1 | U |
| 2C | W26 | 1 | U | 1 | U | 1 | U |
| 2C | W52 (Dupe for W26) | 1 | U | 1 | U | 1 | U |
| 4A | W37 | 1 | U | 1 | U | 1 | U |
| 4B | W45 | 1 | U | 1 | U | 1 | U |
| | W47 (Carboy blank) | 1 | U | 7.3 | | 1 | U |
| | W51 (Carboy blank) | 1 | U | 1 | U | 1 | U |
| Freshwater Chronic Water Quality Criteria * | | 2400 | | na*** | | na*** | |
| Marine Chronic Water Quality Criteria ** | | na*** | | 5000 | | na*** | |

TABLE B-18. PESTICIDES IN WATER

| River Segment | Station | o,p-DDD | | o,p-DDE | | o,p-DDT | | 4,4'-DDD | | 4,4'-DDE | |
|---|--------------------|-----------------------|----------------|-----------------------|----------------|-----------------------|----------------|-----------------------|----------------|-----------------------|----------------|
| | | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code |
| 1B | W6 | 0.05 | U/R | 0.05 | U/R | 0.05 | U/R | 0.05 | U/R | 0.05 | U/R |
| 1C | W14 | 0.05 | U | 0.05 | U | 0.05 | U | 0.05 | U | 0.05 | U |
| 2C | W26 | 0.05 | U | 0.05 | U | 0.05 | U | 0.05 | U | 0.05 | U |
| 2C | W52 (Dupe for W26) | 0.05 | U | 0.05 | U | 0.05 | U | 0.05 | U | 0.05 | U |
| 4A | W37 | 0.05 | U | 0.05 | U | 0.05 | U | 0.05 | U | 0.05 | U |
| 4B | W45 | 0.05 | U | 0.05 | U | 0.05 | U | 0.05 | U | 0.05 | U |
| Freshwater Chronic Water Quality Criteria | | 0.001 | | 0.001 | | 0.001 | | 0.001 | | 0.001 | |
| Marine Chronic Water Quality Criteria ** | | 0.001 | | 0.001 | | 0.001 | | 0.001 | | 0.001 | |

U = Compound was not detected. Value given is the lower quantification limit.

E = Value estimated.

* Freshwater criteria used for Stations W9-W52, excluding Station W50

** Marine criteria used for Stations W1-W8 and W50

*** Chronic Water Quality Criteria not available

B-18-1

| River Segment | Station | 4,4'-DDT | | Heptachlor | | Heptachlor epoxide | | Chlordane | | Aldrin | |
|---|--------------------|-----------------------|----------------|-----------------------|----------------|-----------------------|----------------|-----------------------|----------------|-----------------------|----------------|
| | | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code |
| 1B | W6 | 0.05 | U/R | 0.05 | U/R | 0.05 | U/R | 0.05 | U/R | 0.05 | U/R |
| 1C | W14 | 0.05 | U | 0.05 | U/E | 0.05 | U | 0.05 | U | 0.05 | U/E |
| 2C | W26 | 0.05 | U | 0.05 | U | 0.05 | U | 0.05 | U | 0.05 | U |
| 2C | W52 (Dupe for W26) | 0.05 | U | 0.05 | U | 0.05 | U | 0.05 | U | 0.05 | U |
| 4A | W37 | 0.05 | U | 0.05 | U | 0.05 | U | 0.05 | U | 0.05 | U |
| 4B | W45 | 0.05 | U | 0.05 | U | 0.05 | U | 0.05 | U | 0.05 | U |
| Freshwater Chronic Water Quality Criteria | | 0.001 | | 0.0038 | | na*** | | 0.0043 | | 0.0019 | |
| Marine Chronic Water Quality Criteria ** | | 0.001 | | 0.0036 | | na*** | | 0.004 | | 0.0019 | |

B-182

| River Segment | Station | Dieldrin Measured Conc. (ug/l) | Qualifier Code | Mirex Measured Conc. (ug/l) | Qualifier Code | Dacthal Measured Conc. (ug/l) | Qualifier Code | Dicofol Measured Conc. (ug/l) | Qualifier Code | Methyl parathion Measured Conc. (ug/l) | Qualifier Code |
|---|--------------------|--------------------------------|----------------|-----------------------------|----------------|-------------------------------|----------------|-------------------------------|----------------|--|----------------|
| 1B | W6 | 0.06 | U/R | 0.05 | U/R | 0.05 | U/R | 0.5 | U/R | 0.05 | U/R |
| 1C | W14 | 0.05 | U | 0.05 | U | 0.05 | U | 0.5 | U | 0.05 | U |
| 2C | W26 | 0.05 | U | 0.05 | U | 0.05 | U | 0.5 | U | 0.05 | U |
| 2C | W52 (Dupe for W26) | 0.05 | U | 0.05 | U | 0.05 | U | 0.5 | U | 0.05 | U |
| 4A | W37 | 0.05 | U | 0.05 | U | 0.05 | U | 0.5 | U | 0.05 | U |
| 4B | W45 | 0.05 | U | 0.05 | U | 0.05 | U | 0.5 | U | 0.05 | U |
| Freshwater Chronic Water Quality Criteria | | 0.0019 | | 0.001 | | na*** | | na*** | | na*** | |
| Marine Chronic Water Quality Criteria ** | | 0.0019 | | 0.001 | | na*** | | na*** | | na*** | |

| River Segment | Station | Parathion Measured Conc. (ug/l) | Qualifier Code | Malathion Measured Conc. (ug/l) | Qualifier Code | Toxaphene Measured Conc. (ug/l) | Qualifier Code | Isophorone Measured Conc. (ug/l) | Qualifier Code | Endosulfan I Measured Conc. (ug/l) | Qualifier Code |
|---|--------------------|---------------------------------|----------------|---------------------------------|----------------|---------------------------------|----------------|----------------------------------|----------------|------------------------------------|----------------|
| 1B | W6 | 0.05 | U/R | 0.05 | U/R | 5 | U/R | 2 | U/R | 0.05 | U/R |
| 1C | W14 | 0.05 | U | 0.05 | U | 5 | U | 2 | U | 0.05 | U |
| 2C | W26 | 0.05 | U | 0.05 | U | 5 | U | 2 | U | 0.05 | U |
| 2C | W52 (Dupe for W26) | 0.05 | U | 0.05 | U | 5 | U | 2 | U | 0.05 | U |
| 4A | W37 | 0.05 | U | 0.05 | U | 5 | U | 2 | U | 0.05 | U |
| 4B | W45 | 0.05 | U | 0.05 | U | 5 | U | 2 | U | 0.05 | U |
| Freshwater Chronic Water Quality Criteria | | 0.013 | | 0.1 | | 0.0002 | | na*** | | 0.056 | |
| Marine Chronic Water Quality Criteria ** | | na*** | | 0.1 | | 0.0002 | | na*** | | 0.0087 | |

B-18:3

| River Segment | Station | Endosulfan II | | Endosulfan sulfate | | Endrin | | Endrin aldehyde | | Methoxychlor | |
|---|--------------------|-----------------------|----------------|-----------------------|----------------|-----------------------|----------------|-----------------------|----------------|-----------------------|----------------|
| | | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code |
| 1B | W6 | 0.05 | U/R | 0.05 | U/R | 0.05 | U/R | 0.07 | U/R | 0.05 | U/R |
| 1C | W14 | 0.05 | U | 0.05 | U | 0.05 | U | 0.05 | U | 0.05 | U |
| 2C | W26 | 0.05 | U | 0.05 | U/E | 0.05 | U | 0.05 | U | 0.05 | U/E |
| 2C | W52 (Dupe for W26) | 0.05 | U | 0.05 | U/E | 0.05 | U | 0.05 | U | 0.05 | U/E |
| 4A | W37 | 0.05 | U | 0.05 | U | 0.05 | U | 0.05 | U | 0.05 | U |
| 4B | W45 | 0.05 | U | 0.05 | U | 0.05 | U | 0.05 | U | 0.05 | U |
| Freshwater Chronic Water Quality Criteria | | 0.056 | | na*** | | 0.0023 | | na*** | | 0.03 | |
| Marine Chronic Water Quality Criteria ** | | 0.0087 | | na*** | | 0.0023 | | na*** | | 0.03 | |

| River Segment | Station | alpha-BHC | | beta-BHC | | delta-BHC | | gamma-BHC | |
|---|--------------------|-----------------------|----------------|-----------------------|----------------|-----------------------|----------------|-----------------------|----------------|
| | | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code |
| 1B | W6 | 0.05 | U/R | 0.05 | U/R | 0.05 | U/R | 0.05 | U/R |
| 1C | W14 | 0.05 | U | 0.05 | U | 0.05 | U | 0.05 | U/E |
| 2C | W26 | 0.05 | U | 0.05 | U | 0.05 | U | 0.05 | U |
| 2C | W52 (Dupe for W26) | 0.05 | U | 0.05 | U | 0.05 | U | 0.05 | U |
| 4A | W37 | 0.05 | U | 0.05 | U | 0.05 | U | 0.05 | U |
| 4B | W45 | 0.05 | U | 0.05 | U | 0.05 | U | 0.05 | U |
| Freshwater Chronic Water Quality Criteria | | na*** | | na*** | | na*** | | 0.08 | |
| Marine Chronic Water Quality Criteria ** | | na*** | | na*** | | na*** | | na*** | |

TABLE B-19. PCBs IN WATER

| River Segment | Station | Aroclor-1016 | | Aroclor-1221 | | Aroclor-1232 | | Aroclor-1242 | |
|---|--------------------|-----------------------|----------------|-----------------------|----------------|-----------------------|----------------|-----------------------|----------------|
| | | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code |
| 1B | W6 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U |
| 1C | W14 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U |
| 2C | W26 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U |
| 2C | W52 (Dupe for W26) | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U |
| 4A | W37 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U |
| 4B | W45 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U |
| Freshwater Chronic Water Quality Criteria * | | na*** | | na*** | | na*** | | na*** | |
| Marine Chronic Water Quality Criteria ** | | na*** | | na*** | | na*** | | na*** | |

U = Compound was not detected. Value given is the lower quantification limit.
 * Freshwater criteria used for Stations W9-W52, excluding Station W50.
 ** Marine criteria used for Stations W1-W8 and W50.
 *** Chronic Water Quality Criteria not available.

| River Segment | Station | Aroclor-1248 | | Aroclor-1254 | | Aroclor-1260 | |
|---|--------------------|-----------------------|----------------|-----------------------|----------------|-----------------------|----------------|
| | | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code | Measured Conc. (ug/l) | Qualifier Code |
| 1B | W6 | 0.5 | U | 0.5 | U | 0.5 | U |
| 1C | W14 | 0.5 | U | 0.5 | U | 0.5 | U |
| 2C | W26 | 0.5 | U | 0.5 | U | 0.5 | U |
| 2C | W52 (Dupe for W26) | 0.5 | U | 0.5 | U | 0.5 | U |
| 4A | W37 | 0.5 | U | 0.5 | U | 0.5 | U |
| 4B | W45 | 0.5 | U | 0.5 | U | 0.5 | U |
| Freshwater Chronic Water Quality Criteria * | | na*** | | na*** | | na*** | |
| Marine Chronic Water Quality Criteria ** | | na*** | | na*** | | na*** | |

TABLE B-20. AOX IN WATER

| River Segment | Station | AOX (ug/L) | Qualifier Code |
|---------------|--------------------|------------|----------------|
| 1A | W5 | 255* | Z |
| 1B | W6 | 250 | Z |
| 1C | W11 | 50 | Z |
| 1C | W12 | 55 | Z |
| 1C | W13 | 40 | Z |
| 1C | W14 | 45 | Z |
| 2B | W17 | 45 | Z |
| 2C | W20 | 60 | Z |
| 2C | W22 | 40 | Z |
| 2C | W24 | 5 | UZ |
| 2C | W26 | 25 | Z |
| 2C | W52 (Dupe for W26) | 30 | Z |
| 3A | W30 | 20 | Z |
| 3B | W33 | 25 | Z |
| 3B | W35 | 20 | Z |
| 4A | W36 | 35 | Z |
| 4A | W37 | 20 | Z |
| 4A | W39 | 15 | Z |
| 4A | W42 | 10 | Z |
| 4B | W45 | 15 | Z |

* Sample W5 contained solids. The AOX value on the filtered sample was 35 ug/L.

U = Substance undetected. Value given is the method detection limit.

Z = Value corrected for blank contribution

APPENDIX C

SEDIMENT CHEMISTRY DATA

APPENDIX C. SEDIMENT CHEMISTRY DATA

- C-1. SEDIMENT CONVENTIONALS
- C-2. METALS IN SEDIMENTS
- C-3. PHENOLIC COMPOUNDS IN SEDIMENTS
- C-4. SEMIVOLATILES IN SEDIMENTS: HALOGENATED ETHERS
- C-5. SEMIVOLATILES IN SEDIMENTS: NITROAROMATICS
- C-6. SEMIVOLATILES IN SEDIMENTS: NITROSAMINES
- C-7. SEMIVOLATILES IN SEDIMENTS: NAPHTHALENES
- C-8. SEMIVOLATILES IN SEDIMENTS: POLYNUCLEAR AROMATICS
- C-9. SEMIVOLATILES IN SEDIMENTS: CHLORINATED BENZENES
- C-10. SEMIVOLATILES IN SEDIMENTS: BENZIDINES
- C-11. SEMIVOLATILES IN SEDIMENTS: PHTHALATE ESTERS
- C-12. PESTICIDES IN SEDIMENTS
- C-13. PCBs IN SEDIMENTS
- C-14. DIOXINS AND FURANS IN SEDIMENTS
- C-15. RADIONUCLIDES IN SEDIMENTS
- C-16. BUTYL TIN IN SEDIMENTS

(Note: All concentrations are presented on a dry-weight basis)

TABLE C-1. SEDIMENT CONVENTIONALS

| River Segment | Station | Habitat * | TOC (%) | AVS (mg/kg) | Sand (%) | Silt + Clay (%) | Percent Fines ** |
|---------------|--------------------|--------------|---------|-------------|----------|-----------------|------------------|
| 1A | D1 | Depositional | 1.36 | 61.9 R | 57.4 | 42.5 | 76.2 |
| 1A | D2 | Depositional | 1.63 | 101.9 R | 11.8 | 93.6 | 98.0 |
| 1A | D3 | Depositional | 0.60 | 3.2 R | 70.5 | 26.6 | 73.2 |
| 1A | D46 (Dupe for D3) | Depositional | 0.60 | 41.5 R | 70.5 | 26.6 | 73.2 |
| 1A | D4 | Depositional | 1.13 | 89.9 R | 49.7 | 46.9 | 81.9 |
| 1A | E1 | Erosional | 0.13 | 20.7 R | 97.0 | 3.1 | 4.1 |
| 1B | E2 | Depositional | 0.10 | 0.5 U/R | 94.2 | 5.9 | 24.5 |
| 1C | D5 | Erosional | 0.37 | 0.5 U/R | 90.2 | 9.8 | 18.9 |
| 1C | D6 | Depositional | 0.46 | 0.5 U/R | 85.4 | 14.3 | 25.6 |
| 1C | D7 | Depositional | 0.35 | 0.4 U/R | 91.0 | 8.9 | 32.5 |
| 1C | D8 | Depositional | 0.26 | 0.4 U/R | 88.4 | 11.6 | 50.4 |
| 1C | D9 | Depositional | 0.51 | 0.5 U/R | 91.7 | 8.3 | 25.1 |
| 1C | D11 | Depositional | 0.80 | 11.2 R | 72.2 | 26.2 | 70.5 |
| 1C | D45 (Dupe for D11) | Depositional | 0.80 | 1.4 R | 72.2 | 26.2 | 70.5 |
| 1C | E3 | Erosional | 0.21 | 109.8 R | 89.9 | 10.7 | 14.2 |
| 1C | E4 | Erosional | 0.05 | 0.5 U/R | 98.2 | 1.8 | 2.2 |
| 2A | D10 | Depositional | 0.79 | 0.6 U/R | 77.8 | 22.3 | 53.8 |
| 2A | D12 | Depositional | 0.77 | 0.7 U/R | 65.7 | 34.4 | 93.7 |
| 2A | D13 | Depositional | 0.37 | 0.7 U/R | 81.1 | 18.8 | 89.1 |
| 2A | D14 | Depositional | 0.26 | 0.6 U/R | 77.6 | 22.3 | 77.0 |
| 2A | E5 | Erosional | 0.02 | 0.5 U/R | 97.7 | 2.2 | 2.4 |
| 2B | D15 | Depositional | 0.68 | 0.8 U/R | 80.2 | 19.8 | 42.9 |
| 2C | D16 | Depositional | 0.73 | 0.7 U/R | 53.4 | 46.5 | 98.0 |
| 2C | D17 | Depositional | 0.44 | 0.5 U/R | 80.6 | 19.5 | 73.4 |
| 2C | D44 (Dupe for D17) | Depositional | 0.44 | 0.5 U/R | 80.6 | 19.5 | 73.4 |
| 2C | D18 | Depositional | 0.69 | 0.5 U/R | 86.1 | 13.8 | 31.6 |
| 2C | D19 | Depositional | 0.18 | 0.3 U/R | 86.2 | 13.8 | 56.7 |
| 2C | D20 | Depositional | 0.85 | 0.6 R | 70.4 | 29.8 | 84.5 |
| 2C | D21 | Depositional | 0.87 | 0.7 U/R | 75.6 | 20.9 | 61.2 |
| 2C | E6 | Depositional | 0.31 | 0.4 U/R | 85.2 | 14.9 | 23.3 |
| 2C | E7 | Erosional | 0.02 | 0.6 R | 97.0 | 3.0 | 3.0 |
| 3A | D22 | Depositional | 1.54 | 4.8 R | 44.8 | 51.6 | 76.5 |
| 3A | D23 | Depositional | 0.68 | 0.9 U/R | 58.8 | 38.2 | 84.2 |
| 3A | D43 (Dupe for D23) | Depositional | 0.68 | 0.8 U/R | 58.8 | 38.2 | 84.2 |
| 3A | D24 | Depositional | 0.75 | 0.8 U/R | 72.0 | 25.0 | 70.8 |
| 3A | D25 | Depositional | 0.51 | 0.5 U/R | 68.2 | 28.8 | 79.8 |
| 3A | E8 | Erosional | 0.17 | 0.4 U/R | 95.5 | 4.5 | 8.4 |
| 3A | E9 | Depositional | 0.68 | 0.9 U/R | 78.4 | 21.5 | 55.0 |
| 3B | D26 | Depositional | 0.19 | 0.5 U/R | 88.0 | 12.1 | 23.4 |
| 3B | D27 | Depositional | 0.41 | 0.5 U/R | 88.5 | 11.4 | 21.2 |
| 3B | D28 | Depositional | 0.66 | 0.5 U/R | 83.0 | 17.0 | 33.8 |
| 3B | D42 (Dupe for D28) | Depositional | 0.66 | 0.6 U/R | 83.0 | 17.0 | 33.8 |
| 3B | D29 | Depositional | 0.41 | 0.5 U/R | 92.3 | 7.4 | 21.0 |
| 3B | E10 | Depositional | 0.38 | 0.5 U/R | 88.8 | 11.1 | 26.5 |
| 4A | D30 | Depositional | 0.58 | 0.8 U/R | 72.4 | 27.7 | 68.6 |
| 4A | D31 | Depositional | 0.43 | 6.5 R | 80.6 | 19.3 | 41.2 |
| 4A | D32 | Erosional | 0.24 | 0.3 U/R | 92.9 | 7.8 | 18.1 |
| 4A | D33 | Depositional | 0.48 | 13.5 R | 87.9 | 12.1 | 37.5 |
| 4A | D34 | Erosional | 0.21 | 39.0 R | 88.6 | 11.4 | 16.9 |
| 4A | D35 | Depositional | 4.06 | 12.4 R | 86.0 | 13.4 | 43.6 |
| 4A | D41 (Dupe for D35) | Depositional | 4.06 | 0.5 U/R | 86.0 | 13.4 | 43.6 |
| 4A | D36 | Depositional | 0.73 | 0.7 U/R | 85.8 | 14.1 | 28.2 |
| 4A | D37 | Depositional | 0.47 | 0.5 U/R | 87.1 | 13.0 | 50.0 |
| 4A | D38 | Erosional | 0.07 | 0.3 U/R | 93.7 | 6.3 | 16.1 |
| 4A | E11 | Depositional | 0.64 | 0.6 U/R | 76.7 | 20.6 | 41.2 |
| 4A | E12 | Erosional | 0.04 | 0.6 U/R | 99.5 | 0.6 | 0.8 |
| 4B | D39 | Depositional | 0.06 | 0.4 U/R | 94.1 | 5.9 | 30.5 |
| 4B | D40 | Depositional | 0.45 | 0.5 U/R | 79.6 | 20.4 | 36.4 |
| 4B | E13 | Erosional | 0.04 | 0.5 U/R | 97.3 | 2.7 | 2.9 |
| 4B | E14 | Erosional | 0.08 | 0.4 U/R | 99.7 | 0.3 | 1.0 |

* Based on percent fines and not on original designation. Less than 20% was erosional, greater than 20% was depositional.

** Percent fines considered to be proportion smaller than 100 um.

U = Substance was not detected. Value given is the lower quantification limit.

R = Data are unusable

TABLE C-2. METALS IN SEDIMENTS

| River Segment | Station | Aluminum | | | Antimony | | | Arsenic | | |
|--------------------------------|--------------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (mg/kg) | Normalized* Conc. (mg/kg) | Qualifier Code | Measured Conc. (mg/kg) | Normalized* Conc. (mg/kg) | Qualifier Code | Measured Conc. (mg/kg) | Normalized* Conc. (mg/kg) | Qualifier Code |
| 1A | D1 | 10768 | 14131 | E | 7.02 | | U/E | 3.37 | 4.42 | E |
| 1A | D2 | 15060 | 15367 | E | 7.53 | | U/E | 5.02 | 5.12 | E |
| 1A | D3 | 8226 | 11238 | E | 5.36 | | U/E | 2.43 | 3.32 | E |
| 1A | D46 (Dupe for D3) | 9220 | 12596 | E | 5.32 | | U/E | 2.66 | 3.63 | E |
| 1A | D4 | 10250 | 12515 | E | 6.68 | | U/E | 2.76 | 3.37 | E |
| 1A | E1 | 4611 | 112463 | E | 4.94 | | U/E | 2.04 | 49.76 | E |
| 1B | E2 | 6410 | 26163 | E | 5.06 | | U/E | 1.18 | 4.82 | E |
| 1C | D5 | 8141 | 43074 | E | 10.18 | | U/E | 1.83 | 9.68 | E |
| 1C | D6 | 12630 | 49336 | E | 11.14 | | U/E | 8.92 | 34.84 | E |
| 1C | D7 | 4823 | 14840 | E | 10.19 | | U/E | 1.97 | 6.06 | E |
| 1C | D8 | 6155 | 12212 | E | 10.37 | | U/E | 1.8 | 3.57 | E |
| 1C | D9 | 14053 | 55988 | E | 11.09 | | U/E | 3.25 | 12.95 | E |
| 1C | D11 | 8013 | 11366 | E | 6.01 | | U/E | 2.48 | 3.52 | E |
| 1C | D45 (Dupe for D11) | 10783 | 15295 | E | 5.99 | | U/E | 2.44 | 3.46 | E |
| 1C | E3 | 4619 | 32528 | E | 9.36 | | U/E | 1.44 | 10.14 | E |
| 1C | E4 | 3397 | 154409 | E | 9.62 | | U/E | 1.35 | 61.36 | E |
| 2A | D10 | 7657 | 14232 | E | 5.74 | | U/E | 2.14 | 3.98 | E |
| 2A | D12 | 9426 | 10060 | E | 6.15 | | U/E | 2.05 | 2.19 | E |
| 2A | D13 | 6747 | 7572 | E | 5.33 | | U/E | 1.63 | 1.83 | E |
| 2A | D14 | 5830 | 7571 | E | 5.14 | | U/E | 1.95 | 2.53 | E |
| 2A | E5 | 5137 | 214042 | E | 4.28 | | U/E | 1.86 | 77.5 | E |
| 2B | D15 | 6653 | 15508 | E | 5.25 | | U/E | 2.1 | 4.9 | E |
| 2C | D16 | 9243 | 9432 | E | 6.6 | | U/E | 3.17 | 3.23 | E |
| 2C | D17 | 5610 | 7643 | E | 5.26 | | U/E | 1.37 | 1.87 | E |
| 2C | D44 (Dupe for D17) | 5036 | 6861 | E | 5.4 | | U/E | 1.4 | 1.91 | E |
| 2C | D18 | 5945 | 18813 | E | 4.95 | | U/E | 2.31 | 7.31 | E |
| 2C | D19 | 4605 | 8122 | E | 4.93 | | U/E | 0.95 | 1.68 | E |
| 2C | D20 | 10252 | 12133 | E | 5.91 | | U/E | 3.59 | 4.25 | E |
| 2C | D21 | 9984 | 16314 | E | 5.99 | | U/E | 2.64 | 4.31 | E |
| 2C | E6 | 4664 | 20017 | E | 4.66 | | U/E | 1.87 | 8.03 | E |
| 2C | E7 | 2887 | 96233 | E | 4.92 | | U/E | 0.46 | 15.33 | E |
| 3A | D22 | 10676 | 13956 | E | 6.67 | | U/E | 2.54 | 3.32 | E |
| 3A | D23 | 10449 | 12410 | E | 5.8 | | U/E | 4.64 | 5.51 | E |
| 3A | D43 (Dupe for D23) | 9571 | 11367 | E | 5.74 | | U/E | 4.59 | 5.45 | E |
| 3A | D24 | 13033 | 18408 | E | 5.92 | | U/E | 2.92 | 4.12 | E |
| 3A | D25 | 9731 | 12194 | E | 5.61 | | U/E | 3.33 | 4.17 | E |
| 3A | E8 | 4705 | 56012 | E | 4.71 | | U/E | 1.85 | 22.02 | E |
| 3A | E9 | 12673 | 23042 | E | 5.76 | | U/E | 2 | 3.64 | E |
| 3B | D26 | 4950 | 21154 | E | 4.64 | | U/E | 1.98 | 8.46 | E |
| 3B | D27 | 6536 | 30830 | E | 4.9 | | U/E | 2.06 | 9.72 | E |
| 3B | D28 | 5697 | 16855 | E | 5.03 | | U/E | 2.58 | 7.63 | E |
| 3B | D42 (Dupe for D28) | 6766 | 20018 | E | 5.07 | | U/E | 2.44 | 7.22 | E |
| 3B | D29 | 6241 | 29719 | E | 5.2 | | U/E | 2.18 | 10.38 | E |
| 3B | E10 | 6519 | 24600 | E | 4.89 | | U/E | 1.63 | 6.15 | E |
| 4A | D30 | 8065 | 11757 | E | 5.76 | | U/E | 2.46 | 3.59 | E |
| 4A | D31 | 6831 | 16580 | E | 5.12 | | U/E | 4.1 | 9.95 | E |
| 4A | D32 | 5814 | 32122 | E | 4.84 | | U/E | 2.16 | 11.93 | E |
| 4A | D33 | 6757 | 18019 | E | 5.07 | | U/E | 2.36 | 6.29 | E |
| 4A | D34 | 4747 | 28089 | E | 4.75 | | U/E | 1.46 | 8.64 | E |
| 4A | D35 | 10753 | 24663 | E | 6.72 | | U/E | 3.99 | 9.15 | E |
| 4A | D41 (Dupe for D35) | 10850 | 24885 | E | 6.78 | | U/E | 3.89 | 8.92 | E |
| 4A | D36 | 6338 | 22475 | E | 5.28 | | U/E | 1.02 | 5.74 | E |
| 4A | D37 | 7650 | 15300 | E | 5.22 | | U/E | 2.75 | 5.5 | E |
| 4A | D38 | 5122 | 31814 | E | 4.8 | | U/E | 1.92 | 11.93 | E |
| 4A | E11 | 7241 | 17575 | E | 5.17 | | U/E | 2.52 | 6.12 | E |
| 4A | E12 | 2794 | 349250 | E | 4.51 | | U/E | 0.6 | 75 | E |
| 4B | D39 | 5038 | 16518 | E | 4.72 | | U/E | 1.51 | 4.95 | E |
| 4B | D40 | 9336 | 25648 | E | 5.19 | | U/E | 2.87 | 7.88 | E |
| 4B | E13 | 9032 | 311448 | E | 4.84 | | U/E | 2.9 | 100 | E |
| 4B | E14 | 6904 | 690400 | E | 4.32 | | U/E | 2.36 | 236 | E |
| Effects-Based Reference Levels | | na** | | | 2 | | | 6 | | |

U = Compound was not detected. Value given is the lower quantification limit.

E = Estimated value.

R = Data unusable.

Data are presented on a dry-weight basis

* Percent fines-normalized data presented only when a compound is detected.

** Effects-based reference level not available.

| River Segment | Station | Barium | | | Beryllium | | | Cadmium | | |
|--------------------------------|--------------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (mg/kg) | Normalized* Conc. (mg/kg) | Qualifier Code | Measured Conc. (mg/kg) | Normalized* Conc. (mg/kg) | Qualifier Code | Measured Conc. (mg/kg) | Normalized* Conc. (mg/kg) | Qualifier Code |
| 1A | D1 | 30.4 | 39.9 | E | 4.42 | | U/E | 0.71 | 0.93 | |
| 1A | D2 | 33.1 | 33.8 | E | 5.15 | | U/E | 0.52 | 0.84 | |
| 1A | D3 | 39.3 | 53.7 | E | 3.47 | | U/E | 0.49 | 0.67 | |
| 1A | D46 (Dupe for D3) | 39 | 53.3 | E | 3.39 | | U/E | 0.48 | 0.66 | |
| 1A | D4 | 25 | 30.5 | E | 4.46 | | U/E | 0.53 | 0.65 | |
| 1A | E1 | 24.4 | 595.1 | E | 3.33 | | U/E | 0.07 | 1.71 | |
| 1B | E2 | 47.2 | 192.7 | E | 3.36 | | U/E | 0.07 | 0.29 | |
| 1C | D5 | 74.6 | 394.7 | E | 3.39 | | U/E | 0.14 | 0.74 | |
| 1C | D6 | 104 | 406.3 | E | 3.71 | | U/E | 1.11 | 4.34 | |
| 1C | D7 | 67.9 | 208.9 | E | 3.4 | | U/E | 0.48 | 1.48 | |
| 1C | D8 | 83 | 164.7 | E | 3.46 | | U/E | 0.21 | 0.42 | |
| 1C | D9 | 74 | 294.8 | E | 3.7 | | U/E | 2.66 | 10.6 | |
| 1C | D11 | 80.1 | 113.6 | E | 3.69 | | U/E | 0.37 | 0.52 | |
| 1C | D45 (Dupe for D11) | 95.8 | 135.9 | E | 3.73 | | U/E | 0.37 | 0.52 | |
| 1C | E3 | 48.7 | 343 | E | 3.12 | | U/E | 0.19 | 1.34 | |
| 1C | E4 | 40.4 | 1836.4 | E | 3.21 | | U/E | 0.9 | 40.91 | |
| 2A | D10 | 84.2 | 156.5 | E | 3.75 | | U/E | 0.38 | 0.71 | |
| 2A | D12 | 69.7 | 74.4 | E | 4.1 | | U/E | 0.41 | 0.44 | |
| 2A | D13 | 49.7 | 55.8 | E | 3.37 | | U/E | 0.2 | 0.22 | |
| 2A | D14 | 54.9 | 71.3 | E | 3.38 | | U/E | 0.27 | 0.35 | |
| 2A | E5 | 51.4 | 2141.7 | E | 2.93 | | U/E | 0.06 | 2.5 | |
| 2B | D15 | 73.5 | 171.3 | E | 3.59 | | U/E | 0.22 | 0.51 | |
| 2C | D16 | 70.4 | 71.8 | E | 4.13 | | U/E | 0.41 | 0.42 | |
| 2C | D17 | 42.1 | 57.4 | E | 3.37 | | U/E | 0.2 | 0.27 | |
| 2C | D44 (Dupe for D17) | 35.6 | 48.5 | E | 3.71 | | U/E | 0.22 | 0.3 | |
| 2C | D18 | 62.7 | 198.4 | E | 3.24 | | U/E | 0.26 | 0.82 | |
| 2C | D19 | 23.7 | 41.8 | E | 3.54 | | U/E | 0.14 | 0.25 | |
| 2C | D20 | 102.5 | 121.3 | E | 4.36 | | U/E | 0.52 | 0.62 | |
| 2C | D21 | 115.8 | 189.2 | E | 7.99 | | U/E | 1.12 | 1.83 | |
| 2C | E6 | 46.6 | 200 | E | 3.27 | | U/E | 0.13 | 0.56 | |
| 2C | E7 | 8.5 | 283.3 | E | 3.14 | | U/E | 0.06 | | U |
| 3A | D22 | 106.8 | 139.6 | E | 4.81 | | U/E | 0.96 | 1.25 | |
| 3A | D23 | 127.7 | 151.7 | E | 4.3 | | U/E | 0.52 | 0.62 | |
| 3A | D43 (Dupe for D23) | 126.3 | 150 | E | 4.05 | | U/E | 0.49 | 0.58 | |
| 3A | D24 | 122.4 | 172.9 | E | 4.34 | | U/E | 0.52 | 0.73 | |
| 3A | D25 | 127.2 | 159.4 | E | 3.98 | 4.99 | E | 0.48 | 0.6 | |
| 3A | E8 | 47.1 | 560.7 | E | 3.3 | | U/E | 0.2 | 2.38 | |
| 3A | E9 | 122.9 | 223.5 | E | 3.86 | | U/E | 0.46 | 0.84 | |
| 3B | D26 | 77.4 | 330.8 | E | 3.34 | | U/E | 0.27 | 1.15 | |
| 3B | D27 | 75.2 | 354.7 | E | 3.53 | | U/E | 0.28 | 1.32 | |
| 3B | D28 | 90.5 | 267.8 | E | 3.4 | | U/E | 0.41 | 1.21 | |
| 3B | D42 (Dupe for D28) | 94.7 | 280.2 | E | 3.32 | | U/E | 0.46 | 1.36 | |
| 3B | D29 | 86.7 | 412.9 | E | 3.83 | | U/E | 0.38 | 1.81 | |
| 3B | E10 | 71.7 | 270.6 | E | 3.41 | | U/E | 0.27 | 1.02 | |
| 4A | D30 | 99.8 | 145.5 | E | 3.9 | | U/E | 0.55 | 0.8 | |
| 4A | D31 | 85.4 | 207.3 | E | 3.77 | | U/E | 0.38 | 0.92 | |
| 4A | D32 | 77.5 | 428.2 | E | 3.4 | | U/E | 0.27 | 1.49 | |
| 4A | D33 | 101.4 | 270.4 | E | 3.56 | | U/E | 0.43 | 1.15 | |
| 4A | D34 | 63.3 | 374.6 | E | 3.46 | | U/E | 0.21 | 1.24 | |
| 4A | D35 | 125.4 | 287.6 | E | 4.64 | | U/E | 0.93 | 2.13 | |
| 4A | D41 (Dupe for D35) | 126.6 | 290.4 | E | 4.24 | | U/E | 1.44 | 3.3 | |
| 4A | D36 | 66.9 | 237.2 | E | 3.32 | | U/E | 0.4 | 1.42 | |
| 4A | D37 | 111.3 | 222.6 | E | 3.7 | | U/E | 0.37 | 0.74 | |
| 4A | D38 | 60.8 | 377.6 | E | 3.14 | | U/E | 0.19 | 1.18 | |
| 4A | E11 | 110.3 | 267.7 | E | 3.47 | | U/E | 0.55 | 1.33 | |
| 4A | E12 | 28.2 | 3525 | E | 2.82 | | U/E | 0.11 | 13.75 | |
| 4B | D39 | 69.3 | 227.2 | E | 3.25 | | U/E | 0.13 | 0.43 | |
| 4B | D40 | 117.6 | 323.1 | E | 3.22 | | U/E | 0.32 | 0.88 | |
| 4B | E13 | 164.5 | 5672.4 | E | 3.31 | | U/E | 0.46 | 15.86 | |
| 4B | E14 | 132.3 | 13230 | E | 3.18 | | U/E | 0.32 | 32 | |
| Effects-Based Reference Levels | | na** | | | na** | | | 0.6 | | |

| River Segment | Station | Chromium | | | Copper | | | Iron | | |
|--------------------------------|--------------------|---------------|---------------|-----------|---------------|---------------|-----------|---------------|---------------|-----------|
| | | Measured | Normalized* | Qualifier | Measured | Normalized* | Qualifier | Measured | Normalized* | Qualifier |
| | | Conc. (mg/kg) | Conc. (mg/kg) | Code | Conc. (mg/kg) | Conc. (mg/kg) | Code | Conc. (mg/kg) | Conc. (mg/kg) | Code |
| 1A | D1 | 11.24 | 14.75 | E | 17.32 | 22.73 | E | 14981 | 19660 | E |
| 1A | D2 | 14.56 | 14.86 | E | 23.59 | 24.07 | E | 20562 | 21002 | E |
| 1A | D3 | 9.66 | 13.2 | E | 8.94 | 12.21 | E | 13591 | 18567 | E |
| 1A | D46 (Dupe for D3) | 10.99 | 15.01 | E | 9.22 | 12.6 | E | 14539 | 19862 | E |
| 1A | D4 | 10.25 | 12.52 | E | 14.71 | 17.96 | E | 14706 | 17956 | E |
| 1A | E1 | 3.62 | 88.29 | E | 1.84 | 44.88 | E | 9552 | 232976 | E |
| 1B | E2 | 6.07 | 24.78 | E | 3.71 | 15.14 | E | 10459 | 42690 | E |
| 1C | D5 | 7.46 | 39.47 | E | 4.82 | 25.5 | E | 12212 | 64614 | E |
| 1C | D6 | 8.92 | 34.84 | E | 12.63 | 49.34 | E | 22209 | 87063 | E |
| 1C | D7 | 4.76 | 14.65 | E | 4.82 | 14.83 | E | 8152 | 25083 | E |
| 1C | D8 | 5.46 | 10.89 | E | 5.39 | 10.69 | E | 8990 | 17837 | E |
| 1C | D9 | 7.4 | 29.48 | E | 13.31 | 53.03 | E | 24408 | 97243 | E |
| 1C | D11 | 7.61 | 10.79 | E | 9.62 | 13.65 | E | 11619 | 16481 | E |
| 1C | D45 (Dupe for D11) | 10.38 | 14.72 | E | 11.58 | 16.43 | E | 14776 | 20959 | E |
| 1C | E3 | 5.18 | 36.48 | E | 3.62 | 25.49 | E | 9988 | 70338 | E |
| 1C | E4 | 4.49 | | U/E | 2.56 | 116.36 | E | 7051 | 320500 | E |
| 2A | D10 | 8.04 | 14.94 | E | 10.34 | 19.22 | E | 11888 | 22059 | E |
| 2A | D12 | 7.38 | 7.88 | E | 16.39 | 17.49 | E | 13934 | 14871 | E |
| 2A | D13 | 5.33 | 5.98 | E | 10.65 | 11.95 | E | 9943 | 11159 | E |
| 2A | D14 | 4.8 | 6.23 | E | 10.29 | 13.36 | E | 9259 | 12026 | E |
| 2A | E5 | 2.28 | 95 | E | 4.85 | 202.08 | E | 9989 | 416208 | E |
| 2B | D15 | 5.95 | 13.87 | E | 8.4 | 19.58 | E | 10504 | 24485 | E |
| 2C | D16 | 8.36 | 8.53 | E | 17.17 | 17.52 | E | 13644 | 13922 | E |
| 2C | D17 | 4.91 | 6.69 | E | 11.22 | 15.29 | E | 8065 | 10988 | E |
| 2C | D44 (Dupe for D17) | 3.96 | 5.4 | E | 9.35 | 12.74 | E | 6835 | 9312 | E |
| 2C | D18 | 4.95 | 15.66 | E | 7.6 | 24.05 | E | 9908 | 31354 | E |
| 2C | D19 | 2.86 | 5.04 | E | 10.2 | 17.99 | E | 6579 | 11603 | E |
| 2C | D20 | 8.28 | 9.8 | E | 16.17 | 19.14 | E | 14196 | 16800 | E |
| 2C | D21 | 9.98 | 16.31 | E | 12.78 | 20.88 | E | 15176 | 24797 | E |
| 2C | E6 | 4.98 | 21.37 | E | 5.91 | 25.36 | E | 9328 | 40034 | E |
| 2C | E7 | 2.3 | | U/E | 8.53 | 284.33 | E | 6234 | 207800 | E |
| 3A | D22 | 9.79 | 12.8 | E | 16.69 | 24.42 | E | 15569 | 20352 | E |
| 3A | D23 | 9.67 | 11.48 | E | 13.16 | 15.63 | E | 15480 | 18385 | E |
| 3A | D43 (Dupe for D23) | 9.19 | 10.91 | E | 13.02 | 15.46 | E | 14931 | 17733 | E |
| 3A | D24 | 12.64 | 17.85 | E | 15.4 | 21.75 | E | 17773 | 25103 | E |
| 3A | D25 | 10.48 | 13.13 | E | 10.85 | 13.6 | E | 15344 | 19228 | E |
| 3A | E8 | 2.63 | 31.31 | E | 6.59 | 78.45 | E | 8783 | 104560 | E |
| 3A | E9 | 11.9 | 21.64 | E | 12.67 | 23.04 | E | 17281 | 31420 | E |
| 3B | D26 | 5.88 | 25.13 | E | 3.4 | 14.53 | E | 10210 | 43632 | E |
| 3B | D27 | 5.88 | 27.74 | E | 6.21 | 29.29 | E | 11111 | 52410 | E |
| 3B | D28 | 6.03 | 17.84 | E | 8.71 | 25.77 | E | 10724 | 31728 | E |
| 3B | D42 (Dupe for D28) | 7.44 | 22.01 | E | 8.46 | 25.03 | E | 11502 | 34030 | E |
| 3B | D29 | 6.93 | 33 | E | 6.24 | 29.71 | E | 11096 | 52838 | E |
| 3B | E10 | 6.19 | 23.36 | E | 5.87 | 22.15 | E | 10756 | 40589 | E |
| 4A | D30 | 8.83 | 12.87 | E | 11.14 | 16.24 | E | 12673 | 18474 | E |
| 4A | D31 | 6.83 | 16.58 | E | 6.83 | 16.58 | E | 11954 | 29015 | E |
| 4A | D32 | 7.43 | 41.05 | E | 6.14 | 33.92 | E | 11305 | 62459 | E |
| 4A | D33 | 7.43 | 19.81 | E | 6.76 | 18.03 | E | 11824 | 31531 | E |
| 4A | D34 | 6.65 | 39.35 | E | 3.8 | 22.49 | E | 8861 | 52432 | E |
| 4A | D35 | 9.41 | 21.58 | E | 7.09 | 39.06 | E | 16129 | 36993 | E |
| 4A | D41 (Dupe for D35) | 9.95 | 22.82 | E | 17.83 | 40.44 | E | 16275 | 37328 | E |
| 4A | D36 | 7.39 | 26.21 | E | 7.39 | 26.21 | E | 10211 | 36209 | E |
| 4A | D37 | 8.69 | 17.38 | E | 7.3 | 14.6 | E | 13561 | 27122 | E |
| 4A | D38 | 6.72 | 41.74 | E | 4.16 | 25.84 | E | 10243 | 63621 | E |
| 4A | E11 | 7.93 | 19.25 | E | 26.9 | 65.29 | E | 12414 | 30131 | E |
| 4A | E12 | 2.34 | 292.5 | E | 3.31 | 413.75 | E | 3906 | 488250 | E |
| 4B | D39 | 8.82 | 28.92 | E | 2.39 | 7.84 | E | 11650 | 38197 | E |
| 4B | D40 | 9.34 | 25.66 | E | 12.79 | 35.14 | E | 15214 | 41797 | E |
| 4B | E13 | 5.48 | 188.97 | E | 6.13 | 211.38 | E | 17742 | 611793 | E |
| 4B | E14 | 5.47 | 547 | E | 7.48 | 748 | E | 13521 | 1352100 | E |
| Effects-Based Reference Levels | | 26 | | | 16 | | | 20000 (2%) | | |

| River Segment | Station | Lead | | | Mercury | | | Nickel | | |
|--------------------------------|--------------------|---------------|---------------|-----------|---------------|---------------|-----------|---------------|---------------|-----------|
| | | Measured | Normalized* | Qualifier | Measured | Normalized* | Qualifier | Measured | Normalized* | Qualifier |
| | | Conc. (mg/kg) | Conc. (mg/kg) | Code | Conc. (mg/kg) | Conc. (mg/kg) | Code | Conc. (mg/kg) | Conc. (mg/kg) | Code |
| 1A | D1 | 11.22 | 14.72 | E | 0.094 | | U/E | 11.7 | 15.35 | E |
| 1A | D2 | 16.27 | 16.6 | E | 0.12 | | E | 12.55 | 12.81 | E |
| 1A | D3 | 12.78 | 17.46 | E | 0.086 | 0.12 | E | 8.94 | 12.21 | E |
| 1A | D46 (Dupe for D3) | 11.4 | 15.57 | E | 0.071 | | U/E | 9.22 | 12.6 | E |
| 1A | D4 | 8.65 | 10.56 | E | 0.089 | | U/E | 9.36 | 11.43 | E |
| 1A | E1 | 5.46 | 133.17 | E | 0.066 | | U/E | 6.92 | 168.78 | E |
| 1B | E2 | 4.16 | 16.98 | E | 0.067 | | U/E | 8.43 | 34.41 | E |
| 1C | D5 | 3.53 | 18.68 | E | 0.068 | | U/E | 9.5 | 50.26 | E |
| 1C | D6 | 17.9 | 69.92 | E | 0.074 | | U/E | 20.66 | 78.36 | E |
| 1C | D7 | 6.11 | 18.8 | E | 0.068 | | U/E | 7.47 | 22.98 | E |
| 1C | D8 | 5.95 | 11.81 | E | 0.069 | | U/E | 8.3 | 16.47 | E |
| 1C | D9 | 5.7 | 22.71 | E | 0.074 | | U/E | 10.36 | 41.27 | E |
| 1C | D11 | 8.57 | 12.16 | E | 0.08 | | U/E | 8.41 | 11.93 | E |
| 1C | D45 (Dupe for D11) | 8.73 | 12.38 | E | 0.08 | | U/E | 10.38 | 14.72 | E |
| 1C | E3 | 3.87 | 27.25 | E | 0.062 | | U/E | 6.87 | 48.38 | E |
| 1C | E4 | 2.37 | 107.73 | E | 0.064 | | U/E | 4.87 | 221.36 | E |
| 2A | D10 | 7.88 | 14.65 | E | 0.077 | | U/E | 9.19 | 17.08 | E |
| 2A | D12 | 7.79 | 8.31 | E | 0.082 | | U/E | 8.61 | 9.19 | E |
| 2A | D13 | 4.85 | 5.44 | E | 0.071 | | U/E | 7.1 | 7.97 | E |
| 2A | D14 | 4.8 | 6.23 | E | 0.069 | | U/E | 6.52 | 8.47 | E |
| 2A | E5 | 2.17 | 90.42 | E | 0.057 | | U/E | 5.99 | 249.58 | E |
| 2B | D15 | 5.67 | 13.22 | E | 0.07 | | U/E | 8.05 | 18.76 | E |
| 2C | D16 | 7.93 | 8.09 | E | 0.093 | 0.09 | E | 7.92 | 8.08 | E |
| 2C | D17 | 4.05 | 5.52 | E | 0.07 | | U/E | 5.96 | 8.12 | E |
| 2C | D44 (Dupe for D17) | 4.08 | 5.56 | E | 0.072 | | U/E | 5.04 | 6.87 | E |
| 2C | D18 | 5.37 | 16.99 | E | 0.066 | | U/E | 7.93 | 25.09 | E |
| 2C | D19 | 2.19 | 3.86 | E | 0.066 | | U/E | 5.59 | 9.86 | E |
| 2C | D20 | 9.41 | 11.29 | E | 0.079 | | U/E | 11.04 | 13.07 | E |
| 2C | D21 | 20.45 | 33.42 | E | 0.08 | | U/E | 11.58 | 18.92 | E |
| 2C | E6 | 4.26 | 18.28 | E | 0.062 | | U/E | 9.02 | 38.71 | E |
| 2C | E7 | 0.63 | 21 | E | 0.066 | | U/E | 5.91 | 197 | E |
| 3A | D22 | 13.85 | 18.1 | E | 0.117 | 0.15 | E | 11.12 | 14.54 | E |
| 3A | D23 | 11.27 | 13.38 | E | 0.077 | | U/E | 11.22 | 13.33 | E |
| 3A | D43 (Dupe for D23) | 10.78 | 12.8 | E | 0.077 | | U/E | 11.1 | 13.18 | E |
| 3A | D24 | 13.8 | 19.49 | E | 0.125 | 0.18 | E | 14.22 | 20.08 | E |
| 3A | D25 | 9.71 | 12.17 | E | 0.075 | 0.09 | E | 11.6 | 14.54 | E |
| 3A | E8 | 3.1 | 36.9 | E | 0.063 | | U/E | 5.65 | 67.26 | E |
| 3A | E9 | 10.81 | 19.65 | E | 0.106 | 0.19 | E | 13.44 | 24.44 | E |
| 3B | D26 | 4.21 | 17.99 | E | 0.062 | | U/E | 8.97 | 38.33 | E |
| 3B | D27 | 4.95 | 23.35 | E | 0.065 | | U/E | 10.13 | 47.78 | E |
| 3B | D28 | 9.73 | 28.79 | E | 0.067 | | U/E | 8.71 | 25.77 | E |
| 3B | D42 (Dupe for D28) | 7.43 | 21.98 | E | 0.068 | | U/E | 9.13 | 27.01 | E |
| 3B | D29 | 6.9 | 32.86 | E | 0.069 | | U/E | 10.4 | 49.52 | E |
| 3B | E10 | 5.67 | 21.4 | E | 0.065 | | U/E | 8.47 | 31.96 | E |
| 4A | D30 | 8.66 | 10.39 | E | 0.086 | 0.13 | E | 10.75 | 15.67 | E |
| 4A | D31 | 7.02 | 17.04 | E | 0.068 | | U/E | 8.88 | 21.55 | E |
| 4A | D32 | 7.75 | 42.82 | E | 0.065 | | U/E | 10.34 | 57.13 | E |
| 4A | D33 | 7.33 | 19.55 | E | 0.068 | | U/E | 10.47 | 27.92 | E |
| 4A | D34 | 4.01 | 23.73 | E | 0.063 | | U/E | 9.18 | 54.32 | E |
| 4A | D35 | 11.7 | 26.83 | E | 0.09 | 0.21 | E | 12.54 | 28.76 | E |
| 4A | D41 (Dupe for D35) | 13.24 | 30.37 | E | 0.107 | 0.25 | E | 12.66 | 29.04 | E |
| 4A | D36 | 5.85 | 20.74 | E | 0.07 | 0.25 | E | 8.8 | 31.21 | E |
| 4A | D37 | 12.95 | 25.9 | E | 0.07 | | U/E | 11.13 | 22.26 | E |
| 4A | D38 | 8.03 | 49.88 | E | 0.064 | | U/E | 9.28 | 57.64 | E |
| 4A | E11 | 9.36 | 22.72 | E | 0.069 | | U/E | 10.34 | 25.1 | E |
| 4A | E12 | 1.41 | 176.25 | E | 0.06 | | U/E | 4.21 | 526.25 | E |
| 4B | D39 | 5.19 | 17.02 | E | 0.063 | | U/E | 10.71 | 35.11 | E |
| 4B | D40 | 12.35 | 33.93 | E | 0.069 | | U/E | 12.45 | 34.2 | E |
| 4B | E13 | 7.15 | 246.55 | E | 0.065 | | U/E | 14.19 | 489.31 | E |
| 4B | E14 | 4.83 | 483 | E | 0.058 | | U/E | 12.95 | 1295 | E |
| Effects-Based Reference Levels | | 31 | | | 0.15 | | | 16 | | |

| River Segment | Station | Selenium | | | Silver | | | Thallium | | |
|--------------------------------|--------------------|---------------|---------------|-----------|---------------|---------------|-----------|---------------|---------------|-----------|
| | | Measured | Normalized* | Qualifier | Measured | Normalized* | Qualifier | Measured | Normalized* | Qualifier |
| | | Conc. (mg/kg) | Conc. (mg/kg) | Code | Conc. (mg/kg) | Conc. (mg/kg) | Code | Conc. (mg/kg) | Conc. (mg/kg) | Code |
| 1A | D1 | 0.47 | | U/E | 0.42 | | U/E | 16.85 | | U/E |
| 1A | D2 | 0.5 | | U/E | 0.45 | | U/E | 18.07 | | U/E |
| 1A | D3 | 0.36 | | U/E | 0.32 | | U/E | 12.88 | | U/E |
| 1A | D46 (Dupe for D3) | 0.35 | | U/E | 0.46 | 0.63 | E | 12.77 | | U/E |
| 1A | D4 | 0.45 | | U/E | 0.4 | | U/E | 16.04 | | U/E |
| 1A | E1 | 0.33 | | U/E | 0.4 | 9.76 | E | 11.86 | | U/E |
| 1B | E2 | 0.34 | | U/E | 0.3 | | U/E | 12.15 | | U/E |
| 1C | D5 | 0.68 | | U/E | 0.61 | | U/E | 24.42 | | U/E |
| 1C | D6 | 0.74 | | U/E | 1.49 | 5.82 | E | 26.75 | | U/E |
| 1C | D7 | 0.68 | | U/E | 0.66 | 2.09 | E | 24.46 | | U/E |
| 1C | D8 | 0.69 | | U/E | 0.63 | 1.65 | E | 24.9 | | U/E |
| 1C | D9 | 0.74 | | U/E | 0.89 | 3.55 | E | 26.63 | | U/E |
| 1C | D11 | 0.4 | | U/E | 0.48 | 0.68 | E | 14.42 | | U/E |
| 1C | D45 (Dupe for D11) | 0.4 | | U/E | 0.36 | | U/E | 14.38 | | U/E |
| 1C | E3 | 0.62 | | U/E | 0.69 | 4.86 | E | 22.47 | | U/E |
| 1C | E4 | 0.64 | | U/E | 1.22 | 55.45 | E | 23.08 | | U/E |
| 2A | D10 | 0.38 | | U/E | 0.34 | | U/E | 13.78 | | U/E |
| 2A | D12 | 0.41 | | U/E | 0.37 | | U/E | 14.75 | | U/E |
| 2A | D13 | 0.36 | | U/E | 0.32 | | U/E | 12.78 | | U/E |
| 2A | D14 | 0.34 | | U/E | 0.31 | | U/E | 12.35 | | U/E |
| 2A | E5 | 0.29 | | U/E | 0.26 | | U/E | 10.27 | | U/E |
| 2B | D15 | 0.35 | | U/E | 0.32 | | U/E | 12.61 | | U/E |
| 2C | D16 | 0.44 | | U/E | 0.4 | | U/E | 15.85 | | U/E |
| 2C | D17 | 0.7 | | U/E | 0.32 | | U/E | 12.62 | | U/E |
| 2C | D44 (Dupe for D17) | 0.36 | | U/E | 0.5 | 0.68 | E | 12.95 | | U/E |
| 2C | D18 | 0.33 | | U/E | 0.3 | | U/E | 11.89 | | U/E |
| 2C | D19 | 0.33 | | U/E | 0.3 | | U/E | 11.84 | | U/E |
| 2C | D20 | 0.39 | | U/E | 0.35 | | U/E | 14.2 | | U/E |
| 2C | D21 | 0.8 | | U/E | 0.36 | | U/E | 14.38 | | U/E |
| 2C | E6 | 0.31 | | U/E | 0.28 | | U/E | 11.19 | | U/E |
| 2C | E7 | 0.33 | | U/E | 0.3 | | U/E | 11.81 | | U/E |
| 3A | D22 | 0.44 | | U/E | 0.4 | | U/E | 16.01 | | U/E |
| 3A | D23 | 0.77 | | U/E | 0.35 | | U/E | 13.93 | | U/E |
| 3A | D43 (Dupe for D23) | 0.77 | | U/E | 0.34 | | U/E | 13.78 | | U/E |
| 3A | D24 | 0.79 | | U/E | 0.36 | | U/E | 14.22 | | U/E |
| 3A | D25 | 0.75 | 0.94 | E | 0.34 | | U/E | 13.47 | | U/E |
| 3A | E8 | 0.31 | | U/E | 0.28 | | U/E | 11.29 | | U/E |
| 3A | E9 | 0.38 | | U/E | 0.35 | | U/E | 13.82 | | U/E |
| 3B | D26 | 0.31 | | U/E | 0.28 | | U/E | 11.14 | | U/E |
| 3B | D27 | 0.33 | | U/E | 0.29 | | U/E | 11.76 | | U/E |
| 3B | D28 | 0.34 | | U/E | 0.3 | | U/E | 12.06 | | U/E |
| 3B | D42 (Dupe for D28) | 0.34 | | U/E | 0.3 | | U/E | 12.18 | | U/E |
| 3B | D29 | 0.35 | | U/E | 0.31 | | U/E | 12.48 | | U/E |
| 3B | E10 | 0.33 | | U/E | 0.29 | | U/E | 11.73 | | U/E |
| 4A | D30 | 0.38 | | U/E | 0.35 | | U/E | 13.82 | | U/E |
| 4A | D31 | 0.34 | | U/E | 0.31 | | U/E | 12.3 | | U/E |
| 4A | D32 | 0.32 | | U/E | 0.29 | | U/E | 11.63 | | U/E |
| 4A | D33 | 0.34 | | U/E | 0.3 | | U/E | 12.16 | | U/E |
| 4A | D34 | 0.32 | | U/E | 0.28 | | U/E | 11.39 | | U/E |
| 4A | D35 | 0.45 | | U/E | 0.4 | | U/E | 16.13 | | U/E |
| 4A | D41 (Dupe for D35) | 0.9 | | U/E | 0.41 | | U/E | 16.27 | | U/E |
| 4A | D36 | 0.35 | 1.24 | E | 0.32 | | U/E | 12.68 | | U/E |
| 4A | D37 | 0.35 | | U/E | 0.31 | | U/E | 12.52 | | U/E |
| 4A | D38 | 0.32 | | U/E | 0.29 | | U/E | 11.52 | | U/E |
| 4A | E11 | 0.34 | | U/E | 0.31 | | U/E | 12.41 | | U/E |
| 4A | E12 | 0.3 | | U/E | 0.27 | | U/E | 10.82 | | U/E |
| 4B | D39 | 0.31 | | U/E | 0.28 | | U/E | 11.34 | | U/E |
| 4B | D40 | 0.69 | | U/E | 0.31 | | U/E | 12.45 | | U/E |
| 4B | E13 | 0.32 | | U/E | 0.29 | | U/E | 11.61 | | U/E |
| 4B | E14 | 0.29 | | U/E | 0.26 | | U/E | 10.36 | | U/E |
| Effects-Based Reference Levels | | na** | | | 0.5 | | | na** | | |

| River Segment | Station | Zinc | | | Cyanide | | |
|--------------------------------|--------------------|---------------|---------------|-----------|---------------|---------------|-----------|
| | | Measured | Normalized* | Qualifier | Measured | Normalized* | Qualifier |
| | | Conc. (mg/kg) | Conc. (mg/kg) | Code | Conc. (mg/kg) | Conc. (mg/kg) | Code |
| 1A | D1 | 79.6 | 104.5 | E | 1 | | U/R |
| 1A | D2 | 100.4 | 102.4 | E | 1 | | U/R |
| 1A | D3 | 78.7 | 107.5 | E | 1 | | U/R |
| 1A | D46 (Dupe for D3) | 78 | 106.6 | E | 1 | | U/R |
| 1A | D4 | 66.8 | 81.6 | E | 1 | | U/R |
| 1A | E1 | 27.7 | 675.6 | E | 1 | | U/R |
| 1B | E2 | 37.1 | 151.4 | E | 1 | | U/R |
| 1C | D5 | 44.8 | 237 | E | 1 | | U/R |
| 1C | D6 | 104 | 406.3 | E | 1 | | U/R |
| 1C | D7 | 46.9 | 144.3 | E | 1 | | U/R |
| 1C | D8 | 42.2 | 83.7 | E | 1 | | U/R |
| 1C | D9 | 57 | 227.1 | E | 1 | | U/R |
| 1C | D11 | 56.1 | 79.6 | E | 1 | | U/R |
| 1C | D45 (Dupe for D11) | 67.9 | 96.3 | E | 1 | | U/R |
| 1C | E3 | 39.3 | 276.8 | E | 1 | | U/R |
| 1C | E4 | 21.8 | 990.9 | E | 1 | | U/R |
| 2A | D10 | 72.7 | 135.1 | E | 1 | | U/R |
| 2A | D12 | 65.6 | 70 | E | 1 | | U/R |
| 2A | D13 | 46.2 | 51.9 | E | 1 | | U/R |
| 2A | D14 | 48 | 62.3 | E | 1 | | U/R |
| 2A | E5 | 25.1 | 1045.8 | E | 1 | | U/R |
| 2B | D15 | 52.5 | 122.4 | E | 1 | | U/R |
| 2C | D16 | 61.6 | 62.9 | E | 1 | | U/R |
| 2C | D17 | 35.1 | 47.8 | E | 1 | | U/R |
| 2C | D44 (Dupe for D17) | 31.3 | 42.6 | E | 1 | | U/R |
| 2C | D18 | 59.4 | 188 | E | 1 | | U/R |
| 2C | D19 | 28.3 | 49.9 | E | 1 | | U/R |
| 2C | D20 | 90.7 | 107.3 | E | 1 | | U/R |
| 2C | D21 | 99.8 | 163.1 | E | 1 | | U/R |
| 2C | E6 | 43.5 | 186.7 | E | 1 | | U/R |
| 2C | E7 | 16.4 | 546.7 | E | 1 | | U/R |
| 3A | D22 | 124.6 | 162.9 | E | 1 | | U/R |
| 3A | D23 | 92.9 | 110.3 | E | 1 | | U/R |
| 3A | D43 (Dupe for D23) | 91.9 | 109.1 | E | 1 | | U/R |
| 3A | D24 | 110.6 | 156.2 | E | 1 | | U/R |
| 3A | D25 | 74.9 | 93.9 | E | 1 | | U/R |
| 3A | E8 | 40.8 | 485.7 | E | 1 | | U/R |
| 3A | E9 | 99.8 | 181.5 | E | 1 | | U/R |
| 3B | D26 | 49.5 | 211.5 | E | 1 | | U/R |
| 3B | D27 | 55.6 | 262.3 | E | 1 | | U/R |
| 3B | D28 | 87.1 | 257.7 | E | 1 | | U/R |
| 3B | D42 (Dupe for D28) | 81.2 | 240.2 | E | 1 | | U/R |
| 3B | D29 | 76.3 | 363.3 | E | 1 | | U/R |
| 3B | E10 | 61.9 | 233.6 | E | 1 | | U/R |
| 4A | D30 | 76.8 | 112 | E | 1 | | U/R |
| 4A | D31 | 78.6 | 190.8 | E | 1 | | U/R |
| 4A | D32 | 77.5 | 428.2 | E | 1 | | U/R |
| 4A | D33 | 84.5 | 225.3 | E | 1 | | U/R |
| 4A | D34 | 53.8 | 318.3 | E | 1 | | U/R |
| 4A | D35 | 181.3 | 370 | E | 1 | | U/R |
| 4A | D41 (Dupe for D35) | 154.2 | 362.8 | E | 1 | | U/R |
| 4A | D36 | 59.9 | 212.4 | E | 1 | | U/R |
| 4A | D37 | 111.3 | 222.6 | E | 1 | | U/R |
| 4A | D38 | 67.2 | 417.4 | E | 1 | | U/R |
| 4A | E11 | 103.4 | 251 | E | 1 | | U/R |
| 4A | E12 | 22.5 | 2812.5 | E | 1 | | U/R |
| 4B | D39 | 44.1 | 144.6 | E | 1 | | U/R |
| 4B | D40 | 114.1 | 313.5 | E | 1 | | U/R |
| 4B | E13 | 103.2 | 3558.6 | E | 1 | | U/R |
| 4B | E14 | 66.2 | 6620 | E | 1 | | U/R |
| Effects-Based Reference Levels | | 120 | | | 0.1 | | |

TABLE C-3. PHENOLIC COMPOUNDS IN SEDIMENTS

| River Segment | Station | Phenol | | | 2-Methylphenol | | |
|--------------------------------|--------------------|------------------------|-----------------------------|----------------|------------------------|-----------------------------|----------------|
| | | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code |
| 1A | D1 | 130 | | U | 260 | | U |
| 1A | D2 | 144 | | U | 268 | | U |
| 1A | D3 | 98 | | U | 196 | | U |
| 1A | D46 (Dupe for D3) | 98 | | U | 196 | | U |
| 1A | D4 | 122 | | U | 244 | | U |
| 1A | E1 | 44 | | U | 88 | | U |
| 1B | E2 | 44 | | U | 88 | | U |
| 1C | D5 | 94 | | U | 188 | | U |
| 1C | D6 | 96 | | U | 192 | | U |
| 1C | D7 | 88 | | U | 176 | | U |
| 1C | D8 | 92 | | U | 184 | | U |
| 1C | D9 | 46 | | U | 92 | | U |
| 1C | D11 | 110 | | U | 220 | | U |
| 1C | D45 (Dupe for D11) | 110 | | U | 220 | | U |
| 1C | E3 | 42 | | U | 84 | | U |
| 1C | E4' | 44 | | U | 88 | | U |
| 2A | D10 | 104 | | U | 208 | | U |
| 2A | D12 | 112 | | U | 224 | | U |
| 2A | D13 | 98 | | U | 196 | | U |
| 2A | D14 | 100 | | U | 200 | | U |
| 2A | E5 | 40 | | U | 80 | | U |
| 2B | D15 | 98 | | U | 196 | | U |
| 2C | D16 | 124 | | U | 248 | | U |
| 2C | D17 | 98 | | U | 196 | | U |
| 2C | D44 (Dupe for D17) | 98 | | U | 196 | | U |
| 2C | D18 | 92 | | U | 184 | | U |
| 2C | D19 | 88 | | U | 176 | | U |
| 2C | D20 | 110 | | U | 220 | | U |
| 2C | D21 | 110 | | U | 220 | | U |
| 2C | E6 | 42 | | U | 84 | | U |
| 2C | E7' | 42 | | U | 84 | | U |
| 3A | D22 | 136 | | U | 272 | | U |
| 3A | D23 | 108 | | U | 216 | | U |
| 3A | D43 (Dupe for D23) | 104 | | U | 208 | | U |
| 3A | D24 | 134 | | U | 268 | | U |
| 3A | D25 | 50 | | U | 100 | | U |
| 3A | E8 | 44 | | U | 88 | | U |
| 3A | E9 | 54 | | U | 108 | | U |
| 3B | D26 | 42 | | U | 84 | | U |
| 3B | D27 | 88 | | U | 176 | | U |
| 3B | D28 | 92 | | U | 184 | | U |
| 3B | D42 (Dupe for D28) | 96 | | U | 192 | | U |
| 3B | D29 | 44 | | U | 88 | | U |
| 3B | E10 | 44 | | U | 88 | | U |
| 4A | D30 | 106 | | U | 212 | | U |
| 4A | D31 | 86 | | U | 172 | | U |
| 4A | D32 | 44 | | U | 88 | | U |
| 4A | D33 | 46 | | U | 92 | | U |
| 4A | D34 | 42 | | U | 84 | | U |
| 4A | D35 | 62 | | U | 124 | | U |
| 4A | D41 (Dupe for D35) | 70 | | U | 140 | | U |
| 4A | D36 | 92 | | U | 184 | | U |
| 4A | D37 | 46 | | U | 92 | | U |
| 4A | D38 | 42 | | U | 84 | | U |
| 4A | E11 | 96 | | U | 192 | | U |
| 4A | E12 | 40 | | U | 80 | | U |
| 4B | D39 | 42 | | U | 84 | | U |
| 4B | D40 | 46 | | U | 92 | | U |
| 4B | E13 | 42 | | U | 84 | | U |
| 4B | E14 | 40 | | U | 80 | | U |
| Effects-Based Reference Levels | | na*** | | | na*** | | |

U = Compound was not detected. Value given is the lower quantification limit.

E = Value reported is an estimate.

* Results presented are from reextraction and reanalysis of the sample.

** TOC-normalized data presented only when a compound is detected.

*** Effects-based reference level not available.

| River Segment | Station | 4-Methylphenol | | | 2,4-Dimethylphenol | | |
|--------------------------------|--------------------|------------------------|-----------------------------|----------------|------------------------|-----------------------------|----------------|
| | | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code |
| 1A | D1 | 260 | | U | 130 | | U |
| 1A | D2 | 268 | | U | 144 | | U |
| 1A | D3 | 196 | | U | 98 | | U |
| 1A | D46 (Dupe for D3) | 196 | | U | 98 | | U |
| 1A | D4 | 244 | | U | 122 | | U |
| 1A | E1 | 88 | | U | 44 | | U |
| 1B | E2 | 88 | | U | 44 | | U |
| 1C | D5 | 188 | | U | 94 | | U |
| 1C | D6 | 192 | | U | 96 | | U |
| 1C | D7 | 176 | | U | 88 | | U |
| 1C | D8 | 184 | | U | 92 | | U |
| 1C | D9 | 92 | | U | 46 | | U |
| 1C | D11 | 220 | | U | 110 | | U |
| 1C | D45 (Dupe for D11) | 220 | | U | 110 | | U |
| 1C | E3 | 84 | | U | 42 | | U |
| 1C | E4* | 88 | | U | 44 | | U |
| 2A | D10 | 208 | | U | 104 | | U |
| 2A | D12 | 224 | | U | 112 | | U |
| 2A | D13 | 196 | | U | 98 | | U |
| 2A | D14 | 200 | | U | 100 | | U |
| 2A | E5 | 80 | | U | 40 | | U |
| 2B | D15 | 196 | | U | 98 | | U |
| 2C | D16 | 248 | | U | 124 | | U |
| 2C | D17 | 196 | | U | 98 | | U |
| 2C | D44 (Dupe for D17) | 196 | | U | 98 | | U |
| 2C | D18 | 184 | | U | 92 | | U |
| 2C | D19 | 176 | | U | 88 | | U |
| 2C | D20 | 220 | | U | 110 | | U |
| 2C | D21 | 220 | | U | 110 | | U |
| 2C | E6 | 84 | | U | 42 | | U |
| 2C | E7* | 84 | | U | 42 | | U |
| 3A | D22 | 272 | | U | 136 | | U |
| 3A | D23 | 216 | | U | 108 | | U |
| 3A | D43 (Dupe for D23) | 208 | | U | 104 | | U |
| 3A | D24 | 268 | | U | 134 | | U |
| 3A | D25 | 100 | | U | 50 | | U |
| 3A | E8 | 88 | | U | 44 | | U |
| 3A | E9 | 108 | | U | 54 | | U |
| 3B | D26 | 84 | | U | 42 | | U |
| 3B | D27 | 176 | | U | 88 | | U |
| 3B | D28 | 184 | | U | 92 | | U |
| 3B | D42 (Dupe for D28) | 192 | | U | 96 | | U |
| 3B | D29 | 88 | | U | 44 | | U |
| 3B | E10 | 88 | | U | 44 | | U |
| 4A | D30 | 212 | | U | 106 | | U |
| 4A | D31 | 172 | | U | 86 | | U |
| 4A | D32 | 88 | | U | 44 | | U |
| 4A | D33 | 92 | | U | 46 | | U |
| 4A | D34 | 84 | | U | 42 | | U |
| 4A | D35 | 124 | | U | 62 | | U |
| 4A | D41 (Dupe for D35) | 140 | | U | 70 | | U |
| 4A | D36 | 184 | | U | 92 | | U |
| 4A | D37 | 92 | | U | 46 | | U |
| 4A | D38 | 84 | | U | 42 | | U |
| 4A | E11 | 192 | | U | 96 | | U |
| 4A | E12 | 80 | | U | 40 | | U |
| 4B | D39 | 84 | | U | 42 | | U |
| 4B | D40 | 92 | | U | 46 | | U |
| 4B | E13 | 84 | | U | 42 | | U |
| 4B | E14 | 80 | | U | 40 | | U |
| Effects-Based Reference Levels | | na*** | | | na*** | | |

| River Segment | Station | Pentachlorophenol | | | 2-Chlorophenol | | |
|--------------------------------|--------------------|-------------------|----------------|-----------|----------------|----------------|-----------|
| | | Measured | Normalized** | Qualifier | Measured | Normalized** | Qualifier |
| | | Conc. (ug/kg) | Conc. (ug/g C) | Code | Conc. (ug/kg) | Conc. (ug/g C) | Code |
| 1A | D1 | 1300 | | U | 130 | | U |
| 1A | D2 | 1440 | | U | 144 | | U |
| 1A | D3 | 980 | | U | 98 | | U |
| 1A | D46 (Dupe for D3) | 980 | | U | 98 | | U |
| 1A | D4 | 1220 | | U | 122 | | U |
| 1A | E1 | 440 | | U | 44 | | U |
| 1B | E2 | 440 | | U | 44 | | U |
| 1C | D5 | 940 | | U | 94 | | U |
| 1C | D6 | 960 | | U | 96 | | U |
| 1C | D7 | 880 | | U | 88 | | U |
| 1C | D8 | 920 | | U | 92 | | U |
| 1C | D9 | 460 | | U | 46 | | U |
| 1C | D11 | 1100 | | U | 110 | | U |
| 1C | D45 (Dupe for D11) | 1100 | | U | 110 | | U |
| 1C | E3 | 420 | | U | 42 | | U |
| 1C | E4* | 440 | | U | 44 | | U |
| 2A | D10 | 1040 | | U | 104 | | U |
| 2A | D12 | 1120 | | U | 112 | | U |
| 2A | D13 | 980 | | U | 98 | | U |
| 2A | D14 | 1000 | | U | 100 | | U |
| 2A | E5 | 400 | | U | 40 | | U |
| 2B | D15 | 980 | | U | 98 | | U |
| 2C | D16 | 1240 | | U | 124 | | U |
| 2C | D17 | 980 | | U | 98 | | U |
| 2C | D44 (Dupe for D17) | 980 | | U | 98 | | U |
| 2C | D18 | 920 | | U | 92 | | U |
| 2C | D19 | 880 | | U | 88 | | U |
| 2C | D20 | 1100 | | U | 110 | | U |
| 2C | D21 | 1100 | | U | 110 | | U |
| 2C | E6 | 420 | | U | 42 | | U |
| 2C | E7* | 420 | | U | 42 | | U |
| 3A | D22 | 1360 | | U | 136 | | U |
| 3A | D23 | 1080 | | U | 108 | | U |
| 3A | D43 (Dupe for D23) | 1040 | | U | 104 | | U |
| 3A | D24 | 1340 | | U | 134 | | U |
| 3A | D25 | 500 | | U | 50 | | U |
| 3A | E8 | 440 | | U | 44 | | U |
| 3A | E9 | 540 | | U | 54 | | U |
| 3B | D26 | 420 | | U | 42 | | U |
| 3B | D27 | 880 | | U | 88 | | U |
| 3B | D28 | 920 | | U | 92 | | U |
| 3B | D42 (Dupe for D28) | 960 | | U | 96 | | U |
| 3B | D29 | 440 | | U | 44 | | U |
| 3B | E10 | 440 | | U | 44 | | U |
| 4A | D30 | 1060 | | U | 106 | | U |
| 4A | D31 | 860 | | U | 86 | | U |
| 4A | D32 | 440 | | U | 44 | | U |
| 4A | D33 | 460 | | U | 46 | | U |
| 4A | D34 | 420 | | U | 42 | | U |
| 4A | D35 | 620 | | U | 62 | | U |
| 4A | D41 (Dupe for D35) | 700 | | U | 70 | | U |
| 4A | D36 | 920 | | U | 92 | | U |
| 4A | D37 | 460 | | U | 46 | | U |
| 4A | D38 | 420 | | U | 42 | | U |
| 4A | E11 | 960 | | U | 96 | | U |
| 4A | E12 | 400 | | U | 40 | | U |
| 4B | D39 | 420 | | U | 42 | | U |
| 4B | D40 | 460 | | U | 46 | | U |
| 4B | E13 | 420 | | U | 42 | | U |
| 4B | E14 | 400 | | U | 40 | | U |
| Effects-Based Reference Levels | | na*** | | | na*** | | |

| River Segment | Station | 2,4-Dichlorophenol | | | 4-Chloro-3-methylphenol | | |
|--------------------------------|--------------------|------------------------|-----------------------------|----------------|-------------------------|-----------------------------|----------------|
| | | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code |
| 1A | D1 | 260 | | U | 260 | | U |
| 1A | D2 | 288 | | U | 288 | | U |
| 1A | D3 | 196 | | U | 196 | | U |
| 1A | D46 (Dupe for D3) | 196 | | U | 196 | | U |
| 1A | D4 | 244 | | U | 244 | | U |
| 1A | E1 | 88 | | U | 88 | | U |
| 1B | E2 | 88 | | U | 88 | | U |
| 1C | D5 | 188 | | U | 188 | | U |
| 1C | D6 | 192 | | U | 192 | | U |
| 1C | D7 | 176 | | U | 176 | | U |
| 1C | D8 | 184 | | U | 184 | | U |
| 1C | D9 | 92 | | U | 92 | | U |
| 1C | D11 | 220 | | U | 220 | | U |
| 1C | D45 (Dupe for D11) | 220 | | U | 220 | | U |
| 1C | E3 | 84 | | U | 84 | | U |
| 1C | E4* | 88 | | U | 88 | | U |
| 2A | D10 | 208 | | U | 208 | | U |
| 2A | D12 | 224 | | U | 224 | | U |
| 2A | D13 | 196 | | U | 196 | | U |
| 2A | D14 | 200 | | U | 200 | | U |
| 2A | E5 | 80 | | U | 80 | | U |
| 2B | D15 | 196 | | U | 196 | | U |
| 2C | D16 | 248 | | U | 248 | | U |
| 2C | D17 | 196 | | U | 196 | | U |
| 2C | D44 (Dupe for D17) | 196 | | U | 196 | | U |
| 2C | D18 | 184 | | U | 184 | | U |
| 2C | D19 | 176 | | U | 176 | | U |
| 2C | D20 | 220 | | U | 220 | | U |
| 2C | D21 | 220 | | U | 220 | | U |
| 2C | E6 | 84 | | U | 84 | | U |
| 2C | E7* | 84 | | U | 84 | | U |
| 3A | D22 | 272 | | U | 272 | | U |
| 3A | D23 | 216 | | U | 216 | | U |
| 3A | D43 (Dupe for D23) | 208 | | U | 208 | | U |
| 3A | D24 | 268 | | U | 268 | | U |
| 3A | D25 | 100 | | U | 100 | | U |
| 3A | E8 | 88 | | U | 88 | | U |
| 3A | E9 | 108 | | U | 108 | | U |
| 3B | D26 | 84 | | U | 84 | | U |
| 3B | D27 | 176 | | U | 176 | | U |
| 3B | D28 | 184 | | U | 184 | | U |
| 3B | D42 (Dupe for D28) | 192 | | U | 192 | | U |
| 3B | D29 | 88 | | U | 88 | | U |
| 3B | E10 | 88 | | U | 88 | | U |
| 4A | D30 | 212 | | U | 212 | | U |
| 4A | D31 | 172 | | U | 172 | | U |
| 4A | D32 | 88 | | U | 88 | | U |
| 4A | D33 | 92 | | U | 92 | | U |
| 4A | D34 | 84 | | U | 84 | | U |
| 4A | D35 | 124 | | U | 124 | | U |
| 4A | D41 (Dupe for D35) | 140 | | U | 140 | | U |
| 4A | D36 | 184 | | U | 184 | | U |
| 4A | D37 | 92 | | U | 92 | | U |
| 4A | D38 | 84 | | U | 84 | | U |
| 4A | E11 | 192 | | U | 192 | | U |
| 4A | E12 | 80 | | U | 80 | | U |
| 4B | D39 | 84 | | U | 84 | | U |
| 4B | D40 | 92 | | U | 92 | | U |
| 4B | E13 | 84 | | U | 84 | | U |
| 4B | E14 | 80 | | U | 80 | | U |
| Effects-Based Reference Levels | | na*** | | | na*** | | |

| River Segment | Station | 2,4-Dinitrophenol | | | 2-Nitrophenol | | |
|--------------------------------|--------------------|------------------------|-----------------------------|----------------|------------------------|-----------------------------|----------------|
| | | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code |
| 1A | D1 | 1300 | | U | 260 | | U |
| 1A | D2 | 1440 | | U | 288 | | U |
| 1A | D3 | 980 | | U | 196 | | U |
| 1A | D46 (Dupe for D3) | 980 | | U | 196 | | U |
| 1A | D4 | 1220 | | U | 244 | | U |
| 1A | E1 | 440 | | U | 88 | | U |
| 1B | E2 | 440 | | U | 88 | | U |
| 1C | D5 | 940 | | U | 188 | | U |
| 1C | D6 | 960 | | U | 192 | | U |
| 1C | D7 | 880 | | U | 176 | | U |
| 1C | D8 | 920 | | U | 184 | | U |
| 1C | D9 | 460 | | U | 92 | | U |
| 1C | D11 | 1100 | | U | 220 | | U |
| 1C | D45 (Dupe for D11) | 1100 | | U | 220 | | U |
| 1C | E3 | 420 | | U | 84 | | U |
| 1C | E4* | 440 | | U | 88 | | U |
| 2A | D10 | 1040 | | U | 208 | | U |
| 2A | D12 | 1120 | | U | 224 | | U |
| 2A | D13 | 980 | | U | 196 | | U |
| 2A | D14 | 1000 | | U | 200 | | U |
| 2A | E5 | 400 | | U | 80 | | U |
| 2B | D15 | 980 | | U | 196 | | U |
| 2C | D16 | 1240 | | U | 248 | | U |
| 2C | D17 | 980 | | U | 196 | | U |
| 2C | D44 (Dupe for D17) | 980 | | U | 196 | | U |
| 2C | D18 | 920 | | U | 184 | | U |
| 2C | D19 | 880 | | U | 176 | | U |
| 2C | D20 | 1100 | | U | 220 | | U |
| 2C | D21 | 1100 | | U | 220 | | U |
| 2C | E6 | 420 | | U | 84 | | U |
| 2C | E7* | 420 | | U | 84 | | U |
| 3A | D22 | 1360 | | U | 272 | | U |
| 3A | D23 | 1080 | | U | 216 | | U |
| 3A | D43 (Dupe for D23) | 1040 | | U | 208 | | U |
| 3A | D24 | 1340 | | U | 268 | | U |
| 3A | D25 | 500 | | U | 100 | | U |
| 3A | E8 | 440 | | U | 88 | | U |
| 3A | E9 | 540 | | U | 108 | | U |
| 3B | D26 | 420 | | U | 84 | | U |
| 3B | D27 | 880 | | U | 176 | | U |
| 3B | D28 | 920 | | U | 184 | | U |
| 3B | D42 (Dupe for D28) | 960 | | U | 192 | | U |
| 3B | D29 | 440 | | U | 88 | | U |
| 3B | E10 | 440 | | U | 88 | | U |
| 4A | D30 | 1060 | | U | 212 | | U |
| 4A | D31 | 860 | | U | 172 | | U |
| 4A | D32 | 440 | | U | 88 | | U |
| 4A | D33 | 460 | | U | 92 | | U |
| 4A | D34 | 420 | | U | 84 | | U |
| 4A | D35 | 620 | | U | 124 | | U |
| 4A | D41 (Dupe for D35) | 700 | | U | 140 | | U |
| 4A | D36 | 920 | | U | 184 | | U |
| 4A | D37 | 460 | | U | 92 | | U |
| 4A | D38 | 420 | | U | 84 | | U |
| 4A | E11 | 960 | | U | 192 | | U |
| 4A | E12 | 400 | | U | 80 | | U |
| 4B | D39 | 420 | | U | 84 | | U |
| 4B | D40 | 460 | | U | 92 | | U |
| 4B | E13 | 420 | | U | 84 | | U |
| 4B | E14 | 400 | | U | 80 | | U |
| Effects-Based Reference Levels | | na*** | | | na*** | | |

| River Segment | Station | 4-Nitrophenol | | | 2,4,6-Trichlorophenol | | |
|--------------------------------|--------------------|------------------------|-----------------------------|----------------|------------------------|-----------------------------|----------------|
| | | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code |
| 1A | D1 | 1300 | | U | 260 | | U |
| 1A | D2 | 1440 | | U | 288 | | U |
| 1A | D3 | 980 | | U | 196 | | U |
| 1A | D46 (Dupe for D3) | 980 | | U | 196 | | U |
| 1A | D4 | 1220 | | U | 244 | | U |
| 1A | E1 | 440 | | U | 88 | | U |
| 1B | E2 | 440 | | U | 88 | | U |
| 1C | D5 | 940 | | U | 188 | | U |
| 1C | D6 | 960 | | U | 192 | | U |
| 1C | D7 | 880 | | U | 176 | | U |
| 1C | D8 | 920 | | U | 184 | | U |
| 1C | D9 | 460 | | U | 92 | | U |
| 1C | D11 | 1100 | | U | 220 | | U |
| 1C | D45 (Dupe for D11) | 1100 | | U | 220 | | U |
| 1C | E3 | 420 | | U | 84 | | U |
| 1C | E4* | 440 | | U | 88 | | U |
| 2A | D10 | 1040 | | U | 208 | | U |
| 2A | D12 | 1120 | | U | 224 | | U |
| 2A | D13 | 980 | | U | 196 | | U |
| 2A | D14 | 1000 | | U | 200 | | U |
| 2A | E5 | 400 | | U | 80 | | U |
| 2B | D15 | 980 | | U | 196 | | U |
| 2C | D16 | 1240 | | U | 248 | | U |
| 2C | D17 | 980 | | U | 196 | | U |
| 2C | D44 (Dupe for D17) | 980 | | U | 196 | | U |
| 2C | D18 | 920 | | U | 184 | | U |
| 2C | D19 | 880 | | U | 176 | | U |
| 2C | D20 | 1100 | | U | 220 | | U |
| 2C | D21 | 1100 | | U | 220 | | U |
| 2C | E6 | 420 | | U | 84 | | U |
| 2C | E7* | 420 | | U | 84 | | U |
| 3A | D22 | 1360 | | U | 272 | | U |
| 3A | D23 | 1080 | | U | 216 | | U |
| 3A | D43 (Dupe for D23) | 1040 | | U | 208 | | U |
| 3A | D24 | 1340 | | U | 268 | | U |
| 3A | D25 | 500 | | U | 100 | | U |
| 3A | E8 | 440 | | U | 88 | | U |
| 3A | E9 | 540 | | U | 108 | | U |
| 3B | D26 | 420 | | U | 84 | | U |
| 3B | D27 | 880 | | U | 176 | | U |
| 3B | D28 | 920 | | U | 184 | | U |
| 3B | D42 (Dupe for D28) | 960 | | U | 192 | | U |
| 3B | D29 | 440 | | U | 88 | | U |
| 3B | E10 | 440 | | U | 88 | | U |
| 4A | D30 | 1060 | | U | 212 | | U |
| 4A | D31 | 860 | | U | 172 | | U |
| 4A | D32 | 440 | | U | 88 | | U |
| 4A | D33 | 460 | | U | 92 | | U |
| 4A | D34 | 420 | | U | 84 | | U |
| 4A | D35 | 620 | | U | 124 | | U |
| 4A | D41 (Dupe for D35) | 700 | | U | 140 | | U |
| 4A | D36 | 920 | | U | 184 | | U |
| 4A | D37 | 460 | | U | 92 | | U |
| 4A | D38 | 420 | | U | 84 | | U |
| 4A | E11 | 960 | | U | 192 | | U |
| 4A | E12 | 400 | | U | 80 | | U |
| 4B | D39 | 420 | | U | 84 | | U |
| 4B | D40 | 460 | | U | 92 | | U |
| 4B | E13 | 420 | | U | 84 | | U |
| 4B | E14 | 400 | | U | 80 | | U |
| Effects-Based Reference Levels | | na*** | | | na*** | | |

TABLE C-4. SEMIVOLATILES IN SEDIMENTS: HALOGENATED ETHERS

| River Segment | Station | bis(2-Chloroethyl) ether | | | bis(2-Chloroethoxy) methane | | |
|--------------------------------|--------------------|--------------------------|----------------|-----------|-----------------------------|----------------|-----------|
| | | Measured | Normalized** | Qualifier | Measured | Normalized** | Qualifier |
| | | Conc. (ug/kg) | Conc. (ug/g C) | Code | Conc. (ug/kg) | Conc. (ug/g C) | Code |
| 1A | D1 | 130 | | U | 130 | | U |
| 1A | D2 | 144 | | U | 144 | | U |
| 1A | D3 | 98 | | U | 98 | | U |
| 1A | D46 (Dupe for D3) | 98 | | U | 98 | | U |
| 1A | D4 | 122 | | U | 122 | | U |
| 1A | E1 | 44 | | U | 44 | | U |
| 1B | E2 | 44 | | U | 44 | | U |
| 1C | D5 | 94 | | U | 94 | | U |
| 1C | D6 | 96 | | U | 96 | | U |
| 1C | D7 | 88 | | U | 88 | | U |
| 1C | D8 | 92 | | U | 92 | | U |
| 1C | D9 | 46 | | U | 46 | | U |
| 1C | D11 | 110 | | U | 110 | | U |
| 1C | D45 (Dupe for D11) | 110 | | U | 110 | | U |
| 1C | E3 | 42 | | U | 42 | | U |
| 1C | E4* | 44 | | U | 44 | | U |
| 2A | D10 | 104 | | U | 104 | | U |
| 2A | D12 | 112 | | U | 112 | | U |
| 2A | D13 | 98 | | U | 98 | | U |
| 2A | D14 | 100 | | U | 100 | | U |
| 2A | E5 | 40 | | U | 40 | | U |
| 2B | D15 | 98 | | U | 98 | | U |
| 2C | D16 | 124 | | U | 124 | | U |
| 2C | D17 | 98 | | U | 98 | | U |
| 2C | D44 (Dupe for D17) | 98 | | U | 98 | | U |
| 2C | D18 | 92 | | U | 92 | | U |
| 2C | D19 | 88 | | U | 88 | | U |
| 2C | D20 | 110 | | U | 110 | | U |
| 2C | D21 | 110 | | U | 110 | | U |
| 2C | E6 | 42 | | U | 42 | | U |
| 2C | E7* | 42 | | U | 42 | | U |
| 3A | D22 | 136 | | U | 136 | | U |
| 3A | D23 | 108 | | U | 108 | | U |
| 3A | D43 (Dupe for D23) | 104 | | U | 104 | | U |
| 3A | D24 | 134 | | U | 134 | | U |
| 3A | D25 | 50 | | U | 50 | | U |
| 3A | E8 | 44 | | U | 44 | | U |
| 3A | E9 | 54 | | U | 54 | | U |
| 3B | D26 | 42 | | U | 42 | | U |
| 3B | D27 | 88 | | U | 88 | | U |
| 3B | D28 | 92 | | U | 92 | | U |
| 3B | D42 (Dupe for D28) | 96 | | U | 96 | | U |
| 3B | D29 | 44 | | U | 44 | | U |
| 3B | E10 | 44 | | U | 44 | | U |
| 4A | D30 | 106 | | U | 106 | | U |
| 4A | D31 | 86 | | U | 86 | | U |
| 4A | D32 | 44 | | U | 44 | | U |
| 4A | D33 | 46 | | U | 46 | | U |
| 4A | D34 | 42 | | U | 42 | | U |
| 4A | D35 | 62 | | U | 62 | | U |
| 4A | D41 (Dupe for D35) | 70 | | U | 70 | | U |
| 4A | D36 | 92 | | U | 92 | | U |
| 4A | D37 | 46 | | U | 46 | | U |
| 4A | D38 | 42 | | U | 42 | | U |
| 4A | E11 | 96 | | U | 96 | | U |
| 4A | E12 | 40 | | U | 40 | | U |
| 4B | D39 | 42 | | U | 42 | | U |
| 4B | D40 | 46 | | U | 46 | | U |
| 4B | E13 | 42 | | U | 42 | | U |
| 4B | E14 | 40 | | U | 40 | | U |
| Effects-Based Reference Levels | | na*** | | | na*** | | |

U = Compound was not detected. Value given is the lower quantification limit.

E = Value reported is an estimate.

* Results presented are from reextraction and reanalysis of the sample.

** TOC-normalized data presented only when a compound is detected.

*** Effects-based reference level not available.

| River Segment | Station | bis(2-Chloroisopropyl) ether | | | 4-Bromophenyl phenyl ether | | |
|--------------------------------|--------------------|------------------------------|----------------|-----------|----------------------------|----------------|-----------|
| | | Measured | Normalized** | Qualifier | Measured | Normalized** | Qualifier |
| | | Conc. (ug/kg) | Conc. (ug/g C) | Code | Conc. (ug/kg) | Conc. (ug/g C) | Code |
| 1A | D1 | 130 | | U | 260 | | U |
| 1A | D2 | 144 | | U | 288 | | U |
| 1A | D3 | 98 | | U | 196 | | U |
| 1A | D46 (Dupe for D3) | 98 | | U | 196 | | U |
| 1A | D4 | 122 | | U | 244 | | U |
| 1A | E1 | 44 | | U | 88 | | U |
| 1B | E2 | 44 | | U | 88 | | U |
| 1C | D5 | 94 | | U | 188 | | U |
| 1C | D6 | 96 | | U | 192 | | U |
| 1C | D7 | 88 | | U | 176 | | U |
| 1C | D8 | 92 | | U | 184 | | U |
| 1C | D9 | 46 | | U | 92 | | U |
| 1C | D11 | 110 | | U | 220 | | U |
| 1C | D45 (Dupe for D11) | 110 | | U | 220 | | U |
| 1C | E3 | 42 | | U | 84 | | U |
| 1C | E4* | 44 | | U | 88 | | U |
| 2A | D10 | 104 | | U | 208 | | U |
| 2A | D12 | 112 | | U | 224 | | U |
| 2A | D13 | 98 | | U | 196 | | U |
| 2A | D14 | 100 | | U | 200 | | U |
| 2A | E5 | 40 | | U | 80 | | U |
| 2B | D15 | 98 | | U | 196 | | U |
| 2C | D16 | 124 | | U | 248 | | U |
| 2C | D17 | 98 | | U | 196 | | U |
| 2C | D44 (Dupe for D17) | 98 | | U | 196 | | U |
| 2C | D18 | 92 | | U | 184 | | U |
| 2C | D19 | 88 | | U | 176 | | U |
| 2C | D20 | 110 | | U | 220 | | U |
| 2C | D21 | 110 | | U | 220 | | U |
| 2C | E6 | 42 | | U | 84 | | U |
| 2C | E7* | 42 | | U | 84 | | U |
| 3A | D22 | 136 | | U | 272 | | U |
| 3A | D23 | 108 | | U | 216 | | U |
| 3A | D43 (Dupe for D23) | 104 | | U | 208 | | U |
| 3A | D24 | 134 | | U | 268 | | U |
| 3A | D25 | 50 | | U | 100 | | U |
| 3A | E8 | 44 | | U | 88 | | U |
| 3A | E9 | 54 | | U | 108 | | U |
| 3B | D26 | 42 | | U | 84 | | U |
| 3B | D27 | 88 | | U | 176 | | U |
| 3B | D28 | 92 | | U | 184 | | U |
| 3B | D42 (Dupe for D28) | 96 | | U | 192 | | U |
| 3B | D29 | 44 | | U | 88 | | U |
| 3B | E10 | 44 | | U | 88 | | U |
| 4A | D30 | 106 | | U | 212 | | U |
| 4A | D31 | 86 | | U | 172 | | U |
| 4A | D32 | 44 | | U | 88 | | U |
| 4A | D33 | 46 | | U | 92 | | U |
| 4A | D34 | 42 | | U | 84 | | U |
| 4A | D35 | 62 | | U | 124 | | U |
| 4A | D41 (Dupe for D35) | 70 | | U | 140 | | U |
| 4A | D36 | 92 | | U | 184 | | U |
| 4A | D37 | 46 | | U | 92 | | U |
| 4A | D38 | 42 | | U | 84 | | U |
| 4A | E11 | 96 | | U | 192 | | U |
| 4A | E12 | 40 | | U | 80 | | U |
| 4B | D39 | 42 | | U | 84 | | U |
| 4B | D40 | 46 | | U | 92 | | U |
| 4B | E13 | 42 | | U | 84 | | U |
| 4B | E14 | 40 | | U | 80 | | U |
| Effects-Based Reference Levels | | na*** | | | na*** | | |

| River Segment | Station | 4-Chlorophenyl phenyl ether | | Qualifier Code |
|--------------------------------|--------------------|-----------------------------|-----------------------------|----------------|
| | | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | |
| 1A | D1 | 130 | | U |
| 1A | D2 | 144 | | U |
| 1A | D3 | 98 | | U |
| 1A | D46 (Dupe for D3) | 98 | | U |
| 1A | D4 | 122 | | U |
| 1A | E1 | 44 | | U |
| 1B | E2 | 44 | | U |
| 1C | D5 | 94 | | U |
| 1C | D6 | 96 | | U |
| 1C | D7 | 88 | | U |
| 1C | D8 | 92 | | U |
| 1C | D9 | 46 | | U |
| 1C | D11 | 110 | | U |
| 1C | D45 (Dupe for D11) | 110 | | U |
| 1C | E3 | 42 | | U |
| 1C | E4* | 44 | | U |
| 2A | D10 | 104 | | U |
| 2A | D12 | 112 | | U |
| 2A | D13 | 98 | | U |
| 2A | D14 | 100 | | U |
| 2A | E5 | 40 | | U |
| 2B | D15 | 98 | | U |
| 2C | D16 | 124 | | U |
| 2C | D17 | 98 | | U |
| 2C | D44 (Dupe for D17) | 98 | | U |
| 2C | D18 | 92 | | U |
| 2C | D19 | 88 | | U |
| 2C | D20 | 110 | | U |
| 2C | D21 | 110 | | U |
| 2C | E6 | 42 | | U |
| 2C | E7* | 42 | | U |
| 3A | D22 | 136 | | U |
| 3A | D23 | 108 | | U |
| 3A | D43 (Dupe for D23) | 104 | | U |
| 3A | D24 | 134 | | U |
| 3A | D25 | 50 | | U |
| 3A | E8 | 44 | | U |
| 3A | E9 | 54 | | U |
| 3B | D26 | 42 | | U |
| 3B | D27 | 88 | | U |
| 3B | D28 | 92 | | U |
| 3B | D42 (Dupe for D28) | 96 | | U |
| 3B | D29 | 44 | | U |
| 3B | E10 | 44 | | U |
| 4A | D30 | 106 | | U |
| 4A | D31 | 86 | | U |
| 4A | D32 | 44 | | U |
| 4A | D33 | 46 | | U |
| 4A | D34 | 42 | | U |
| 4A | D35 | 62 | | U |
| 4A | D41 (Dupe for D35) | 70 | | U |
| 4A | D36 | 92 | | U |
| 4A | D37 | 46 | | U |
| 4A | D38 | 42 | | U |
| 4A | E11 | 96 | | U |
| 4A | E12 | 40 | | U |
| 4B | D39 | 42 | | U |
| 4B | D40 | 46 | | U |
| 4B | E13 | 42 | | U |
| 4B | E14 | 40 | | U |
| Effects-Based Reference Levels | | na*** | | |

TABLE C-5. SEMIVOLATILES IN SEDIMENTS: NITROAROMATICS

| River Segment | Station | 2,4-Dinitrotoluene | | | 2,6-Dinitrotoluene | | | Nitrobenzene | | |
|--------------------------------|--------------------|--------------------|----------------|-----------|--------------------|----------------|-----------|---------------|----------------|-----------|
| | | Measured | Normalized** | Qualifier | Measured | Normalized** | Qualifier | Measured | Normalized** | Qualifier |
| | | Conc. (ug/kg) | Conc. (ug/g C) | Code | Conc. (ug/kg) | Conc. (ug/g C) | Code | Conc. (ug/kg) | Conc. (ug/g C) | Code |
| 1A | D1 | 130 | | U | 130 | | U | 130 | | U |
| 1A | D2 | 144 | | U | 144 | | U | 144 | | U |
| 1A | D3 | 98 | | U | 98 | | U | 98 | | U |
| 1A | D46 (Dupe for D3) | 98 | | U | 98 | | U | 98 | | U |
| 1A | D4 | 122 | | U | 122 | | U | 122 | | U |
| 1A | E1 | 44 | | U | 44 | | U | 44 | | U |
| 1B | E2 | 44 | | U | 44 | | U | 44 | | U |
| 1C | D5 | 94 | | U | 94 | | U | 94 | | U |
| 1C | D6 | 96 | | U | 96 | | U | 96 | | U |
| 1C | D7 | 88 | | U | 88 | | U | 88 | | U |
| 1C | D8 | 92 | | U | 92 | | U | 92 | | U |
| 1C | D9 | 46 | | U | 46 | | U | 46 | | U |
| 1C | D11 | 110 | | U | 110 | | U | 110 | | U |
| 1C | D45 (Dupe for D11) | 110 | | U | 110 | | U | 110 | | U |
| 1C | E3 | 42 | | U | 42 | | U | 42 | | U |
| 1C | E4* | 44 | | U | 44 | | U | 44 | | U |
| 2A | D10 | 104 | | U | 104 | | U | 104 | | U |
| 2A | D12 | 112 | | U | 112 | | U | 112 | | U |
| 2A | D13 | 98 | | U | 98 | | U | 98 | | U |
| 2A | D14 | 100 | | U | 100 | | U | 100 | | U |
| 2A | E5 | 40 | | U | 40 | | U | 40 | | U |
| 2B | D15 | 98 | | U | 98 | | U | 98 | | U |
| 2C | D16 | 124 | | U | 124 | | U | 124 | | U |
| 2C | D17 | 98 | | U | 98 | | U | 98 | | U |
| 2C | D44 (Dupe for D17) | 98 | | U | 98 | | U | 98 | | U |
| 2C | D18 | 92 | | U | 92 | | U | 92 | | U |
| 2C | D19 | 88 | | U | 88 | | U | 88 | | U |
| 2C | D20 | 110 | | U | 110 | | U | 110 | | U |
| 2C | D21 | 110 | | U | 110 | | U | 110 | | U |
| 2C | E6 | 42 | | U | 42 | | U | 42 | | U |
| 2C | E7* | 42 | | U | 42 | | U | 42 | | U |
| 3A | D22 | 136 | | U | 136 | | U | 136 | | U |
| 3A | D23 | 108 | | U | 108 | | U | 108 | | U |
| 3A | D43 (Dupe for D23) | 104 | | U | 104 | | U | 104 | | U |
| 3A | D24 | 134 | | U | 134 | | U | 134 | | U |
| 3A | D25 | 50 | | U | 50 | | U | 50 | | U |
| 3A | E8 | 44 | | U | 44 | | U | 44 | | U |
| 3A | E9 | 54 | | U | 54 | | U | 54 | | U |
| 3B | D26 | 42 | | U | 42 | | U | 42 | | U |
| 3B | D27 | 88 | | U | 88 | | U | 88 | | U |
| 3B | D28 | 92 | | U | 92 | | U | 92 | | U |
| 3B | D42 (Dupe for D28) | 96 | | U | 96 | | U | 96 | | U |
| 3B | D29 | 44 | | U | 44 | | U | 44 | | U |
| 3B | E10 | 44 | | U | 44 | | U | 44 | | U |
| 4A | D30 | 106 | | U | 106 | | U | 106 | | U |
| 4A | D31 | 86 | | U | 86 | | U | 86 | | U |
| 4A | D32 | 44 | | U | 44 | | U | 44 | | U |
| 4A | D33 | 46 | | U | 46 | | U | 46 | | U |
| 4A | D34 | 42 | | U | 42 | | U | 42 | | U |
| 4A | D35 | 62 | | U | 62 | | U | 62 | | U |
| 4A | D41 (Dupe for D35) | 70 | | U | 70 | | U | 70 | | U |
| 4A | D36 | 92 | | U | 92 | | U | 92 | | U |
| 4A | D37 | 46 | | U | 46 | | U | 46 | | U |
| 4A | D38 | 42 | | U | 42 | | U | 42 | | U |
| 4A | E11 | 96 | | U | 96 | | U | 96 | | U |
| 4A | E12 | 40 | | U | 40 | | U | 40 | | U |
| 4B | D39 | 42 | | U | 42 | | U | 42 | | U |
| 4B | D40 | 46 | | U | 46 | | U | 46 | | U |
| 4B | E13 | 42 | | U | 42 | | U | 42 | | U |
| 4B | E14 | 40 | | U | 40 | | U | 40 | | U |
| Effects-Based Reference Levels | | na*** | | | na*** | | | na*** | | |

U = Compound was not detected. Value given is the lower quantification limit.

E = Value reported is an estimate.

* Results presented are from reextraction and reanalysis of the sample.

** TOC-normalized data presented only when a compound is detected.

*** Effects-based reference level not available.

TABLE C-6. SEMIVOLATILES IN SEDIMENTS: NITROSAMINES

| River Segment | Station | N-Nitrosodi-n-propylamine | | | N-Nitrosodiphenylamine | | |
|--------------------------------|--------------------|---------------------------|-----------------------------|----------------|------------------------|-----------------------------|----------------|
| | | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code |
| 1A | D1 | 130 | | U | 130 | | U |
| 1A | D2 | 144 | | U | 144 | | U |
| 1A | D3 | 98 | | U | 98 | | U |
| 1A | D46 (Dupe for D3) | 98 | | U | 98 | | U |
| 1A | D4 | 122 | | U | 122 | | U |
| 1A | E1 | 44 | | U | 44 | | U |
| 1B | E2 | 44 | | U | 44 | | U |
| 1C | D5 | 94 | | U | 94 | | U |
| 1C | D6 | 96 | | U | 96 | | U |
| 1C | D7 | 88 | | U | 88 | | U |
| 1C | D8 | 92 | | U | 92 | | U |
| 1C | D9 | 46 | | U | 46 | | U |
| 1C | D11 | 110 | | U | 110 | | U |
| 1C | D45 (Dupe for D11) | 110 | | U | 110 | | U |
| 1C | E3 | 42 | | U | 42 | | U |
| 1C | E4* | 44 | | U | 44 | | U |
| 2A | D10 | 104 | | U | 104 | | U |
| 2A | D12 | 112 | | U | 112 | | U |
| 2A | D13 | 98 | | U | 98 | | U |
| 2A | D14 | 100 | | U | 100 | | U |
| 2A | E5 | 40 | | U | 40 | | U |
| 2B | D15 | 98 | | U | 98 | | U |
| 2C | D16 | 124 | | U | 124 | | U |
| 2C | D17 | 98 | | U | 98 | | U |
| 2C | D44 (Dupe for D17) | 98 | | U | 98 | | U |
| 2C | D18 | 92 | | U | 92 | | U |
| 2C | D19 | 88 | | U | 88 | | U |
| 2C | D20 | 110 | | U | 110 | | U |
| 2C | D21 | 110 | | U | 110 | | U |
| 2C | E6 | 42 | | U | 42 | | U |
| 2C | E7* | 42 | | U | 42 | | U |
| 3A | D22 | 136 | | U | 136 | | U |
| 3A | D23 | 108 | | U | 108 | | U |
| 3A | D43 (Dupe for D23) | 104 | | U | 104 | | U |
| 3A | D24 | 134 | | U | 134 | | U |
| 3A | D25 | 50 | | U | 50 | | U |
| 3A | E8 | 44 | | U | 44 | | U |
| 3A | E9 | 54 | | U | 54 | | U |
| 3B | D26 | 42 | | U | 42 | | U |
| 3B | D27 | 88 | | U | 88 | | U |
| 3B | D28 | 92 | | U | 92 | | U |
| 3B | D42 (Dupe for D28) | 96 | | U | 96 | | U |
| 3B | D29 | 44 | | U | 44 | | U |
| 3B | E10 | 44 | | U | 44 | | U |
| 4A | D30 | 106 | | U | 106 | | U |
| 4A | D31 | 86 | | U | 86 | | U |
| 4A | D32 | 44 | | U | 44 | | U |
| 4A | D33 | 46 | | U | 46 | | U |
| 4A | D34 | 42 | | U | 42 | | U |
| 4A | D35 | 62 | | U | 62 | | U |
| 4A | D41 (Dupe for D35) | 70 | | U | 70 | | U |
| 4A | D36 | 92 | | U | 92 | | U |
| 4A | D37 | 46 | | U | 46 | | U |
| 4A | D38 | 42 | | U | 42 | | U |
| 4A | E11 | 96 | | U | 96 | | U |
| 4A | E12 | 40 | | U | 40 | | U |
| 4B | D39 | 42 | | U | 42 | | U |
| 4B | D40 | 46 | | U | 46 | | U |
| 4B | E13 | 42 | | U | 42 | | U |
| 4B | E14 | 40 | | U | 40 | | U |
| Effects-Based Reference Levels | | na*** | | | na*** | | |

U = Compound was not detected. Value given is the lower quantification limit.

E = Value reported is an estimate.

* Results presented are from reextraction and reanalysis of the sample.

** TOC-normalized data presented only when a compound is detected.

*** Effects-based reference level not available.

TABLE C-7. SEMIVOLATILES IN SEDIMENTS: NAPHTHALENES

| River Segment | Station | 2-Chloronaphthalene | | | 2-Methylnaphthalene | | |
|---------------|--------------------|------------------------|-----------------------------|----------------|------------------------|-----------------------------|----------------|
| | | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code |
| 1A | D1 | 130 | | U | 130 | | U |
| 1A | D2 | 144 | | U | 144 | | U |
| 1A | D3 | 98 | | U | 98 | | U |
| 1A | D46 (Dupe for D3) | 98 | | U | 98 | | U |
| 1A | D4 | 122 | | U | 122 | | U |
| 1A | E1 | 44 | | U | 44 | | U |
| 1B | E2 | 44 | | U | 44 | | U |
| 1C | D5 | 94 | | U | 94 | | U |
| 1C | D6 | 96 | | U | 96 | | U |
| 1C | D7 | 88 | | U | 88 | | U |
| 1C | D8 | 92 | | U | 92 | | U |
| 1C | D9 | 46 | | U | 46 | | U |
| 1C | D11 | 110 | | U | 110 | | U |
| 1C | D45 (Dupe for D11) | 110 | | U | 110 | | U |
| 1C | E3 | 42 | | U | 42 | | U |
| 1C | E4* | 44 | | U | 44 | | U |
| 2A | D10 | 104 | | U | 104 | | U |
| 2A | D12 | 112 | | U | 112 | | U |
| 2A | D13 | 98 | | U | 98 | | U |
| 2A | D14 | 100 | | U | 100 | | U |
| 2A | E5 | 40 | | U | 40 | | U |
| 2B | D15 | 98 | | U | 98 | | U |
| 2C | D16 | 124 | | U | 124 | | U |
| 2C | D17 | 98 | | U | 98 | | U |
| 2C | D44 (Dupe for D17) | 98 | | U | 98 | | U |
| 2C | D18 | 92 | | U | 92 | | U |
| 2C | D19 | 88 | | U | 88 | | U |
| 2C | D20 | 110 | | U | 110 | | U |
| 2C | D21 | 110 | | U | 110 | | U |
| 2C | E6 | 42 | | U | 42 | | U |
| 2C | E7* | 42 | | U | 42 | | U |
| 3A | D22 | 136 | | U | 136 | | U |
| 3A | D23 | 108 | | U | 108 | | U |
| 3A | D43 (Dupe for D23) | 104 | | U | 104 | | U |
| 3A | D24 | 134 | | U | 134 | | U |
| 3A | D25 | 50 | | U | 50 | | U |
| 3A | E8 | 44 | | U | 44 | | U |
| 3A | E9 | 54 | | U | 54 | | U |
| 3B | D26 | 42 | | U | 42 | | U |
| 3B | D27 | 88 | | U | 88 | | U |
| 3B | D28 | 92 | | U | 92 | | U |
| 3B | D42 (Dupe for D28) | 96 | | U | 96 | | U |
| 3B | D29 | 44 | | U | 44 | | U |
| 3B | E10 | 44 | | U | 44 | | U |
| 4A | D30 | 106 | | U | 106 | | U |
| 4A | D31 | 86 | | U | 86 | | U |
| 4A | D32 | 44 | | U | 44 | | U |
| 4A | D33 | 46 | | U | 46 | | U |
| 4A | D34 | 42 | | U | 42 | | U |
| 4A | D35 | 62 | | U | 62 | | U |
| 4A | D41 (Dupe for D35) | 70 | | U | 70 | | U |
| 4A | D36 | 92 | | U | 92 | | U |
| 4A | D37 | 46 | | U | 46 | | U |
| 4A | D38 | 42 | | U | 42 | | U |
| 4A | E11 | 96 | | U | 96 | | U |
| 4A | E12 | 40 | | U | 40 | | U |
| 4B | D39 | 42 | | U | 42 | | U |
| 4B | D40 | 46 | | U | 46 | | U |
| 4B | E13 | 42 | | U | 42 | | U |
| 4B | E14 | 40 | | U | 40 | | U |

Effects-Based Reference Levels

na***

na***

U = Compound was not detected. Value given is the lower quantification limit.

E = Value reported is an estimate.

* Results presented are from reextraction and reanalysis of the sample.

** TOC-normalized data presented only when a compound is detected.

*** Effects-based reference level not available.

TABLE C-8. SEMIVOLATILES IN SEDIMENTS: POLYNUCLEAR AROMATICS

| River Segment | Station | Acenaphthene | | | Acenaphthylene | | | Anthracene | | |
|--------------------------------|--------------------|------------------------|-----------------------------|----------------|------------------------|-----------------------------|----------------|------------------------|-----------------------------|----------------|
| | | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code |
| 1A | D1 | 130 | | U | 130 | | U | 130 | | U |
| 1A | D2 | 144 | | U | 144 | | U | 144 | | U |
| 1A | D3 | 98 | | U | 98 | | U | 98 | | U |
| 1A | D46 (Dupe for D3) | 98 | | U | 98 | | U | 98 | | U |
| 1A | D4 | 122 | | U | 122 | | U | 122 | | U |
| 1A | E1 | 44 | | U | 44 | | U | 44 | | U |
| 1B | E2 | 44 | | U | 44 | | U | 44 | | U |
| 1C | D5 | 94 | | U | 94 | | U | 94 | | U |
| 1C | D6 | 96 | | U | 96 | | U | 96 | | U |
| 1C | D7 | 88 | | U | 88 | | U | 88 | | U |
| 1C | D8 | 92 | | U | 92 | | U | 92 | | U |
| 1C | D9 | 46 | | U | 46 | | U | 46 | | U |
| 1C | D11 | 110 | | U | 110 | | U | 110 | | U |
| 1C | D45 (Dupe for D11) | 110 | | U | 110 | | U | 110 | | U |
| 1C | E3 | 42 | | U | 42 | | U | 42 | | U |
| 1C | E4* | 44 | | U | 44 | | U | 44 | | U |
| 2A | D10 | 104 | | U | 104 | | U | 104 | | U |
| 2A | D12 | 112 | | U | 112 | | U | 112 | | U |
| 2A | D13 | 98 | | U | 98 | | U | 98 | | U |
| 2A | D14 | 100 | | U | 100 | | U | 100 | | U |
| 2A | E5 | 40 | | U | 40 | | U | 40 | | U |
| 2B | D15 | 98 | | U | 98 | | U | 98 | | U |
| 2C | D16 | 124 | | U | 124 | | U | 124 | | U |
| 2C | D17 | 98 | | U | 98 | | U | 98 | | U |
| 2C | D44 (Dupe for D17) | 98 | | U | 98 | | U | 98 | | U |
| 2C | D18 | 92 | | U | 92 | | U | 92 | | U |
| 2C | D19 | 88 | | U | 88 | | U | 88 | | U |
| 2C | D20 | 110 | | U | 110 | | U | 110 | | U |
| 2C | D21 | 110 | | U | 110 | | U | 110 | | U |
| 2C | E6 | 42 | | U | 42 | | U | 42 | | U |
| 2C | E7* | 42 | | U | 42 | | U | 42 | | U |
| 3A | D22 | 136 | | U | 136 | | U | 136 | | U |
| 3A | D23 | 108 | | U | 108 | | U | 108 | | U |
| 3A | D43 (Dupe for D23) | 104 | | U | 104 | | U | 104 | | U |
| 3A | D24 | 134 | | U | 134 | | U | 134 | | U |
| 3A | D25 | 50 | | U | 50 | | U | 50 | | U |
| 3A | E8 | 44 | | U | 44 | | U | 44 | | U |
| 3A | E9 | 54 | | U | 54 | | U | 54 | | U |
| 3B | D26 | 42 | | U | 42 | | U | 42 | | U |
| 3B | D27 | 88 | | U | 88 | | U | 88 | | U |
| 3B | D28 | 92 | | U | 92 | | U | 92 | | U |
| 3B | D42 (Dupe for D28) | 96 | | U | 96 | | U | 96 | | U |
| 3B | D29 | 44 | | U | 44 | | U | 44 | | U |
| 3B | E10 | 44 | | U | 44 | | U | 44 | | U |
| 4A | D30 | 106 | | U | 106 | | U | 106 | | U |
| 4A | D31 | 86 | | U | 86 | | U | 86 | | U |
| 4A | D32 | 44 | | U | 44 | | U | 44 | | U |
| 4A | D33 | 46 | | U | 46 | | U | 46 | | U |
| 4A | D34 | 42 | | U | 42 | | U | 42 | | U |
| 4A | D35 | 62 | | U | 62 | | U | 62 | | U |
| 4A | D41 (Dupe for D35) | 70 | | U | 70 | | U | 70 | | U |
| 4A | D36 | 92 | | U | 92 | | U | 92 | | U |
| 4A | D37 | 46 | | U | 46 | | U | 46 | | U |
| 4A | D38 | 42 | | U | 42 | | U | 42 | | U |
| 4A | E11 | 96 | | U | 96 | | U | 96 | | U |
| 4A | E12 | 40 | | U | 40 | | U | 40 | | U |
| 4B | D39 | 42 | | U | 42 | | U | 42 | | U |
| 4B | D40 | 46 | | U | 46 | | U | 46 | | U |
| 4B | E13 | 42 | | U | 42 | | U | 42 | | U |
| 4B | E14 | 40 | | U | 40 | | U | 40 | | U |
| Effects-Based Reference Levels | | 150 | 140 | | na*** | | | 85 | | |

U = Compound was not detected. Value given is the lower quantification limit.

E = Value reported is an estimate.

* Results presented are from reextraction and reanalysis of the sample.

** TOC-normalized data presented only when a compound is detected.

*** Effects-based reference level not available.

| River Segment | Station | Benzo(a)anthracene | | | Benzo(b)fluoranthene | | | Benzo(k)fluoranthene | | |
|--------------------------------|--------------------|--------------------|----------------|-----------|----------------------|----------------|-----------|----------------------|----------------|-----------|
| | | Measured | Normalized** | Qualifier | Measured | Normalized** | Qualifier | Measured | Normalized** | Qualifier |
| | | Conc. (ug/kg) | Conc. (ug/g C) | Code | Conc. (ug/kg) | Conc. (ug/g C) | Code | Conc. (ug/kg) | Conc. (ug/g C) | Code |
| 1A | D1 | 130 | | U | 260 | | U | 260 | | U |
| 1A | D2 | 144 | | U | 288 | | U | 288 | | U |
| 1A | D3 | 98 | | U | 196 | | U | 196 | | U |
| 1A | D46 (Dupe for D3) | 98 | | U | 196 | | U | 196 | | U |
| 1A | D4 | 122 | | U | 244 | | U | 244 | | U |
| 1A | E1 | 44 | | U | 88 | | U | 88 | | U |
| 1B | E2 | 44 | | U | 88 | | U | 88 | | U |
| 1C | D5 | 94 | | U | 188 | | U | 188 | | U |
| 1C | D6 | 96 | | U | 192 | | U | 192 | | U |
| 1C | D7 | 88 | | U | 176 | | U | 176 | | U |
| 1C | D8 | 92 | | U | 184 | | U | 184 | | U |
| 1C | D9 | 46 | | U | 92 | | U | 92 | | U |
| 1C | D11 | 110 | | U | 220 | | U | 220 | | U |
| 1C | D45 (Dupe for D11) | 110 | | U | 220 | | U | 220 | | U |
| 1C | E3 | 42 | | U | 84 | | U | 84 | | U |
| 1C | E4* | 44 | | U | 88 | | U | 88 | | U |
| 2A | D10 | 104 | | U | 208 | | U | 208 | | U |
| 2A | D12 | 112 | | U | 224 | | U | 224 | | U |
| 2A | D13 | 98 | | U | 196 | | U | 196 | | U |
| 2A | D14 | 100 | | U | 200 | | U | 200 | | U |
| 2A | E5 | 40 | | U | 80 | | U | 80 | | U |
| 2B | D15 | 98 | | U | 196 | | U | 196 | | U |
| 2C | D16 | 124 | | U | 248 | | U | 248 | | U |
| 2C | D17 | 98 | | U | 196 | | U | 196 | | U |
| 2C | D44 (Dupe for D17) | 98 | | U | 196 | | U | 196 | | U |
| 2C | D18 | 92 | | U | 184 | | U | 184 | | U |
| 2C | D19 | 450 | 144 | | 400 | 222 | | 176 | | U |
| 2C | D20 | 110 | | U | 220 | | U | 220 | | U |
| 2C | D21 | 110 | | U | 220 | | U | 220 | | U |
| 2C | E6 | 42 | | U | 84 | | U | 84 | | U |
| 2C | E7* | 42 | | U | 84 | | U | 84 | | U |
| 3A | D22 | 136 | | U | 272 | | U | 272 | | U |
| 3A | D23 | 108 | | U | 216 | | U | 216 | | U |
| 3A | D43 (Dupe for D23) | 104 | | U | 208 | | U | 208 | | U |
| 3A | D24 | 180 | 24 | | 170 | 23 | E | 210 | 28 | E |
| 3A | D25 | 50 | | U | 100 | | U | 100 | | U |
| 3A | E8 | 44 | | U | 88 | | U | 88 | | U |
| 3A | E9 | 65 | 10 | | 63 | 9 | E | 108 | | U |
| 3B | D26 | 42 | | U | 84 | | U | 84 | | U |
| 3B | D27 | 88 | | U | 176 | | U | 176 | | U |
| 3B | D28 | 92 | | U | 184 | | U | 184 | | U |
| 3B | D42 (Dupe for D28) | 96 | | U | 192 | | U | 192 | | U |
| 3B | D29 | 44 | | U | 88 | | U | 88 | | U |
| 3B | E10 | 44 | | U | 88 | | U | 88 | | U |
| 4A | D30 | 106 | | U | 212 | | U | 212 | | U |
| 4A | D31 | 86 | | U | 172 | | U | 172 | | U |
| 4A | D32 | 44 | | U | 88 | | U | 88 | | U |
| 4A | D33 | 46 | | U | 92 | | U | 92 | | U |
| 4A | D34 | 42 | | U | 84 | | U | 84 | | U |
| 4A | D35 | 62 | | U | 124 | | U | 124 | | U |
| 4A | D41 (Dupe for D35) | 70 | | U | 140 | | U | 140 | | U |
| 4A | D36 | 92 | | U | 184 | | U | 184 | | U |
| 4A | D37 | 46 | | U | 92 | | U | 92 | | U |
| 4A | D38 | 42 | | U | 84 | | U | 84 | | U |
| 4A | E11 | 96 | | U | 192 | | U | 192 | | U |
| 4A | E12 | 40 | | U | 80 | | U | 80 | | U |
| 4B | D39 | 42 | | U | 84 | | U | 84 | | U |
| 4B | D40 | 46 | | U | 92 | | U | 92 | | U |
| 4B | E13 | 42 | | U | 84 | | U | 84 | | U |
| 4B | E14 | 40 | | U | 80 | | U | 80 | | U |
| Effects-Based Reference Levels | | 230 | | | na*** | | | na*** | | |

| River Segment | Station | Benzo(a)pyrene | | | Benzo(g,h,i)perylene | | | Chrysene | | |
|--------------------------------|--------------------|----------------|----------------|-----------|----------------------|----------------|-----------|---------------|----------------|-----------|
| | | Measured | Normalized** | Qualifier | Measured | Normalized** | Qualifier | Measured | Normalized** | Qualifier |
| | | Conc. (ug/kg) | Conc. (ug/g C) | Code | Conc. (ug/kg) | Conc. (ug/g C) | Code | Conc. (ug/kg) | Conc. (ug/g C) | Code |
| 1A | D1 | 260 | | U | 260 | | U | 130 | | U |
| 1A | D2 | 288 | | U | 288 | | U | 144 | | U |
| 1A | D3 | 196 | | U | 196 | | U | 98 | | U |
| 1A | D46 (Dupe for D3) | 196 | | U | 196 | | U | 98 | | U |
| 1A | D4 | 244 | | U | 244 | | U | 122 | | U |
| 1A | E1 | 88 | | U | 88 | | U | 44 | | U |
| 1B | E2 | 88 | | U | 88 | | U | 44 | | U |
| 1C | D5 | 188 | | U | 188 | | U | 94 | | U |
| 1C | D6 | 192 | | U | 192 | | U | 96 | | U |
| 1C | D7 | 176 | | U | 176 | | U | 88 | | U |
| 1C | D8 | 184 | | U | 184 | | U | 92 | | U |
| 1C | D9 | 92 | | U | 92 | | U | 46 | | U |
| 1C | D11 | 220 | | U | 220 | | U | 110 | | U |
| 1C | D45 (Dupe for D11) | 220 | | U | 220 | | U | 110 | | U |
| 1C | E3 | 84 | | U | 84 | | U | 42 | | U |
| 1C | E4* | 88 | | U | 88 | | U | 44 | | U |
| 2A | D10 | 208 | | U | 208 | | U | 104 | | U |
| 2A | D12 | 224 | | U | 224 | | U | 112 | | U |
| 2A | D13 | 196 | | U | 196 | | U | 98 | | U |
| 2A | D14 | 200 | | U | 200 | | U | 100 | | U |
| 2A | E5 | 80 | | U | 80 | | U | 40 | | U |
| 2B | D15 | 196 | | U | 196 | | U | 98 | | U |
| 2C | D16 | 248 | | U | 248 | | U | 124 | | U |
| 2C | D17 | 196 | | U | 196 | | U | 98 | | U |
| 2C | D44 (Dupe for D17) | 196 | | U | 196 | | U | 98 | | U |
| 2C | D18 | 184 | | U | 184 | | U | 92 | | U |
| 2C | D19 | 250 | 139 | | 176 | | U | 88 | 350 | |
| 2C | D20 | 220 | | U | 220 | | U | 110 | | U |
| 2C | D21 | 220 | | U | 220 | | U | 110 | | U |
| 2C | E6 | 84 | | U | 84 | | U | 42 | | U |
| 2C | E7* | 84 | | U | 84 | | U | 42 | | U |
| 3A | D22 | 272 | | U | 272 | | U | 136 | | U |
| 3A | D23 | 216 | | U | 216 | | U | 108 | | U |
| 3A | D43 (Dupe for D23) | 208 | | U | 208 | | U | 104 | | U |
| 3A | D24 | 260 | 35 | E | 200 | 27 | E | 280 | 37 | |
| 3A | D25 | 100 | | U | 100 | | U | 50 | | U |
| 3A | E8 | 88 | | U | 88 | | U | 44 | | U |
| 3A | E9 | 100 | 15 | E | 78 | 11 | E | 99 | 15 | |
| 3B | D26 | 84 | | U | 84 | | U | 42 | | U |
| 3B | D27 | 176 | | U | 176 | | U | 88 | | U |
| 3B | D28 | 184 | | U | 184 | | U | 92 | | U |
| 3B | D42 (Dupe for D28) | 192 | | U | 192 | | U | 96 | | U |
| 3B | D29 | 88 | | U | 88 | | U | 44 | | U |
| 3B | E10 | 88 | | U | 88 | | U | 44 | | U |
| 4A | D30 | 212 | | U | 212 | | U | 106 | | U |
| 4A | D31 | 172 | | U | 172 | | U | 86 | | U |
| 4A | D32 | 88 | | U | 88 | | U | 48 | 20 | |
| 4A | D33 | 92 | | U | 92 | | U | 46 | | U |
| 4A | D34 | 84 | | U | 84 | | U | 42 | | U |
| 4A | D35 | 124 | | U | 124 | | U | 62 | | U |
| 4A | D41 (Dupe for D35) | 140 | | U | 140 | | U | 70 | | U |
| 4A | D36 | 184 | | U | 184 | | U | 92 | | U |
| 4A | D37 | 92 | | U | 92 | | U | 46 | | U |
| 4A | D38 | 84 | | U | 84 | | U | 42 | | U |
| 4A | E11 | 192 | | U | 192 | | U | 96 | | U |
| 4A | E12 | 80 | | U | 80 | | U | 40 | | U |
| 4B | D39 | 84 | | U | 84 | | U | 42 | | U |
| 4B | D40 | 92 | | U | 92 | | U | 46 | | U |
| 4B | E13 | 84 | | U | 84 | | U | 42 | | U |
| 4B | E14 | 80 | | U | 80 | | U | 40 | | U |
| Effects-Based Reference Levels | | 400 | | | na*** | | | 400 | | |

| River Segment | Station | Dibenzo(a,h)anthracene | | | Fluoranthene | | | Fluorene | | |
|--------------------------------|--------------------|------------------------|-----------------------------|----------------|------------------------|-----------------------------|----------------|------------------------|-----------------------------|----------------|
| | | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code |
| 1A | D1 | 260 | | U | 130 | | U | 130 | | U |
| 1A | D2 | 288 | | U | 144 | | U | 144 | | U |
| 1A | D3 | 196 | | U | 98 | | U | 98 | | U |
| 1A | D46 (Dupe for D3) | 196 | | U | 98 | | U | 98 | | U |
| 1A | D4 | 244 | | U | 122 | | U | 122 | | U |
| 1A | E1 | 88 | | U | 44 | | U | 44 | | U |
| 1B | E2 | 88 | | U | 44 | | U | 44 | | U |
| 1C | D5 | 188 | | U | 94 | | U | 94 | | U |
| 1C | D6 | 192 | | U | 96 | | U | 96 | | U |
| 1C | D7 | 176 | | U | 88 | | U | 88 | | U |
| 1C | D8 | 184 | | U | 92 | | U | 92 | | U |
| 1C | D9 | 92 | | U | 46 | | U | 46 | | U |
| 1C | D11 | 220 | | U | 110 | | U | 110 | | U |
| 1C | D45 (Dupe for D11) | 220 | | U | 110 | | U | 110 | | U |
| 1C | E3 | 84 | | U | 42 | | U | 42 | | U |
| 1C | E4* | 88 | | U | 44 | | U | 44 | | U |
| 2A | D10 | 208 | | U | 104 | | U | 104 | | U |
| 2A | D12 | 224 | | U | 112 | | U | 112 | | U |
| 2A | D13 | 196 | | U | 98 | | U | 98 | | U |
| 2A | D14 | 200 | | U | 100 | | U | 100 | | U |
| 2A | E5 | 80 | | U | 40 | | U | 40 | | U |
| 2B | D15 | 196 | | U | 98 | | U | 98 | | U |
| 2C | D16 | 248 | | U | 124 | | U | 124 | | U |
| 2C | D17 | 196 | | U | 98 | | U | 98 | | U |
| 2C | D44 (Dupe for D17) | 196 | | U | 98 | | U | 98 | | U |
| 2C | D18 | 184 | | U | 92 | | U | 92 | | U |
| 2C | D19 | 176 | | U | 280 | 156 | | 88 | | U |
| 2C | D20 | 220 | | U | 110 | | U | 110 | | U |
| 2C | D21 | 220 | | U | 110 | | U | 110 | | U |
| 2C | E6 | 84 | | U | 42 | | U | 42 | | U |
| 2C | E7* | 84 | | U | 42 | | U | 42 | | U |
| 3A | D22 | 272 | | U | 136 | | U | 136 | | U |
| 3A | D23 | 216 | | U | 108 | | U | 108 | | U |
| 3A | D43 (Dupe for D23) | 208 | | U | 104 | | U | 104 | | U |
| 3A | D24 | 268 | | U | 250 | 33 | | 134 | | U |
| 3A | D25 | 100 | | U | 50 | | U | 50 | | U |
| 3A | E8 | 88 | | U | 70 | 41 | | 44 | | U |
| 3A | E9 | 108 | | U | 88 | 13 | | 54 | | U |
| 3B | D26 | 84 | | U | 42 | | U | 42 | | U |
| 3B | D27 | 176 | | U | 88 | | U | 88 | | U |
| 3B | D28 | 184 | | U | 92 | | U | 92 | | U |
| 3B | D42 (Dupe for D28) | 192 | | U | 96 | | U | 96 | | U |
| 3B | D29 | 88 | | U | 44 | | U | 44 | | U |
| 3B | E10 | 88 | | U | 44 | | U | 44 | | U |
| 4A | O30 | 212 | | U | 106 | | U | 106 | | U |
| 4A | D31 | 172 | | U | 86 | | U | 86 | | U |
| 4A | D32 | 88 | | U | 72 | 30 | | 44 | | U |
| 4A | D33 | 92 | | U | 46 | | U | 46 | | U |
| 4A | D34 | 84 | | U | 42 | | U | 42 | | U |
| 4A | D35 | 124 | | U | 62 | | U | 62 | | U |
| 4A | D41 (Dupe for D35) | 140 | | U | 70 | | U | 70 | | U |
| 4A | D36 | 184 | | U | 92 | | U | 92 | | U |
| 4A | D37 | 92 | | U | 46 | | U | 46 | | U |
| 4A | D38 | 84 | | U | 42 | | U | 42 | | U |
| 4A | E11 | 192 | | U | 96 | | U | 96 | | U |
| 4A | E12 | 80 | | U | 40 | | U | 40 | | U |
| 4B | D39 | 84 | | U | 42 | | U | 42 | | U |
| 4B | D40 | 92 | | U | 46 | | U | 46 | | U |
| 4B | E13 | 84 | | U | 42 | | U | 42 | | U |
| 4B | E14 | 80 | | U | 40 | | U | 40 | | U |
| Effects-Based Reference Levels | | 50 | | | 600 | 1020 | | 35 | | |

| River Segment | Station | Indeno(1,2,3-c,d)pyrene | | | Naphthalene | | | Phenanthrene | | | |
|--------------------------------|--------------------|-------------------------|-----------------------------|----------------|------------------------|-----------------------------|----------------|------------------------|-----------------------------|----------------|--|
| | | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code | |
| 1A | D1 | 260 | | U | 130 | | U | 130 | | U | |
| 1A | D2 | 288 | | U | 144 | | U | 144 | | U | |
| 1A | D3 | 196 | | U | 98 | | U | 98 | | U | |
| 1A | D46 (Dupe for D3) | 196 | | U | 98 | | U | 98 | | U | |
| 1A | D4 | 244 | | U | 122 | | U | 122 | | U | |
| 1A | E1 | 88 | | U | 44 | | U | 44 | | U | |
| 1B | E2 | 88 | | U | 44 | | U | 44 | | U | |
| 1C | D5 | 188 | | U | 94 | | U | 94 | | U | |
| 1C | D6 | 192 | | U | 96 | | U | 96 | | U | |
| 1C | D7 | 176 | | U | 88 | | U | 88 | | U | |
| 1C | D8 | 184 | | U | 92 | | U | 92 | | U | |
| 1C | D9 | 92 | | U | 46 | | U | 46 | | U | |
| 1C | D11 | 220 | | U | 110 | | U | 110 | | U | |
| 1C | D45 (Dupe for D11) | 220 | | U | 110 | | U | 110 | | U | |
| 1C | E3 | 84 | | U | 42 | | U | 42 | | U | |
| 1C | E4* | 88 | | U | 44 | | U | 44 | | U | |
| 2A | D10 | 208 | | U | 104 | | U | 104 | | U | |
| 2A | D12 | 224 | | U | 112 | | U | 112 | | U | |
| 2A | D13 | 196 | | U | 98 | | U | 98 | | U | |
| 2A | D14 | 200 | | U | 100 | | U | 100 | | U | |
| 2A | E5 | 80 | | U | 40 | | U | 40 | | U | |
| 2B | D15 | 196 | | U | 98 | | U | 98 | | U | |
| 2C | D16 | 248 | | U | 124 | | U | 124 | | U | |
| 2C | D17 | 196 | | U | 98 | | U | 98 | | U | |
| 2C | D44 (Dupe for D17) | 196 | | U | 98 | | U | 98 | | U | |
| 2C | D18 | 184 | | U | 92 | | U | 92 | | U | |
| 2C | D19 | 140 | 78 | E | 88 | | U | 110 | 61 | U | |
| 2C | D20 | 220 | | U | 110 | | U | 110 | | U | |
| 2C | D21 | 220 | | U | 110 | | U | 110 | | U | |
| 2C | E6 | 84 | | U | 42 | | U | 42 | | U | |
| 2C | E7* | 84 | | U | 42 | | U | 42 | | U | |
| 3A | D22 | 272 | | U | 136 | | U | 136 | | U | |
| 3A | D23 | 216 | | U | 108 | | U | 108 | | U | |
| 3A | D43 (Dupe for D23) | 208 | | U | 104 | | U | 104 | | U | |
| 3A | D24 | 170 | 23 | E | 134 | | U | 210 | 28 | U | |
| 3A | D25 | 100 | | U | 50 | | U | 50 | | U | |
| 3A | E8 | 88 | | U | 44 | | U | 44 | | U | |
| 3A | E9 | 62 | 9 | E | 54 | | U | 80 | 12 | U | |
| 3B | D26 | 84 | | U | 42 | | U | 42 | | U | |
| 3B | D27 | 176 | | U | 88 | | U | 88 | | U | |
| 3B | D28 | 184 | | U | 92 | | U | 92 | | U | |
| 3B | D42 (Dupe for D28) | 192 | | U | 96 | | U | 96 | | U | |
| 3B | D29 | 88 | | U | 44 | | U | 44 | | U | |
| 3B | E10 | 88 | | U | 44 | | U | 44 | | U | |
| 4A | D30 | 212 | | U | 106 | | U | 106 | | U | |
| 4A | D31 | 172 | | U | 86 | | U | 86 | | U | |
| 4A | D32 | 88 | | U | 44 | | U | 48 | 20 | U | |
| 4A | D33 | 92 | | U | 46 | | U | 46 | | U | |
| 4A | D34 | 84 | | U | 42 | | U | 42 | | U | |
| 4A | D35 | 124 | | U | 62 | | U | 62 | | U | |
| 4A | D41 (Dupe for D35) | 140 | | U | 70 | | U | 70 | | U | |
| 4A | D36 | 184 | | U | 92 | | U | 92 | | U | |
| 4A | D37 | 92 | | U | 46 | | U | 46 | | U | |
| 4A | D38 | 84 | | U | 42 | | U | 42 | | U | |
| 4A | E11 | 192 | | U | 96 | | U | 96 | | U | |
| 4A | E12 | 80 | | U | 40 | | U | 40 | | U | |
| 4B | D39 | 84 | | U | 42 | | U | 42 | | U | |
| 4B | D40 | 92 | | U | 46 | | U | 46 | | U | |
| 4B | E13 | 84 | | U | 42 | | U | 42 | | U | |
| 4B | E14 | 80 | | U | 40 | | U | 40 | | U | |
| Effects-Based Reference Levels | | na*** | | | 34 | | | 225 | | 120 | |

| River Segment | Station | Pyrene | | Qualifier Code |
|--------------------------------|--------------------|------------------------|-----------------------------|----------------|
| | | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | |
| 1A | D1 | 130 | | U |
| 1A | D2 | 144 | | U |
| 1A | D3 | 98 | | U |
| 1A | D46 (Dupe for D3) | 98 | | U |
| 1A | D4 | 122 | | U |
| 1A | E1 | 44 | | U |
| 1B | E2 | 44 | | U |
| 1C | D5 | 94 | | U |
| 1C | D6 | 96 | | U |
| 1C | D7 | 88 | | U |
| 1C | D8 | 92 | | U |
| 1C | D9 | 46 | | U |
| 1C | D11 | 110 | | U |
| 1C | D45 (Dupe for D11) | 110 | | U |
| 1C | E3 | 42 | | U |
| 1C | E4* | 44 | | U |
| 2A | D10 | 104 | | U |
| 2A | D12 | 112 | | U |
| 2A | D13 | 98 | | U |
| 2A | D14 | 100 | | U |
| 2A | E5 | 40 | | U |
| 2B | D15 | 98 | | U |
| 2C | D16 | 124 | | U |
| 2C | D17 | 98 | | U |
| 2C | D44 (Dupe for D17) | 98 | | U |
| 2C | D18 | 92 | | U |
| 2C | D19 | 266 | 200 | |
| 2C | D20 | 110 | | U |
| 2C | D21 | 110 | | U |
| 2C | E6 | 42 | | U |
| 2C | E7* | 42 | | U |
| 3A | D22 | 136 | | U |
| 3A | D23 | 108 | | U |
| 3A | D43 (Dupe for D23) | 104 | | U |
| 3A | D24 | 420 | 56 | |
| 3A | D25 | 50 | | U |
| 3A | E8 | 44 | 26 | |
| 3A | E9 | 130 | 19 | |
| 3B | D26 | 42 | | U |
| 3B | D27 | 88 | | U |
| 3B | D28 | 92 | | U |
| 3B | D42 (Dupe for D28) | 96 | | U |
| 3B | D29 | 44 | | U |
| 3B | E10 | 44 | | U |
| 4A | D30 | 106 | | U |
| 4A | D31 | 86 | | U |
| 4A | D32 | 110 | 46 | |
| 4A | D33 | 46 | | U |
| 4A | D34 | 42 | | U |
| 4A | D35 | 62 | | U |
| 4A | D41 (Dupe for D35) | 70 | | U |
| 4A | D36 | 92 | | U |
| 4A | D37 | 46 | | U |
| 4A | D38 | 42 | | U |
| 4A | E11 | 96 | | U |
| 4A | E12 | 40 | | U |
| 4B | D39 | 42 | | U |
| 4B | D40 | 46 | | U |
| 4B | E13 | 42 | | U |
| 4B | E14 | 40 | | U |
| Effects-Based Reference Levels | | 350 | | |

TABLE C-9. SEMIVOLATILES IN SEDIMENTS: CHLORINATED BENZENES

| River Segment | Station | 1,3-Dichlorobenzene | | | 1,2-Dichlorobenzene | | | 1,4-Dichlorobenzene | | |
|--------------------------------|--------------------|------------------------|-----------------------------|----------------|------------------------|-----------------------------|----------------|------------------------|-----------------------------|----------------|
| | | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code |
| 1A | D1 | 130 | | U | 130 | | U | 130 | | U |
| 1A | D2 | 144 | | U | 144 | | U | 144 | | U |
| 1A | D3 | 98 | | U | 98 | | U | 98 | | U |
| 1A | D46 (Dupe for D3) | 98 | | U | 98 | | U | 98 | | U |
| 1A | D4 | 122 | | U | 122 | | U | 122 | | U |
| 1A | E1 | 44 | | U | 44 | | U | 44 | | U |
| 1B | E2 | 44 | | U | 44 | | U | 44 | | U |
| 1C | D5 | 94 | | U | 94 | | U | 94 | | U |
| 1C | D6 | 96 | | U | 96 | | U | 96 | | U |
| 1C | D7 | 88 | | U | 88 | | U | 88 | | U |
| 1C | D8 | 92 | | U | 92 | | U | 92 | | U |
| 1C | D9 | 46 | | U | 46 | | U | 46 | | U |
| 1C | D11 | 110 | | U | 110 | | U | 110 | | U |
| 1C | D45 (Dupe for D11) | 110 | | U | 110 | | U | 110 | | U |
| 1C | E3 | 42 | | U | 42 | | U | 42 | | U |
| 1C | E4* | 44 | | U | 44 | | U | 44 | | U |
| 2A | D10 | 104 | | U | 104 | | U | 104 | | U |
| 2A | D12 | 112 | | U | 112 | | U | 112 | | U |
| 2A | D13 | 98 | | U | 98 | | U | 98 | | U |
| 2A | D14 | 100 | | U | 100 | | U | 100 | | U |
| 2A | E5 | 40 | | U | 40 | | U | 40 | | U |
| 2B | D15 | 98 | | U | 98 | | U | 98 | | U |
| 2C | D16 | 124 | | U | 124 | | U | 124 | | U |
| 2C | D17 | 98 | | U | 98 | | U | 98 | | U |
| 2C | D44 (Dupe for D17) | 98 | | U | 98 | | U | 98 | | U |
| 2C | D18 | 92 | | U | 92 | | U | 92 | | U |
| 2C | D19 | 88 | | U | 88 | | U | 88 | | U |
| 2C | D20 | 110 | | U | 110 | | U | 110 | | U |
| 2C | D21 | 110 | | U | 110 | | U | 110 | | U |
| 2C | E6 | 42 | | U | 42 | | U | 42 | | U |
| 2C | E7* | 42 | | U | 42 | | U | 42 | | U |
| 3A | D22 | 136 | | U | 136 | | U | 136 | | U |
| 3A | D23 | 108 | | U | 108 | | U | 108 | | U |
| 3A | D43 (Dupe for D23) | 104 | | U | 104 | | U | 104 | | U |
| 3A | D24 | 134 | | U | 134 | | U | 134 | | U |
| 3A | D25 | 50 | | U | 50 | | U | 50 | | U |
| 3A | E8 | 44 | | U | 44 | | U | 44 | | U |
| 3A | E9 | 54 | | U | 54 | | U | 54 | | U |
| 3B | D26 | 42 | | U | 42 | | U | 42 | | U |
| 3B | D27 | 88 | | U | 88 | | U | 88 | | U |
| 3B | D28 | 92 | | U | 92 | | U | 92 | | U |
| 3B | D42 (Dupe for D28) | 96 | | U | 96 | | U | 96 | | U |
| 3B | D29 | 44 | | U | 44 | | U | 44 | | U |
| 3B | E10 | 44 | | U | 44 | | U | 44 | | U |
| 4A | D30 | 106 | | U | 106 | | U | 106 | | U |
| 4A | D31 | 86 | | U | 86 | | U | 86 | | U |
| 4A | D32 | 44 | | U | 44 | | U | 44 | | U |
| 4A | D33 | 46 | | U | 46 | | U | 46 | | U |
| 4A | D34 | 42 | | U | 42 | | U | 42 | | U |
| 4A | D35 | 62 | | U | 62 | | U | 62 | | U |
| 4A | D41 (Dupe for D35) | 70 | | U | 70 | | U | 70 | | U |
| 4A | D36 | 92 | | U | 92 | | U | 92 | | U |
| 4A | D37 | 46 | | U | 46 | | U | 46 | | U |
| 4A | D38 | 42 | | U | 42 | | U | 42 | | U |
| 4A | E11 | 96 | | U | 96 | | U | 96 | | U |
| 4A | E12 | 40 | | U | 40 | | U | 40 | | U |
| 4B | D39 | 42 | | U | 42 | | U | 42 | | U |
| 4B | D40 | 46 | | U | 46 | | U | 46 | | U |
| 4B | E13 | 42 | | U | 42 | | U | 42 | | U |
| 4B | E14 | 40 | | U | 40 | | U | 40 | | U |
| Effects-Based Reference Levels | | na*** | | | na*** | | | na*** | | |

U = Compound was not detected. Value given is the lower quantification limit.

E = Value reported is an estimate.

* Results presented are from reextraction and reanalysis of the sample.

** TOC-normalized data presented only when a compound is detected.

*** Effects-based reference level not available.

| River Segment | Station | 1,2,4-Trichlorobenzene | | | Hexachlorobenzene | | | Hexachlorobutadiene | | |
|--------------------------------|--------------------|------------------------|-----------------------------|----------------|------------------------|-----------------------------|----------------|------------------------|-----------------------------|----------------|
| | | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code |
| 1A | D1 | 260 | | U | 260 | | U | 130 | | U |
| 1A | D2 | 288 | | U | 288 | | U | 144 | | U |
| 1A | D3 | 196 | | U | 196 | | U | 98 | | U |
| 1A | D46 (Dupe for D3) | 196 | | U | 196 | | U | 98 | | U |
| 1A | D4 | 244 | | U | 244 | | U | 122 | | U |
| 1A | E1 | 88 | | U | 88 | | U | 44 | | U |
| 1B | E2 | 88 | | U | 88 | | U | 44 | | U |
| 1C | D5 | 188 | | U | 188 | | U | 94 | | U |
| 1C | D6 | 192 | | U | 192 | | U | 96 | | U |
| 1C | D7 | 176 | | U | 176 | | U | 88 | | U |
| 1C | D8 | 184 | | U | 184 | | U | 92 | | U |
| 1C | D9 | 92 | | U | 92 | | U | 46 | | U |
| 1C | D11 | 220 | | U | 220 | | U | 110 | | U |
| 1C | D45 (Dupe for D11) | 220 | | U | 220 | | U | 110 | | U |
| 1C | E3 | 84 | | U | 84 | | U | 42 | | U |
| 1C | E4* | 88 | | U | 88 | | U | 44 | | U |
| 2A | D10 | 208 | | U | 208 | | U | 104 | | U |
| 2A | D12 | 224 | | U | 224 | | U | 112 | | U |
| 2A | D13 | 196 | | U | 196 | | U | 98 | | U |
| 2A | D14 | 200 | | U | 200 | | U | 100 | | U |
| 2A | E5 | 80 | | U | 80 | | U | 40 | | U |
| 2B | D15 | 196 | | U | 196 | | U | 98 | | U |
| 2C | D16 | 248 | | U | 184 | | U | 124 | | U |
| 2C | D17 | 196 | | U | 196 | | U | 98 | | U |
| 2C | D44 (Dupe for D17) | 196 | | U | 196 | | U | 98 | | U |
| 2C | D18 | 184 | | U | 184 | | U | 92 | | U |
| 2C | D19 | 176 | | U | 176 | | U | 88 | | U |
| 2C | D20 | 220 | | U | 220 | | U | 110 | | U |
| 2C | D21 | 220 | | U | 220 | | U | 110 | | U |
| 2C | E6 | 84 | | U | 84 | | U | 42 | | U |
| 2C | E7* | 84 | | U | 84 | | U | 42 | | U |
| 3A | D22 | 272 | | U | 272 | | U | 136 | | U |
| 3A | D23 | 216 | | U | 216 | | U | 108 | | U |
| 3A | D43 (Dupe for D23) | 208 | | U | 208 | | U | 104 | | U |
| 3A | D24 | 268 | | U | 184 | | U | 134 | | U |
| 3A | D25 | 100 | | U | 100 | | U | 50 | | U |
| 3A | E8 | 88 | | U | 88 | | U | 44 | | U |
| 3A | E9 | 108 | | U | 108 | | U | 54 | | U |
| 3B | D26 | 84 | | U | 84 | | U | 42 | | U |
| 3B | D27 | 176 | | U | 176 | | U | 88 | | U |
| 3B | D28 | 184 | | U | 184 | | U | 92 | | U |
| 3B | D42 (Dupe for D28) | 192 | | U | 192 | | U | 96 | | U |
| 3B | D29 | 88 | | U | 88 | | U | 44 | | U |
| 3B | E10 | 88 | | U | 88 | | U | 44 | | U |
| 4A | D30 | 212 | | U | 212 | | U | 106 | | U |
| 4A | D31 | 172 | | U | 172 | | U | 86 | | U |
| 4A | D32 | 88 | | U | 88 | | U | 44 | | U |
| 4A | D33 | 92 | | U | 92 | | U | 46 | | U |
| 4A | D34 | 84 | | U | 84 | | U | 42 | | U |
| 4A | D35 | 124 | | U | 124 | | U | 62 | | U |
| 4A | D41 (Dupe for D35) | 140 | | U | 140 | | U | 70 | | U |
| 4A | D36 | 184 | | U | 184 | | U | 92 | | U |
| 4A | D37 | 92 | | U | 92 | | U | 46 | | U |
| 4A | D38 | 84 | | U | 84 | | U | 42 | | U |
| 4A | E11 | 192 | | U | 192 | | U | 96 | | U |
| 4A | E12 | 80 | | U | 80 | | U | 40 | | U |
| 4B | D39 | 84 | | U | 84 | | U | 42 | | U |
| 4B | D40 | 92 | | U | 92 | | U | 46 | | U |
| 4B | E13 | 84 | | U | 84 | | U | 42 | | U |
| 4B | E14 | 80 | | U | 80 | | U | 40 | | U |
| Effects-Based Reference Levels | | na*** | | | na*** | | | na*** | | |

| River Segment | Station | Hexachloroethane | | | Hexachlorocyclopentadiene | | |
|--------------------------------|--------------------|------------------|----------------|-----------|---------------------------|----------------|-----------|
| | | Measured | Normalized** | Qualifier | Measured | Normalized** | Qualifier |
| | | Conc. (ug/kg) | Conc. (ug/g C) | Code | Conc. (ug/kg) | Conc. (ug/g C) | Code |
| 1A | D1 | 260 | | U | 650 | | U |
| 1A | D2 | 288 | | U | 720 | | U |
| 1A | D3 | 196 | | U | 490 | | U |
| 1A | D46 (Dupe for D3) | 196 | | U | 490 | | U |
| 1A | D4 | 244 | | U | 610 | | U |
| 1A | E1 | 88 | | U | 220 | | U |
| 1B | E2 | 88 | | U | 220 | | U |
| 1C | D5 | 188 | | U | 470 | | U |
| 1C | D6 | 192 | | U | 480 | | U |
| 1C | D7 | 176 | | U | 440 | | U |
| 1C | D8 | 184 | | U | 460 | | U |
| 1C | D9 | 92 | | U | 230 | | U |
| 1C | D11 | 220 | | U | 550 | | U |
| 1C | D45 (Dupe for D11) | 220 | | U | 550 | | U |
| 1C | E3 | 84 | | U | 210 | | U |
| 1C | E4* | 88 | | U | 220 | | U |
| 2A | D10 | 208 | | U | 520 | | U |
| 2A | D12 | 224 | | U | 200 | | U |
| 2A | D13 | 196 | | U | 490 | | U |
| 2A | D14 | 200 | | U | 500 | | U |
| 2A | E5 | 80 | | U | 200 | | U |
| 2B | D15 | 196 | | U | 490 | | U |
| 2C | D16 | 248 | | U | 620 | | U |
| 2C | D17 | 196 | | U | 490 | | U |
| 2C | D44 (Dupe for D17) | 196 | | U | 490 | | U |
| 2C | D18 | 184 | | U | 460 | | U |
| 2C | D19 | 176 | | U | 440 | | U |
| 2C | D20 | 220 | | U | 550 | | U |
| 2C | D21 | 220 | | U | 550 | | U |
| 2C | E6 | 84 | | U | 210 | | U |
| 2C | E7* | 84 | | U | 210 | | U |
| 3A | D22 | 272 | | U | 680 | | U |
| 3A | D23 | 216 | | U | 540 | | U |
| 3A | D43 (Dupe for D23) | 208 | | U | 520 | | U |
| 3A | D24 | 268 | | U | 670 | | U |
| 3A | D25 | 100 | | U | 250 | | U |
| 3A | E8 | 88 | | U | 220 | | U |
| 3A | E9 | 108 | | U | 270 | | U |
| 3B | D26 | 84 | | U | 210 | | U |
| 3B | D27 | 176 | | U | 440 | | U |
| 3B | D28 | 184 | | U | 460 | | U |
| 3B | D42 (Dupe for D28) | 192 | | U | 480 | | U |
| 3B | D29 | 88 | | U | 220 | | U |
| 3B | E10 | 88 | | U | 220 | | U |
| 4A | D30 | 212 | | U | 530 | | U |
| 4A | D31 | 172 | | U | 430 | | U |
| 4A | D32 | 88 | | U | 220 | | U |
| 4A | D33 | 92 | | U | 230 | | U |
| 4A | D34 | 84 | | U | 210 | | U |
| 4A | D35 | 124 | | U | 310 | | U |
| 4A | D41 (Dupe for D35) | 140 | | U | 350 | | U |
| 4A | D36 | 184 | | U | 460 | | U |
| 4A | D37 | 92 | | U | 230 | | U |
| 4A | D38 | 84 | | U | 210 | | U |
| 4A | E11 | 192 | | U | 480 | | U |
| 4A | E12 | 80 | | U | 200 | | U |
| 4B | D39 | 84 | | U | 210 | | U |
| 4B | D40 | 92 | | U | 230 | | U |
| 4B | E13 | 84 | | U | 210 | | U |
| 4B | E14 | 80 | | U | 200 | | U |
| Effects-Based Reference Levels | | na*** | | | na*** | | |

TABLE C-10. SEMIVOLATILES IN SEDIMENTS: BENZIDINES

| River Segment | Station | 3,3'-Dichlorobenzidine | | Qualifier Code |
|--------------------------------|--------------------|------------------------|-----------------------------|----------------|
| | | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | |
| 1A | D1 | 1300 | | U |
| 1A | D2 | 1440 | | U |
| 1A | D3 | 980 | | U |
| 1A | D46 (Dupe for D3) | 980 | | U |
| 1A | D4 | 1220 | | U |
| 1A | E1 | 440 | | U |
| 1B | E2 | 440 | | U |
| 1C | D5 | 940 | | U |
| 1C | D6 | 960 | | U |
| 1C | D7 | 880 | | U |
| 1C | D8 | 920 | | U |
| 1C | D9 | 460 | | U |
| 1C | D11 | 1100 | | U |
| 1C | D45 (Dupe for D11) | 1100 | | U |
| 1C | E3 | 420 | | U |
| 1C | E4* | 440 | | U |
| 2A | D10 | 1040 | | U |
| 2A | D12 | 1120 | | U |
| 2A | D13 | 980 | | U |
| 2A | D14 | 1000 | | U |
| 2A | E5 | 400 | | U |
| 2B | D15 | 980 | | U |
| 2C | D16 | 1240 | | U |
| 2C | D17 | 980 | | U |
| 2C | D44 (Dupe for D17) | 980 | | U |
| 2C | D18 | 920 | | U |
| 2C | D19 | 880 | | U |
| 2C | D20 | 1100 | | U |
| 2C | D21 | 1100 | | U |
| 2C | E6 | 420 | | U |
| 2C | E7* | 420 | | U |
| 3A | D22 | 1360 | | U |
| 3A | D23 | 1080 | | U |
| 3A | D43 (Dupe for D23) | 1040 | | U |
| 3A | D24 | 1340 | | U |
| 3A | D25 | 500 | | U |
| 3A | E8 | 440 | | U |
| 3A | E9 | 540 | | U |
| 3B | D26 | 420 | | U |
| 3B | D27 | 880 | | U |
| 3B | D28 | 920 | | U |
| 3B | D42 (Dupe for D28) | 960 | | U |
| 3B | D29 | 440 | | U |
| 3B | E10 | 440 | | U |
| 4A | D30 | 1060 | | U |
| 4A | D31 | 860 | | U |
| 4A | D32 | 440 | | U |
| 4A | D33 | 460 | | U |
| 4A | D34 | 420 | | U |
| 4A | D35 | 620 | | U |
| 4A | D41 (Dupe for D35) | 700 | | U |
| 4A | D36 | 920 | | U |
| 4A | D37 | 460 | | U |
| 4A | D38 | 420 | | U |
| 4A | E11 | 960 | | U |
| 4A | E12 | 400 | | U |
| 4B | D39 | 420 | | U |
| 4B | D40 | 460 | | U |
| 4B | E13 | 420 | | U |
| 4B | E14 | 400 | | U |
| Effects-Based Reference Levels | | na*** | | |

U = Compound was not detected. Value given is the lower quantification limit.

E = Value reported is an estimate.

* Results presented are from reextraction and reanalysis of the sample.

** TOC-normalized data presented only when a compound is detected.

*** Effects-based reference level not available.

TABLE C-11. SEMIVOLATILES IN SEDIMENTS; PHTHALATE ESTERS

| River Segment | Station | Dimethyl phthalate | | | Diethyl phthalate | | | Di-n-butyl phthalate | | |
|--------------------------------|--------------------|------------------------|-----------------------------|----------------|------------------------|-----------------------------|----------------|------------------------|-----------------------------|----------------|
| | | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code |
| 1A | D1 | 130 | | U | 260 | | U | 130 | | U |
| 1A | D2 | 144 | | U | 288 | | U | 144 | | U |
| 1A | D3 | 98 | | U | 196 | | U | 98 | | U |
| 1A | D46 (Dupe for D3) | 98 | | U | 196 | | U | 98 | | U |
| 1A | D4 | 122 | | U | 244 | | U | 122 | | U |
| 1A | E1 | 44 | | U | 88 | | U | 44 | | U |
| 1B | E2 | 44 | | U | 88 | | U | 44 | | U |
| 1C | D5 | 94 | | U | 188 | | U | 94 | | U |
| 1C | D6 | 96 | | U | 192 | | U | 96 | | U |
| 1C | D7 | 88 | | U | 176 | | U | 88 | | U |
| 1C | D8 | 92 | | U | 184 | | U | 92 | | U |
| 1C | D9 | 46 | | U | 92 | | U | 46 | | U |
| 1C | D11 | 110 | | U | 220 | | U | 110 | | U |
| 1C | D45 (Dupe for D11) | 110 | | U | 220 | | U | 110 | | U |
| 1C | E3 | 42 | | U | 84 | | U | 42 | | U |
| 1C | E4* | 44 | | U | 88 | | U | 44 | | U |
| 2A | D10 | 104 | | U | 208 | | U | 104 | | U |
| 2A | D12 | 112 | | U | 224 | | U | 112 | | U |
| 2A | D13 | 98 | | U | 196 | | U | 98 | | U |
| 2A | D14 | 100 | | U | 200 | | U | 100 | | U |
| 2A | E5 | 40 | | U | 80 | | U | 40 | | U |
| 2B | D15 | 98 | | U | 196 | | U | 98 | | U |
| 2C | D16 | 124 | | U | 248 | | U | 124 | | U |
| 2C | D17 | 98 | | U | 196 | | U | 98 | | U |
| 2C | D44 (Dupe for D17) | 98 | | U | 196 | | U | 98 | | U |
| 2C | D18 | 92 | | U | 184 | | U | 92 | | U |
| 2C | D19 | 88 | | U | 176 | | U | 88 | | U |
| 2C | D20 | 110 | | U | 220 | | U | 110 | | U |
| 2C | D21 | 110 | | U | 220 | | U | 110 | | U |
| 2C | E6 | 42 | | U | 84 | | U | 42 | | U |
| 2C | E7* | 42 | | U | 84 | | U | 42 | | U |
| 3A | D22 | 136 | | U | 272 | | U | 136 | | U |
| 3A | D23 | 108 | | U | 216 | | U | 108 | | U |
| 3A | D43 (Dupe for D23) | 104 | | U | 208 | | U | 104 | | U |
| 3A | D24 | 134 | | U | 268 | | U | 134 | | U |
| 3A | D25 | 50 | | U | 100 | | U | 50 | | U |
| 3A | E8 | 44 | | U | 88 | | U | 44 | | U |
| 3A | E9 | 54 | | U | 108 | | U | 54 | | U |
| 3B | D26 | 42 | | U | 84 | | U | 42 | | U |
| 3B | D27 | 88 | | U | 176 | | U | 88 | | U |
| 3B | D28 | 92 | | U | 184 | | U | 92 | | U |
| 3B | D42 (Dupe for D28) | 96 | | U | 192 | | U | 96 | | U |
| 3B | D29 | 44 | | U | 88 | | U | 44 | | U |
| 3B | E10 | 44 | | U | 88 | | U | 44 | | U |
| 4A | D30 | 106 | | U | 212 | | U | 106 | | U |
| 4A | D31 | 86 | | U | 172 | | U | 86 | | U |
| 4A | D32 | 44 | | U | 88 | | U | 44 | | U |
| 4A | D33 | 46 | | U | 92 | | U | 46 | | U |
| 4A | D34 | 42 | | U | 84 | | U | 42 | | U |
| 4A | D35 | 62 | | U | 124 | | U | 62 | | U |
| 4A | D41 (Dupe for D35) | 70 | | U | 140 | | U | 70 | | U |
| 4A | D36 | 92 | | U | 184 | | U | 92 | | U |
| 4A | D37 | 46 | | U | 92 | | U | 46 | | U |
| 4A | D38 | 42 | | U | 84 | | U | 42 | | U |
| 4A | E11 | 96 | | U | 192 | | U | 96 | | U |
| 4A | E12 | 40 | | U | 80 | | U | 40 | | U |
| 4B | D39 | 42 | | U | 84 | | U | 42 | | U |
| 4B | D40 | 46 | | U | 92 | | U | 46 | | U |
| 4B | E13 | 42 | | U | 84 | | U | 42 | | U |
| 4B | E14 | 40 | | U | 80 | | U | 40 | | U |
| Effects-Based Reference Levels | | na*** | | | na*** | | | na*** | | |

U = Compound was not detected. Value given is the lower quantification limit.

E = Value reported is an estimate.

* Results presented are from reextraction and reanalysis of the sample.

** TOC-normalized data presented only when a compound is detected.

*** Effects-based reference level not available.

| River Segment | Station | Benzyl butyl phthalate | | | bis(2-Ethylhexyl) phthalate | | | Di-n-octyl phthalate | | |
|--------------------------------|--------------------|------------------------|-----------------------------|----------------|-----------------------------|-----------------------------|----------------|------------------------|-----------------------------|----------------|
| | | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code |
| 1A | D1 | 130 | | U | 200 | 15 | | 260 | | U |
| 1A | D2 | 144 | | U | 310 | 19 | | 288 | | U |
| 1A | D3 | 98 | | U | 98 | | U | 196 | | U |
| 1A | D46 (Dupe for D3) | 98 | | U | 98 | | U | 196 | | U |
| 1A | D4 | 122 | | U | 170 | 15 | | 244 | | U |
| 1A | E1 | 44 | | U | 47 | 36 | | 88 | | U |
| 1B | E2 | 44 | | U | 95 | 95 | | 88 | | U |
| 1C | D5 | 94 | | U | 500 | 135 | | 188 | | U |
| 1C | D6 | 96 | | U | 510 | 111 | | 192 | | U |
| 1C | D7 | 88 | | U | 250 | 71 | | 176 | | U |
| 1C | D8 | 92 | | U | 260 | 100 | | 184 | | U |
| 1C | D9 | 46 | | U | 410 | 80 | | 92 | | U |
| 1C | D11 | 110 | | U | 110 | | U | 220 | | U |
| 1C | D45 (Dupe for D11) | 110 | | U | 110 | | U | 220 | | U |
| 1C | E3 | 42 | | U | 240 | 114 | | 84 | | U |
| 1C | E4* | 44 | | U | 44 | | U | 88 | | U |
| 2A | D10 | 104 | | U | 160 | 20 | | 208 | | U |
| 2A | D12 | 112 | | U | 112 | | U | 224 | | U |
| 2A | D13 | 98 | | U | 98 | | U | 196 | | U |
| 2A | D14 | 100 | | U | 100 | | U | 200 | | U |
| 2A | E5 | 40 | | U | 40 | | U | 80 | | U |
| 2B | D15 | 98 | | U | 260 | 38 | | 196 | | U |
| 2C | D16 | 124 | | U | 124 | | U | 248 | | U |
| 2C | D17 | 98 | | U | 98 | | U | 196 | | U |
| 2C | D44 (Dupe for D17) | 98 | | U | 98 | | U | 196 | | U |
| 2C | D18 | 92 | | U | 92 | | U | 184 | | U |
| 2C | D19 | 88 | | U | 250 | | U | 176 | | U |
| 2C | D20 | 110 | | U | 110 | | U | 220 | | U |
| 2C | D21 | 110 | | U | 110 | | U | 220 | | U |
| 2C | E6 | 42 | | U | 58 | 19 | | 84 | | U |
| 2C | E7* | 42 | | U | 88 | 440 | | 84 | | U |
| 3A | D22 | 136 | | U | 150 | 10 | | 272 | | U |
| 3A | D23 | 108 | | U | 108 | | U | 216 | | U |
| 3A | D43 (Dupe for D23) | 104 | | U | 104 | | U | 208 | | U |
| 3A | D24 | 134 | | U | 420 | 56 | | 268 | | U |
| 3A | D25 | 50 | | U | 50 | | U | 100 | | U |
| 3A | E8 | 44 | | U | 180 | 106 | | 88 | | U |
| 3A | E9 | 54 | | U | 210 | 31 | | 108 | | U |
| 3B | D26 | 42 | | U | 42 | | U | 84 | | U |
| 3B | D27 | 88 | | U | 88 | | U | 176 | | U |
| 3B | D28 | 92 | | U | 92 | | U | 184 | | U |
| 3B | D42 (Dupe for D28) | 96 | | U | 150 | 23 | | 192 | | U |
| 3B | D29 | 44 | | U | 44 | | U | 88 | | U |
| 3B | E10 | 44 | | U | 790 | 208 | | 88 | | U |
| 4A | D30 | 106 | | U | 106 | | U | 212 | | U |
| 4A | D31 | 86 | | U | 470 | 109 | | 172 | | U |
| 4A | D32 | 44 | | U | 58 | 24 | | 88 | | U |
| 4A | D33 | 46 | | U | 46 | | U | 92 | | U |
| 4A | D34 | 42 | | U | 42 | | U | 84 | | U |
| 4A | D35 | 62 | | U | 62 | | U | 124 | | U |
| 4A | D41 (Dupe for D35) | 70 | | U | 200 | 5 | | 140 | | U |
| 4A | D36 | 92 | | U | 92 | | U | 184 | | U |
| 4A | D37 | 46 | | U | 46 | | U | 92 | | U |
| 4A | D38 | 42 | | U | 42 | | U | 84 | | U |
| 4A | E11 | 96 | | U | 490 | 77 | | 192 | | U |
| 4A | E12 | 40 | | U | 40 | | U | 80 | | U |
| 4B | D39 | 42 | | U | 42 | | U | 84 | | U |
| 4B | D40 | 46 | | U | 46 | | U | 92 | | U |
| 4B | E13 | 42 | | U | 42 | | U | 84 | | U |
| 4B | E14 | 40 | | U | 40 | | U | 80 | | U |
| Effects-Based Reference Levels | | na*** | | | na*** | | | na*** | | |

TABLE C-12. PESTICIDES IN SEDIMENTS

| River Segment | Station | o,p-DDD | | | o,p-DDE | | | o,p-DDT | | |
|--------------------------------|--------------------|------------------------|-----------------------------|----------------|------------------------|-----------------------------|----------------|------------------------|-----------------------------|----------------|
| | | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code |
| 1A | D1 | 20 | | U | 20 | | U | 20 | 1.5 | U |
| 1A | D2 | 2 | | U | 2 | | U | 2 | | U |
| 1A | D3 | 2 | | U | 2 | | U | 2 | | U |
| 1A | D46 (Dupe for D3) | 2 | | U | 2 | | U | 2 | | U |
| 1A | D4 | 2 | | U | 2 | | U | 2 | | U |
| 1A | E1 | 2 | | U | 2 | | U | 2 | | U |
| 1B | E2 | 2 | | U | 2 | | U | 2 | | U |
| 1C | D5 | 2 | | U | 2 | | U | 2 | | U |
| 1C | D6 | 2 | | U | 2 | | U | 2 | | U |
| 1C | D7 | 2 | | U | 2 | | U | 2 | | U |
| 1C | D8 | 2 | | U | 2 | | U | 2 | | U |
| 1C | D9 | 2 | | U | 2 | | U | 2 | | U |
| 1C | D11 | 2 | | U | 2 | | U | 2 | | U |
| 1C | D45 (Dupe for D11) | 2 | | U | 2 | | U | 2 | | U |
| 1C | E3 | 2 | | U | 2 | | U | 2 | | U |
| 1C | E4 | 2 | | U | 2 | | U | 2 | | U |
| 2A | D10 | 2 | | U | 2 | | U | 2 | | U |
| 2A | D12 | 2 | | U | 2 | | U | 2 | | U |
| 2A | D13 | 2 | | U | 2 | | U | 2 | | U |
| 2A | D14 | 2 | | U | 2 | | U | 2 | | U |
| 2A | E5 | 2 | | U | 2 | | U | 2 | | U |
| 2B | D15 | 2 | | U | 2 | | U | 2 | | U |
| 2C | D16 | 2 | | U | 2 | | U | 2 | | U |
| 2C | D17 | 2 | | U | 2 | | U | 2 | | U |
| 2C | D44 (Dupe for D17) | 2 | | U | 2 | | U | 2 | | U |
| 2C | D18 | 2 | | U | 2 | | U | 2 | | U |
| 2C | D19 | 2 | | U | 2 | | U | 2 | | U |
| 2C | D20 | 2 | | U | 2 | | U | 2 | | U |
| 2C | D21 | 2 | | U | 2 | | U | 2 | | U |
| 2C | E6 | 2 | | U | 2 | | U | 2 | | U |
| 2C | E7 | 2 | | U | 2 | | U | 2 | | U |
| 3A | D22 | 2 | | U | 2 | | U | 2 | | U |
| 3A | D23 | 2 | | U | 2 | | U | 2 | | U |
| 3A | D43 (Dupe for D23) | 2 | | U | 2 | | U | 2 | | U |
| 3A | D24 | 3* | | U | 3.2 | 0.4 | U | 9.4 | 1.3 | U |
| 3A | D25 | 2 | | U | 2 | | U | 2 | | U |
| 3A | E8 | 6.6 | 3.9 | | 3.6 | 2.1 | | 5.6 | 3.3 | E |
| 3A | E9 | 2 | | U | 2 | | U | 2 | | U |
| 3B | D26 | 2 | | U | 2 | | U | 2 | | U |
| 3B | D27 | 2 | | U | 2 | | U | 2 | | U |
| 3B | D28 | 2 | | U | 2 | | U | 2.7 | 0.4 | |
| 3B | D42 (Dupe for D28) | 2 | | U | 2 | | U | 2 | | U |
| 3B | D29 | 2 | | U | 2 | | U | 2 | | U |
| 3B | E10 | 2 | | U | 2 | | U | 2 | | U |
| 4A | D30 | 2 | | U | 2 | | U | 2 | | U |
| 4A | D31 | 2 | | U | 2 | | U | 2 | | U |
| 4A | D32 | 2 | | U | 2 | | U | 8.3 | 3.5 | E |
| 4A | D33 | 2 | | U | 2 | | U | 2 | | U |
| 4A | D34 | 2 | | U | 2 | | U | 2 | | U |
| 4A | D35 | 2 | | U | 2 | | U | 2 | | U |
| 4A | D41 (Dupe for D35) | 2 | | U | 2 | | U | 7* | | U |
| 4A | D36 | 2 | | U | 2 | | U | 2 | | U |
| 4A | D37 | 2 | | U | 2 | | U | 2 | | U |
| 4A | D38 | 2 | | U | 2 | | U | 2 | | U |
| 4A | E11 | 2 | | U | 2 | | U | 2 | | U |
| 4A | E12 | 2 | | U | 2 | | U | 2 | | U |
| 4B | D39 | 2 | | U | 2 | | U | 2 | | U |
| 4B | D40 | 3* | | U | 2 | | U | 2 | | U |
| 4B | E13 | 2 | | U | 2 | | U | 2 | | U |
| 4B | E14 | 2 | | U | 2 | | U | 2 | | U |
| Effects-Based Reference Levels | | na*** | | | na*** | | | na*** | | |

U = Compound was not detected. Value given is the lower quantification limit.

E = Estimated value.

* Reporting limits adjusted due to coeluting interfering peaks.

** TOC-normalized data presented only when a compound is detected.

*** Effects-based reference level not available.

| River Segment | Station | 4,4'-DDD | | | 4,4'-DDE | | | 4,4'-DDT | | |
|--------------------------------|--------------------|---------------|----------------|-----------|---------------|----------------|-----------|---------------|----------------|-----------|
| | | Measured | Normalized** | Qualifier | Measured | Normalized** | Qualifier | Measured | Normalized** | Qualifier |
| | | Conc. (ug/kg) | Conc. (ug/g C) | Code | Conc. (ug/kg) | Conc. (ug/g C) | Code | Conc. (ug/kg) | Conc. (ug/g C) | Code |
| 1A | D1 | 20 | | U | 20 | | U | 20 | | U |
| 1A | D2 | 2 | | U | 2 | | U | 3* | | U |
| 1A | D3 | 2 | | U | 2 | | U | 2 | | U |
| 1A | D46 (Dupe for D3) | 2 | | U | 2 | | U | 2 | | U |
| 1A | D4 | 2 | | U | 2 | | U | 2 | | U |
| 1A | E1 | 2 | | U | 2 | | U | 2 | | U |
| 1B | E2 | 2 | | U | 2 | | U | 2 | | U |
| 1C | D5 | 2 | | U | 2 | | U | 2 | | U |
| 1C | D6 | 2 | | U | 2 | | U | 2 | | U |
| 1C | D7 | 2 | | U | 2 | | U | 2 | | U |
| 1C | D8 | 2 | | U | 2 | | U | 2 | | U |
| 1C | D9 | 2 | | U | 2 | | U | 2 | | U |
| 1C | D11 | 2 | | U | 2 | | U | 2 | | U |
| 1C | D45 (Dupe for D11) | 2 | | U | 2 | | U | 2 | | U |
| 1C | E3 | 2 | | U | 2 | | U | 2 | | U |
| 1C | E4 | 2 | | U | 2 | | U | 2 | | U |
| 2A | D10 | 2 | | U | 2 | | U | 2 | | U |
| 2A | D12 | 2 | | U | 2 | | U | 2 | | U |
| 2A | D13 | 2 | | U | 2 | | U | 2 | | U |
| 2A | D14 | 2 | | U | 2 | | U | 2 | | U |
| 2A | E5 | 2 | | U | 2 | | U | 2 | | U |
| 2B | D15 | 2 | | U | 2 | | U | 2 | | U |
| 2C | D16 | 2 | | U | 2 | 0.3 | | 2 | | U |
| 2C | D17 | 2 | | U | 2 | | U | 2 | | U |
| 2C | D44 (Dupe for D17) | 2 | | U | 2 | | U | 2 | | U |
| 2C | D18 | 2 | | U | 2 | | U | 2 | | U |
| 2C | D19 | 2 | | U | 4* | | U | 2 | | U |
| 2C | D20 | 2 | | U | 2 | | U | 2 | | U |
| 2C | D21 | 2 | | U | 2 | | U | 2 | | U |
| 2C | E6 | 2 | | U | 2 | | U | 2 | | U |
| 2C | E7 | 2 | | U | 2 | | U | 2 | | U |
| 3A | D22 | 2 | | U | 2 | | U | 2 | | U |
| 3A | D23 | 2 | | U | 2 | | U | 2 | | U |
| 3A | D43 (Dupe for D23) | 2 | | U | 2 | | U | 2 | | U |
| 3A | D24 | 2 | | U | 2 | 0.4 | | 9* | | U |
| 3A | D25 | 2 | | U | 2 | | U | 2 | | U |
| 3A | E8 | 2 | | U | 2 | | U | 3.3 | 1.9 | E |
| 3A | E9 | 2 | | U | 3* | | U | 100 | 14.7 | |
| 3B | D26 | 2 | | U | 2 | | U | 2 | | U |
| 3B | D27 | 2 | | U | 2 | | U | 2 | | U |
| 3B | D28 | 2 | | U | 2 | | U | 2 | | U |
| 3B | D42 (Dupe for D28) | 2 | | U | 2 | | U | 2 | | U |
| 3B | D29 | 2 | | U | 2 | | U | 2 | | U |
| 3B | E10 | 2 | | U | 2 | | U | 2 | | U |
| 4A | D30 | 2 | | U | 2 | | U | 2 | | U |
| 4A | D31 | 2 | | U | 2 | | U | 2 | | U |
| 4A | D32 | 2 | | U | 2 | | U | 2 | | U |
| 4A | D33 | 2 | | U | 2 | | U | 2 | | U |
| 4A | D34 | 2 | | U | 2 | | U | 2 | | U |
| 4A | D35 | 2 | | U | 2 | | U | 6* | | U |
| 4A | D41 (Dupe for D35) | 2 | | U | 2 | 0.1 | | 2 | | U |
| 4A | D36 | 2 | | U | 2 | | U | 2 | | U |
| 4A | D37 | 2 | | U | 2 | | U | 2 | | U |
| 4A | D38 | 2 | | U | 2 | | U | 2 | | U |
| 4A | E11 | 2 | | U | 2 | | U | 2 | | U |
| 4A | E12 | 2 | | U | 2 | | U | 2 | | U |
| 4B | D39 | 2 | | U | 2 | | U | 2 | | U |
| 4B | D40 | 2 | | U | 2 | 0.6 | | 2 | | U |
| 4B | E13 | 2 | | U | 2 | | U | 2 | | U |
| 4B | E14 | 2 | | U | 2 | | U | 2 | | U |
| Effects-Based Reference Levels | | 2 | | | 2 | | | 1 | | |

| River Segment | Station | Heptachlor | | | Heptachlor epoxide | | | Chlordane | | |
|--------------------------------|--------------------|---------------|----------------|-----------|--------------------|----------------|-----------|---------------|----------------|-----------|
| | | Measured | Normalized** | Qualifier | Measured | Normalized** | Qualifier | Measured | Normalized** | Qualifier |
| | | Conc. (ug/kg) | Conc. (ug/g C) | Code | Conc. (ug/kg) | Conc. (ug/g C) | Code | Conc. (ug/kg) | Conc. (ug/g C) | Code |
| 1A | D1 | 20 | | U/E | 20 | | U | 20 | | U |
| 1A | D2 | 2 | | U/E | 2 | | U | 2 | | U |
| 1A | D3 | 2 | | U | 2 | | U | 2 | | U |
| 1A | D46 (Dupe for D3) | 2 | | U/E | 2 | | U | 2 | | U |
| 1A | D4 | 2 | | U/E | 2 | | U | 2 | | U |
| 1A | E1 | 2 | | U | 2 | | U | 2 | | U |
| 1B | E2 | 2 | | U | 2 | | U | 2 | | U |
| 1C | D5 | 2 | | U | 2 | | U | 2 | | U |
| 1C | D6 | 2 | | U | 2 | | U | 2 | | U |
| 1C | D7 | 2 | | U | 2 | | U | 2 | | U |
| 1C | D8 | 2 | | U | 2 | | U | 2 | | U |
| 1C | D9 | 2 | | U | 2 | | U | 2 | | U |
| 1C | D11 | 2 | | U/E | 2 | | U | 2 | | U |
| 1C | D45 (Dupe for D11) | 2 | | U/E | 2 | | U | 2 | | U |
| 1C | E3 | 2 | | U | 2 | | U | 2 | | U |
| 1C | E4 | 2 | | U | 2 | | U | 2 | | U |
| 2A | D10 | 2 | | U/E | 2 | | U | 2 | | U |
| 2A | D12 | 3* | | U/E | 2 | | U | 2 | | U |
| 2A | D13 | 2 | | U | 2 | | U | 2 | | U |
| 2A | D14 | 2 | | U | 2 | | U | 2 | | U |
| 2A | E5 | 2 | | U | 2 | | U | 2 | | U |
| 2B | D15 | 2 | | U | 2 | | U | 2 | | U |
| 2C | D16 | 2 | | U | 2 | | U | 2 | | U |
| 2C | D17 | 2 | | U | 2 | | U | 2 | | U |
| 2C | D44 (Dupe for D17) | 2 | | U | 2 | | U | 2 | | U |
| 2C | D18 | 2 | | U | 2 | | U | 2 | | U |
| 2C | D19 | 2 | | U | 2 | | U | 2 | | U |
| 2C | D20 | 2 | | U | 2 | | U | 2 | | U |
| 2C | D21 | 2 | | U | 2 | | U | 2 | | U |
| 2C | E6 | 2 | | U | 2 | | U | 2 | | U |
| 2C | E7 | 2 | | U | 2 | | U | 2 | | U |
| 3A | D22 | 2.5 | 0.2 | | 2 | | U | 2 | | U |
| 3A | D23 | 2 | | U | 2 | | U | 2 | | U |
| 3A | D43 (Dupe for D23) | 2 | | U | 2 | | U | 2 | | U |
| 3A | D24 | 2 | | U | 2 | | U | 2 | | U |
| 3A | D25 | 2 | | U | 2 | | U | 2 | | U |
| 3A | E8 | 2 | | U | 2 | | U | 2 | | U |
| 3A | E9 | 2.1 | 0.3 | | 2 | | U | 2 | | U |
| 3B | D26 | 2 | | U | 2 | | U | 2 | | U |
| 3B | D27 | 2 | | U | 2 | | U | 2 | | U |
| 3B | D28 | 2 | | U | 2 | | U | 2 | | U |
| 3B | D42 (Dupe for D28) | 2 | | U | 2 | | U | 2 | | U |
| 3B | D29 | 2 | | U | 2 | | U | 2 | | U |
| 3B | E10 | 2 | | U | 2 | | U/E | 2 | | U |
| 4A | D30 | 2 | | U | 2 | | U | 2 | | U |
| 4A | D31 | 2 | | U | 2 | | U | 2 | | U |
| 4A | D32 | 2 | | U | 2 | | U | 2 | | U |
| 4A | D33 | 2 | | U | 2 | | U | 2 | | U |
| 4A | D34 | 2 | | U | 2 | | U | 2 | | U |
| 4A | D35 | 2 | | U | 2 | | U | 2 | | U |
| 4A | D41 (Dupe for D35) | 6.1 | 0.2 | | 2 | | U | 2 | | U |
| 4A | D36 | 2 | | U | 2 | | U | 2 | | U |
| 4A | D37 | 2 | | U | 2 | | U | 2 | | U |
| 4A | D38 | 2 | | U | 2 | | U | 2 | | U |
| 4A | E11 | 2 | | U | 2 | | U | 2 | | U |
| 4A | E12 | 2 | | U | 2 | | U | 2 | | U |
| 4B | D39 | 2 | | U | 2 | | U | 2 | | U |
| 4B | D40 | 2 | | U | 2 | | U | 2 | | U |
| 4B | E13 | 2 | | U | 2 | | U | 2 | | U |
| 4B | E14 | 2 | | U | 2 | | U | 2 | | U |
| Effects-Based Reference Levels | | na*** | | | na*** | | | 0.5 | | |

| River Segment | Station | Aldrin | | | Dieldrin | | | Mirex | | |
|--------------------------------|--------------------|---------------|----------------|-----------|---------------|----------------|-----------|---------------|----------------|-----------|
| | | Measured | Normalized** | Qualifier | Measured | Normalized** | Qualifier | Measured | Normalized** | Qualifier |
| | | Conc. (ug/kg) | Conc. (ug/g C) | Code | Conc. (ug/kg) | Conc. (ug/g C) | Code | Conc. (ug/kg) | Conc. (ug/g C) | Code |
| 1A | D1 | 20 | | U | 20 | | U | 20 | | U |
| 1A | D2 | 2 | | U | 2 | | U | 2 | | U |
| 1A | D3 | 2 | | U | 2 | | U | 2 | | U |
| 1A | D46 (Dupe for D3) | 2 | | U | 2 | | U | 2 | | U |
| 1A | D4 | 2 | | U | 2 | | U | 2 | | U |
| 1A | E1 | 2 | | U | 2 | | U | 2 | | U |
| 1B | E2 | 2 | | U | 2 | | U | 2 | | U |
| 1C | D5 | 2 | | U | 2 | | U | 2 | | U |
| 1C | D6 | 2 | | U | 2 | | U | 2 | | U |
| 1C | D7 | 2 | | U | 2 | | U | 2 | | U |
| 1C | D8 | 2 | | U | 2 | | U | 2 | | U |
| 1C | D9 | 2 | | U | 2 | | U | 2 | | U |
| 1C | D11 | 2 | | U | 2 | | U | 2 | | U |
| 1C | D45 (Dupe for D11) | 2 | | U | 2 | | U | 2 | | U |
| 1C | E3 | 2 | | U | 2 | | U | 2 | | U |
| 1C | E4 | 2 | | U | 2 | | U | 2 | | U |
| 2A | D10 | 2 | | U | 2 | | U | 2 | | U |
| 2A | D12 | 2 | | U | 2 | | U | 2 | | U |
| 2A | D13 | 2 | | U | 2 | | U | 2 | | U |
| 2A | D14 | 2 | | U | 2 | | U | 2 | | U |
| 2A | E5 | 2 | | U | 2 | | U | 2 | | U |
| 2B | D15 | 2 | | U | 2 | | U | 2 | | U |
| 2C | D16 | 2 | | U | 2 | | U | 2 | | U |
| 2C | D17 | 2 | | U | 2 | | U | 2 | | U |
| 2C | D44 (Dupe for D17) | 2 | | U | 2 | | U | 2 | | U |
| 2C | D18 | 2 | | U | 2 | | U | 2 | | U |
| 2C | D19 | 2 | | U | 2 | | U | 2 | | U |
| 2C | D20 | 2 | | U | 2 | | U | 2 | | U |
| 2C | D21 | 2 | | U | 2 | | U | 2 | | U |
| 2C | E6 | 2 | | U | 2 | | U | 2 | | U |
| 2C | E7 | 2 | | U | 2 | | U | 2 | | U |
| 3A | D22 | 2 | | U | 2 | | U | 2 | | U |
| 3A | D23 | 2 | | U | 2 | | U | 2 | | U |
| 3A | D43 (Dupe for D23) | 2 | | U | 2 | | U | 2 | | U |
| 3A | D24 | 2 | | U | 2 | | U | 2 | | U |
| 3A | D25 | 2 | | U | 2 | | U | 2 | | U |
| 3A | E8 | 2 | | U | 2 | | U | 4.8 | 2.8 | U |
| 3A | E9 | 2 | 0.5 | U | 2 | 1.9 | U | 2 | | U |
| 3B | D26 | 2 | | U | 2 | | U | 2 | | U |
| 3B | D27 | 2 | | U | 2 | | U | 2 | | U |
| 3B | D28 | 2 | | U | 2 | | U | 2 | | U |
| 3B | D42 (Dupe for D28) | 2 | | U | 2 | | U | 2 | | U |
| 3B | D29 | 2 | | U | 2 | | U | 2 | | U |
| 3B | E10 | 2 | | U | 2 | | U/E | 2 | | U |
| 4A | D30 | 2 | | U | 2 | | U | 2 | | U |
| 4A | D31 | 2 | | U | 2 | | U | 2 | | U |
| 4A | D32 | 2 | | U | 2 | | U | 2 | | U |
| 4A | D33 | 2 | | U | 2 | | U | 2 | | U |
| 4A | D34 | 2 | | U | 2 | | U | 2 | | U |
| 4A | D35 | 2 | | U | 2 | | U | 5.2 | 0.1 | U |
| 4A | D41 (Dupe for D35) | 2 | | U | 2 | | U | 2 | | U |
| 4A | D36 | 2 | | U | 2 | | U | 2 | | U |
| 4A | D37 | 2 | | U | 2 | | U | 2 | | U |
| 4A | D38 | 2 | | U | 2 | | U | 2 | | U |
| 4A | E11 | 2 | | U | 2 | | U | 2 | | U |
| 4A | E12 | 2 | | U | 2 | | U | 2 | | U |
| 4B | D39 | 2 | | U | 2 | | U | 2 | | U |
| 4B | D40 | 2 | | U | 2 | | U | 2 | | U |
| 4B | E13 | 2 | | U | 2 | | U | 2 | | U |
| 4B | E14 | 2 | | U | 2 | | U | 2 | | U |
| Effects-Based Reference Levels | | 2 | | | 0.02 | 9.0 | | 7 | | |

| River Segment | Station | Dacthal | | | Dicofol | | | Methyl parathion | | |
|--------------------------------|--------------------|------------------------|-----------------------------|----------------|------------------------|-----------------------------|----------------|------------------------|-----------------------------|----------------|
| | | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code |
| 1A | D1 | 20 | | U | 200 | | U | 68 | 5.0 | |
| 1A | D2 | 2 | | U | 20 | | U | 2 | | U |
| 1A | D3 | 2 | | U | 20 | | U | 6* | | U |
| 1A | D46 (Dupe for D3) | 2 | | U | 20 | | U | 5* | | U |
| 1A | D4 | 2 | | U | 20 | | U | 2 | | U |
| 1A | E1 | 2 | | U | 20 | | U | 2 | | U |
| 1B | E2 | 2 | | U | 20 | | U | 2 | | U |
| 1C | D5 | 2 | | U | 20 | | U | 3.1 | 0.8 | |
| 1C | D6 | 2 | | U | 20 | | U | 4.1 | 0.9 | |
| 1C | D7 | 2 | | U | 20 | | U | 2 | | U |
| 1C | D8 | 2 | | U | 20 | | U | 3 | 1.2 | |
| 1C | D9 | 2 | | U | 20 | | U | 2 | | U |
| 1C | D11 | 2 | | U | 20 | | U | 7* | | U |
| 1C | D45 (Dupe for D11) | 2 | | U | 20 | | U | 9* | | U |
| 1C | E3 | 2 | | U | 20 | | U | 2 | | U |
| 1C | E4 | 2 | | U | 20 | | U | 2 | | U |
| 2A | D10 | 2 | | U | 20 | | U | 3* | | U |
| 2A | D12 | 2 | | U | 20 | | U | 10 | 1.3 | |
| 2A | D13 | 2 | | U | 20 | | U | 9* | | U |
| 2A | D14 | 2 | | U | 20 | | U | 6* | | U |
| 2A | E5 | 2 | | U | 20 | | U | 2 | | U |
| 2B | D15 | 2 | | U | 20 | | U | 3* | | U |
| 2C | D16 | 2 | | U | 20 | | U | 20* | | U |
| 2C | D17 | 2 | | U | 20 | | U | 20* | | U |
| 2C | D44 (Dupe for D17) | 2 | | U | 20 | | U | 7* | | U |
| 2C | D18 | 2 | | U | 20 | | U | 5.9 | 0.9 | |
| 2C | D19 | 2 | | U | 20 | | U | 2 | | U |
| 2C | D20 | 2 | | U | 20 | | U | 2 | | U |
| 2C | D21 | 2 | | U | 20 | | U | 6* | | U |
| 2C | E6 | 2 | | U | 20 | | U | 2.3 | 0.7 | |
| 2C | E7 | 2 | | U | 20 | | U | 2 | | U |
| 3A | D22 | 2 | | U | 20 | | U | 14 | 0.9 | |
| 3A | D23 | 2 | | U | 20 | | U | 6.1 | 0.9 | |
| 3A | D43 (Dupe for D23) | 2 | | U | 20 | | U | 10 | 1.5 | |
| 3A | D24 | 2 | | U | 20 | | U | 3.4 | 0.5 | |
| 3A | D25 | 2 | | U | 20 | | U | 2 | | U |
| 3A | E8 | 9 | 5.3 | | 20 | | U | 4.9 | 2.9 | E |
| 3A | E9 | 2 | | U | 20 | | U | 2 | | U |
| 3B | D26 | 2 | | U | 20 | | U | 2 | | U |
| 3B | D27 | 2 | | U | 20 | | U | 2 | | U |
| 3B | D28 | 2 | | U | 20 | | U | 9* | | U |
| 3B | D42 (Dupe for D28) | 2 | | U | 20 | | U | 2 | | U |
| 3B | D29 | 2 | | U | 20 | | U | 2 | | U |
| 3B | E10 | 2 | | U | 20 | | U | 2 | | U |
| 4A | D30 | 2 | | U | 20 | | U | 6.3 | 1.1 | |
| 4A | D31 | 2 | | U | 20 | | U | 4 | 0.9 | |
| 4A | D32 | 2 | | U | 20 | | U | 2 | | U |
| 4A | D33 | 2 | | U | 20 | | U | 2 | | U |
| 4A | D34 | 2 | | U | 20 | | U | 2 | | U |
| 4A | D35 | 2 | | U | 20 | | U | 2 | | U |
| 4A | D41 (Dupe for D35) | 2 | | U | 20 | | U | 2 | | U |
| 4A | D36 | 2 | | U | 20 | | U | 5* | | U |
| 4A | D37 | 2 | | U | 20 | | U | 2 | | U |
| 4A | D38 | 2 | | U | 20 | | U | 2 | | U |
| 4A | E11 | 2 | | U | 20 | | U | 3* | | U |
| 4A | E12 | 2 | | U | 20 | | U | 2 | | U |
| 4B | D39 | 2 | | U | 20 | | U | 2 | | U |
| 4B | D40 | 2 | | U | 20 | | U | 2 | | U |
| 4B | E13 | 2 | | U | 20 | | U | 2 | | U |
| 4B | E14 | 2 | | U | 20 | | U | 2 | | U |
| Effects-Based Reference Levels | | na*** | | | na*** | | | na*** | | |

| River Segment | Station | Parathion | | | Malathion | | | Toxaphene | | |
|--------------------------------|--------------------|---------------|----------------|-----------|---------------|----------------|-----------|---------------|----------------|-----------|
| | | Measured | Normalized** | Qualifier | Measured | Normalized** | Qualifier | Measured | Normalized** | Qualifier |
| | | Conc. (ug/kg) | Conc. (ug/g C) | Code | Conc. (ug/kg) | Conc. (ug/g C) | Code | Conc. (ug/kg) | Conc. (ug/g C) | Code |
| 1A | D1 | 20 | | U | 20 | | U | 1000 | | U |
| 1A | D2 | 2 | | U | 2 | | U | 100 | | U |
| 1A | D3 | 2 | | U | 2 | | U | 100 | | U |
| 1A | D46 (Dupe for D3) | 2 | | U | 2 | | U | 100 | | U |
| 1A | D4 | 2 | | U | 2 | | U | 100 | | U |
| 1A | E1 | 2 | | U | 2 | | U | 100 | | U |
| 1B | E2 | 2 | | U | 2 | | U | 100 | | U |
| 1C | D5 | 2 | | U | 2 | | U | 100 | | U |
| 1C | D6 | 2 | | U | 2 | | U | 100 | | U |
| 1C | D7 | 2 | | U | 2 | | U | 100 | | U |
| 1C | D8 | 2 | | U | 2 | | U | 100 | | U |
| 1C | D9 | 2 | | U | 2 | | U | 100 | | U |
| 1C | D11 | 2 | | U | 2 | | U | 100 | | U |
| 1C | D45 (Dupe for D11) | 2 | | U | 2 | | U | 100 | | U |
| 1C | E3 | 2 | | U | 2 | | U | 100 | | U |
| 1C | E4 | 2 | | U | 2 | | U | 100 | | U |
| 2A | D10 | 2 | | U | 2 | | U | 100 | | U |
| 2A | D12 | 2 | | U | 2 | | U | 100 | | U |
| 2A | D13 | 2 | | U | 2 | | U | 100 | | U |
| 2A | D14 | 2 | | U | 2 | | U | 100 | | U |
| 2A | E5 | 2 | | U | 2 | | U | 100 | | U |
| 2B | D15 | 2 | | U | 2 | | U | 100 | | U |
| 2C | D16 | 2 | | U | 2 | | U | 100 | | U |
| 2C | D17 | 2 | | U | 2 | | U | 100 | | U |
| 2C | D44 (Dupe for D17) | 2 | | U | 2 | | U | 100 | | U |
| 2C | D18 | 2 | | U | 2 | | U | 100 | | U |
| 2C | D19 | 2 | | U | 2 | | U | 100 | | U |
| 2C | D20 | 2 | | U | 2 | | U | 100 | | U |
| 2C | D21 | 2 | | U | 2 | | U | 100 | | U |
| 2C | E6 | 2 | | U | 2 | | U | 100 | | U |
| 2C | E7 | 2 | | U | 2 | | U | 100 | | U |
| 3A | D22 | 2 | | U | 2 | | U | 100 | | U |
| 3A | D23 | 2 | | U | 2 | | U | 100 | | U |
| 3A | D43 (Dupe for D23) | 2 | | U | 2 | | U | 100 | | U |
| 3A | D24 | 3* | | U | 2 | | U | 100 | | U |
| 3A | D25 | 2 | | U | 2 | | U | 100 | | U |
| 3A | E8 | 5.1 | 3.0 | | 2.3 | 1.4 | | 100 | | U |
| 3A | E9 | 2 | | U | 2 | | U | 100 | | U |
| 3B | D26 | 2 | | U | 2 | | U | 100 | | U |
| 3B | D27 | 2 | | U | 2 | | U | 100 | | U |
| 3B | D28 | 2 | | U | 2 | | U | 100 | | U |
| 3B | D42 (Dupe for D28) | 2 | | U | 2 | | U | 100 | | U |
| 3B | D29 | 2 | | U | 2 | | U | 100 | | U |
| 3B | E10 | 2 | | U | 2 | | U | 100 | | U |
| 4A | D30 | 2 | | U | 2 | | U | 100 | | U |
| 4A | D31 | 2 | | U | 2 | | U | 100 | | U |
| 4A | D32 | 2 | | U | 2 | | U | 100 | | U |
| 4A | D33 | 2 | | U | 2 | | U | 100 | | U |
| 4A | D34 | 2 | | U | 2 | | U | 100 | | U |
| 4A | D35 | 2 | | U | 2 | | U | 100 | | U |
| 4A | D41 (Dupe for D35) | 2 | | U | 2 | | U | 100 | | U |
| 4A | D36 | 2 | | U | 2 | | U | 100 | | U |
| 4A | D37 | 2 | | U | 2 | | U | 100 | | U |
| 4A | D38 | 2 | | U | 2 | | U | 100 | | U |
| 4A | E11 | 2 | | U | 2 | | U | 100 | | U |
| 4A | E12 | 2 | | U | 2 | | U | 100 | | U |
| 4B | D39 | 2 | | U | 2 | | U | 100 | | U |
| 4B | D40 | 4.4 | 1.0 | | 2 | | U | 100 | | U |
| 4B | E13 | 2 | | U | 2 | | U | 100 | | U |
| 4B | E14 | 2 | | U | 2 | | U | 100 | | U |
| Effects-Based Reference Levels | | na*** | | | na*** | | | na*** | | |

| River Segment | Station | Isophorone | | | Endosulfan I | | | Endosulfan II | | |
|--------------------------------|--------------------|------------------------|-----------------------------|----------------|------------------------|-----------------------------|----------------|------------------------|-----------------------------|----------------|
| | | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code |
| 1A | D1 | 130 | | U | 20 | | U/E | 20 | | U |
| 1A | D2 | 144 | | U | 2 | | U/E | 2 | | U |
| 1A | D3 | 98 | | U | 2 | | U | 2 | | U |
| 1A | D46 (Dupe for D3) | 98 | | U | 2 | | U/E | 2 | | U |
| 1A | D4 | 122 | | U | 2 | | U/E | 2 | | U |
| 1A | E1 | 44 | | U | 2 | | U | 2 | | U |
| 1B | E2 | 44 | | U | 2 | | U | 2 | | U |
| 1C | D5 | 94 | | U | 2 | | U | 2 | | U |
| 1C | D6 | 96 | | U | 2 | | U | 2 | | U |
| 1C | D7 | 88 | | U | 2 | | U | 2 | | U |
| 1C | D8 | 92 | | U | 2 | | U | 2 | | U |
| 1C | D9 | 46 | | U | 2 | | U | 2 | | U |
| 1C | D11 | 110 | | U | 2 | | U/E | 2 | | U |
| 1C | D45 (Dupe for D11) | 110 | | U | 2 | | U/E | 2 | | U |
| 1C | E3 | 42 | | U | 2 | | U | 2 | | U |
| 1C | E4 | 44 | | U | 2 | | U | 2 | | U |
| 2A | D10 | 104 | | U | 2 | | U/E | 2 | | U |
| 2A | D12 | 112 | | U | 2 | | U/E | 2 | | U |
| 2A | D13 | 98 | | U | 2 | | U | 2 | | U |
| 2A | D14 | 100 | | U | 2 | | U | 2 | | U |
| 2A | E5 | 40 | | U | 2 | | U | 2 | | U |
| 2B | D15 | 98 | | U | 2 | | U | 2 | | U |
| 2C | D16 | 124 | | U | 2 | | U | 2 | | U |
| 2C | D17 | 98 | | U | 2 | | U | 2 | | U |
| 2C | D44 (Dupe for D17) | 98 | | U | 2 | | U | 2 | | U |
| 2C | D18 | 92 | | U | 2 | | U | 2 | | U |
| 2C | D19 | 88 | | U | 2 | | U | 2 | | U |
| 2C | D20 | 110 | | U | 2 | | U | 2 | | U |
| 2C | D21 | 110 | | U | 2 | | U | 2 | | U |
| 2C | E6 | 42 | | U | 2 | | U | 2 | | U |
| 2C | E7 | 42 | | U | 2 | | U | 2 | | U |
| 3A | D22 | 136 | | U | 2 | | U | 2 | | U |
| 3A | D23 | 108 | | U | 2 | | U | 2 | | U |
| 3A | D43 (Dupe for D23) | 104 | | U | 2 | | U | 2 | | U |
| 3A | D24 | 134 | | U | 2 | | U | 2 | | U |
| 3A | D25 | 50 | | U | 2 | | U | 2 | | U |
| 3A | E8 | 44 | | U | 2 | | U | 2 | | U |
| 3A | E9 | 54 | | U | 2 | | U | 2 | | U |
| 3B | D26 | 42 | | U | 2 | | U | 2 | | U |
| 3B | D27 | 88 | | U | 2 | | U | 2 | | U |
| 3B | D28 | 92 | | U | 2 | | U | 2 | | U |
| 3B | D42 (Dupe for D28) | 96 | | U | 2 | | U | 2 | | U |
| 3B | D29 | 44 | | U | 2 | | U | 2 | | U |
| 3B | E10 | 44 | | U | 2 | | U | 2 | | U |
| 4A | D30 | 106 | | U | 2 | | U | 2 | | U |
| 4A | D31 | 86 | | U | 2 | | U | 2 | | U |
| 4A | D32 | 44 | | U | 2 | | U | 2 | | U |
| 4A | D33 | 46 | | U | 2 | | U | 2 | | U |
| 4A | D34 | 42 | | U | 2 | | U | 2 | | U |
| 4A | D35 | 62 | | U | 2 | | U | 2 | | U |
| 4A | D41 (Dupe for D35) | 70 | | U | 2 | | U | 2 | | U |
| 4A | D36 | 92 | | U | 2 | | U | 2 | | U |
| 4A | D37 | 46 | | U | 2 | | U | 2 | | U |
| 4A | D38 | 42 | | U | 2 | | U | 2 | | U |
| 4A | E11 | 96 | | U | 2 | | U | 2 | | U |
| 4A | E12 | 40 | | U | 2 | | U | 2 | | U |
| 4B | D39 | 42 | | U | 2 | | U | 2 | | U |
| 4B | D40 | 46 | | U | 2 | | U | 2 | | U |
| 4B | E13 | 42 | | U | 2 | | U | 2 | | U |
| 4B | E14 | 40 | | U | 2 | | U | 2 | | U |
| Effects-Based Reference Levels | | na** | | | na*** | | | na*** | | |

| River Segment | Station | Endosulfan sulfate | | | Endrin | | | Endrin aldehyde | | |
|--------------------------------|--------------------|--------------------|----------------|-----------|---------------|----------------|-----------|-----------------|----------------|-----------|
| | | Measured | Normalized** | Qualifier | Measured | Normalized** | Qualifier | Measured | Normalized** | Qualifier |
| | | Conc. (ug/kg) | Conc. (ug/g C) | Code | Conc. (ug/kg) | Conc. (ug/g C) | Code | Conc. (ug/kg) | Conc. (ug/g C) | Code |
| 1A | D1 | 20 | | U | 20 | | U | 20 | | U |
| 1A | D2 | 3* | | U | 2 | | U | 2 | | U |
| 1A | D3 | 2 | | U | 2 | | U | 2 | | U |
| 1A | D46 (Dupe for D3) | 2 | | U | 2 | | U | 2 | | U |
| 1A | D4 | 2 | | U | 2 | | U | 2 | | U |
| 1A | E1 | 2 | | U | 2 | | U | 2 | | U |
| 1B | E2 | 2 | | U | 2 | | U | 2 | | U |
| 1C | D5 | 2 | | U | 2 | | U | 2 | | U |
| 1C | D6 | 2 | | U | 2 | | U | 2 | | U |
| 1C | D7 | 2 | | U | 2 | | U | 2 | | U |
| 1C | D8 | 2 | | U | 2 | | U | 2 | | U |
| 1C | D9 | 2 | | U | 2 | | U | 2 | | U |
| 1C | D11 | 2 | | U | 2 | | U | 2 | | U |
| 1C | D45 (Dupe for D11) | 2 | | U | 2 | | U | 2 | | U |
| 1C | E3 | 2 | | U | 2 | | U | 2 | | U |
| 1C | E4 | 2 | | U | 2 | | U | 2 | | U |
| 2A | D10 | 2 | | U | 2 | | U | 2 | | U |
| 2A | D12 | 2 | | U | 2 | | U | 3* | | U |
| 2A | D13 | 2 | | U/E | 2 | | U | 2 | | U |
| 2A | D14 | 2 | | U/E | 2 | | U | 2 | | U |
| 2A | E5 | 2 | | U/E | 2 | | U | 2 | | U |
| 2B | D15 | 2 | | U/E | 2 | | U | 2 | | U |
| 2C | D16 | 2 | | U/E | 2 | | U | 2 | | U |
| 2C | D17 | 2 | | U/E | 2 | | U | 2 | | U |
| 2C | D44 (Dupe for D17) | 2 | | U/E | 2 | | U | 2 | | U |
| 2C | D18 | 2 | | U/E | 2 | | U | 2 | | U |
| 2C | D19 | 2 | | U/E | 2 | | U | 2 | | U |
| 2C | D20 | 2 | | U/E | 2 | | U | 2 | | U |
| 2C | D21 | 2 | | U/E | 2 | | U | 2 | | U |
| 2C | E6 | 2 | | U | 2 | | U | 2 | | U |
| 2C | E7 | 2 | | U/E | 2 | | U | 2 | | U |
| 3A | D22 | 2 | | U/E | 2 | | U | 2 | | U |
| 3A | D23 | 2 | | U/E | 2 | | U | 2 | | U |
| 3A | D43 (Dupe for D23) | 2 | | U/E | 2 | | U | 2 | | U |
| 3A | D24 | 2 | | U | 5* | | U | 2 | | U |
| 3A | D25 | 2 | | U | 2 | | U | 2 | | U |
| 3A | E8 | 2 | | U/E | 4.5 | 2.6 | U | 2 | | U |
| 3A | E9 | 2 | | U | 2 | | U | 2 | | U |
| 3B | D26 | 2 | | U | 2 | | U | 2 | | U |
| 3B | D27 | 2 | | U | 2 | | U | 2 | | U |
| 3B | D28 | 2 | | U/E | 2 | | U | 2 | | U |
| 3B | D42 (Dupe for D28) | 2 | | U | 2 | | U | 2 | | U |
| 3B | D29 | 2 | | U | 2 | | U | 2 | | U |
| 3B | E10 | 2 | | U/E | 2 | | U | 2 | | U |
| 4A | D30 | 2 | | U | 2 | | U | 2 | | U |
| 4A | D31 | 2 | | U/E | 2 | | U | 2 | | U |
| 4A | D32 | 2 | | U | 2 | | U | 2 | | U |
| 4A | D33 | 2 | | U | 2 | | U | 2 | | U |
| 4A | D34 | 2 | | U | 2 | | U | 2 | | U |
| 4A | D35 | 2 | | U/E | 2 | | U | 3* | | U |
| 4A | D41 (Dupe for D35) | 2 | | U | 2 | | U | 2 | | U |
| 4A | D36 | 2 | | U | 2 | | U | 2 | | U |
| 4A | D37 | 2 | | U | 2 | | U | 2 | | U |
| 4A | D38 | 2 | | U | 2 | | U | 2 | | U |
| 4A | E11 | 2 | | U | 2 | | U | 2 | | U |
| 4A | E12 | 2 | | U | 2 | | U | 2 | | U |
| 4B | D39 | 2 | | U | 2 | | U | 2 | | U |
| 4B | D40 | 2 | | U | 2 | | U | 2 | | U |
| 4B | E13 | 2 | | U | 2 | | U | 2 | | U |
| 4B | E14 | 2 | | U | 2 | | U | 2 | | U |
| Effects-Based Reference Levels | | na*** | | | 0.02 4.0 | | | na*** | | |

| River Segment | Station | Methoxychlor | | | alpha-BHC | | | beta-BHC | | |
|--------------------------------|--------------------|------------------------|-----------------------------|----------------|------------------------|-----------------------------|----------------|------------------------|-----------------------------|----------------|
| | | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code |
| 1A | D1 | 200 | | U | 20 | | U | 20 | | U |
| 1A | D2 | 20 | | U | 2 | | U | 6* | | U |
| 1A | D3 | 20 | | U | 2 | | U | 12* | | U |
| 1A | D46 (Dupe for D3) | 20 | | U | 2 | | U | 10* | | U |
| 1A | D4 | 20 | | U | 2 | | U | 4* | | U |
| 1A | E1 | 20 | | U | 3* | | U | 5* | | U |
| 1B | E2 | 20 | | U | 2 | | U | 2 | | U |
| 1C | D5 | 20 | | U | 2 | | U | 2 | | U |
| 1C | D6 | 20 | | U | 2 | | U | 2 | | U |
| 1C | D7 | 20 | | U | 2 | | U | 2 | | U |
| 1C | D8 | 20 | | U | 2 | | U | 2 | | U |
| 1C | D9 | 20 | | U | 2 | | U | 2 | | U |
| 1C | D11 | 20 | | U | 2 | | U | 24* | | U |
| 1C | D45 (Dupe for D11) | 20 | | U | 2 | | U | 11* | | U |
| 1C | E3 | 20 | | U | 2 | | U | 2 | | U |
| 1C | E4 | 20 | | U | 2 | | U | 2 | | U |
| 2A | D10 | 20 | | U | 2 | | U | 2 | | U |
| 2A | D12 | 20 | | U | 2 | | U | 2 | | U |
| 2A | D13 | 20 | | U/E | 2 | | U | 2 | | U |
| 2A | D14 | 20 | | U | 2 | | U | 2 | | U |
| 2A | E5 | 20 | | U/E | 2 | | U | 2 | | U |
| 2B | D15 | 20 | | U | 2 | | U | 2 | | U |
| 2C | D16 | 20 | | U | 2 | | U | 2 | | U |
| 2C | D17 | 20 | | U/E | 2 | | U | 2 | | U |
| 2C | D44 (Dupe for D17) | 20 | | U/E | 2 | | U | 2 | | U |
| 2C | D18 | 20 | | U | 2 | | U | 2 | | U |
| 2C | D19 | 20 | | U | 2 | | U | 2 | | U |
| 2C | D20 | 20 | | U | 2 | | U | 2 | | U |
| 2C | D21 | 20 | | U | 2 | | U | 2 | | U |
| 2C | E6 | 20 | | U | 2 | | U | 2 | | U |
| 2C | E7 | 20 | | U | 2 | | U | 2 | | U |
| 3A | D22 | 20 | | U | 2.6 | 0.2 | U | 2 | | U |
| 3A | D23 | 20 | | U | 2 | | U | 2 | | U |
| 3A | D43 (Dupe for D23) | 20 | | U | 2 | | U | 2 | | U |
| 3A | D24 | 20 | | U | 2.9 | 0.4 | U | 2 | | U |
| 3A | D25 | 20 | | U | 2 | | U | 2 | | U |
| 3A | E8 | 20 | | U | 2 | | U | 2 | | U |
| 3A | E9 | 20 | | U | 3 | 0.4 | U | 2 | | U |
| 3B | D26 | 20 | | U | 2 | | U | 2 | | U |
| 3B | D27 | 20 | | U | 2 | | U | 2 | | U |
| 3B | D28 | 20 | | U | 2 | | U | 6* | | U |
| 3B | D42 (Dupe for D28) | 20 | | U | 2 | | U | 4* | | U |
| 3B | D29 | 20 | | U | 2 | | U | 2 | | U |
| 3B | E10 | 20 | | U | 2 | | U | 2 | | U |
| 4A | D30 | 20 | | U | 2 | | U | 3* | | U |
| 4A | D31 | 20 | | U | 2 | | U | 2 | | U |
| 4A | D32 | 20 | | U | 2 | | U | 2 | | U |
| 4A | D33 | 20 | | U | 2 | | U | 2 | | U |
| 4A | D34 | 20 | | U | 2 | | U | 2 | | U |
| 4A | D35 | 20 | | U | 2 | | U | 6* | | U |
| 4A | D41 (Dupe for D35) | 20 | | U | 4 | 0.1 | U | 7* | | U |
| 4A | D36 | 20 | | U | 2 | | U | 2 | | U |
| 4A | D37 | 20 | | U | 2 | | U | 2 | | U |
| 4A | D38 | 20 | | U | 2 | | U | 2 | | U |
| 4A | E11 | 20 | | U | 3* | | U | 2 | | U |
| 4A | E12 | 20 | | U | 2 | | U | 2 | | U |
| 4B | D39 | 20 | | U | 2 | | U | 2 | | U |
| 4B | D40 | 20 | | U | 2 | | U | 2 | | U |
| 4B | E13 | 20 | | U | 2 | | U | 2 | | U |
| 4B | E14 | 20 | | U | 2 | | U | 2 | | U |
| Effects-Based Reference Levels | | na*** | | | 3 | | | 3 | | |

| River Segment | Station | delta-BHC | | | gamma-BHC | | |
|--------------------------------|--------------------|---------------|----------------|-----------|---------------|----------------|-----------|
| | | Measured | Normalized** | Qualifier | Measured | Normalized** | Qualifier |
| | | Conc. (ug/kg) | Conc. (ug/g C) | Code | Conc. (ug/kg) | Conc. (ug/g C) | Code |
| 1A | D1 | 20 | | U/E | 20 | | U |
| 1A | D2 | 2 | | U/E | 2 | | U |
| 1A | D3 | 3* | | U | 2 | | U |
| 1A | D46 (Dupe for D3) | 2 | | U/E | 2 | | U |
| 1A | D4 | 2 | | U/E | 2 | | U |
| 1A | E1 | 2 | | U | 2 | | U |
| 1B | E2 | 2 | | U | 2 | | U |
| 1C | D5 | 2 | | U | 2 | | U |
| 1C | D6 | 2 | | U | 2 | | U |
| 1C | D7 | 2 | | U | 2 | | U |
| 1C | D8 | 2 | | U | 2 | | U |
| 1C | D9 | 2 | | U | 3* | | U |
| 1C | D11 | 3* | | U/E | 2 | | U |
| 1C | D45 (Dupe for D11) | 3* | | U/E | 2 | | U |
| 1C | E3 | 2 | | U | 2 | | U |
| 1C | E4 | 2 | | U | 2 | | U |
| 2A | D10 | 2 | | U/E | 2 | | U |
| 2A | D12 | 7.9 | 1.0 | E | 2 | | U |
| 2A | D13 | 2 | | U | 2 | | U |
| 2A | D14 | 2 | | U | 2 | | U |
| 2A | E5 | 2 | | U | 2 | | U |
| 2B | D15 | 2 | | U | 2 | | U |
| 2C | D16 | 4.2 | 0.6 | | 2 | | U |
| 2C | D17 | 5.5 | 1.3 | | 3* | | U |
| 2C | D44 (Dupe for D17) | 2 | | U | 2 | | U |
| 2C | D18 | 2 | | U | 2 | | U |
| 2C | D19 | 2 | | U | 2 | | U |
| 2C | D20 | 2 | | U | 4* | | U |
| 2C | D21 | 2 | | U | 2 | | U |
| 2C | E6 | 2 | | U | 2 | | U |
| 2C | E7 | 2 | | U | 2 | | U |
| 3A | D22 | 2 | | U | 2 | | U |
| 3A | D23 | 2 | | U | 2.2 | 0.3 | |
| 3A | D43 (Dupe for D23) | 2 | | U | 2 | | U |
| 3A | D24 | 4* | | U | 2 | | U |
| 3A | D25 | 2 | | U | 2 | | U |
| 3A | E8 | 2 | | U | 2 | | U |
| 3A | E9 | 7* | | U | 2 | | U |
| 3B | D26 | 2 | | U | 2 | | U |
| 3B | D27 | 2 | | U | 2 | | U |
| 3B | D28 | 2 | | U | 2 | | U |
| 3B | D42 (Dupe for D28) | 2 | | U | 2 | | U |
| 3B | D29 | 2 | | U | 2 | | U |
| 3B | E10 | 2 | | U | 2 | | U |
| 4A | D30 | 2 | | U | 2 | | U |
| 4A | D31 | 2 | | U | 2 | | U |
| 4A | D32 | 2 | | U | 2 | | U |
| 4A | D33 | 2 | | U | 2 | | U |
| 4A | D34 | 2 | | U | 2 | | U |
| 4A | D35 | 5* | | U | 3* | | U |
| 4A | D41 (Dupe for D35) | 7* | | U | 7* | | U |
| 4A | D36 | 2 | | U | 2 | | U |
| 4A | D37 | 2 | | U | 2 | | U |
| 4A | D38 | 2 | | U | 2 | | U |
| 4A | E11 | 3* | | U | 2 | | U |
| 4A | E12 | 2 | | U | 2 | | U |
| 4B | D39 | 2 | | U | 2 | | U |
| 4B | D40 | 2 | | U | 2 | | U |
| 4B | E13 | 2 | | U | 2 | | U |
| 4B | E14 | 2 | | U | 2 | | U |
| Effects-Based Reference Levels | | 3 | | | 3 | | |

TABLE C-13. PCBs IN SEDIMENTS

| River Segment | Station | Aroclor-1016 | | | Aroclor-1221 | | | Aroclor-1232 | | |
|--------------------------------|--------------------|---------------|----------------|-----------|---------------|----------------|-----------|---------------|----------------|-----------|
| | | Measured | Normalized** | Qualifier | Measured | Normalized** | Qualifier | Measured | Normalized** | Qualifier |
| | | Conc. (ug/kg) | Conc. (ug/g C) | Code | Conc. (ug/kg) | Conc. (ug/g C) | Code | Conc. (ug/kg) | Conc. (ug/g C) | Code |
| 1A | D1 | 250 | | U | 250 | | U | 250 | | U |
| 1A | D2 | 25 | | U | 25 | | U | 25 | | U |
| 1A | D3 | 25 | | U | 25 | | U | 25 | | U |
| 1A | D46 (Dupe for D3) | 25 | | U | 25 | | U | 25 | | U |
| 1A | D4 | 25 | | U | 25 | | U | 25 | | U |
| 1A | E1 | 25 | | U | 25 | | U | 25 | | U |
| 1B | E2 | 25 | | U | 25 | | U | 25 | | U |
| 1C | D5 | 25 | | U | 25 | | U | 25 | | U |
| 1C | D6 | 25 | | U | 25 | | U | 25 | | U |
| 1C | D7 | 25 | | U | 25 | | U | 25 | | U |
| 1C | D8 | 25 | | U | 25 | | U | 25 | | U |
| 1C | D9 | 25 | | U | 25 | | U | 25 | | U |
| 1C | D11 | 25 | | U | 25 | | U | 25 | | U |
| 1C | D45 (Dupe for D11) | 25 | | U | 25 | | U | 25 | | U |
| 1C | E3 | 25 | | U | 25 | | U | 25 | | U |
| 1C | E4 | 25 | | U | 25 | | U | 25 | | U |
| 2A | D10 | 25 | | U | 25 | | U | 25 | | U |
| 2A | D12 | 25 | | U | 25 | | U | 25 | | U |
| 2A | D13 | 25 | | U | 25 | | U | 25 | | U |
| 2A | D14 | 25 | | U | 25 | | U | 25 | | U |
| 2A | E5 | 25 | | U | 25 | | U | 25 | | U |
| 2B | D15 | 25 | | U | 25 | | U | 25 | | U |
| 2C | D16 | 25 | | U | 25 | | U | 25 | | U |
| 2C | D17 | 25 | | U | 25 | | U | 25 | | U |
| 2C | D44 (Dupe for D17) | 25 | | U | 25 | | U | 25 | | U |
| 2C | D18 | 25 | | U | 25 | | U | 25 | | U |
| 2C | D19 | 25 | | U | 25 | | U | 25 | | U |
| 2C | D20 | 25 | | U | 25 | | U | 25 | | U |
| 2C | D21 | 25 | | U | 25 | | U | 25 | | U |
| 2C | E6 | 25 | | U | 25 | | U | 25 | | U |
| 2C | E7 | 25 | | U | 25 | | U | 25 | | U |
| 3A | D22 | 25 | | U | 25 | | U | 25 | | U |
| 3A | D23 | 25 | | U | 25 | | U | 25 | | U |
| 3A | D43 (Dupe for D23) | 25 | | U | 25 | | U | 25 | | U |
| 3A | D24 | 25 | | U | 25 | | U | 25 | | U |
| 3A | D25 | 25 | | U | 25 | | U | 25 | | U |
| 3A | E8 | 25 | | U | 25 | | U | 25 | | U |
| 3A | E9 | 25 | | U | 25 | | U | 25 | | U |
| 3B | D26 | 25 | | U | 25 | | U | 25 | | U |
| 3B | D27 | 25 | | U | 25 | | U | 25 | | U |
| 3B | D28 | 25 | | U | 25 | | U | 25 | | U |
| 3B | D42 (Dupe for D28) | 25 | | U | 25 | | U | 25 | | U |
| 3B | D29 | 25 | | U | 25 | | U | 25 | | U |
| 3B | E10 | 25 | | U | 25 | | U | 25 | | U |
| 4A | D30 | 25 | | U | 25 | | U | 25 | | U |
| 4A | D31 | 25 | | U | 25 | | U | 25 | | U |
| 4A | D32 | 25 | | U | 25 | | U | 25 | | U |
| 4A | D33 | 25 | | U | 25 | | U | 25 | | U |
| 4A | D34 | 25 | | U | 25 | | U | 25 | | U |
| 4A | D35 | 25 | | U | 25 | | U | 25 | | U |
| 4A | D41 (Dupe for D35) | 25 | | U | 25 | | U | 25 | | U |
| 4A | D36 | 25 | | U | 25 | | U | 25 | | U |
| 4A | D37 | 25 | | U | 25 | | U | 25 | | U |
| 4A | D38 | 25 | | U | 25 | | U | 25 | | U |
| 4A | E11 | 25 | | U | 25 | | U | 25 | | U |
| 4A | E12 | 25 | | U | 25 | | U | 25 | | U |
| 4B | D39 | 25 | | U | 25 | | U | 25 | | U |
| 4B | D40 | 25 | | U | 25 | | U | 25 | | U |
| 4B | E13 | 25 | | U | 25 | | U | 25 | | U |
| 4B | E14 | 25 | | U | 25 | | U | 25 | | U |
| Effects-Based Reference Levels | | na*** | | | na*** | | | na*** | | |

U = Compound was not detected. Value given is the lower quantification limit.

* Reporting limits adjusted due to coeluting interfering peaks.

** TOC-normalized data presented only when a compound is detected.

*** Effects-based reference level not available.

| River Segment | Station | Aroclor-1242 | | | Aroclor-1248 | | | Aroclor-1254 | | |
|--------------------------------|--------------------|---------------|----------------|-----------|---------------|----------------|-----------|---------------|----------------|-----------|
| | | Measured | Normalized** | Qualifier | Measured | Normalized** | Qualifier | Measured | Normalized** | Qualifier |
| | | Conc. (ug/kg) | Conc. (ug/g C) | Code | Conc. (ug/kg) | Conc. (ug/g C) | Code | Conc. (ug/kg) | Conc. (ug/g C) | Code |
| 1A | D1 | 250 | | U | 250 | | U | 250 | | U |
| 1A | D2 | 25 | | U | 25 | | U | 25 | | U |
| 1A | D3 | 25 | | U | 25 | | U | 25 | | U |
| 1A | D46 (Dupe for D3) | 25 | | U | 25 | | U | 25 | | U |
| 1A | D4 | 25 | | U | 25 | | U | 25 | | U |
| 1A | E1 | 25 | | U | 25 | | U | 25 | | U |
| 1B | E2 | 25 | | U | 25 | | U | 25 | | U |
| 1C | D5 | 25 | | U | 25 | | U | 25 | | U |
| 1C | D6 | 25 | | U | 25 | | U | 25 | | U |
| 1C | D7 | 25 | | U | 25 | | U | 25 | | U |
| 1C | D8 | 25 | | U | 25 | | U | 25 | | U |
| 1C | D9 | 25 | | U | 25 | | U | 25 | | U |
| 1C | D11 | 25 | | U | 25 | | U | 25 | | U |
| 1C | D45 (Dupe for D11) | 25 | | U | 25 | | U | 25 | | U |
| 1C | E3 | 25 | | U | 25 | | U | 25 | | U |
| 1C | E4 | 25 | | U | 25 | | U | 25 | | U |
| 2A | D10 | 25 | | U | 25 | | U | 25 | | U |
| 2A | D12 | 25 | | U | 25 | | U | 25 | | U |
| 2A | D13 | 25 | | U | 25 | | U | 25 | | U |
| 2A | D14 | 25 | | U | 25 | | U | 25 | | U |
| 2A | E5 | 25 | | U | 25 | | U | 25 | | U |
| 2B | D15 | 25 | | U | 25 | | U | 25 | | U |
| 2C | D16 | 25 | | U | 25 | | U | 25 | | U |
| 2C | D17 | 25 | | U | 25 | | U | 25 | | U |
| 2C | D44 (Dupe for D17) | 25 | | U | 25 | | U | 25 | | U |
| 2C | D18 | 25 | | U | 25 | | U | 25 | | U |
| 2C | D19 | 25 | | U | 25 | | U | 85 | 47 | |
| 2C | D20 | 25 | | U | 25 | | U | 25 | | U |
| 2C | D21 | 25 | | U | 25 | | U | 25 | | U |
| 2C | E6 | 25 | | U | 25 | | U | 25 | | U |
| 2C | E7 | 25 | | U | 25 | | U | 25 | | U |
| 3A | D22 | 25 | | U | 25 | | U | 25 | | U |
| 3A | D23 | 25 | | U | 25 | | U | 25 | | U |
| 3A | D43 (Dupe for D23) | 25 | | U | 25 | | U | 25 | | U |
| 3A | D24 | 25 | | U | 25 | | U | 25 | | U |
| 3A | D25 | 25 | | U | 25 | | U | 25 | | U |
| 3A | E8 | 25 | | U | 25 | | U | 25 | | U |
| 3A | E9 | 25 | | U | 25 | | U | 25 | | U |
| 3B | D26 | 25 | | U | 25 | | U | 25 | | U |
| 3B | D27 | 25 | | U | 25 | | U | 25 | | U |
| 3B | D28 | 25 | | U | 25 | | U | 25 | | U |
| 3B | D42 (Dupe for D28) | 25 | | U | 25 | | U | 25 | | U |
| 3B | D29 | 25 | | U | 25 | | U | 25 | | U |
| 3B | E10 | 25 | | U | 25 | | U | 25 | | U |
| 4A | D30 | 25 | | U | 25 | | U | 25 | | U |
| 4A | D31 | 25 | | U | 25 | | U | 25 | | U |
| 4A | D32 | 25 | | U | 25 | | U | 25 | | U |
| 4A | D33 | 25 | | U | 25 | | U | 25 | | U |
| 4A | D34 | 25 | | U | 25 | | U | 25 | | U |
| 4A | D35 | 25 | | U | 25 | | U | 25 | | U |
| 4A | D41 (Dupe for D35) | 25 | | U | 25 | | U | 25 | | U |
| 4A | D36 | 25 | | U | 25 | | U | 25 | | U |
| 4A | D37 | 25 | | U | 25 | | U | 25 | | U |
| 4A | D38 | 25 | | U | 25 | | U | 25 | | U |
| 4A | E11 | 25 | | U | 25 | | U | 25 | | U |
| 4A | E12 | 25 | | U | 25 | | U | 25 | | U |
| 4B | D39 | 25 | | U | 25 | | U | 25 | | U |
| 4B | D40 | 25 | | U | 25 | | U | 25 | | U |
| 4B | E13 | 25 | | U | 25 | | U | 25 | | U |
| 4B | E14 | 25 | | U | 25 | | U | 25 | | U |
| Effects-Based Reference Levels | | na*** | | | na*** | | | na*** | | |

| River Segment | Station | Aroclor-1260 | | |
|--------------------------------|--------------------|---------------|----------------|-----------|
| | | Measured | Normalized** | Qualifier |
| | | Conc. (ug/kg) | Conc. (ug/g C) | Code |
| 1A | D1 | 250 | | U |
| 1A | D2 | 25 | | U |
| 1A | D3 | 25 | | U |
| 1A | D46 (Dupe for D3) | 25 | | U |
| 1A | D4 | 25 | | U |
| 1A | E1 | 25 | | U |
| 1B | E2 | 25 | | U |
| 1C | D5 | 25 | | U |
| 1C | D6 | 25 | | U |
| 1C | D7 | 25 | | U |
| 1C | D8 | 25 | | U |
| 1C | D9 | 25 | | U |
| 1C | D11 | 25 | | U |
| 1C | D45 (Dupe for D11) | 25 | | U |
| 1C | E3 | 25 | | U |
| 1C | E4 | 25 | | U |
| 2A | D10 | 25 | | U |
| 2A | D12 | 25 | | U |
| 2A | D13 | 25 | | U |
| 2A | D14 | 25 | | U |
| 2A | E5 | 25 | | U |
| 2B | D15 | 25 | | U |
| 2C | D16 | 25 | | U |
| 2C | D17 | 25 | | U |
| 2C | D44 (Dupe for D17) | 25 | | U |
| 2C | D18 | 25 | | U |
| 2C | D19 | 25 | | U |
| 2C | D20 | 25 | | U |
| 2C | D21 | 25 | | U |
| 2C | E6 | 25 | | U |
| 2C | E7 | 25 | | U |
| 3A | D22 | 25 | | U |
| 3A | D23 | 25 | | U |
| 3A | D43 (Dupe for D23) | 25 | | U |
| 3A | D24 | 25 | | U |
| 3A | D25 | 25 | | U |
| 3A | E8 | 25 | | U |
| 3A | E9 | 25 | | U |
| 3B | D26 | 25 | | U |
| 3B | D27 | 25 | | U |
| 3B | D28 | 25 | | U |
| 3B | D42 (Dupe for D28) | 25 | | U |
| 3B | D29 | 25 | | U |
| 3B | E10 | 25 | | U |
| 4A | D30 | 25 | | U |
| 4A | D31 | 25 | | U |
| 4A | D32 | 25 | | U |
| 4A | D33 | 25 | | U |
| 4A | D34 | 25 | | U |
| 4A | D35 | 25 | | U |
| 4A | D41 (Dupe for D35) | 25 | | U |
| 4A | D36 | 25 | | U |
| 4A | D37 | 25 | | U |
| 4A | D38 | 25 | | U |
| 4A | E11 | 25 | | U |
| 4A | E12 | 25 | | U |
| 4B | D39 | 25 | | U |
| 4B | D40 | 25 | | U |
| 4B | E13 | 25 | | U |
| 4B | E14 | 25 | | U |
| Effects-Based Reference Levels | | na*** | | |

TABLE C-14. DIOXINS AND FURANS IN SEDIMENTS

| River Segment | Station | 2,3,7,8-TCDD | | | 1,2,3,7,8-PeCDD | | | 1,2,3,4,7,8-HxCDD | | |
|--------------------------------|--------------------|-----------------------|-----------------------------|----------------|-----------------------|-----------------------------|----------------|-----------------------|-----------------------------|----------------|
| | | Measured Conc. (pg/g) | Normalized** Conc. (ug/g C) | Qualifier Code | Measured Conc. (pg/g) | Normalized** Conc. (ug/g C) | Qualifier Code | Measured Conc. (pg/g) | Normalized** Conc. (ug/g C) | Qualifier Code |
| 1A | D4 | 0.23 | 0.02 | | 0.22 | 0.02 | M | 0.51 | 0.05 | |
| 1C | D5 | 0.12 | 0.03 | | 0.17 | 0.05 | M | 0.15 | 0.04 | |
| 1C | D6 | 0.15 | 0.03 | | 0.16 | 0.03 | | 0.17 | 0.04 | M |
| 1C | Lab Dupe for D6 | 0.17 | 0.04 | | 0.19 | 0.04 | M | 0.19 | 0.04 | |
| 1C | D8 | 0.16 | 0.06 | | 0.14 | 0.05 | M | 0.19 | 0.07 | |
| 1C | D11 | 0.22 | 0.03 | | 0.12 | 0.02 | | 0.38 | 0.05 | |
| 2A | D10 | 0.26 | 0.03 | M | 0.52 | 0.07 | | 1.92 | 0.24 | |
| 2A | D45 (Dupe for D11) | 0.25 | 0.03 | | 0.16 | 0.02 | | 0.4 | 0.05 | |
| 2A | D14 | 0.19 | 0.07 | | 0.23 | 0.09 | | 0.4 | 0.15 | M |
| 2B | D15 | 0.17 | 0.03 | | 0.16 | 0.02 | | 0.26 | 0.04 | M |
| 2C | D16 | 0.35 | 0.05 | | 0.23 | 0.03 | | 0.74 | 0.10 | |
| 2C | D18 | 0.13 | 0.02 | | 0.2 | 0.03 | | 0.49 | 0.07 | |
| 2C | D19 | 0.07 | 0.04 | M | 0.08 | | U | 0.15 | 0.08 | |
| 2C | D20 | 0.24 | 0.03 | | 0.12 | 0.01 | | 0.31 | 0.04 | |
| 3A | D23 | 0.19 | 0.03 | | 0.13 | 0.02 | | 0.15 | 0.02 | M |
| 3A | D24 | 0.26 | 0.03 | M | 3.38 | 0.45 | M | 1.37 | 0.18 | |
| 3B | D26 | 0.1 | | U | 0.12 | | U | 0.1 | 0.05 | M |
| 3B | D28 | 0.18 | 0.03 | M | 0.21 | 0.03 | M | 0.65 | 0.10 | |
| 4A | D30 | 0.12 | 0.02 | | 0.09 | 0.02 | | 0.17 | 0.03 | M |
| 4A | D35 | 0.28 | 0.01 | | 0.13 | | U | 0.4 | 0.01 | |
| 4A | D38 | 0.09 | | U | 0.1 | | U | 0.17 | | U |
| 4B | D40 | 0.21 | 0.05 | M | 0.18 | 0.04 | | 0.27 | 0.06 | M |
| 4B | Lab Dupe for D40 | 0.17 | 0.04 | | 0.13 | 0.03 | M | 0.2 | 0.04 | M |
| Effects-Based Reference Levels | | na*** | | | na*** | | | na*** | | |

U = Compound was not detected. Value given is the lower quantification limit.

M = Estimated maximum possible concentration.

* Measured using a DB-225 column.

** TOC-normalized data presented only when a compound is detected.

*** Effects-based reference level not available.

| River Segment | Station | 1,2,3,6,7,8-HxCDD | | | 1,2,3,7,8,9-HxCDD | | | 1,2,3,4,6,7,8-HpCDD | | |
|--------------------------------|--------------------|-----------------------|-----------------------------|----------------|-----------------------|-----------------------------|----------------|-----------------------|-----------------------------|----------------|
| | | Measured Conc. (pg/g) | Normalized** Conc. (ug/g C) | Qualifier Code | Measured Conc. (pg/g) | Normalized** Conc. (ug/g C) | Qualifier Code | Measured Conc. (pg/g) | Normalized** Conc. (ug/g C) | Qualifier Code |
| 1A | D4 | 1.91 | 0.17 | | 1.58 | 0.14 | | 26.2 | 2.32 | |
| 1C | D5 | 0.78 | 0.21 | M | 0.58 | 0.16 | | 12.6 | 3.41 | |
| 1C | D6 | 1.14 | 0.25 | | 0.74 | 0.16 | | 8.75 | 1.90 | |
| 1C | Lab Dupe for D6 | 1.98 | 0.43 | | 1.04 | 0.23 | M | 10.1 | 2.20 | |
| 1C | D8 | 0.59 | 0.23 | | 0.37 | 0.14 | | 5.93 | 2.28 | |
| 1C | D11 | 1.43 | 0.18 | | 1.19 | 0.15 | | 23.8 | 2.98 | |
| 2A | D10 | 5.95 | 0.75 | | 5.04 | 0.64 | | 132 | 16.71 | |
| 2A | D45 (Dupe for D11) | 1.43 | 0.18 | | 0.94 | 0.12 | | 27.1 | 3.39 | |
| 2A | D14 | 1.21 | 0.47 | | 1 | 0.38 | | 12.7 | 4.88 | |
| 2B | D15 | 0.99 | 0.15 | | 0.83 | 0.12 | | 12.1 | 1.78 | |
| 2C | D16 | 1.67 | 0.23 | | 1.59 | 0.22 | | 28.8 | 3.95 | |
| 2C | D18 | 1.93 | 0.28 | | 2.39 | 0.35 | | 27.3 | 3.96 | |
| 2C | D19 | 0.44 | 0.24 | | 0.2 | 0.11 | | 16.5 | 9.17 | |
| 2C | D20 | 1.48 | 0.17 | | 0.89 | 0.10 | M | 54.3 | 6.39 | |
| 3A | D23 | 1.02 | 0.15 | | 0.58 | 0.09 | | 15.4 | 2.26 | |
| 3A | D24 | 5.29 | 0.71 | | 2.52 | 0.34 | | 188 | 25.07 | |
| 3B | D26 | 0.61 | 0.32 | | 0.44 | 0.23 | | 6.38 | 3.36 | |
| 3B | D28 | 1.61 | 0.24 | | 1.13 | 0.17 | | 41.4 | 6.27 | |
| 4A | D30 | 0.82 | 0.14 | | 0.57 | 0.10 | M | 23.03 | 3.97 | |
| 4A | D35 | 1.39 | 0.03 | | 1 | 0.02 | | 20 | 0.49 | |
| 4A | D38 | 0.14 | 0.20 | M | 0.1 | 0.14 | | 0.9 | 1.29 | |
| 4B | D40 | 0.59 | 0.13 | | 0.84 | 0.19 | | 9.25 | 2.06 | |
| 4B | Lab Dupe for D40 | 0.42 | 0.09 | | 0.59 | 0.13 | M | 6.41 | 1.42 | |
| Effects-Based Reference Levels | | na*** | | | na*** | | | na*** | | |

| River Segment | Station | OCDD | | | 2,3,7,8-TCDF | | | 1,2,3,7,8-PeCDF | | |
|--------------------------------|--------------------|-----------------------|-----------------------------|----------------|-----------------------|-----------------------------|----------------|-----------------------|-----------------------------|----------------|
| | | Measured Conc. (pg/g) | Normalized** Conc. (ug/g C) | Qualifier Code | Measured Conc. (pg/g) | Normalized** Conc. (ug/g C) | Qualifier Code | Measured Conc. (pg/g) | Normalized** Conc. (ug/g C) | Qualifier Code |
| 1A | D4 | 272 | 24.07 | | 2.06 | 0.18 | * | 0.3 | 0.03 | M |
| 1C | D5 | 159 | 42.97 | | 1.23 | 0.33 | * | 0.79 | 0.21 | |
| 1C | D6 | 64.6 | 14.04 | | 1.25 | 0.27 | * | 0.24 | 0.05 | M |
| 1C | Lab Dupe for D6 | 57.9 | 12.59 | | 1.33 | 0.29 | * | 0.5 | 0.11 | |
| 1C | D8 | 45.9 | 17.65 | | 0.96 | 0.37 | * | 0.24 | 0.09 | |
| 1C | D11 | 217 | 27.13 | | 1.93 | 0.24 | * | 0.36 | 0.05 | M |
| 2A | D10 | 768 | 97.22 | | 2.09 | 0.26 | * | 0.69 | 0.09 | M |
| 2A | D45 (Dupe for D11) | 244 | 30.50 | | 1.96 | 0.25 | * | 0.25 | 0.03 | |
| 2A | D14 | 103 | 39.62 | | 1.17 | 0.45 | * | 0.27 | 0.10 | |
| 2B | D15 | 105 | 15.44 | | 1.34 | 0.20 | * | 0.29 | 0.04 | |
| 2C | D16 | 303 | 41.51 | | 2.87 | 0.39 | * | 0.57 | 0.08 | |
| 2C | D18 | 219 | 31.74 | | 1.3 | 0.19 | * | 1.37 | 0.20 | |
| 2C | D19 | 129 | 71.67 | | 0.82 | 0.46 | * | 0.31 | 0.17 | M |
| 2C | D20 | 566 | 66.59 | | 2.07 | 0.24 | * | 0.17 | 0.02 | M |
| 3A | D23 | 139 | 20.44 | | 1.92 | 0.28 | * | 0.19 | 0.03 | |
| 3A | D24 | 1480 | 197.33 | | 3.23 | 0.43 | * | 1.14 | 0.15 | |
| 3B | D26 | 53.76 | 28.29 | | 0.67 | 0.35 | * | 0.24 | 0.13 | M |
| 3B | D28 | 369 | 55.91 | | 1.44 | 0.22 | * | 0.26 | 0.04 | M |
| 4A | D30 | 221 | 38.10 | | 1.72 | 0.30 | * | 0.19 | 0.03 | M |
| 4A | D35 | 193 | 4.75 | | 2.94 | 0.07 | * | 1.14 | 0.03 | |
| 4A | D38 | 6.76 | 9.66 | | 0.06 | 0.09 | * | 0.07 | | U |
| 4B | D40 | 71.5 | 15.89 | | 0.98 | 0.22 | * | 0.94 | 0.21 | |
| 4B | Lab Dupe for D40 | 64.6 | 14.36 | | 0.65 | 0.14 | * | 0.32 | 0.07 | |
| Effects-Based Reference Levels | | na*** | | | na*** | | | na*** | | |

| River Segment | Station | 2,3,4,7,8-PeCDF | | | 1,2,3,4,7,8-HxCDF | | | 1,2,3,6,7,8-HxCDF | | |
|--------------------------------|--------------------|-----------------------|-----------------------------|----------------|-----------------------|-----------------------------|----------------|-----------------------|-----------------------------|----------------|
| | | Measured Conc. (pg/g) | Normalized** Conc. (ug/g C) | Qualifier Code | Measured Conc. (pg/g) | Normalized** Conc. (ug/g C) | Qualifier Code | Measured Conc. (pg/g) | Normalized** Conc. (ug/g C) | Qualifier Code |
| 1A | D4 | 0.3 | 0.03 | M | 0.67 | 0.06 | M | 0.27 | 0.02 | |
| 1C | D5 | 0.54 | 0.15 | | 1.69 | 0.46 | | 0.63 | 0.17 | |
| 1C | D6 | 0.2 | 0.04 | | 0.37 | 0.08 | | 0.17 | 0.04 | |
| 1C | Lab Dupe for D6 | 0.25 | 0.05 | M | 2.09 | 0.45 | | 0.5 | 0.11 | |
| 1C | D8 | 0.16 | 0.06 | M | 0.42 | 0.16 | | 0.14 | 0.05 | |
| 1C | D11 | 0.24 | 0.03 | | 0.51 | 0.06 | M | 0.21 | 0.03 | M |
| 2A | D10 | 0.43 | 0.05 | M | 1.75 | 0.22 | | 1.41 | 0.18 | M |
| 2A | D45 (Dupe for D11) | 0.27 | 0.03 | | 0.54 | 0.07 | | 0.28 | 0.04 | |
| 2A | D14 | 0.24 | 0.09 | | 0.61 | 0.23 | | 0.23 | 0.09 | M |
| 2B | D15 | 0.23 | 0.03 | | 0.73 | 0.11 | | 0.31 | 0.05 | |
| 2C | D16 | 0.49 | 0.07 | | 1.14 | 0.16 | | 0.37 | 0.05 | M |
| 2C | D18 | 1.46 | 0.21 | | 7.47 | 1.08 | | 2.22 | 0.32 | |
| 2C | D19 | 0.28 | 0.16 | | 0.6 | 0.33 | | 0.27 | 0.15 | M |
| 2C | D20 | 0.28 | 0.03 | | 0.61 | 0.07 | | 0.25 | 0.03 | |
| 3A | D23 | 0.21 | 0.03 | | 0.43 | 0.06 | | 0.18 | 0.03 | |
| 3A | D24 | 0.83 | 0.11 | | 2.18 | 0.29 | | 0.91 | 0.12 | |
| 3B | D26 | 0.2 | 0.11 | | 0.7 | 0.37 | | 0.23 | 0.12 | |
| 3B | D28 | 0.32 | 0.05 | | 0.74 | 0.11 | M | 0.43 | 0.07 | |
| 4A | D30 | 0.16 | 0.03 | | 0.37 | 0.06 | | 0.16 | 0.03 | |
| 4A | D35 | 0.18 | 0.00 | | 2.99 | 0.07 | | 0.94 | 0.02 | |
| 4A | D38 | 0.07 | | U | 0.31 | 0.44 | | 0.11 | 0.16 | M |
| 4B | D40 | 0.69 | 0.15 | | 2.78 | 0.62 | | 1.06 | 0.24 | |
| 4B | Lab Dupe for D40 | 0.28 | 0.06 | M | 0.76 | 0.17 | | 0.3 | 0.07 | |
| Effects-Based Reference Levels | | na*** | | | na*** | | | na*** | | |

| River Segment | Station | 2,3,4,6,7,8-HxCDF | | | 1,2,3,7,8,9-HxCDF | | | 1,2,3,4,6,7,8-HpCDF | | |
|--------------------------------|--------------------|-----------------------|-----------------------------|----------------|-----------------------|-----------------------------|----------------|-----------------------|-----------------------------|----------------|
| | | Measured Conc. (pg/g) | Normalized** Conc. (ug/g C) | Qualifier Code | Measured Conc. (pg/g) | Normalized** Conc. (ug/g C) | Qualifier Code | Measured Conc. (pg/g) | Normalized** Conc. (ug/g C) | Qualifier Code |
| 1A | D4 | 0.66 | 0.06 | M | 0.07 | 0.01 | M | 4.65 | 0.41 | |
| 1C | D5 | 0.86 | 0.23 | M | 0.1 | 0.03 | M | 4.5 | 1.22 | |
| 1C | D6 | 0.3 | 0.07 | | 0.21 | | U | 2.24 | 0.49 | |
| 1C | Lab Dupe for D6 | 0.54 | 0.12 | M | 0.2 | | U | 4.31 | 0.94 | |
| 1C | D8 | 0.43 | 0.17 | | 0.19 | | U | 1.52 | 0.58 | |
| 1C | D11 | 0.16 | 0.02 | | 1.87 | 0.23 | M | 2.83 | 0.35 | |
| 2A | D10 | 1.4 | 0.18 | | 0.08 | 0.01 | M | 14.8 | 1.87 | |
| 2A | D45 (Dupe for D11) | 0.3 | 0.04 | | 0.18 | 0.02 | | 2.91 | 0.36 | |
| 2A | D14 | 0.36 | 0.14 | | 0.14 | 0.05 | M | 2.75 | 1.06 | |
| 2B | D15 | 0.43 | 0.06 | | 0.18 | 0.03 | | 3.12 | 0.46 | |
| 2C | D16 | 0.61 | 0.08 | | 0.27 | 0.04 | M | 5.14 | 0.70 | |
| 2C | D18 | 6.21 | 0.90 | | 7.21 | 1.04 | M | 27.8 | 4.03 | |
| 2C | D19 | 0.3 | 0.17 | | 0.07 | 0.04 | M | 2.06 | 1.14 | |
| 2C | D20 | 0.55 | 0.06 | M | 0.16 | 0.02 | M | 3.42 | 0.40 | |
| 3A | D23 | 0.47 | 0.07 | | 0.15 | 0.02 | M | 2.45 | 0.36 | |
| 3A | D24 | 0.65 | 0.09 | | 0.09 | 0.01 | | 13.05 | 1.74 | |
| 3B | D26 | 0.38 | 0.20 | M | 0.08 | 0.04 | M | 1.67 | 0.88 | |
| 3B | D28 | 0.44 | 0.07 | M | 0.24 | | U | 4.3 | 0.65 | |
| 4A | D30 | 0.37 | 0.06 | | 0.1 | 0.02 | M | 2.37 | 0.41 | |
| 4A | D35 | 1.02 | 0.03 | | 0.22 | 0.01 | | 6.46 | 0.16 | |
| 4A | D38 | 0.24 | 0.34 | M | 0.1 | | U | 0.51 | 0.73 | |
| 4B | D40 | 1.25 | 0.28 | | 0.15 | 0.03 | M | 6.38 | 1.42 | |
| 4B | Lab Dupe for D40 | 0.53 | 0.12 | | 0.22 | 0.05 | | 2.08 | 0.46 | |
| Effects-Based Reference Levels | | na*** | | | na*** | | | na*** | | |

| River Segment | Station | 1,2,3,4,7,8,9-HpCDF | | | OCDF | | |
|--------------------------------|--------------------|-----------------------|-----------------------------|----------------|-----------------------|-----------------------------|----------------|
| | | Measured Conc. (pg/g) | Normalized** Conc. (ug/g C) | Qualifier Code | Measured Conc. (pg/g) | Normalized** Conc. (ug/g C) | Qualifier Code |
| 1A | D4 | 0.31 | 0.03 | | 15.1 | 1.34 | |
| 1C | D5 | 1.14 | 0.31 | | 14.9 | 4.03 | |
| 1C | D6 | 0.42 | | U | 4.64 | 1.01 | |
| 1C | Lab Dupe for D6 | 0.66 | 0.14 | | 6.27 | 1.36 | |
| 1C | D8 | 0.25 | 0.10 | | 4.48 | 1.72 | M |
| 1C | D11 | 0.31 | 0.04 | M | 6.76 | 0.85 | |
| 2A | D10 | 1.19 | 0.15 | | 34.6 | 4.38 | |
| 2A | D45 (Dupe for D11) | 0.25 | 0.03 | | 8.22 | 1.03 | |
| 2A | D14 | 0.25 | 0.10 | M | 7.86 | 3.02 | |
| 2B | D15 | 0.45 | 0.07 | M | 9.45 | 1.39 | |
| 2C | D16 | 0.75 | 0.10 | | 8.61 | 1.18 | |
| 2C | D18 | 15.5 | 2.25 | | 128 | 18.55 | |
| 2C | D19 | 0.31 | 0.17 | | 6.15 | 3.42 | |
| 2C | D20 | 0.37 | 0.04 | M | 12.5 | 1.47 | |
| 3A | D23 | 0.28 | 0.04 | | 6.3 | 0.93 | |
| 3A | D24 | 1.14 | 0.15 | | 36.56 | 4.67 | |
| 3B | D26 | 0.35 | 0.18 | | 3.58 | 1.88 | |
| 3B | D28 | 0.37 | 0.06 | | 9.84 | 1.49 | |
| 4A | D30 | 0.12 | 0.02 | M | 6.89 | 1.19 | |
| 4A | D35 | 1.76 | 0.04 | | 16.9 | 0.42 | |
| 4A | D38 | 0.15 | 0.21 | | 1.19 | 1.70 | |
| 4B | D40 | 1.61 | 0.36 | | 12.5 | 2.78 | |
| 4B | Lab Dupe for D40 | 0.5 | 0.11 | | 5.14 | 1.14 | |
| Effects-Based Reference Levels | | na*** | | | na*** | | |

TABLE C-15. RADIONUCLIDES IN SEDIMENTS

| River Segment | Station | Americium-241 (430 yr)* | | Cesium-137 (30 yr)* | | Cobalt-60 (5.3 yr)* | |
|---------------|---------|-------------------------|---------------|---------------------|---------------|---------------------|---------------|
| | | Activity (pCi/g) | LLD** (pCi/g) | Activity (pCi/g) | LLD** (pCi/g) | Activity (pCi/g) | LLD** (pCi/g) |
| 1C | D8 | 0.000 ± 0.003 | 0.006 | 0.07 ± 0.03 | NA | 0.03 ± 0.02 | 0.03 |
| 2A | D14 | 0.002 ± 0.003 | 0.004 | 0.07 ± 0.02 | NA | 0.02 ± 0.02 | 0.03 |
| 2C | D20 | 0.000 ± 0.002 | 0.003 | 0.19 ± 0.03 | NA | 0.02 ± 0.02 | 0.04 |
| 3B | D28 | 0.000 ± 0.002 | 0.003 | 0.11 ± 0.02 | NA | -0.001 ± 0.002 | 0.05 |
| 4A | D35 | 0.000 ± 0.002 | 0.003 | 0.25 ± 0.04 | NA | 0.05 ± 0.03 | 0.05 |
| 4B | D40 | 0.000 ± 0.001 | 0.003 | 0.29 ± 0.03 | NA | 0.03 ± 0.02 | 0.04 |

*Physical half-life of radionuclide.

**Lower limit of detection.

| River Segment | Station | Europium-152 (12 yr)* | | Europium-155 (1.8 yr)* | | Plutonium-239/240 (24,000 yr)* | |
|---------------|---------|-----------------------|---------------|------------------------|---------------|--------------------------------|---------------|
| | | Activity (pCi/g) | LLD** (pCi/g) | Activity (pCi/g) | LLD** (pCi/g) | Activity (pCi/g) | LLD** (pCi/g) |
| 1C | D8 | -0.02 ± 0.05 | 0.09 | 0.04 ± 0.05 | 0.09 | 0.001 ± 0.001 | 0.001 |
| 2A | D14 | 0.02 ± 0.05 | 0.08 | -0.01 ± 0.04 | 0.07 | 0.002 ± 0.001 | 0.001 |
| 2C | D20 | 0.04 ± 0.06 | 0.10 | 0.03 ± 0.05 | 0.09 | 0.003 ± 0.001 | 0.001 |
| 3B | D28 | -0.003 ± 0.052 | 0.09 | 0.08 ± 0.05 | 0.10 | 0.001 ± 0.001 | 0.001 |
| 4A | D35 | 0.11 ± 0.08 | NA | 0.07 ± 0.06 | 0.1 | 0.002 ± 0.002 | 0.002 |
| 4B | D40 | 0.14 ± 0.06 | NA | 0.04 ± 0.05 | 0.08 | 0.005 ± 0.002 | 0.001 |

| River Segment | Station | Plutonium-238 (88 yr)* | |
|---------------|---------|------------------------|---------------|
| | | Activity (pCi/g) | LLD** (pCi/g) |
| 1C | D8 | 0.000 ± 0.001 | 0.002 |
| 2A | D14 | -0.001 ± 0.001 | 0.002 |
| 2C | D20 | 0.000 ± 0.001 | 0.002 |
| 3B | D28 | 0.000 ± 0.001 | 0.002 |
| 4A | D35 | 0.000 ± 0.003 | 0.006 |
| 4B | D40 | 0.000 ± 0.001 | 0.003 |

TABLE C-16. BUTYL TIN IN SEDIMENTS

| River Segment | Station | Triethyl butyl tin | | | Diethyl dibutyl tin | | | Ethyl tributyl tin | | |
|--------------------------------|-------------------|------------------------|-----------------------------|----------------|------------------------|-----------------------------|----------------|------------------------|-----------------------------|----------------|
| | | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code | Measured Conc. (ug/kg) | Normalized** Conc. (ug/g C) | Qualifier Code |
| 1A | D2 | 11.0 | | E/U | 11.0 | | E/U | 11.0 | | E/U |
| 1A | D3 | 6.9 | 1.2 | E/J | 6.6 | 1.1 | E/J | 7.8 | | E/U |
| 1A | D46 (Dupe for D3) | 4.3 | 0.7 | E/J | 7.8 | | E/U | 7.8 | | E/U |
| 2A | D12 | 5.2 | 0.7 | E/J | 10.0 | 1.3 | E | 21.0 | 2.7 | E |
| 2C | D19 | 110.0 | 61.1 | E | 7.4 | | E/U | 28.0 | 15.6 | E |
| 3A | D22 | 6.0 | 0.4 | E/J | 11.0 | 0.7 | E | 12.0 | 0.8 | E/M |
| 3A | D24 | 6.8 | 0.9 | E/J | 13.0 | 1.7 | E | 27.0 | 3.6 | E |
| 3B | D29 | 2.9 | 0.7 | E/J | 6.3 | 1.5 | E/J | 7.1 | 1.7 | E/M |
| 4A | D31 | 3.4 | 0.8 | E/J | 6.1 | 1.4 | E/J | 7.1 | | E/U |
| 4A | D37 | 7.5 | | E/U | 7.5 | | E/U | 7.5 | | E/U |
| 4B | D40 | 7.2 | | E/U | 7.2 | | E/U | 7.2 | | E/U |
| Effects-Based Reference Levels | | na*** | | | na*** | | | na*** | | |

U = Compound was not detected. Value given is the lower quantification limit.

E = Value estimated due to holding time exceedance.

J = Estimated value less than the specified detection limit.

M = Low spectral match parameters may affect the estimated value.

** TOC-normalized data presented only when a compound is detected.

*** Effects-based reference level not available.

APPENDIX D

TISSUE BIOACCUMULATION DATA

- D1. CARP BIOACCUMULATION DATA**
- D2. CRAYFISH BIOACCUMULATION DATA**
- D3. PEAMOUTH BIOACCUMULATION DATA**
- D4. WHITE STURGEON BIOACCUMULATION DATA**
- D5. LARGESCALE SUCKER BIOACCUMULATION DATA**

APPENDIX D1. CARP TISSUE BIOACCUMULATION DATA

- D1-0. PERCENT LIPID AND LENGTH/WEIGHT DATA
- D1-1. METALS IN CARP WHOLE-BODY COMPOSITES
- D1-2. PHENOLIC COMPOUNDS IN CARP WHOLE-BODY COMPOSITES
- D1-3. SEMIVOLATILES IN CARP WHOLE-BODY COMPOSITES: HALOGENATED ETHERS
- D1-4. SEMIVOLATILES IN CARP WHOLE-BODY COMPOSITES: NITROAROMATICS
- D1-5. SEMIVOLATILES IN CARP WHOLE-BODY COMPOSITES: NITROSAMINES
- D1-6. SEMIVOLATILES IN CARP WHOLE-BODY COMPOSITES: NAPHTHALENES
- D1-7. SEMIVOLATILES IN CARP WHOLE-BODY COMPOSITES: POLYNUCLEAR AROMATICS
- D1-8. SEMIVOLATILES IN CARP WHOLE-BODY COMPOSITES: CHLORINATED BENZENES
- D1-9. SEMIVOLATILES IN CARP WHOLE-BODY COMPOSITES: BENZIDINES
- D1-10. SEMIVOLATILES IN CARP WHOLE-BODY COMPOSITES: PHTHALATE ESTERS
- D1-11. PESTICIDES IN CARP WHOLE-BODY COMPOSITES
- D1-12. PCBs IN CARP WHOLE-BODY COMPOSITES
- D1-13. DIOXINS AND FURANS IN CARP WHOLE-BODY COMPOSITES

(Note: All concentrations are presented on a wet-weight basis)

TABLE D1-0. CARP LIPID AND SIZE DATA

| River Segment | Station | Latitude | Longitude | Percent Lipid | Average Weight (g) | Minimum Weight (g) | Maximum Weight (g) | Average Length (cm) | Minimum Length (cm) | Maximum Length (cm) |
|---------------|---------|--------------|---------------|---------------|--------------------|--------------------|--------------------|---------------------|---------------------|---------------------|
| 3A | D23 | 45-57-20.1 N | 122-48-15.8 W | 2.50 | 1300 | 475 | 2000 | 39.9 | 28.7 | 45.3 |
| 3A | D24 | 45-52-22.5 N | 122-47-54.9 W | 6.51 | 587 | 250 | 1050 | 31.2 | 24.4 | 39.4 |
| 3B | D26 | 45-46-52.5 N | 122-46-09.3 W | 5.83 | 1670 | 1100 | 2750 | 43.0 | 38.5 | 51.3 |
| 3B | D28 | 45-42-15.7 N | 122-45-35.3 W | 2.62 | 1264 | 450 | 1760 | 38.6 | 28.0 | 44.0 |
| 3B | D29 | 45-40-07.0 N | 122-44-54.7 W | 2.27 | 1805 | 1150 | 3125 | 44.7 | 39.5 | 55.0 |
| 4A | D31 | 45-36-33.8 N | 122-40-33.2 W | 5.96 | 1647 | 1400 | 2420 | 43.4 | 40.0 | 52.0 |
| 4A | D35 | 45-34-28.4 N | 122-26-23.9 W | 3.97 | 2380 | 1900 | 3300 | 43.3 | 39.0 | 49.0 |
| 4B | D38 | 45-33-32.5 N | 122-19-03.6 W | 3.29 | 1800 | 1500 | 2100 | 41.4 | 39.0 | 44.0 |
| 4B | D40 | 45-37-20.5 N | 122-01-13.7 W | 4.02 | 2860 | 2000 | 3000 | 47.0 | 42.0 | 52.0 |

D1-0:1

TABLE D1-1. METALS IN CARP WHOLE-BODY COMPOSITES

| River Segment | Station | Antimony | | Arsenic | | Barium | | Cadmium | | Copper | | Lead | |
|---------------|---------|----------------------------|-------------------|----------------------------|-------------------|----------------------------|-------------------|----------------------------|-------------------|----------------------------|-------------------|----------------------------|-------------------|
| | | Measured* Conc. (mg/kg) | Qualifier Code | Measured* Conc. (mg/kg) | Qualifier Code | Measured* Conc. (mg/kg) | Qualifier Code | Measured* Conc. (mg/kg) | Qualifier Code | Measured* Conc. (mg/kg) | Qualifier Code | Measured* Conc. (mg/kg) | Qualifier Code |
| 3A | D24 | 0.39 | U/E | 0.52 | U | 2.6 | E | 0.03 | | 1.48 | E | 0.10 | E |
| 3B | D26 | 0.48 | U/E | 0.64 | U | 1.6 | E | 0.35 | | 1.82 | E | 0.13 | E |
| 3B | D28 | 0.41 | U/E | 0.55 | U | 3.3 | E | 0.11 | | 1.47 | E | 0.22 | E |
| 3B | D29 | 0.37 | U/E | 0.49 | U | 2.9 | E | 0.10 | | 1.20 | E | 0.07 | E |
| 4A | D31 | 0.30 | U/E | 0.40 | U | 1.4 | E | 0.04 | | 1.46 | E | 0.02 | E |
| 4A | D35 | 0.38 | U/E | 0.51 | U | 2.2 | E | 0.08 | | 1.37 | E | 0.18 | E |
| 4B | D38 | 0.36 | U/E | 0.49 | U | 3.4 | E | 0.29 | | 1.68 | E | 0.22 | E |
| 4B | D40 | 0.44 | U/E | 0.58 | U | 1.3 | E | 0.12 | | 1.51 | E | 0.23 | E |

U = Compound was not detected. Value given is the lower quantification limit.

E = Estimated value.

* Metals data normalized to wet weight.

| River Segment | Station | Mercury | | Nickel | | Selenium | | Silver | | Zinc | |
|---------------|---------|----------------------------|-------------------|----------------------------|-------------------|----------------------------|-------------------|----------------------------|-------------------|----------------------------|-------------------|
| | | Measured* Conc. (mg/kg) | Qualifier Code | Measured* Conc. (mg/kg) | Qualifier Code | Measured* Conc. (mg/kg) | Qualifier Code | Measured* Conc. (mg/kg) | Qualifier Code | Measured* Conc. (mg/kg) | Qualifier Code |
| 3A | D24 | 0.056 | E | 0.91 | U/E | 0.52 | U | 0.23 | U/E | 88.4 | E |
| 3B | D26 | 0.166 | E | 1.12 | U/E | 0.64 | U | 0.29 | U/E | 112.0 | E |
| 3B | D28 | 0.090 | E | 1.85 | E | 0.55 | U | 0.25 | U/E | 133.7 | E |
| 3B | D29 | 0.073 | E | 0.86 | U/E | 0.49 | U | 0.22 | U/E | 78.5 | E |
| 4A | D31 | 0.146 | E | 0.70 | U/E | 0.40 | U | 0.18 | U/E | 100.0 | E |
| 4A | D35 | 0.087 | E | 1.17 | E | 0.51 | U | 0.23 | U/E | 109.5 | E |
| 4B | D38 | 0.129 | E | 17.29 | E | 0.49 | U | 0.22 | U/E | 109.6 | E |
| 4B | D40 | 0.104 | E | 1.02 | U/E | 0.58 | U | 0.26 | U/E | 89.9 | E |

D1-1:1

TABLE D1-2. PHENOLIC COMPOUNDS IN CARP WHOLE-BODY COMPOSITES

| River Segment | Station | Phenol | | | 2-Methylphenol | | | 4-Methylphenol | | | 2,4-Dimethylphenol | | |
|---------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 3A | D23 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 3A | D24 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 3B | D26 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 3B | D28 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 3B | D29 | 5000 | 220 | | 200 | | U | 200 | | U | 100 | | U |
| 4A | D31 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 4A | D35 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 4B | D38 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 4B | D40 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |

U = Compound was not detected. Value given is the lower quantification limit.
 * Lipid-normalized data presented only when a compound is detected.

| River Segment | Station | Pentachlorophenol | | | 2-Chlorophenol | | | 2,4-Dichlorophenol | | | 4-Chloro-3-methylphenol | | |
|---------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|-------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 3A | D23 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 3A | D24 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 3B | D26 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 3B | D28 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 3B | D29 | 1000 | | U | 4200 | 185 | | 200 | | U | 5600 | 247 | |
| 4A | D31 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 4A | D35 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 4B | D38 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 4B | D40 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |

D1-2:1

D1-2:2

| River Segment | Station | 2,4-Dinitrophenol | | | 2-Nitrophenol | | | 4-Nitrophenol | | | 2,4,6-Trichlorophenol | | |
|---------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 3A | D23 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 3A | D24 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 3B | D26 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 3B | D28 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 3B | D29 | 1000 | | U | 200 | | U | 4000 | 176 | | 200 | | U |
| 4A | D31 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 4A | D35 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 4B | D38 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 4B | D40 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |

TABLE D1-3. SEMIVOLATILES IN CARP WHOLE-BODY COMPOSITES:
HALOGENATED ETHERS

| River Segment | Station | bis(2-Chloroethyl) ether | | | bis(2-Chloroethoxy) methane | | | bis(2-Chloroisopropyl) ether | | |
|---------------|---------|--------------------------|---------------------------|----------------|-----------------------------|---------------------------|----------------|------------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 3A | D23 | 100 | | U | 100 | | U | 100 | | U |
| 3A | D24 | 100 | | U | 100 | | U | 100 | | U |
| 3B | D26 | 100 | | U | 100 | | U | 100 | | U |
| 3B | D28 | 100 | | U | 100 | | U | 100 | | U |
| 3B | D29 | 100 | | U | 100 | | U | 100 | | U |
| 4A | D31 | 100 | | U | 100 | | U | 100 | | U |
| 4A | D35 | 100 | | U | 100 | | U | 100 | | U |
| 4B | D38 | 100 | | U | 100 | | U | 100 | | U |
| 4B | D40 | 100 | | U | 100 | | U | 100 | | U |

U = Compound was not detected. Value given is the lower quantification limit.

* Lipid-normalized data presented only when a compound is detected.

| River Segment | Station | 4-Bromophenyl phenyl ether | | | 4-Chlorophenyl phenyl ether | | |
|---------------|---------|----------------------------|---------------------------|----------------|-----------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 3A | D23 | 200 | | U | 100 | | U |
| 3A | D24 | 200 | | U | 100 | | U |
| 3B | D26 | 200 | | U | 100 | | U |
| 3B | D28 | 200 | | U | 100 | | U |
| 3B | D29 | 200 | | U | 100 | | U |
| 4A | D31 | 200 | | U | 100 | | U |
| 4A | D35 | 200 | | U | 100 | | U |
| 4B | D38 | 200 | | U | 100 | | U |
| 4B | D40 | 200 | | U | 100 | | U |

TABLE D1-4. SEMIVOLATILES IN CARP WHOLE-BODY COMPOSITES:
NITROAROMATICS

| River Segment | Station | 2,4-Dinitrotoluene | | | 2,6-Dinitrotoluene | | | Nitrobenzene | | |
|---------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 3A | D23 | 100 | | U | 100 | | U | 100 | | U |
| 3A | D24 | 100 | | U | 100 | | U | 100 | | U |
| 3B | D26 | 100 | | U | 100 | | U | 100 | | U |
| 3B | D28 | 100 | | U | 100 | | U | 100 | | U |
| 3B | D29 | 1000 | 44 | | 100 | | U | 100 | | U |
| 4A | D31 | 100 | | U | 100 | | U | 100 | | U |
| 4A | D35 | 100 | | U | 100 | | U | 100 | | U |
| 4B | D38 | 100 | | U | 100 | | U | 100 | | U |
| 4B | D40 | 100 | | U | 100 | | U | 100 | | U |

U = Compound was not detected, Value given is the lower quantification limit.

* Lipid-normalized data presented only when a compound is detected.

TABLE D1-5. SEMIVOLATILES IN CARP WHOLE-BODY COMPOSITES:
NITROSAMINES

| River Segment | Station | N-Nitrosodi-n-propylamine | | | N-Nitrosodiphenylamine | | |
|---------------|---------|---------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 3A | D23 | 100 | | U | 100 | | U |
| 3A | D24 | 100 | | U | 100 | | U |
| 3B | D26 | 100 | | U | 100 | | U |
| 3B | D28 | 100 | | U | 100 | | U |
| 3B | D29 | 2900 | 128 | | 100 | | U |
| 4A | D31 | 100 | | U | 100 | | U |
| 4A | D35 | 100 | | U | 100 | | U |
| 4B | D38 | 100 | | U | 100 | | U |
| 4B | D40 | 100 | | U | 100 | | U |

U = Compound was not detected. Value given is the lower quantification limit.

* Lipid-normalized data presented only when a compound is detected.

| TABLE D1-6. SEMIVOLATILES IN CARP WHOLE-BODY COMPOSITES: NAPHTHALENES | | | | | | | |
|--|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| River Segment | Station | 2-Chloronaphthalene | | | 2-Methylnaphthalene | | |
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 3A | D23 | 100 | | U | 100 | | U |
| 3A | D24 | 100 | | U | 100 | | U |
| 3B | D26 | 100 | | U | 100 | | U |
| 3B | D28 | 100 | | U | 100 | | U |
| 3B | D29 | 100 | | U | 101 | 4.4 | |
| 4A | D31 | 100 | | U | 100 | | U |
| 4A | D35 | 100 | | U | 230 | 5.8 | |
| 4B | D38 | 100 | | U | 100 | | U |
| 4B | D40 | 100 | | U | 100 | | U |

U = Compound was not detected. Value given is the lower quantification limit.
* Lipid-normalized data presented only when a compound is detected.

TABLE D1-7. SEMIVOLATILES IN CARP WHOLE-BODY COMPOSITES:
POLYNUCLEAR AROMATICS

| River Segment | Station | Acenaphthene | | | Acenaphthylene | | | Anthracene | | | Benzo(a)anthracene | | |
|---------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 3A | D23 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 3A | D24 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 3B | D26 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 3B | D28 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 3B | D29 | 3800 | 167 | | 100 | | U | 100 | | U | 100 | | U |
| 4A | D31 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 4A | D35 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 4B | D38 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 4B | D40 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |

U = Compound was not detected. Value given is the lower quantification limit.

* Lipid-normalized data presented only when a compound is detected.

D1-7:1

| River Segment | Station | Benzo(b)fluoranthene | | | Benzo(k)fluoranthene | | | Benzo(a)pyrene | | | Benzo(g,h,i)perylene | | |
|---------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 3A | D23 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 3A | D24 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 3B | D26 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 3B | D28 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 3B | D29 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 4A | D31 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 4A | D35 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 4B | D38 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 4B | D40 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |

| River Segment | Station | Chrysene | | | Dibenzo(a,h)anthracene | | | Fluoranthene | | | Fluorene | | |
|---------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 3A | D23 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 3A | D24 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 3B | D26 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 3B | D28 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 3B | D29 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 4A | D31 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 4A | D35 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 4B | D38 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 4B | D40 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |

| River Segment | Station | Indeno(1,2,3-c,d)pyrene | | | Naphthalene | | | Phenanthrene | | | Pyrene | | |
|---------------|---------|-------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 3A | D23 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 3A | D24 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 3B | D26 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 3B | D28 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 3B | D29 | 200 | | U | 100 | | U | 100 | | U | 5200 | 229 | U |
| 4A | D31 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 4A | D35 | 200 | | U | 220 | 5.5 | U | 100 | | U | 100 | | U |
| 4B | D38 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 4B | D40 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |

TABLE D1-8. SEMIVOLATILES IN CARP WHOLE-BODY COMPOSITES:
CHLORINATED BENZENES

| River Segment | Station | 1,3-Dichlorobenzene | | | 1,2-Dichlorobenzene | | | 1,4-Dichlorobenzene | | | 1,2,4-Trichlorobenzene | | |
|-------------------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 3A | D23 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 3A | D24 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 3B | D26 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 3B | D28 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 3B | D29 | 100 | | U | 100 | | U | 1800 | 79 | | 3180 | 137 | |
| 4A | D31 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 4A | D35 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 4B | D38 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 4B | D40 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| Tissue Reference Levels | | na*** | | | na*** | | | na*** | | | 1300 | | |

U = Compound was not detected. Value given is the lower quantification limit.

* Lipid-normalized data presented only when a compound is detected.

*** Tissue reference level not available for this compound.

D1-8:1

| River Segment | Station | Hexachlorobenzene | | | Hexachlorobutadiene | | | Hexachloroethane | | | Hexachlorocyclopentadiene | | |
|-------------------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|---------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 3A | D23 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 3A | D24 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 3B | D26 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 3B | D28 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 3B | D29 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 4A | D31 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 4A | D35 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 4B | D38 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 4B | D40 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| Tissue Reference Levels | | na*** | | | na*** | | | na*** | | | na*** | | |

TABLE D1-9. CONCENTRATIONS OF BENZIDINES IN CARP TISSUE

| River Segment | Station | 3,3'-Dichlorobenzidine | | Qualifier Code |
|---------------|---------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | |
| 3A | D23 | 1000 | | U |
| 3A | D24 | 1000 | | U |
| 3B | D26 | 1000 | | U |
| 3B | D28 | 1000 | | U |
| 3B | D29 | 1000 | | U |
| 4A | D31 | 1000 | | U |
| 4A | D35 | 1000 | | U |
| 4B | D38 | 1000 | | U |
| 4B | D40 | 1000 | | U |

U = Compound was not detected. Value given is the lower quantification limit.

* Lipid-normalized data presented only when a compound is detected.

TABLE D1-10. SEMIVOLATILES IN CARP WHOLE-BODY COMPOSITES:
 PHTHALATE ESTERS

| River Segment | Station | Dimethyl phthalate | | | Diethyl phthalate | | | Di-n-butyl phthalate | | |
|---------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 3A | D23 | 100 | | U | 200 | | U | 100 | | U |
| 3A | D24 | 100 | | U | 200 | | U | 100 | | U |
| 3B | D26 | 100 | | U | 200 | | U | 100 | | U |
| 3B | D28 | 100 | | U | 200 | | U | 130 | 4.6 | |
| 3B | D29 | 100 | | U | 200 | | U | 100 | | U |
| 4A | D31 | 100 | | U | 200 | | U | 100 | | U |
| 4A | D35 | 100 | | U | 200 | | U | 100 | | U |
| 4B | D38 | 100 | | U | 200 | | U | 160 | 4.9 | |
| 4B | D40 | 100 | | U | 200 | | U | 100 | | U |

U = Compound was not detected. Value given is the lower quantification limit.

* Lipid-normalized data presented only when a compound is detected.

| River Segment | Station | Benzyl butyl phthalate | | | bis(2-Ethylhexyl) phthalate | | | Di-n-octyl phthalate | | |
|---------------|---------|------------------------|---------------------------|----------------|-----------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 3A | D23 | 100 | | U | 1100 | 44 | | 200 | | U |
| 3A | D24 | 100 | | U | 530 | 8.1 | | 200 | | U |
| 3B | D26 | 100 | | U | 100 | | U | 200 | | U |
| 3B | D28 | 100 | | U | 450 | 16 | | 200 | | U |
| 3B | D29 | 100 | | U | 680 | 30 | | 200 | | U |
| 4A | D31 | 100 | | U | 480 | 8.1 | | 200 | | U |
| 4A | D35 | 100 | | U | 850 | 21 | | 200 | | U |
| 4B | D38 | 100 | | U | 790 | 24 | | 200 | | U |
| 4B | D40 | 100 | | U | 1500 | 37 | | 200 | | U |

TABLE D1-11. PESTICIDES IN CARP WHOLE-BODY COMPOSITES

| River Segment | Station | o,p-DDD | | | o,p-DDE | | | o,p-DDT | | | 4,4'-DDD | | |
|-------------------------|---------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code |
| 3A | D23 | 3 | | U | 3 | | U | 4* | | U | 7.6 | 0.30 | E |
| 3A | D24 | 3 | | U | 3 | | U | 8* | | U | 4.4 | 0.07 | E |
| 3B | D26 | 20* | | U | 17 | 0.29 | U | 3 | | U | 23 | 0.39 | E |
| 3B | D28 | 3 | | U | 11 | 0.39 | E | 6.9 | 0.24 | E | 3.5 | 0.12 | E |
| 3B | D29 | 3.3 | 0.15 | E | 4* | | U | 3 | | U | 3 | | U |
| 4A | D31 | 3 | | U | 11 | 0.18 | E | 3 | | U | 7* | | U |
| 4A | D35 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 4B | D38 | 3 | | U | 4* | | U | 4* | | U | 4.9 | 0.15 | E |
| 4B | D40 | 6 | | U | 3 | | U | 3 | | U | 14 | 0.34 | E |
| Tissue Reference Levels | | 200 | | | 200 | | | 200 | | | 200 | | |

U = Compound was not detected. Value given is the lower quantification limit.

E = Estimated value.

* Reporting limits adjusted due to coeluting interfering peaks.

** Lipid-normalized data presented only when a compound is detected.

*** Tissue reference level not available for this compound.

D1-11:1

| River Segment | Station | 4,4'-DDE | | | 4,4'-DDT | | | Heptachlor | | | Heptachlor epoxide | | |
|-------------------------|---------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code |
| 3A | D23 | 18 | 0.72 | E | 3 | | U | 3 | | U | 3 | | U |
| 3A | D24 | 21 | 0.32 | E | 3 | | U | 3 | | U | 3 | | U |
| 3B | D26 | 3 | | U | 11 | 0.19 | E | 3 | | U | 4* | | U |
| 3B | D28 | 37 | 1.31 | E | 3 | | U | 3 | | U | 3 | | U |
| 3B | D29 | 22 | 0.97 | E | 3.5 | 0.15 | E | 3 | | U | 3 | | U |
| 4A | D31 | 91 | 1.53 | E | 7 | 0.12 | E | 3 | | U | 3 | | U |
| 4A | D35 | 38 | 0.96 | E | 3 | | U | 3 | | U | 3 | | U |
| 4B | D38 | 88 | 2.67 | E | 5.3 | 0.16 | E | 3 | | U | 3 | | U |
| 4B | D40 | 40* | | U | 3.5 | 0.77 | E | 3 | | U | 3 | | U |
| Tissue Reference Levels | | 200 | | | 200 | | | 200 | | | na*** | | |

D1-11:2

| River Segment | Station | Chlordane | | | Aldrin | | | Dieldrin | | | Mirex | | |
|-------------------------|---------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code |
| 3A | D23 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 3A | D24 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 3B | D26 | 3 | | U | 4* | | U | 10* | | U | 8.8 | 0.15 | |
| 3B | D28 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 3B | D29 | 3 | | U | 9.6 | 0.42 | | 3 | | U | 3 | | U |
| 4A | D31 | 3 | | U | 4* | | U | 5.6 | 0.09 | E | 3 | | U |
| 4A | D35 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 4B | D38 | 3 | | U | 3 | | U | 3.6 | 0.11 | E | 3 | | U |
| 4B | D40 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| Tissue Reference Levels | | na*** | | | 120 | | | 120 | | | 300 | | |

| River Segment | Station | Dacthal | | | Dicofol | | | Methyl parathion | | | Parathion | | |
|-------------------------|---------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code |
| 3A | D23 | 3 | | U | 30 | | U | 3 | | U | 3 | | U |
| 3A | D24 | 3 | | U | 30 | | U | 3 | | U | 3 | | U |
| 3B | D26 | 4* | | U | 30 | | U | 3 | | U | 3 | | U |
| 3B | D28 | 3 | | U | 30 | | U | 3 | | U | 3 | | U |
| 3B | D29 | 3 | | U | 30 | | U | 3 | | U | 3 | | U |
| 4A | D31 | 3 | | U | 30 | | U | 3 | | U | 3 | | U |
| 4A | D35 | 3 | | U | 30 | | U | 4* | | U | 3 | | U |
| 4B | D38 | 3 | | U | 30 | | U | 3 | | U | 3 | | U |
| 4B | D40 | 3 | | U | 30 | | U | 10* | | U | 3 | | U |
| Tissue Reference Levels | | na*** | | | na*** | | | na*** | | | na*** | | |

D1-11:3

| River Segment | Station | Malathion | | | Toxaphene | | | Isophorone | | | Endosulfan I | | |
|-------------------------|---------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code |
| 3A | D23 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 3A | D24 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 3B | D26 | 4* | | U | 150 | | U | 100 | | U | 3 | | U |
| 3B | D28 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 3B | D29 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 4A | D31 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 4A | D35 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 4B | D38 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 4B | D40 | 6* | | U | 150 | | U | 100 | | U | 3 | | U |
| Tissue Reference Levels | | na*** | | | na*** | | | na*** | | | na*** | | |

| River Segment | Station | Endosulfan II | | | Endosulfan sulfate | | | Endrin | | | Endrin aldehyde | | |
|-------------------------|---------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code |
| 3A | D23 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 3A | D24 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 3B | D26 | 3 | | U | 3 | | U | 12* | | U | 5* | | U |
| 3B | D28 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 3B | D29 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 4A | D31 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 4A | D35 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 4B | D38 | 3 | | U | 3 | | U | 3.9 | 0.12 | E | 3 | | U |
| 4B | D40 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| Tissue Reference Levels | | na*** | | | na*** | | | 25 | | | na*** | | |

D1-114

| River Segment | Station | Methoxychlor | | | alpha-BHC | | | beta-BHC | | | delta-BHC | | |
|-------------------------|---------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|
| | | Measured Conc. (ug/kg) | Normalized** Conc. (ug/kg) | Qualifier Code | Measured Conc. (ug/kg) | Normalized** Conc. (ug/kg) | Qualifier Code | Measured Conc. (ug/kg) | Normalized** Conc. (ug/kg) | Qualifier Code | Measured Conc. (ug/kg) | Normalized** Conc. (ug/kg) | Qualifier Code |
| 3A | D23 | 30 | | U | 3 | | U | 3 | | U | 3 | | U |
| 3A | D24 | 30 | | U | 3 | | U | 3 | | U | 3 | | U |
| 3B | D26 | 30 | | U | 3 | | U | 3 | | U | 3 | | U |
| 3B | D28 | 30 | | U | 3 | | U | 3 | | U | 3 | | U |
| 3B | D29 | 30 | | U | 3 | | U | 3 | | U | 3 | | U |
| 4A | D31 | 30 | | U | 3 | | U | 3 | | U | 3 | | U |
| 4A | D35 | 30 | | U | 3 | | U | 3 | | U | 3 | | U |
| 4B | D38 | 30 | | U | 3 | | U | 3 | | U | 3 | | U |
| 4B | D40 | 30 | | U | 3 | | U | 3 | | U | 3 | | U |
| Tissue Reference Levels | | na*** | | | 100 | | | 100 | | | 100 | | |

| River Segment | Station | gamma-BHC | | Qualifier Code |
|-------------------------|---------|------------------------|----------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | |
| 3A | D23 | 3 | | U |
| 3A | D24 | 3 | | U |
| 3B | D26 | 3.5 | 0.06 | |
| 3B | D28 | 3 | | U |
| 3B | D29 | 3 | | U |
| 4A | D31 | 3 | | U |
| 4A | D35 | 3 | | U |
| 4B | D38 | 3 | | U |
| 4B | D40 | 3 | | U |
| Tissue Reference Levels | | 100 | | |

TABLE D1-12. PCBs IN CARP WHOLE-BODY COMPOSITES

| River Segment | Station | Aroclor-1016 | | | Aroclor-1221 | | | Aroclor-1232 | | | Aroclor-1242 | | |
|-------------------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 3A | D23 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 3A | D24 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 3B | D26 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 3B | D28 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 3B | D29 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 4A | D31 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 4A | D35 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 4B | D38 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 4B | D40 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| Tissue Reference Levels | | na*** | | | na*** | | | na*** | | | na*** | | |

U = Compound was not detected. Value given is the lower quantification limit.

* Lipid-normalized data presented only when a compound is detected.

*** Tissue reference level not available for this compound.

D1-12:1

| River Segment | Station | Aroclor-1248 | | | Aroclor-1254 | | | Aroclor-1260 | | | Total Detected PCBs | |
|-------------------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) |
| 3A | D23 | 50 | | U | 50 | | U | 69 | 2.8 | | 69 | 2.8 |
| 3A | D24 | 50 | | U | 50 | | U | 62 | 1.0 | | 62 | 1.0 |
| 3B | D26 | 50 | | U | 50 | | U | 80 | 1.4 | | 80 | 1.4 |
| 3B | D28 | 50 | | U | 270 | 9.6 | | 50 | | U | 270 | 9.6 |
| 3B | D29 | 50 | | U | 190 | 8.4 | | 50 | | U | 190 | 8.4 |
| 4A | D31 | 50 | | U | 260 | 4.4 | | 50 | | U | 260 | 4.4 |
| 4A | D35 | 50 | | U | 60 | 1.5 | | 50 | | U | 60 | 1.5 |
| 4B | D38 | 50 | | U | 110 | 3.3 | | 50 | | U | 110 | 3.3 |
| 4B | D40 | 50 | | U | 50 | | U | 110 | 2.7 | | 110 | 2.7 |
| Tissue Reference Levels | | na*** | | | na*** | | | na*** | | | 110 | |

TABLE D1-13. DIOXINS AND FURANS IN CARP WHOLE-BODY COMPOSITES

| River Segment | Station | 2,3,7,8-TCDD | | | 1,2,3,7,8-PeCDD | | | 1,2,3,4,7,8-HxCDD | | | 1,2,3,6,7,8-HxCDD | | |
|-------------------------|---------|-----------------------|---------------------------|----------------|-----------------------|---------------------------|----------------|-----------------------|---------------------------|----------------|-----------------------|---------------------------|----------------|
| | | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code |
| 3A | D24 | 1.57 | 0.025 | | 1.89 | 0.030 | S/M | 1.45 | 0.023 | S/M | 4.82 | 0.078 | |
| 3B | D28 | 1.64 | 0.057 | | 1.77 | 0.061 | S/M | 1.18 | 0.041 | S | 3.73 | 0.129 | |
| 4A | D35 | 1.32 | 0.034 | | 1.11 | 0.028 | S/M | 0.62 | 0.016 | S/M | 1.53 | 0.039 | S/M |
| 4B | D38 | 1.28 | 0.085 | | 0.84 | 0.056 | S/M | 0.26 | 0.017 | S | 0.73 | 0.049 | S |
| 4B | D40 | 2.1 | 0.030 | | 1.68 | 0.024 | S/M | 0.4 | 0.006 | S/M | 1.93 | 0.028 | S |
| Tissue Reference Levels | | na*** | | | na*** | | | na*** | | | na*** | | |

U = Compound was not detected.
 E = Analyte not detected at or above the sample specific Estimated Detection Limit (EDL). The EDL is reported.
 L = Analyte not detected at or above the Lower Method Calibration Limit (LMCL). The LMCL is reported.
 M = Estimated Maximum Possible Concentration.
 MD = Estimated Maximum Possible Concentration with Diphenyl Ether Interferences.
 S = Analyte detected below the Lower Method Calibration Limit. Value should be considered an estimate.
 * Obtained from a DB-225 column.
 ** Lipid-normalized data presented only when a compound is detected.
 *** Tissue reference level not available for this compound.

D1-13:1

| River Segment | Station | 1,2,3,7,8,9-HxCDD | | | 1,2,3,4,5,7,8-HpCDD | | | OCDD | | | 2,3,7,8-TCDF | | |
|-------------------------|---------|-----------------------|---------------------------|----------------|-----------------------|---------------------------|----------------|-----------------------|---------------------------|----------------|-----------------------|---------------------------|----------------|
| | | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code |
| 3A | D24 | 0.5 | 0.008 | S | 9.81 | 0.158 | | 20.1 | 0.324 | | 4.37 | 0.070 | * |
| 3B | D28 | 0.36 | | U/E | 9.5 | 0.328 | | 30.6 | 1.055 | | 4.89 | 0.169 | * |
| 4A | D35 | 0.21 | 0.005 | S/M | 3.42 | 0.088 | | 12.3 | 0.315 | | 9.53 | 0.244 | * |
| 4B | D38 | 0.12 | 0.008 | S/M | 1.59 | 0.106 | S | 2.71 | 0.181 | | 7.6 | 0.507 | * |
| 4B | D40 | 0.27 | 0.004 | S/M | 4.39 | 0.064 | | 7.54 | 0.109 | | 12.2 | 0.177 | * |
| Tissue Reference Levels | | na*** | | | na*** | | | na*** | | | na*** | | |

| River Segment | Station | 1,2,3,7,8-PeCDF | | | 2,3,4,7,8-PeCDF | | | 1,2,3,4,7,8-HxCDF | | | 1,2,3,6,7,8-HxCDF | | |
|-------------------------|---------|-----------------------|---------------------------|----------------|-----------------------|---------------------------|----------------|-----------------------|---------------------------|----------------|-----------------------|---------------------------|----------------|
| | | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code |
| 3A | D24 | 0.76 | 0.012 | S | 1.37 | 0.022 | S | 0.66 | 0.011 | S | 0.57 | 0.009 | S |
| 3B | D28 | 0.57 | 0.020 | S/M | 1.37 | 0.047 | S | 0.52 | 0.018 | S | 0.42 | 0.014 | S/M |
| 4A | D35 | 0.29 | 0.007 | S | 0.73 | 0.019 | S/M | 0.23 | 0.006 | S/M | 0.18 | 0.005 | S |
| 4B | D38 | 0.21 | 0.014 | S | 0.46 | 0.031 | S | 0.12 | 0.008 | S | 0.09 | 0.006 | S/M |
| 4B | D40 | 0.39 | 0.006 | S | 0.96 | 0.014 | S | 0.19 | 0.003 | S/M | 0.16 | 0.002 | S |
| Tissue Reference Levels | | na*** | | | na*** | | | na*** | | | na*** | | |

| River Segment | Station | 2,3,4,6,7,8-HxCDF | | | 1,2,3,7,8,9-HxCDF | | | 1,2,3,4,6,7,8-HpCDF | | | 1,2,3,4,7,8,9-HpCDF | | |
|-------------------------|---------|-----------------------|---------------------------|----------------|-----------------------|---------------------------|----------------|-----------------------|---------------------------|----------------|-----------------------|---------------------------|----------------|
| | | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code |
| 3A | D24 | 5.7 | 0.092 | MD | 0.3 | | U/E | 0.75 | 0.012 | S | 0.11 | | U/E |
| 3B | D28 | 3.5 | 0.121 | MD | 0.34 | | U/E | 1.31 | 0.045 | S | 0.18 | | U/E |
| 4A | D35 | 0.33 | 0.008 | S/M | 0.21 | | U/E | 0.4 | 0.010 | S | 0.12 | 0.003 | S |
| 4B | D38 | 0.26 | 0.017 | S | 0.05 | 0.003 | S/M | 0.18 | 0.012 | S/M | 0.56 | | U/E |
| 4B | D40 | 0.4 | 0.006 | S/M | 0.12 | | U/E | 0.27 | 0.004 | S/M | 0.16 | | U/E |
| Tissue Reference Levels | | na*** | | | na*** | | | na*** | | | na*** | | |

| River Segment | Station | OCDF | | | TECs Calculated Conc. (pg/g) |
|-------------------------|---------|-----------------------|---------------------------|----------------|------------------------------|
| | | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code | |
| 3A | D24 | 0.86 | 0.014 | S/M | 5.2 |
| 3B | D28 | 2.45 | 0.084 | S | 4.9 |
| 4A | D35 | 0.84 | 0.022 | S | 3.6 |
| 4B | D38 | 0.29 | | U/E | 2.9 |
| 4B | D40 | 0.52 | | U/E | 5.1 |
| Tissue Reference Levels | | na*** | | | 3 |

D1-13:2

APPENDIX D2 - CRAYFISH TISSUE BIOACCUMULATION DATA

- D2-0. PERCENT LIPID AND WEIGHT DATA
- D2-1. METALS IN CRAYFISH WHOLE-BODY COMPOSITES
- D2-2. PHENOLIC COMPOUNDS IN CRAYFISH WHOLE-BODY COMPOSITES
- D2-3. SEMIVOLATILES IN CRAYFISH WHOLE-BODY COMPOSITES: HALOGENATED ETHERS
- D2-4. SEMIVOLATILES IN CRAYFISH WHOLE-BODY COMPOSITES: NITROAROMATICS
- D2-5. SEMIVOLATILES IN CRAYFISH WHOLE-BODY COMPOSITES: NITROSAMINES
- D2-6. SEMIVOLATILES IN CRAYFISH WHOLE-BODY COMPOSITES: NAPHTHALENES
- D2-7. SEMIVOLATILES IN CRAYFISH WHOLE-BODY COMPOSITES: POLYNUCLEAR AROMATICS
- D2-8. SEMIVOLATILES IN CRAYFISH WHOLE-BODY COMPOSITES: CHLORINATED BENZENES
- D2-9. SEMIVOLATILES IN CRAYFISH WHOLE-BODY COMPOSITES: BENZIDINES
- D2-10. SEMIVOLATILES IN CRAYFISH WHOLE-BODY COMPOSITES: PHTHALATE ESTERS
- D2-11. PESTICIDES IN CRAYFISH WHOLE-BODY COMPOSITES
- D2-12. PCB₆ IN CRAYFISH WHOLE-BODY COMPOSITES
- D2-13. DIOXINS AND FURANS IN CRAYFISH WHOLE-BODY COMPOSITES

(Note: All concentrations are presented on a wet-weight basis)

TABLE D2-0. CRAYFISH LIPID AND SIZE DATA

| River Segment | Station | Latitude | Longitude | Number of Individuals In Composite | Percent Lipid | Average Weight (g) | Minimum Weight (g) | Maximum Weight (g) |
|---------------|---------|--------------|---------------|------------------------------------|---------------|--------------------|--------------------|--------------------|
| 1C | D6 | 46-16-02.1 N | 123-40-25.8 W | 30 | 1.32 | 27.72 | 12.20 | 47.70 |
| 1C | D8 | 46-13-38.8 N | 123-34-35.6 W | 31 | 1.79 | 51.04 | 20.90 | 132.40 |
| 1C | D10 | 46-12-35.5 N | 123-26-35.1 W | 31 | 1.52 | 29.46 | 13.40 | 63.70 |
| 2A | D12 | 46-12-20.9 N | 123-23-25.2 W | 10 | 1.4 | 33.24 | 19.50 | 51.70 |
| 2B | D15 | 46-09-21.3 N | 123-13-56.6 W | 32 | 1.57 | 30.04 | 13.90 | 68.70 |
| 2C | D16 | 46-11-15.3 N | 123-05-28.1 W | 31 | 1.56 | 37.70 | 13.30 | 65.40 |
| 2C | D19 | 46-08-17.3 N | 123-00-28.5 W | 30 | 2.4 | 64.23 | 33.90 | 124.40 |
| 2C | D20 | 46-03-28.4 N | 122-52-16.1 W | 21 | 1.75 | 69.83 | 25.00 | 132.00 |
| 3A | D22 | 46-00-34.8 N | 122-50-55.6 W | 18 | 0.76 | 33.01 | 2.70 | 77.30 |
| 3A | D23 | 45-57-20.1 N | 122-48-15.8 W | 12 | 1.05 | 50.36 | 20.20 | 103.20 |
| 3A | D24 | 45-52-22.5 N | 122-47-54.9 W | 31 | 1.3 | 41.36 | 13.40 | 121.20 |
| 3B | D26 | 45-46-52.5 N | 122-46-09.3 W | 32 | 1.53 | 46.57 | 25.00 | 78.50 |
| 3B | D28 | 46-41-39.4 N | 122-45-55.2 W | 24 | 2.58 | 48.49 | 27.20 | 85.60 |
| 4A | D29 | 45-38-57.9 N | 122-44-42.1 W | 30 | 2.11 | 41.19 | 6.90 | 89.60 |
| 4A | D31 | 45-36-14.2 N | 122-40-18.3 W | 12 | 1.41 | 34.18 | 7.85 | 84.25 |
| 4A | D35 | 45-34-36.7 N | 122-26-48.2 W | 61 | 1.35 | 43.63 | 6.35 | 117.40 |
| 4A | D38 | 45-33-23.7 N | 122-20-00.4 W | 27 | 2.25 | 48.98 | 22.00 | 79.00 |
| 4B | D40 | 45-37-27.9 N | 122-01-09.8 W | 9 | 1.28 | 59.59 | 27.00 | 86.90 |

D2-1:1

TABLE D2-1. CONCENTRATIONS OF METALS IN CRAYFISH WHOLE-BODY COMPOSITES

| River Segment | Station | Antimony | | Arsenic | | Barium | | Cadmium | | Copper | | Lead | |
|---------------|---------|-----------------------------|-------------------|-----------------------------|-------------------|-----------------------------|-------------------|-----------------------------|-------------------|-----------------------------|-------------------|-----------------------------|-------------------|
| | | Measured * Conc. (mg/kg) | Qualifier Code | Measured * Conc. (mg/kg) | Qualifier Code | Measured * Conc. (mg/kg) | Qualifier Code | Measured * Conc. (mg/kg) | Qualifier Code | Measured * Conc. (mg/kg) | Qualifier Code | Measured * Conc. (mg/kg) | Qualifier Code |
| 1C | D6 | 2.80 | U/E | 0.37 | U | 1.6 | E | 0.08 | | 37.33 | E | 0.02 | E |
| 1C | D8 | 2.89 | U/E | 0.38 | U | 1.5 | E | 0.08 | | 30.77 | E | 0.02 | E |
| 1C | D10 | 2.48 | U/E | 0.33 | U | 1.3 | E | 0.07 | | 41.39 | E | 0.02 | E |
| 2A | D12 | 2.72 | U/E | 0.36 | U | 0.8 | E | 0.05 | | 19.93 | E | 0.04 | E |
| 2B | D15 | 2.45 | U/E | 0.33 | U | 0.6 | E | 0.08 | | 27.80 | E | 0.02 | E |
| 2B | D15d | 3.25 | U/E | ** | ** | 1.9 | E | 0.13 | | 28.17 | E | 0.02 | E |
| 2C | D16 | 2.30 | U/E | 0.31 | U | 0.6 | E | 0.03 | | 21.47 | E | 0.02 | U/E |
| 2C | D19 | 2.72 | U/E | 0.36 | U | 1.2 | E | 0.07 | | 38.05 | E | 0.02 | U/E |
| 2C | D20 | 4.05 | U/E | 0.54 | U | 3.5 | E | 0.08 | | 27.00 | E | 0.03 | U/E |
| 3A | D22 | 0.35 | U/E | 0.46 | U | 1.6 | E | 0.05 | | 17.94 | E | 0.05 | E |
| 3A | D23 | 0.31 | U/E | 0.42 | U | 1.5 | E | 0.06 | | 25.00 | E | 0.02 | E |
| 3A | D24 | 0.37 | U/E | 0.49 | U | 1.6 | E | 0.05 | | 24.55 | E | 0.02 | E |
| 3B | D26 | 0.38 | U/E | 0.48 | U | 2.5 | E | 0.08 | | 46.40 | E | 0.03 | E |
| 3B | D26d | 0.37 | U/E | ** | ** | 2.5 | E | 0.10 | | 44.73 | E | 0.02 | U/E |
| 3B | D28 | 1.98 | U/E | 0.26 | U | 1.1 | E | 0.09 | | 35.73 | E | 0.01 | E |
| 4A | D29 | 2.40 | U/E | 0.32 | U | 1.0 | E | 0.10 | | 25.60 | E | 0.02 | U/E |
| 4A | D31 | 1.84 | U/E | 0.25 | U | 0.9 | E | 0.09 | | 37.99 | E | 0.03 | E |
| 4A | D35 | 1.78 | U/E | 0.24 | U | 1.0 | E | 0.02 | | 26.17 | E | 0.01 | E |
| 4A | D38 | 4.05 | U/E | 0.54 | U | 1.6 | E | 0.11 | | 29.70 | E | 0.03 | E |
| 4B | D40 | 3.42 | U/E | 0.46 | U | 2.1 | E | 0.12 | | 29.60 | E | 0.05 | E |

U = Compound was not detected. Value given is the lower quantification limit.

E = Estimated value.

* Metals data normalized to wet weight

** Not reported.

D2-1:2

| River Segment | Station | Mercury | | Nickel | | Selenium | | Silver | | Zinc | |
|---------------|---------|-----------------------------|-------------------|-----------------------------|-------------------|-----------------------------|-------------------|-----------------------------|-------------------|-----------------------------|-------------------|
| | | Measured * Conc. (mg/kg) | Qualifier Code | Measured * Conc. (mg/kg) | Qualifier Code | Measured * Conc. (mg/kg) | Qualifier Code | Measured * Conc. (mg/kg) | Qualifier Code | Measured * Conc. (mg/kg) | Qualifier Code |
| 1C | D6 | 0.056 | E | 0.65 | U/E | 0.37 | U | 0.17 | U/E | 26.1 | E |
| 1C | D8 | 0.038 | E | 0.67 | U/E | 0.38 | U | 1.17 | E | 26.9 | E |
| 1C | D10 | 0.013 | U/E | 0.58 | U/E | 0.33 | U | 0.94 | E | 24.8 | E |
| 2A | D12 | 0.021 | E | 0.63 | U/E | 0.36 | U | 0.82 | E | 23.5 | E |
| 2B | D15 | 0.022 | E | 0.57 | U/E | 0.33 | U | 0.80 | E | 24.5 | E |
| 2B | D15d | 0.061 | E | 0.76 | U/E | ** | ** | 1.13 | E | 21.0 | E |
| 2C | D16 | 0.022 | E | 0.54 | U/E | 0.31 | U | 1.03 | E | 24.5 | E |
| 2C | D19 | 0.036 | E | 0.63 | U/E | 0.36 | U | 0.16 | U/E | 29.0 | E |
| 2C | D20 | 0.022 | E | 0.95 | U/E | 0.54 | U | 1.54 | E | 29.7 | E |
| 3A | D22 | 0.049 | E | 0.81 | U/E | 0.46 | U | 0.48 | E | 21.9 | E |
| 3A | D23 | 0.078 | E | 0.73 | U/E | 0.42 | U | 0.38 | E | 20.2 | E |
| 3A | D24 | 0.042 | E | 0.85 | U/E | 0.49 | U | 0.34 | E | 21.1 | E |
| 3B | D26 | 0.015 | U/E | 1.01 | E | 0.48 | U | 0.23 | U/E | 38.8 | E |
| 3B | D26d | 0.057 | E | 1.23 | E | ** | ** | 0.22 | U/E | 33.7 | E |
| 3B | D28 | 0.060 | E | 0.46 | U/E | 0.26 | U | 0.58 | E | 26.5 | E |
| 4A | D29 | 0.012 | U/E | 0.56 | U/E | 0.32 | U | 1.01 | E | 27.2 | E |
| 4A | D31 | 0.053 | E | 0.43 | U/E | 0.25 | U | 0.55 | E | 25.7 | E |
| 4A | D35 | 0.056 | E | 1.02 | E | 0.24 | U | 0.61 | E | 27.4 | E |
| 4A | D38 | 0.018 | E | 0.95 | U/E | 0.54 | U | 1.11 | E | 29.7 | E |
| 4B | D40 | 0.014 | E | 0.80 | U/E | 0.46 | U | 1.37 | E | 34.2 | E |

D2-2:1

TABLE D2-2. PHENOLIC COMPOUNDS IN CRAYFISH WHOLE-BODY COMPOSITES

| River Segment | Station | Phenol | | | 2-Methylphenol | | | 4-Methylphenol | | | 2,4-Dimethylphenol | | |
|---------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1C | D6 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 1C | D8 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 1C | D10 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 2A | D12 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 2B | D15 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 2C | D16 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 2C | D19 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 2C | D20 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 3A | D22 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 3A | D23 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 3A | D24 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 3B | D26 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 3B | D28 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 4A | D29 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 4A | D31 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 4A | D35 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 4A | D38 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 4B | D40 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |

U = Compound was not detected. Value given is the lower quantification limit.

* Lipid-normalized data presented only when a compound is detected.

D2-2:2

| River Segment | Station | Pentachlorophenol | | | 2-Chlorophenol | | | 2,4-Dichlorophenol | | | 4-Chloro-3-methylphenol | | |
|---------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|-------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1C | D6 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 1C | D8 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 1C | D10 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 2A | D12 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 2B | D15 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 2C | D16 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 2C | D19 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 2C | D20 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 3A | D22 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 3A | D23 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 3A | D24 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 3B | D26 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 3B | D28 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 4A | D29 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 4A | D31 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 4A | D35 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 4A | D38 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 4B | D40 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |

D2-2.3

| River Segment | Station | 2,4-Dinitrophenol | | | 2-Nitrophenol | | | 4-Nitrophenol | | | 2,4,6-Trichlorophenol | | |
|---------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1C | D6 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 1C | D8 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 1C | D10 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 2A | D12 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 2B | D15 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 2C | D16 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 2C | D19 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 2C | D20 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 3A | D22 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 3A | D23 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 3A | D24 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 3B | D26 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 3B | D28 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 4A | D29 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 4A | D31 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 4A | D35 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 4A | D38 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 4B | D40 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |

D2-3:1

TABLE D2-3. SEMIVOLATILES IN CRAYFISH WHOLE-BODY COMPOSITES:
HALOGENATED ETHERS

| River Segment | Station | bis(2-Chloroethyl) ether | | | bis(2-Chloroethoxy) methane | | | bis(2-Chloroisopropyl) ether | | |
|---------------|---------|--------------------------|---------------------------|----------------|-----------------------------|---------------------------|----------------|------------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1C | D6 | 100 | | U | 100 | | U | 100 | | U |
| 1C | D8 | 100 | | U | 100 | | U | 100 | | U |
| 1C | D10 | 100 | | U | 100 | | U | 100 | | U |
| 2A | D12 | 100 | | U | 100 | | U | 100 | | U |
| 2B | D15 | 100 | | U | 100 | | U | 100 | | U |
| 2C | D16 | 100 | | U | 100 | | U | 100 | | U |
| 2C | D19 | 100 | | U | 100 | | U | 100 | | U |
| 2C | D20 | 100 | | U | 100 | | U | 100 | | U |
| 3A | D22 | 100 | | U | 100 | | U | 100 | | U |
| 3A | D23 | 100 | | U | 100 | | U | 100 | | U |
| 3A | D24 | 100 | | U | 100 | | U | 100 | | U |
| 3B | D26 | 100 | | U | 100 | | U | 100 | | U |
| 3B | D28 | 100 | | U | 100 | | U | 100 | | U |
| 4A | D29 | 100 | | U | 100 | | U | 100 | | U |
| 4A | D31 | 100 | | U | 100 | | U | 100 | | U |
| 4A | D35 | 100 | | U | 100 | | U | 100 | | U |
| 4A | D38 | 100 | | U | 100 | | U | 100 | | U |
| 4B | D40 | 100 | | U | 100 | | U | 100 | | U |

U = Compound was not detected. Value given is the lower quantification limit.
* Lipid-normalized data presented only when a compound is detected.

D2-3:2

| River Segment | Station | 4-Bromophenyl phenyl ether | | | 4-Chlorophenyl phenyl ether | | |
|---------------|---------|----------------------------|--------------|-----------|-----------------------------|--------------|-----------|
| | | Measured | Norm. Conc.* | Qualifier | Measured | Norm. Conc.* | Qualifier |
| | | Conc. (ug/kg) | (ug/g lipid) | Code | Conc. (ug/kg) | (ug/g lipid) | Code |
| 1C | D6 | 200 | | U | 100 | | U |
| 1C | D8 | 200 | | U | 100 | | U |
| 1C | D10 | 200 | | U | 100 | | U |
| 2A | D12 | 200 | | U | 100 | | U |
| 2B | D15 | 200 | | U | 100 | | U |
| 2C | D16 | 200 | | U | 100 | | U |
| 2C | D19 | 200 | | U | 100 | | U |
| 2C | D20 | 200 | | U | 100 | | U |
| 3A | D22 | 200 | | U | 100 | | U |
| 3A | D23 | 200 | | U | 100 | | U |
| 3A | D24 | 200 | | U | 100 | | U |
| 3B | D26 | 200 | | U | 100 | | U |
| 3B | D28 | 200 | | U | 100 | | U |
| 4A | D29 | 200 | | U | 100 | | U |
| 4A | D31 | 200 | | U | 100 | | U |
| 4A | D35 | 200 | | U | 100 | | U |
| 4A | D38 | 200 | | U | 100 | | U |
| 4B | D40 | 200 | | U | 100 | | U |

D2-4:1

TABLE D2-4. SEMIVOLATILES IN CRAYFISH WHOLE-BODY COMPOSITES:
NITROAROMATICS

| River Segment | Station | 2,4-Dinitrotoluene | | | 2,6-Dinitrotoluene | | | Nitrobenzene | | |
|---------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1C | D6 | 100 | | U | 100 | | U | 100 | | U |
| 1C | D8 | 100 | | U | 100 | | U | 100 | | U |
| 1C | D10 | 100 | | U | 100 | | U | 100 | | U |
| 2A | D12 | 100 | | U | 100 | | U | 100 | | U |
| 2B | D15 | 100 | | U | 100 | | U | 100 | | U |
| 2C | D16 | 100 | | U | 100 | | U | 100 | | U |
| 2C | D19 | 100 | | U | 100 | | U | 100 | | U |
| 2C | D20 | 100 | | U | 100 | | U | 100 | | U |
| 3A | D22 | 100 | | U | 100 | | U | 100 | | U |
| 3A | D23 | 100 | | U | 100 | | U | 100 | | U |
| 3A | D24 | 100 | | U | 100 | | U | 100 | | U |
| 3B | D26 | 100 | | U | 100 | | U | 100 | | U |
| 3B | D28 | 100 | | U | 100 | | U | 100 | | U |
| 4A | D29 | 100 | | U | 100 | | U | 100 | | U |
| 4A | D31 | 100 | | U | 100 | | U | 100 | | U |
| 4A | D35 | 100 | | U | 100 | | U | 100 | | U |
| 4A | D38 | 100 | | U | 100 | | U | 100 | | U |
| 4B | D40 | 100 | | U | 100 | | U | 100 | | U |

U = Compound was not detected. Value given is the lower quantification limit.
* Lipid-normalized data presented only when a compound is detected.

TABLE D2-5. SEMIVOLATILES IN CRAYFISH WHOLE-BODY COMPOSITES:
NITROSAMINES

| River Segment | Station | N-Nitrosodi-n-propylamine | | | N-Nitrosodiphenylamine | | |
|---------------|---------|---------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1C | D6 | 100 | | U | 100 | | U |
| 1C | D8 | 100 | | U | 100 | | U |
| 1C | D10 | 100 | | U | 100 | | U |
| 2A | D12 | 100 | | U | 100 | | U |
| 2B | D15 | 100 | | U | 100 | | U |
| 2C | D16 | 100 | | U | 100 | | U |
| 2C | D19 | 100 | | U | 100 | | U |
| 2C | D20 | 100 | | U | 100 | | U |
| 3A | D22 | 100 | | U | 100 | | U |
| 3A | D23 | 100 | | U | 100 | | U |
| 3A | D24 | 100 | | U | 100 | | U |
| 3B | D26 | 100 | | U | 100 | | U |
| 3B | D28 | 100 | | U | 100 | | U |
| 4A | D29 | 100 | | U | 100 | | U |
| 4A | D31 | 100 | | U | 100 | | U |
| 4A | D35 | 100 | | U | 100 | | U |
| 4A | D38 | 100 | | U | 100 | | U |
| 4B | D40 | 100 | | U | 100 | | U |

U = Compound was not detected. Value given is the lower quantification limit.

* Lipid-normalized data presented only when a compound is detected.

TABLE D2-6. SEMIVOLATILES IN CRAYFISH WHOLE-BODY COMPOSITES:
NAPHTHALENES

| River Segment | Station | 2-Chloronaphthalene | | | 2-Methylnaphthalene | | |
|---------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1C | D6 | 100 | | U | 100 | | U |
| 1C | D8 | 100 | | U | 100 | | U |
| 1C | D10 | 100 | | U | 100 | | U |
| 2A | D12 | 100 | | U | 100 | | U |
| 2B | D15 | 100 | | U | 100 | | U |
| 2C | D16 | 100 | | U | 100 | | U |
| 2C | D19 | 100 | | U | 100 | | U |
| 2C | D20 | 100 | | U | 100 | | U |
| 3A | D22 | 100 | | U | 100 | | U |
| 3A | D23 | 100 | | U | 100 | | U |
| 3A | D24 | 100 | | U | 100 | | U |
| 3B | D26 | 100 | | U | 100 | | U |
| 3B | D28 | 100 | | U | 100 | | U |
| 4A | D29 | 100 | | U | 100 | | U |
| 4A | D31 | 100 | | U | 100 | | U |
| 4A | D35 | 100 | | U | 100 | | U |
| 4A | D38 | 100 | | U | 100 | | U |
| 4B | D40 | 100 | | U | 100 | | U |

U = Compound was not detected. Value given is the lower quantification limit.

* Lipid-normalized data presented only when a compound is detected.

D2-7:1

TABLE D2-7. SEMIVOLATILES IN CRAYFISH WHOLE-BODY COMPOSITES:
POLYNUCLEAR AROMATICS

| River Segment | Station | Acenaphthene | | | Acenaphthylene | | | Anthracene | | | Benzo(a)anthracene | | |
|---------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1C | D6 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 1C | D8 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 1C | D10 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 2A | D12 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 2B | D15 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 2C | D16 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 2C | D19 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 2C | D20 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 3A | D22 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 3A | D23 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 3A | D24 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 3B | D26 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 3B | D28 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 4A | D29 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 4A | D31 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 4A | D35 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 4A | D38 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 4B | D40 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |

U = Compound was not detected. Value given is the lower quantification limit.

* Lipid-normalized data presented only when a compound is detected.

D2-7:2

| River Segment | Station | Benzo(b)fluoranthene | | | Benzo(k)fluoranthene | | | Benzo(a)pyrene | | | Benzo(g,h,i)perylene | | |
|---------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1C | D6 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 1C | D8 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 1C | D10 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 2A | D12 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 2B | D15 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 2C | D16 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 2C | D19 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 2C | D20 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 3A | D22 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 3A | D23 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 3A | D24 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 3B | D26 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 3B | D28 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 4A | D29 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 4A | D31 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 4A | D35 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 4A | D38 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 4B | D40 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |

D2-7:3

| River Segment | Station | Chrysene | | | Dibenzo(a,h)anthracene | | | Fluoranthene | | | Fluorene | | |
|---------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1C | D6 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 1C | D8 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 1C | D10 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 2A | D12 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 2B | D15 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 2C | D16 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 2C | D19 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 2C | D20 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 3A | D22 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 3A | D23 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 3A | D24 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 3B | D26 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 3B | D28 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 4A | D29 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 4A | D31 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 4A | D35 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 4A | D38 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 4B | D40 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |

D2-7:4

| River Segment | Station | Indeno(1,2,3-c,d)pyrene | | | Naphthalene | | | Phenanthrene | | | Pyrene | | |
|---------------|---------|-------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1C | D6 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 1C | D8 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 1C | D10 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 2A | D12 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 2B | D15 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 2C | D16 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 2C | D19 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 2C | D20 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 3A | D22 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 3A | D23 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 3A | D24 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 3B | D26 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 3B | D28 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 4A | D29 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 4A | D31 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 4A | D35 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 4A | D38 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 4B | D40 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |

D2-8:1

TABLE D2-8. SEMIVOLATILES IN CRAYFISH WHOLE-BODY COMPOSITES:
CHLORINATED BENZENES

| River Segment | Station | 1,3-Dichlorobenzene | | | 1,2-Dichlorobenzene | | | 1,4-Dichlorobenzene | | | 1,2,4-Trichlorobenzene | | |
|-------------------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1C | D6 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 1C | D8 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 1C | D10 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 2A | D12 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 2B | D15 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 2C | D16 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 2C | D19 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 2C | D20 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 3A | D22 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 3A | D23 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 3A | D24 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 3B | D26 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 3B | D28 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 4A | D29 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 4A | D31 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 4A | D35 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 4A | D38 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 4B | D40 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| Tissue Reference Levels | | na*** | | | na*** | | | na*** | | | 1300 | | |

U = Compound was not detected. Value given is the lower quantification limit.

* Lipid-normalized data presented only when a compound is detected.

*** Tissue reference level not available for this compound.

D2-8:2

| River Segment | Station | Hexachlorobenzene | | | Hexachlorobutadiene | | | Hexachloroethane | | | Hexachlorocyclopentadiene | | |
|-------------------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|---------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1C | D6 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 1C | D8 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 1C | D10 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 2A | D12 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 2B | D15 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 2C | D16 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 2C | D19 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 2C | D20 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 3A | D22 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 3A | D23 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 3A | D24 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 3B | D26 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 3B | D28 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 4A | D29 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 4A | D31 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 4A | D35 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 4A | D38 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 4B | D40 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| Tissue Reference Levels | | na*** | | | na*** | | | na*** | | | na*** | | |

**TABLE D2-9. SEMIVOLATILES IN CRAYFISH WHOLE-BODY COMPOSITES:
BENZIDINES**

| River Segment | Station | 3,3'-Dichlorobenzidine | | Qualifier Code |
|---------------|---------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | |
| 1C | D6 | 1000 | | U |
| 1C | D8 | 1000 | | U |
| 1C | D10 | 1000 | | U |
| 2A | D12 | 1000 | | U |
| 2B | D15 | 1000 | | U |
| 2C | D16 | 1000 | | U |
| 2C | D19 | 1000 | | U |
| 2C | D20 | 1000 | | U |
| 3A | D22 | 1000 | | U |
| 3A | D23 | 1000 | | U |
| 3A | D24 | 1000 | | U |
| 3B | D26 | 1000 | | U |
| 3B | D28 | 1000 | | U |
| 4A | D29 | 1000 | | U |
| 4A | D31 | 1000 | | U |
| 4A | D35 | 1000 | | U |
| 4A | D38 | 1000 | | U |
| 4B | D40 | 1000 | | U |

U = Compound was not detected. Value given is the lower quantification limit.
* Lipid-normalized data presented only when a compound is detected.

TABLE D2-10. SEMIVOLATILES IN CRAYFISH WHOLE-BODY COMPOSITES: PHTHALATE ESTERS

| River Segment | Station | Dimethyl phthalate | | | Diethyl phthalate | | | Di-n-butyl phthalate | | |
|---------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1C | D6 | 100 | | U | 200 | | U | 100 | | U |
| 1C | D8 | 100 | | U | 200 | | U | 100 | | U |
| 1C | D10 | 100 | | U | 200 | | U | 100 | | U |
| 2A | D12 | 100 | | U | 200 | | U | 100 | | U |
| 2B | D15 | 100 | | U | 200 | | U | 100 | | U |
| 2C | D16 | 100 | | U | 200 | | U | 100 | | U |
| 2C | D19 | 100 | | U | 200 | | U | 100 | | U |
| 2C | D20 | 100 | | U | 200 | | U | 100 | | U |
| 3A | D22 | 100 | | U | 200 | | U | 100 | | U |
| 3A | D23 | 100 | | U | 200 | | U | 110 | 10 | |
| 3A | D24 | 100 | | U | 200 | | U | 100 | | U |
| 3B | D26 | 100 | | U | 200 | | U | 100 | | U |
| 3B | D28 | 100 | | U | 200 | | U | 100 | | U |
| 4A | D29 | 100 | | U | 200 | | U | 100 | | U |
| 4A | D31 | 100 | | U | 200 | | U | 100 | | U |
| 4A | D35 | 100 | | U | 200 | | U | 100 | | U |
| 4A | D38 | 100 | | U | 200 | | U | 100 | | U |
| 4B | D40 | 100 | | U | 200 | | U | 100 | | U |

U = Compound was not detected. Value given is the lower quantification limit.

* Lipid-normalized data presented only when a compound is detected.

| River Segment | Station | Benzyl butyl phthalate | | | bis(2-Ethylhexyl) phthalate | | | Di-n-octyl phthalate | | |
|---------------|---------|------------------------|---------------------------|----------------|-----------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1C | D6 | 100 | | U | 100 | | U | 200 | | U |
| 1C | D8 | 100 | | U | 140 | 7.8 | | 200 | | U |
| 1C | D10 | 100 | | U | 200 | 13 | | 200 | | U |
| 2A | D12 | 100 | | U | 100 | | U | 200 | | U |
| 2B | D15 | 100 | | U | 140 | 8.9 | | 200 | | U |
| 2C | D16 | 100 | | U | 170 | 11 | | 200 | | U |
| 2C | D19 | 100 | | U | 150 | 6.3 | | 200 | | U |
| 2C | D20 | 100 | | U | 120 | 69.0 | | 200 | | U |
| 3A | D22 | 100 | | U | 980 | 129 | | 200 | | U |
| 3A | D23 | 100 | | U | 100 | | U | 200 | | U |
| 3A | D24 | 100 | | U | 470 | 36 | | 200 | | U |
| 3B | D26 | 100 | | U | 3100 | 203 | | 200 | | U |
| 3B | D28 | 100 | | U | 260 | 10 | | 200 | | U |
| 4A | D29 | 100 | | U | 100 | | U | 200 | | U |
| 4A | D31 | 100 | | U | 110 | 7.8 | | 200 | | U |
| 4A | D35 | 100 | | U | 240 | 18 | | 200 | | U |
| 4A | D38 | 100 | | U | 120 | 5.3 | | 200 | | U |
| 4B | D40 | 100 | | U | 100 | | U | 200 | | U |

D2-11:1

TABLE D2-11. PESTICIDES IN CRAYFISH WHOLE-BODY COMPOSITES

| River Segment | Station | o,p-DDD | | | o,p-DDE | | | o,p-DDT | | | 4,4'-DDD | | |
|-------------------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code |
| 1C | D6 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 1C | D8 | 3 | | U | 3 | | U | 3 | | U | 5* | | U |
| 1C | D10 | 3 | | U | 3 | | U | 3 | | U | 9.9 | 0.65 | |
| 2A | D12 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 2B | D15 | 3 | | U | 3 | | U | 3 | | U | 9.6 | 0.61 | |
| 2C | D16 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 2C | D19 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 2C | D20 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 3A | D22 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 3A | D23 | 3 | | U | 3 | | U | 3 | 0.29 | | 3 | | U |
| 3A | D24 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 3B | D26 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 3B | D28 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 4A | D29 | 3 | | U | 3 | | U | 3 | | U | 8* | | U |
| 4A | D31 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 4A | D35 | 3 | | U | 3 | | U | 3 | | U | 7* | | U |
| 4A | D36 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 4B | D40 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| Tissue Reference Levels | | 200 | | | 200 | | | 200 | | | 200 | | |

U = Compound was not detected. Value given is the lower quantification limit.

E = Estimated value.

* Reporting limits adjusted due to coeluting interfering peaks.

** Lipid-normalized data presented only when a compound is detected.

*** Tissue reference level not available for this compound.

D2-1:2

| River Segment | Station | 4,4'-DDE | | | 4,4'-DDT | | | Heptachlor | | | Heptachlor epoxide | | |
|-------------------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code |
| 1C | D6 | 4.7 | 0.36 | | 3 | | U | 3 | | U | 3 | | U |
| 1C | D8 | 5.4 | 0.30 | | 3 | | U | 3 | | U | 3 | | U |
| 1C | D10 | 8.5 | 0.56 | | 3 | | U | 3 | | U | 3 | | U |
| 2A | D12 | 3.3 | 2.40 | | 3 | | U | 3 | | U | 3 | | U |
| 2B | D15 | 6.8 | 0.43 | | 3 | | U | 3 | | U | 3 | | U |
| 2C | D16 | 3.4 | 0.22 | | 3 | | U | 3 | | U | 3 | | U |
| 2C | D19 | 9.8 | 0.41 | | 3 | | U | 3 | | U | 3 | | U |
| 2C | D20 | 11 | 0.63 | | 3 | 0.17 | | 3 | | U | 3 | | U |
| 3A | D22 | 7.2 | 0.95 | | 3 | | U | 3 | | U | 3 | | U/E |
| 3A | D23 | 14 | 1.33 | | 3 | | U | 3 | | U | 3 | | U |
| 3A | D24 | 8.7 | 0.67 | | 3 | | U | 3 | | U | 3 | | U |
| 3B | D26 | 7.8 | 0.51 | | 3 | | U | 3 | | U | 3 | | U |
| 3B | D28 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 4A | D29 | 11 | 0.52 | | 3 | | U | 3 | | U | 3 | | U |
| 4A | D31 | 17 | 1.21 | | 3 | | U | 3 | | U | 3 | | U |
| 4A | D35 | 3 | | U | 4* | | U | 3 | | U | 3 | | U |
| 4A | D38 | 17 | 0.76 | | 3 | | U | 4.5 | 0.20 | | 3 | | U |
| 4B | D40 | 6.1 | 0.48 | | 3 | | U | 3 | | U | 3 | | U |
| Tissue Reference Levels | | 200 | | | 200 | | | 200 | | | na*** | | |

D2-1:3

| River Segment | Station | Chlordane | | | Aldrin | | | Dieldrin | | | Mirex | | |
|-------------------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code |
| 1C | D6 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 1C | D8 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 1C | D10 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 2A | D12 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 2B | D15 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 2C | D16 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 2C | D19 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 2C | D20 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 3A | D22 | 3 | | U | 3 | | U/E | 3 | | U/E | 3 | | U |
| 3A | D23 | 3 | | U | 3 | | U/E | 3 | | U/E | 3 | | U |
| 3A | D24 | 3 | | U | 3 | | U/E | 3 | | U/E | 3 | | U |
| 3B | D26 | 3 | | U | 3 | | U/E | 3 | | U/E | 3 | | U |
| 3B | D28 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 4A | D29 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 4A | D31 | 3 | | U | 3 | | U | 6.6 | 0.47 | | 3 | | U |
| 4A | D35 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 4A | D38 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 4B | D40 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| Tissue Reference Levels | | na*** | | | 120 | | | 120 | | | 300 | | |

D2-1:4

| River Segment | Station | Dacthal | | | Dicofol | | | Methyl parathion | | | Parathion | | |
|-------------------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code |
| 1C | D6 | 3 | | U | 30 | | U | 38 | 2.88 | | 3 | | U |
| 1C | D8 | 3 | | U | 30 | | U | 3 | | U | 3 | | U |
| 1C | D10 | 3 | | U | 30 | | U | 3 | | U | 3 | | U |
| 2A | D12 | 3 | | U | 30 | | U | 3 | | U | 3 | | U |
| 2B | D15 | 3 | | U | 30 | | U | 3 | | U | 3 | | U |
| 2C | D16 | 3 | | U | 30 | | U | 10 | 0.64 | | 3 | | U |
| 2C | D19 | 3 | | U | 30 | | U | 3 | | U | 3 | | U |
| 2C | D20 | 3 | | U | 30 | | U | 3 | | U | 3 | | U |
| 3A | D22 | 3 | | U | 30 | | U | 3 | | U | 3 | | U |
| 3A | D23 | 3 | | U | 30 | | U | 7* | | U | 3 | | U |
| 3A | D24 | 3 | | U | 30 | | U | 17 | 1.31 | | 3 | | U |
| 3B | D26 | 3 | | U | 30 | | U | 3 | | U | 3 | | U |
| 3B | D28 | 3 | | U | 30 | | U | 3 | | U | 3 | | U |
| 4A | D29 | 3 | | U | 30 | | U | 8* | | U | 3 | | U |
| 4A | D31 | 3 | | U | 30 | | U | 3 | | U | 3 | | U |
| 4A | D35 | 3 | | U | 30 | | U | 4* | | U | 3 | | U |
| 4A | D38 | 3 | | U | 30 | | U | 3 | | U | 3 | | U |
| 4B | D40 | 3 | | U | 30 | | U | 3 | | U | 3 | | U |
| Tissue Reference Levels | | na*** | | | na*** | | | na*** | | | na*** | | |

D2-11:5

| River Segment | Station | Malathion | | | Toxaphene | | | Isophorone | | | Endosulfan I | | |
|-------------------------|---------|------------------------|--------------------------|----------------|------------------------|--------------------------|----------------|------------------------|--------------------------|----------------|------------------------|--------------------------|----------------|
| | | Measured Conc. (ug/kg) | Nom. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Nom. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Nom. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Nom. Conc** (ug/g lipid) | Qualifier Code |
| 1C | D6 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 1C | D8 | 3 | | U | 150 | | U | 120 | 6.7 | | 3 | | U |
| 1C | D10 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 2A | D12 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 2B | D15 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 2C | D16 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 2C | D19 | 3 | | U | 150 | | U | 430 | 17.9 | | 3 | | U |
| 2C | D20 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 3A | D22 | 3 | | U | 150 | | U | 110 | 14.5 | | 3 | | U/E |
| 3A | D23 | 3 | | U | 150 | | U | 100 | | U | 3 | | U/E |
| 3A | D24 | 3 | | U | 150 | | U | 210 | 16.2 | | 3 | | U/E |
| 3B | D26 | 3 | | U | 150 | | U | 280 | 18.3 | | 3 | | U/E |
| 3B | D28 | 3 | | U | 150 | | U | 330 | 12.8 | | 3 | | U |
| 4A | D29 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 4A | D31 | 3 | | U | 150 | | U | 310 | 22.0 | | 3 | | U |
| 4A | D35 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 4A | D38 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 4B | D40 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| Tissue Reference Levels | | na*** | | | na*** | | | na*** | | | na*** | | |

D2-11:6

| River Segment | Station | Endosulfan II | | | Endosulfan sulfate | | | Endrin | | | Endrin aldehyde | | |
|-------------------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code |
| 1C | D6 | 3 | | U | 3 | | U/E | 3 | | U | 3 | | U |
| 1C | D8 | 3 | | U | 3 | | U/E | 3 | | U | 3 | | U |
| 1C | D10 | 3 | | U | 3 | | U/E | 3 | | U | 3 | | U |
| 2A | D12 | 3 | | U | 3 | | U/E | 3 | | U | 3 | | U |
| 2B | D15 | 3 | | U | 3 | | U/E | 3 | | U | 3 | | U |
| 2C | D16 | 3 | | U | 3 | | E | 3 | | U | 3 | | U |
| 2C | D19 | 3 | | U | 3 | | U/E | 3 | | U | 3 | | U |
| 2C | D20 | 3 | | U | 3 | | U/E | 3 | | U | 3 | | U |
| 3A | D22 | 3 | | U | 3 | | U | 3 | | U | 3 | | U/E |
| 3A | D23 | 3 | | U | 3 | | U | 3 | | U | 3 | | U/E |
| 3A | D24 | 3 | | U | 3 | | U | 3 | | U | 3 | | U/E |
| 3B | D26 | 3 | | U | 3 | | U | 3 | | U | 3 | | U/E |
| 3B | D28 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 4A | D29 | 7.6 | 0.36 | | 3 | | U/E | 4* | | U | 3 | | U |
| 4A | D31 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 4A | D35 | 4* | | U | 3 | | U | 3 | | U | 3 | | U |
| 4A | D38 | 3 | | U | 3 | | U/E | 3 | | U | 3 | | U |
| 4B | D40 | 3 | | U | 3 | | U/E | 3 | | U | 3 | | U |
| Tissue Reference Levels | | na*** | | | na*** | | | 25 | | | na*** | | |

D2-11:7

| River Segment | Station | Methoxychlor | | | alpha-BHC | | | beta-BHC | | | delta-BHC | | |
|-------------------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code |
| 1C | D6 | 30 | | U/E | 3 | | U | 3 | | U | 3 | | U |
| 1C | D8 | 30 | | U/E | 3 | | U | 3 | | U | 3 | | U |
| 1C | D10 | 30 | | U/E | 3 | | U | 3 | | U | 3 | | U |
| 2A | D12 | 30 | | U/E | 3 | | U | 3 | | U | 3 | | U |
| 2B | D15 | 32 | 2.04 | E | 3 | | U | 3 | | U | 3 | | U |
| 2C | D16 | 30 | | U/E | 3 | | U | 5.6 | 0.36 | | 3 | | U |
| 2C | D19 | 30 | | U/E | 3 | | U | 3 | | U | 3 | | U |
| 2C | D20 | 30 | | U/E | 3 | | U | 3 | | U | 3 | | U |
| 3A | D22 | 30 | | U | 3 | | U | 3 | | U | 3 | | U/E |
| 3A | D23 | 40* | | U | 3 | | U | 3 | | U | 3 | | U/E |
| 3A | D24 | 34 | 2.62 | | 3 | | U | 3 | | U | 3 | | U/E |
| 3B | D26 | 30 | | U | 3 | | U | 3 | | U | 3 | | U/E |
| 3B | D28 | 30 | | U | 3 | | U | 3 | | U | 3 | | U |
| 4A | D29 | 30 | | U/E | 3 | | U | 3 | | U | 3 | | U |
| 4A | D31 | 30 | | U | 3 | | U | 3 | | U | 3 | | U |
| 4A | D35 | 30 | | U | 3 | | U | 3 | | U | 3 | | U |
| 4A | D38 | 30 | | U/E | 3 | | U | 4.1 | 0.18 | | 3 | | U |
| 4B | D40 | 30 | | U/E | 3 | | U | 3 | | U | 3 | | U |
| Tissue Reference Levels | | na*** | | | 100 | | | 100 | | | 100 | | |

D2-1:8

| River Segment | Station | gamma-BHC | | Qualifier Code |
|-------------------------|---------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | |
| 1C | D6 | 3 | | U |
| 1C | D8 | 3 | | U |
| 1C | D10 | 3 | | U |
| 2A | D12 | 3 | | U |
| 2B | D15 | 3 | | U |
| 2C | D16 | 3 | | U |
| 2C | D19 | 3 | | U |
| 2C | D20 | 3 | | U |
| 3A | D22 | 3 | | U |
| 3A | D23 | 3 | | U |
| 3A | D24 | 3 | | U |
| 3B | D26 | 3 | | U |
| 3B | D28 | 3 | | U |
| 4A | D29 | 3 | | U |
| 4A | D31 | 3 | | U |
| 4A | D35 | 3 | | U |
| 4A | D38 | 3 | | U |
| 4B | D40 | 3 | | U |
| Tissue Reference Levels | | 100 | | |

D2-12:1

TABLE D2-12. PCBs IN CRAYFISH WHOLE-BODY COMPOSITES

| River Segment | Station | Aroclor-1016 | | | Aroclor-1221 | | | Aroclor-1232 | | | Aroclor-1242 | | |
|-------------------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1C | D6 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 1C | D8 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 1C | D10 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 2A | D12 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 2B | D15 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 2C | D16 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 2C | D19 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 2C | D20 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 3A | D22 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 3A | D23 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 3A | D24 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 3B | D26 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 3B | D28 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 4A | D29 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 4A | D31 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 4A | D35 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 4A | D38 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 4B | D40 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| Tissue Reference Levels | | na** | | | na** | | | na** | | | na** | | |

U = Compound was not detected. Value given is the lower quantification limit.

* Lipid-normalized data presented only when a compound is detected.

** Tissue reference level not available for this compound.

D2-12:2

| River Segment | Station | Aroclor-1248 | | | Aroclor-1254 | | | Aroclor-1260 | | | Total Detected PCBs | |
|-------------------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) |
| 1C | D6 | 50 | | U | 50 | | U | 50 | | U | 0 | |
| 1C | D8 | 50 | | U | 50 | | U | 50 | | U | 0 | |
| 1C | D10 | 50 | | U | 50 | | U | 50 | | U | 0 | |
| 2A | D12 | 50 | | U | 50 | | U | 50 | | U | 0 | |
| 2B | D15 | 50 | | U | 50 | | U | 50 | | U | 0 | |
| 2C | D16 | 50 | | U | 50 | | U | 50 | | U | 0 | |
| 2C | D19 | 50 | | U | 50 | | U | 50 | | U | 0 | |
| 2C | D20 | 50 | | U | 50 | | U | 50 | | U | 0 | |
| 3A | D22 | 50 | | U | 50 | | U | 50 | | U | 0 | |
| 3A | D23 | 50 | | U | 50 | | U | 50 | | U | 0 | |
| 3A | D24 | 50 | | U | 50 | | U | 50 | | U | 0 | |
| 3B | D26 | 50 | | U | 50 | | U | 50 | | U | 0 | |
| 3B | D28 | 50 | | U | 50 | | U | 50 | | U | 0 | |
| 4A | D29 | 50 | | U | 50 | | U | 50 | | U | 0 | |
| 4A | D31 | 50 | | U | 50 | | U | 50 | | U | 0 | |
| 4A | D35 | 50 | | U | 50 | | U | 50 | | U | 0 | |
| 4A | D38 | 50 | | U | 50 | | U | 50 | | U | 0 | |
| 4B | D40 | 50 | | U | 50 | | U | 50 | | U | 0 | |
| Tissue Reference Levels | | na** | | | na** | | | na** | | | 110 | |

D2-13:1

TABLE D2-13. DIOXINS AND FURANS IN CRAYFISH WHOLE-BODY COMPOSITES

| River Segment | Station | 2,3,7,8-TCDD | | | 1,2,3,7,8-PeCDD | | | 1,2,3,4,7,8-HxCDD | | | 1,2,3,6,7,8-HxCDD | | |
|-------------------------|---------|-----------------------|---------------------------|----------------|-----------------------|---------------------------|----------------|-----------------------|---------------------------|----------------|-----------------------|---------------------------|----------------|
| | | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code |
| 1C | D6 | 0.44 | 0.033 | S | 0.19 | | U/E | 0.16 | | U/E | 0.16 | | U/E |
| 1C | D8 | 0.45 | 0.025 | S | 0.18 | | U/E | 0.08 | | U/E | 0.07 | | U/E |
| 1C | D10 | 0.45 | 0.030 | S | 0.17 | | U/E | 0.13 | | U/E | 0.38 | 0.025 | S/M |
| 2B | D15 | 0.39 | 0.025 | S/M | 0.14 | | U/E | 0.08 | | U/E | 0.07 | | U/E |
| 2C | D19 | 0.62 | 0.026 | | 0.66 | | U/E | 0.21 | | U/E | 0.3 | | U/E |
| 2C | D20 | 0.39 | 0.022 | S/M | 0.09 | | U/E | 0.3 | | U/E | 0.3 | | U/E |
| 3A | D23 | 0.43 | 0.041 | S | 0.32 | | U/E | 0.1 | | U/E | 0.31 | 0.030 | |
| 3A | D24 | 0.47 | 0.036 | S | 0.83 | | U/E | 0.39 | 0.030 | S | 0.89 | 0.068 | S |
| 3B | D28 | 0.86 | 0.033 | | 0.32 | | U/E | 0.16 | 0.006 | S/M | 0.32 | 0.012 | S/M |
| 4A | D35 | 0.4 | 0.030 | S/M | 0.48 | 0.036 | S | 0.15 | 0.011 | S/M | 0.53 | 0.039 | S |
| 4A | D38 | 0.4 | 0.018 | S/M | 0.27 | | U/E | 0.24 | | U/E | 0.25 | | U/E |
| 4B | D40 | 0.27 | 0.021 | S | 0.22 | | U/E | 0.2 | | U/E | 0.19 | | U/E |
| Tissue Reference Levels | | na*** | | | na*** | | | na*** | | | na*** | | |

U = Compound was not detected.
 E = Analyte not detected at or above the sample specific Estimated Detection Limit (EDL). The EDL is reported.
 L = Analyte not detected at or above the Lower Method Calibration Limit (LMCL). The LMCL is reported.
 M = Estimated Maximum Possible Concentration.
 MD = Estimated Maximum Possible Concentration with Diphenyl Ether interferences.
 S = Analyte detected below the Lower Method Calibration Limit. Value should be considered an estimate.
 * Obtained from a DB-225 column.
 ** Lipid-normalized data presented only when a compound is detected.
 *** Tissue reference level not available for this compound.

| River Segment | Station | 1,2,3,7,8,9-HxCDD | | | 1,2,3,4,6,7,8-HpCDD | | | OCDD | | | 2,3,7,8-TCDF | | |
|-------------------------|---------|-----------------------|---------------------------|----------------|-----------------------|---------------------------|----------------|-----------------------|---------------------------|----------------|-----------------------|---------------------------|----------------|
| | | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code |
| 1C | D6 | 0.16 | | U/E | 0.42 | 0.032 | S/M | 2.22 | 0.168 | S | 4.66 | 0.353 | * |
| 1C | D8 | 0.07 | | U/E | 0.67 | 0.037 | S/M | 4.12 | 0.230 | S | 4.72 | 0.264 | * |
| 1C | D10 | 0.12 | | U/E | 1.57 | 0.103 | S | 7.81 | 0.514 | | 4.41 | 0.290 | * |
| 2B | D15 | 0.07 | | U/E | 0.53 | 0.034 | S/M | 3.38 | 0.215 | S | 4.12 | 0.262 | * |
| 2C | D19 | 0.18 | | U/E | 1.18 | 0.049 | S | 6.52 | 0.272 | | 9.52 | 0.397 | * |
| 2C | D20 | 0.29 | | U/E | 0.47 | 0.027 | S | 3.33 | 0.190 | S | 5.64 | 0.322 | * |
| 3A | D23 | 0.15 | 0.014 | M | 0.71 | 0.068 | S | 4.67 | 0.445 | S | 6.08 | 0.579 | * |
| 3A | D24 | 0.76 | 0.058 | S/M | 4.01 | 0.308 | | 16.7 | 1.285 | | 6.39 | 0.492 | * |
| 3B | D28 | 0.19 | | U/E | 5.21 | 0.202 | | 79.1 | 3.066 | | 12.4 | 0.481 | * |
| 4A | D35 | 0.59 | 0.044 | S | 2.07 | 0.153 | S | 5.72 | 0.424 | | 4.1 | 0.304 | * |
| 4A | D38 | 0.25 | | U/E | 0.32 | | U/E | 1.62 | 0.072 | S/M | 4.83 | 0.215 | * |
| 4B | D40 | 0.18 | | U/E | 0.62 | 0.048 | S | 3.12 | 0.244 | S | 4.81 | 0.376 | * |
| Tissue Reference Levels | | na*** | | | na*** | | | na*** | | | na*** | | |

| River Segment | Station | 1,2,3,7,8-PeCDF | | | 2,3,4,7,8-PeCDF | | | 1,2,3,4,7,8-HxCDF | | | 1,2,3,6,7,8-HxCDF | | |
|-------------------------|---------|-----------------------|---------------------------|----------------|-----------------------|---------------------------|----------------|-----------------------|---------------------------|----------------|-----------------------|---------------------------|----------------|
| | | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code |
| 1C | D6 | 0.14 | 0.011 | S | 0.23 | 0.017 | S | 0.27 | | U/E | 0.27 | | U/E |
| 1C | D8 | 0.11 | 0.006 | S/M | 0.22 | 0.012 | S/M | 0.24 | | U/E | 0.22 | | U/E |
| 1C | D10 | 0.16 | | U/E | 0.24 | 0.016 | S/M | 0.26 | | U/E | 0.25 | | U/E |
| 2B | D15 | 0.19 | | U/E | 0.29 | 0.018 | S/M | 0.09 | | U/E | 0.09 | | U/E |
| 2C | D19 | 1.02 | 0.043 | S | 3.05 | 0.127 | | 0.35 | 0.015 | S | 0.24 | 0.010 | S |
| 2C | D20 | 0.17 | 0.010 | S | 0.2 | 0.011 | S | 0.09 | | U/E | 0.1 | | U/E |
| 3A | D23 | 0.25 | 0.024 | S/M | 0.42 | 0.040 | S/M | 0.07 | | U/E | 0.06 | | U/E |
| 3A | D24 | 0.67 | 0.052 | S | 0.98 | 0.075 | S | 0.36 | 0.028 | S | 0.32 | 0.025 | S |
| 3B | D28 | 0.39 | 0.015 | S/M | 0.85 | 0.033 | S/M | 0.28 | 0.011 | S | 0.32 | 0.012 | S/M |
| 4A | D35 | 0.3 | 0.022 | S | 0.48 | 0.036 | S/M | 0.21 | 0.016 | S | 0.18 | 0.013 | S/M |
| 4A | D38 | 0.42 | | U/E | 0.29 | 0.013 | S/M | 0.42 | | U/E | 0.4 | | U/E |
| 4B | D40 | 0.26 | | U/E | 0.22 | 0.017 | S/M | 0.32 | | U/E | 0.31 | | U/E |
| Tissue Reference Levels | | na*** | | | na*** | | | na*** | | | na*** | | |

D2-13:3

| River Segment | Station | 2,3,4,6,7,8-HxCDF | | | 1,2,3,7,8,9-HxCDF | | | 1,2,3,4,6,7,8-HpCDF | | | 1,2,3,4,7,8,9-HpCDF | | |
|-------------------------|---------|-----------------------|---------------------------|----------------|-----------------------|---------------------------|----------------|-----------------------|---------------------------|----------------|-----------------------|---------------------------|----------------|
| | | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code |
| 1C | D6 | 0.32 | | U/E | 0.41 | | U/E | 0.13 | | U/E | 0.15 | | U/E |
| 1C | D8 | 0.21 | 0.012 | S/M | 0.31 | | U/E | 0.1 | | U/E | 0.13 | | U/E |
| 1C | D10 | 0.26 | 0.017 | S | 0.35 | | U/E | 0.29 | 0.019 | S | 0.16 | | U/E |
| 2B | D15 | 0.28 | 0.018 | S | 0.16 | | U/E | 0.27 | 0.017 | S/M | 0.16 | | U/E |
| 2C | D19 | 0.46 | 0.019 | S | 0.05 | | U/E | 0.31 | | U/E | 0.09 | | U/E |
| 2C | D20 | 0.35 | 0.020 | S | 0.12 | | U/E | 0.13 | | U/E | 0.17 | | U/E |
| 3A | D23 | 0.33 | 0.031 | S | 0.09 | | U/E | 0.37 | 0.035 | S/M | 0.27 | | U/E |
| 3A | D24 | 0.84 | 0.065 | S | 0.23 | 0.018 | S | 0.7 | 0.054 | S | 0.19 | 0.015 | S |
| 3B | D28 | 7.26 | 0.281 | | 0.71 | | U/E | 0.31 | 0.012 | S/M | 0.35 | | U/E |
| 4A | D35 | 0.48 | 0.036 | S | 0.13 | 0.010 | S/M | 0.29 | 0.021 | S | 0.07 | | U/E |
| 4A | D38 | 0.34 | 0.015 | S/M | 0.59 | | U/E | 0.45 | 0.020 | S/M | 0.24 | | U/E |
| 4B | D40 | 0.27 | 0.021 | S/M | 0.5 | | U/E | 0.09 | | U/E | 0.14 | | U/E |
| Tissue Reference Levels | | na*** | | | na*** | | | na*** | | | na*** | | |

| River Segment | Station | OCDF | | | TECs Calculated Conc. (pg/g) |
|-------------------------|---------|-----------------------|---------------------------|----------------|------------------------------|
| | | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code | |
| 1C | D6 | 0.29 | | U/E | 1.3 |
| 1C | D8 | 0.18 | | U/E | 1.3 |
| 1C | D10 | 0.35 | | U/E | 1.3 |
| 2B | D15 | 0.52 | | U/E | 1.1 |
| 2C | D19 | 0.56 | 0.023 | S | 3.7 |
| 2C | D20 | 0.44 | | U/E | 1.3 |
| 3A | D23 | 0.49 | 0.047 | S/M | 1.6 |
| 3A | D24 | 0.63 | 0.048 | S | 2.5 |
| 3B | D28 | 1.24 | 0.048 | S/M | 3.0 |
| 4A | D35 | 0.42 | 0.031 | S/M | 1.6 |
| 4A | D38 | 0.6 | 0.027 | S/M | 1.4 |
| 4B | D40 | 0.24 | | U/E | 1.2 |
| Tissue Reference Levels | | na*** | | | 3 |

APPENDIX D3. PEAMOUTH TISSUE BIOACCUMULATION DATA

- D3-0. PERCENT LIPID AND LENGTH/WEIGHT DATA
- D3-1. METALS IN PEAMOUTH WHOLE-BODY COMPOSITES
- D3-2. PHENOLIC COMPOUNDS IN PEAMOUTH WHOLE-BODY COMPOSITES
- D3-3. SEMIVOLATILES IN PEAMOUTH WHOLE-BODY COMPOSITES: HALOGENATED ETHERS
- D3-4. SEMIVOLATILES IN PEAMOUTH WHOLE-BODY COMPOSITES: NITROAROMATICS
- D3-5. SEMIVOLATILES IN PEAMOUTH WHOLE-BODY COMPOSITES: NITROSAMINES
- D3-6. SEMIVOLATILES IN PEAMOUTH WHOLE-BODY COMPOSITES: NAPHTHALENES
- D3-7. SEMIVOLATILES IN PEAMOUTH WHOLE-BODY COMPOSITES: POLYNUCLEAR AROMATICS
- D3-8. SEMIVOLATILES IN PEAMOUTH WHOLE-BODY COMPOSITES: CHLORINATED BENZENES
- D3-9. SEMIVOLATILES IN PEAMOUTH WHOLE-BODY COMPOSITES: BENZIDINES
- D3-10. SEMIVOLATILES IN PEAMOUTH WHOLE-BODY COMPOSITES: PHTHALATE ESTERS
- D3-11. PESTICIDES IN PEAMOUTH WHOLE-BODY COMPOSITES
- D3-12. PCBs IN PEAMOUTH WHOLE-BODY COMPOSITES
- D3-13. DIOXINS AND FURANS IN PEAMOUTH WHOLE-BODY COMPOSITES

(Note: All concentrations are presented on a wet-weight basis)

D3-0:1

| TABLE D3-0. PEAMOUTH LIPID AND SIZE DATA | | | | | | | | | | |
|--|---------|--------------|---------------|---------------|--------------------|--------------------|--------------------|---------------------|---------------------|---------------------|
| River Segment | Station | Latitude | Longitude | Percent Lipid | Average Weight (g) | Minimum Weight (g) | Maximum Weight (g) | Average Length (cm) | Minimum Length (cm) | Maximum Length (cm) |
| 1B | D3 | 46-09-56.0 N | 123-48-59.2 W | 12.2 | 198.6 | 123.0 | 302.0 | 24.4 | 21.5 | 28.0 |
| 1C | D10 | 46-12-35.5 N | 123-26-35.1 W | 3.9 | 131.2 | 52.0 | 165.0 | 21.9 | 16.2 | 24.0 |
| 2A | D12 | 46-12-20.9 N | 123-23-25.2 W | 4.21 | 76.8 | 22.0 | 128.0 | 18.6 | 13.0 | 22.7 |
| 2B | D15 | 46-08-21.3 N | 123-13-56.6 W | 5.89 | 101.1 | 44.0 | 137.0 | 20.4 | 16.0 | 23.4 |
| 2C | D16 | 46-11-15.3 N | 123-05-28.1 W | 5.9 | 60.4 | 21.0 | 143.0 | 16.8 | 13.1 | 22.7 |
| 2C | D19 | 46-08-17.3 N | 123-00-28.5 W | 6.22 | 51.2 | 27.0 | 74.5 | 16.3 | 13.5 | 18.7 |
| 2C | D21 | 46-03-39.3 N | 122-52-02.6 W | 6.89 | 65.7 | 30.6 | 102.9 | 17.2 | 13.7 | 20.8 |
| 3A | D23 | 45-57-20.1 N | 122-48-15.8 W | 8.07 | 66.0 | 50.0 | 100.0 | 15.4 | 12.9 | 19.7 |
| 3A | D24 | 45-52-22.5 N | 122-47-54.9 W | 5.05 | 106.8 | 46.0 | 200.0 | 21.0 | 16.4 | 26.0 |
| 3B | D28 | 45-42-15.7 N | 122-45-35.3 W | 2.42 | 92.2 | 67.0 | 125.0 | 20.2 | 18.0 | 22.5 |

TABLE D3-1. CONCENTRATIONS OF METALS IN PEAMOUTH WHOLE-BODY COMPOSITES

| River Segment | Station | Antimony | | Arsenic | | Barium | | Cadmium | | Copper | | Lead | |
|---------------|---------|------------------------|----------------|------------------------|----------------|------------------------|----------------|------------------------|----------------|------------------------|----------------|------------------------|----------------|
| | | Measured Conc. (mg/kg) | Qualifier Code | Measured Conc. (mg/kg) | Qualifier Code | Measured Conc. (mg/kg) | Qualifier Code | Measured Conc. (mg/kg) | Qualifier Code | Measured Conc. (mg/kg) | Qualifier Code | Measured Conc. (mg/kg) | Qualifier Code |
| 1B | D3 | 0.36 | U | 0.48 | U | 2.4 | E | 0.02 | | 1.60 | E | 0.12 | E |
| 1C | D10 | 0.35 | U | 0.47 | U | 2.3 | E | 0.07 | | 1.73 | E | 0.09 | E |
| 2A | D12 | 0.33 | U | 0.44 | U | 2.6 | E | 0.04 | | 1.27 | E | 0.10 | E |
| 2B | D15 | 0.33 | U | 0.44 | U | 4.2 | E | 0.08 | | 27.31 | E | 1.35 | E |
| 2C | D16 | 0.35 | U | 0.46 | U | 2.2 | E | 0.02 | | 0.90 | E | 0.06 | E |
| 2C | D19 | 0.31 | U | 0.41 | U | 2.5 | E | 0.02 | | 1.20 | E | 0.10 | E |
| 2C | D21 | 0.36 | U | 0.48 | U | 2.0 | E | 0.02 | | 1.65 | E | 0.08 | E |
| 3A | D23 | 0.32 | U | 0.43 | U | 1.9 | E | 0.02 | | 1.10 | E | 0.07 | E |
| 3A | D24 | 0.37 | U | 0.49 | U | 3.2 | E | 0.05 | | 8.54 | E | 0.34 | E |
| 3B | D28 | 0.32 | U | 0.42 | U | 3.2 | E | 0.04 | | 2.06 | E | 0.05 | E |

U = Compound was not detected. Value given is the lower quantification limit.

E = Estimated value.

* Metals data normalized to wet weight.

| River Segment | Station | Mercury | | Nickel | | Selenium | | Silver | | Zinc | |
|---------------|---------|------------------------|----------------|------------------------|----------------|------------------------|----------------|------------------------|----------------|------------------------|----------------|
| | | Measured Conc. (mg/kg) | Qualifier Code | Measured Conc. (mg/kg) | Qualifier Code | Measured Conc. (mg/kg) | Qualifier Code | Measured Conc. (mg/kg) | Qualifier Code | Measured Conc. (mg/kg) | Qualifier Code |
| 1B | D3 | 0.230 | E | 0.84 | U/E | 0.48 | U | 0.21 | U/E | 23.9 | E |
| 1C | D10 | 0.126 | E | 0.82 | U/E | 0.47 | U | 0.21 | U/E | 28.1 | E |
| 2A | D12 | 0.096 | E | 0.77 | U/E | 0.44 | U | 0.20 | U/E | 30.8 | E |
| 2B | D15 | 0.054 | E | 1.97 | E | 0.44 | U | 0.20 | U/E | 44.2 | E |
| 2C | D16 | 0.142 | E | 0.81 | U/E | 0.46 | U | 0.21 | U/E | 23.1 | E |
| 2C | D19 | 0.094 | E | 0.72 | U/E | 0.41 | U | 0.19 | U/E | 22.7 | E |
| 2C | D21 | 0.095 | E | 0.83 | U/E | 0.48 | U | 0.21 | U/E | 28.6 | E |
| 3A | D23 | 0.088 | E | 0.75 | U/E | 0.43 | U | 0.20 | U/E | 30.1 | E |
| 3A | D24 | 0.212 | E | 3.42 | E | 0.49 | U | 0.22 | U/E | 29.3 | E |
| 3B | D28 | 0.075 | E | 0.74 | U/E | 0.42 | U | 0.19 | U/E | 31.5 | E |

D3-1:1

TABLE D3-2. PHENOLIC COMPOUNDS IN PEAMOUTH WHOLE-BODY COMPOSITES

| River Segment | Station | Phenol | | | 2-Methylphenol | | | 4-Methylphenol | | | 2,4-Dimethylphenol | | |
|---------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1B | D3 | 200 | | U | 400 | | U | 400 | | U | 200 | | U |
| 1C | D10 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 2A | D12 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 2B | D15 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 2C | D16 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 2C | D19 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 2C | D21 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 3A | D23 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 3A | D24 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 3B | D28 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |

U = Compound was not detected. Value given is the lower quantification limit.

* Lipid-normalized data presented only when a compound is detected.

| River Segment | Station | Pentachlorophenol | | | 2-Chlorophenol | | | 2,4-Dichlorophenol | | | 4-Chloro-3-methylphenol | | |
|---------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|-------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1B | D3 | 2000 | | U | 200 | | U | 400 | | U | 400 | | U |
| 1C | D10 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 2A | D12 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 2B | D15 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 2C | D16 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 2C | D19 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 2C | D21 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 3A | D23 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 3A | D24 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 3B | D28 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |

P3-2:1

D3-2:2

| River Segment | Station | 2,4-Dinitrophenol | | | 2-Nitrophenol | | | 4-Nitrophenol | | | 2,4,6-Trichlorophenol | | |
|---------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1B | D3 | 2000 | | U | 400 | | U | 2000 | | U | 400 | | U |
| 1C | D10 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 2A | D12 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 2B | D15 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 2C | D16 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 2C | D19 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 2C | D21 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 3A | D23 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 3A | D24 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 3B | D28 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |

TABLE D3-3. SEMIVOLATILES IN PEAMOUTH WHOLE-BODY COMPOSITES:
HALOGENATED ETHERS

| River Segment | Station | bis(2-Chloroethyl) ether | | | bis(2-Chloroethoxy) methane | | | bis(2-Chloroisopropyl) ether | | |
|---------------|---------|--------------------------|---------------------------|----------------|-----------------------------|---------------------------|----------------|------------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1B | D3 | 200 | | U | 200 | | U | 200 | | U |
| 1C | D10 | 100 | | U | 100 | | U | 100 | | U |
| 2A | D12 | 100 | | U | 100 | | U | 100 | | U |
| 2B | D15 | 100 | | U | 100 | | U | 100 | | U |
| 2C | D16 | 100 | | U | 100 | | U | 100 | | U |
| 2C | D19 | 100 | | U | 100 | | U | 100 | | U |
| 2C | D21 | 100 | | U | 100 | | U | 100 | | U |
| 3A | D23 | 100 | | U | 100 | | U | 100 | | U |
| 3A | D24 | 100 | | U | 100 | | U | 100 | | U |
| 3B | D28 | 100 | | U | 100 | | U | 100 | | U |

U = Compound was not detected. Value given is the lower quantification limit.

* Lipid-normalized data presented only when a compound is detected.

| River Segment | Station | 4-Bromophenyl phenyl ether | | | 4-Chlorophenyl phenyl ether | | |
|---------------|---------|----------------------------|---------------------------|----------------|-----------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1B | D3 | 400 | | U | 200 | | U |
| 1C | D10 | 200 | | U | 100 | | U |
| 2A | D12 | 200 | | U | 100 | | U |
| 2B | D15 | 200 | | U | 100 | | U |
| 2C | D16 | 200 | | U | 100 | | U |
| 2C | D19 | 200 | | U | 100 | | U |
| 2C | D21 | 200 | | U | 100 | | U |
| 3A | D23 | 200 | | U | 100 | | U |
| 3A | D24 | 200 | | U | 100 | | U |
| 3B | D28 | 200 | | U | 100 | | U |

TABLE D3-4. SEMIVOLATILES IN PEAMOUTH WHOLE-BODY COMPOSITES:
NITROAROMATICS

| River Segment | Station | 2,4-Dinitrotoluene | | | 2,6-Dinitrotoluene | | | Nitrobenzene | | |
|---------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1B | D3 | 200 | | U | 200 | | U | 200 | | U |
| 1C | D10 | 100 | | U | 100 | | U | 100 | | U |
| 2A | D12 | 100 | | U | 100 | | U | 100 | | U |
| 2B | D15 | 100 | | U | 100 | | U | 100 | | U |
| 2C | D16 | 100 | | U | 100 | | U | 100 | | U |
| 2C | D19 | 100 | | U | 100 | | U | 100 | | U |
| 2C | D21 | 100 | | U | 100 | | U | 100 | | U |
| 3A | D23 | 100 | | U | 100 | | U | 100 | | U |
| 3A | D24 | 100 | | U | 100 | | U | 100 | | U |
| 3B | D28 | 100 | | U | 100 | | U | 100 | | U |

U = Compound was not detected. Value given is the lower quantification limit.

* Lipid-normalized data presented only when a compound is detected.

TABLE D3-5. SEMIVOLATILES IN PEAMOUTH WHOLE-BODY COMPOSITES:
NITROSAMINES

| River Segment | Station | N-Nitrosodi-n-propylamine | | | N-Nitrosodiphenylamine | | |
|---------------|---------|---------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1B | D3 | 200 | | U | 200 | | U |
| 1C | D10 | 100 | | U | 100 | | U |
| 2A | D12 | 100 | | U | 100 | | U |
| 2B | D15 | 100 | | U | 100 | | U |
| 2C | D16 | 100 | | U | 100 | | U |
| 2C | D19 | 100 | | U | 100 | | U |
| 2C | D21 | 100 | | U | 100 | | U |
| 3A | D23 | 100 | | U | 100 | | U |
| 3A | D24 | 100 | | U | 100 | | U |
| 3B | D28 | 100 | | U | 100 | | U |

U = Compound was not detected. Value given is the lower quantification limit.

* Lipid-normalized data presented only when a compound is detected.

TABLE D3-6. SEMIVOLATILES IN PEAMOUTH WHOLE-BODY COMPOSITES:
NAPHTHALENES

| River Segment | Station | 2-Chloronaphthalene | | | 2-Methylnaphthalene | | |
|---------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1B | D3 | 200 | | U | 200 | | U |
| 1C | D10 | 100 | | U | 100 | | U |
| 2A | D12 | 100 | | U | 100 | | U |
| 2B | D15 | 100 | | U | 100 | | U |
| 2C | D16 | 100 | | U | 100 | | U |
| 2C | D19 | 100 | | U | 100 | | U |
| 2C | D21 | 100 | | U | 100 | | U |
| 3A | D23 | 100 | | U | 100 | | U |
| 3A | D24 | 100 | | U | 100 | | U |
| 3B | D28 | 100 | | U | 100 | | U |

U = Compound was not detected. Value given is the lower quantification limit.

* Lipid-normalized data presented only when a compound is detected.

TABLE D3-7. SEMIVOLATILES IN PEAMOUTH WHOLE-BODY COMPOSITES:
POLYNUCLEAR AROMATICS

| River Segment | Station | Acenaphthene | | | Acenaphthylene | | | Anthracene | | | Benzo(a)anthracene | | |
|---------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1B | D3 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 1C | D10 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 2A | D12 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 2B | D15 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 2C | D16 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 2C | D19 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 2C | D21 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 3A | D23 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 3A | D24 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 3B | D28 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |

U = Compound was not detected. Value given is the lower quantification limit.

* Lipid-normalized data presented only when a compound is detected.

| River Segment | Station | Benzo(b)fluoranthene | | | Benzo(k)fluoranthene | | | Benzo(a)pyrene | | | Benzo(g,h,i)perylene | | |
|---------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1B | D3 | 400 | | U | 400 | | U | 400 | | U | 400 | | U |
| 1C | D10 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 2A | D12 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 2B | D15 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 2C | D16 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 2C | D19 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 2C | D21 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 3A | D23 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 3A | D24 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 3B | D28 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |

D3-7:1

D3-7:2

| River Segment | Station | Chrysene | | | Dibenzo(a,h)anthracene | | | Fluoranthene | | | Fluorene | | |
|---------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1B | D3 | 200 | | U | 400 | | U | 200 | | U | 200 | | U |
| 1C | D10 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 2A | D12 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 2B | D15 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 2C | D16 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 2C | D19 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 2C | D21 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 3A | D23 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 3A | D24 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 3B | D28 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |

| River Segment | Station | Indeno(1,2,3-c,d)pyrene | | | Naphthalene | | | Phenanthrene | | | Pyrene | | |
|---------------|---------|-------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1B | D3 | 400 | | U | 200 | | U | 200 | | U | 200 | | U |
| 1C | D10 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 2A | D12 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 2B | D15 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 2C | D16 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 2C | D19 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 2C | D21 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 3A | D23 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 3A | D24 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 3B | D28 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |

TABLE D3-8. SEMIVOLATILES IN PEAMOUTH WHOLE-BODY COMPOSITES:
CHLORINATED BENZENES

| River Segment | Station | 1,3-Dichlorobenzene | | | 1,2-Dichlorobenzene | | | 1,4-Dichlorobenzene | | | 1,2,4-Trichlorobenzene | | |
|-------------------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1B | D3 | 200 | | U | 200 | | U | 200 | | U | 400 | | U |
| 1C | D10 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 2A | D12 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 2B | D15 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 2C | D16 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 2C | D19 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 2C | D21 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 3A | D23 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 3A | D24 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 3B | D28 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| Tissue Reference Levels | | na*** | | | na*** | | | na*** | | | 1300 | | |

U = Compound was not detected. Value given is the lower quantification limit.

* Lipid-normalized data presented only when a compound is detected.

*** Tissue reference level not available for this compound.

D3-8:1

| River Segment | Station | Hexachlorobenzene | | | Hexachlorobutadiene | | | Hexachloroethane | | | Hexachlorocyclopentadiene | | |
|-------------------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|---------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1B | D3 | 400 | | U | 200 | | U | 400 | | U | 1000 | | U |
| 1C | D10 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 2A | D12 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 2B | D15 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 2C | D16 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 2C | D19 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 2C | D21 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 3A | D23 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 3A | D24 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 3B | D28 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| Tissue Reference Levels | | na*** | | | na*** | | | na*** | | | na*** | | |

**TABLE D3-9. SEMIVOLATILES IN PEAMOUTH WHOLE-BODY COMPOSITES:
BENZIDINES**

| River Segment | Station | 3,3'-Dichlorobenzidine | | Qualifier Code |
|---------------|---------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | |
| 1B | D3 | 2000 | | U |
| 1C | D10 | 1000 | | U |
| 2A | D12 | 1000 | | U |
| 2B | D15 | 1000 | | U |
| 2C | D16 | 1000 | | U |
| 2C | D19 | 1000 | | U |
| 2C | D21 | 1000 | | U |
| 3A | D23 | 1000 | | U |
| 3A | D24 | 1000 | | U |
| 3B | D28 | 1000 | | U |

U = Compound was not detected. Value given is the lower quantification limit.

* Lipid-normalized data presented only when a compound is detected.

TABLE D3-10. SEMIVOLATILES IN PEAMOUTH WHOLE-BODY COMPOSITES:
 PHTHALATE ESTERS

| River Segment | Station | Dimethyl phthalate | | | Diethyl phthalate | | | Di-n-butyl phthalate | | |
|---------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1B | D3 | 200 | | U | 400 | | U | 200 | | U |
| 1C | D10 | 100 | | U | 200 | | U | 100 | | U |
| 2A | D12 | 100 | | U | 200 | | U | 100 | | U |
| 2B | D15 | 100 | | U | 200 | | U | 100 | | U |
| 2C | D16 | 100 | | U | 200 | | U | 100 | | U |
| 2C | D19 | 100 | | U | 200 | | U | 100 | | U |
| 2C | D21 | 100 | | U | 200 | | U | 100 | | U |
| 3A | D23 | 100 | | U | 200 | | U | 100 | | U |
| 3A | D24 | 100 | | U | 200 | | U | 100 | | U |
| 3B | D28 | 100 | | U | 200 | | U | 100 | | U |

U = Compound was not detected. Value given is the lower quantification limit.

* Lipid-normalized data presented only when a compound is detected.

| River Segment | Station | Benzyl butyl phthalate | | | bis(2-Ethylhexyl) phthalate | | | Di-n-octyl phthalate | | |
|---------------|---------|------------------------|---------------------------|----------------|-----------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1B | D3 | 200 | | U | 740 | 6.1 | | 400 | | U |
| 1C | D10 | 100 | | U | 190 | 4.9 | | 200 | | U |
| 2A | D12 | 100 | | U | 260 | 6.2 | | 200 | | U |
| 2B | D15 | 100 | | U | 100 | | U | 200 | | U |
| 2C | D16 | 100 | | U | 270 | 4.6 | | 200 | | U |
| 2C | D19 | 100 | | U | 200 | 3.2 | | 200 | | U |
| 2C | D21 | 100 | | U | 180 | 2.6 | | 200 | | U |
| 3A | D23 | 100 | | U | 770 | 9.5 | | 200 | | U |
| 3A | D24 | 100 | | U | 310 | 6.1 | | 200 | | U |
| 3B | D28 | 100 | | U | 210 | 8.7 | | 200 | | U |

TABLE D3-11. PESTICIDES IN PEAMOUTH WHOLE-BODY COMPOSITES

| River Segment | Station | o,p-DDD | | | o,p-DDE | | | o,p-DDT | | | 4,4'-DDD | | |
|-------------------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code |
| 1B | D3 | 49 | 0.40 | | 47 | 0.39 | E | 25 | | U | 50* | | U |
| 1C | D10 | 25 | | U/E | 25 | | U/E | 25 | | U/E | 30* | | U/E |
| 2A | D12 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 2B | D15 | 10* | | U | 3 | | U | 3 | | U | 38 | 0.65 | |
| 2C | D16 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 2C | D19 | 25 | | U | 25 | | U | 25 | | U | 38 | 0.61 | |
| 2C | D21 | 25 | | U | 25 | | U | 25 | | U | 30* | | U |
| 3A | D23 | 25 | | U | 25 | | U | 25 | | U | 72 | 0.89 | |
| 3A | D24 | 25 | | U | 25 | | U | 25 | | U | 30* | | U |
| 3B | D28 | 25 | | U | 25 | | U | 25 | | U | 25 | | U |
| Tissue Reference Levels | | 200 | | | 200 | | | 200 | | | 200 | | |

U = Compound was not detected. Value given is the lower quantification limit.

E = Estimated value.

* Reporting limits adjusted due to coeluting interfering peaks.

** Lipid-normalized data presented only when a compound is detected.

*** Tissue reference level not available for this compound.

D3-1:1

| River Segment | Station | 4,4'-DDE | | | 4,4'-DDT | | | Heptachlor | | | Heptachlor epoxide | | |
|-------------------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code |
| 1B | D3 | 270 | 2.21 | E | 25 | | U | 25 | | U | 25 | | U |
| 1C | D10 | 55* | | U/E | 25 | | U/E | 25 | | U/E | 25 | | U/E |
| 2A | D12 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 2B | D15 | 83 | 1.41 | | 3 | | U | 3 | | U | 3 | | U |
| 2C | D16 | 3 | | U | 3 | | U | 8* | | U | 3 | | U |
| 2C | D19 | 140 | 2.25 | E | 25 | | U | 25 | | U | 25 | | U |
| 2C | D21 | 170 | 2.47 | E | 25 | | U | 25 | | U | 25 | | U |
| 3A | D23 | 200 | 2.48 | E | 25 | | U | 25 | | U | 25 | | U |
| 3A | D24 | 450 | 9.50 | E | 25 | | U | 25 | | U | 25 | | U |
| 3B | D28 | 82 | 3.39 | E | 25 | | U | 25 | | U | 25 | | U |
| Tissue Reference Levels | | 200 | | | 200 | | | 200 | | | na*** | | |

D3-1:2

| River Segment | Station | Chlordane | | | Aldrin | | | Dieldrin | | | Mirex | | |
|-------------------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code |
| 1B | D3 | 25 | | U | 25 | | U | 40* | | U | 25 | | U |
| 1C | D10 | 25 | | U/E | 25 | | U/E | 25 | | U/E | 25 | | U/E |
| 2A | D12 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 2B | D15 | 3 | | U | 11 | 0.19 | | 3 | | U | 3 | | U |
| 2C | D16 | 3 | | U | 3.7 | 0.06 | | 3 | | U | 3 | | U |
| 2C | D19 | 25 | | U | 67 | | U | 25 | | U | 25 | | U |
| 2C | D21 | 25 | | U | 42 | 0.61 | | 35 | 0.51 | | 25 | | U |
| 3A | D23 | 25 | | U | 25 | | U | 32 | 0.40 | | 25 | | U |
| 3A | D24 | 25 | | U | 25 | | U | 25 | | U | 25 | | U |
| 3B | D28 | 25 | | U | 25 | | U | 25 | | U | 25 | | U |
| Tissue Reference Levels | | na*** | | | 120 | | | 120 | | | 300 | | |

| River Segment | Station | Dacthal | | | Dicofol | | | Methyl parathion | | | Parathion | | |
|-------------------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code |
| 1B | D3 | 25 | | U | 250 | | U | 25 | | U | 26 | 0.21 | E |
| 1C | D10 | 25 | | U/E | 250 | | U/E | 25 | | U/E | 25 | | U/E |
| 2A | D12 | 3 | | U | 30 | | U | 3 | | U | 3 | | U |
| 2B | D15 | 3 | | U | 30 | | U | 15* | | U | 3 | | U |
| 2C | D16 | 13 | 0.22 | | 30 | | U | 3 | | U | 3 | | U |
| 2C | D19 | 25 | | U | 250 | | U | 25 | | U | 35* | | U |
| 2C | D21 | 25 | | U | 250 | | U | 25 | | U | 25 | | U |
| 3A | D23 | 25 | | U | 250 | | U | 25 | | U | 25 | | U |
| 3A | D24 | 25 | | U | 250 | | U | 25 | | U | 25 | | U |
| 3B | D28 | 25 | | U | 250 | | U | 25 | | U | 25 | | U |
| Tissue Reference Levels | | na*** | | | na*** | | | na*** | | | na*** | | |

D3-11:3

| River Segment | Station | Malathion | | | Toxaphene | | | Isophorone | | | Endosulfan I | | |
|-------------------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code |
| 1B | D3 | 25 | | U | 1500 | | U | 200 | | U | 45 | 0.37 | |
| 1C | D10 | 110 | 2.82 | E | 1500 | | U/E | 100 | | U/E | 25 | | U/E |
| 2A | D12 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 2B | D15 | 3 | | U | 150 | | U | 100 | | U | 5* | | U |
| 2C | D16 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 2C | D19 | 25 | | U | 1500 | | U | 100 | | U | 60* | | U |
| 2C | D21 | 25 | | U | 1500 | | U | 100 | | U | 69 | 1.00 | |
| 3A | D23 | 25 | | U | 1500 | | U | 100 | | U | 85 | 1.05 | |
| 3A | D24 | 66 | 1.31 | | 1500 | | U | 100 | | U | 25 | | U |
| 3B | D28 | 25 | | U | 1500 | | U | 100 | | U | 25 | | U |
| Tissue Reference Levels | | na*** | | | na*** | | | na*** | | | na*** | | |

| River Segment | Station | Endosulfan II | | | Endosulfan sulfate | | | Endrin | | | Endrin aldehyde | | |
|-------------------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code |
| 1B | D3 | 25 | | U | 25 | | U | 25 | | U/E | 40* | | U |
| 1C | D10 | 25 | | U/E | 25 | | U/E | 25 | | U/E | 25 | | U/E |
| 2A | D12 | 3 | | U | 3 | | U | 3 | | U/E | 3 | | U |
| 2B | D15 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 2C | D16 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 2C | D19 | 25 | | U | 25 | | U | 25 | | U/E | 30* | | U |
| 2C | D21 | 25 | | U | 25 | | U | 25 | | U/E | 40 | 0.58 | |
| 3A | D23 | 25 | | U | 25 | | U | 25 | | U/E | 25 | | U |
| 3A | D24 | 25 | | U | 25 | | U | 25 | | U/E | 25 | | U |
| 3B | D28 | 25 | | U | 25 | | U | 25 | | U/E | 25 | | U |
| Tissue Reference Levels | | na*** | | | na*** | | | 25 | | | na*** | | |

| River Segment | Station | Methoxychlor | | | alpha-BHC | | | beta-BHC | | | delta-BHC | | |
|-------------------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code |
| 1B | D3 | 250 | | U | 25 | | U | 100* | | U | 40* | | U |
| 1C | D10 | 250 | | U/E | 25 | | U/E | 40* | | U/E | 25 | | U/E |
| 2A | D12 | 30 | | U | 3 | | U | 13 | 0.31 | | 3 | | U |
| 2B | D15 | 30 | | U | 3 | | U | 3 | | U | 3 | | U |
| 2C | D16 | 30 | | U | 3 | | U | 25* | | U | 9* | | U |
| 2C | D19 | 250 | | U | 25 | | U | 25 | | U | 25 | | U |
| 2C | D21 | 250 | | U | 25 | | U | 158 | 2.18 | | 25 | | U |
| 3A | D23 | 250 | | U | 25 | | U | 160* | | U | 25 | | U |
| 3A | D24 | 250 | | U | 25 | | U | 50* | | U | 25 | | U |
| 3B | D28 | 250 | | U | 25 | | U | 25 | | U | 25 | | U |
| Tissue Reference Levels | | na*** | | | 100 | | | 100 | | | 100 | | |

D3-1:4

| River Segment | Station | gamma-BHC | | |
|-------------------------|---------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc** (ug/g lipid) | Qualifier Code |
| 1B | D3 | 40* | | U |
| 1C | D10 | 25 | | U/E |
| 2A | D12 | 3 | | U |
| 2B | D15 | 14 | 0.24 | |
| 2C | D16 | 3 | | U |
| 2C | D19 | 40* | | U |
| 2C | D21 | 40* | | U |
| 3A | D23 | 25 | | U |
| 3A | D24 | 25 | | U |
| 3B | D28 | 25 | | U |
| Tissue Reference Levels | | 100 | | |

TABLE D3-12. PCBs IN PEAMOUTH WHOLE-BODY COMPOSITES

| River Segment | Station | Aroclor-1016 | | | Aroclor-1221 | | | Aroclor-1232 | | | Aroclor-1242 | | |
|-------------------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1B | D3 | 50 | | U | 50 | | U | 50 | | U | 99 | 0.8 | |
| 1C | D10 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 2A | D12 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 2B | D15 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 2C | D16 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 2C | D19 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 2C | D21 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 3A | D23 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 3A | D24 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 3B | D28 | 50 | | U | 50 | | U | 50 | | U | 78 | 3.2 | |
| Tissue Reference Levels | | na*** | | | na*** | | | na*** | | | na*** | | |

U = Compound was not detected. Value given is the lower quantification limit.

* Lipid-normalized data presented only when a compound is detected.

*** Tissue reference level not available for this compound.

D3-12:1

| River Segment | Station | Aroclor-1248 | | | Aroclor-1254 | | | Aroclor-1260 | | | Total Detected PCBs | |
|-------------------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) |
| 1B | D3 | 50 | | U | 50 | | U | 280 | 2.3 | | 378 | 3.1 |
| 1C | D10 | 50 | | U | 50 | | U | 80 | 2.1 | | 80 | 2.1 |
| 2A | D12 | 50 | | U | 50 | | U | 130 | 3.1 | | 130 | 3.1 |
| 2B | D15 | 50 | | U | 50 | | U | 170 | 2.9 | | 170 | 2.9 |
| 2C | D16 | 50 | | U | 50 | | U | 120 | 2.0 | | 120 | 2.0 |
| 2C | D19 | 50 | | U | 50 | | U | 180 | 2.9 | | 180 | 2.9 |
| 2C | D21 | 50 | | U | 50 | | U | 160 | 2.3 | | 160 | 2.3 |
| 3A | D23 | 50 | | U | 50 | | U | 170 | 2.1 | | 170 | 2.1 |
| 3A | D24 | 50 | | U | 50 | | U | 520 | 10.3 | | 520 | 10.3 |
| 3B | D28 | 50 | | U | 50 | | U | 86 | 3.6 | | 164 | 6.8 |
| Tissue Reference Levels | | na*** | | | na*** | | | na*** | | | 110 | |

TABLE D3-13. DIOXINS AND FURANS IN PEAMOUTH WHOLE-BODY COMPOSITES

| River Segment | Station | 2,3,7,8-TCDD | | | 1,2,3,7,8-PeCDD | | | 1,2,3,4,7,8-HxCDD | | | 1,2,3,6,7,8-HxCDD | | |
|-------------------------|---------|-----------------------|---------------------------|----------------|-----------------------|---------------------------|----------------|-----------------------|---------------------------|----------------|-----------------------|---------------------------|----------------|
| | | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code |
| 1C | D10 | 2.32 | 0.059 | | 0.5 | 0.013 | S | 0.11 | 0.003 | S/M | 0.31 | 0.008 | S |
| 2B | D15 | 1.44 | 0.024 | | 0.31 | 0.005 | S | 0.11 | 0.002 | S | 0.39 | 0.007 | S |
| 2C | D19 | 3.29 | 0.053 | | 0.7 | 0.011 | S | 0.14 | 0.002 | S | 0.51 | 0.008 | S |
| 2C | D21 | 2.77 | 0.040 | | 0.76 | 0.011 | S | 0.21 | 0.003 | S/M | 0.63 | 0.009 | S |
| 3A | D23 | 3.1 | 0.038 | | 0.83 | 0.010 | S | 0.39 | 0.005 | S/M | 0.62 | 0.008 | S/M |
| 3A | D24 | 4.41 | 0.087 | | 2.04 | 0.040 | S/M | 0.87 | 0.017 | S/M | 1.16 | 0.023 | S |
| 3B | D28 | 2 | 0.083 | | 0.66 | 0.027 | S | 0.2 | 0.008 | S/M | 0.59 | 0.024 | S |
| Tissue Reference Levels | | na*** | | | na*** | | | na*** | | | na*** | | |

U = Compound was not detected.
 E = Analyte not detected at or above the sample specific Estimated Detection Limit (EDL). The EDL is reported.
 L = Analyte not detected at or above the Lower Method Calibration Limit (LMCL). The LMCL is reported.
 M = Estimated Maximum Possible Concentration.
 S = Analyte detected below the Lower Method Calibration Limit. Value should be considered an estimate.
 * Obtained from a DB-225 column.
 ** Lipid-normalized data presented only when a compound is detected.
 *** Tissue reference level not available for this compound.

D3-13:1

| River Segment | Station | 1,2,3,7,8,9-HxCDD | | | 1,2,3,4,6,7,8-HpCDD | | | OCDD | | | 2,3,7,8-TCDF | | |
|-------------------------|---------|-----------------------|---------------------------|----------------|-----------------------|---------------------------|----------------|-----------------------|---------------------------|----------------|-----------------------|---------------------------|----------------|
| | | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code |
| 1C | D10 | 0.14 | 0.004 | S | 0.65 | 0.017 | S | 3.62 | 0.093 | S | 40 | 1.026 | * |
| 2B | D15 | 0.12 | 0.002 | S/M | 0.74 | 0.013 | S | 5.67 | 0.096 | | 22.2 | 0.377 | * |
| 2C | D19 | 0.15 | 0.002 | S | 0.73 | 0.012 | S | 4.47 | 0.072 | S | 52.1 | 0.838 | * |
| 2C | D21 | 0.18 | 0.003 | S | 1.09 | 0.016 | S | 4.21 | 0.061 | S | 41.2 | 0.599 | |
| 3A | D23 | 0.29 | 0.004 | S/M | 0.24 | 0.003 | S | 3.91 | 0.048 | S | 42.5 | 0.527 | * |
| 3A | D24 | 0.47 | | U/E | 2.81 | 0.056 | | 18.1 | 0.358 | | 58.8 | 1.164 | * |
| 3B | D28 | 0.22 | 0.009 | S | 1.83 | 0.076 | S/M | 8.4 | 0.347 | | 32.5 | 1.343 | * |
| Tissue Reference Levels | | na*** | | | na*** | | | na*** | | | na*** | | |

| River Segment | Station | 1,2,3,7,8-PeCDF | | | 2,3,4,7,8-PeCDF | | | 1,2,3,4,7,8-HxCDF | | | 1,2,3,6,7,8-HxCDF | | |
|-------------------------|---------|-----------------------|---------------------------|----------------|-----------------------|---------------------------|----------------|-----------------------|---------------------------|----------------|-----------------------|---------------------------|----------------|
| | | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code |
| 1C | D10 | 0.31 | 0.008 | S | 0.59 | 0.015 | S | 0.11 | | U/E | 0.1 | | U/E |
| 2B | D15 | 0.24 | 0.004 | S | 0.55 | 0.009 | S | 0.12 | 0.002 | S | 0.05 | 0.001 | S |
| 2C | D19 | 0.58 | 0.009 | S/M | 0.94 | 0.015 | S | 0.13 | 0.002 | S | 0.07 | 0.001 | S/M |
| 2C | D21 | 0.56 | 0.008 | S | 0.9 | 0.013 | S | 0.16 | 0.002 | S | 0.06 | 0.001 | S/M |
| 3A | D23 | 0.65 | 0.008 | S/M | 0.95 | 0.012 | S/M | 0.71 | | U/E | 0.64 | | U/E |
| 3A | D24 | 0.86 | 0.017 | S | 2.46 | 0.049 | S | 0.56 | 0.011 | S/M | 0.44 | 0.009 | S/M |
| 3B | D28 | 0.38 | 0.016 | S | 0.62 | 0.034 | S | 0.24 | 0.010 | S | 0.13 | 0.005 | S |
| Tissue Reference Levels | | na*** | | | na*** | | | na*** | | | na*** | | |

| River Segment | Station | 2,3,4,6,7,8-HxCDF | | | 1,2,3,7,8,9-HxCDF | | | 1,2,3,4,6,7,8-HpCDF | | | 1,2,3,4,7,8,9-HpCDF | | |
|-------------------------|---------|-----------------------|---------------------------|----------------|-----------------------|---------------------------|----------------|-----------------------|---------------------------|----------------|-----------------------|---------------------------|----------------|
| | | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code |
| 1C | D10 | 0.26 | 0.007 | S/M | 0.15 | | U/E | 0.21 | 0.005 | S | 0.06 | 0.002 | S/M |
| 2B | D15 | 0.25 | 0.004 | S | 0.08 | | U/E | 0.16 | 0.003 | S/M | 0.04 | 0.001 | S |
| 2C | D19 | 0.23 | 0.004 | S/M | 0.11 | | U/E | 0.2 | 0.003 | S | 0.08 | | U/E |
| 2C | D21 | 0.29 | 0.004 | S | 0.14 | | U/E | 0.18 | 0.003 | S | 0.07 | 0.001 | S/M |
| 3A | D23 | 1.38 | | U/E | 1.09 | | U/E | 0.17 | | U/E | 0.18 | | U/E |
| 3A | D24 | 1.61 | | U/E | 1.38 | | U/E | 0.74 | 0.015 | S | 0.5 | | U/E |
| 3B | D28 | 0.32 | 0.013 | S | 0.26 | | U/E | 0.43 | 0.018 | S | 0.18 | 0.007 | S/M |
| Tissue Reference Levels | | na*** | | | na*** | | | na*** | | | na*** | | |

| River Segment | Station | OCDF | | | TECs Calculated Conc. (pg/g) |
|-------------------------|---------|-----------------------|---------------------------|----------------|------------------------------|
| | | Measured Conc. (pg/g) | Norm. Conc** (ug/g lipid) | Qualifier Code | |
| 1C | D10 | 0.31 | 0.008 | S | 7.0 |
| 2B | D15 | 0.38 | 0.006 | S | 4.2 |
| 2C | D19 | 0.53 | 0.009 | S | 9.5 |
| 2C | D21 | 0.41 | 0.006 | S/M | 7.9 |
| 3A | D23 | 1.18 | | U/E | 8.8 |
| 3A | D24 | 2.03 | 0.040 | S | 13.3 |
| 3B | D28 | 1.01 | 0.042 | S/M | 6.2 |
| Tissue Reference Levels | | na*** | | | 3 |

D3-13.2

APPENDIX D4. WHITE STURGEON TISSUE BIOACCUMULATION DATA

- D4-0. PERCENT LIPID AND LENGTH/WEIGHT DATA
- D4-1. METALS IN WHITE STURGEON WHOLE-BODY COMPOSITES
- D4-2. PHENOLIC COMPOUNDS IN WHITE STURGEON WHOLE-BODY COMPOSITES
- D4-3. SEMIVOLATILES IN WHITE STURGEON WHOLE-BODY COMPOSITES: HALOGENATED ETHERS
- D4-4. SEMIVOLATILES IN WHITE STURGEON WHOLE-BODY COMPOSITES: NITROAROMATICS
- D4-5. SEMIVOLATILES IN WHITE STURGEON WHOLE-BODY COMPOSITES: NITROSAMINES
- D4-6. SEMIVOLATILES IN WHITE STURGEON WHOLE-BODY COMPOSITES: NAPHTHALENES
- D4-7. SEMIVOLATILES IN WHITE STURGEON WHOLE-BODY COMPOSITES: POLYNUCLEAR AROMATICS
- D4-8. SEMIVOLATILES IN WHITE STURGEON WHOLE-BODY COMPOSITES: CHLORINATED BENZENES
- D4-9. SEMIVOLATILES IN WHITE STURGEON WHOLE-BODY COMPOSITES: BENZIDINES
- D4-10. SEMIVOLATILES IN WHITE STURGEON WHOLE-BODY COMPOSITES: PHTHALATE ESTERS
- D4-11. PESTICIDES IN WHITE STURGEON WHOLE-BODY COMPOSITES
- D4-12. PCBs IN WHITE STURGEON WHOLE-BODY COMPOSITES
- D4-13. DIOXINS AND FURANS IN WHITE STURGEON WHOLE-BODY COMPOSITES

(Note: All concentrations are presented on a wet-weight basis)

TABLE D4-0. WHITE STURGEON LIPID AND SIZE DATA

| River Segment | Station | Percent Lipid | Weight (kg) | Length (cm) |
|---------------|---------|---------------|-------------|-------------|
| 1B | RM 15 | 0.65 | 17.3 | 125.0 |
| 1B | RM 18.5 | 1.07 | 11.5 | 111.0 |
| 1C | RM 20 | 0.43 | 10.9 | 115.6 |
| 1C | RM 21 | 0.29 | 11.8 | 124.5 |
| 1C | RM 21 | 0.71 | 11.8 | 124.5 |
| 1C | RM 27 | 7.14 | ND | ND |
| 2B | RM 49 | 2.36 | 10.5 | 112.0 |
| 2B | RM 49 | 0.29 | 20.0 | 132.1 |
| 2B | RM 49 | 0.22 | 17.2 | 124.5 |
| 2C | RM 67 | 0.16 | 37.2 | 181.6 |
| 3A | RM 75 | 4.27 | 28.6 | 147.3 |
| 3A | RM 75 | 8.49 | 10.4 | 106.7 |
| 3A | RM 75 | 9.52 | 19.5 | 127.0 |
| 3A | RM 80 | 4.9 | 14.1 | ND |
| 4A | RM 103 | 2.34 | ND | ND |
| 4A | RM 115 | 1.76 | ND | ND |
| 4B | RM 127 | 0.91 | ND | ND |
| 4B | RM 136 | 1.8 | ND | ND |

D4-1:1

TABLE D4-1. CONCENTRATIONS OF METALS IN WHITE STURGEON STEAKS

| River Segment | Station | Antimony | | Arsenic | | Barium | | Cadmium | | Copper | | Lead | |
|---------------|---------|------------------------|----------------|------------------------|----------------|------------------------|----------------|------------------------|----------------|------------------------|----------------|------------------------|----------------|
| | | Measured Conc. (mg/kg) | Qualifier Code | Measured Conc. (mg/kg) | Qualifier Code | Measured Conc. (mg/kg) | Qualifier Code | Measured Conc. (mg/kg) | Qualifier Code | Measured Conc. (mg/kg) | Qualifier Code | Measured Conc. (mg/kg) | Qualifier Code |
| 1B | RM 15 | 0.33 | U | 0.49 | | 0.2 | U/E | 0.02 | U | 0.66 | U/E | 0.06 | E |
| 1B | RM 18,5 | 0.35 | U | 0.46 | U | 0.2 | U/E | 0.02 | U | 0.69 | U/E | 0.02 | E |
| 1C | RM 21 | 0.20 | U | 0.26 | U | 0.1 | U/E | 0.01 | U | 0.45 | E | 0.01 | E |
| 1C | RM 21 | 1.00 | U | 0.27 | U | 0.5 | U/E | 0.07 | U | 2.00 | U/E | 0.07 | E |
| 1C | RM 27 | 0.45 | U/E | 0.40 | | 0.2 | U/E | 0.03 | U | 0.90 | U/E | 0.03 | E |
| 2B | RM 49 | 2.16 | U | 0.29 | U | 0.1 | U/E | 0.02 | U | 0.43 | U/E | 0.02 | E |
| 2B | RM 49 | 0.32 | U | 1.38 | | 0.2 | U/E | 0.02 | U | 0.63 | U/E | 0.02 | E |
| 2B | RM 49 | 0.33 | U | 1.07 | | 0.2 | U/E | 0.02 | U | 0.65 | U/E | 0.02 | E |
| 2C | RM 67 | 0.26 | U | 1.96 | | 0.1 | U/E | 0.02 | U | 0.53 | U/E | 0.02 | E |
| 3A | RM 75 | 0.30 | U | 0.40 | U | 0.2 | U/E | 0.04 | | 0.60 | U/E | 1.12 | E |
| 3A | RM 75 | 0.34 | U | 0.45 | U | 0.2 | U/E | 0.02 | U | 0.68 | U/E | 0.07 | E |
| 3A | RM 75 | 0.34 | U | 0.55 | U | 0.2 | U/E | 0.02 | U | 0.68 | U/E | 0.02 | E |
| 3A | RM 80 | 0.31 | U | 0.42 | U | 0.2 | U/E | 0.02 | U | 0.63 | U/E | 0.02 | E |
| 4A | RM 103 | 0.33 | U/E | 0.44 | U | 0.2 | U/E | 0.02 | U | 0.66 | U/E | 0.02 | E |
| 4A | RM 115 | 0.33 | U/E | 0.44 | U | 0.2 | U/E | 0.02 | | 0.66 | U/E | 0.04 | E |
| 4B | RM 127 | 2.40 | U | 0.27 | | 0.1 | U/E | 0.02 | U | 0.48 | U/E | 0.02 | E |
| 4B | RM 136 | 2.20 | U | 0.84 | | 0.1 | U/E | 0.02 | U | 0.50 | E | 0.04 | E |

U = Compound was not detected. Value given is the lower quantification limit.

E = Estimated value.

* Metals data normalized to wet weight

D4-1:2

| River Segment | Station | Mercury | | Nickel | | Selenium | | Silver | | Zinc | |
|---------------|---------|------------------------|----------------|------------------------|----------------|------------------------|----------------|------------------------|----------------|------------------------|----------------|
| | | Measured Conc. (mg/kg) | Qualifier Code | Measured Conc. (mg/kg) | Qualifier Code | Measured Conc. (mg/kg) | Qualifier Code | Measured Conc. (mg/kg) | Qualifier Code | Measured Conc. (mg/kg) | Qualifier Code |
| 1B | RM 15 | 0.012 | U/E | 0.76 | U/E | 0.44 | U | 0.20 | U/E | 5.0 | E |
| 1B | RM 18.5 | 0.047 | E | 0.81 | U/E | 0.46 | U | 0.21 | U/E | 1.8 | U/E |
| 1C | RM 21 | 0.110 | E | 0.46 | U/E | 0.26 | U | 0.12 | U/E | 3.4 | E |
| 1C | RM 21 | 0.521 | E | 2.33 | U/E | 0.27 | U | 0.60 | U/E | 16.0 | E |
| 1C | RM 27 | 0.051 | E | 1.05 | U/E | 0.52 | U | 0.27 | U/E | 6.3 | E |
| 2B | RM 49 | 0.068 | E | 0.50 | U/E | 0.29 | U | 0.23 | E | 2.3 | E |
| 2B | RM 49 | 0.058 | E | 0.74 | U/E | 0.42 | U | 0.19 | U/E | 3.8 | E |
| 2B | RM 49 | 0.106 | E | 0.76 | U/E | 0.40 | U | 0.20 | U/E | 5.2 | E |
| 2C | RM 67 | 0.094 | E | 0.61 | U/E | 0.35 | U | 0.16 | U/E | 5.4 | E |
| 3A | RM 75 | 0.347 | E | 0.70 | U/E | 0.40 | U | 0.18 | U/E | 5.2 | E |
| 3A | RM 75 | 0.094 | E | 0.80 | U/E | 0.45 | U | 0.21 | U/E | 3.9 | E |
| 3A | RM 75 | 0.013 | U/E | 0.80 | U/E | 0.55 | U | 0.21 | U/E | 3.9 | E |
| 3A | RM 80 | 0.127 | E | 0.73 | U/E | 0.42 | U | 0.19 | U/E | 4.0 | E |
| 4A | RM 103 | 0.021 | E | 0.77 | U/E | 0.44 | U | 0.20 | U/E | 3.7 | E |
| 4A | RM 115 | 0.045 | E | 0.77 | U/E | 0.44 | U | 0.20 | U/E | 5.7 | E |
| 4B | RM 127 | 0.061 | E | 0.56 | U/E | 0.32 | U | 0.14 | U/E | 3.8 | E |
| 4B | RM 136 | 0.076 | E | 0.59 | E | 0.29 | U | 0.13 | U/E | 4.2 | E |

D4-2:1

TABLE D4-2. PHENOLIC COMPOUNDS IN WHITE STURGEON STEAKS

| River Segment | Station | Phenol | | | 2-Methylphenol | | | 4-Methylphenol | | | 2,4-Dimethylphenol | | |
|---------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1B | RM 15 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 1B | RM 18.5 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 1C | RM 20 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 1C | RM 21 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 1C | RM 21 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 1C | RM 27 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 2B | RM 49 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 2B | RM 49 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 2B | RM 49 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 2C | RM 67 | 100 | | U/E | 200 | | U/E | 200 | | U/E | 100 | | U/E |
| 3A | RM 75 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 3A | RM 75 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 3A | RM 75 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 3A | RM 80 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 4A | RM 103 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 4A | RM 115 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 4B | RM 127 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 4B | RM 136 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |

U = Compound was not detected. Value given is the lower quantification limit.

E = Value estimated.

* Lipid-normalized data presented only when a compound is detected.

D4-2.2

| River Segment | Station | Pentachlorophenol | | | 2-Chlorophenol | | | 2,4-Dichlorophenol | | | 4-Chloro-3-methylphenol | | |
|---------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|-------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1B | RM 15 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 1B | RM 18.5 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 1C | RM 20 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 1C | RM 21 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 1C | RM 21 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 1C | RM 27 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 2B | RM 49 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 2B | RM 49 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 2B | RM 49 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 2C | RM 67 | 1000 | | U/E | 100 | | U/E | 200 | | U/E | 200 | | U/E |
| 3A | RM 75 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 3A | RM 75 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 3A | RM 75 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 3A | RM 80 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 4A | RM 103 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 4A | RM 115 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 4B | RM 127 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 4B | RM 136 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |

D4-2:3

| River Segment | Station | 2,4-Dinitrophenol | | | 2-Nitrophenol | | | 4-Nitrophenol | | | 2,4,6-Trichlorophenol | | |
|---------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1B | RM 15 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 1B | RM 18.5 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 1C | RM 20 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 1C | RM 21 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 1C | RM 21 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 1C | RM 27 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 2B | RM 49 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 2B | RM 49 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 2B | RM 49 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 2C | RM 67 | 1000 | | U/E | 200 | | U/E | 1000 | | U/E | 200 | | U/E |
| 3A | RM 75 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 3A | RM 75 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 3A | RM 75 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 3A | RM 80 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 4A | RM 103 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 4A | RM 115 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 4B | RM 127 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 4B | RM 136 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |

TABLE D4-3. SEMIVOLATILES IN WHITE STURGEON STEAKS:
HALOGENATED ETHERS

| River Segment | Station | bis(2-Chloroethyl) ether | | | bis(2-Chloroethoxy) methane | | | bis(2-Chloroisopropyl) ether | | |
|---------------|---------|--------------------------|---------------------------|----------------|-----------------------------|---------------------------|----------------|------------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1B | RM 15 | 100 | | U | 100 | | U | 100 | | U |
| 1B | RM 18.5 | 100 | | U | 100 | | U | 100 | | U |
| 1C | RM 20 | 100 | | U | 100 | | U | 100 | | U |
| 1C | RM 21 | 100 | | U | 100 | | U | 100 | | U |
| 1C | RM 21 | 100 | | U | 100 | | U | 100 | | U |
| 1C | RM 27 | 100 | | U | 100 | | U | 100 | | U |
| 2B | RM 49 | 100 | | U | 100 | | U | 100 | | U |
| 2B | RM 49 | 100 | | U | 100 | | U | 100 | | U |
| 2B | RM 49 | 100 | | U | 100 | | U | 100 | | U |
| 2C | RM 67 | 100 | | U/E | 100 | | U/E | 100 | | U/E |
| 3A | RM 75 | 100 | | U | 100 | | U | 100 | | U |
| 3A | RM 75 | 100 | | U | 100 | | U | 100 | | U |
| 3A | RM 75 | 100 | | U | 100 | | U | 100 | | U |
| 3A | RM 80 | 100 | | U | 100 | | U | 100 | | U |
| 4A | RM 103 | 100 | | U | 100 | | U | 100 | | U |
| 4A | RM 115 | 100 | | U | 100 | | U | 100 | | U |
| 4B | RM 127 | 100 | | U | 100 | | U | 100 | | U |
| 4B | RM 136 | 100 | | U | 100 | | U | 100 | | U |

U = Compound was not detected. Value given is the lower quantification limit.

E = Estimated value.

* Lipid-normalized data presented only when a compound is detected.

| River Segment | Station | 4-Bromophenyl phenyl ether | | | 4-Chlorophenyl phenyl ether | | |
|---------------|---------|----------------------------|---------------------------|----------------|-----------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1B | RM 15 | 200 | | U | 100 | | U |
| 1B | RM 18.5 | 200 | | U | 100 | | U |
| 1C | RM 20 | 200 | | U | 100 | | U |
| 1C | RM 21 | 200 | | U | 100 | | U |
| 1C | RM 21 | 200 | | U | 100 | | U |
| 1C | RM 27 | 200 | | U | 100 | | U |
| 2B | RM 49 | 200 | | U | 100 | | U |
| 2B | RM 49 | 200 | | U | 100 | | U |
| 2B | RM 49 | 200 | | U | 100 | | U |
| 2C | RM 67 | 200 | | U/E | 100 | | U/E |
| 3A | RM 75 | 200 | | U | 100 | | U |
| 3A | RM 75 | 200 | | U | 100 | | U |
| 3A | RM 75 | 200 | | U | 100 | | U |
| 3A | RM 80 | 200 | | U | 100 | | U |
| 4A | RM 103 | 200 | | U | 100 | | U |
| 4A | RM 115 | 200 | | U | 100 | | U |
| 4B | RM 127 | 200 | | U | 100 | | U |
| 4B | RM 136 | 200 | | U | 100 | | U |

TABLE D4-4. SEMIVOLATILES IN WHITE STURGEON STEAKS:
NITROAROMATICS

| River Segment | Station | 2,4-Dinitrotoluene | | | 2,6-Dinitrotoluene | | | Nitrobenzene | | |
|---------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1B | RM 15 | 100 | | U | 100 | | U | 100 | | U |
| 1B | RM 18.5 | 100 | | U | 100 | | U | 100 | | U |
| 1C | RM 20 | 100 | | U | 100 | | U | 100 | | U |
| 1C | RM 21 | 100 | | U | 100 | | U | 100 | | U |
| 1C | RM 21 | 100 | | U | 100 | | U | 100 | | U |
| 1C | RM 27 | 100 | | U | 100 | | U | 100 | | U |
| 2B | RM 49 | 100 | | U | 100 | | U | 100 | | U |
| 2B | RM 49 | 100 | | U | 100 | | U | 100 | | U |
| 2B | RM 49 | 100 | | U | 100 | | U | 100 | | U |
| 2C | RM 67 | 100 | | U/E | 100 | | U/E | 100 | | U/E |
| 3A | RM 75 | 100 | | U | 100 | | U | 100 | | U |
| 3A | RM 75 | 100 | | U | 100 | | U | 100 | | U |
| 3A | RM 75 | 100 | | U | 100 | | U | 100 | | U |
| 3A | RM 80 | 100 | | U | 100 | | U | 100 | | U |
| 4A | RM 103 | 100 | | U | 100 | | U | 100 | | U |
| 4A | RM 115 | 100 | | U | 100 | | U | 100 | | U |
| 4B | RM 127 | 100 | | U | 100 | | U | 100 | | U |
| 4B | RM 136 | 100 | | U | 100 | | U | 100 | | U |

U = Compound was not detected. Value given is the lower quantification limit.

E = Estimated value.

* Lipid-normalized data presented only when a compound is detected.

TABLE D4-5. SEMIVOLATILES IN WHITE STURGEON STEAKS:
NITROSAMINES

| River Segment | Station | N-Nitrosodi-n-propylamine | | | N-Nitrosodiphenylamine | | |
|---------------|---------|---------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1B | RM 15 | 100 | | U | 100 | | U |
| 1B | RM 18.5 | 100 | | U | 100 | | U |
| 1C | RM 20 | 100 | | U | 100 | | U |
| 1C | RM 21 | 100 | | U | 100 | | U |
| 1C | RM 21 | 100 | | U | 100 | | U |
| 1C | RM 27 | 100 | | U | 100 | | U |
| 2B | RM 49 | 100 | | U | 100 | | U |
| 2B | RM 49 | 100 | | U | 100 | | U |
| 2B | RM 49 | 100 | | U | 100 | | U |
| 2C | RM 67 | 100 | | U/E | 100 | | U/E |
| 3A | RM 75 | 100 | | U | 100 | | U |
| 3A | RM 75 | 100 | | U | 100 | | U |
| 3A | RM 75 | 100 | | U | 100 | | U |
| 3A | RM 80 | 100 | | U | 100 | | U |
| 4A | RM 103 | 100 | | U | 100 | | U |
| 4A | RM 115 | 100 | | U | 100 | | U |
| 4B | RM 127 | 100 | | U | 100 | | U |
| 4B | RM 136 | 100 | | U | 100 | | U |

U = Compound was not detected. Value given is the lower quantification limit.

E = Estimated value.

* Lipid-normalized data presented only when a compound is detected.

TABLE D4-6. SEMIVOLATILES IN WHITE STURGEON STEAKS:
NAPHTHALENES

| River Segment | Station | 2-Chloronaphthalene | | | 2-Methylnaphthalene | | |
|---------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1B | RM 15 | 100 | | U | 100 | | U |
| 1B | RM 18.5 | 100 | | U | 100 | | U |
| 1C | RM 20 | 100 | | U | 100 | | U |
| 1C | RM 21 | 100 | | U | 100 | | U |
| 1C | RM 21 | 100 | | U | 100 | | U |
| 1C | RM 27 | 100 | | U | 100 | | U |
| 2B | RM 49 | 100 | | U | 100 | | U |
| 2B | RM 49 | 100 | | U | 100 | | U |
| 2B | RM 49 | 100 | | U | 100 | | U |
| 2C | RM 67 | 100 | | U/E | 100 | | U/E |
| 3A | RM 75 | 100 | | U | 100 | | U |
| 3A | RM 75 | 100 | | U | 100 | | U |
| 3A | RM 75 | 100 | | U | 100 | | U |
| 3A | RM 80 | 100 | | U | 100 | | U |
| 4A | RM 103 | 100 | | U | 100 | | U |
| 4A | RM 115 | 100 | | U | 100 | | U |
| 4B | RM 127 | 100 | | U | 100 | | U |
| 4B | RM 136 | 100 | | U | 100 | | U |

U = Compound was not detected. Value given is the lower quantification limit.

E = Estimated value.

* Lipid-normalized data presented only when a compound is detected.

D4-7.1

TABLE D4-7. SEMIVOLATILES IN WHITE STURGEON STEAKS:
POLYNUCLEAR AROMATICS

| River Segment | Station | Acenaphthene | | | Acenaphthylene | | | Anthracene | | | Benzo(a)anthracene | | |
|---------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1B | RM 15 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 1B | RM 18.5 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 1C | RM 20 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 1C | RM 21 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 1C | RM 21 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 1C | RM 27 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 2B | RM 49 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 2B | RM 49 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 2B | RM 49 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 2C | RM 67 | 100 | | U/E | 100 | | U/E | 100 | | U/E | 100 | | U/E |
| 3A | RM 75 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 3A | RM 75 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 3A | RM 75 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 3A | RM 80 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 4A | RM 103 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 4A | RM 115 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 4B | RM 127 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 4B | RM 136 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |

U = Compound was not detected. Value given is the lower quantification limit.

E = Estimated value.

* Lipid-normalized data presented only when a compound is detected.

D4-7:2

| River Segment | Station | Benzo(b)fluoranthene | | | Benzo(k)fluoranthene | | | Benzo(a)pyrene | | | Benzo(g,h,i)perylene | | |
|---------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1B | RM 15 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 1B | RM 18.5 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 1C | RM 20 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 1C | RM 21 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 1C | RM 21 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 1C | RM 27 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 2B | RM 49 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 2B | RM 49 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 2B | RM 49 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 2C | RM 67 | 200 | | U/E | 200 | | U/E | 200 | | U/E | 200 | | U/E |
| 3A | RM 75 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 3A | RM 75 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 3A | RM 75 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 3A | RM 80 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 4A | RM 103 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 4A | RM 115 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 4B | RM 127 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 4B | RM 136 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |

DA-7.3

| River Segment | Station | Chrysene | | | Dibenzo(a,h)anthracene | | | Fluoranthene | | | Fluorene | | |
|---------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1B | RM 15 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 1B | RM 18.5 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 1C | RM 20 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 1C | RM 21 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 1C | RM 21 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 1C | RM 27 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 2B | RM 49 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 2B | RM 49 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 2B | RM 49 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 2C | RM 67 | 100 | | U/E | 200 | | U/E | 100 | | U/E | 100 | | U/E |
| 3A | RM 75 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 3A | RM 75 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 3A | RM 75 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 3A | RM 80 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 4A | RM 103 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 4A | RM 115 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 4B | RM 127 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 4B | RM 136 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |

D4-7:4

| River Segment | Station | Indeno(1,2,3-c,d)pyrene | | | Naphthalene | | | Phenanthrene | | | Pyrene | | |
|---------------|---------|-------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1B | RM 15 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 1B | RM 18.5 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 1C | RM 20 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 1C | RM 21 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 1C | RM 21 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 1C | RM 27 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 2B | RM 49 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 2B | RM 49 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 2B | RM 49 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 2C | RM 67 | 200 | | U/E | 100 | | U/E | 100 | | U/E | 100 | | U/E |
| 3A | RM 75 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 3A | RM 75 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 3A | RM 75 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 3A | RM 80 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 4A | RM 103 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 4A | RM 115 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 4B | RM 127 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 4B | RM 136 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |

TABLE D4-8. SEMIVOLATILES IN WHITE STURGEON STEAKS:
CHLORINATED BENZENES

| River Segment | Station | 1,3-Dichlorobenzene | | | 1,2-Dichlorobenzene | | | 1,4-Dichlorobenzene | | | 1,2,4-Trichlorobenzene | | |
|-------------------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1B | RM 15 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 1B | RM 18.5 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 1C | RM 20 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 1C | RM 21 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 1C | RM 21 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 1C | RM 27 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 2B | RM 49 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 2B | RM 49 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 2B | RM 49 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 2C | RM 67 | 100 | | U/E | 100 | | U/E | 100 | | U/E | 200 | | U/E |
| 3A | RM 75 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 3A | RM 75 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 3A | RM 75 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 3A | RM 80 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 4A | RM 103 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 4A | RM 115 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 4B | RM 127 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 4B | RM 136 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| Tissue Reference Levels | | na*** | | | na*** | | | na*** | | | 1300 | | |

U = Compound was not detected. Value given is the lower quantification limit.

E = Estimated value.

* Lipid-normalized data presented only when a compound is detected.

*** Tissue reference level not available for this compound.

D4-8:2

| River Segment | Station | Hexachlorobenzene | | | Hexachlorobutadiene | | | Hexachloroethane | | | Hexachlorocyclopentadiene | | |
|------------------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|---------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1B | RM 15 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 1B | RM 18.5 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 1C | RM 20 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 1C | RM 21 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 1C | RM 21 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 1C | RM 27 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 2B | RM 49 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 2B | RM 49 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 2B | RM 49 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 2C | RM 67 | 200 | | U/E | 100 | | U/E | 200 | | U/E | 500 | | U/E |
| 3A | RM 75 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 3A | RM 75 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 3A | RM 75 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 3A | RM 80 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 4A | RM 103 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 4A | RM 115 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 4B | RM 127 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 4B | RM 136 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| Issue Reference Levels | | na*** | | | na*** | | | na*** | | | na*** | | |

TABLE D4-9. SEMIVOLATILES IN WHITE STURGEON STEAKS:
BENZIDINES

| River Segment | Station | 3,3'-Dichlorobenzidine | | Qualifier Code |
|---------------|---------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | |
| 1B | RM 15 | 1000 | | U |
| 1B | RM 18.5 | 1000 | | U |
| 1C | RM 20 | 1000 | | U |
| 1C | RM 21 | 1000 | | U |
| 1C | RM 21 | 1000 | | U |
| 1C | RM 27 | 1000 | | U |
| 2B | RM 49 | 1000 | | U |
| 2B | RM 49 | 1000 | | U |
| 2B | RM 49 | 1000 | | U |
| 2C | RM 67 | 1000 | | U/E |
| 3A | RM 75 | 1000 | | U |
| 3A | RM 75 | 1000 | | U |
| 3A | RM 75 | 1000 | | U |
| 3A | RM 80 | 1000 | | U |
| 4A | RM 103 | 1000 | | U |
| 4A | RM 115 | 1000 | | U |
| 4B | RM 127 | 1000 | | U |
| 4B | RM 136 | 1000 | | U |

U = Compound was not detected. Value given is the lower quantification limit.

E = Estimated value.

* Lipid-normalized data presented only when a compound is detected.

TABLE D4-10. SEMIVOLATILES IN WHITE STURGEON STEAKS:
PHTHALATE ESTERS

| River Segment | Station | Dimethyl phthalate | | | Diethyl phthalate | | | Di-n-butyl phthalate | | |
|---------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1B | RM 15 | 100 | | U | 200 | | U | 100 | | U |
| 1B | RM 18.5 | 100 | | U | 200 | | U | 150 | 14 | |
| 1C | RM 20 | 100 | | U | 200 | | U | 100 | | U |
| 1C | RM 21 | 100 | | U | 200 | | U | 100 | | U |
| 1C | RM 21 | 100 | | U | 200 | | U | 150 | | U |
| 1C | RM 27 | 100 | | U | 200 | | U | 100 | | U |
| 2B | RM 49 | 100 | | U | 200 | | U | 100 | | U |
| 2B | RM 49 | 100 | | U | 200 | | U | 110 | 38 | |
| 2B | RM 49 | 100 | | U | 200 | | U | 100 | | U |
| 2C | RM 67 | 100 | | U/E | 200 | | U/E | 100 | | U/E |
| 3A | RM 75 | 100 | | U | 200 | | U | 170 | 4 | |
| 3A | RM 75 | 100 | | U | 200 | | U | 190 | 2 | |
| 3A | RM 75 | 100 | | U | 200 | | U | 100 | | U |
| 3A | RM 80 | 100 | | U | 200 | | U | 100 | | U |
| 4A | RM 103 | 100 | | U | 200 | | U | 100 | | U |
| 4A | RM 115 | 100 | | U | 200 | | U | 160 | | U |
| 4B | RM 127 | 100 | | U | 200 | | U | 160 | 18 | |
| 4B | RM 136 | 100 | | U | 200 | | U | 160 | | U |

U = Compound was not detected. Value given is the lower quantification limit.

E = Estimated value.

* Lipid-normalized data presented only when a compound is detected.

| River Segment | Station | Benzyl butyl phthalate | | | bis(2-Ethylhexyl) phthalate | | | Di-n-octyl phthalate | | |
|---------------|---------|------------------------|---------------------------|----------------|-----------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1B | RM 15 | 100 | | U | 100 | | U | 200 | | U |
| 1B | RM 18.5 | 100 | | U | 500 | 47 | | 200 | | U |
| 1C | RM 20 | 100 | | U | 1500 | 349 | | 200 | | U |
| 1C | RM 21 | 100 | | U | 590 | 203 | | 200 | | U |
| 1C | RM 21 | 100 | | U | 650 | 92 | | 200 | | U |
| 1C | RM 27 | 100 | | U | 100 | | U | 200 | | U |
| 2B | RM 49 | 100 | | U | 100 | | U | 200 | | U |
| 2B | RM 49 | 100 | | U | 500 | 172 | | 200 | | U |
| 2B | RM 49 | 100 | | U | 190 | 86 | | 200 | | U |
| 2C | RM 67 | 100 | | U/E | 1300 | 813 | | 200 | | U/E |
| 3A | RM 75 | 100 | | U | 1200 | | U | 200 | | U |
| 3A | RM 75 | 990 | 12 | | 100 | | U | 200 | | U |
| 3A | RM 75 | 100 | | U | 100 | | U | 200 | | U |
| 3A | RM 80 | 100 | | U | 100 | | U | 200 | | U |
| 4A | RM 103 | 100 | | U | 240 | 10 | | 200 | | U |
| 4A | RM 115 | 100 | | U | 790 | 45 | | 200 | | U |
| 4B | RM 127 | 100 | | U | 100 | | U | 200 | | U |
| 4B | RM 136 | 100 | | U | 220 | 12 | | 200 | | U |

D4-11:1

TABLE D4-11. PESTICIDES IN WHITE STURGEON STEAKS

| River Segment | Station | o,p-DDD | | | o,p-DDE | | | o,p-DDT | | | 4,4'-DDD | | |
|-------------------------|---------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code |
| 1B | RM 15 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 1B | RM 18.5 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 1C | RM 20 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 1C | RM 21 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 1C | RM21 | 4* | | U | 3 | | U | 3 | | U | 3 | | U |
| 1C | RM 27 | 3 | | U | 3 | | U | 3 | | U | 11 | 0.15 | |
| 2B | RM 49 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 2B | RM 49 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 2B | RM 49 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 2C | RM 67 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 3A | RM 75 | 3 | | U | 14 | 0.33 | E | 30 | 0.70 | E | 16* | | U |
| 3A | RM 75 | 3 | | U | 3 | | U | 3 | | U | 6* | | U |
| 3A | RM 75 | 9.1 | 0.10 | E | 3 | | U | 3 | | U | 7* | | U |
| 3A | RM.80 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 4A | RM 103 | 3 | | U | 3 | | U | 3 | | U | 11 | 0.47 | |
| 4A | RM 115 | 3 | | U | 3 | | U | 3 | | U | 6.5 | 0.37 | |
| 4B | RM 127 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 4B | RM 136 | 5.4 | 0.30 | | 3 | | U | 3 | | U | 3 | | U |
| Tissue Reference Levels | | 200 | | | 200 | | | 200 | | | 200 | | |

U = Compound was not detected. Value given is the lower quantification limit.

E = Estimated value.

* Reporting limits adjusted due to coeluting interfering peaks.

** Lipid-normalized data presented only when a compound is detected.

*** Tissue reference level not available for this compound.

D4-1:2

| River Segment | Station | 4,4'-DDE | | | 4,4'-DDT | | | Heptachlor | | | Heptachlor epoxide | | |
|-------------------------|---------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code |
| 1B | RM 15 | 5.5 | 0.85 | | 3 | | U | 3 | | U | 3 | | U |
| 1B | RM 18.5 | 9.9 | 0.93 | | 3 | | U | 3 | | U | 3 | | U |
| 1C | RM 20 | 11 | 2.56 | | 3 | | U | 3 | | U | 3 | | U |
| 1C | RM 21 | 5.4 | 1.86 | | 3 | | U | 3 | | U | 3 | | U |
| 1C | RM21 | 5.8 | 0.82 | | 3 | | U | 3 | | U | 3 | | U |
| 1C | RM 27 | 51 | 0.71 | | 3.5 | 0.05 | | 3 | | U | 3 | | U |
| 2B | RM 49 | 6.6 | 0.28 | | 14 | 0.59 | | 3 | | U | 3 | | U |
| 2B | RM 49 | 3.9 | 1.34 | | 3 | | U | 3 | | U | 3 | | U |
| 2B | RM 49 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 2C | RM 67 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 3A | RM 75 | 24* | | U | 9* | | U | 3 | | U | 3 | | U |
| 3A | RM 75 | 50 | 0.59 | | 8.6 | 0.10 | E | 3 | | U | 3 | | U |
| 3A | RM 75 | 50 | 0.53 | E | 8 | 0.08 | E | 3 | | U | 3 | | U |
| 3A | RM 80 | 16 | 0.33 | | 3 | | U | 3 | | U | 3 | | U |
| 4A | RM 103 | 48 | 2.05 | | 5.8 | 0.25 | | 3 | | U | 3 | | U |
| 4A | RM 115 | 34 | 1.93 | | 5.3 | 0.30 | | 3 | | U | 3 | | U |
| 4B | RM 127 | 5.8 | 0.64 | | 3.1 | 0.34 | | 3 | | U | 3 | | U |
| 4B | RM 136 | 21 | 1.17 | | 16 | 0.89 | | 3 | | U | 3 | | U |
| Tissue Reference Levels | | 200 | | | 200 | | | 200 | | | na*** | | |

D4-1:3

| River Segment | Station | Chlordane | | | Aldrin | | | Dieldrin | | | Mirex | | |
|-------------------------|---------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code |
| 1B | RM 15 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 1B | RM 18.5 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 1C | RM 20 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 1C | RM 21 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 1C | RM21 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 1C | RM 27 | 3 | | U | 3 | | U | 3 | 0.04 | | 3 | | U |
| 2B | RM 49 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 2B | RM 49 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 2B | RM 49 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 2C | RM 67 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 3A | RM 75 | 3 | | U | 3 | | U | 12 | 0.28 | E | 3 | | U |
| 3A | RM 75 | 3 | | U | 3 | | U | 5.4 | 0.06 | E | 3 | | U |
| 3A | RM 75 | 3 | | U | 3 | | U | 4.1 | 0.04 | E | 3 | | U |
| 3A | RM 80 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 4A | RM 103 | 3 | | U | 3 | | U | 3.1 | 0.13 | | 3 | | U |
| 4A | RM 115 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 4B | RM 127 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 4B | RM 136 | 3 | | U | 3 | | U | 4* | | U | 3 | | U |
| Tissue Reference Levels | | na*** | | | 120 | | | 120 | | | 300 | | |

D4-114

| River Segment | Station | Dacthal | | | Dicofol | | | Methyl parathion | | | Parathion | | |
|-------------------------|---------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code |
| 1B | RM 15 | 3 | | U | 30 | | U | 3 | | U | 3 | | U |
| 1B | RM 18.5 | 3 | | U | 30 | | U | 3 | | U | 3 | | U |
| 1C | RM 20 | 3 | | U | 30 | | U | 5* | | U | 3 | | U |
| 1C | RM 21 | 3 | | U | 30 | | U | 3 | | U | 3 | | U |
| 1C | RM21 | 3 | | U | 30 | | U | 3 | | U | 3 | | U |
| 1C | RM 27 | 3 | | U | 30 | | U | 16 | 0.22 | | 3 | | U |
| 2B | RM 49 | 3 | | U | 30 | | U | 20* | | U | 3 | | U |
| 2B | RM 49 | 3 | | U | 30 | | U | 3 | | U | 3 | | U |
| 2B | RM 49 | 3 | | U | 30 | | U | 3 | | U | 3 | | U |
| 2C | RM 67 | 3 | | U | 30 | | U | 3 | | U | 3 | | U |
| 3A | RM 75 | 3 | | U | 30 | | U | 10* | | U | 3 | | U |
| 3A | RM 75 | 3 | | U | 30 | | U | 3 | | U | 3 | | U |
| 3A | RM 75 | 3 | | U | 30 | | U | 5* | | U | 3 | | U |
| 3A | RM 80 | 3 | | U | 30 | | U | 3 | | U | 3 | | U |
| 4A | RM 103 | 3 | | U | 30 | | U | 22 | 0.94 | | 3 | | U |
| 4A | RM 115 | 3 | | U | 30 | | U | 10 | 0.57 | | 3 | | U |
| 4B | RM 127 | 3 | | U | 30 | | U | 3 | | U | 3 | | U |
| 4B | RM 136 | 3 | | U | 30 | | U | 3 | | U | 3 | | U |
| Tissue Reference Levels | | na*** | | | na*** | | | na*** | | | na*** | | |

D4-115

| Filter Segment | Station | Malathion | | | Toxaphene | | | Isophorone | | | Endosulfan I | | |
|-------------------------|---------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code |
| 1B | RM 15 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 1B | RM 18.5 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 1C | RM 20 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 1C | RM 21 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 1C | RM21 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 1C | RM 27 | 3 | | U | 150 | | U | 100 | | U | 4.9 | 0.07 | |
| 2B | RM 49 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 2B | RM 49 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 2B | RM 49 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 2C | RM 67 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 3A | RM 75 | 3 | | U | 150 | | U | 100 | | U | 4* | | U |
| 3A | RM 75 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 3A | RM 75 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 3A | RM 80 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 4A | RM 103 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 4A | RM 115 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 4B | RM 127 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 4B | RM 136 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| Tissue Reference Levels | | na*** | | | na*** | | | na*** | | | na*** | | |

D4-116

| River Segment | Station | Endosulfan II | | | Endosulfan sulfate | | | Endrin | | | Endrin aldehyde | | |
|-------------------------|---------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code |
| 1B | RM 15 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 1B | RM 18.5 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 1C | RM 20 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 1C | RM 21 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 1C | RM21 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 1C | RM 27 | 4* | | U | 3 | | U | 3 | | U | 3 | | U |
| 2B | RM 49 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 2B | RM 49 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 2B | RM 49 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 2C | RM 67 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 3A | RM 75 | 3 | | U | 3 | | U | 30* | | U | 6* | | U |
| 3A | RM 75 | 3 | | U | 4* | | U | 5.1 | 0.06 | E | 7 | 0.08 | E |
| 3A | RM 75 | 3 | | U | 5.5 | 0.06 | | 3.2 | 0.03 | E | 8.4 | 0.09 | E |
| 3A | RM 80 | 3 | | U | 3 | | U | 3 | | U | 3.7 | | U |
| 4A | RM 103 | 5* | | U | 3 | | U | 3 | | U | 3 | | U |
| 4A | RM 115 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 4B | RM 127 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 4B | RM 136 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| Tissue Reference Levels | | na*** | | | na*** | | | 25 | | | na*** | | |

D4-11:7

| River Segment | Station | Methoxychlor | | | alpha-BHC | | | beta-BHC | | | delta-BHC | | |
|-------------------------|---------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code |
| 1B | RM 15 | 30 | | U | 3 | | U | 3 | | U | 3 | | U |
| 1B | RM 18.5 | 30 | | U | 3 | | U | 3 | | U | 3 | | U |
| 1C | RM 20 | .30 | | U | 3 | | U | 3 | | U | 3 | | U |
| 1C | RM 21 | 30 | | U | 3 | | U | 3 | | U | 3 | | U |
| 1C | RM21 | 30 | | U | 3 | | U | 3 | | U | 3 | | U |
| 1C | RM 27 | 50 | 0.70 | | 3 | | U | 3 | | U | 3 | | U |
| 2B | RM 49 | 30 | | U | 3 | | U | 3 | | U | 3 | | U |
| 2B | RM 49 | 30 | | U | 3 | | U | 3 | | U | 3 | | U |
| 2B | RM 49 | 30 | | U | 3 | | U | 3 | | U | 3 | | U |
| 2C | RM 67 | 30 | | U | 3 | | U | 3 | | U | 3 | | U |
| 3A | RM 75 | 180 | 4.20 | E | 3 | | U | 3 | | U | 3 | | U |
| 3A | RM 75 | 30 | | U | 3 | | U | 3 | | U | 3 | | U |
| 3A | RM 75 | 30 | | U | 3 | | U | 3 | | U | 3 | | U |
| 3A | RM 80 | 30 | | U | 3 | | U | 3 | | U | 3 | | U |
| 4A | RM 103 | 30 | | U | 3 | | U | 3 | | U | 3 | | U |
| 4A | RM 115 | 30 | | U | 3 | | U | 3 | | U | 3 | | U |
| 4B | RM 127 | 30 | | U | 3 | | U | 3 | | U | 3 | | U |
| 4B | RM 136 | 50 | 2.80 | | 3 | | U | 3 | | U | 3 | | U |
| Tissue Reference Levels | | na** | | | 100 | | | 100 | | | 100 | | |

D4-11:8

| River Segment | Station | gamma-BHC | | |
|-------------------------|---------|------------------------|----------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code |
| 1B | RM 15 | 3 | | U |
| 1B | RM 18.5 | 3 | | U |
| 1C | RM 20 | 3 | | U |
| 1C | RM 21 | 3 | | U |
| 1C | RM21 | 3 | | U |
| 1C | RM 27 | 3 | | U |
| 2B | RM 49 | 3 | | U |
| 2B | RM 49 | 3 | | U |
| 2B | RM 49 | 3 | | U |
| 2C | RM 67 | 3 | | U |
| 3A | RM 75 | 3 | | U |
| 3A | RM 75 | 3 | | U |
| 3A | RM 75 | 3 | | U |
| 3A | RM 80 | 3 | | U |
| 4A | RM 103 | 3 | | U |
| 4A | RM 115 | 3 | | U |
| 4B | RM 127 | 4* | | U |
| 4B | RM 136 | 3 | | U |
| Tissue Reference Levels | | 100 | | |

D4-12:1

TABLE D4-12. PCBs IN WHITE STURGEON STEAKS

| River Segment | Station | Aroclor-1016 | | | Aroclor-1221 | | | Aroclor-1232 | | | Aroclor-1242 | | |
|-------------------------|---------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code |
| 1B | RM 15 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 1B | RM 18.5 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 1C | RM 20 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 1C | RM 21 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 1C | RM21 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 1C | RM 27 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 2B | RM 49 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 2B | RM 49 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 2B | RM 49 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 2C | RM 67 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 3A | RM 75 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 3A | RM 75 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 3A | RM 75 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 3A | RM 80 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 4A | RM 103 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 4A | RM 115 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 4B | RM 127 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 4B | RM 136 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| Tissue Reference Levels | | na*** | | | na*** | | | na*** | | | na*** | | |

U = Compound was not detected. Value given is the lower quantification limit.

* Lipid-normalized data presented only when a compound is detected.

*** Tissue reference level not available for this compound.

D4-12:2

| River Segment | Station | Aroclor-1248 | | | Aroclor-1254 | | | Aroclor-1260 | | | Total Detected PCBs | |
|-------------------------|---------|---------------|---------------|-----------|---------------|---------------|-----------|---------------|---------------|-----------|---------------------|---------------|
| | | Measured | Norm. Conc.** | Qualifier | Measured | Norm. Conc.** | Qualifier | Measured | Norm. Conc.** | Qualifier | Measured | Norm. Conc.** |
| | | Conc. (ug/kg) | (ug/g lipid) | Code | Conc. (ug/kg) | (ug/g lipid) | Code | Conc. (ug/kg) | (ug/g lipid) | Code | Conc. (ug/kg) | (ug/g lipid) |
| 1B | RM 15 | 50 | | U | 50 | | U | 50 | | U | 0 | |
| 1B | RM 18.5 | 50 | | U | 50 | | U | 50 | | U | 0 | |
| 1C | RM 20 | 50 | | U | 50 | | U | 50 | | U | 0 | |
| 1C | RM 21 | 50 | | U | 50 | | U | 50 | | U | 0 | |
| 1C | RM21 | 50 | | U | 50 | | U | 50 | | U | 0 | |
| 1C | RM 27 | 50 | | U | 50 | | U | 50 | | U | 0 | |
| 2B | RM 49 | 50 | | U | 50 | | U | 50 | | U | 0 | |
| 2B | RM 49 | 50 | | U | 50 | | U | 50 | | U | 0 | |
| 2B | RM 49 | 50 | | U | 50 | | U | 50 | | U | 0 | |
| 2C | RM 67 | 50 | | U | 50 | | U | 50 | | U | 0 | |
| 3A | RM 75 | 50 | | U | 500 | 11.7 | | 50 | | U | 500 | 11.7 |
| 3A | RM 75 | 50 | | U | 96 | 1.1 | | 50 | | U | 96 | 1.1 |
| 3A | RM 75 | 50 | | U | 150 | 1.6 | | 50 | | U | 150 | 1.6 |
| 3A | RM 80 | 50 | | U | 57 | 1.2 | | 50 | | U | 57 | 1.2 |
| 4A | RM 103 | 50 | | U | 50 | | U | 50 | | U | 0 | |
| 4A | RM 115 | 50 | | U | 50 | | U | 50 | | U | 0 | |
| 4B | RM 127 | 50 | | U | 50 | | U | 50 | | U | 0 | |
| 4B | RM 136 | 50 | | U | 50 | | U | 50 | | U | 0 | |
| Tissue Reference Levels | | na*** | | | na*** | | | na*** | | | 110 | |

TABLE D4-13. DIOXINS AND FURANS IN WHITE STURGEON STEAKS

| River Segment | Station | 2,3,7,8-TCDD | | | 1,2,3,7,8-PeCDD | | | 1,2,3,4,7,8-HxCDD | | | 1,2,3,6,7,8-HxCDD | | |
|-------------------------|---------|-----------------------|----------------------------|----------------|-----------------------|----------------------------|----------------|-----------------------|----------------------------|----------------|-----------------------|----------------------------|----------------|
| | | Measured Conc. (pg/g) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc.** (ug/g lipid) | Qualifier Code |
| 1B | RM 18.5 | 1 | | U/E | 1.02 | | U/E | 0.5 | | U/E | 0.36 | | U/E |
| 1C | RM 27 | 1.07 | | U/E | 2.5 | | U/L | 0.18 | | U/E | 0.17 | | U/E |
| 2B | RM 49 | 0.92 | | U/E | 1.14 | | U/E | 0.53 | | U/E | 0.38 | | U/E |
| 2C | RM 67 | 0.79 | | U/E | 0.92 | | U/E | 0.4 | | U/E | 0.3 | | U/E |
| 3A | RM 75 | 0.72 | | U/E | 0.87 | | U/E | 0.43 | | U/E | 0.33 | | U/E |
| 3A | RM 75 | 1.66 | 0.017 | | 0.9 | | U/E | 0.42 | | U/E | 0.31 | | U/E |
| 4A | RM 115 | 0.59 | | U/E | 0.61 | | U/E | 0.47 | | U/E | 0.35 | | U/E |
| 4B | RM 127 | 0.62 | | U/E | 0.57 | | U/E | 0.37 | | U/E | 0.3 | | U/E |
| Tissue Reference Levels | | na*** | | | na*** | | | na*** | | | na*** | | |

U = Compound was not detected.

E = Analyte not detected at or above the sample specific Estimated Detection Limit (EDL). The EDL is reported.

L = Analyte not detected at or above the Lower Method Calibration Limit (LMCL). The LMCL is reported.

M = Estimated Maximum Possible Concentration.

S = Analyte detected below the Lower Method Calibration Limit. Value should be considered an estimate.

** Lipid-normalized data presented only when a compound is detected.

*** Tissue reference level not available for this compound.

D4-13:1

| River Segment | Station | 1,2,3,7,8,9-HxCDD | | | 1,2,3,4,6,7,8-HpCDD | | | OCDD | | | 2,3,7,8-TCDF | | |
|-------------------------|---------|-----------------------|----------------------------|----------------|-----------------------|----------------------------|----------------|-----------------------|----------------------------|----------------|-----------------------|----------------------------|----------------|
| | | Measured Conc. (pg/g) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc.** (ug/g lipid) | Qualifier Code |
| 1B | RM 18.5 | 0.4 | | U/E | 1.25 | | U/E | 0.61 | | U/E | 1.54 | 0.144 | * |
| 1C | RM 27 | 0.19 | | U/E | 0.35 | 0.005 | S | 0.25 | 0.004 | S | 5.52 | 0.077 | * |
| 2B | RM 49 | 0.42 | | U/E | 1.09 | | U/E | 0.98 | 0.445 | S/M | 6.41 | 2.914 | * |
| 2C | RM 67 | 0.33 | | U/E | 1 | | U/E | 2.22 | 1.388 | S/M | 1.66 | 1.038 | * |
| 3A | RM 75 | 0.36 | | U/E | 0.87 | | U/E | 2.9 | 0.034 | S | 22.6 | 0.266 | * |
| 3A | RM 75 | 0.34 | | U/E | 1.03 | | U/E | 1.48 | 0.016 | S/M | 22.8 | 0.239 | * |
| 4A | RM 115 | 0.39 | | U/E | 0.5 | 0.028 | S/M | 3.61 | 0.205 | S/M | 13.3 | 0.756 | * |
| 4B | RM 127 | 0.33 | | U/E | 0.63 | | U/E | 1.07 | 0.059 | S | 3.53 | 0.196 | * |
| Tissue Reference Levels | | na*** | | | na*** | | | na*** | | | na*** | | |

D4-13:2

| River Segment | Station | 1,2,3,7,8-PeCDF | | | 2,3,4,7,8-PeCDF | | | 1,2,3,4,7,8-HxCDF | | | 1,2,3,6,7,8-HxCDF | | |
|-------------------------|---------|-----------------------|----------------------------|----------------|-----------------------|----------------------------|----------------|-----------------------|----------------------------|----------------|-----------------------|----------------------------|----------------|
| | | Measured Conc. (pg/g) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc.** (ug/g lipid) | Qualifier Code |
| 1B | RM 18.5 | 0.32 | | U/E | 0.28 | | U/E | 1.02 | | U/E | 0.83 | | U/E |
| 1C | RM 27 | 2.5 | | U/L | 2.5 | | U/L | 0.31 | | U/E | 0.31 | | U/E |
| 2B | RM 49 | 0.25 | | U/E | 0.24 | | U/E | 1.15 | | U/E | 0.88 | | U/E |
| 2C | RM 67 | 0.27 | | U/E | 0.24 | | U/E | 0.72 | | U/E | 0.62 | | U/E |
| 3A | RM 75 | 0.29 | | U/E | 0.28 | | U/E | 1.08 | | U/E | 0.9 | | U/E |
| 3A | RM 75 | 0.73 | 0.008 | S/M | 0.49 | 0.005 | S/M | 1.3 | | U/E | 1.1 | | U/E |
| 4A | RM 115 | 0.31 | | U/E | 0.28 | | U/E | 0.8 | | U/E | 0.7 | | U/E |
| 4B | RM 127 | 0.26 | | U/E | 0.21 | | U/E | 0.67 | | U/E | 0.58 | | U/E |
| Tissue Reference Levels | | na*** | | | na*** | | | na*** | | | na*** | | |

| River Segment | Station | 2,3,4,6,7,9-HxCDF | | | 1,2,3,7,8,9-HxCDF | | | 1,2,3,4,6,7,8-HpCDF | | | 1,2,3,4,7,8,9-HpCDF | | |
|-------------------------|---------|-----------------------|----------------------------|----------------|-----------------------|----------------------------|----------------|-----------------------|----------------------------|----------------|-----------------------|----------------------------|----------------|
| | | Measured Conc. (pg/g) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc.** (ug/g lipid) | Qualifier Code |
| 1B | RM 18.5 | 3.83 | | U/E | 1.67 | | U/E | 0.58 | | U/E | 0.79 | | U/E |
| 1C | RM 27 | 0.35 | | U/E | 0.41 | | U/E | 0.2 | | U/E | 0.26 | | U/E |
| 2B | RM 49 | 3.09 | | U/E | 1.74 | | U/E | 0.73 | | U/E | 1 | | U/E |
| 2C | RM 67 | 1.95 | | U/E | 1.09 | | U/E | 0.59 | | U/E | 0.78 | | U/E |
| 3A | RM 75 | 4.81 | | U/E | 1.78 | | U/E | 0.47 | | U/E | 0.63 | | U/E |
| 3A | RM 75 | 3.66 | | U/E | 2.04 | | U/E | 0.84 | | U/E | 0.57 | | U/E |
| 4A | RM 115 | 1.27 | | U/E | 1.33 | | U/E | 0.53 | | U/E | 0.84 | | U/E |
| 4B | RM 127 | 0.83 | | U/E | 1.13 | | U/E | 0.5 | | U/E | 0.69 | | U/E |
| Tissue Reference Levels | | na*** | | | na*** | | | na*** | | | na*** | | |

D4-13:3

| River Segment | Station | OCDF | | | TECs |
|-------------------------|---------|-----------------------|----------------------------|----------------|-------------------------|
| | | Measured Conc. (pg/g) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Calculated Conc. (pg/g) |
| 1B | RM 18.5 | 0.65 | | U/E | 2.7 |
| 1C | RM 27 | 0.29 | | U/E | 1.4 |
| 2B | RM 49 | 0.82 | | U/E | 3.1 |
| 2C | RM 67 | 0.93 | | U/E | 2.1 |
| 3A | RM 75 | 0.82 | | U/E | 4.6 |
| 3A | RM 75 | 0.72 | | U/E | 5.6 |
| 4A | RM 115 | 0.49 | | U/E | 2.9 |
| 4B | RM 127 | 0.61 | | U/E | 1.8 |
| Tissue Reference Levels | | na*** | | | 3 |

APPENDIX D5. LARGESCALE SUCKER TISSUE BIOACCUMULATION DATA

- D5-0. PERCENT LIPID AND LENGTH/WEIGHT DATA
- D5-1. METALS IN LARGESCALE SUCKER WHOLE-BODY COMPOSITES
- D5-2. PHENOLIC COMPOUNDS IN LARGESCALE SUCKER WHOLE-BODY COMPOSITES
- D5-3. SEMIVOLATILES IN LARGESCALE SUCKER WHOLE-BODY COMPOSITES:
HALOGENATED ETHERS
- D5-4. SEMIVOLATILES IN LARGESCALE SUCKER WHOLE-BODY COMPOSITES:
NITROAROMATICS
- D5-5. SEMIVOLATILES IN LARGESCALE SUCKER WHOLE-BODY COMPOSITES:
NITROSAMINES
- D5-6. SEMIVOLATILES IN LARGESCALE SUCKER WHOLE-BODY COMPOSITES:
NAPHTHALENES
- D5-7. SEMIVOLATILES IN LARGESCALE SUCKER WHOLE-BODY COMPOSITES:
POLYNUCLEAR AROMATICS
- D5-8. SEMIVOLATILES IN LARGESCALE SUCKER WHOLE-BODY COMPOSITES:
CHLORINATED BENZENES
- D5-9. SEMIVOLATILES IN LARGESCALE SUCKER WHOLE-BODY COMPOSITES:
BENZIDINES
- D5-10. SEMIVOLATILES IN LARGESCALE SUCKER WHOLE-BODY COMPOSITES:
PHTHALATE ESTERS
- D5-11. PESTICIDES IN LARGESCALE SUCKER WHOLE-BODY COMPOSITES
- D5-12. PCBs IN LARGESCALE SUCKER WHOLE-BODY COMPOSITES
- D5-13. DIOXINS AND FURANS IN LARGESCALE SUCKER WHOLE-BODY COMPOSITES

(Note: All concentrations are presented on a wet-weight basis)

TABLE D5-0. LARGESCALE SUCKER LIPID AND SIZE DATA

| River Segment | Station | Latitude | Longitude | Percent Lipid | Average Weight (g) | Minimum Weight (g) | Maximum Weight (g) | Average Length (cm) | Minimum Length (cm) | Maximum Length (cm) |
|---------------|---------|--------------|---------------|---------------|--------------------|--------------------|--------------------|---------------------|---------------------|---------------------|
| 1C | D6 | 46-18-02.0 N | 123-43-16.4 W | 2.15 | 976 | 745 | 1500 | 41.4 | 38.0 | 45.0 |
| 1C | D8 | 46-13-38.8 N | 123-34-35.6 W | 2.67 | 944 | 625 | 1250 | 42.1 | 37.5 | 47.0 |
| 1C | D10 | 46-12-35.5 N | 123-26-35.1 W | 3.63 | 940 | 500 | 1250 | 42.5 | 35.5 | 47.0 |
| 2A | D12 | 46-12-20.9 N | 123-23-25.2 W | 2.97 | 788 | 530 | 1125 | 40.0 | 35.0 | 44.0 |
| 2B | D15 | 46-08-21.3 N | 123-13-56.6 W | 2.94 | 675 | 450 | 950 | 38.1 | 32.0 | 45.0 |
| 2C | D16 | 46-11-15.3 N | 123-05-28.1 W | 3.50 | 584 | 400 | 700 | 37.4 | 32.0 | 41.0 |
| 2C | D19 | 46-08-17.3 N | 123-00-28.5 W | 2.39 | 490 | 275 | 725 | 34.2 | 28.0 | 40.5 |
| 2C | D20 | 46-03-39.3 N | 122-52-02.6 W | 1.37 | 870 | 650 | 1050 | 41.9 | 38.5 | 44.0 |
| 3A | D22 | 46-00-34.8 N | 122-50-55.6 W | 2.36 | 950 | 750 | 1350 | 42.5 | 39.0 | 45.0 |
| 3A | D23 | 45-57-20.1 N | 122-48-15.8 W | 2.24 | 805 | 700 | 1025 | 41.4 | 39.4 | 44.2 |
| 3A | D24 | 45-52-22.5 N | 122-47-54.9 W | 3.07 | 520 | 300 | 725 | 35.5 | 30.0 | 40.8 |
| 3B | D26 | 45-46-52.5 N | 122-46-09.3 W | 3.10 | 980 | 700 | 1200 | 44.8 | 39.5 | 48.0 |
| 3B | D28 | 45-42-15.7 N | 122-45-35.3 W | 3.60 | 542 | 260 | 800 | 37.3 | 29.5 | 46.0 |
| 3B | D29 | 45-40-07.0 N | 122-44-54.7 W | 2.37 | 900 | 725 | 1150 | 43.1 | 40.0 | 47.0 |
| 4A | D31 | 45-36-33.8 N | 122-40-33.2 W | 3.45 | 704 | 500 | 1050 | 41.2 | 37.5 | 46.0 |
| 4A | D35 | 45-34-28.4 N | 122-26-23.9 W | 2.30 | 1020 | 900 | 1200 | 41.5 | 39.5 | 44.0 |
| 4B | D38 | 45-33-32.5 N | 122-19-03.6 W | 3.25 | 461 | 197 | 581 | 34.3 | 25.0 | 40.0 |
| 4B | D40 | 45-37-20.5 N | 122-01-13.7 W | 3.73 | 378 | 320 | 592 | 36.2 | 31.0 | 44.0 |

D5-0:1

D5-1:1

TABLE D5-1. CONCENTRATIONS OF METALS IN LARGESCALE SUCKER WHOLE-BODY COMPOSITES

| River Segment | Station | Antimony | | Arsenic | | Barium | | Cadmium | | Copper | | Lead | |
|---------------|---------|------------------------|----------------|------------------------|----------------|------------------------|----------------|------------------------|----------------|------------------------|----------------|------------------------|----------------|
| | | Measured Conc. (mg/kg) | Qualifier Code | Measured Conc. (mg/kg) | Qualifier Code | Measured Conc. (mg/kg) | Qualifier Code | Measured Conc. (mg/kg) | Qualifier Code | Measured Conc. (mg/kg) | Qualifier Code | Measured Conc. (mg/kg) | Qualifier Code |
| 1C | D6 | 0.25 | U/E | 0.34 | U | 2.5 | E | 0.04 | | 1.23 | E | 0.23 | E |
| 1C | D8 | 0.39 | U/E | 0.52 | U | 2.9 | E | 0.03 | | 1.13 | E | 0.08 | E |
| 1C | D10 | 0.35 | U/E | 0.47 | U | 2.0 | E | 0.05 | | 1.16 | E | 0.22 | E |
| 2A | D12 | 0.32 | U/E | 0.42 | U | 3.2 | E | 0.04 | | 1.18 | E | 0.16 | E |
| 2B | D15 | 0.39 | U/E | 0.52 | U | 3.1 | E | 0.05 | | 0.99 | E | 0.10 | E |
| 2C | D16 | 0.32 | U/E | 0.43 | U | 1.2 | E | 0.02 | | 0.90 | E | 0.12 | E |
| 2C | D19 | 0.26 | U/E | 0.35 | U | 1.1 | E | 0.02 | | 0.92 | E | 0.02 | U/E |
| 2C | D20 | 0.32 | U/E | 0.42 | U | 2.5 | E | 0.04 | | 1.04 | E | 0.20 | E |
| 3A | D22 | 0.34 | U/E | 0.45 | U | 1.9 | E | 0.02 | | 1.23 | E | 0.86 | E |
| 3A | D23 | 0.31 | U/E | 0.42 | U | 3.6 | E | 0.02 | | 0.86 | E | 0.02 | U/E |
| 3A | D24 | 0.35 | U/E | 0.46 | U | 2.5 | E | 0.05 | | 1.03 | E | 0.12 | E |
| 3B | D26 | 0.28 | U/E | 0.37 | U | 3.0 | E | 0.04 | | 0.84 | E | 0.04 | E |
| 3B | D28 | 0.30 | U/E | 0.40 | U | 2.4 | E | 0.04 | | 1.08 | E | 0.22 | E |
| 3B | D29 | 0.37 | U/E | 0.49 | U | 3.2 | E | 0.05 | | 1.06 | E | 0.25 | E |
| 4A | D31 | 3.38 | U/E | 0.45 | U | 5.4 | E | 0.05 | | 0.70 | E | 0.02 | U/E |
| 4A | D35 | 0.25 | U/E | 0.33 | U | 1.4 | E | 0.03 | | 0.91 | E | 0.02 | U/E |
| 4B | D38 | 0.31 | U/E | 0.42 | U | 3.6 | E | 0.04 | | 0.75 | E | 0.41 | E |
| 4B | D40 | 0.32 | U/E | 0.43 | U | 3.7 | E | 0.06 | | 0.75 | E | 0.17 | E |

U = Compound was not detected. Value given is the lower quantification limit.

E = Estimated value.

* Metals data normalized to wet weight

D5-1:2

| River Segment | Station | Mercury | | Nickel | | Selenium | | Silver | | Zinc | |
|---------------|---------|------------------------|----------------|------------------------|----------------|------------------------|----------------|------------------------|----------------|------------------------|----------------|
| | | Measured Conc. (mg/kg) | Qualifier Code | Measured Conc. (mg/kg) | Qualifier Code | Measured Conc. (mg/kg) | Qualifier Code | Measured Conc. (mg/kg) | Qualifier Code | Measured Conc. (mg/kg) | Qualifier Code |
| 1C | D6 | 0.082 | E | 0.59 | U/E | 0.34 | U | 0.15 | U/E | 22.0 | E |
| 1C | D8 | 0.093 | E | 0.92 | U/E | 0.52 | U | 0.24 | U/E | 23.3 | E |
| 1C | D10 | 0.117 | E | 0.82 | U/E | 0.47 | U | 0.21 | U/E | 20.7 | E |
| 2A | D12 | 0.071 | E | 0.74 | U/E | 0.42 | U | 0.19 | U/E | 18.7 | E |
| 2B | D15 | 0.065 | E | 0.91 | U/E | 0.52 | U | 0.23 | U/E | 28.6 | E |
| 2C | D16 | 0.054 | E | 0.75 | U/E | 0.43 | U | 0.19 | U/E | 18.0 | E |
| 2C | D19 | 0.061 | E | 0.61 | U/E | 0.35 | U | 0.16 | U/E | 17.3 | E |
| 2C | D20 | 0.072 | E | 0.74 | U/E | 0.42 | U | 0.19 | U/E | 23.4 | E |
| 3A | D22 | 0.094 | E | 1.05 | E | 0.45 | U | 0.21 | U/E | 97.7 | E |
| 3A | D23 | 0.137 | E | 0.73 | U/E | 0.42 | U | 0.19 | U/E | 20.6 | E |
| 3A | D24 | 0.038 | E | 0.81 | U/E | 0.46 | U | 0.21 | U/E | 19.8 | E |
| 3B | D26 | 0.137 | E | 0.65 | U/E | 0.37 | U | 0.17 | U/E | 18.7 | E |
| 3B | D28 | 0.071 | E | 1.36 | E | 0.40 | U | 0.18 | U/E | 98.0 | E |
| 3B | D29 | 0.022 | E | 1.08 | E | 0.49 | U | 0.22 | U/E | 21.8 | E |
| 4A | D31 | 0.087 | E | 0.79 | U/E | 0.45 | U | 0.20 | U/E | 22.1 | E |
| 4A | D35 | 0.070 | E | 0.96 | E | 0.33 | U | 0.15 | U/E | 19.9 | E |
| 4B | D38 | 0.051 | E | 0.73 | U/E | 0.42 | U | 0.19 | U/E | 22.9 | E |
| 4B | D40 | 0.131 | E | 0.75 | U/E | 0.43 | U | 0.19 | U/E | 23.7 | E |

TABLE D5-2. PHENOLIC COMPOUNDS IN LARGESCALE SUCKER WHOLE-BODY COMPOSITES

| River Segment | Station | Phenol | | | 2-Methylphenol | | | 4-Methylphenol | | | 2,4-Dimethylphenol | | |
|---------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1C | D6 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 1C | D8 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 1C | D10 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 2A | D12 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 2B | D15 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 2C | D16 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 2C | D19 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 2C | D20 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 3A | D22 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 3A | D23 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 3A | D24 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 3B | D26 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 3B | D28 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 3B | D29 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 4A | D31 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 4A | D35 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 4B | D38 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |
| 4B | D40 | 100 | | U | 200 | | U | 200 | | U | 100 | | U |

U = Compound was not detected. Value given is the lower quantification limit.

* Lipid-normalized data presented only when a compound is detected.

DS-2:2

| River Segment | Station | Pentachlorophenol | | | 2-Chlorophenol | | | 2,4-Dichlorophenol | | | 4-Chloro-3-methylphenol | | |
|---------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|-------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1C | D6 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 1C | D8 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 1C | D10 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 2A | D12 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 2B | D15 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 2C | D16 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 2C | D19 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 2C | D20 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 3A | D22 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 3A | D23 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 3A | D24 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 3B | D25 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 3B | D28 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 3B | D29 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 4A | D31 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 4A | D35 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 4B | D38 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |
| 4B | D40 | 1000 | | U | 100 | | U | 200 | | U | 200 | | U |

D5-2:3

| River Segment | Station | 2,4-Dinitrophenol | | | 2-Nitrophenol | | | 4-Nitrophenol | | | 2,4,6-Trichlorophenol | | |
|---------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1C | D6 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 1C | D8 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 1C | D10 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 2A | D12 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 2B | D15 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 2C | D16 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 2C | D19 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 2C | D20 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 3A | D22 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 3A | D23 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 3A | D24 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 3B | D26 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 3B | D28 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 3B | D29 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 4A | D31 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 4A | D35 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 4B | D38 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |
| 4B | D40 | 1000 | | U | 200 | | U | 1000 | | U | 200 | | U |

TABLE D5-3. SEMIVOLATILES IN LARGESCALE SUCKER WHOLE-BODY COMPOSITES:
HALOGENATED ETHERS

| River Segment | Station | bis(2-Chloroethyl) ether | | | bis(2-Chloroethoxy) methane | | | bis(2-Chloroisopropyl) ether | | |
|---------------|---------|--------------------------|---------------------------|----------------|-----------------------------|---------------------------|----------------|------------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1C | D6 | 100 | | U | 100 | | U | 100 | | U |
| 1C | D8 | 100 | | U | 100 | | U | 100 | | U |
| 1C | D10 | 100 | | U | 100 | | U | 100 | | U |
| 2A | D12 | 100 | | U | 100 | | U | 100 | | U |
| 2B | D15 | 100 | | U | 100 | | U | 100 | | U |
| 2C | D16 | 100 | | U | 100 | | U | 100 | | U |
| 2C | D19 | 100 | | U | 100 | | U | 100 | | U |
| 2C | D20 | 100 | | U | 100 | | U | 100 | | U |
| 3A | D22 | 100 | | U | 100 | | U | 100 | | U |
| 3A | D23 | 100 | | U | 100 | | U | 100 | | U |
| 3A | D24 | 100 | | U | 100 | | U | 100 | | U |
| 3B | D26 | 100 | | U | 100 | | U | 100 | | U |
| 3B | D28 | 100 | | U | 100 | | U | 100 | | U |
| 3B | D29 | 100 | | U | 100 | | U | 100 | | U |
| 4A | D31 | 100 | | U | 100 | | U | 100 | | U |
| 4A | D35 | 100 | | U | 100 | | U | 100 | | U |
| 4B | D38 | 100 | | U | 100 | | U | 100 | | U |
| 4B | D40 | 100 | | U | 100 | | U | 100 | | U |

U = Compound was not detected. Value given is the lower quantification limit.

* Lipid-normalized data presented only when a compound is detected.

| River Segment | Station | 4-Bromophenyl phenyl ether | | | 4-Chlorophenyl phenyl ether | | |
|---------------|---------|----------------------------|---------------------------|----------------|-----------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1C | D6 | 200 | | U | 100 | | U |
| 1C | D8 | 200 | | U | 100 | | U |
| 1C | D10 | 200 | | U | 100 | | U |
| 2A | D12 | 200 | | U | 100 | | U |
| 2B | D15 | 200 | | U | 100 | | U |
| 2C | D16 | 200 | | U | 100 | | U |
| 2C | D19 | 200 | | U | 100 | | U |
| 2C | D20 | 200 | | U | 100 | | U |
| 3A | D22 | 200 | | U | 100 | | U |
| 3A | D23 | 200 | | U | 100 | | U |
| 3A | D24 | 200 | | U | 100 | | U |
| 3B | D26 | 200 | | U | 100 | | U |
| 3B | D28 | 200 | | U | 100 | | U |
| 3B | D29 | 200 | | U | 100 | | U |
| 4A | D31 | 200 | | U | 100 | | U |
| 4A | D35 | 200 | | U | 100 | | U |
| 4B | D38 | 200 | | U | 100 | | U |
| 4B | D40 | 200 | | U | 100 | | U |

TABLE D5-4. SEMIVOLATILES IN LARGESCALE SUCKER WHOLE-BODY COMPOSITES:
NITROAROMATICS

| River Segment | Station | 2,4-Dinitrotoluene | | | 2,6-Dinitrotoluene | | | Nitrobenzene | | |
|---------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1C | D6 | 100 | | U | 100 | | U | 100 | | U |
| 1C | D8 | 100 | | U | 100 | | U | 100 | | U |
| 1C | D10 | 100 | | U | 100 | | U | 100 | | U |
| 2A | D12 | 100 | | U | 100 | | U | 100 | | U |
| 2B | D15 | 100 | | U | 100 | | U | 100 | | U |
| 2C | D16 | 100 | | U | 100 | | U | 100 | | U |
| 2C | D19 | 100 | | U | 100 | | U | 100 | | U |
| 2C | D20 | 100 | | U | 100 | | U | 100 | | U |
| 3A | D22 | 100 | | U | 100 | | U | 100 | | U |
| 3A | D23 | 100 | | U | 100 | | U | 100 | | U |
| 3A | D24 | 100 | | U | 100 | | U | 100 | | U |
| 3B | D26 | 100 | | U | 100 | | U | 100 | | U |
| 3B | D28 | 100 | | U | 100 | | U | 100 | | U |
| 3B | D29 | 100 | | U | 100 | | U | 100 | | U |
| 4A | D31 | 100 | | U | 100 | | U | 100 | | U |
| 4A | D35 | 100 | | U | 100 | | U | 100 | | U |
| 4B | D38 | 100 | | U | 100 | | U | 100 | | U |
| 4B | D40 | 100 | | U | 100 | | U | 100 | | U |

U = Compound was not detected. Value given is the lower quantification limit.

* Lipid-normalized data presented only when a compound is detected.

TABLE D5-5. SEMIVOLATILES IN LARGESCALE SUCKER WHOLE-BODY COMPOSITES:
NITROSAMINES

| River Segment | Station | N-Nitrosodi-n-propylamine | | | N-Nitrosodiphenylamine | | |
|---------------|---------|---------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1C | D6 | 100 | | U | 100 | | U |
| 1C | D8 | 100 | | U | 100 | | U |
| 1C | D10 | 100 | | U | 100 | | U |
| 2A | D12 | 100 | | U | 100 | | U |
| 2B | D15 | 100 | | U | 100 | | U |
| 2C | D16 | 100 | | U | 100 | | U |
| 2C | D19 | 100 | | U | 100 | | U |
| 2C | D20 | 100 | | U | 100 | | U |
| 3A | D22 | 100 | | U | 100 | | U |
| 3A | D23 | 100 | | U | 100 | | U |
| 3A | D24 | 100 | | U | 100 | | U |
| 3B | D26 | 100 | | U | 100 | | U |
| 3B | D28 | 100 | | U | 100 | | U |
| 3B | D29 | 100 | | U | 100 | | U |
| 4A | D31 | 100 | | U | 100 | | U |
| 4A | D35 | 100 | | U | 100 | | U |
| 4B | D38 | 100 | | U | 100 | | U |
| 4B | D40 | 100 | | U | 100 | | U |

U = Compound was not detected. Value given is the lower quantification limit.

* Lipid-normalized data presented only when a compound is detected.

TABLE D5-6. SEMIVOLATILES IN LARGESCALE SUCKER WHOLE-BODY COMPOSITES:
NAPHTHALENES

| River Segment | Station | 2-Chloronaphthalene | | | 2-Methylnaphthalene | | |
|---------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1C | D6 | 100 | | U | 100 | | U |
| 1C | D8 | 100 | | U | 100 | | U |
| 1C | D10 | 100 | | U | 100 | | U |
| 2A | D12 | 100 | | U | 100 | | U |
| 2B | D15 | 100 | | U | 100 | | U |
| 2C | D16 | 100 | | U | 100 | | U |
| 2C | D19 | 100 | | U | 100 | | U |
| 2C | D20 | 100 | | U | 100 | | U |
| 3A | D22 | 100 | | U | 100 | | U |
| 3A | D23 | 100 | | U | 100 | | U |
| 3A | D24 | 100 | | U | 100 | | U |
| 3B | D26 | 100 | | U | 100 | | U |
| 3B | D28 | 100 | | U | 100 | | U |
| 3B | D29 | 100 | | U | 100 | | U |
| 4A | D31 | 100 | | U | 100 | | U |
| 4A | D35 | 100 | | U | 140 | | |
| 4B | D38 | 100 | | U | 100 | | U |
| 4B | D40 | 100 | | U | 100 | | U |

U = Compound was not detected. Value given is the lower quantification limit.

* Lipid-normalized data presented only when a compound is detected.

D5-7:1

TABLE D5-7. SEMIVOLATILES IN LARGESCALE SUCKER WHOLE-BODY COMPOSITES:
POLYNUCLEAR AROMATICS

| River Segment | Station | Acenaphthene | | | Acenaphthylene | | | Anthracene | | | Benzo(a)anthracene | | |
|---------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1C | D6 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 1C | D8 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 1C | D10 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 2A | D12 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 2B | D15 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 2C | D16 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 2C | D19 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 2C | D20 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 3A | D22 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 3A | D23 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 3A | D24 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 3B | D26 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 3B | D28 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 3B | D29 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 4A | D31 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 4A | D35 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 4B | D38 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |
| 4B | D40 | 100 | | U | 100 | | U | 100 | | U | 100 | | U |

U = Compound was not detected. Value given is the lower quantification limit.
* Lipid-normalized data presented only when a compound is detected.

DS-7:2

| River Segment | Station | Benzo(b)fluoranthene | | | Benzo(k)fluoranthene | | | Benzo(a)pyrene | | | Benzo(g,h,i)perylene | | |
|---------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1C | D6 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 1C | D8 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 1C | D10 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 2A | D12 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 2B | D15 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 2C | D16 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 2C | D19 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 2C | D20 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 3A | D22 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 3A | D23 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 3A | D24 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 3B | D26 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 3B | D28 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 3B | D29 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 4A | D31 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 4A | D35 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 4B | D38 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |
| 4B | D40 | 200 | | U | 200 | | U | 200 | | U | 200 | | U |

D5-7.3

| River Segment | Station | Chrysene | | | Dibenzo(a,h)anthracene | | | Fluoranthene | | | Fluorene | | |
|---------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1C | D6 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 1C | D8 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 1C | D10 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 2A | D12 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 2B | D15 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 2C | D16 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 2C | D19 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 2C | D20 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 3A | D22 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 3A | D23 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 3A | D24 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 3B | D26 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 3B | D28 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 3B | D29 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 4A | D31 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 4A | D35 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 4B | D38 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |
| 4B | D40 | 100 | | U | 200 | | U | 100 | | U | 100 | | U |

DS-7:4

| River Segment | Station | Indeno(1,2,3-c,d)pyrene | | | Naphthalene | | | Phenanthrene | | | Pyrene | | |
|---------------|---------|-------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1C | D6 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 1C | D8 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 1C | D10 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 2A | D12 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 2B | D15 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 2C | D16 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 2C | D19 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 2C | D20 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 3A | D22 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 3A | D23 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 3A | D24 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 3B | D25 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 3B | D28 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 3B | D29 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 4A | D31 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 4A | D35 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 4B | D38 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |
| 4B | D40 | 200 | | U | 100 | | U | 100 | | U | 100 | | U |

TABLE D5-8. SEMIVOLATILES IN LARGESCALE SUCKER WHOLE-BODY COMPOSITES:
CHLORINATED BENZENES

| River Segment | Station | 1,3-Dichlorobenzene | | | 1,2-Dichlorobenzene | | | 1,4-Dichlorobenzene | | | 1,2,4-Trichlorobenzene | | |
|-------------------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1C | D6 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 1C | D8 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 1C | D10 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 2A | D12 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 2B | D15 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 2C | D16 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 2C | D19 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 2C | D20 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 3A | D22 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 3A | D23 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 3A | D24 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 3B | D26 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 3B | D28 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 3B | D29 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 4A | D31 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 4A | D35 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 4B | D38 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| 4B | D40 | 100 | | U | 100 | | U | 100 | | U | 200 | | U |
| Tissue Reference Levels | | na*** | | | na*** | | | na*** | | | 1300 | | |

U = Compound was not detected. Value given is the lower quantification limit.
 * Lipid-normalized data presented only when a compound is detected.
 *** Tissue reference level not available for this compound.

| River Segment | Station | Hexachlorobenzene | | | Hexachlorobutadiene | | | Hexachloroethane | | | Hexachlorocyclopentadiene | | |
|-------------------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|---------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1C | D6 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 1C | D8 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 1C | D10 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 2A | D12 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 2B | D15 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 2C | D16 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 2C | D19 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 2C | D20 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 3A | D22 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 3A | D23 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 3A | D24 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 3B | D26 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 3B | D28 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 3B | D29 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 4A | D31 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 4A | D35 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 4B | D38 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| 4B | D40 | 200 | | U | 100 | | U | 200 | | U | 500 | | U |
| Tissue Reference Levels | | na*** | | | na*** | | | na*** | | | na*** | | |

TABLE D5-9. SEMIVOLATILES IN LARGESCALE SUCKER WHOLE-BODY COMPOSITES:
BENZIDINES

| River Segment | Station | 3,3'-Dichlorobenzidine | | Qualifier Code |
|---------------|---------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | |
| 1C | D6 | 1000 | | U |
| 1C | D8 | 1000 | | U |
| 1C | D10 | 1000 | | U |
| 2A | D12 | 1000 | | U |
| 2B | D15 | 1000 | | U |
| 2C | D16 | 1000 | | U |
| 2C | D19 | 1000 | | U |
| 2C | D20 | 1000 | | U |
| 3A | D22 | 1000 | | U |
| 3A | D23 | 1000 | | U |
| 3A | D24 | 1000 | | U |
| 3B | D26 | 1000 | | U |
| 3B | D28 | 1000 | | U |
| 3B | D29 | 1000 | | U |
| 4A | D31 | 1000 | | U |
| 4A | D35 | 1000 | | U |
| 4B | D38 | 1000 | | U |
| 4B | D40 | 1000 | | U |

U = Compound was not detected. Value given is the lower quantification limit.
* Lipid-normalized data presented only when a compound is detected.

TABLE D5-10. SEMIVOLATILES IN LARGESCALE SUCKER WHOLE-BODY COMPOSITES:
 PHTHALATE ESTERS

| River Segment | Station | Dimethyl phthalate | | | Diethyl phthalate | | | Di-n-butyl phthalate | | |
|---------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1C | D6 | 100 | | U | 200 | | U | 100 | | U |
| 1C | D8 | 100 | | U | 200 | | U | 100 | | U |
| 1C | D10 | 100 | | U | 200 | | U | 100 | | U |
| 2A | D12 | 100 | | U | 200 | | U | 100 | | U |
| 2B | D15 | 100 | | U | 200 | | U | 100 | | U |
| 2C | D16 | 100 | | U | 200 | | U | 100 | | U |
| 2C | D19 | 100 | | U | 200 | | U | 100 | | U |
| 2C | D20 | 100 | | U | 200 | | U | 100 | | U |
| 3A | D22 | 100 | | U | 200 | | U | 100 | | U |
| 3A | D23 | 100 | | U | 200 | | U | 100 | | U |
| 3A | D24 | 100 | | U | 200 | | U | 100 | | U |
| 3B | D26 | 100 | | U | 200 | | U | 100 | | U |
| 3B | D28 | 100 | | U | 200 | | U | 100 | | U |
| 3B | D29 | 100 | | U | 200 | | U | 100 | | U |
| 4A | D31 | 100 | | U | 200 | | U | 100 | | U |
| 4A | D35 | 100 | | U | 200 | | U | 100 | | U |
| 4B | D38 | 100 | | U | 200 | | U | 100 | | U |
| 4B | D40 | 100 | | U | 200 | | U | 100 | | U |

U = Compound was not detected. Value given is the lower quantification limit.

* Lipid-normalized data presented only when a compound is detected.

| River Segment | Station | Benzyl butyl phthalate | | | bis(2-Ethylhexyl) phthalate | | | Di-n-octyl phthalate | | |
|---------------|---------|------------------------|---------------------------|----------------|-----------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1C | D6 | 100 | | U | 100 | | U | 200 | | U |
| 1C | D8 | 100 | | U | 100 | | U | 200 | | U |
| 1C | D10 | 100 | | U | 100 | | U | 200 | | U |
| 2A | D12 | 100 | | U | 100 | | U | 200 | | U |
| 2B | D15 | 100 | | U | 1100 | 37 | | 200 | | U |
| 2C | D16 | 100 | | U | 100 | | U | 200 | | U |
| 2C | D19 | 100 | | U | 800 | 33 | | 200 | | U |
| 2C | D20 | 100 | | U | 100 | | U | 200 | | U |
| 3A | D22 | 100 | | U | 850 | 36 | | 200 | | U |
| 3A | D23 | 100 | | U | 370 | 17 | | 200 | | U |
| 3A | D24 | 100 | | U | 100 | | U | 200 | | U |
| 3B | D26 | 100 | | U | 100 | | U | 200 | | U |
| 3B | D28 | 100 | | U | 100 | | U | 200 | | U |
| 3B | D29 | 100 | | U | 470 | 20 | | 200 | | U |
| 4A | D31 | 100 | | U | 680 | 20 | | 200 | | U |
| 4A | D35 | 100 | | U | 440 | 19 | | 200 | | U |
| 4B | D38 | 100 | | U | 100 | | U | 200 | | U |
| 4B | D40 | 100 | | U | 1100 | 29 | | 200 | | U |

D5-1:1

TABLE D5-11. PESTICIDES IN LARGESCALE SUCKER WHOLE-BODY COMPOSITES

| River Segment | Station | o,p-DDD | | | o,p-DDE | | | o,p-DDT | | | 4,4'-DDD | | |
|-------------------------|---------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code |
| 1C | D6 | 3 | | U | 4* | | U | 3 | | U | 5* | | U |
| 1C | D6 | 3 | | U/R | 3 | | U/R | 3 | | U/R | 5.6 | 0.21 | R |
| 1C | D10 | 3 | | U | 4* | | U | 3 | | U | 23 | 0.63 | E |
| 2A | D12 | 3 | | U | 3 | | U | 3 | | U | 7* | | U |
| 2B | D15 | 24 | 0.82 | | 24 | 0.82 | | 3 | | U | 24 | 0.82 | E |
| 2C | D16 | 3 | | U | 10 | 0.29 | | 3 | | U | 13 | 0.37 | E |
| 2C | D19 | 3 | | U | 23 | 0.96 | | 15* | | U | 16 | 0.67 | E |
| 2C | D20 | 3 | | U | 3 | | U | 3 | | U | 13 | 0.95 | E |
| 3A | D22 | 24 | 1.02 | | 14 | 0.59 | | 3 | | U | 8.7 | 0.37 | E |
| 3A | D23 | 24 | 1.07 | | 21 | 0.94 | | 5* | | U | 23 | 1.03 | E |
| 3A | D24 | 3 | | U | 5.5 | 1.80 | E | 3 | | U | 21 | 0.68 | E |
| 3B | D26 | 3 | | U | 8* | | U | 3 | | U | 30 | 0.97 | E |
| 3B | D28 | 8* | | U | 16 | 0.44 | | 5* | | U | 18 | 0.50 | E |
| 3B | D29 | 24 | 1.01 | | 14 | 0.59 | | 6* | | U | 6.1 | 0.26 | E |
| 4A | D31 | 29 | 0.84 | | 42 | 1.22 | | 10* | | U | 26 | 0.75 | E |
| 4A | D35 | 18 | 0.78 | | 3 | | U | 3 | | U | 8.5 | 0.37 | E |
| 4B | D38 | 3 | | U | 3 | | U | 3 | | U | 24 | 0.74 | E |
| 4B | D40 | 3 | | U | 3 | | U | 3 | | U | 18 | 0.48 | E |
| Tissue Reference Levels | | 200 | | | 200 | | | 200 | | | 200 | | |

U = Compound was not detected. Value given is the lower quantification limit.

E = Estimated value.

* Reporting limits adjusted due to coeluting interfering peaks.

** Lipid-normalized data presented only when a compound is detected.

*** Tissue reference level not available for this compound.

DS-11:2

| River Segment | Station | 4,4'-DDE | | | 4,4'-DDT | | | Heptachlor | | | Heptachlor epoxide | | |
|-------------------------|---------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code |
| 1C | D6 | 3 | | U | 4.5 | 0.21 | E | 3 | | U | 3 | | U |
| 1C | D8 | 26 | 0.97 | R | 3 | | U/R | 3 | | U/R | 3 | | U/R |
| 1C | D10 | 59* | | U | 11 | 0.30 | E | 3 | | U | 3 | | U |
| 2A | D12 | 45* | | U | 3 | | U | 3 | | U | 3 | | U |
| 2B | D15 | 45* | | U | 16 | 0.54 | | 3 | | U | 3 | | U |
| 2C | D16 | 70* | | U | 4.2 | 0.12 | E | 3 | | U | 3 | | U |
| 2C | D19 | 38* | | U | 4* | | U | 3 | | U | 3 | | U |
| 2C | D20 | 60* | | U | 5.8 | 0.42 | E | 3 | | U | 3 | | U |
| 3A | D22 | 45* | | U | 6.1 | 0.26 | E | 3 | | U | 3 | | U |
| 3A | D23 | 63* | | U | 11 | 0.49 | E | 3 | | U | 3 | | U |
| 3A | D24 | 53* | | U | 9.6* | | U | 3 | | U | 3 | | U |
| 3B | D26 | 62* | | U | 13 | 0.42 | E | 3 | | U | 3 | | U |
| 3B | D28 | 57* | | U | 5.1 | 0.14 | E | 3 | | U | 3 | | U |
| 3B | D29 | 45* | | U | 4 | 0.17 | E | 3 | | U | 3 | | U |
| 4A | D31 | 61* | | U | 12* | | U | 3 | | U | 3 | | U |
| 4A | D35 | 50* | | U | 3.9 | 0.17 | E | 3 | | U | 3 | | U |
| 4B | D38 | 5* | | U | 5.2 | 0.16 | E | 3 | | U | 3 | | U |
| 4B | D40 | 50* | | U | 7.5 | 0.20 | E | 3 | | U | 3 | | U |
| Tissue Reference Levels | | 200 | | | 200 | | | 200 | | | na*** | | |

DS-11:3

| River Segment | Station | Chlordane | | | Aldrin | | | Dieldrin | | | Mirex | | |
|-------------------------|---------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code |
| 1C | D6 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 1C | D8 | 3 | | U/R | 3 | | U/R | 3 | | U/R | 3 | | U/R |
| 1C | D10 | 3 | | U | 3.9 | 0.11 | | 3 | | U | 3 | | U |
| 2A | D12 | 3 | | U | 5.6 | 0.19 | | 3 | | U | 3 | | U |
| 2B | D15 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 2C | D16 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 2C | D19 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 2C | D20 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 3A | D22 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 3A | D23 | 3 | | U | 3 | | U | 4* | | U | 3 | | U |
| 3A | D24 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 3B | D26 | 3 | | U | 3 | | U | 4.5 | 0.15 | | 3 | | U |
| 3B | D28 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 3B | D29 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 4A | D31 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 4A | D35 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 4B | D38 | 3 | | U | 3 | | U | 4* | | U | 3 | | U |
| 4B | D40 | 3 | | U | 3 | 0.80 | | 3 | | U | 3 | | U |
| Tissue Reference Levels | | na*** | | | 120 | | | 120 | | | 300 | | |

D5-11:4

| River Segment | Station | Dacthal | | | Dicofol | | | Methyl parathion | | | Parathion | | |
|-------------------------|---------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code |
| 1C | D6 | 3 | | U | 30 | | U | 6* | | U | 6* | | U |
| 1C | D8 | 3 | | U | 30 | | U | 5* | | U | 7.8 | 0.29 | R |
| 1C | D10 | 3 | | U | 30 | | U | 16* | | U | 3 | | U |
| 2A | D12 | 3 | | U | 30 | | U | 12* | | U | 3 | | U |
| 2B | D15 | 3 | | U | 30 | | U | 9* | | U | 3 | | U |
| 2C | D16 | 3 | | U | 30 | | U | 7* | | U | 7.5 | 0.21 | |
| 2C | D19 | 3 | | U | 30 | | U | 3 | | U | 3 | | U |
| 2C | D20 | 3 | | U | 30 | | U | 16* | | U | 15 | 1.09 | |
| 3A | D22 | 3 | | U | 30 | | U | 5* | | U | 3 | | U |
| 3A | D23 | 3 | | U | 30 | | U | 3 | | U | 3 | | U |
| 3A | D24 | 3 | | U | 30 | | U | 3 | | U | 3 | | U |
| 3B | D26 | 3 | | U | 30 | | U | 3 | | U | 3 | | U |
| 3B | D28 | 3 | | U | 30 | | U | 3 | | U | 3 | | U |
| 3B | D29 | 3 | | U | 30 | | U | 3 | | U | 3 | | U |
| 4A | D31 | 3 | | U | 30 | | U | 3 | | U | 3 | | U |
| 4A | D35 | 3 | | U | 30 | | U | 6* | | U | 3 | | U |
| 4B | D38 | 3 | | U | 30 | | U | 5* | | U | 3 | | U |
| 4B | D40 | 3 | | U | 30 | | U | 10* | | U | 3 | | U |
| Tissue Reference Levels | | na*** | | | na*** | | | na*** | | | na*** | | |

D5-11:5

| River Segment | Station | Malathion | | | Toxaphene | | | Isophorone | | | Endosulfan I | | |
|-------------------------|---------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code |
| 1C | D6 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 1C | D8 | 3 | | U/R | 150 | | U/R | 100 | | U/R | 3 | | U/R |
| 1C | D10 | 3 | | U | 150 | | U | 100 | | U | 3.3 | 0.09 | |
| 2A | D12 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 2B | D15 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 2C | D16 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 2C | D19 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 2C | D20 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 3A | D22 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 3A | D23 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 3A | D24 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 3B | D26 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 3B | D28 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 3B | D29 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 4A | D31 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 4A | D35 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 4B | D38 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| 4B | D40 | 3 | | U | 150 | | U | 100 | | U | 3 | | U |
| Tissue Reference Levels | | na*** | | | na*** | | | na*** | | | na*** | | |

D6-11:6

| River Segment | Station | Endosulfan II | | | Endosulfan sulfate | | | Endrin | | | Endrin aldehyde | | |
|-------------------------|---------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code |
| 1C | D6 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 1C | D8 | 3 | | U/R | 3 | | U/R | 3 | | U/R | 3 | | U/R |
| 1C | D10 | 3 | | U | 3 | | U | 4* | | U | 4* | | U |
| 2A | D12 | 3 | | U | 6* | | U | 3 | | U | 4.2 | 0.14 | U |
| 2B | D15 | 3 | | U | 3 | | U | 6* | | U | 4* | | U |
| 2C | D16 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 2C | D19 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 2C | D20 | 3 | | U | 3 | | U | 6* | | U | 3 | | U |
| 3A | D22 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 3A | D23 | 3 | | U | 3 | | U | 12 | 0.54 | U | 4* | | U |
| 3A | D24 | 3 | | U | 3 | | U | 6* | | U | 3 | | U |
| 3B | D26 | 3 | | U | 3 | | U | 8* | | U | 3 | | U |
| 3B | D28 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 3B | D29 | 3 | | U | 3 | | U | 6.7 | 0.28 | U | 3 | | U |
| 4A | D31 | 3 | | U | 6* | | U | 3 | | U | 3 | | U |
| 4A | D35 | 3 | | U | 3.5 | 0.15 | U | 3 | | U | 3 | | U |
| 4B | D38 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| 4B | D40 | 3 | | U | 3 | | U | 3 | | U | 3 | | U |
| Tissue Reference Levels | | na** | | | na** | | | 25 | | | na** | | |

051117

| River Segment | Station | Methoxychlor | | | alpha-BHC | | | beta-BHC | | | delta-BHC | | |
|-------------------------|---------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|------------------------|----------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | Qualifier Code |
| 1C | D6 | 30 | | U | 3 | | U | 3 | | U | 3 | | U |
| 1C | D8 | 30 | | U/R | 3 | | U/R | 3 | | U/R | 3 | | U/R |
| 1C | D10 | 30 | | U | 5* | | U | 3 | | U | 3 | | U |
| 2A | D12 | 30 | | U | 10* | | U | 3 | | U | 3 | | U |
| 2B | D15 | 65 | 2.21 | | 7* | | U | 8* | | U | 3 | | U |
| 2C | D16 | 30 | | U | 3 | | U | 3 | | U | 3 | | U |
| 2C | D19 | 30 | | U | 8* | | U | 8* | | U | 3 | | U |
| 2C | D20 | 30 | | U | 3 | | U | 3 | | U | 3 | | U |
| 3A | D22 | 30 | | U | 3 | | U | 3 | | U | 3 | | U |
| 3A | D23 | 30 | | U | 3 | 0.13 | | 3 | | U | 3 | | U |
| 3A | D24 | 30 | | U | 9* | | U | 3 | | U | 3 | | U |
| 3B | D26 | 30 | | U | 3.7 | 0.12 | | 3 | | U | 3 | | U |
| 3B | D28 | 30 | | U | 3 | | U | 3 | | U | 3 | | U |
| 3B | D29 | 30 | | U | 3 | | U | 4.1 | 0.17 | | 3 | | U |
| 4A | D31 | 30 | | U | 3 | | U | 3 | | U | 3 | | U |
| 4A | D35 | 30 | | U | 3 | | U | 3 | | U | 3 | | U |
| 4B | D38 | 30 | | U | 3 | | U | 3 | | U | 3 | | U |
| 4B | D40 | 30 | | U | 3 | | U | 3 | | U | 3 | | U |
| Tissue Reference Levels | | na*** | | | 100 | | | 100 | | | 100 | | |

D5-11:8

| River Segment | Station | gamma-BHC | | Qualifier Code |
|-------------------------|---------|------------------------|----------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.** (ug/g lipid) | |
| 1C | D6 | 3 | | U |
| 1C | D8 | 3 | | U/R |
| 1C | D10 | 3 | | U |
| 2A | D12 | 3 | | U |
| 2B | D15 | 3 | | U |
| 2C | D16 | 5.6 | 0.16 | |
| 2C | D19 | 7.7 | 0.32 | |
| 2C | D20 | 3 | | U |
| 3A | D22 | 3 | | U |
| 3A | D23 | 3 | | U |
| 3A | D24 | 3.1 | 0.10 | |
| 3B | D26 | 3 | | U |
| 3B | D28 | 3 | | U |
| 3B | D29 | 3 | | U |
| 4A | D31 | 3 | | U |
| 4A | D35 | 3 | | U |
| 4B | D38 | 3 | | U |
| 4B | D40 | 3 | | U |
| Tissue Reference Levels | | 100 | | |

D5-12:1

TABLE D5-12. PCBs IN LARGESCALE SUCKER WHOLE-BODY COMPOSITES

| River Segment | Station | Aroclor-1016 | | | Aroclor-1221 | | | Aroclor-1232 | | | Aroclor-1242 | | |
|-------------------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code |
| 1C | D6 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 1C | D8 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 1C | D10 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 2A | D12 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 2B | D15 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 2C | D16 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 2C | D19 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 2C | D20 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 3A | D22 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 3A | D23 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 3A | D24 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 3B | D26 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 3B | D28 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 3B | D29 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 4A | D31 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 4A | D35 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 4B | D38 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| 4B | D40 | 50 | | U | 50 | | U | 50 | | U | 50 | | U |
| Tissue Reference Levels | | na** | | | na*** | | | na*** | | | na*** | | |

U = Compound was not detected. Value given is the lower quantification limit.

* Lipid-normalized data presented only when a compound is detected.

*** Tissue reference level not available for this compound.

D5-1:2:2

| River Segment | Station | Aroclor-1248 | | | Aroclor-1254 | | | Aroclor-1260 | | | Total Detected PCBs | |
|-------------------------|---------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|----------------|------------------------|---------------------------|
| | | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) | Qualifier Code | Measured Conc. (ug/kg) | Norm. Conc.* (ug/g lipid) |
| 1C | D6 | 50 | | U | 110 | 5.1 | | 50 | | U | 110 | 5.1 |
| 1C | D8 | 50 | | U | 70 | 2.6 | | 50 | | U | 70 | 2.6 |
| 1C | D10 | 50 | | U | 210 | 5.8 | | 50 | | U | 210 | 5.8 |
| 2A | D12 | 50 | | U | 110 | 3.7 | | 50 | | U | 110 | 3.7 |
| 2B | D15 | 50 | | U | 66 | 2.2 | | 50 | | U | 66 | 2.2 |
| 2C | D16 | 50 | | U | 76 | 2.2 | | 50 | | U | 76 | 2.2 |
| 2C | D19 | 50 | | U | 63 | 2.6 | | 50 | | U | 63 | 2.6 |
| 2C | D20 | 50 | | U | 130 | 9.5 | | 50 | | U | 130 | 9.5 |
| 3A | D22 | 50 | | U | 61 | 2.6 | | 50 | | U | 61 | 2.6 |
| 3A | D23 | 50 | | U | 160 | 7.1 | | 50 | | U | 160 | 7.1 |
| 3A | D24 | 50 | | U | 120 | 3.9 | | 50 | | U | 120 | 3.9 |
| 3B | D26 | 50 | | U | 150 | 4.8 | | 50 | | U | 150 | 4.8 |
| 3B | D28 | 50 | | U | 380 | 10.6 | | 50 | | U | 380 | 10.6 |
| 3B | D29 | 50 | | U | 160 | 6.8 | | 50 | | U | 160 | 6.8 |
| 4A | D31 | 50 | | U | 210 | 6.1 | | 50 | | U | 210 | 6.1 |
| 4A | D35 | 50 | | U | 55 | 2.4 | | 50 | | U | 55 | 2.4 |
| 4B | D38 | 50 | | U | 130 | 4.0 | | 50 | | U | 130 | 4.0 |
| 4B | D40 | 50 | | U | 50 | | U | 130 | 3.5 | | 130 | 3.5 |
| Tissue Reference Levels | | na*** | | | na*** | | | na*** | | | 110 | |

D5-13:1

| TABLE D5-13. DIOXINS AND FURANS IN LARGESCALE SUCKER WHOLE-BODY COMPOSITES | | | | | | | | | | | | | |
|--|---------|-----------------------|----------------------------|----------------|-----------------------|----------------------------|----------------|-----------------------|----------------------------|----------------|-----------------------|----------------------------|----------------|
| River Segment | Station | 2,3,7,8-TCDD | | | 1,2,3,7,8-PeCDD | | | 1,2,3,4,7,8-HxCDD | | | 1,2,3,6,7,8-HxCDD | | |
| | | Measured Conc. (pg/g) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc.** (ug/g lipid) | Qualifier Code |
| 1C | D6 | 0.49 | 0.023 | S | 0.46 | 0.021 | S/M | 0.18 | 0.008 | S | 0.68 | 0.032 | S/M |
| 1C | D8 | 0.82 | 0.031 | | 0.65 | 0.024 | S/M | 0.23 | 0.009 | S | 0.97 | 0.036 | S |
| 1C | D10 | 1.56 | 0.043 | | 1.1 | 0.030 | S/M | 0.53 | 0.015 | S | 1.01 | 0.028 | S |
| 2B | D15 | 0.88 | 0.030 | | 0.51 | 0.017 | S/M | 0.19 | 0.006 | S/M | 0.74 | 0.025 | S |
| 2C | D19 | 1.32 | 0.055 | | 0.64 | 0.027 | S/M | 0.23 | 0.010 | S | 0.87 | 0.036 | S |
| 2C | D20 | 0.76 | 0.055 | | 0.4 | 0.029 | S/M | 0.13 | 0.009 | S/M | 0.33 | 0.024 | S/M |
| 3A | D23 | 0.92 | 0.041 | | 0.43 | 0.019 | S/M | 0.13 | 0.006 | S/M | 0.44 | 0.020 | S |
| 3A | D24 | 1.01 | 0.033 | | 0.58 | 0.019 | S/M | 0.22 | 0.007 | S | 0.65 | 0.021 | S |
| 3B | D28 | 1.41 | 0.039 | | 0.9 | 0.025 | S/M | 0.35 | 0.010 | S | 1.42 | 0.039 | S |
| 4A | D35 | 0.62 | 0.027 | | 0.4 | 0.017 | S/M | 0.2 | 0.009 | S | 0.18 | 0.008 | S |
| 4B | D38 | 1.38 | 0.042 | | 0.72 | 0.022 | S/M | 0.33 | 0.010 | S | 0.81 | 0.025 | S |
| 4B | D40 | 0.72 | 0.019 | | 0.48 | 0.013 | S/M | 0.17 | 0.005 | S/M | 0.41 | 0.011 | S |
| Tissue Reference Levels | | na*** | | | na*** | | | na*** | | | na*** | | |

U = Compound was not detected.
E = Analyte not detected at or above the sample specific Estimated Detection Limit (EDL). The EDL is reported.
L = Analyte not detected at or above the Lower Method Calibration Limit (LMCL). The LMCL is reported.
M = Estimated Maximum Possible Concentration.
MD = Estimated Maximum Possible Concentration with Diphenyl Ether interferences.
S = Analyte detected below the Lower Method Calibration Limit. Value should be considered an estimate.
* Obtained from a DB-225 column.
** Lipid-normalized data presented only when a compound is detected.
*** Tissue reference level not available for this compound.

D5-13.2

| River Segment | Station | 1,2,3,7,8,9-HxCDD | | | 1,2,3,4,6,7,8-HpCDD | | | OCDD | | | 2,3,7,8-TCDF | | |
|-------------------------|---------|-----------------------|----------------------------|----------------|-----------------------|----------------------------|----------------|-----------------------|----------------------------|----------------|-----------------------|----------------------------|----------------|
| | | Measured Conc. (pg/g) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc.** (ug/g lipid) | Qualifier Code |
| 1C | D6 | 0.43 | 0.020 | S | 2.07 | 0.096 | S | 4.04 | 0.188 | S | 5.24 | 0.244 | * |
| 1C | D8 | 0.45 | 0.017 | S | 2.44 | 0.091 | S | 4.41 | 0.165 | S | 7.97 | 0.299 | * |
| 1C | D10 | 0.92 | 0.025 | S | 3.35 | 0.092 | | 6.67 | 0.184 | | 5.45 | 0.150 | * |
| 2B | D15 | 0.42 | 0.014 | S | 2.45 | 0.083 | S | 6.43 | 0.219 | | 4.69 | 0.160 | * |
| 2C | D19 | 0.48 | 0.020 | S | 2.98 | 0.125 | | 9.28 | 0.388 | | 8.79 | 0.366 | * |
| 2C | D20 | 0.16 | 0.012 | S | 1.66 | 0.121 | S | 13.7 | 1.600 | | 2.46 | 0.180 | *M |
| 3A | D23 | 0.19 | 0.008 | S | 1.1 | 0.049 | S | 5.25 | 0.234 | | 6.36 | 0.284 | * |
| 3A | D24 | 0.28 | 0.009 | S | 3.11 | 0.101 | | 21.3 | 0.694 | | 7.24 | 0.236 | * |
| 3B | D28 | 0.36 | 0.010 | S | 4.36 | 0.121 | | 20.1 | 0.558 | | 6.98 | 0.194 | * |
| 4A | D35 | 0.11 | 0.005 | S | 1.04 | 0.045 | S | 3.79 | 0.165 | S | 7.09 | 0.308 | * |
| 4B | D38 | 0.38 | 0.012 | S | 2.41 | 0.074 | S | 4.12 | 0.127 | S | 11.4 | 0.351 | * |
| 4B | D40 | 0.32 | 0.009 | S/M | 1.82 | 0.049 | S | 0.79 | 0.021 | S | 11 | 0.295 | * |
| Tissue Reference Levels | | na*** | | | na*** | | | na*** | | | na*** | | |

D5-13:3

| River Segment | Station | 1,2,3,7,8-PeCDF | | | 2,3,4,7,8-PeCDF | | | 1,2,3,4,7,8-HxCDF | | | 1,2,3,6,7,8-HxCDF | | |
|-------------------------|---------|-----------------------|----------------------------|----------------|-----------------------|----------------------------|----------------|-----------------------|----------------------------|----------------|-----------------------|----------------------------|----------------|
| | | Measured Conc. (pg/g) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc.** (ug/g lipid) | Qualifier Code |
| 1C | D6 | 0.18 | 0.008 | S | 0.43 | 0.020 | S | 0.18 | 0.008 | S | 0.23 | 0.011 | S |
| 1C | D6 | 0.23 | 0.009 | S | 0.52 | 0.019 | S | 0.21 | 0.008 | S | 0.21 | 0.008 | S/M |
| 1C | D10 | 0.49 | 0.013 | S | 1.21 | 0.033 | S | 0.39 | 0.011 | S | 0.33 | 0.009 | S/M |
| 2B | D15 | 0.2 | 0.007 | S | 0.48 | 0.016 | S | 0.2 | 0.007 | S | 0.22 | 0.007 | S |
| 2C | D19 | 0.34 | 0.014 | S/M | 0.69 | 0.029 | S | 0.27 | 0.011 | S | 0.22 | 0.009 | S |
| 2C | D20 | 0.14 | 0.010 | S | 0.33 | 0.024 | S | 0.14 | 0.010 | S | 0.09 | 0.007 | S |
| 3A | D23 | 0.16 | 0.007 | S | 0.38 | 0.017 | S | 0.13 | 0.006 | S/M | 0.11 | 0.005 | S/M |
| 3A | D24 | 0.28 | 0.009 | S/M | 0.5 | 0.016 | S | 0.22 | 0.007 | S/M | 0.18 | 0.006 | S |
| 3B | D28 | 0.42 | 0.012 | S | 0.92 | 0.026 | S | 0.45 | 0.013 | S | 0.25 | 0.007 | S |
| 4A | D35 | 0.18 | 0.008 | S | 0.31 | 0.013 | S | 0.08 | 0.003 | S | 0.16 | 0.007 | S |
| 4B | D38 | 0.23 | 0.007 | S/M | 0.72 | 0.022 | S | 0.27 | 0.008 | S/M | 0.36 | 0.011 | S |
| 4B | D40 | 0.16 | 0.004 | S/M | 0.45 | 0.012 | S/M | 0.09 | 0.002 | S | 0.15 | 0.004 | S/M |
| Tissue Reference Levels | | na*** | | | na*** | | | na*** | | | na*** | | |

D5-13:4

| River Segment | Station | 2,3,4,6,7,8-HxCDF | | | 1,2,3,7,8,9-HxCDF | | | 1,2,3,4,6,7,8-HpCDF | | | 1,2,3,4,7,8,9-HpCDF | | |
|-------------------------|---------|-----------------------|----------------------------|----------------|-----------------------|----------------------------|----------------|-----------------------|----------------------------|----------------|-----------------------|----------------------------|----------------|
| | | Measured Conc. (pg/g) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Measured Conc. (pg/g) | Norm. Conc.** (ug/g lipid) | Qualifier Code |
| 1C | D6 | 1.35 | 0.063 | S/MD | 0.13 | 0.006 | S | 0.29 | 0.013 | S/MD | 0.06 | 0.003 | S |
| 1C | D8 | 2.17 | 0.081 | S/M | 0.14 | 0.005 | S | 0.36 | 0.013 | S | 0.08 | 0.003 | S/M |
| 1C | D10 | 0.78 | 0.021 | S | 0.6 | 0.017 | S | 0.85 | 0.023 | S | 0.43 | 0.012 | S |
| 2B | D15 | 1.65 | 0.056 | S/MD | 0.12 | 0.004 | S/M | 1.03 | 0.035 | S/MD | 0.1 | 0.003 | S/M |
| 2C | D19 | 1.41 | 0.059 | S/M | 0.18 | 0.008 | S | 1.05 | 0.044 | S/MD | 0.13 | 0.005 | S |
| 2C | D20 | 0.4 | 0.029 | S | 0.09 | 0.007 | S/M | 0.33 | 0.024 | S/M | 0.12 | 0.009 | S/M |
| 3A | D23 | 0.49 | 0.022 | S/M | 0.09 | 0.004 | S | 0.23 | 0.010 | S/M | 0.09 | 0.004 | S |
| 3A | D24 | 0.54 | 0.018 | S/M | 0.17 | 0.006 | S | 0.55 | 0.018 | S | 0.15 | 0.005 | S/M |
| 3B | D28 | 1.5 | 0.042 | S/M | 0.33 | 0.009 | S | 0.7 | 0.019 | S | 0.3 | 0.008 | S |
| 4A | D35 | 1.61 | 0.070 | S/MD | 0.11 | 0.005 | S | 0.9 | 0.039 | S | 0.1 | 0.004 | S |
| 4B | D38 | 2.69 | 0.083 | MD | 0.18 | 0.006 | S | 1.79 | 0.055 | S/MD | 0.15 | 0.005 | S |
| 4B | D40 | 2.77 | 0.074 | MD | 0.17 | 0.005 | S/M | 0.3 | 0.008 | S/M | 0.11 | 0.003 | S/M |
| Tissue Reference Levels | | na*** | | | na*** | | | na*** | | | na*** | | |

D5-13:5

| River Segment | Station | OCDF | | | TECs |
|-------------------------|---------|-----------------------|----------------------------|----------------|-------------------------|
| | | Measured Conc. (pg/g) | Norm. Conc.** (ug/g lipid) | Qualifier Code | Calculated Conc. (pg/g) |
| 1C | D6 | 0.3 | 0.014 | S | 1.8 |
| 1C | D8 | 0.35 | 0.013 | S | 2.7 |
| 1C | D10 | 1.2 | 0.033 | S | 3.8 |
| 2B | D15 | 0.47 | 0.016 | S | 2.3 |
| 2C | D19 | 1.03 | 0.043 | S | 3.3 |
| 2C | D20 | 1.44 | 0.105 | S | 1.5 |
| 3A | D23 | 0.56 | 0.025 | S | 2.1 |
| 3A | D24 | 1.76 | 0.057 | S | 2.6 |
| 3B | D28 | 3.07 | 0.085 | S | 3.6 |
| 4A | D35 | 0.35 | 0.015 | S/M | 2 |
| 4B | D38 | 0.69 | 0.021 | S | 3.8 |
| 4B | D40 | 10.6 | 0.284 | | 2.7 |
| Tissue Reference Levels | | na*** | | | 3 |

APPENDIX E

BENTHIC COMMUNITY DATA

TABLE E-1. BENTHIC INFAUNA DATA

| TAXA NAME | STATION | | | | | | |
|-------------------------------|---------|-------|-------|-------|-------|-------|-------|
| | D1B01 | D2B01 | D3B03 | D4B02 | D5B01 | D6B01 | D7B02 |
| Annelida | | | | | | | |
| Oligochaeta | 2109 | 149 | 454 | 0 | 62 | 137 | 112 |
| Polychaeta | | | | | | | |
| Ampharetinae | 0 | 0 | 0 | 57 | 0 | 0 | 0 |
| Barantolla americana | 0 | 0 | 0 | 9 | 0 | 0 | 0 |
| Capitella capitata | 0 | 0 | 0 | 3 | 0 | 0 | 0 |
| Eteone spilotus | 25 | 0 | 0 | 21 | 0 | 0 | 0 |
| Eteone spp. | 0 | 0 | 13 | 4 | 0 | 0 | 0 |
| Glycinda picta | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Heteromasius spp. | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| Hobsonia florida | 490 | 403 | 159 | 181 | 0 | 0 | 0 |
| Nereis limnicola | 47 | 6 | 5 | 6 | 42 | 10 | 46 |
| Nereis spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Polychaeta | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Polydora spp. | 15 | 10 | 0 | 249 | 0 | 0 | 0 |
| Pseudopolydora kempi japonica | 0 | 140 | 0 | 20 | 0 | 0 | 0 |
| Pygospio elegans | 0 | 0 | 0 | 117 | 0 | 0 | 0 |
| Spio spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spionidae | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
| Streblospio benedicti | 0 | 5 | 0 | 0 | 0 | 0 | 0 |
| Hirudinea | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Vermiform (unidentified) | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Arthropoda | | | | | | | |
| Arachnida | | | | | | | |
| Acan spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Araneae (spiders) | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hydracarina | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Crustacea | | | | | | | |
| Acanthocyclops vernalis | 0 | 0 | 0 | 0 | 5 | 3 | 0 |
| Acartia longiremis | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Acartia spp. | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Alona costata | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Archaeomysis grebnitzkii | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| Asellidae | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Balanus sp. juveniles | 7 | 0 | 0 | 0 | 0 | 0 | 0 |
| Barnacle | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bosmina longirostris | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Calanus spp. | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Candona spp. | 0 | 0 | 0 | 0 | 0 | 1 | 2 |
| Cladocera | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Copepoda | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Corophium salmonis | 3 | 2 | 0 | 1 | 7259 | 1444 | 4392 |
| Corophium spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Crangonyx spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cumella vulgaris | 0 | 0 | 0 | 4 | 0 | 0 | 0 |
| Cyprid spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cyprinotus spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Daphnia spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Darwinula stevensoni | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diacyclops thomasi | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Eogammarus confervicolus | 3 | 4 | 0 | 21 | 1 | 0 | 0 |
| Eohaustorius estuarius | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Ephemeroptera nymph | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Eucypris spp. | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Euphausiacea larvae | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| Gnathomysphaeroma oregonense | 0 | 0 | 0 | 2 | 0 | 0 | 0 |
| Grandifoxus grandis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hemileucon spp. | 17 | 0 | 0 | 867 | 0 | 0 | 0 |
| Hyalella azteca | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| Isocypris spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Leptodiaptomus novamexicanus | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Limnocythere spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Macrocyclops albidus | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Monoculodes spinipes | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Neomysis mercedis | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Pinnotheridae megalops | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Pontoporeia affinis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pseudodiaptomus inopinatus | 0 | 1 | 1 | 0 | 29 | 8 | 15 |
| Scottolana canadensis | 53 | 0 | 1 | 12 | 1 | 0 | 0 |
| Sida crystallina | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tachidius triangularis | 0 | 1 | 0 | 0 | 0 | 0 | 0 |

| | D1B01 | D2B01 | D3B03 | D4B02 | D5B01 | D6B01 | D7B02 |
|----------------------------------|-------------|------------|------------|-------------|-------------|-------------|-------------|
| Insecta | | | | | | | |
| Baetidae-early instar | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ceratopogonidae | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Chironomidae | 0 | 0 | 0 | 0 | 1 | 12 | 0 |
| Chironomus-early instar | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Chironomus spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cryptochironomus spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Glyptotendipes spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Orthocladinae-early instar | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Procladius spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Paratanytarsus | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Procladius spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Robackia spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Stictochironomus spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diptera larvae | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Gomphidae-early instar | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Heptageniidae-early instar | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hexagenia spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hydropsychinae | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Neureclipsis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Oecells spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sialis spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Stenonema spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tanytarsus spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tricoptera larvae | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| Cnidaria | | | | | | | |
| Hydra | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mollusca | | | | | | | |
| Gastropoda | | | | | | | |
| Cerithiacea | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Ferrissia parallelus | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fiuminicola nuttalliana | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fiuminicola virens | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Gastropoda | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Juga (J.) hemphilli hemphilli | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Juga spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Littorinacea | 0 | 0 | 0 | 0 | 0 | 12 | 0 |
| Menetus opercularis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Vorticifex effusus | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pelecypoda | | | | | | | |
| Anodonta wahlamensis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bivalvia (unidentified) | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Corbicula luminea | 0 | 0 | 0 | 0 | 21 | 43 | 73 |
| Macoma balthica | 201 | 204 | 170 | 207 | 0 | 0 | 0 |
| Mya arenaria | 65 | 13 | 19 | 0 | 0 | 0 | 0 |
| Mytilus edulis | 1 | 0 | 1 | 0 | 0 | 0 | 0 |
| Pisidium (Cyclocalyx) casertanum | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pisidium (Cyclocalyx) compressum | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pisidium spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sphaerium (S.) patella | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nematoda | 63 | 4 | 88 | 214 | 270 | 245 | 77 |
| Platyhelminthes | | | | | | | |
| Turbellaria | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Tardigrada | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL ABUNDANCE | 3113 | 944 | 911 | 1997 | 7693 | 1921 | 4723 |
| TOTAL NUMBER OF TAXA | 22 | 15 | 10 | 20 | 12 | 14 | 10 |

| TAXA NAME | D8B02 | D9B02 | D10B01 | D11B02 | D12B03 | D13B01 | D14B03 |
|--------------------------------|-------|-------|--------|--------|--------|--------|--------|
| Annelida | | | | | | | |
| Oligochaeta | 105 | 40 | 738 | 3607 | 1354 | 278 | 1335 |
| ----- | | | | | | | |
| Polychaeta | | | | | | | |
| Ampharetinae | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Barantolla americana | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Capitella capitata | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Eteone spilotus | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Eteone spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Glycinda picta | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Heteromastus spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hobsonia florida | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nereis limnicola | 12 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nereis spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Polychaeta | 0 | 0 | 0 | 2 | 0 | 7 | 3 |
| Polydora spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pseudopolydora kempti japonica | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pygospio elegans | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spio spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spionidae | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Streblospio benedicti | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ----- | | | | | | | |
| Hirudinea | 0 | 0 | 0 | 0 | 3 | 0 | 0 |
| ----- | | | | | | | |
| Vermiform (unidentified) | 0 | 0 | 0 | 1 | 17 | 0 | 21 |
| Arthropoda | | | | | | | |
| Arachnida | | | | | | | |
| Acarti spp. | 0 | 0 | 0 | 4 | 3 | 0 | 0 |
| Araneae (spiders) | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hydracarina | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
| ----- | | | | | | | |
| Crustacea | | | | | | | |
| Acanthocyclops vernalis | 0 | 0 | 2 | 0 | 0 | 0 | 0 |
| Acartia longiremis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Acartia spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Alona costata | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| Archaeomysis grebnitzkii | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Asellidae | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Balanus sp. juveniles | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Barnacle | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bosmina longirostris | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Calanus spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Candona spp. | 5 | 0 | 0 | 67 | 20 | 4 | 2 |
| Cladocera | 0 | 0 | 0 | 7 | 0 | 0 | 0 |
| Copepoda | 0 | 0 | 0 | 11 | 13 | 0 | 0 |
| Corophium salmonis | 1864 | 271 | 559 | 37 | 0 | 142 | 70 |
| Corophium spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Crangonyx spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cumella vulgaris | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cyprina spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cyprinotus spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Daphnia spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Darwinula stevensoni | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Diacyclops thomasi | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Eogammarus confervicolus | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Eohaustorius estuarius | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ephemeroptera nymph | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Eucypris spp. | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| Euphausiacea larvae | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Gnoriemosphaeroma oregonense | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Grandifoxus grandis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hemiteucon spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hyalia azteca | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Isocypris spp. | 0 | 0 | 0 | 0 | 5 | 0 | 0 |
| Leptodiaptomus novamexicanus | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Limnocythere spp. | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| Macrocyclus albidus | 0 | 0 | 2 | 0 | 0 | 0 | 0 |
| Monoculodes spinipes | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Neomysis mercedis | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Pinnotheridae megalops | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pontoporeia affinis | 0 | 0 | 0 | 12 | 0 | 0 | 0 |
| Pseudodiaptomus inopinatus | 30 | 0 | 16 | 0 | 0 | 0 | 0 |
| Scottolana canadensis | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sida crystallina | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Tachidius triangularis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| | D8B02 | D9B02 | D10B01 | D11B02 | D12B03 | D13B01 | D14B03 |
|----------------------------------|-------------|------------|-------------|-------------|-------------|------------|-------------|
| Insecta | | | | | | | |
| Baetidae-early instar | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ceratopogonidae | 0 | 1 | 0 | 15 | 8 | 0 | 0 |
| Chironomidae | | | | | | | |
| Chironomini-early instar | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Chironomus spp. | 0 | 0 | 0 | 132 | 11 | 11 | 0 |
| Cryptochironomus spp. | 0 | 0 | 0 | 97 | 30 | 5 | 8 |
| Glyptotendipes spp. | 0 | 0 | 0 | 5 | 0 | 0 | 0 |
| Orthocladiinae-early instar | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Procladius spp. | 0 | 0 | 0 | 5 | 0 | 0 | 0 |
| Paratanytarsus | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Procladius spp. | 0 | 0 | 0 | 9 | 21 | 0 | 1 |
| Robackia spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Stictochironomus spp. | 0 | 0 | 0 | 23 | 1 | 0 | 1 |
| Diptera larvae | | | | | | | |
| Gomphidae-early instar | 0 | 0 | 3 | 1 | 0 | 0 | 0 |
| Heptageniidae-early instar | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hexagenia spp. | 0 | 0 | 0 | 1 | 5 | 5 | 3 |
| Hydropsychinae | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Neureclipsis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Oecetis spp. | 0 | 0 | 0 | 0 | 3 | 0 | 0 |
| Sialis spp. | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Stenonema spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tanytarsus spp. | 0 | 0 | 0 | 5 | 5 | 1 | 0 |
| Tricoptera larvae | 1 | 0 | 1 | 0 | 0 | 0 | 0 |
| Cnidaria | | | | | | | |
| Hydra | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mollusca | | | | | | | |
| Gastropoda | | | | | | | |
| Cerithiacea | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ferussia parallelus | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fluminicola nuttalliana | 0 | 0 | 0 | 0 | 6 | 25 | 0 |
| Fluminicola virens | 0 | 0 | 0 | 3 | 2 | 0 | 1 |
| Gastropoda | 5 | 0 | 1 | 0 | 0 | 0 | 0 |
| Juga (J.) hemphilli hemphilli | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Juga spp. | 0 | 0 | 0 | 1 | 0 | 1 | 0 |
| Littorinacea | 228 | 4 | 72 | 0 | 0 | 0 | 0 |
| Menetus opercularis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Vorticifex effusus | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pelecypoda | | | | | | | |
| Anodonta wahlamensis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bivalvia (unidentified) | 0 | 0 | 0 | 273 | 0 | 22 | 5 |
| Corbicula fluminea | 2 | 22 | 97 | 0 | 17 | 0 | 0 |
| Macoma balthica | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mya arenaria | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mytilus edulis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pisidium (Cyclocalyx) casertanum | 0 | 0 | 0 | 0 | 11 | 0 | 0 |
| Pisidium (Cyclocalyx) compressum | 0 | 0 | 0 | 0 | 4 | 0 | 0 |
| Pisidium spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sphaerium (S.) patella | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Nematoda | | | | | | | |
| | 1091 | 5 | 277 | 1631 | 470 | 12 | 23 |
| Platyhelminthes | | | | | | | |
| Turbellaria | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tardigrada | | | | | | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL ABUNDANCE | 3411 | 352 | 1790 | 5960 | 2014 | 516 | 1473 |
| TOTAL NUMBER OF TAXA | 16 | 8 | 18 | 25 | 25 | 13 | 12 |

| TAXA NAME | D15B01 | D16B01 | D17B02 | D18B03 | D19B01 | D20B02 | D21B02 |
|-------------------------------|--------|--------|--------|--------|--------|--------|--------|
| Annelida | | | | | | | |
| Oligochaeta | 175 | 295 | 650 | 167 | 381 | 2142 | 353 |
| Polychaeta | | | | | | | |
| Ampharetinae | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Barantola americana | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Capitella capitata | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Eteone spilotus | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Eteone spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Glycinda picta | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Heteromastus spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hobsonia florida | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nereis limnicola | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nereis spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Polychaeta | 1 | 0 | 0 | 0 | 0 | 111 | 0 |
| Polydora spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pseudopolydora kempj japonica | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pygospio elegans | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spio spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spionidae | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Streblospio benedicti | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hirudinea | 1 | 2 | 1 | 0 | 0 | 0 | 0 |
| Vermiform (unidentified) | 0 | 0 | 0 | 0 | 0 | 4 | 2 |
| Arthropoda | | | | | | | |
| Arachnida | | | | | | | |
| Acarid spp. | 0 | 0 | 0 | 7 | 0 | 7 | 0 |
| Araneae (spiders) | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hydracarina | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Crustacea | | | | | | | |
| Acanthocyclops vernalis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Acartia longiremis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Acartia spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Alona costata | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Archaeomysis grebnitzkii | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Asellidae | 0 | 0 | 0 | 7 | 0 | 0 | 0 |
| Balanus sp. juveniles | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Barnacle | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bosmina longirostris | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Calanus spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Candona spp. | 1 | 0 | 6 | 4 | 3 | 22 | 1 |
| Cladocera | 1 | 0 | 4 | 2 | 0 | 17 | 0 |
| Copepoda | 0 | 0 | 2 | 2 | 0 | 15 | 0 |
| Corophium salmonis | 197 | 0 | 8 | 386 | 122 | 162 | 6 |
| Corophium spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Crangonyx spp. | 0 | 0 | 0 | 12 | 0 | 0 | 0 |
| Cumella vulgaris | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cyprid spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cypriinotus spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Daphnia spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Darwinula stevensoni | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diacyclops thomasi | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Eogammarus confervicolus | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Eohaustorius estuarius | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ephemeroptera nymph | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Eucypris spp. | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| Euphausiacea larvae | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Gnathomphalea oregonensis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Granditoxus grandis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hemiteucon spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hyalella azteca | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Isocypris spp. | 0 | 0 | 0 | 0 | 0 | 8 | 0 |
| Leptodiaptomus novamexicanus | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Limnocythere spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Macrocyclus albidus | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Monoculodes spinipes | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Neomysis mercedis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pinnotheridae megalops | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pontoporeia affinis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pseudodiaptomus incipinus | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Scottolana canadensis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sida crystallina | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tachidius triangularis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| | D15B01 | D16B01 | D17B02 | D18B03 | D19B01 | D20B02 | D21B02 |
|----------------------------------|------------|------------|------------|------------|------------|-------------|------------|
| Insecta | | | | | | | |
| Baetidae-early instar | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Geratopogonidae | 1 | 0 | 0 | 2 | 0 | 0 | 0 |
| Chironomidae | 0 | 0 | 1 | 1 | 1 | 8 | 0 |
| Chironominae-early instar | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Chironomus spp. | 2 | 12 | 1 | 0 | 0 | 159 | 3 |
| Cryptochironomus spp. | 5 | 1 | 9 | 0 | 0 | 6 | 0 |
| Glyptotendipes spp. | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Orthocladinae-early instar | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Procladius spp. | 0 | 0 | 0 | 0 | 0 | 3 | 0 |
| Paralanytarsus | 0 | 0 | 2 | 1 | 0 | 0 | 1 |
| Procladius spp. | 3 | 2 | 0 | 0 | 0 | 23 | 0 |
| Robackia spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Stictochironomus spp. | 12 | 0 | 16 | 2 | 0 | 1 | 0 |
| Diptera larvae | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Gomphidae-early instar | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Heptageniidae-early instar | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hexagenia spp. | 0 | 0 | 2 | 0 | 0 | 1 | 0 |
| Hydropsychinae | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Neureclipsis | 0 | 0 | 0 | 2 | 0 | 0 | 0 |
| Oecetis spp. | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Stalis spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Stenonema spp. | 0 | 0 | 0 | 3 | 0 | 0 | 0 |
| Tanytarsus spp. | 0 | 0 | 0 | 1 | 2 | 31 | 0 |
| Tricoptera larvae | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | | | | | | | |
| Hydra | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mollusca | | | | | | | |
| Gastropoda | | | | | | | |
| Cerithiacea | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ferussia parallela | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fumiricola nuttalliana | 0 | 0 | 7 | 27 | 38 | 0 | 1 |
| Fumiricola virens | 0 | 0 | 4 | 7 | 0 | 0 | 0 |
| Gastropoda | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Juga (J.) hemphilli hemphilli | 0 | 0 | 4 | 30 | 0 | 0 | 0 |
| Juga spp. | 0 | 0 | 0 | 0 | 5 | 0 | 0 |
| Littorinacea | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Menetus opercularis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Vorticifex effusus | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pelecypoda | | | | | | | |
| Anodonta wahlametensis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bivalvia (unidentified) | 14 | 3 | 93 | 38 | 10 | 46 | 2 |
| Corbicula fluminea | 0 | 0 | 35 | 112 | 0 | 0 | 0 |
| Macoma balthica | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mya arenaria | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mytilus edulis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pisidium (Cyclocalyx) casertanum | 0 | 0 | 0 | 3 | 0 | 0 | 0 |
| Pisidium (Cyclocalyx) compressum | 0 | 0 | 4 | 4 | 0 | 0 | 0 |
| Pisidium spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sphaerium (S.) patella | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nematoda | 20 | 0 | 53 | 111 | 16 | 1260 | 76 |
| Platyhelminthes | | | | | | | |
| Turbellaria | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Tardigrada | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL ABUNDANCE | 434 | 316 | 903 | 931 | 578 | 4027 | 445 |
| TOTAL NUMBER OF TAXA | 14 | 7 | 20 | 25 | 9 | 20 | 9 |

| TAXA NAME | D22B02 | D23B02 | D24B01 | D25B01 | D26B01 | D27B03 | D28B03 |
|--------------------------------|--------|--------|--------|--------|--------|--------|--------|
| Annelida | | | | | | | |
| Oligochaeta | 631 | 1112 | 1479 | 606 | 3 | 27 | 262 |
| Polychaeta | | | | | | | |
| Ampharetinae | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Barantolla americana | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Capitella capitata | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Eteone spilotus | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Eteone spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Glycinde picta | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Heteromastus spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hobsonia florida | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nereis limnicola | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nereis spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Polychaeta | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Polydora spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pseudopolydora kempii japonica | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pygospio elegans | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spio spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spionidae | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Streblospio benedicti | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hirudinea | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Vermiform (unidentified) | 1 | 0 | 5 | 13 | 0 | 43 | 3 |
| Arthropoda | | | | | | | |
| Arachnida | | | | | | | |
| Acarid spp. | 3 | 2 | 0 | 4 | 0 | 5 | 3 |
| Araneae (spiders) | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hydracarina | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Crustacea | | | | | | | |
| Acanthocyclops vernalis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Acartia longiremis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Acartia spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Atona costata | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Archaeomysis grebnitzkii | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Asellidae | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Balanus sp. juveniles | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Barnacle | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bosmina longirostris | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Calanus spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Candona spp. | 1 | 23 | 2 | 1 | 0 | 17 | 1 |
| Cladocera | 13 | 4 | 35 | 2 | 5 | 0 | 5 |
| Copepoda | 52 | 7 | 80 | 7 | 2 | 7 | 6 |
| Corophium salmonis | 1 | 178 | 0 | 3 | 41 | 89 | 166 |
| Corophium spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cragonyx spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cumella vulgaris | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cyprid spp. | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Cyprinotus spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Daphnia spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Darwinula stevensoni | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diacyclops thomasi | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Eogammarus confervicolus | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Eohaustorius estuaris | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ephemeroptera nymph | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Eucypris spp. | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Euphausiacea larvae | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Gnathosphaeroma oregonense | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Grandifoxus grandis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hemiteucon spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hyalafella azteca | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Isocypris spp. | 5 | 2 | 0 | 0 | 0 | 0 | 0 |
| Leptodiaptomus novamexicanus | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Limnocythere spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Macrocyclops albidus | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Monoculodes spinipes | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Neomysis mercedis | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Pinnotheridae megalops | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pontoporeia affinis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pseudodiaptomus inopinus | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Scotolana canadensis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sida crystallina | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tachidius triangularis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| | D22B02 | D23B02 | D24B01 | D25B01 | D26B01 | D27B03 | D28B03 |
|----------------------------------|------------|-------------|-------------|------------|-----------|------------|------------|
| <u>Insecta</u> | | | | | | | |
| Baetidae-early instar | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ceratopogonidae | 0 | 2 | 0 | 3 | 0 | 0 | 1 |
| Chironomidae | 0 | 1 | 4 | 0 | 0 | 1 | 2 |
| Chironomini-early instar | 0 | 0 | 6 | 0 | 0 | 0 | 0 |
| Chironomus spp. | 26 | 8 | 51 | 3 | 0 | 0 | 4 |
| Cryptochironomus spp. | 0 | 19 | 8 | 15 | 0 | 0 | 10 |
| Glyptotendipes spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Orthocladinae-early instar | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Paracadius spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Paratanytarsus | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Procladius spp. | 5 | 1 | 3 | 2 | 0 | 0 | 0 |
| Robackia spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Stictochironomus spp. | 0 | 0 | 3 | 1 | 0 | 0 | 13 |
| Diptera larvae | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Gomphidae-early instar | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| Heptageniidae-early instar | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hoxagenia spp. | 1 | 6 | 0 | 1 | 0 | 0 | 0 |
| Hydropsychinae | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Naureclipsis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Oecetis spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sialis spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Stenonema spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tanytarsus spp. | 0 | 2 | 1 | 0 | 0 | 0 | 3 |
| Tricoptera larvae | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| <u>Cnidaria</u> | | | | | | | |
| Hydra | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| <u>Mollusca</u> | | | | | | | |
| <u>Gastropoda</u> | | | | | | | |
| Corithiacea | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ferrissia parallelus | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fuminicota nutalliana | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fuminicota virens | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Gastropoda | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Juga (J.) hemphilli hemphilli | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Juga spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Litorinaea | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Menetus opercularis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Vorticifex effusus | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| <u>Pelecypoda</u> | | | | | | | |
| Anodonta wahlamensis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bivalvia (unidentified) | 10 | 45 | 14 | 0 | 45 | 149 | 21 |
| Corbicula fluminea | 0 | 0 | 4 | 3 | 0 | 23 | 21 |
| Macoma balthica | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mya arenaria | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mytilus edulis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pisidium (Cyclocalyx) casertanum | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pisidium (Cyclocalyx) compressum | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pisidium spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sphaerium (S.) patella | 0 | 0 | 0 | 2 | 0 | 0 | 0 |
| <u>Nematoda</u> | 167 | 1764 | 106 | 252 | 1 | 65 | 390 |
| <u>Platyhelminthes</u> | | | | | | | |
| Turbellaria | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| <u>Tardigrada</u> | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL ABUNDANCE | 919 | 3176 | 1802 | 919 | 97 | 421 | 912 |
| TOTAL NUMBER OF TAXA | 16 | 16 | 16 | 17 | 6 | 11 | 17 |

| TAXA NAME | D29B02 | D30B03 | D31B02 | D32B03 | D33B01 | D34B01 | D35B01 |
|--------------------------------|--------|--------|--------|--------|--------|--------|--------|
| Annelida | | | | | | | |
| Oligochaeta | 27 | 655 | 302 | 5 | 138 | 4 | 1996 |
| Polychaeta | | | | | | | |
| Ampharetinae | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Barantolla americana | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Capitella capitata | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Eteone spilotus | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Eteone spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Glycinde picta | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Heteromastus spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hobsonia florida | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nereis limnicola | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nereis spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Polychaeta | 0 | 1 | 2 | 1 | 0 | 0 | 0 |
| Polydora spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pseudopolydora kempii japonica | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pygospio elegans | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spio spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spionidae | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sireblospio benedicti | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hirudinea | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| Vermiform (unidentified) | 5 | 0 | 0 | 0 | 0 | 1 | 3 |
| Arthropoda | | | | | | | |
| Arachnida | | | | | | | |
| Acani spp. | 2 | 0 | 5 | 0 | 0 | 0 | 3 |
| Araneae (spiders) | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hydracarina | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Crustacea | | | | | | | |
| Acanthocyclops vernalis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Acartia longiremis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Acartia spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Alona costata | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Archaeomysis grebnitzkii | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Asellidae | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Balanus sp. juveniles | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Barnacle | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Boemina longirostris | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Calanus spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Candona spp. | 3 | 0 | 3 | 0 | 8 | 2 | 24 |
| Cladocera | 0 | 0 | 1 | 1 | 0 | 0 | 5 |
| Copepoda | 0 | 57 | 10 | 0 | 4 | 0 | 46 |
| Corophium salmonis | 94 | 5 | 11 | 119 | 157 | 13 | 13 |
| Corophium spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Crangonyx spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cumella vulgaris | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cyprid spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cyprinotus spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Daphnia spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Darwinula stevensoni | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diacyclops thomasi | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Eogammarus confervicolus | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Eohaustorius estuaris | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ephemeroptera nymph | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Eucypris spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Euphausiacea larvae | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Gnoriomphaeroma oregonense | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Grandifoxus grandis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hemileucon spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hyalella azteca | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Isocypris spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Leptodiatomus novamexicanus | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Limnocythere spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Macrocyclus albidus | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Monoculodes spinipes | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Neomysis mercedis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pinnotheridae megalops | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pontoporeia affinis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pseudodiatomus inopinus | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Scottolana canadensis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sida crystallina | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tachidius triangularis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| | D29B02 | D30B03 | D31B02 | D32B03 | D33B01 | D34B01 | D35B01 |
|----------------------------------|--------|--------|--------|--------|--------|--------|--------|
| Insecta | | | | | | | |
| Baetidae-early instar | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ceratopogonidae | 0 | 2 | 1 | 0 | 0 | 0 | 7 |
| Chironomidae | 0 | 0 | 0 | 0 | 1 | 1 | 1 |
| Chironominae-early instar | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Chironomus spp. | 0 | 7 | 23 | 2 | 11 | 0 | 13 |
| Cryptochironomus spp. | 3 | 3 | 4 | 0 | 0 | 3 | 4 |
| Glyptotendipes spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Orthocladinae-early instar | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Paracletus spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Paratanytarsus | 0 | 0 | 0 | 0 | 0 | 1 | 2 |
| Procladius spp. | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Robackia spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Silicochironomus spp. | 0 | 0 | 0 | 0 | 0 | 0 | 46 |
| Diptera larvae | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Gomphidae-early instar | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| Heptageniidae-early instar | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hexagenia spp. | 0 | 5 | 1 | 0 | 0 | 0 | 1 |
| Hydropsychinae | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Neureclipsis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Oecetis spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sialis spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Stenonema spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tanytarsus spp. | 2 | 0 | 2 | 0 | 0 | 0 | 3 |
| Tricoptera larvae | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | | | | | | | |
| Hydra | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mollusca | | | | | | | |
| Gastropoda | | | | | | | |
| Cerithiacea | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ferrissia parallela | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| Fluminicola nuttalliana | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Fluminicola virens | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Gastropoda | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Juga (J.) hemphilli hemphilli | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Juga spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Littorinacea | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Menetus opercularis | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Vorticifex effusus | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pelecypoda | | | | | | | |
| Anodonta wahlamensis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bivalvia (unidentified) | 0 | 44 | 56 | 56 | 68 | 34 | 155 |
| Corbicula luminea | 36 | 28 | 0 | 7 | 35 | 27 | 11 |
| Macoma bathica | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mya arenaria | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mytilus edulis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pisidium (Cyclocalyx) casertanum | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pisidium (Cyclocalyx) compressum | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pisidium spp. | 0 | 1 | 0 | 0 | 3 | 0 | 0 |
| Sphaerium (S.) patella | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nematoda | 116 | 244 | 115 | 18 | 411 | 4 | 92 |
| Platyhelminthes | | | | | | | |
| Turbellaria | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tardigrada | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| TOTAL ABUNDANCE | 289 | 1053 | 638 | 210 | 836 | 90 | 2444 |
| TOTAL NUMBER OF TAXA | 10 | 13 | 16 | 9 | 10 | 10 | 24 |

| TAXA NAME | D36B01 | D37B01 | D38B03 | D39B03 | D40B01 | E1B02 | E2B03 |
|--------------------------------|--------|--------|--------|--------|--------|-------|-------|
| Annelida | | | | | | | |
| Oligochaeta | 40 | 156 | 7 | 2 | 3 | 2 | 91 |
| ----- | | | | | | | |
| Polychaeta | | | | | | | |
| Ampharetinae | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Barantolla americana | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Capitella capitata | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Eteone spilotus | 0 | 0 | 0 | 0 | 0 | 12 | 4 |
| Eteone spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Glycinde picta | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Heteromastus spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hobsonia florida | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| Nereis limnicola | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Nereis spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Polychaeta | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| Polydora spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pseudopolydora kempii japonica | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pygospio elegans | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spio spp. | 0 | 0 | 0 | 0 | 0 | 8 | 0 |
| Spionidae | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| Streblospio benedicti | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ----- | | | | | | | |
| Hirudinea | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ----- | | | | | | | |
| Vermiform (unidentified) | 2 | 0 | 0 | 0 | 2 | 0 | 0 |
| Arthropoda | | | | | | | |
| Arachnida | | | | | | | |
| Acarid spp. | 5 | 2 | 0 | 0 | 0 | 0 | 0 |
| Araneae (spiders) | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hydracarina | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ----- | | | | | | | |
| Crustacea | | | | | | | |
| Acanthocyclops vernalis | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Acartia longiremis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Acartia spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Alona costata | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Archaeomysis grebnitzkii | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Asellidae | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Balanus sp. juveniles | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Barnacle | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bosmina longirostris | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Calanus spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Candona spp. | 17 | 1 | 0 | 0 | 0 | 0 | 0 |
| Cladocera | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Copepoda | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| Corophium salmonis | 1 | 28 | 0 | 0 | 8 | 15 | 4 |
| Corophium spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Crangonyx spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cumella vulgaris | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cyprid spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cyprinotus spp. | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Daphnia spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Darwinula staveanoni | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diacyclops thomasi | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Eogammarus confervicolus | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Eohaustorius estuarius | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| Ephemeroptera nymph | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Eucypris spp. | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Euphausiacea larvae | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Gnathosphaeroma oregonense | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Grandifoxus grandis | 0 | 0 | 0 | 0 | 0 | 4 | 1 |
| Hemileucon spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hyalella azteca | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Isocypris spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Leptodiptomus novamexicanus | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Limnocythere spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Macrocyclops albidus | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Monoculodes spinipes | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Neomysis mercedis | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pinnotheridae megalops | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pontoporeia affinis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pseudodiptomus inopinatus | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Scottolana canadensis | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Sida crystallina | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tachidius triangularis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| | D36B01 | D37B01 | D38B03 | D39B03 | D40B01 | E1B02 | E2B03 |
|----------------------------------|--------|--------|--------|--------|--------|-------|-------|
| Insecta | | | | | | | |
| Baetidae-early instar | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ceratopogonidae | 0 | 0 | 1 | 1 | 0 | 0 | 0 |
| Chironomidae | 2 | 0 | 0 | 1 | 0 | 0 | 0 |
| Chironomini-early instar | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Chironomus spp. | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Cryptochironomus spp. | 13 | 6 | 0 | 2 | 0 | 0 | 0 |
| Glyptotendipes spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Orthocladinae-early instar | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Paracletus spp. | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Paratanytarsus | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| Procladius spp. | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
| Robackia spp. | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Stictochironomus spp. | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| Diptera larvae | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Gomphidae-early instar | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Heptageniidae-early instar | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hexagenia spp. | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hydropsychinae | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Neuraclipsis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Oecetis spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sialis spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Stenonema spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tanytarsus spp. | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
| Trichoptera larvae | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | | | | | | | |
| Hydra | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mollusca | | | | | | | |
| Gastropoda | | | | | | | |
| Caudofoveata | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ferrissia parvulus | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fluminicola nuttalliana | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fluminicola virens | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Gastropoda | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Juga (J.) hemphilli hemphilli | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Juga spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Littorinacea | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Menetus opercularis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Vorticifex effusus | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pelecypoda | | | | | | | |
| Anodonta wahlamensis | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bivalvia (unidentified) | 75 | 21 | 0 | 29 | 1 | 1 | 0 |
| Corbicula fluminea | 0 | 0 | 0 | 0 | 0 | 11 | 0 |
| Macoma balthica | 0 | 0 | 0 | 0 | 0 | 1 | 42 |
| Mya arenaria | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mytilus edulis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pisidium (Cyclocalyx) casertanum | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pisidium (Cyclocalyx) compressum | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pisidium spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sphaerium (S.) patella | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nematoda | 70 | 85 | 1 | 2 | 3 | 4 | 3 |
| Platyhelminthes | | | | | | | |
| Turbellaria | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| Tardigrada | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL ABUNDANCE | 248 | 303 | 9 | 38 | 16 | 60 | 174 |
| TOTAL NUMBER OF TAXA | 18 | 11 | 3 | 7 | 6 | 10 | 13 |

| TAXA NAME | E3B01 | E4B03 | E5B03 | E6B01 | E7B02 | E8B02 | E9B02 |
|-------------------------------|-------|-------|-------|-------|-------|-------|-------|
| Annelida | | | | | | | |
| Oligochaeta | 3 | 0 | 0 | 8 | 2 | 62 | 828 |
| ----- | | | | | | | |
| Polychaeta | | | | | | | |
| Ampharetinae | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Barantolla americana | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Capitella capitata | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Eteone spilotus | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Eteone spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Glycinde picta | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Heteromastus spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hobsonia florida | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nereis limnicola | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nereis spp. | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Polychaeta | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Polydora spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pseudopolydora kempl japonica | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pygospio elegans | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spio spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spionidae | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Streblospio benedicti | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ----- | | | | | | | |
| Hirudinea | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ----- | | | | | | | |
| Vermiform (unidentified) | 0 | 0 | 0 | 1 | 0 | 27 | 0 |
| Arthropoda | | | | | | | |
| Arachnida | | | | | | | |
| Acarid spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Araneae (spiders) | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hydracarina | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ----- | | | | | | | |
| Crustacea | | | | | | | |
| Acanthocyclops vernalis | 0 | 4 | 0 | 0 | 0 | 0 | 0 |
| Acartia longiremis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Acartia spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Alona costata | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Archaeomysis grebnitzkii | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Asellidae | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Balanus sp. juveniles | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Barnacle | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bosmina longirostris | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| Calanus spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Candona spp. | 0 | 0 | 0 | 0 | 0 | 9 | 0 |
| Cladocera | 0 | 0 | 0 | 0 | 0 | 29 | 0 |
| Copepoda | 0 | 0 | 0 | 2 | 0 | 35 | 1 |
| Corophium salmonis | 27 | 324 | 0 | 117 | 3 | 298 | 1 |
| Corophium spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Crangonyx spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cumella vulgaris | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cyprid spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cyprinotus spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Daphnia spp. | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| Darwinula stevensoni | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diacyclops thomasi | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Eogammarus confervicolus | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Eohauserius estuaris | 15 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ephemeroptera nymph | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Eucypris spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Euphausiacea larvae | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Gnathomphaeroma oregonense | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Grandifoxus grandis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hemiteucon spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hyalafela azteca | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Isocypris spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Leptodiaptomus novamexicanus | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Limnocythere spp. | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Macrocyclus albidus | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Monoculodes spinipes | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Neomysis mercedis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pinnotheridae megalops | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pontoporeia affinis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pseudodiaptomus inopinus | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Scottolana canadensis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sida crystallina | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tachidius triangularis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| | E3B01 | E4B03 | E5B03 | E6B01 | E7B02 | E8B02 | E9B02 |
|----------------------------------|-------|-------|-------|-------|-------|-------|-------|
| Insecta | | | | | | | |
| Baetidae-early instar | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ceratopogonidae | 0 | 0 | 0 | 7 | 0 | 46 | 1 |
| Chironomidae | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
| Chironominae-early instar | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| Chironomus spp. | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Cryptochironomus spp. | 0 | 0 | 0 | 0 | 7 | 7 | 2 |
| Glyptotendipes spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Orthocladiinae-early instar | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Procladius spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Paratanytarsus | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Procladius spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Robackia spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Stictochironomus spp. | 0 | 0 | 0 | 1 | 37 | 0 | 0 |
| Diptera larvae | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Gomphidae-early instar | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Heptageniidae-early instar | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hexagenia spp. | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Hydropsychinae | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Neureclipsis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Oecetis spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sialis spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Stenonema spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tanytarsus spp. | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Tricoptera larvae | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cnidaria | | | | | | | |
| Hydra | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mollusca | | | | | | | |
| Gastropoda | | | | | | | |
| Cerithiacea | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ferrissia parallelus | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fluminicola nuttalliana | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fluminicola virens | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Gastropoda | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Juga (J.) hemphilli hemphilli | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Juga spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Littorinacea | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Menetus opercularis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Vorticifex effusus | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pelecypoda | | | | | | | |
| Anodonta wahlamensis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bivalvia (unidentified) | 0 | 2 | 14 | 88 | 4 | 364 | 13 |
| Corbicula fluminea | 0 | 3 | 3 | 43 | 0 | 17 | 13 |
| Macoma balthica | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mya arenaria | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mytilus edulis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pisidium (Cyclocalyx) casertanum | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Pisidium (Cyclocalyx) compressum | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pisidium spp. | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Sphaerium (S.) patella | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nematoda | 26 | 5 | 23 | 27 | 0 | 106 | 14 |
| Platyhelminthes | | | | | | | |
| Turbellaria | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tardigrada | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL ABUNDANCE | 80 | 338 | 40 | 295 | 53 | 1002 | 890 |
| TOTAL NUMBER OF TAXA | 8 | 5 | 3 | 10 | 5 | 13 | 13 |

| TAXA NAME | E10B02 | E11B01 | E12 | E13B03 | E14B03 | TOTAL TAXA ABUNDANCE |
|--------------------------------|--------|--------|-----|--------|--------|----------------------|
| Annelida | | | | | | |
| Oligochaeta | 12 | 365 | 0 | 0 | 3 | 23474 |
| Polychaeta | | | | | | |
| Ampharetidae | 0 | 0 | 0 | 0 | 0 | 57 |
| Barantolla americana | 0 | 0 | 0 | 0 | 0 | 9 |
| Capitella capitata | 0 | 0 | 0 | 0 | 0 | 3 |
| Eteone spilotus | 0 | 0 | 0 | 0 | 0 | 62 |
| Eteone spp. | 0 | 0 | 0 | 0 | 0 | 17 |
| Glycinde picta | 0 | 0 | 0 | 0 | 0 | 1 |
| Heteromastus spp. | 0 | 0 | 0 | 0 | 0 | 2 |
| Hobsonia florida | 0 | 0 | 0 | 0 | 0 | 1235 |
| Nereis limicola | 0 | 0 | 0 | 0 | 0 | 175 |
| Nereis spp. | 0 | 0 | 0 | 0 | 0 | 1 |
| Polychaeta | 0 | 1 | 0 | 0 | 0 | 130 |
| Polydora spp. | 0 | 0 | 0 | 0 | 0 | 274 |
| Pseudopolydora kempii japonica | 0 | 0 | 0 | 0 | 0 | 160 |
| Pygospio elegans | 0 | 0 | 0 | 0 | 0 | 117 |
| Spio spp. | 0 | 0 | 0 | 0 | 0 | 8 |
| Spionidae | 0 | 0 | 0 | 0 | 0 | 17 |
| Streblospio benedicti | 0 | 0 | 0 | 0 | 0 | 5 |
| Hirudinea | 0 | 0 | 0 | 0 | 0 | 10 |
| Vermiform (unidentified) | 0 | 3 | 0 | 0 | 0 | 154 |
| Arthropoda | | | | | | |
| Arachnida | | | | | | |
| Acarid spp. | 0 | 0 | 0 | 0 | 1 | 56 |
| Araneae (spiders) | 0 | 0 | 0 | 0 | 0 | 1 |
| Hydracarina | 0 | 0 | 0 | 0 | 0 | 4 |
| Crustacea | | | | | | |
| Acanthocyclops vernalis | 0 | 0 | 0 | 0 | 0 | 15 |
| Acartia longiremis | 0 | 0 | 0 | 0 | 0 | 1 |
| Acartia spp. | 0 | 0 | 0 | 0 | 0 | 1 |
| Alona costata | 0 | 0 | 0 | 0 | 0 | 3 |
| Archaeomysis grebnitzkii | 0 | 0 | 0 | 0 | 0 | 1 |
| Asellidae | 0 | 0 | 0 | 0 | 0 | 10 |
| Balanus sp. juveniles | 0 | 0 | 0 | 0 | 0 | 7 |
| Barnacle | 0 | 0 | 0 | 0 | 0 | 1 |
| Bosmina longirostris | 0 | 0 | 0 | 0 | 0 | 2 |
| Calanus spp. | 0 | 0 | 0 | 0 | 0 | 1 |
| Candona spp. | 0 | 9 | 0 | 0 | 0 | 259 |
| Cladocera | 2 | 0 | 0 | 9 | 0 | 142 |
| Copepoda | 4 | 0 | 0 | 9 | 0 | 373 |
| Corophium salmonis | 0 | 22 | 0 | 0 | 24 | 18679 |
| Corophium spp. | 1 | 0 | 0 | 0 | 0 | 1 |
| Crangonyx spp. | 0 | 0 | 0 | 0 | 1 | 13 |
| Cumella vulgaris | 0 | 0 | 0 | 0 | 0 | 4 |
| Cyprid spp. | 0 | 0 | 0 | 0 | 0 | 1 |
| Cyprinotus spp. | 0 | 0 | 0 | 0 | 0 | 1 |
| Daphnia spp. | 0 | 0 | 0 | 0 | 0 | 2 |
| Darwinula stevensoni | 0 | 0 | 0 | 0 | 0 | 1 |
| Diacyclops thomasi | 0 | 0 | 0 | 0 | 0 | 1 |
| Eogammarus confervicolus | 0 | 0 | 0 | 0 | 0 | 30 |
| Eohaustorius estuaris | 0 | 0 | 0 | 0 | 0 | 29 |
| Ephemeroptera nymph | 0 | 0 | 0 | 0 | 0 | 1 |
| Eucypris spp. | 0 | 0 | 0 | 0 | 0 | 10 |
| Euphausiacea larvae | 0 | 0 | 0 | 0 | 0 | 2 |
| Gnathomysphaeroma oregonense | 0 | 0 | 0 | 0 | 0 | 2 |
| Grandifoxus grandis | 0 | 0 | 0 | 0 | 0 | 5 |
| Hemiteucon spp. | 0 | 0 | 0 | 0 | 0 | 884 |
| Hyalella azteca | 0 | 0 | 0 | 0 | 0 | 3 |
| Isocypris spp. | 0 | 0 | 0 | 0 | 0 | 20 |
| Leptodiptomus novamexicanus | 0 | 0 | 0 | 0 | 0 | 1 |
| Limnocythere spp. | 0 | 0 | 0 | 0 | 0 | 2 |
| Macrocyclops albidus | 0 | 0 | 0 | 0 | 0 | 2 |
| Monoculodes spinipes | 0 | 0 | 0 | 0 | 0 | 1 |
| Neomysis mercedis | 0 | 0 | 0 | 0 | 0 | 4 |
| Pinnotheridae megalops | 0 | 0 | 0 | 0 | 0 | 1 |
| Pontoporeia affinis | 0 | 0 | 0 | 0 | 0 | 12 |
| Pseudodiptomus inopinus | 0 | 0 | 0 | 0 | 0 | 101 |
| Scottolana canadensis | 0 | 0 | 0 | 0 | 0 | 69 |
| Sida crystallina | 0 | 0 | 0 | 0 | 0 | 1 |
| Tachidius triangularis | 0 | 0 | 0 | 0 | 0 | 1 |

| | E10B02 | E11B01 | E12 | E13B03 | E14B03 | TOTAL TAXA ABUNDANCE |
|----------------------------------|--------|--------|-----|--------|--------|-------------------------|
| Insecta | | | | | | |
| Baetidae-early instar | 2 | 0 | 0 | 0 | 0 | 2 |
| Ceratopogonidae | 2 | 0 | 37 | 28 | 2 | 169 |
| Chironomidae | 0 | 0 | 0 | 0 | 0 | 135 |
| Chironominae-early instar | 18 | 0 | 0 | 0 | 0 | 32 |
| Chironomus spp. | 0 | 7 | 0 | 0 | 0 | 489 |
| Cryptochironomus spp. | 2 | 3 | 0 | 0 | 0 | 272 |
| Glyptotendipes spp. | 0 | 0 | 0 | 0 | 0 | 6 |
| Orthocladiinae-early instar | 8 | 0 | 0 | 0 | 0 | 8 |
| Paracladius spp. | 0 | 0 | 0 | 0 | 0 | 9 |
| Paratanytarsus | 0 | 0 | 0 | 0 | 10 | 20 |
| Procladius spp. | 0 | 2 | 0 | 0 | 0 | 80 |
| Robackia spp. | 0 | 0 | 0 | 0 | 0 | 1 |
| Sitochironomus spp. | 0 | 1 | 0 | 0 | 0 | 159 |
| Diptera larvae | 0 | 0 | 0 | 0 | 0 | 6 |
| Gomphidae-early instar | 0 | 0 | 0 | 0 | 0 | 11 |
| Heptageniidae-early instar | 3 | 0 | 0 | 0 | 0 | 3 |
| Hexagenia spp. | 0 | 4 | 0 | 0 | 0 | 42 |
| Hydropsychinae | 0 | 0 | 0 | 0 | 1 | 1 |
| Neureclipsis | 0 | 0 | 0 | 0 | 0 | 2 |
| Oecetis spp. | 0 | 0 | 0 | 0 | 0 | 4 |
| Sialis spp. | 0 | 0 | 0 | 0 | 0 | 1 |
| Stenonema spp. | 0 | 0 | 0 | 0 | 0 | 3 |
| Tanytarsus spp. | 0 | 0 | 0 | 0 | 0 | 65 |
| Tricoptera larvae | 0 | 0 | 0 | 0 | 0 | 4 |
| Onidaria | | | | | | |
| Hydra | 0 | 0 | 0 | 0 | 4 | 4 |
| Mollusca | | | | | | |
| Gastropoda | | | | | | |
| Cerithiacea | 0 | 0 | 0 | 0 | 0 | 2 |
| Ferussia parallela | 0 | 0 | 0 | 0 | 0 | 13 |
| Fluminicola nuttalliana | 0 | 0 | 0 | 0 | 0 | 105 |
| Fluminicola virans | 0 | 0 | 0 | 0 | 13 | 30 |
| Gastropoda | 0 | 0 | 0 | 0 | 0 | 6 |
| Juga (J.) hemphilli hemphilli | 0 | 0 | 0 | 0 | 0 | 34 |
| Juga spp. | 0 | 0 | 0 | 0 | 1 | 8 |
| Littorinacea | 0 | 0 | 0 | 0 | 0 | 316 |
| Menetus opercularis | 0 | 0 | 0 | 0 | 0 | 1 |
| Vorticifex effusus | 0 | 0 | 0 | 0 | 1 | 1 |
| Pelecypoda | | | | | | |
| Anodonta wahlmetensis | 0 | 0 | 0 | 0 | 0 | 1 |
| Bivalvia (unidentified) | 87 | 37 | 0 | 114 | 109 | 2160 |
| Corbicula fluminea | 6 | 0 | 0 | 13 | 0 | 728 |
| Macoma balthica | 0 | 0 | 0 | 0 | 0 | 825 |
| Mya arenaria | 0 | 0 | 0 | 0 | 0 | 97 |
| Mytilus edulis | 0 | 0 | 0 | 0 | 0 | 2 |
| Pisidium (Cyclocalyx) casertanum | 0 | 0 | 0 | 0 | 0 | 15 |
| Pisidium (Cyclocalyx) compressum | 0 | 0 | 0 | 0 | 0 | 12 |
| Pisidium spp. | 0 | 0 | 0 | 0 | 0 | 5 |
| Sphaerium (S.) patella | 0 | 0 | 0 | 0 | 0 | 3 |
| Nematoda | 13 | 288 | 0 | 31 | 0 | 10452 |
| Platyhelminthes | | | | | | |
| Turbellaria | 0 | 0 | 0 | 0 | 4 | 7 |
| Tardigrada | 0 | 0 | 0 | 0 | 0 | 1 |
| TOTAL ABUNDANCE | 160 | 742 | 37 | 204 | 174 | |
| TOTAL NUMBER OF TAXA | 13 | 12 | 1 | 6 | 13 | |