


Bioassays of

**E.C.U.A. Main Street**
**Wastewater Treatment Plant**

Pensacola, Escambia County, Florida

NPDES #FL0021440

Sampled 9/9/02

January 2003

**Biology Section**
**Division of Resource Assessment & Management**

Comprehensive Quality Assurance Plan #870346G

Bioassays of

# E.C.U.A. Main Street
# Wastewater Treatment Plant

Pensacola, Escambia County, Florida

NPDES #FL0021440

**Biology Section**
**Bureau of Laboratories**
**January 2003**

E.C.U.A. Main Street WWTP, 401 West Government St., Pensacola, Escambia County, Florida, NPDES #FL0021440, tests performed on 10 to 12 September 2002.

## Introduction

This wastewater treatment facility has a design flow of 20.0 MGD and an average daily flow of 13.52 MGD (January 2000- May 2002). The facility consists of mechanically cleaned bar screens, an aerated grit chamber, alum addition for phosphorus removal, primary clarification, lime addition for pH adjustment, nitrification and biological denitrification, polymer addition, final clarification, chlorination, dechlorination, and residual incineration. Wastewater is discharged into the Class III marine waters of Pensacola Bay (facility information provided by Wesley Keller, FDEP, Pensacola).

## Methods

Samples were collected by Glenn Butts following DEP-SOP-001/01 FS 2400 Wastewater Sampling. All DEP SOP's are available on the web at:
http://www.floridadep.org/labs/qa/sops.htm

The toxicity tests discussed in this report were performed following internal DEP SOP's TA07-01 and TA07-02. All internal DEP SOP's are available on the web at:
http://www.floridadep.org/labs/cgi-bin/sop/biosop.asp.

## Toxicity Test Results

*Ceriodaphnia dubia* 48-hr acute screen – Toxic-30% mortality
*Cyprinella leedsi* 48-hr acute screen – Not Toxic

See Table 1 for bioassay bench sheets.

## Chemistry Results

Total residual chlorine and total ammonia were not detected in the bioassay sample in the laboratory.

See Table 2 for chemicals detected in the analytical chemistry samples.
See Table 3 for a complete list of chemical analyses performed.

## Discussion

The sample of effluent collected from this facility on September 9, 2002 was acutely toxic to *C. dubia* during the 48-hour bioassay tests. The cause of this toxicity appears to be due to the pesticide diazinon, which was detected in the chemistry sample at a concentration of 0.23ug/L. The *C. dubia* 48-hour LC50 for diazinon ranges from 0.26 to 0.58ug/L (Baily, HC, JL Miller, MJ Miller, LC Wiborg, L Deanovic, T Shed. 1997. Joint acute toxicity of diazinon and chlorpyrifos to *Ceriodaphnia dubia*. *Environ. Toxicol.& Chem.* 16(11):2304-08), therefore it is possible that the 30% mortality observed in the *C. dubia* test organisms is due to toxicity from diazinon.

## Conclusion

The sample was acutely toxic to the invertebrate, *C. dubia*, within 48 hours. The diazinon concentration in the sample is believed to be the primary cause of the observed toxicity.

**Table 1.** Data recorded during the 48-hour acute screening bioassays of a sample of effluent from the E.C.U.A. Main Street WWTP, 401 West Government St., Pensacola, Escambia County, Florida, NPDES# FL0021440, performed from 10 to 12 September 2002.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Facility: | **E.C.U.A. Main Street WWTP** | | **NPDES #** | **FL0021440** | Facility Type: **WWTP** | **Analysts:** | Jacquelyn Brynda |
| Location: | 401 West Government St., Pensacola | | Contact/District: | Butts/NW | | | Joshua Ayres |
| County: | Escambia | | Test type: | static acute screen | | | James Daniels |
| Sample Collection Date: | 9/9/2002 | Time: 1020 | # tests: | 2 | Receiving Water: Pensacola Bay | | Marshall Faircloth |
| Test Beginning Date: | 9/10/2002 | Time: 1530 | Chlorination Type: | Chlorinated | Class III Marine | | |
| Test Ending Date: | 9/12/2002 | Time: 1330 | | sample collected after dechlorination | **Page 1 of 1** | **Reviewer:** | David Whiting |

Organism: ***Ceriodaphnia dubia*** Life stage: <24 hours

| | Sample/Diluent | SURVIVAL # Alive | | | pH | | | Temperature[A] | | | Dissolved Oxygen | | | Conductivity Uncorrected µmhos/cm | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Concentrations | Volume(mL) | 0 hr | 24 hr | 48 hr | 0 hour | 24 hour | 48 hour | 0 hour | 24 hour | 48 hour | 0 hour | 24 hour | 48 hour | 0 hour | 48 hour |
| Control A | 0/20 | 5 | 5 | 5 | 8.0 | - | 8.3 | 23.7 | - | 24.3 | 7.5 | - | 7.5 | 160 | 235 |
| Control B | 0/20 | 5 | 5 | 5 | - | - | 8.4 | - | - | 24.1 | - | - | 7.7 | - | 230 |
| Control C | 0/20 | 5 | 5 | 5 | - | - | 8.5 | - | - | 24.1 | - | - | 7.9 | - | 210 |
| Control D | 0/20 | 5 | 5 | 5 | - | - | 8.4 | - | - | 24.0 | - | - | 8.0 | - | 220 |
| 100% A | 20/0 | 5 | 5 | 3 | 7.8 | - | 8.6 | 23.8 | - | 24.0 | 7.5 | - | 8.0 | 750 | 875 |
| 100% B | 20/0 | 5 | 5 | 5 | - | - | 8.6 | - | - | 24.1 | - | - | 8.0 | - | 880 |
| 100% C | 20/0 | 5 | 5 | 3 | - | - | 8.6 | - | - | 24.2 | - | - | 8.0 | - | 850 |
| 100% D | 20/0 | 5 | 5 | 3 | - | - | 8.6 | - | - | 24.2 | - | - | 7.9 | - | 860 |

[A] Temperatures of room and test incubator were continuously recorded on a strip chart recorder.
Room Temperature range for the test period was 23.0-25.0°C.
Incubator #3 temperature range for the test period was 24.0-25.5°C.

Organism: ***Cyprinella leedsi*** Life stage: 9 days

| | Sample/Diluent | SURVIVAL # Alive | | | pH | | | Temperature[B] | | | Dissolved Oxygen | | | Conductivity Uncorrected µmhos/cm | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Concentrations | Volume(mL) | 0 hr | 24 hr | 48 hr | 0 hour | 24 hour | 48 hour | 0 hour | 24 hour | 48 hour | 0 hour | 24 hour | 48 hour | 0 hour | 48 hour |
| Control A | 0/500 | 5 | 5 | 5 | 8.0 | 8.3 | 8.4 | 23.3 | 26.0 | 24.3 | 7.1 | 7.1 | 7.8 | 260 | 270 |
| Control B | 0/500 | 5 | 5 | 5 | 8.0 | 8.3 | 8.4 | 23.4 | 25.0 | 24.1 | 7.4 | 7.1 | 7.7 | 255 | 270 |
| Control C | 0/500 | 5 | 5 | 5 | 8.0 | 8.3 | 8.4 | 23.4 | 24.5 | 24.0 | 7.5 | 7.6 | 7.8 | 255 | 275 |
| Control D | 0/500 | 5 | 5 | 5 | 8.0 | 8.3 | 8.4 | 23.2 | 24.6 | 23.9 | 7.5 | 7.5 | 7.8 | 255 | 275 |
| 100% A | 500/0 | 5 | 5 | 5 | 7.6 | 8.3 | 8.6 | 23.2 | 24.9 | 23.9 | 7.3 | 7.4 | 7.9 | 695 | 750 |
| 100% B | 500/0 | 5 | 5 | 5 | 7.6 | 8.3 | 8.6 | 23.4 | 24.7 | 23.8 | 7.3 | 7.4 | 7.8 | 760 | 790 |
| 100 % C | 500/0 | 5 | 5 | 5 | 7.6 | 8.3 | 8.6 | 23.4 | 24.6 | 23.9 | 7.2 | 7.4 | 7.8 | 785 | 790 |
| 100% D | 500/0 | 5 | 5 | 5 | 7.6 | 8.3 | 8.6 | 23.4 | 24.5 | 23.9 | 7.2 | 7.4 | 7.7 | 790 | 800 |

[B] Temperatures of room and test incubator were continuously recorded on a strip chart recorder.
Room Temperature range for the test period was 23.0-25.0°C.
Incubator #3 temperature range for the test period was 24.0-25.5°C.

| **LIMS** | |
|---|---|
| Job number: | TLH-2002-09-10-14 |
| sample number: | 620708 |

| **Data Transcription Verification** | |
|---|---|
| date: | 11/14/2002 |
| by: | Joshua Ayres |
| | Christa Pierini |

| **Total Residual CL2** | mg/L | Method |
|---|---|---|
| Field: | - | - |
| Lab: | 0.03 | Hach |

| **Ammonia** | Total (mg/L) | Unionized (mg/L) |
|---|---|---|
| Control water (fish): | <0.017 | <0.017 |
| Control water (water flea): | <0.017 | <0.017 |
| 100% Sample: | <0.017 | <0.017 |

| **Alk & Hardness** | Alkalinity (mg/L) | Hardness (mg/L) |
|---|---|---|
| Control water (fish): | 135 | 138 |
| Control water (water flea): | 75 | 85 |
| 100% Sample: | 310 | 155 |

**Table 2. Results of chemical analyses on the effluent from E.C.U.A. Main Street WWTP sampled on September 9, 2002.**

| | | | |
|---|---|---|---|
| **Metals** | | | |
| Aluminum | 111 | ug/L | |
| Cadmium | 0.043 | ug/L | [I] |
| Calcium | 95.4 | mg/L | |
| Copper | 1.4 | ug/L | [I] |
| Iron | 136 | ug/L | |
| Lead | 0.69 | ug/L | |
| Magnesium | 5.1 | mg/L | |
| Nickel | 2.2 | ug/L | [I] |
| Silver | 0.077 | ug/L | [I] |
| Zinc | 20.7 | ug/L | |
| **Pesticides and Herbicides** | | | |
| Diazinon | 0.23 | ug/L | |
| **Nutrients** | | | |
| Ammonia-N | 0.078 | mg N/L | |
| Nitrates and Nitrites | 0.87 | mg N/L | |
| Total Kjeldahl Nitrogen | 1.1 | mg N/L | |
| Ortho-Phosphate | 0.028 | mg P/L | |
| Total Phosphorous | 0.3 | mg P/L | |
| **Base, Neutral, & Acid Extractable Organics** | | | |
| None detected | | | |

[I] The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

**Table 3.** **Chemical Analysis performed on the effluent from E.C.U.A. Main Street WWTP, sampled on September 9, 2002.**

| Date Sampled | Field ID | Analysis Group | Component | Result | Units | Remark | MDL | PQL |
|---|---|---|---|---|---|---|---|---|
| 9/9/2002 10:20 | # 1 | BNA-Water | 1,2,4,5-Tetrachlorobenzene | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 | # 1 | BNA-Water | 1,2,4-Trichlorobenzene | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 | # 1 | BNA-Water | 1,2-Dichlorobenzene | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 | # 1 | BNA-Water | 1,3,5-Trinitrobenzene | 4.1 | ug/L | U | 4.1 | 16 |
| 9/9/2002 10:20 | # 1 | BNA-Water | 1,3-Dichlorobenzene | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 | # 1 | BNA-Water | 1,3-Dinitrobenzene | 2.1 | ug/L | U | 2.1 | 8.2 |
| 9/9/2002 10:20 | # 1 | BNA-Water | 1,4-Dichlorobenzene | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 | # 1 | BNA-Water | 1,4-Naphthoquinone | 21 | ug/L | U | 21 | 82 |
| 9/9/2002 10:20 | # 1 | BNA-Water | 1-Naphthylamine | 10 | ug/L | U | 10 | 41 |
| 9/9/2002 10:20 | # 1 | BNA-Water | 2,3,4,6-Tetrachlorophenol | 2.1 | ug/L | U | 2.1 | 8.2 |
| 9/9/2002 10:20 | # 1 | BNA-Water | 2,4,5-Trichlorophenol | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 | # 1 | BNA-Water | 2,4,6-Trichlorophenol | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 | # 1 | BNA-Water | 2,4-Dichlorophenol | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 | # 1 | BNA-Water | 2,4-Dimethylphenol | 52 | ug/L | U | 52 | 210 |
| 9/9/2002 10:20 | # 1 | BNA-Water | 2,4-Dinitrophenol | 15 | ug/L | U | 15 | 62 |
| 9/9/2002 10:20 | # 1 | BNA-Water | 2,4-Dinitrotoluene | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 | # 1 | BNA-Water | 2,6-Dichlorophenol | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 | # 1 | BNA-Water | 2,6-Dinitrotoluene | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 | # 1 | BNA-Water | 2-Acetylaminofluorene | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 | # 1 | BNA-Water | 2-Chloronaphthalene | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 | # 1 | BNA-Water | 2-Chlorophenol | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 | # 1 | BNA-Water | 2-Methyl-4,6-dinitrophenol | 3.1 | ug/L | U | 3.1 | 12 |
| 9/9/2002 10:20 | # 1 | BNA-Water | 2-Methylnaphthalene | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 | # 1 | BNA-Water | 2-Naphthylamine | 10 | ug/L | U | 10 | 41 |
| 9/9/2002 10:20 | # 1 | BNA-Water | 2-Nitroaniline | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 | # 1 | BNA-Water | 2-Nitrophenol | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 | # 1 | BNA-Water | 2-Picoline | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 | # 1 | BNA-Water | 3,3'-Dichlorobenzidine | 41 | ug/L | U | 41 | 160 |
| 9/9/2002 10:20 | # 1 | BNA-Water | 3,3'-Dimethylbenzidine | 21 | ug/L | U | 21 | 82 |
| 9/9/2002 10:20 | # 1 | BNA-Water | 3-Methylcholanthrene | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 | # 1 | BNA-Water | 3-Nitroaniline | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 | # 1 | BNA-Water | 4,4'-DDD | 1.5 | ug/L | U | 1.5 | 6.2 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 9/9/2002 10:20 # 1 | BNA-Water | 4,4'-DDE | 1.5 | ug/L | U | 1.5 | 6.2 |
| 9/9/2002 10:20 # 1 | BNA-Water | 4,4'-DDT | 1.5 | ug/L | U | 1.5 | 6.2 |
| 9/9/2002 10:20 # 1 | BNA-Water | 4-Aminobiphenyl | 4.1 | ug/L | U | 4.1 | 16 |
| 9/9/2002 10:20 # 1 | BNA-Water | 4-Bromophenyl phenyl ether | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 # 1 | BNA-Water | 4-Chloro-3-methylphenol | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 # 1 | BNA-Water | 4-Chloroaniline | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 # 1 | BNA-Water | 4-Chlorophenyl phenyl ether | 2.1 | ug/L | U | 2.1 | 8.2 |
| 9/9/2002 10:20 # 1 | BNA-Water | 4-Nitroaniline | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 # 1 | BNA-Water | 4-Nitrophenol | 15 | ug/L | U | 15 | 62 |
| 9/9/2002 10:20 # 1 | BNA-Water | 5-Nitro-o-toluidine | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 # 1 | BNA-Water | 7,12-Dimethylbenz(a)anthracene | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 # 1 | BNA-Water | Acenaphthene | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 # 1 | BNA-Water | Acenaphthylene | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 # 1 | BNA-Water | Acetophenone | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 # 1 | BNA-Water | Aldrin | 1.5 | ug/L | U | 1.5 | 6.2 |
| 9/9/2002 10:20 # 1 | BNA-Water | Aniline | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 # 1 | BNA-Water | Anthracene | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 # 1 | BNA-Water | Azobenzene/1,2-Diphenylhydrazir | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 # 1 | BNA-Water | Benzidine | 100 | ug/L | U | 100 | 410 |
| 9/9/2002 10:20 # 1 | BNA-Water | Benzo(a)anthracene | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 # 1 | BNA-Water | Benzo(a)pyrene | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 # 1 | BNA-Water | Benzo(b)fluoranthene | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 # 1 | BNA-Water | Benzo(g,h,i)perylene | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 # 1 | BNA-Water | Benzo(k)fluoranthene | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 # 1 | BNA-Water | Benzyl alcohol | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 # 1 | BNA-Water | Bis(2-chloroethoxy)methane | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 # 1 | BNA-Water | Bis(2-chloroethyl)ether | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 # 1 | BNA-Water | Bis(2-chloroisopropyl)ether | 3.1 | ug/L | U | 3.1 | 12 |
| 9/9/2002 10:20 # 1 | BNA-Water | Bis(2-ethylhexyl)phthalate | 15 | ug/L | U | 15 | 62 |
| 9/9/2002 10:20 # 1 | BNA-Water | Butyl benzyl phthalate | 5.2 | ug/L | U | 5.2 | 21 |
| 9/9/2002 10:20 # 1 | BNA-Water | Chrysene | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 # 1 | BNA-Water | Di-n-butyl phthalate | 5.2 | ug/L | U | 5.2 | 21 |
| 9/9/2002 10:20 # 1 | BNA-Water | Di-n-octyl phthalate | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 # 1 | BNA-Water | Dibenzo(a,h)anthracene | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 # 1 | BNA-Water | Dibenzofuran | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 # 1 | BNA-Water | Dieldrin | 1.5 | ug/L | U | 1.5 | 6.2 |
| 9/9/2002 10:20 # 1 | BNA-Water | Diethyl phthalate | 1 | ug/L | U | 1 | 4.1 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 9/9/2002 10:20 # 1 | BNA-Water | Dimethyl phthalate | 52 | ug/L | U | 52 | 210 |
| 9/9/2002 10:20 # 1 | BNA-Water | Dimethylaminoazobenzene | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 # 1 | BNA-Water | Dinoseb | 4.1 | ug/L | U | 4.1 | 16 |
| 9/9/2002 10:20 # 1 | BNA-Water | Diphenylamine | 3.1 | ug/L | U | 3.1 | 12 |
| 9/9/2002 10:20 # 1 | BNA-Water | Endosulfan I | 4.1 | ug/L | U | 4.1 | 16 |
| 9/9/2002 10:20 # 1 | BNA-Water | Endosulfan II | 4.1 | ug/L | U | 4.1 | 16 |
| 9/9/2002 10:20 # 1 | BNA-Water | Endosulfan sulfate | 1.5 | ug/L | U | 1.5 | 6.2 |
| 9/9/2002 10:20 # 1 | BNA-Water | Endrin | 1.5 | ug/L | U | 1.5 | 6.2 |
| 9/9/2002 10:20 # 1 | BNA-Water | Endrin aldehyde | 4.1 | ug/L | U | 4.1 | 16 |
| 9/9/2002 10:20 # 1 | BNA-Water | Ethyl methanesulfonate | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 # 1 | BNA-Water | Fluoranthene | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 # 1 | BNA-Water | Fluorene | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 # 1 | BNA-Water | Heptachlor | 1.5 | ug/L | U | 1.5 | 6.2 |
| 9/9/2002 10:20 # 1 | BNA-Water | Heptachlor epoxide | 1.5 | ug/L | U | 1.5 | 6.2 |
| 9/9/2002 10:20 # 1 | BNA-Water | Hexachlorobenzene | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 # 1 | BNA-Water | Hexachlorobutadiene | 3.1 | ug/L | U | 3.1 | 12 |
| 9/9/2002 10:20 # 1 | BNA-Water | Hexachlorocyclopentadiene | 3.1 | ug/L | U | 3.1 | 12 |
| 9/9/2002 10:20 # 1 | BNA-Water | Hexachloroethane | 3.1 | ug/L | U | 3.1 | 12 |
| 9/9/2002 10:20 # 1 | BNA-Water | Hexachloropropene | 2.1 | ug/L | U | 2.1 | 8.2 |
| 9/9/2002 10:20 # 1 | BNA-Water | Indeno(1,2,3-cd)pyrene | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 # 1 | BNA-Water | Isophorone | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 # 1 | BNA-Water | Isosafrole | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 # 1 | BNA-Water | Methapyrilene | 4.1 | ug/L | U | 4.1 | 16 |
| 9/9/2002 10:20 # 1 | BNA-Water | Methyl methanesulfonate | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 # 1 | BNA-Water | N-Nitrosodi-n-butylamine | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 # 1 | BNA-Water | N-Nitrosodi-n-propylamine | 2.1 | ug/L | U | 2.1 | 8.2 |
| 9/9/2002 10:20 # 1 | BNA-Water | N-Nitrosodiethylamine | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 # 1 | BNA-Water | N-Nitrosodimethylamine | 2.1 | ug/L | U | 2.1 | 8.2 |
| 9/9/2002 10:20 # 1 | BNA-Water | N-Nitrosodiphenylamine | 3.1 | ug/L | U | 3.1 | 12 |
| 9/9/2002 10:20 # 1 | BNA-Water | N-Nitrosomethylethylamine | 2.1 | ug/L | U | 2.1 | 8.2 |
| 9/9/2002 10:20 # 1 | BNA-Water | N-Nitrosomorpholine | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 # 1 | BNA-Water | N-Nitrosopiperidine | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 # 1 | BNA-Water | N-Nitrosopyrrolidine | 2.1 | ug/L | U | 2.1 | 8.2 |
| 9/9/2002 10:20 # 1 | BNA-Water | Naphthalene | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 # 1 | BNA-Water | Nitrobenzene | 2.1 | ug/L | U | 2.1 | 8.2 |
| 9/9/2002 10:20 # 1 | BNA-Water | Nitroquinoline-1-oxide | 21 | ug/L | U | 21 | 82 |
| 9/9/2002 10:20 # 1 | BNA-Water | Pentachlorobenzene | 1 | ug/L | U | 1 | 4.1 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 9/9/2002 10:20 # 1 | BNA-Water | Pentachloroethane | 52 | ug/L | U | 52 | 210 |
| 9/9/2002 10:20 # 1 | BNA-Water | Pentachloronitrobenzene | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 # 1 | BNA-Water | Pentachlorophenol | 3.1 | ug/L | U | 3.1 | 12 |
| 9/9/2002 10:20 # 1 | BNA-Water | Phenacetin | 4.1 | ug/L | U | 4.1 | 12 |
| 9/9/2002 10:20 # 1 | BNA-Water | Phenanthrene | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 # 1 | BNA-Water | Phenol | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 # 1 | BNA-Water | Pyrene | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 # 1 | BNA-Water | Pyridine | 4.1 | ug/L | U | 4.1 | 16 |
| 9/9/2002 10:20 # 1 | BNA-Water | Safrole | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 # 1 | BNA-Water | alpha-BHC | 1.5 | ug/L | U | 1.5 | 6.2 |
| 9/9/2002 10:20 # 1 | BNA-Water | beta-BHC | 1.5 | ug/L | U | 1.5 | 6.2 |
| 9/9/2002 10:20 # 1 | BNA-Water | delta-BHC | 1.5 | ug/L | U | 1.5 | 6.2 |
| 9/9/2002 10:20 # 1 | BNA-Water | gamma-BHC | 1.5 | ug/L | U | 1.5 | 6.2 |
| 9/9/2002 10:20 # 1 | BNA-Water | m,p-Cresols | 2.1 | ug/L | U | 2.1 | 8.2 |
| 9/9/2002 10:20 # 1 | BNA-Water | o-Cresol | 2.1 | ug/L | U | 2.1 | 8.2 |
| 9/9/2002 10:20 # 1 | BNA-Water | o-Toluidine | 1 | ug/L | U | 1 | 4.1 |
| 9/9/2002 10:20 # 1 | GC-Water | Alachlor | 0.64 | ug/L | U | 0.64 | 2.56 |
| 9/9/2002 10:20 # 1 | GC-Water | Ametryn | 0.054 | ug/L | U | 0.054 | 0.216 |
| 9/9/2002 10:20 # 1 | GC-Water | Atrazine | 0.054 | ug/L | U | 0.054 | 0.216 |
| 9/9/2002 10:20 # 1 | GC-Water | Azinphos Methyl | 0.054 | ug/L | U | 0.054 | 0.216 |
| 9/9/2002 10:20 # 1 | GC-Water | Bromacil | 0.22 | ug/L | U | 0.22 | 0.88 |
| 9/9/2002 10:20 # 1 | GC-Water | Butylate | 0.22 | ug/L | U | 0.22 | 0.88 |
| 9/9/2002 10:20 # 1 | GC-Water | Chlorpyrifos Ethyl | 0.054 | ug/L | U | 0.054 | 0.216 |
| 9/9/2002 10:20 # 1 | GC-Water | Chlorpyrifos Methyl | 0.11 | ug/L | U | 0.11 | 0.44 |
| 9/9/2002 10:20 # 1 | GC-Water | Diazinon | 0.23 | ug/L | | 0.054 | 0.216 |
| 9/9/2002 10:20 # 1 | GC-Water | Ethion | 0.054 | ug/L | U | 0.054 | 0.216 |
| 9/9/2002 10:20 # 1 | GC-Water | Ethoprop | 0.11 | ug/L | U | 0.11 | 0.44 |
| 9/9/2002 10:20 # 1 | GC-Water | Fenamiphos | 0.22 | ug/L | U | 0.22 | 0.88 |
| 9/9/2002 10:20 # 1 | GC-Water | Fonofos | 0.11 | ug/L | U | 0.11 | 0.44 |
| 9/9/2002 10:20 # 1 | GC-Water | Hexazinone | 0.11 | ug/L | U | 0.11 | 0.44 |
| 9/9/2002 10:20 # 1 | GC-Water | Malathion | 0.16 | ug/L | U | 0.16 | 0.64 |
| 9/9/2002 10:20 # 1 | GC-Water | Metalaxyl | 0.27 | ug/L | U | 0.27 | 1.08 |
| 9/9/2002 10:20 # 1 | GC-Water | Metolachlor | 0.54 | ug/L | U | 0.54 | 2.16 |
| 9/9/2002 10:20 # 1 | GC-Water | Metribuzin | 0.11 | ug/L | U | 0.11 | 0.44 |
| 9/9/2002 10:20 # 1 | GC-Water | Mevinphos | 0.22 | ug/L | U | 0.22 | 0.88 |
| 9/9/2002 10:20 # 1 | GC-Water | Naled | 0.86 | ug/L | U | 0.86 | 3.44 |
| 9/9/2002 10:20 # 1 | GC-Water | Norflurazon | 0.11 | ug/L | U | 0.11 | 0.44 |

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|---|---|---|---|---|---|---|---|---|
| 9/9/2002 | 10:20 | # 1 | GC-Water | Parathion Ethyl | 0.16 | ug/L | U | 0.16 | 0.64 |
| 9/9/2002 | 10:20 | # 1 | GC-Water | Parathion Methyl | 0.11 | ug/L | U | 0.11 | 0.44 |
| 9/9/2002 | 10:20 | # 1 | GC-Water | Phorate | 0.054 | ug/L | U | 0.054 | 0.216 |
| 9/9/2002 | 10:20 | # 1 | GC-Water | Prometryn | 0.16 | ug/L | U | 0.16 | 0.64 |
| 9/9/2002 | 10:20 | # 1 | GC-Water | Simazine | 0.054 | ug/L | U | 0.054 | 0.216 |
| 9/9/2002 | 10:20 | # 1 | Mercury-Water | Mercury | 0.1 | ug/L | U | 0.1 | 0.4 |
| 9/9/2002 | 10:20 | # 1 | Metals-Water | Aluminum | 111 | ug/L | | 5 | 20 |
| 9/9/2002 | 10:20 | # 1 | Metals-Water | Arsenic | 3 | ug/L | U | 3 | 12 |
| 9/9/2002 | 10:20 | # 1 | Metals-Water | Cadmium | 0.043 | ug/L | I | 0.025 | 0.1 |
| 9/9/2002 | 10:20 | # 1 | Metals-Water | Calcium | 95.4 | mg/L | | 0.02 | 0.08 |
| 9/9/2002 | 10:20 | # 1 | Metals-Water | Chromium | 2 | ug/L | U | 2 | 8 |
| 9/9/2002 | 10:20 | # 1 | Metals-Water | Copper | 1.4 | ug/L | I | 0.75 | 3 |
| 9/9/2002 | 10:20 | # 1 | Metals-Water | Iron | 145 | ug/L | | 7 | 28 |
| 9/9/2002 | 10:20 | # 1 | Metals-Water | Lead | 0.69 | ug/L | | 0.1 | 0.4 |
| 9/9/2002 | 10:20 | # 1 | Metals-Water | Magnesium | 5.1 | mg/L | | 0.01 | 0.04 |
| 9/9/2002 | 10:20 | # 1 | Metals-Water | Nickel | 2.2 | ug/L | I | 1.5 | 6 |
| 9/9/2002 | 10:20 | # 1 | Metals-Water | Selenium | 1 | ug/L | U | 1 | 4 |
| 9/9/2002 | 10:20 | # 1 | Metals-Water | Silver | 0.077 | ug/L | I | 0.02 | 0.08 |
| 9/9/2002 | 10:20 | # 1 | Metals-Water | Zinc | 20.7 | ug/L | | 2 | 8 |
| 9/9/2002 | 10:20 | # 1 | Nutrients-Liquid | Ammonia-N | 0.1 | mg N/L | | 0.01 | 0.02 |
| 9/9/2002 | 10:20 | # 1 | Nutrients-Liquid | NO2NO3-N | 0.87 | mg N/L | | 0.04 | 0.1 |
| 9/9/2002 | 10:20 | # 1 | Nutrients-Liquid | N_KJEL_TOT | 1.1 | mg N/L | | 0.06 | 0.2 |
| 9/9/2002 | 10:20 | # 1 | Nutrients-Liquid | O-Phosphate-P | 0.028 | mg P/L | | 0.004 | 0.01 |
| 9/9/2002 | 10:20 | # 1 | Nutrients-Liquid | Total-P | 0.3 | mg P/L | | 0.015 | 0.04 |
| 9/9/2002 | 7:20 | BLANKS | BNA-Water | 1,2,4,5-Tetrachlorobenzene | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 | 7:20 | BLANKS | BNA-Water | 1,2,4-Trichlorobenzene | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 | 7:20 | BLANKS | BNA-Water | 1,2-Dichlorobenzene | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 | 7:20 | BLANKS | BNA-Water | 1,3,5-Trinitrobenzene | 3.8 | ug/L | U | 3.8 | 15 |
| 9/9/2002 | 7:20 | BLANKS | BNA-Water | 1,3-Dichlorobenzene | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 | 7:20 | BLANKS | BNA-Water | 1,3-Dinitrobenzene | 1.9 | ug/L | U | 1.9 | 7.7 |
| 9/9/2002 | 7:20 | BLANKS | BNA-Water | 1,4-Dichlorobenzene | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 | 7:20 | BLANKS | BNA-Water | 1,4-Naphthoquinone | 19 | ug/L | U | 19 | 77 |
| 9/9/2002 | 7:20 | BLANKS | BNA-Water | 1-Naphthylamine | 9.6 | ug/L | U | 9.6 | 38 |
| 9/9/2002 | 7:20 | BLANKS | BNA-Water | 2,3,4,6-Tetrachlorophenol | 1.9 | ug/L | U | 1.9 | 7.7 |
| 9/9/2002 | 7:20 | BLANKS | BNA-Water | 2,4,5-Trichlorophenol | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 | 7:20 | BLANKS | BNA-Water | 2,4,6-Trichlorophenol | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 | 7:20 | BLANKS | BNA-Water | 2,4-Dichlorophenol | 0.96 | ug/L | U | 0.96 | 3.8 |

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|---|---|---|---|---|---|---|---|---|
| 9/9/2002 7:20 | BLANKS | BNA-Water | 2,4-Dimethylphenol | 48 | ug/L | U | 48 | 190 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | 2,4-Dinitrophenol | 14 | ug/L | U | 14 | 58 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | 2,4-Dinitrotoluene | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | 2,6-Dichlorophenol | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | 2,6-Dinitrotoluene | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | 2-Acetylaminofluorene | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | 2-Chloronaphthalene | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | 2-Chlorophenol | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | 2-Methyl-4,6-dinitrophenol | 2.9 | ug/L | U | 2.9 | 12 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | 2-Methylnaphthalene | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | 2-Naphthylamine | 9.6 | ug/L | U | 9.6 | 38 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | 2-Nitroaniline | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | 2-Nitrophenol | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | 2-Picoline | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | 3,3'-Dichlorobenzidine | 38 | ug/L | U | 38 | 150 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | 3,3'-Dimethylbenzidine | 19 | ug/L | U | 19 | 77 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | 3-Methylcholanthrene | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | 3-Nitroaniline | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | 4,4'-DDD | 1.4 | ug/L | U | 1.4 | 5.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | 4,4'-DDE | 1.4 | ug/L | U | 1.4 | 5.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | 4,4'-DDT | 1.4 | ug/L | U | 1.4 | 5.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | 4-Aminobiphenyl | 3.8 | ug/L | U | 3.8 | 15 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | 4-Bromophenyl phenyl ether | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | 4-Chloro-3-methylphenol | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | 4-Chloroaniline | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | 4-Chlorophenyl phenyl ether | 1.9 | ug/L | U | 1.9 | 7.7 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | 4-Nitroaniline | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | 4-Nitrophenol | 14 | ug/L | U | 14 | 58 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | 5-Nitro-o-toluidine | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | 7,12-Dimethylbenz(a)anthracene | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Acenaphthene | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Acenaphthylene | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Acetophenone | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Aldrin | 1.4 | ug/L | U | 1.4 | 5.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Aniline | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Anthracene | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Azobenzene/1,2-Diphenylhydrazir | 0.96 | ug/L | U | 0.96 | 3.8 |

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|---|---|---|---|---|---|---|---|---|
| 9/9/2002 7:20 | BLANKS | BNA-Water | Benzidine | 96 | ug/L | U | 96 | 380 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Benzo(a)anthracene | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Benzo(a)pyrene | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Benzo(b)fluoranthene | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Benzo(g,h,i)perylene | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Benzo(k)fluoranthene | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Benzyl alcohol | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Bis(2-chloroethoxy)methane | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Bis(2-chloroethyl)ether | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Bis(2-chloroisopropyl)ether | 2.9 | ug/L | U | 2.9 | 12 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Bis(2-ethylhexyl)phthalate | 14 | ug/L | U | 14 | 58 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Butyl benzyl phthalate | 4.8 | ug/L | U | 4.8 | 19 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Chrysene | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Di-n-butyl phthalate | 4.8 | ug/L | U | 4.8 | 19 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Di-n-octyl phthalate | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Dibenzo(a,h)anthracene | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Dibenzofuran | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Dieldrin | 1.4 | ug/L | U | 1.4 | 5.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Diethyl phthalate | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Dimethyl phthalate | 48 | ug/L | U | 48 | 190 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Dimethylaminoazobenzene | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Dinoseb | 3.8 | ug/L | U | 3.8 | 15 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Diphenylamine | 2.9 | ug/L | U | 2.9 | 12 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Endosulfan I | 3.8 | ug/L | U | 3.8 | 15 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Endosulfan II | 3.8 | ug/L | U | 3.8 | 15 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Endosulfan sulfate | 1.4 | ug/L | U | 1.4 | 5.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Endrin | 1.4 | ug/L | U | 1.4 | 5.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Endrin aldehyde | 3.8 | ug/L | U | 3.8 | 15 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Ethyl methanesulfonate | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Fluoranthene | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Fluorene | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Heptachlor | 1.4 | ug/L | U | 1.4 | 5.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Heptachlor epoxide | 1.4 | ug/L | U | 1.4 | 5.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Hexachlorobenzene | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Hexachlorobutadiene | 2.9 | ug/L | U | 2.9 | 12 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Hexachlorocyclopentadiene | 2.9 | ug/L | U | 2.9 | 12 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Hexachloroethane | 2.9 | ug/L | U | 2.9 | 12 |

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|---|---|---|---|---|---|---|---|---|
| 9/9/2002 7:20 | BLANKS | BNA-Water | Hexachloropropene | 1.9 | ug/L | U | 1.9 | 7.7 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Indeno(1,2,3-cd)pyrene | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Isophorone | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Isosafrole | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Methapyrilene | 3.8 | ug/L | U | 3.8 | 15 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Methyl methanesulfonate | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | N-Nitrosodi-n-butylamine | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | N-Nitrosodi-n-propylamine | 1.9 | ug/L | U | 1.9 | 7.7 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | N-Nitrosodiethylamine | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | N-Nitrosodimethylamine | 1.9 | ug/L | U | 1.9 | 7.7 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | N-Nitrosodiphenylamine | 2.9 | ug/L | U | 2.9 | 12 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | N-Nitrosomethylethylamine | 1.9 | ug/L | U | 1.9 | 7.7 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | N-Nitrosomorpholine | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | N-Nitrosopiperidine | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | N-Nitrosopyrrolidine | 1.9 | ug/L | U | 1.9 | 7.7 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Naphthalene | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Nitrobenzene | 1.9 | ug/L | U | 1.9 | 7.7 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Nitroquinoline-1-oxide | 19 | ug/L | U | 19 | 77 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Pentachlorobenzene | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Pentachloroethane | 48 | ug/L | U | 48 | 190 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Pentachloronitrobenzene | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Pentachlorophenol | 2.9 | ug/L | U | 2.9 | 12 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Phenacetin | 3.8 | ug/L | U | 3.8 | 12 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Phenanthrene | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Phenol | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Pyrene | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Pyridine | 3.8 | ug/L | U | 3.8 | 15 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | Safrole | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | alpha-BHC | 1.4 | ug/L | U | 1.4 | 5.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | beta-BHC | 1.4 | ug/L | U | 1.4 | 5.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | delta-BHC | 1.4 | ug/L | U | 1.4 | 5.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | gamma-BHC | 1.4 | ug/L | U | 1.4 | 5.8 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | m,p-Cresols | 1.9 | ug/L | U | 1.9 | 7.7 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | o-Cresol | 1.9 | ug/L | U | 1.9 | 7.7 |
| 9/9/2002 7:20 | BLANKS | BNA-Water | o-Toluidine | 0.96 | ug/L | U | 0.96 | 3.8 |
| 9/9/2002 7:20 | BLANKS | GC-Water | Alachlor | 0.58 | ug/L | U | 0.58 | 2.32 |
| 9/9/2002 7:20 | BLANKS | GC-Water | Ametryn | 0.048 | ug/L | U | 0.048 | 0.192 |

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|---|---|---|---|---|---|---|---|---|
| 9/9/2002 7:20 | BLANKS | GC-Water | Atrazine | 0.048 | ug/L | U | 0.048 | 0.192 |
| 9/9/2002 7:20 | BLANKS | GC-Water | Azinphos Methyl | 0.048 | ug/L | U | 0.048 | 0.192 |
| 9/9/2002 7:20 | BLANKS | GC-Water | Bromacil | 0.19 | ug/L | U | 0.19 | 0.76 |
| 9/9/2002 7:20 | BLANKS | GC-Water | Butylate | 0.19 | ug/L | U | 0.19 | 0.76 |
| 9/9/2002 7:20 | BLANKS | GC-Water | Chlorpyrifos Ethyl | 0.048 | ug/L | U | 0.048 | 0.192 |
| 9/9/2002 7:20 | BLANKS | GC-Water | Chlorpyrifos Methyl | 0.097 | ug/L | U | 0.097 | 0.388 |
| 9/9/2002 7:20 | BLANKS | GC-Water | Diazinon | 0.048 | ug/L | U | 0.048 | 0.192 |
| 9/9/2002 7:20 | BLANKS | GC-Water | Ethion | 0.048 | ug/L | U | 0.048 | 0.192 |
| 9/9/2002 7:20 | BLANKS | GC-Water | Ethoprop | 0.097 | ug/L | U | 0.097 | 0.388 |
| 9/9/2002 7:20 | BLANKS | GC-Water | Fenamiphos | 0.19 | ug/L | U | 0.19 | 0.76 |
| 9/9/2002 7:20 | BLANKS | GC-Water | Fonofos | 0.097 | ug/L | U | 0.097 | 0.388 |
| 9/9/2002 7:20 | BLANKS | GC-Water | Hexazinone | 0.097 | ug/L | U | 0.097 | 0.388 |
| 9/9/2002 7:20 | BLANKS | GC-Water | Malathion | 0.14 | ug/L | U | 0.14 | 0.56 |
| 9/9/2002 7:20 | BLANKS | GC-Water | Metalaxyl | 0.24 | ug/L | U | 0.24 | 0.96 |
| 9/9/2002 7:20 | BLANKS | GC-Water | Metolachlor | 0.48 | ug/L | U | 0.48 | 1.92 |
| 9/9/2002 7:20 | BLANKS | GC-Water | Metribuzin | 0.097 | ug/L | U | 0.097 | 0.388 |
| 9/9/2002 7:20 | BLANKS | GC-Water | Mevinphos | 0.19 | ug/L | U | 0.19 | 0.76 |
| 9/9/2002 7:20 | BLANKS | GC-Water | Naled | 0.78 | ug/L | U | 0.78 | 3.12 |
| 9/9/2002 7:20 | BLANKS | GC-Water | Norflurazon | 0.097 | ug/L | U | 0.097 | 0.388 |
| 9/9/2002 7:20 | BLANKS | GC-Water | Parathion Ethyl | 0.14 | ug/L | U | 0.14 | 0.56 |
| 9/9/2002 7:20 | BLANKS | GC-Water | Parathion Methyl | 0.097 | ug/L | U | 0.097 | 0.388 |
| 9/9/2002 7:20 | BLANKS | GC-Water | Phorate | 0.048 | ug/L | U | 0.048 | 0.192 |
| 9/9/2002 7:20 | BLANKS | GC-Water | Prometryn | 0.14 | ug/L | U | 0.14 | 0.56 |
| 9/9/2002 7:20 | BLANKS | GC-Water | Simazine | 0.048 | ug/L | U | 0.048 | 0.192 |
| 9/9/2002 7:20 | BLANKS | Mercury-Water | Mercury | 0.1 | ug/L | U | 0.1 | 0.4 |
| 9/9/2002 7:20 | BLANKS | Metals-Water | Aluminum | 14 | ug/L | U | 5 | 20 |
| 9/9/2002 7:20 | BLANKS | Metals-Water | Arsenic | 3 | ug/L | U | 3 | 12 |
| 9/9/2002 7:20 | BLANKS | Metals-Water | Cadmium | 0.025 | ug/L | U | 0.025 | 0.1 |
| 9/9/2002 7:20 | BLANKS | Metals-Water | Calcium | 0.02 | mg/L | U | 0.02 | 0.08 |
| 9/9/2002 7:20 | BLANKS | Metals-Water | Chromium | 2 | ug/L | U | 2 | 8 |
| 9/9/2002 7:20 | BLANKS | Metals-Water | Copper | 0.75 | ug/L | U | 0.75 | 3 |
| 9/9/2002 7:20 | BLANKS | Metals-Water | Iron | 9 | ug/L | I | 7 | 28 |
| 9/9/2002 7:20 | BLANKS | Metals-Water | Lead | 0.1 | ug/L | U | 0.1 | 0.4 |
| 9/9/2002 7:20 | BLANKS | Metals-Water | Magnesium | 0.01 | mg/L | U | 0.01 | 0.04 |
| 9/9/2002 7:20 | BLANKS | Metals-Water | Nickel | 1.5 | ug/L | U | 1.5 | 6 |
| 9/9/2002 7:20 | BLANKS | Metals-Water | Selenium | 1 | ug/L | U | 1 | 4 |
| 9/9/2002 7:20 | BLANKS | Metals-Water | Silver | 0.02 | ug/L | U | 0.02 | 0.08 |

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|---|---|---|---|---|---|---|---|---|---|
| 9/9/2002 | 7:20 | BLANKS | Metals-Water | Zinc | 2 | ug/L | U | 2 | 8 |
| 9/9/2002 | 7:20 | BLANKS | Nutrients-Liquid | Ammonia-N | 0.022 | mg N/L | | 0.01 | 0.02 |
| 9/9/2002 | 7:20 | BLANKS | Nutrients-Liquid | NO2NO3-N | 0.004 | mg N/L | U | 0.004 | 0.01 |
| 9/9/2002 | 7:20 | BLANKS | Nutrients-Liquid | N_KJEL_TOT | 0.06 | mg N/L | U | 0.06 | 0.2 |
| 9/9/2002 | 7:20 | BLANKS | Nutrients-Liquid | O-Phosphate-P | 0.004 | mg P/L | U | 0.004 | 0.01 |
| 9/9/2002 | 7:20 | BLANKS | Nutrients-Liquid | Total-P | 0.015 | mg P/L | U | 0.015 | 0.04 |

## The Bioassay of E.C.U.A. Main Street WWTP effluent sampled on September 9, 2002, NPDES #FL0021440.

Fill Out This Section For All Surface Water Discharger Inspections(CEI, CSI, CBI, PAI, XSI-RI Optional)

| Transaction Code | | NPDES NUMBER | | YR/MO/DA | | Insp Type | Inspector | Fac Type |
|---|---|---|---|---|---|---|---|---|
| 1 N | 2 5 | 3 F L 0 0 2 1 4 4 0 # | # | 0 2 0 9 0 9 | # | **B** | # **S** | # 1 |

Remarks

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## The Priority Pollutants Analysis for Bioassay of E.C.U.A. Main Street WWTP effluent sampled on September 9, 2002, NPDES #FL0021440.

Fill Out This Section For All Surface Water Discharger Inspections(CEI, CSI, CBI, PAI, XSI-RI Optional)

| Transaction Code | | NPDES NUMBER | | YR/MO/DA | | Insp Type | Inspector | Fac Type |
|---|---|---|---|---|---|---|---|---|
| 1 N | 2 5 | 3 F L 0 0 2 1 4 4 0 # | # | 0 2 0 9 0 9 | # | **B** | # **S** | # 1 |

Remarks

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