



Bioassays of
Dale Mabry Advanced Wastewater Treatment Plant
Tampa, Hillsborough County, Florida
NPDES #FL0036820
Sampled 8/13/02

January 2003

Biology Section
Division of Resource Assessment & Management
Comprehensive Quality Assurance Plan #870346G

Bioassays of
Dale Mabry Advanced Wastewater Treatment Plant
Tampa, Hillsborough County, Florida
NPDES #FL0036820

**Biology Section
Bureau of Laboratories
January 2003**

Dale Mabry AWWTP, 13055 Delwood Road, Tampa, Hillsborough County, Florida, NPDES #FL0036820, tests performed on 14 to 16 August 2002.

Introduction

This advanced domestic wastewater treatment plant has a design flow of 6.0 MGD and an annual average daily flow of 1.1 MGD (July 2001-June 2002). The wastewater treatment process consists of screening and grit removal, a conditioning tank, oxidation ditches for the activated-sludge process with clarification, denitrification filters, chlorination, then dechlorination using sulfur dioxide gas. Wastewater is discharged to the Class III fresh waters of Brushy Creek (facility information provided by Joe Squitieri, FDEP, Tampa).

Methods

Samples were collected by Melissa Gunter and Eli Landrau 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 – Not Toxic

Cyprinella leedsii 48-hr acute screen – Not Toxic

See Table 1 for bioassay bench sheets.

Chemistry Results

Total residual chlorine was not detected in the bioassay sample in the laboratory.

Total ammonia was detected in the bioassay sample in the laboratory at a concentration of 0.053 mg/L and in the analytical chemistry sample at a concentration of 0.032 mg N/L.

See Table 2 for chemicals detected in the analytical chemistry samples.

See Table 3 for a complete list of chemical analyses performed.

Conclusion

The sample of effluent collected from this facility on August 13, 2002, did not show acute toxicity to either test species during the 48-hour bioassay tests.

Table 1. Data recorded during the 48-hour acute screening bioassays of a sample of effluent from the Dale Mabry AWWTP, 13055 Delwood Road, Tampa, Hillsborough County, Florida, NPDES# FL0036820, performed from 14 to 16 August 2002.

Facility:	Dale Mabry AWWTP			NPDES #	FL0036820	Facility Type:	AWWTP	Analysts:	Marshall Faircloth
Location:	13055 Delwood Road, Tampa			Contact/District:	Squitieri/SW				Joshua Ayres
County:	Hillsborough			Test type:	static acute screen				Gary Hardie
Sample Collection Date:	8/13/2002	Time:	1255	# tests:	2	Receiving Water:	Brushy Creek		
Test Beginning Date:	8/14/2002	Time:	1425	Chlorination Type:	Chlorinated		Class III fresh water		
Test Ending Date:	8/16/2002	Time:	1330		sample collected after dechlorination				
								Page 1 of 1	Reviewer: David Whiting

Organism: <i>Ceriodaphnia dubia</i>										Life stage: <24 hours					Conductivity Uncorrected µmhos/cm		LIMS		
																	Job number: TLH-2002-08-14-54-01		
		Sample/Diluent	SURVIVAL # Alive			pH			Temperature ^A			Dissolved Oxygen					sample number: 614364		
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	-	8.0	23.8	-	24.6	7.4	-	8.2	155	260	Data Transcription Verification		
Control B	0/20		5	5	5	-	-	8.2	-	-	24.6	-	-	7.9	-	220	date: 11/15/2002		
Control C	0/20		5	5	5	-	-	8.2	-	-	24.7	-	-	7.5	-	240	by: Joshua Ayres		
Control D	0/20		5	5	5	-	-	8.3	-	-	24.7	-	-	7.7	-	220	James Daniels		
100% A	20/0		5	5	5	7.4	-	8.6	24.0	-	24.7	7.4	-	7.5	740	925			
100% B	20/0		5	5	5	-	-	8.6	-	-	24.8	-	-	7.5	-	940	Total Residual CL2		
100% C	20/0		5	5	5	-	-	8.6	-	-	24.8	-	-	7.3	-	880	Field:	-	-
100% D	20/0		5	5	5	-	-	8.6	-	-	24.8	-	-	7.3	-	965	Lab:	<0.03	Hach

^A Temperatures of room and test incubator were continuously recorded on a strip chart recorder.
Room Temperature range for the test period was 23.5-25.5°C.
Incubator #3 temperature range for the test period was 25.0-26.0°C.

Organism: <i>Cyprinella leedsi</i> Life stage: 13 days														Conductivity	
	Sample/Diluent	SURVIVAL # Alive			pH			Temperature ^B			Dissolved Oxygen			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	7.9	8.2	8.4	24.7	24.0	24.4	7.1	6.8	7.6	255	280
Control B	0/500	5	5	5	7.9	8.1	8.4	24.8	24.2	24.6	7.1	6.5	7.5	260	275
Control C	0/500	5	5	5	7.9	8.2	8.4	24.8	24.4	24.5	7.1	6.6	7.6	260	270
Control D	0/500	5	5	5	7.9	8.2	8.3	24.9	24.4	24.6	7.1	6.7	7.5	260	270
100% A	500/0	5	5	5	7.4	8.0	8.3	24.7	24.4	24.6	7.1	6.4	7.3	740	780
100% B	500/0	5	5	5	7.4	8.0	8.3	24.6	24.2	24.6	7.1	6.4	7.3	770	780
100 % C	500/0	5	5	5	7.4	8.0	8.3	24.5	24.2	24.1	7.1	6.2	7.3	760	800
100% D	500/0	5	5	5	7.4	8.0	8.3	24.5	24.2	24.4	7.0	6.6	7.5	775	785

^B Temperatures of room and test incubator were continuously recorded on a strip chart recorder. Room Temperature range for the test period was 23.5-25.5°C. Incubator #3 temperature range for the test period was 25.0-26.0°C.

LIMS	
Job number:	TLH-2002-08-14-54-01
sample number:	614364
Data Transcription Verification	
date:	11/15/2002
by:	Joshua Ayres Josh Daniels

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:	0.053	<0.017

Alk & Hardness	Alkalinity (mg/L)	Hardness (mg/L)
Control water (fish):	140	130
Control water (water flea):	79	84
100% Sample:	170	185

Table 2. Results of chemical analyses on the effluent from Dale Mabry AWWTP sampled on August 13, 2002.

Metals			
Aluminum	103	ug/L	^A
Cadmium	0.066	ug/L	^I
Calcium	67.2	mg/L	^A
Copper	3.4	ug/L	^A
Iron	29	ug/L	^A
Lead	0.65	ug/L	^A
Magnesium	3.3	mg/L	^A
Zinc	53.6	ug/L	^A

Pesticides and Herbicides	
Atrazine	0.056 ug/L ^I

Nutrients	
Ammonia-N	0.032 mg N/L
Nitrates and Nitrites	0.29 mg N/L
Total Kjeldahl Nitrogen	0.77 mg N/L
Ortho-Phosphate	0.26 mg P/L
Total Phosphorous	0.28 mg P/L

Base, Neutral, & Acid Extractable Organics

None detected

^A The reported value is an average of two or more values.

^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 Dale Mabry AWWTP, sampled on August 13, 2002.

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
8/13/2002 12:55	27629	BNA-Water	1,2,4,5-Tetrachlorobenzene	0.98	ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	1,2,4-Trichlorobenzene	0.98	ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	1,2-Dichlorobenzene	0.98	ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	1,3,5-Trinitrobenzene	3.9	ug/L	U	3.9	16
8/13/2002 12:55	27629	BNA-Water	1,3-Dichlorobenzene	0.98	ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	1,3-Dinitrobenzene	2	ug/L	U	2	7.8
8/13/2002 12:55	27629	BNA-Water	1,4-Dichlorobenzene	0.98	ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	1,4-Naphthoquinone	20	ug/L	U	20	78
8/13/2002 12:55	27629	BNA-Water	1-Naphthylamine	9.8	ug/L	U	9.8	39
8/13/2002 12:55	27629	BNA-Water	2,3,4,6-Tetrachlorophenol	2	ug/L	U	2	7.8
8/13/2002 12:55	27629	BNA-Water	2,4,5-Trichlorophenol	0.98	ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	2,4,6-Trichlorophenol	0.98	ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	2,4-Dichlorophenol	0.98	ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	2,4-Dimethylphenol	49	ug/L	U	49	200
8/13/2002 12:55	27629	BNA-Water	2,4-Dinitrophenol	15	ug/L	U	15	59
8/13/2002 12:55	27629	BNA-Water	2,4-Dinitrotoluene	0.98	ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	2,6-Dichlorophenol	0.98	ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	2,6-Dinitrotoluene	0.98	ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	2-Acetylaminofluorene	0.98	ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	2-Chloronaphthalene	0.98	ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	2-Chlorophenol	0.98	ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	2-Methyl-4,6-dinitrophenol	2.9	ug/L	U	2.9	12
8/13/2002 12:55	27629	BNA-Water	2-Methylnaphthalene	0.98	ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	2-Naphthylamine	9.8	ug/L	U	9.8	39
8/13/2002 12:55	27629	BNA-Water	2-Nitroaniline	0.98	ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	2-Nitrophenol	0.98	ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	2-Picoline	0.98	ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	3,3'-Dichlorobenzidine	39	ug/L	U	39	160
8/13/2002 12:55	27629	BNA-Water	3,3'-Dimethylbenzidine	20	ug/L	U	20	78
8/13/2002 12:55	27629	BNA-Water	3-Methylcholanthrene	0.98	ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	3-Nitroaniline	0.98	ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	4,4'-DDD	1.5	ug/L	U	1.5	5.9
8/13/2002 12:55	27629	BNA-Water	4,4'-DDE	1.5	ug/L	U	1.5	5.9

8/13/2002 12:55	27629	BNA-Water	4,4'-DDT	1.5 ug/L	U	1.5	5.9
8/13/2002 12:55	27629	BNA-Water	4-Aminobiphenyl	3.9 ug/L	U	3.9	16
8/13/2002 12:55	27629	BNA-Water	4-Bromophenyl phenyl ether	0.98 ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	4-Chloro-3-methylphenol	0.98 ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	4-Chloroaniline	0.98 ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	4-Chlorophenyl phenyl ether	2 ug/L	U	2	7.8
8/13/2002 12:55	27629	BNA-Water	4-Nitroaniline	0.98 ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	4-Nitrophenol	15 ug/L	U	15	59
8/13/2002 12:55	27629	BNA-Water	5-Nitro-o-toluidine	0.98 ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	7,12-Dimethylbenz(a)anthracene	0.98 ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	Acenaphthene	0.98 ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	Acenaphthylene	0.98 ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	Acetophenone	0.98 ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	Aldrin	1.5 ug/L	U	1.5	5.9
8/13/2002 12:55	27629	BNA-Water	Aniline	0.98 ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	Anthracene	0.98 ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	Azobenzene/1,2-Diphenylhydrazine	0.98 ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	Benzidine	98 ug/L	U	98	390
8/13/2002 12:55	27629	BNA-Water	Benzo(a)anthracene	0.98 ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	Benzo(a)pyrene	0.98 ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	Benzo(b)fluoranthene	0.98 ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	Benzo(g,h,i)perylene	0.98 ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	Benzo(k)fluoranthene	0.98 ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	Benzyl alcohol	0.98 ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	Bis(2-chloroethoxy)methane	0.98 ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	Bis(2-chloroethyl)ether	0.98 ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	Bis(2-chloroisopropyl)ether	2.9 ug/L	U	2.9	12
8/13/2002 12:55	27629	BNA-Water	Bis(2-ethylhexyl)phthalate	15 ug/L	U	15	59
8/13/2002 12:55	27629	BNA-Water	Butyl benzyl phthalate	4.9 ug/L	U	4.9	20
8/13/2002 12:55	27629	BNA-Water	Chrysene	0.98 ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	Di-n-butyl phthalate	4.9 ug/L	U	4.9	20
8/13/2002 12:55	27629	BNA-Water	Di-n-octyl phthalate	0.98 ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	Dibenzo(a,h)anthracene	0.98 ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	Dibenzofuran	0.98 ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	Dieldrin	1.5 ug/L	U	1.5	5.9
8/13/2002 12:55	27629	BNA-Water	Diethyl phthalate	0.98 ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	Dimethyl phthalate	49 ug/L	U	49	200

8/13/2002 12:55	27629	BNA-Water	Dimethylaminoazobenzene	0.98 ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	Dinoseb	3.9 ug/L	U	3.9	16
8/13/2002 12:55	27629	BNA-Water	Diphenylamine	2.9 ug/L	U	2.9	12
8/13/2002 12:55	27629	BNA-Water	Endosulfan I	3.9 ug/L	U	3.9	16
8/13/2002 12:55	27629	BNA-Water	Endosulfan II	3.9 ug/L	U	3.9	16
8/13/2002 12:55	27629	BNA-Water	Endosulfan sulfate	1.5 ug/L	U	1.5	5.9
8/13/2002 12:55	27629	BNA-Water	Endrin	1.5 ug/L	U	1.5	5.9
8/13/2002 12:55	27629	BNA-Water	Endrin aldehyde	3.9 ug/L	U	3.9	16
8/13/2002 12:55	27629	BNA-Water	Ethyl methanesulfonate	0.98 ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	Fluoranthene	0.98 ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	Fluorene	0.98 ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	Heptachlor	1.5 ug/L	U	1.5	5.9
8/13/2002 12:55	27629	BNA-Water	Heptachlor epoxide	1.5 ug/L	U	1.5	5.9
8/13/2002 12:55	27629	BNA-Water	Hexachlorobenzene	0.98 ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	Hexachlorobutadiene	2.9 ug/L	U	2.9	12
8/13/2002 12:55	27629	BNA-Water	Hexachlorocyclopentadiene	2.9 ug/L	U	2.9	12
8/13/2002 12:55	27629	BNA-Water	Hexachloroethane	2.9 ug/L	U	2.9	12
8/13/2002 12:55	27629	BNA-Water	Hexachloropropene	2 ug/L	U	2	7.8
8/13/2002 12:55	27629	BNA-Water	Indeno(1,2,3-cd)pyrene	0.98 ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	Isophorone	0.98 ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	Isosafrole	0.98 ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	Methapyrilene	3.9 ug/L	U	3.9	16
8/13/2002 12:55	27629	BNA-Water	Methyl methanesulfonate	0.98 ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	N-Nitrosodi-n-butylamine	0.98 ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	N-Nitrosodi-n-propylamine	2 ug/L	U	2	7.8
8/13/2002 12:55	27629	BNA-Water	N-Nitrosodiethylamine	0.98 ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	N-Nitrosodimethylamine	2 ug/L	U	2	7.8
8/13/2002 12:55	27629	BNA-Water	N-Nitrosodiphenylamine	2.9 ug/L	U	2.9	12
8/13/2002 12:55	27629	BNA-Water	N-Nitrosomethylethylamine	2 ug/L	U	2	7.8
8/13/2002 12:55	27629	BNA-Water	N-Nitrosomorpholine	0.98 ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	N-Nitrosopiperidine	0.98 ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	N-Nitrosopyrrolidine	2 ug/L	U	2	7.8
8/13/2002 12:55	27629	BNA-Water	Naphthalene	0.98 ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	Nitrobenzene	2 ug/L	U	2	7.8
8/13/2002 12:55	27629	BNA-Water	Nitroquinoline-1-oxide	20 ug/L	U	20	78
8/13/2002 12:55	27629	BNA-Water	Pentachlorobenzene	0.98 ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	Pentachloroethane	49 ug/L	U	49	200

8/13/2002 12:55	27629	BNA-Water	Pentachloronitrobenzene	0.98 ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	Pentachlorophenol	2.9 ug/L	U	2.9	12
8/13/2002 12:55	27629	BNA-Water	Phenacetin	3.9 ug/L	U	3.9	12
8/13/2002 12:55	27629	BNA-Water	Phenanthrene	0.98 ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	Phenol	0.98 ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	Pyrene	0.98 ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	Pyridine	3.9 ug/L	U	3.9	16
8/13/2002 12:55	27629	BNA-Water	Safrole	0.98 ug/L	U	0.98	3.9
8/13/2002 12:55	27629	BNA-Water	alpha-BHC	1.5 ug/L	U	1.5	5.9
8/13/2002 12:55	27629	BNA-Water	beta-BHC	1.5 ug/L	U	1.5	5.9
8/13/2002 12:55	27629	BNA-Water	delta-BHC	1.5 ug/L	U	1.5	5.9
8/13/2002 12:55	27629	BNA-Water	gamma-BHC	1.5 ug/L	U	1.5	5.9
8/13/2002 12:55	27629	BNA-Water	m,p-Cresols	2 ug/L	U	2	7.8
8/13/2002 12:55	27629	BNA-Water	o-Cresol	2 ug/L	U	2	7.8
8/13/2002 12:55	27629	BNA-Water	o-Toluidine	0.98 ug/L	U	0.98	3.9
8/13/2002 12:55	27629	GC-Water	Alachlor	0.58 ug/L	U	0.58	2.32
8/13/2002 12:55	27629	GC-Water	Ametryn	0.048 ug/L	U	0.048	0.192
8/13/2002 12:55	27629	GC-Water	Atrazine	0.056 ug/L	I	0.048	0.192
8/13/2002 12:55	27629	GC-Water	Azinphos Methyl	0.048 ug/L	U	0.048	0.192
8/13/2002 12:55	27629	GC-Water	Bromacil	0.19 ug/L	U	0.19	0.76
8/13/2002 12:55	27629	GC-Water	Butylate	0.19 ug/L	U	0.19	0.76
8/13/2002 12:55	27629	GC-Water	Chlorpyrifos Ethyl	0.048 ug/L	U	0.048	0.192
8/13/2002 12:55	27629	GC-Water	Chlorpyrifos Methyl	0.096 ug/L	U	0.096	0.384
8/13/2002 12:55	27629	GC-Water	Diazinon	0.048 ug/L	U	0.048	0.192
8/13/2002 12:55	27629	GC-Water	Ethion	0.048 ug/L	U	0.048	0.192
8/13/2002 12:55	27629	GC-Water	Ethoprop	0.096 ug/L	U	0.096	0.384
8/13/2002 12:55	27629	GC-Water	Fenamiphos	0.19 ug/L	U	0.19	0.76
8/13/2002 12:55	27629	GC-Water	Fonofos	0.096 ug/L	U	0.096	0.384
8/13/2002 12:55	27629	GC-Water	Hexazinone	0.096 ug/L	U	0.096	0.384
8/13/2002 12:55	27629	GC-Water	Malathion	0.14 ug/L	U	0.14	0.56
8/13/2002 12:55	27629	GC-Water	Metalaxyl	0.24 ug/L	U	0.24	0.96
8/13/2002 12:55	27629	GC-Water	Metolachlor	0.48 ug/L	U	0.48	1.92
8/13/2002 12:55	27629	GC-Water	Metribuzin	0.096 ug/L	U	0.096	0.384
8/13/2002 12:55	27629	GC-Water	Mevinphos	0.19 ug/L	U	0.19	0.76
8/13/2002 12:55	27629	GC-Water	Naled	0.77 ug/L	U	0.77	3.08
8/13/2002 12:55	27629	GC-Water	Norflurazon	0.096 ug/L	U	0.096	0.384
8/13/2002 12:55	27629	GC-Water	Parathion Ethyl	0.14 ug/L	U	0.14	0.56

8/13/2002 12:55	27629	GC-Water	Parathion Methyl	0.096 ug/L	U	0.096	0.384
8/13/2002 12:55	27629	GC-Water	Phorate	0.048 ug/L	U	0.048	0.192
8/13/2002 12:55	27629	GC-Water	Prometryn	0.14 ug/L	U	0.14	0.56
8/13/2002 12:55	27629	GC-Water	Simazine	0.048 ug/L	U	0.048	0.192
8/13/2002 12:55	27629	Metals-Water	Aluminum	103 ug/L	A	5	20
8/13/2002 12:55	27629	Metals-Water	Arsenic	3 ug/L	U	3	12
8/13/2002 12:55	27629	Metals-Water	Cadmium	0.066 ug/L	I	0.025	0.1
8/13/2002 12:55	27629	Metals-Water	Calcium	67.2 mg/L	A	0.02	0.08
8/13/2002 12:55	27629	Metals-Water	Chromium	2 ug/L	U	2	8
8/13/2002 12:55	27629	Metals-Water	Copper	3.4 ug/L	A	0.75	3
8/13/2002 12:55	27629	Metals-Water	Iron	29 ug/L	A	7	28
8/13/2002 12:55	27629	Metals-Water	Lead	0.65 ug/L	A	0.1	0.4
8/13/2002 12:55	27629	Metals-Water	Magnesium	3.3 mg/L	A	0.01	0.04
8/13/2002 12:55	27629	Metals-Water	Nickel	1.5 ug/L	U	1.5	6
8/13/2002 12:55	27629	Metals-Water	Selenium	1 ug/L	U	1	4
8/13/2002 12:55	27629	Metals-Water	Silver	0.02 ug/L	U	0.02	0.08
8/13/2002 12:55	27629	Metals-Water	Zinc	53.6 ug/L	A	2	8
8/13/2002 12:55	27629	Nutrients-Liquid	Ammonia-N	0.043 mg N/L		0.01	0.02
8/13/2002 12:55	27629	Nutrients-Liquid	NO2NO3-N	0.29 mg N/L		0.004	0.01
8/13/2002 12:55	27629	Nutrients-Liquid	N_KJEL_TOT	0.77 mg N/L		0.06	0.2
8/13/2002 12:55	27629	Nutrients-Liquid	O-Phosphate-P	0.26 mg P/L		0.04	0.1
8/13/2002 12:55	27629	Nutrients-Liquid	Total-P	0.28 mg P/L		0.02	0.05
8/13/2002 12:53	27630	BNA-Water	1,2,4,5-Tetrachlorobenzene	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	1,2,4-Trichlorobenzene	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	1,2-Dichlorobenzene	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	1,3,5-Trinitrobenzene	3.8 ug/L	U	3.8	15
8/13/2002 12:53	27630	BNA-Water	1,3-Dichlorobenzene	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	1,3-Dinitrobenzene	1.9 ug/L	U	1.9	7.6
8/13/2002 12:53	27630	BNA-Water	1,4-Dichlorobenzene	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	1,4-Naphthoquinone	19 ug/L	U	19	76
8/13/2002 12:53	27630	BNA-Water	1-Naphthylamine	9.5 ug/L	U	9.5	38
8/13/2002 12:53	27630	BNA-Water	2,3,4,6-Tetrachlorophenol	1.9 ug/L	U	1.9	7.6
8/13/2002 12:53	27630	BNA-Water	2,4,5-Trichlorophenol	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	2,4,6-Trichlorophenol	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	2,4-Dichlorophenol	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	2,4-Dimethylphenol	48 ug/L	U	48	190
8/13/2002 12:53	27630	BNA-Water	2,4-Dinitrophenol	14 ug/L	U	14	57

8/13/2002 12:53	27630	BNA-Water	2,4-Dinitrotoluene	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	2,6-Dichlorophenol	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	2,6-Dinitrotoluene	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	2-Acetylaminofluorene	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	2-Chloronaphthalene	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	2-Chlorophenol	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	2-Methyl-4,6-dinitrophenol	2.9 ug/L	U	2.9	11
8/13/2002 12:53	27630	BNA-Water	2-Methylnaphthalene	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	2-Naphthylamine	9.5 ug/L	U	9.5	38
8/13/2002 12:53	27630	BNA-Water	2-Nitroaniline	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	2-Nitrophenol	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	2-Picoline	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	3,3'-Dichlorobenzidine	38 ug/L	U	38	150
8/13/2002 12:53	27630	BNA-Water	3,3'-Dimethylbenzidine	19 ug/L	U	19	76
8/13/2002 12:53	27630	BNA-Water	3-Methylcholanthrene	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	3-Nitroaniline	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	4,4'-DDD	1.4 ug/L	U	1.4	5.7
8/13/2002 12:53	27630	BNA-Water	4,4'-DDE	1.4 ug/L	U	1.4	5.7
8/13/2002 12:53	27630	BNA-Water	4,4'-DDT	1.4 ug/L	U	1.4	5.7
8/13/2002 12:53	27630	BNA-Water	4-Aminobiphenyl	3.8 ug/L	U	3.8	15
8/13/2002 12:53	27630	BNA-Water	4-Bromophenyl phenyl ether	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	4-Chloro-3-methylphenol	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	4-Chloroaniline	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	4-Chlorophenyl phenyl ether	1.9 ug/L	U	1.9	7.6
8/13/2002 12:53	27630	BNA-Water	4-Nitroaniline	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	4-Nitrophenol	14 ug/L	U	14	57
8/13/2002 12:53	27630	BNA-Water	5-Nitro-o-toluidine	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	7,12-Dimethylbenz(a)anthracene	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	Acenaphthene	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	Acenaphthylene	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	Acetophenone	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	Aldrin	1.4 ug/L	U	1.4	5.7
8/13/2002 12:53	27630	BNA-Water	Aniline	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	Anthracene	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	Azobenzene/1,2-Diphenylhydrazine	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	Benzidine	95 ug/L	U	95	380
8/13/2002 12:53	27630	BNA-Water	Benzo(a)anthracene	0.95 ug/L	U	0.95	3.8

8/13/2002 12:53	27630	BNA-Water	Benzo(a)pyrene	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	Benzo(b)fluoranthene	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	Benzo(g,h,i)perylene	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	Benzo(k)fluoranthene	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	Benzyl alcohol	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	Bis(2-chloroethoxy)methane	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	Bis(2-chloroethyl)ether	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	Bis(2-chloroisopropyl)ether	2.9 ug/L	U	2.9	11
8/13/2002 12:53	27630	BNA-Water	Bis(2-ethylhexyl)phthalate	14 ug/L	U	14	57
8/13/2002 12:53	27630	BNA-Water	Butyl benzyl phthalate	4.8 ug/L	U	4.8	19
8/13/2002 12:53	27630	BNA-Water	Chrysene	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	Di-n-butyl phthalate	4.8 ug/L	U	4.8	19
8/13/2002 12:53	27630	BNA-Water	Di-n-octyl phthalate	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	Dibenzo(a,h)anthracene	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	Dibenzofuran	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	Dieldrin	1.4 ug/L	U	1.4	5.7
8/13/2002 12:53	27630	BNA-Water	Diethyl phthalate	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	Dimethyl phthalate	48 ug/L	U	48	190
8/13/2002 12:53	27630	BNA-Water	Dimethylaminoazobenzene	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	Dinoseb	3.8 ug/L	U	3.8	15
8/13/2002 12:53	27630	BNA-Water	Diphenylamine	2.9 ug/L	U	2.9	11
8/13/2002 12:53	27630	BNA-Water	Endosulfan I	3.8 ug/L	U	3.8	15
8/13/2002 12:53	27630	BNA-Water	Endosulfan II	3.8 ug/L	U	3.8	15
8/13/2002 12:53	27630	BNA-Water	Endosulfan sulfate	1.4 ug/L	U	1.4	5.7
8/13/2002 12:53	27630	BNA-Water	Endrin	1.4 ug/L	U	1.4	5.7
8/13/2002 12:53	27630	BNA-Water	Endrin aldehyde	3.8 ug/L	U	3.8	15
8/13/2002 12:53	27630	BNA-Water	Ethyl methanesulfonate	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	Fluoranthene	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	Fluorene	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	Heptachlor	1.4 ug/L	U	1.4	5.7
8/13/2002 12:53	27630	BNA-Water	Heptachlor epoxide	1.4 ug/L	U	1.4	5.7
8/13/2002 12:53	27630	BNA-Water	Hexachlorobenzene	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	Hexachlorobutadiene	2.9 ug/L	U	2.9	11
8/13/2002 12:53	27630	BNA-Water	Hexachlorocyclopentadiene	2.9 ug/L	U	2.9	11
8/13/2002 12:53	27630	BNA-Water	Hexachloroethane	2.9 ug/L	U	2.9	11
8/13/2002 12:53	27630	BNA-Water	Hexachloropropene	1.9 ug/L	U	1.9	7.6
8/13/2002 12:53	27630	BNA-Water	Indeno(1,2,3-cd)pyrene	0.95 ug/L	U	0.95	3.8

8/13/2002 12:53	27630	BNA-Water	Isophorone	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	Isosafrole	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	Methapyrilene	3.8 ug/L	U	3.8	15
8/13/2002 12:53	27630	BNA-Water	Methyl methanesulfonate	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	N-Nitrosodi-n-butylamine	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	N-Nitrosodi-n-propylamine	1.9 ug/L	U	1.9	7.6
8/13/2002 12:53	27630	BNA-Water	N-Nitrosodiethylamine	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	N-Nitrosodimethylamine	1.9 ug/L	U	1.9	7.6
8/13/2002 12:53	27630	BNA-Water	N-Nitrosodiphenylamine	2.9 ug/L	U	2.9	11
8/13/2002 12:53	27630	BNA-Water	N-Nitrosomethylethylamine	1.9 ug/L	U	1.9	7.6
8/13/2002 12:53	27630	BNA-Water	N-Nitrosomorpholine	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	N-Nitrosopiperidine	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	N-Nitrosopyrrolidine	1.9 ug/L	U	1.9	7.6
8/13/2002 12:53	27630	BNA-Water	Naphthalene	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	Nitrobenzene	1.9 ug/L	U	1.9	7.6
8/13/2002 12:53	27630	BNA-Water	Nitroquinoline-1-oxide	19 ug/L	U	19	76
8/13/2002 12:53	27630	BNA-Water	Pentachlorobenzene	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	Pentachloroethane	48 ug/L	U	48	190
8/13/2002 12:53	27630	BNA-Water	Pentachloronitrobenzene	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	Pentachlorophenol	2.9 ug/L	U	2.9	11
8/13/2002 12:53	27630	BNA-Water	Phenacetin	3.8 ug/L	U	3.8	11
8/13/2002 12:53	27630	BNA-Water	Phenanthrene	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	Phenol	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	Pyrene	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	Pyridine	3.8 ug/L	U	3.8	15
8/13/2002 12:53	27630	BNA-Water	Safrole	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	BNA-Water	alpha-BHC	1.4 ug/L	U	1.4	5.7
8/13/2002 12:53	27630	BNA-Water	beta-BHC	1.4 ug/L	U	1.4	5.7
8/13/2002 12:53	27630	BNA-Water	delta-BHC	1.4 ug/L	U	1.4	5.7
8/13/2002 12:53	27630	BNA-Water	gamma-BHC	1.4 ug/L	U	1.4	5.7
8/13/2002 12:53	27630	BNA-Water	m,p-Cresols	1.9 ug/L	U	1.9	7.6
8/13/2002 12:53	27630	BNA-Water	o-Cresol	1.9 ug/L	U	1.9	7.6
8/13/2002 12:53	27630	BNA-Water	o-Toluidine	0.95 ug/L	U	0.95	3.8
8/13/2002 12:53	27630	GC-Water	Alachlor	0.57 ug/L	U	0.57	2.28
8/13/2002 12:53	27630	GC-Water	Ametryn	0.048 ug/L	U	0.048	0.192
8/13/2002 12:53	27630	GC-Water	Atrazine	0.048 ug/L	U	0.048	0.192
8/13/2002 12:53	27630	GC-Water	Azinphos Methyl	0.048 ug/L	U	0.048	0.192

8/13/2002 12:53	27630	GC-Water	Bromacil	0.19 ug/L	U	0.19	0.76
8/13/2002 12:53	27630	GC-Water	Butylate	0.19 ug/L	U	0.19	0.76
8/13/2002 12:53	27630	GC-Water	Chlorpyrifos Ethyl	0.048 ug/L	U	0.048	0.192
8/13/2002 12:53	27630	GC-Water	Chlorpyrifos Methyl	0.095 ug/L	U	0.095	0.38
8/13/2002 12:53	27630	GC-Water	Diazinon	0.048 ug/L	U	0.048	0.192
8/13/2002 12:53	27630	GC-Water	Ethion	0.048 ug/L	U	0.048	0.192
8/13/2002 12:53	27630	GC-Water	Ethoprop	0.095 ug/L	U	0.095	0.38
8/13/2002 12:53	27630	GC-Water	Fenamiphos	0.19 ug/L	U	0.19	0.76
8/13/2002 12:53	27630	GC-Water	Fonofos	0.095 ug/L	U	0.095	0.38
8/13/2002 12:53	27630	GC-Water	Hexazinone	0.095 ug/L	U	0.095	0.38
8/13/2002 12:53	27630	GC-Water	Malathion	0.14 ug/L	U	0.14	0.56
8/13/2002 12:53	27630	GC-Water	Metalaxyl	0.24 ug/L	U	0.24	0.96
8/13/2002 12:53	27630	GC-Water	Metolachlor	0.48 ug/L	U	0.48	1.92
8/13/2002 12:53	27630	GC-Water	Metribuzin	0.095 ug/L	U	0.095	0.38
8/13/2002 12:53	27630	GC-Water	Mevinphos	0.19 ug/L	U	0.19	0.76
8/13/2002 12:53	27630	GC-Water	Naled	0.76 ug/L	U	0.76	3.04
8/13/2002 12:53	27630	GC-Water	Norflurazon	0.095 ug/L	U	0.095	0.38
8/13/2002 12:53	27630	GC-Water	Parathion Ethyl	0.14 ug/L	U	0.14	0.56
8/13/2002 12:53	27630	GC-Water	Parathion Methyl	0.095 ug/L	U	0.095	0.38
8/13/2002 12:53	27630	GC-Water	Phorate	0.048 ug/L	U	0.048	0.192
8/13/2002 12:53	27630	GC-Water	Prometryn	0.14 ug/L	U	0.14	0.56
8/13/2002 12:53	27630	GC-Water	Simazine	0.048 ug/L	U	0.048	0.192
8/13/2002 12:53	27630	Metals-Water	Aluminum	5 ug/L	U	5	20
8/13/2002 12:53	27630	Metals-Water	Arsenic	3 ug/L	U	3	12
8/13/2002 12:53	27630	Metals-Water	Cadmium	0.025 ug/L	U	0.025	0.1
8/13/2002 12:53	27630	Metals-Water	Calcium	0.02 mg/L	U	0.02	0.08
8/13/2002 12:53	27630	Metals-Water	Chromium	2 ug/L	U	2	8
8/13/2002 12:53	27630	Metals-Water	Copper	0.75 ug/L	U	0.75	3
8/13/2002 12:53	27630	Metals-Water	Iron	7 ug/L	U	7	28
8/13/2002 12:53	27630	Metals-Water	Lead	0.1 ug/L	U	0.1	0.4
8/13/2002 12:53	27630	Metals-Water	Magnesium	0.01 mg/L	U	0.01	0.04
8/13/2002 12:53	27630	Metals-Water	Nickel	1.5 ug/L	U	1.5	6
8/13/2002 12:53	27630	Metals-Water	Selenium	1 ug/L	U	1	4
8/13/2002 12:53	27630	Metals-Water	Silver	0.02 ug/L	U	0.02	0.08
8/13/2002 12:53	27630	Metals-Water	Zinc	2 ug/L	U	2	8
8/13/2002 12:53	27630	Nutrients-Liquid	Ammonia-N	0.011 mg N/L	I	0.01	0.02
8/13/2002 12:53	27630	Nutrients-Liquid	NO2NO3-N	0.004 mg N/L	U	0.004	0.01

8/13/2002 12:53	27630	Nutrients-Liquid	N_KJEL_TOT	0.06 mg N/L	U	0.06	0.2
8/13/2002 12:53	27630	Nutrients-Liquid	O-Phosphate-P	0.004 mg P/L	U	0.004	0.01
8/13/2002 12:53	27630	Nutrients-Liquid	Total-P	0.004 mg P/L	U	0.004	0.01

The Bioassay of Dale Mabry AWWTP effluent sampled on August 13, 2002, NPDES #FL0036820.

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	3	6	8	2	0	#	#	0	2	0	8	1	3	#	B	#	S	#	1

Remarks																												

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The Priority Pollutants Analysis for Bioassay of Dale Mabry AWWTP effluent sampled on August 13, 2002, NPDES #FL0036820.

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	3	6	8	2	0	#	#	0	2	0	8	1	3	#	B	#	S	#	1

Remarks																												

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