

Facility Director / Contact: Jennifer L. Bouldin, PhD
Phone: (870) 972-2570

Client: Walnut Ridge Wastewater Treatment Plant
216 Southwest 4th Street
Walnut Ridge, AR 72476

Contact: Jon Kopp
870-866-2312

NPDES Permit #: AR00 AFIN#:

Effluent Sampling Point/Type: 24hr Composite

Samples Collected:

Sample #	Sampling Times	Received	Arrival Temp
1	01/19/14 0900 hrs to 01/20/14 0900 hrs	01/20/14 1204 hrs	1.0°C
2	01/21/14 0900 hrs to 01/22/14 0900 hrs	01/22/14 1145 hrs	1.0°C
3	01/23/14 0900 hrs to 01/24/14 0900 hrs	01/24/14 1005 hrs	2.0°C

Test Methods:

7-Day Chronic Toxicity, Static renewal, Fathead minnow, EPA 821/R-02/013, Section 11

7-Day Chronic Toxicity, Static renewal, Cladoceran, EPA 821/R-02/013, Section 13

Organisms: *P. promelas* <24hrs, *C. dubia* <24hrs

Culture Source: ASU ERF

Dilutions: 0%, 32%, 42%, 56%, 80%, 100%

Critical Dilution: 100%

Statistical Method: Toxcalc 5.0.25

Results:

	<i>P. promelas</i>	<i>C. dubia</i>
NOEC Survival:	100%	100%
Pass/Fail (0=pass; 1=fail):	0	0
NOEC Growth/Reproduction:	100%	100%
Pass/Fail (0=pass; 1=fail):	0	0
Control Survival:	97.5%	80%
Control % CV Growth/Reproduction:	9.1	23.1
Critical Dilution % CV Growth/Reproduction:	9.7	41.9
Mean Weight/ # Neonates in Control:	0.4528 mg	16.4
Mean Weight/ # of Neonates in Critical Dilution:	0.5331 mg	18.1
MSDp Growth/ Reproduction	0.2401	0.5197
Daily Average Minimum NOEC:	100%	100%
7-Day Minimum NOEC:	100%	100%

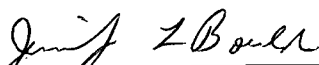
Results Summary:

Neither lethal or sublethal effects were measured in *P. promelas* or *C. dubia* exposed to treated effluent or dilution mixtures. However, the *C. dubia* test was deemed invalid due to MSDp >0.47 and %CV (critical dilution) > 40%.

QA/Reference Testing:

Data attached

Reviewed By:


Jennifer L. Bouldin, PhD
Director ASU Ecotoxicology Research Facility

1st Quarter
WET DMR

City Water Works
216 SW Fourth
Walnut Ridge AR
72476



ADEQ
NPDES Enforcement
5301 Northshore Drive
North Little Rock, AR 72118