

# LABORATORY REPORT



*"dedicated to providing quality aquatic toxicity testing"*

4350 Transport Street, Unit 107  
Ventura, CA 93003  
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CA ELAP Cert. No.: 1775

**Date:** December 14, 2015

**Client:** Yolo County District Attorney  
301 Second Street  
Woodland, CA 95695  
Attn: Heidi D'Agostino

**Laboratory No.:** A-15120808-001

**Sample Control:** The samples were received by ATL in new and unopened packaging, with the chain of custody record attached.

Date Sampled: 12/04/15  
Date Received: 12/08/15  
Date Tested: 12/09/15 to 12/13/15

**Sample Analysis:** The following analyses were performed on your sample:

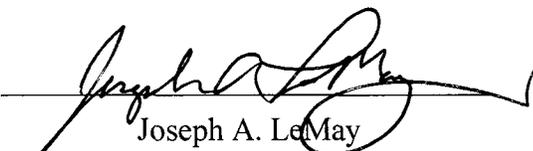
CCR Title 22 Fathead Minnow Hazardous Waste Screen Bioassay (Polisini & Miller 1988).

Attached are the test data generated from the analysis of your sample. All testing was conducted under the direct supervision of Joseph A. LeMay.

## Result Summary:

<u>Sample ID.</u>	<u>Results</u>
339A – Tulip Metallics Fabric Paint, Black	PASS (LC50 > 750 mg/l)

**Quality Control:** Reviewed and approved by:

  
Joseph A. LeMay  
Laboratory Director

**FATHEAD MINNOW HAZARDOUS WASTE  
SCREEN BIOASSAY**



Lab No.: A15120808-001

Client/ID: Yolo co. 339A Tulip Medicals Fabric Print, Black, 4 fl oz

**TEST SUMMARY**

Species: *Pimephales promelas*.  
 Fish weight (gm): av: 0.46 ; min: 0.38 ; max: 0.54.  
 Reference Toxicant: SDS conducted per batch.  
 Test chamber volume: 10 liters.  
 Temperature: 20 +/- 2°C.  
 Aeration: none, unless D.O. drops below 5.0 mg/l.  
 Number of replicates: 2.  
 Dilution water: Soft reconstituted water (40-48 mg/l CaCO<sub>3</sub>).

Source: Thomas Fish.  
 Regulations: CCR Title 22.  
 Test Protocol: California F&G/DHS 1988.  
 Endpoints: Survival at 96 hrs.  
 Test type: Static.  
 Feeding: None.  
 Number of fish per chamber: 10.  
 Photoperiod: 16/8 hrs light/dark.

**TEST DATA**

	INITIAL			24 Hr				48 Hr				72 Hr				96 Hr			
Date/Time:	12-9-15 1100			12-10-15 1100				12-11-15 1030				12-12-15 1100				12-13-15 1100			
Analyst:	P			P				P				P				P			
	°C	DO	pH	°C	DO	pH	# D	°C	DO	pH	# D	°C	DO	pH	# D	°C	DO	pH	# D
Control A	20.4	8.7	8.1	20.5	8.5	7.8	0	20.5	8.4	7.7	0	20.2	8.5	7.9	0	19.9	8.5	8.0	0
Control B	20.2	8.7	8.1	20.5	8.4	7.8	0	20.4	8.1	7.7	0	20.3	8.4	7.8	0	19.8	8.4	7.8	0
400 mg/l A	20.2	8.5	8.1	20.3	8.2	7.6	0	20.4	8.1	7.6	0	20.2	8.6	7.7	0	20.1	8.7	7.7	0
400 mg/l B	20.4	8.4	8.1	20.4	8.2	7.5	0	20.4	8.0	7.5	0	20.1	8.3	7.7	0	20.2	8.4	7.6	0
750 mg/l A	20.4	8.5	8.0	20.5	8.6	7.5	0	20.5	8.1	7.6	0	20.0	8.4	7.7	0	20.3	8.4	7.6	0
750 mg/l B	20.5	8.4	8.0	20.4	8.2	7.6	0	20.4	8.1	7.5	0	20.0	8.5	7.5	0	20.4	8.7	7.5	0

Comments: Extraction method: Mechanical shaking .  
 None (aqueous solution) NA.  
 Dissolved Oxygen (DO) readings in mg/l O<sub>2</sub>. Test Aerated: Yes / No

	CONTROL		HIGH CONCENTRATION		Total Number Dead	
	Alkalinity	Hardness	Alkalinity	Hardness	Control	400 mg/l
<b>Initial</b>	35 mg/l CaCO <sub>3</sub>	43 mg/l CaCO <sub>3</sub>	38 mg/l CaCO <sub>3</sub>	45 mg/l CaCO <sub>3</sub>	0	0
<b>Final</b>	36 mg/l CaCO <sub>3</sub>	45 mg/l CaCO <sub>3</sub>	39 mg/l CaCO <sub>3</sub>	49 mg/l CaCO <sub>3</sub>	0	0

**RESULTS**

(the checked (✓) result applies based on fish survival rates of this test; NA - not applicable)

✓	<b>PASSED</b>	LC50 > 750 mg/l (<40% dead in 750 mg/l conc.)
NA	<b>FAILED</b>	≥40% dead in 750 mg/l (close to passing - definitive test recommended)
NA	<b>FAILED</b>	LC50 < 400 mg/l (>60% dead in 400 mg/l conc.)

