LABORATORY REPORT

Aquatic Testing Laboratories
"dedicated to providing quality aquatic toxicity testing"
4350 Transport Street, Unit 107
Ventura, CA 93003
(805) 650-0546 FAX (805) 650-0756
CA DOHS ELAP Cert. No.: 1775

Date: January 6, 2014

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

Laboratory No.: A-13123001-011/020

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

Date Received: 12/30/13
Date Tested: 01/01/14 to 01/05/14

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:

Sample ID.	Results
31A- Biotin	PASS (LC50 > 750 mg/l)
32A- Red Yeast Rice	FAIL (LC50 < 400 mg/l)
33A- Echinacea	PASS (LC50 > 750 mg/l)
34A- Folic Acid	PASS (LC50 > 750 mg/l)
35A- L-Carnitine	PASS (LC50 > 750 mg/l)
36A- Ginseng	PASS (LC50 > 750 mg/l)
37A- Ginger	FAIL (LC50 < 400 mg/l)
38A- Ultimate Flora (Pro-biotic)	FAIL (>40% mortality in 750 mg/l)
39A- 5 Hour Energy	PASS (LC50 > 750 mg/l)
40A- Shape Inner Beauty	PASS (LC50 > 750 mg/l)

Quality Control: Reviewed and approved by:

Joseph A. LeMay
Laboratory Director

This report pertains only to the samples investigated and does not necessarily apply to other apparently identical or similar materials. This report is submitted for the exclusive use of the client to whom it is addressed. Any reproduction of this report or use of the Laboratory's name for advertising or publicity purpose without authorization is prohibited.

FATHEAD MINNOW HAZARDOUS WASTE SCREEN BIOASSAY

Aquatic Testing Laboratories

Lab No.: A13123001-011

Client/ID: Yolo county 03076818545
31A - Biotin

TEST SUMMARY

Species: ***Pimephales promelas***.
Fish weight (gm): av: 0.23; min: 0.21; max: 0.25.
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 $CaCO_3$).

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:	1-1-14 1045			1-2-14 1045				1-3-14 1045				1-4-14 1030				1-5-14 1030			
Analyst:	[illegible]			[illegible]				[illegible]				[illegible]				[illegible]			
	°C	DO	pH	°C	DO	pH	# D	°C	DO	pH	# D	°C	DO	pH	# D	°C	DO	pH	# D
Control A	19.9	7.9	8.0	20.1	7.5	7.9	0	20.2	7.7	8.0	0	20.2	7.1	7.8	0	19.9	7.2	8.0	0
Control B	19.8	8.0	8.1	20.1	8.3	7.9	0	20.2	8.1	8.0	0	20.2	8.1	7.8	0	19.9	7.4	7.6	0
400 mg/l A	19.7	8.6	7.8	20.0	7.3	7.6	0	20.3	7.9	7.7	0	20.3	7.8	7.6	0	20.0	7.6	7.6	0
400 mg/l B	19.8	8.7	7.8	20.2	7.5	7.7	0	20.3	8.2	7.7	0	20.3	8.1	7.6	0	20.1	8.0	7.7	0
750 mg/l A	19.7	8.7	7.7	20.4	7.8	7.6	0	20.3	8.4	7.7	0	20.5	8.3	7.5	0	20.0	7.9	7.6	1
750 mg/l B	19.7	8.5	7.6	20.2	8.3	7.6	0	20.3	8.5	7.7	0	20.4	8.4	7.5	0	20.1	7.8	7.6	0

Comments: Extraction method: Mechanical shaking ✓.
None (aqueous solution) —.
Dissolved Oxygen (DO) readings in mg/l O_2. Test Aerated: Yes / No

	CONTROL		HIGH CONCENTRATION	
	Alkalinity	Hardness	Alkalinity	Hardness
Initial	31 mg/l $CaCO_3$	45 mg/l $CaCO_3$	31 mg/l $CaCO_3$	71 mg/l $CaCO_3$
Final	31 mg/l $CaCO_3$	46 mg/l $CaCO_3$	30 mg/l $CaCO_3$	103 mg/l $CaCO_3$

Total Number Dead	
Control	0 /20
400 mg/l	0 /20
750 mg/l	1 /20

RESULTS
(the checked result applies based on fish survival rates)

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

FATHEAD MINNOW HAZARDOUS WASTE SCREEN BIOASSAY

Aquatic Testing Laboratories

Lab No.: A1312300 1-012

Client/ID: Yolo County 0743121989
32 A- Red Yeast Rice

TEST SUMMARY

Species: ***Pimephales promelas***.
Fish weight (gm): av: 0.23; min: 0.21; max: 0.25.
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 $CaCO_3$).

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:	1-1-14 1045			1-2-14 1045				1-3-14 1045				1-4-14 1030				1-5-14 1030			
Analyst:																			
	°C	DO	pH	°C	DO	pH	# D	°C	DO	pH	# D	°C	DO	pH	# D	°C	DO	pH	# D
Control A	19.9	7.9	8.0	20.1	7.5	7.9	0	20.2	7.7	8.0	0	20.2	7.1	7.8	0	19.9	7.2	8.0	0
Control B	19.8	8.0	8.1	20.1	8.3	7.9	0	20.2	8.1	8.0	0	20.2	8.1	7.8	0	19.9	7.4	7.6	0
400 mg/l A	19.6	8.1	7.8	20.2	7.5	7.9	0	20.3	7.0	7.9	0*	20.1	6.1	7.8	10	-	-	-	-
400 mg/l B	19.7	8.2	7.8	20.3	7.1	7.9	0	20.1	5.8	7.8	0*	20.2	5.6	7.5	10	-	-	-	-
750 mg/l A	19.6	8.7	7.8	20.4	7.2	7.8	0	20.2	5.9	7.7	0*	20.2	5.4	7.6	10	-	-	-	-
750 mg/l B	19.6	8.6	7.8	20.3	7.0	7.8	0	20.3	6.2	7.8	0*	20.3	5.6	7.6	10	-	-	-	-

Comments: Extraction method: Mechanical shaking ✓
None (aqueous solution) ___

* Fish under stress

Dissolved Oxygen (DO) readings in mg/l O_2. Test Aerated: (Yes) / No

	CONTROL		HIGH CONCENTRATION	
	Alkalinity	Hardness	Alkalinity	Hardness
Initial	31 mg/l $CaCO_3$	45 mg/l $CaCO_3$	25 mg/l $CaCO_3$	41 mg/l $CaCO_3$
Final	31 mg/l $CaCO_3$	46 mg/l $CaCO_3$	— mg/l $CaCO_3$	— mg/l $CaCO_3$

Total Number Dead		
Control	0	/20
400 mg/l	20	/20
750 mg/l	20	/20

RESULTS
(the checked result applies based on fish survival rates)

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

FATHEAD MINNOW HAZARDOUS WASTE SCREEN BIOASSAY

Aquatic Testing Laboratories

Lab No.: A13123001-013

Client/ID: Yolo County 0743120556 9
33A - Echinacea

TEST SUMMARY

Species: ***Pimephales promelas***.
Fish weight (gm): av: 0.23; min: 0.21; max: 0.25.
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 $CaCO_3$).

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:	1-1-14 1045			1-2-14 1045				1-3-14 1045				1-4-14 1030				1-5-14 1030			
Analyst:																			
	°C	DO	pH	°C	DO	pH	# D	°C	DO	pH	# D	°C	DO	pH	# D	°C	DO	pH	# D
Control A	19.9	7.9	8.0	20.1	7.5	7.9	0	20.2	7.7	8.0	0	20.2	7.1	7.8	0	19.9	7.2	8.0	0
Control B	19.8	8.0	8.1	20.1	8.3	7.9	0	20.2	8.1	8.0	0	20.2	8.1	7.8	0	19.9	7.4	7.6	0
400 mg/l A	19.7	8.2	7.7	20.2	5.8	7.7	0	20.5	6.1	7.8	0	20.2	5.7	7.6	0	20.1	7.1	7.7	0
400 mg/l B	19.6	8.3	7.7	20.2	6.4	7.6	0	20.6	6.0	7.8	0	20.3	7.0	7.7	0	20.1	7.2	7.7	0
750 mg/l A	19.7	8.3	7.7	20.3	5.0	7.4	0	20.7	6.2	7.7	0	20.3	7.5	7.6	0	20.1	7.3	7.8	0
750 mg/l B	19.6	8.4	7.6	20.4	5.1	7.4	0	20.4	6.3	7.6	0	20.3	7.1	7.6	0	20.0	7.4	7.7	0

Comments: Extraction method: Mechanical shaking ✓
None (aqueous solution) ___

Dissolved Oxygen (DO) readings in mg/l O_2. Test Aerated: (Yes) / No

	CONTROL		HIGH CONCENTRATION	
	Alkalinity	Hardness	Alkalinity	Hardness
Initial	31 mg/l $CaCO_3$	45 mg/l $CaCO_3$	28 mg/l $CaCO_3$	59 mg/l $CaCO_3$
Final	31 mg/l $CaCO_3$	46 mg/l $CaCO_3$	53 mg/l $CaCO_3$	91 mg/l $CaCO_3$

Total Number Dead		
Control	0	/20
400 mg/l	0	/20
750 mg/l	0	/20

RESULTS
(the checked result applies based on fish survival rates)

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

FATHEAD MINNOW HAZARDOUS WASTE SCREEN BIOASSAY

Aquatic Testing Laboratories

Lab No.: A1312 3001-014

Client/ID: Yolo County 0173390 2843
34A- Folic Acid

TEST SUMMARY

Species: ***Pimephales promelas***.
Fish weight (gm): av: 0.23 ; min: 0.21 ; max: 0.25 .
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 $CaCO_3$).

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:	1-1-14 1045			1-2-14 1045				1-3-14 1045				1-4-14 1030				1-5-14 1030			
Analyst:	Z			Z				Z				Z				Z			
	°C	DO	pH	°C	DO	pH	# D	°C	DO	pH	# D	°C	DO	pH	# D	°C	DO	pH	# D
Control A	19.9	7.9	8.0	20.1	7.5	7.9	0	20.2	7.7	8.0	0	20.2	7.1	7.8	0	19.9	7.2	8.0	0
Control B	19.8	8.0	8.1	20.1	8.3	7.9	0	20.2	8.1	8.0	0	20.2	8.1	7.8	0	19.9	7.4	7.6	0
400 mg/l A	19.7	7.3	7.8	20.0	7.4	7.7	0	20.3	7.0	7.6	0	20.2	6.8	7.6	0	20.0	6.7	7.1	0
400 mg/l B	19.6	8.0	7.8	20.1	8.2	7.7	0	20.3	7.8	7.6	0	20.2	7.6	7.5	0	20.1	7.1	7.3	0
750 mg/l A	19.6	8.2	7.8	20.2	8.3	7.7	0	20.3	8.1	7.6	0	20.3	8.1	7.5	0	20.2	7.2	7.4	0
750 mg/l B	19.7	8.3	7.7	20.2	8.3	7.7	0	20.4	8.3	7.6	0	20.3	8.3	7.5	0	20.1	7.3	7.4	0

Comments: Extraction method: Mechanical shaking ✓
None (aqueous solution) ___

Dissolved Oxygen (DO) readings in mg/l O_2. Test Aerated: (Yes) / No

	CONTROL		HIGH CONCENTRATION	
	Alkalinity	Hardness	Alkalinity	Hardness
Initial	31 mg/l $CaCO_3$	45 mg/l $CaCO_3$	38 mg/l $CaCO_3$	64 mg/l $CaCO_3$
Final	31 mg/l $CaCO_3$	46 mg/l $CaCO_3$	50 mg/l $CaCO_3$	76 mg/l $CaCO_3$

Total Number Dead		
Control	0	/20
400 mg/l	0	/20
750 mg/l	0	/20

RESULTS
(the checked result applies based on fish survival rates)

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

FATHEAD MINNOW HAZARDOUS WASTE SCREEN BIOASSAY

Aquatic Testing Laboratories

Lab No.: A13123001-015

Client/ID: Yolo county 017339 01684
3SA - L-Carnitine

TEST SUMMARY

Species: ***Pimephales promelas***.
Fish weight (gm): av: 0.23; min: 0.21; max: 0.25.
Reference Toxicant: SDS conducted monthly.
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 $CaCO_3$).

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:	1-1-14 1045			1-2-14 1045				1-3-14 1045				1-4-14 1030				1-5-14 1030			
Analyst:																			
	°C	DO	pH	°C	DO	pH	# D	°C	DO	pH	# D	°C	DO	pH	# D	°C	DO	pH	# D
Control A	19.9	7.9	8.0	20.1	7.5	7.9	0	20.2	7.7	8.0	0	20.2	7.1	7.8	0	19.9	7.2	8.0	0
Control B	19.8	8.0	8.1	20.1	8.3	7.9	0	20.2	8.1	8.0	0	20.2	8.1	7.8	0	19.9	7.4	7.6	0
400 mg/l A	19.8	8.1	5.5*	20.1	7.5	7.0	0	20.2	8.0	7.9	0	20.3	7.0	7.9	0	20.1	8.3	7.1	0
400 mg/l B	19.7	7.9	5.5*	20.2	8.1	7.1	0	20.2	8.1	7.9	0	20.4	8.2	7.9	0	20.2	8.2	7.0	0
750 mg/l A	19.7	7.8	5.5*	20.2	8.1	7.3	0	20.3	8.4	8.0	0	20.5	8.2	7.9	0	20.3	8.3	7.0	0
750 mg/l B	19.8	8.0	5.5*	20.3	8.2	7.5	0	20.4	8.5	7.0	0	20.5	8.2	7.8	0	20.2	8.2	7.0	0
pH Control	19.8	8.0	5.5*	20.2	8.1	5.7	0	20.4	8.3	5.7	0	20.3	8.1	5.7	0	20.3	8.1	5.7	0

Comments: Extraction method: Mechanical shaking ✓.
None (aqueous solution) —.
* pH adjusted to 5.5
initial pH 3.2

Dissolved Oxygen (DO) readings in mg/l O_2. Test Aerated: Yes / No pH Control adjusted with HCl/NaOH to pH similar to sample tanks

	CONTROL		HIGH CONCENTRATION	
	Alkalinity	Hardness	Alkalinity	Hardness
Initial	31 mg/l $CaCO_3$	45 mg/l $CaCO_3$	16 mg/l $CaCO_3$	41 mg/l $CaCO_3$
Final	31 mg/l $CaCO_3$	46 mg/l $CaCO_3$	17 mg/l $CaCO_3$	43 mg/l $CaCO_3$

Total Number Dead		
Control	0	/20
400 mg/l	0	/20
750 mg/l	0	/20

RESULTS
(the checked result applies based on fish survival rates)

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

FATHEAD MINNOW HAZARDOUS WASTE SCREEN BIOASSAY

Aquatic Testing Laboratories

Lab No.: A13123001-016

Client/ID: Yolo County 07431211932
36A- Ginseng

TEST SUMMARY

Species: ***Pimephales promelas***.
Fish weight (gm): av: 0.23; min: 0.21; max: 0.25.
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 $CaCO_3$).

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:	1-1-14 1045			1-2-14 1045				1-3-14 1045				1-4-14 1030				1-5-14 1030			
Analyst:	[illegible]			[illegible]				[illegible]				[illegible]				[illegible]			
	°C	DO	pH	°C	DO	pH	# D	°C	DO	pH	# D	°C	DO	pH	# D	°C	DO	pH	# D
Control A	19.9	7.9	8.0	20.1	7.5	7.9	0	20.2	7.7	8.0	0	20.2	7.1	7.8	0	19.9	7.2	8.0	0
Control B	19.8	8.0	8.1	20.1	8.3	7.9	0	20.2	8.1	8.0	0	20.2	8.1	7.8	0	19.9	7.4	7.6	0
400 mg/l A	19.7	7.4	7.3	20.1	5.7	7.7	0	20.2	6.5	7.7	0	20.2	5.7	7.7	0	20.1	6.7	7.6	0
400 mg/l B	19.6	8.2	7.1	20.2	5.6	7.7	0	20.3	6.7	7.7	0	20.3	6.6	7.7	0	20.2	8.0	7.4	0
750 mg/l A	19.6	8.3	7.0	20.2	5.7	7.6	0	20.3	7.2	7.6	0	20.4	5.6	6.8	1*	20.3	6.9	7.6	3
750 mg/l B	19.7	8.7	7.0	20.2	5.6	7.7	0	20.3	6.2	7.4	0	20.4	5.3	6.3	0*	20.2	6.0	7.0	2

Comments: Extraction method: Mechanical shaking ✓.
None (aqueous solution) ✓.
Dissolved Oxygen (DO) readings in mg/l O_2. Test Aerated: Yes / No

*Fish understress

	CONTROL		HIGH CONCENTRATION	
	Alkalinity	Hardness	Alkalinity	Hardness
Initial	31 mg/l $CaCO_3$	45 mg/l $CaCO_3$	31 mg/l $CaCO_3$	41 mg/l $CaCO_3$
Final	31 mg/l $CaCO_3$	46 mg/l $CaCO_3$	19 mg/l $CaCO_3$	51 mg/l $CaCO_3$

Total Number Dead	
Control	0 /20
400 mg/l	0 /20
750 mg/l	6 /20

RESULTS
(the checked result applies based on fish survival rates)

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

FATHEAD MINNOW HAZARDOUS WASTE SCREEN BIOASSAY

Aquatic Testing Laboratories

Lab No.: A1312-3001-017

Client/ID: Yolo County 0336741310B
37A - Grayson

TEST SUMMARY

Species: ***Pimephales promelas***.
Fish weight (gm): av: 0.23; min: 0.21; max: 0.25.
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 $CaCO_3$).

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:	1-1-14 1045			1-2-14 1045				1-3-14 1045				1-4-14 1030				1-5-14 1030			
Analyst:																			
	°C	DO	pH	°C	DO	pH	# D	°C	DO	pH	# D	°C	DO	pH	# D	°C	DO	pH	# D
Control A	19.9	7.9	8.0	20.1	7.5	7.9	0	20.2	7.7	8.0	0	20.2	7.1	7.8	0	19.9	7.2	8.0	0
Control B	19.8	8.0	8.1	20.1	8.3	7.9	0	20.2	8.1	8.0	0	20.2	8.1	7.8	0	19.9	7.4	7.6	0
400 mg/l A	19.7	8.0	7.0	20.4	5.8	7.7	10	-	-	-	-	-	-	-	-	-	-	-	-
400 mg/l B	19.6	8.2	7.0	20.2	6.1	7.6	10	-	-	-	-	-	-	-	-	-	-	-	-
750 mg/l A	19.6	8.1	7.1	20.2	6.0	7.6	10	-	-	-	-	-	-	-	-	-	-	-	-
750 mg/l B	19.6	8.2	7.0	20.2	6.1	7.5	10	-	-	-	-	-	-	-	-	-	-	-	-

Comments: Extraction method: Mechanical shaking ✓
None (aqueous solution) ✓

Dissolved Oxygen (DO) readings in mg/l O_2. Test Aerated: (Yes) / No

	CONTROL		HIGH CONCENTRATION	
	Alkalinity	Hardness	Alkalinity	Hardness
Initial	31 mg/l $CaCO_3$	45 mg/l $CaCO_3$	25 mg/l $CaCO_3$	47 mg/l $CaCO_3$
Final	31 mg/l $CaCO_3$	46 mg/l $CaCO_3$	— mg/l $CaCO_3$	— mg/l $CaCO_3$

Total Number Dead		
Control	0	/20
400 mg/l	20	/20
750 mg/l	20	/20

RESULTS
(the checked result applies based on fish survival rates)

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

FATHEAD MINNOW HAZARDOUS WASTE SCREEN BIOASSAY

Aquatic Testing Laboratories

Lab No.: A13123001-018

Client/ID: Yolo county 63125753550
38A - Ultimate Flora (Pro-Biotic)

TEST SUMMARY

Species: ***Pimephales promelas***.
Fish weight (gm): av: 0.23; min: 0.21; max: 0.25.
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 $CaCO_3$).

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:	1-1-14 1045			1-2-14 1045				1-3-14 1045				1-4-14 1030				1-5-14 1030			
Analyst:	[illegible]			[illegible]				[illegible]				[illegible]				[illegible]			
	°C	DO	pH	°C	DO	pH	# D	°C	DO	pH	# D	°C	DO	pH	# D	°C	DO	pH	# D
Control A	19.9	7.9	8.0	20.1	7.5	7.9	0	20.2	7.7	8.0	0	20.2	7.1	7.8	0	19.9	7.2	8.0	0
Control B	19.8	8.0	8.1	20.1	8.3	7.9	0	20.2	8.1	8.0	0	20.2	8.1	7.8	0	19.9	7.4	7.6	0
400 mg/l A	19.7	8.2	7.0	20.1	4.5*	7.1	1	20.3	6.9	7.7	0	20.2	6.6	7.7	0	20.1	6.5	7.6	0
400 mg/l B	19.6	8.3	7.0	20.2	4.3*	7.2	2	20.3	8.0	7.7	0	20.2	7.7	7.6	1	20.0	6.7	7.6	0
750 mg/l A	19.7	8.3	7.1	20.1	4.0*	7.2	6	20.3	7.7	7.5	0	20.4	8.0	7.6	2	20.1	6.7	7.7	0
750 mg/l B	19.6	8.4	6.9	20.2	4.0*	7.1	4	20.3	7.6	7.3	1	20.4	7.9	7.4	3	20.0	6.8	7.6	0

Comments: Extraction method: Mechanical shaking ✓. * D.O. increased to maximum
None (aqueous solution) —.
Dissolved Oxygen (DO) readings in mg/l O_2. Test Aerated: Yes / No

	CONTROL		HIGH CONCENTRATION	
	Alkalinity	Hardness	Alkalinity	Hardness
Initial	31 mg/l $CaCO_3$	45 mg/l $CaCO_3$	18 mg/l $CaCO_3$	44 mg/l $CaCO_3$
Final	31 mg/l $CaCO_3$	46 mg/l $CaCO_3$	43 mg/l $CaCO_3$	52 mg/l $CaCO_3$

Total Number Dead	
Control	0 /20
400 mg/l	4 /20
750 mg/l	16 /20

RESULTS
(the checked result applies based on fish survival rates)

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

FATHEAD MINNOW HAZARDOUS WASTE SCREEN BIOASSAY

Aquatic Testing Laboratories

Lab No.: A13123001-019

Client/ID: Yolo county 7194105 0001
39A - 5 Hour Energy

TEST SUMMARY

Species: ***Pimephales promelas***.
Fish weight (gm): av: 0.23; min: 0.21; max: 0.25.
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 $CaCO_3$).

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:	1-1-14 1045			1-2-14 1045				1-3-14 1045				1-4-14 1030				1-5-14 1030			
Analyst:	Z			Z				Z				Z				Z			
	°C	DO	pH	°C	DO	pH	# D	°C	DO	pH	# D	°C	DO	pH	# D	°C	DO	pH	# D
Control A	19.9	7.9	8.0	20.1	7.5	7.9	0	20.2	7.7	8.0	0	20.2	7.1	7.8	0	19.9	7.2	8.0	0
Control B	19.8	8.0	8.1	20.1	8.3	7.9	0	20.2	8.1	8.0	0	20.2	8.1	7.8	0	19.9	7.4	7.6	0
400 mg/l A	19.7	7.3	7.3	20.1	7.3	7.7	0	20.1	7.1	7.8	0	20.3	7.2	7.9	0	20.1	7.5	7.6	0
400 mg/l B	19.6	8.1	7.1	20.2	8.0	7.7	0	20.2	8.1	7.8	0	20.3	7.4	7.8	0	20.2	7.6	7.5	0
750 mg/l A	19.7	8.1	7.0	20.1	8.1	7.7	0	20.2	8.0	7.7	0	20.4	7.3	7.8	0	20.3	7.6	7.5	0
750 mg/l B	19.6	8.2	7.1	20.1	8.0	7.7	0	20.3	8.2	7.7	0	20.4	7.3	7.9	0	20.2	7.6	7.6	0

Comments: Extraction method: Mechanical shaking ✓
None (aqueous solution) ___

Dissolved Oxygen (DO) readings in mg/l O_2. Test Aerated: (Yes) / No

	CONTROL		HIGH CONCENTRATION	
	Alkalinity	Hardness	Alkalinity	Hardness
Initial	31 mg/l $CaCO_3$	45 mg/l $CaCO_3$	23 mg/l $CaCO_3$	45 mg/l $CaCO_3$
Final	31 mg/l $CaCO_3$	46 mg/l $CaCO_3$	25 mg/l $CaCO_3$	46 mg/l $CaCO_3$

Total Number Dead		
Control	0	/20
400 mg/l	0	/20
750 mg/l	0	/20

RESULTS
(the checked result applies based on fish survival rates)

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

FATHEAD MINNOW HAZARDOUS WASTE SCREEN BIOASSAY

Aquatic Testing Laboratories

Lab No.: A13123001-020

Client/ID: Yolo County 0350460 85643
40A - Shape Inner Beauty

TEST SUMMARY

Species: ***Pimephales promelas***.
Fish weight (gm): av: 0.23; min: 0.21; max: 0.25.
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 $CaCO_3$).

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:	1-1-14 1045			1-2-14 1045				1-3-14 1045				1-4-14 1030				1-5-14 1030			
Analyst:																			
	°C	DO	pH	°C	DO	pH	# D	°C	DO	pH	# D	°C	DO	pH	# D	°C	DO	pH	# D
Control A	19.9	7.9	8.0	20.1	7.5	7.9	0	20.2	7.7	8.0	0	20.2	7.1	7.9	0	19.9	7.2	8.0	0
Control B	19.8	8.0	8.1	20.1	8.3	7.9	0	20.2	8.1	8.0	0	20.2	8.1	7.8	0	19.9	7.4	7.6	0
400 mg/l A	19.7	8.3	7.0	20.1	7.3	7.8	0	20.2	6.3	7.9	0	20.3	6.5	7.8	0	20.1	6.5	7.4	0
400 mg/l B	19.6	8.4	7.1	20.2	8.1	7.8	0	20.1	6.3	7.8	0	20.3	7.0	7.7	0	20.0	6.3	7.4	0
750 mg/l A	19.6	8.5	7.0	20.4	8.0	7.8	0	20.1	6.3	7.9	0	20.4	7.0	7.3	0	20.1	7.7	7.5	2
750 mg/l B	19.7	8.3	7.0	20.4	8.0	7.7	0	20.1	6.4	7.8	0	20.4	7.0	7.4	0	20.2	7.0	7.5	0

Comments: Extraction method: Mechanical shaking ✓
None (aqueous solution) ___

Dissolved Oxygen (DO) readings in mg/l O_2. Test Aerated: (Yes) / No

	CONTROL		HIGH CONCENTRATION	
	Alkalinity	Hardness	Alkalinity	Hardness
Initial	31 mg/l $CaCO_3$	45 mg/l $CaCO_3$	18 mg/l $CaCO_3$	42 mg/l $CaCO_3$
Final	31 mg/l $CaCO_3$	46 mg/l $CaCO_3$	32 mg/l $CaCO_3$	44 mg/l $CaCO_3$

Total Number Dead		
Control	0	/20
400 mg/l	0	/20
750 mg/l	2	/20

RESULTS
(the checked result applies based on fish survival rates)

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

OFFICE OF THE DISTRICT ATTORNEY
SAN JOAQUIN COUNTY

222 E. Weber Avenue, Suite 678, Stockton, CA 95202
P.O. Box 990, Stockton, California 95201
Telephone: (209) 468-2400 Fax: (209) 468-0314

Please send results to:
Name: Investigator Heidi D'Agostino
Email: heidi.dagostino@yolocounty.org
Fax: 530-666-8423

Testing Facility
Facility name: Aquatic Testing Laboratories
Facility address: 4350 Transport Street, Unit 107, Ventura, CA 93003
Facility contact: Joseph A. LeMay

CHAIN OF CUSTODY RECORD

L1 Sample Number	Description	Manufacturer	CVS Item#	UPC	Strength	Main Ingredient / Or Usage / NOTES	Date sampled	Time sampled	Sample container description: Method of sampling: Composite (C) Grab (G)	Size of sample container (include units)	Type of sample container: Glass (G) Plastic (P) Metal tube (MT) VOA (V)	Evidence tape: Yes (Y) No (N)	Transported in iced cooler: Yes (Y) No (N)	Required analysis: 96-hour fish bioassay
21A	EAS Lean Protein Powder	EAS / Myoplex	883522	079108362405	n/a	Whey Protein / Muscle/Energy/Immune Support			n/a	200g (min)	P	N	N	X
22A	Milk Thistle	Nature's Bounty	239041	07431204549	250mg	Silymarin for liver function; also anti-oxidant			n/a	200g (min)	P	N	N	X
23A	Garlic	Nature's Bounty	239027	07431241682	2000mg	Heart/Cardiovascular; also anti-oxident			n/a	200g (min)	P	N	N	X
24A	Ginkgo	Nature's Bounty	239028	07431204544	120mg	Circulation, memory; also anti-oxidant			n/a	200g (min)	P	N	N	X
25A	Saw Palmetto (softgels)	Nature's Way	704022	03367462800	Standardized 85-95% Fatty Acids	(Serenoa repens) Prostate health			n/a	200g (min)	P	N	N	X
26A	Magnesium	Sundown Naturals	723289	03076830173	500mg	Bone & muscle health			n/a	200g (min)	P	N	N	X
27A	Potasium Gluconate	Nature's Bounty	149893	07431201110	595mg	Muscle activity, nerve transmission			n/a	200g (min)	P	N	N	X
28B	Cod Liver Oil	Radiance	501038	01733907743	1000mg	Vit A, D: Eye, Skin, Immune Health			n/a	200g (min)	P	N	N	X
29A	Zinc	Nature's Bounty	149928	07431202060	50mg	Immune System			n/a	200g (min)	P	N	N	X
30A	Aloe	Nature's Way	923838	03367410150	550mg	Aloe ferox (latex), Fennel, Beet			n/a	200g (min)	P	N	N	X
31A	Biotin	Sundown Naturals	718217	03076818545	7500mcg	Promotes Energy Metabolism			n/a	200g (min)	P	N	N	X
32A	Red Yeast Rice	Nature's Bounty	711206	07431219989	600mg	Rice powder			n/a	200g (min)	P	N	N	X
33A	Echinacea	Nature's Bounty	328329	07431205569	400mg	Immune System			n/a	200g (min)	P	N	N	X
34A	Folic Acid	Radiance	500978	01733902843	800mcg	Cardiovascular health, Pre-natal			n/a	200g (min)	P	N	N	X
35A	L-Carnitine	Radiance	501060	01733901684	500mg	Assists in the breakdown of fat			n/a	200g (min)	P	N	N	X
36A	Ginseng	Nature's Bounty	239032	07431211932	300mg 50mg 50mg	Energy & Immune Function (Ginseng flavonoids)			n/a	200g (min)	P	N	N	X
37A	Ginger	Nature's Way	938060	03367413108	550mg	Digestion			n/a	200g (min)	P	N	N	X
38A	Ultimate Flora (Pro-biotic)	Renew Life	724030	063125753550	cultures; 10 strains	Digestion / immune Support			n/a	200g (min)	P	N	N	X
39A	5 Hour Energy	5-Hour Brand	484226	071941050009	1.93 oz. "shot"	Energy			n/a	200g (min)	P	N	N	X
40A	Shape Inner Beauty Liquid Collagen with Biotin	Media Brands LLC		035046085643	16 oz.				n/a	200g (min)	P	N	N	X

NOTE: All Samples were taken at 222 E. Weber Ave., Room 678, Stockton, CA 95202

	Name	Title	Date	Time	Remarks
Relinquished by:	[signature]	DA / I.C.	12/30/2013	1030A	ALL NEW & UNOPENED
Received by:	[signature]	ATL	12-30-2013	1030	
Relinquished by:					
Received by:					
Relinquished by:					
Received by:					