



Calscience



WORK ORDER NUMBER: 16-03-0698

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AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Yolo County District Attorney's Office

Client Project Name: Bioassay Testing

Attention: Heidi D'Agostino
301 Second Street
Woodland, CA 95695-3415

Approved for release on 04/08/2016 by:
Don Burley
Project Manager

ResultLink ▶

Email your PM ▶



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Work Order Number: 16-03-0698

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Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 03/09/16. They were assigned to Work Order 16-03-0698.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of ≤ 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.



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Sample Summary

Client: Yolo County District Attorney's Office
301 Second Street
Woodland, CA 95695-3415

Work Order: 16-03-0698
Project Name: Bioassay Testing
PO Number:
Date/Time Received: 03/09/16 15:55
Number of Containers: 29

Attn: Heidi D'Agostino

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
381B	16-03-0698-1	03/07/16 10:30	1	Solid
382B	16-03-0698-2	03/07/16 10:30	1	Solid
383B	16-03-0698-3	03/07/16 10:30	1	Solid
384B	16-03-0698-4	03/07/16 10:30	1	Solid
385B	16-03-0698-5	03/07/16 10:30	1	Solid
386B	16-03-0698-6	03/07/16 10:30	1	Solid
387B	16-03-0698-7	03/07/16 10:30	1	Solid
388B	16-03-0698-8	03/07/16 10:30	1	Solid
389B	16-03-0698-9	03/07/16 10:30	1	Solid
390B	16-03-0698-10	03/07/16 10:30	1	Solid
391B	16-03-0698-11	03/07/16 10:30	1	Solid
392B	16-03-0698-12	03/07/16 10:30	1	Solid
393B	16-03-0698-13	03/07/16 10:30	1	Solid
394B	16-03-0698-14	03/07/16 10:30	1	Solid
395B	16-03-0698-15	03/07/16 10:30	1	Solid
396B	16-03-0698-16	03/07/16 10:30	1	Solid
397B	16-03-0698-17	03/07/16 10:30	1	Solid
398B	16-03-0698-18	03/07/16 10:30	1	Solid
399B	16-03-0698-19	03/07/16 10:30	1	Solid
400B	16-03-0698-20	03/07/16 10:30	1	Solid
401B	16-03-0698-21	03/07/16 10:30	1	Solid
402B	16-03-0698-22	03/07/16 10:30	1	Solid
403B	16-03-0698-23	03/07/16 10:30	2	Solid
404B	16-03-0698-24	03/07/16 10:30	5	Solid



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Analytical Report

Yolo County District Attorney's Office
301 Second Street
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Date Received: 03/09/16
Work Order: 16-03-0698
Preparation: N/A
Method: CA Fish and Game

Project: Bioassay Testing

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Test Species:	Fathead Minnow (<i>Pimephales Promelas</i>)	Mean Length:	43 mm	Mean Weight:	0.47 g
Sample Collected:	03/07/16 10:30:00	Sample Received:	03/09/16 15:55:00		
Test Start:	03/10/16 15:00:00	Test End:	03/14/16 15:00:00		

Initial Water Quality Parameters

Residual Chlorine:	< 0.01 mg/L	Temperature:	19.8 °C
pH:	7.79 units	Conductivity:	910 umhos/cm
Dissolved Oxygen (D.O.):	7.24 mg/L	Alkalinity:	194 mg/L
Hardness:	42 mg/L	Ammonia:	N/A

Sample Preparation

The sample was adjusted to test temperature.

Sample Adjustment During Analysis

No Supplemental aeration needed.

If needed, supplemental aeration to maintain required Dissolved Oxygen level is supplied via a low pressure oil-free pump connected to individual lines for each tank/chamber from a common manifold. Individual valves at each tank/chamber control the flow rate as required.

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date/Time Analyzed	QC Batch ID
381B	16-03-0698-1	03/07/16	Solid	03/10/16	03/14/16 15:00:00	

Parameter	Result	Units
Bioassay 750 mg/L (% Mortality)	0	%
Bioassay 250 mg/L (% Mortality)	0	%

Laboratory Notes

Sample was received within recommended holding time.

All testing was within method protocol.

LC 50 Results

SRT sample (mg/L):	24.50
Upper 95% confidence limit:	26.00
Lower 95% confidence limit:	23.00

SRT: Standard Reference Toxicant.



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Analytical Report

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Date Received: 03/09/16
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Preparation: N/A
Method: CA Fish and Game

Project: Bioassay Testing

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Test Species:	Fathead Minnow (<i>Pimephales Promelas</i>)	Mean Length:	43 mm	Mean Weight:	0.47 g
Sample Collected:	03/07/16 10:30:00	Sample Received:	03/09/16 15:55:00		
Test Start:	03/10/16 15:00:00	Test End:	03/14/16 15:00:00		

Initial Water Quality Parameters

Residual Chlorine:	< 0.01 mg/L	Temperature:	19.8 °C
pH:	7.77 units	Conductivity:	910 umhos/cm
Dissolved Oxygen (D.O.):	7.19 mg/L	Alkalinity:	194 mg/L
Hardness:	42 mg/L	Ammonia:	N/A

Sample Preparation

The sample was adjusted to test temperature.

Sample Adjustment During Analysis

No Supplemental aeration needed.

If needed, supplemental aeration to maintain required Dissolved Oxygen level is supplied via a low pressure oil-free pump connected to individual lines for each tank/chamber from a common manifold. Individual valves at each tank/chamber control the flow rate as required.

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date/Time Analyzed	QC Batch ID
382B	16-03-0698-2	03/07/16	Solid	03/10/16	03/14/16 15:00:00	

Parameter	Result	Units
Bioassay 750 mg/L (% Mortality)	0	%
Bioassay 250 mg/L (% Mortality)	0	%

Laboratory Notes

Sample was received within recommended holding time.

All testing was within method protocol.

LC 50 Results

SRT sample (mg/L):	24.50
Upper 95% confidence limit:	26.00
Lower 95% confidence limit:	23.00

SRT: Standard Reference Toxicant.

Analytical Report

Yolo County District Attorney's Office
 301 Second Street
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Date Received: 03/09/16
 Work Order: 16-03-0698
 Preparation: N/A
 Method: CA Fish and Game

Project: Bioassay Testing

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Test Species:	Fathead Minnow (<i>Pimephales Promelas</i>)	Mean Length:	43 mm	Mean Weight:	0.47 g
Sample Collected:	03/07/16 10:30:00	Sample Received:	03/09/16 15:55:00		
Test Start:	03/10/16 16:00:00	Test End:	03/14/16 16:00:00		

Initial Water Quality Parameters

Residual Chlorine:	< 0.01 mg/L	Temperature:	19.8 °C
pH:	7.76 units	Conductivity:	910 umhos/cm
Dissolved Oxygen (D.O.):	7.17 mg/L	Alkalinity:	194 mg/L
Hardness:	42 mg/L	Ammonia:	N/A

Sample Preparation

The sample was adjusted to test temperature.

Sample Adjustment During Analysis

No Supplemental aeration needed.

If needed, supplemental aeration to maintain required Dissolved Oxygen level is supplied via a low pressure oil-free pump connected to individual lines for each tank/chamber from a common manifold. Individual valves at each tank/chamber control the flow rate as required.

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date/Time Analyzed	QC Batch ID
383B	16-03-0698-3	03/07/16	Solid	03/10/16	03/14/16 16:00:00	

Parameter	Result	Units
Bioassay 750 mg/L (% Mortality)	0	%
Bioassay 250 mg/L (% Mortality)	0	%

Laboratory Notes

Sample was received within recommended holding time.

All testing was within method protocol.

LC 50 Results

SRT sample (mg/L):	24.50
Upper 95% confidence limit:	26.00
Lower 95% confidence limit:	23.00

SRT: Standard Reference Toxicant.

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Yolo County District Attorney's Office
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Date Received: 03/09/16
 Work Order: 16-03-0698
 Preparation: N/A
 Method: CA Fish and Game

Project: Bioassay Testing

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Test Species:	Fathead Minnow (Pimephales Promelas)	Mean Length:	43 mm	Mean Weight:	0.47 g
Sample Collected:	03/07/16 10:30:00	Sample Received:	03/09/16 15:55:00		
Test Start:	03/10/16 16:00:00	Test End:	03/14/16 16:00:00		

Initial Water Quality Parameters

Residual Chlorine:	< 0.01 mg/L	Temperature:	19.8 °C
pH:	7.78 units	Conductivity:	910 umhos/cm
Dissolved Oxygen (D.O.):	7.22 mg/L	Alkalinity:	194 mg/L
Hardness:	42 mg/L	Ammonia:	N/A

Sample Preparation

The sample was adjusted to test temperature.

Sample Adjustment During Analysis

No Supplemental aeration needed.

If needed, supplemental aeration to maintain required Dissolved Oxygen level is supplied via a low pressure oil-free pump connected to individual lines for each tank/chamber from a common manifold. Individual valves at each tank/chamber control the flow rate as required.

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date/Time Analyzed	QC Batch ID
384B	16-03-0698-4	03/07/16	Solid	03/10/16	03/14/16 16:00:00	

Parameter	Result	Units
Bioassay 750 mg/L (% Mortality)	0	%
Bioassay 250 mg/L (% Mortality)	0	%

Laboratory Notes

Sample was received within recommended holding time.

All testing was within method protocol.

LC 50 Results

SRT sample (mg/L):	24.50
Upper 95% confidence limit:	26.00
Lower 95% confidence limit:	23.00

SRT: Standard Reference Toxicant.

Analytical Report

Yolo County District Attorney's Office
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Date Received: 03/09/16
 Work Order: 16-03-0698
 Preparation: N/A
 Method: CA Fish and Game

Project: Bioassay Testing

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Test Species:	Fathead Minnow (<i>Pimephales Promelas</i>)	Mean Length:	43 mm	Mean Weight:	0.47 g
Sample Collected:	03/07/16 10:30:00	Sample Received:	03/09/16 15:55:00		
Test Start:	03/10/16 15:00:00	Test End:	06/14/16 15:00:00		

Initial Water Quality Parameters

Residual Chlorine:	< 0.01 mg/L	Temperature:	19.8 °C
pH:	7.68 units	Conductivity:	910 umhos/cm
Dissolved Oxygen (D.O.):	7.2 mg/L	Alkalinity:	190 mg/L
Hardness:	42 mg/L	Ammonia:	N/A

Sample Preparation

The sample was adjusted to test temperature.

Sample Adjustment During Analysis

No Supplemental aeration needed.

If needed, supplemental aeration to maintain required Dissolved Oxygen level is supplied via a low pressure oil-free pump connected to individual lines for each tank/chamber from a common manifold. Individual valves at each tank/chamber control the flow rate as required.

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date/Time Analyzed	QC Batch ID
385B	16-03-0698-5	03/07/16	Solid	03/10/16	06/14/16 15:00:00	

Parameter	Result	Units
Bioassay 750 mg/L (% Mortality)	0	%
Bioassay 250 mg/L (% Mortality)	0	%

Laboratory Notes

Sample was received within recommended holding time.

All testing was within method protocol.

LC 50 Results

SRT sample (mg/L):	24.50
Upper 95% confidence limit:	26.00
Lower 95% confidence limit:	23.00

SRT: Standard Reference Toxicant.



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Yolo County District Attorney's Office
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Date Received: 03/09/16
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Test Species:	Fathead Minnow (<i>Pimephales Promelas</i>)	Mean Length:	43 mm	Mean Weight:	0.47 g
Sample Collected:	03/07/16 10:30:00	Sample Received:	03/09/16 15:55:00		
Test Start:	03/10/16 15:00:00	Test End:	03/14/16 15:00:00		

Initial Water Quality Parameters

Residual Chlorine:	< 0.01 mg/L	Temperature:	19.8 °C
pH:	8.41 units	Conductivity:	910 umhos/cm
Dissolved Oxygen (D.O.):	7.17 mg/L	Alkalinity:	214 mg/L
Hardness:	42 mg/L	Ammonia:	N/A

Sample Preparation

The sample was adjusted to test temperature.

Sample Adjustment During Analysis

No Supplemental aeration needed.

If needed, supplemental aeration to maintain required Dissolved Oxygen level is supplied via a low pressure oil-free pump connected to individual lines for each tank/chamber from a common manifold. Individual valves at each tank/chamber control the flow rate as required.

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date/Time Analyzed	QC Batch ID
386B	16-03-0698-6	03/07/16	Solid	03/10/16	03/14/16 15:00:00	

Parameter	Result	Units
Bioassay 750 mg/L (% Mortality)	30	%
Bioassay 250 mg/L (% Mortality)	0	%

Laboratory Notes

Sample was received within recommended holding time.

All testing was within method protocol.

LC 50 Results

SRT sample (mg/L):	24.50
Upper 95% confidence limit:	26.00
Lower 95% confidence limit:	23.00

SRT: Standard Reference Toxicant.

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Yolo County District Attorney's Office
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Date Received: 03/09/16
Work Order: 16-03-0698
Preparation: N/A
Method: CA Fish and Game

Project: Bioassay Testing

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Test Species:	Fathead Minnow (<i>Pimephales Promelas</i>)	Mean Length:	43 mm	Mean Weight:	0.47 g
Sample Collected:	03/07/16 10:30:00	Sample Received:	03/09/16 15:55:00		
Test Start:	03/10/16 15:00:00	Test End:	03/14/16 15:00:00		

Initial Water Quality Parameters

Residual Chlorine:	< 0.01 mg/L	Temperature:	19.8 °C
pH:	7.78 units	Conductivity:	910 umhos/cm
Dissolved Oxygen (D.O.):	7.21 mg/L	Alkalinity:	194 mg/L
Hardness:	42 mg/L	Ammonia:	N/A

Sample Preparation

The sample was adjusted to test temperature.

Sample Adjustment During Analysis

No Supplemental aeration needed.

If needed, supplemental aeration to maintain required Dissolved Oxygen level is supplied via a low pressure oil-free pump connected to individual lines for each tank/chamber from a common manifold. Individual valves at each tank/chamber control the flow rate as required.

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date/Time Analyzed	QC Batch ID
387B	16-03-0698-7	03/07/16	Solid	03/10/16	03/14/16 15:00:00	

Parameter	Result	Units
Bioassay 750 mg/L (% Mortality)	0	%
Bioassay 250 mg/L (% Mortality)	0	%

Laboratory Notes

Sample was received within recommended holding time.

All testing was within method protocol.

LC 50 Results

SRT sample (mg/L):	24.50
Upper 95% confidence limit:	26.00
Lower 95% confidence limit:	23.00

SRT: Standard Reference Toxicant.



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Analytical Report

Yolo County District Attorney's Office
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Date Received: 03/09/16
Work Order: 16-03-0698
Preparation: N/A
Method: CA Fish and Game

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Test Species:	Fathead Minnow (<i>Pimephales Promelas</i>)	Mean Length:	43 mm	Mean Weight:	0.47 g
Sample Collected:	03/07/16 10:30:00	Sample Received:	03/09/16 15:55:00		
Test Start:	03/10/16 15:00:00	Test End:	03/14/16 15:00:00		

Initial Water Quality Parameters

Residual Chlorine:	< 0.01 mg/L	Temperature:	19.8 °C
pH:	7.8 units	Conductivity:	920 umhos/cm
Dissolved Oxygen (D.O.):	7.22 mg/L	Alkalinity:	200 mg/L
Hardness:	42 mg/L	Ammonia:	N/A

Sample Preparation

The sample was adjusted to test temperature.

Sample Adjustment During Analysis

No Supplemental aeration needed.

If needed, supplemental aeration to maintain required Dissolved Oxygen level is supplied via a low pressure oil-free pump connected to individual lines for each tank/chamber from a common manifold. Individual valves at each tank/chamber control the flow rate as required.

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date/Time Analyzed	QC Batch ID
388B	16-03-0698-8	03/07/16	Solid	03/10/16	03/14/16 15:00:00	

Parameter	Result	Units
Bioassay 750 mg/L (% Mortality)	100	%
Bioassay 250 mg/L (% Mortality)	15	%

Laboratory Notes

Sample was received within recommended holding time.

All testing was within method protocol.

LC 50 Results

SRT sample (mg/L):	24.50
Upper 95% confidence limit:	26.00
Lower 95% confidence limit:	23.00

SRT: Standard Reference Toxicant.

Analytical Report

Yolo County District Attorney's Office
 301 Second Street
 Woodland, CA 95695-3415

Date Received: 03/09/16
 Work Order: 16-03-0698
 Preparation: N/A
 Method: CA Fish and Game

Project: Bioassay Testing

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Test Species:	Fathead Minnow (<i>Pimephales Promelas</i>)	Mean Length:	44 mm	Mean Weight:	0.48 g
Sample Collected:	03/07/16 10:30:00	Sample Received:	03/09/16 15:55:00		
Test Start:	03/12/16 17:00:00	Test End:	03/16/16 17:00:00		

Initial Water Quality Parameters

Residual Chlorine:	< 0.01 mg/L	Temperature:	20 °C
pH:	7.85 units	Conductivity:	910 umhos/cm
Dissolved Oxygen (D.O.):	7.15 mg/L	Alkalinity:	196 mg/L
Hardness:	42 mg/L	Ammonia:	N/A

Sample Preparation

The sample was adjusted to test temperature.

Sample Adjustment During Analysis

No Supplemental aeration needed.

If needed, supplemental aeration to maintain required Dissolved Oxygen level is supplied via a low pressure oil-free pump connected to individual lines for each tank/chamber from a common manifold. Individual valves at each tank/chamber control the flow rate as required.

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date/Time Analyzed	QC Batch ID
389B	16-03-0698-9	03/07/16	Solid	03/12/16	03/16/16 17:00:00	

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Bioassay 750 mg/L (% Mortality)	55	%
Bioassay 250 mg/L (% Mortality)	0	%

Laboratory Notes

Sample was received within recommended holding time.

All testing was within method protocol.

LC 50 Results

SRT sample (mg/L):	22.50
Upper 95% confidence limit:	23.90
Lower 95% confidence limit:	21.10

SRT: Standard Reference Toxicant.



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Date Received: 03/09/16
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Preparation: N/A
Method: CA Fish and Game

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Test Species:	Fathead Minnow (<i>Pimephales Promelas</i>)	Mean Length:	44 mm	Mean Weight:	0.48 g
Sample Collected:	03/07/16 10:30:00	Sample Received:	03/09/16 15:55:00		
Test Start:	03/12/16 17:00:00	Test End:	03/16/16 17:00:00		

Initial Water Quality Parameters

Residual Chlorine:	< 0.01 mg/L	Temperature:	20 °C
pH:	7.84 units	Conductivity:	910 umhos/cm
Dissolved Oxygen (D.O.):	7.15 mg/L	Alkalinity:	196 mg/L
Hardness:	42 mg/L	Ammonia:	N/A

Sample Preparation

The sample was adjusted to test temperature.

Sample Adjustment During Analysis

No Supplemental aeration needed.

If needed, supplemental aeration to maintain required Dissolved Oxygen level is supplied via a low pressure oil-free pump connected to individual lines for each tank/chamber from a common manifold. Individual valves at each tank/chamber control the flow rate as required.

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date/Time Analyzed	QC Batch ID
390B	16-03-0698-10	03/07/16	Solid	03/12/16	03/16/16 17:00:00	

Parameter	Result	Units
Bioassay 750 mg/L (% Mortality)	0	%
Bioassay 250 mg/L (% Mortality)	0	%

Laboratory Notes

Sample was received within recommended holding time.

All testing was within method protocol.

LC 50 Results

SRT sample (mg/L):	22.50
Upper 95% confidence limit:	23.90
Lower 95% confidence limit:	21.10

SRT: Standard Reference Toxicant.



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Test Species:	Fathead Minnow (<i>Pimephales Promelas</i>)	Mean Length:	44 mm	Mean Weight:	0.48 g
Sample Collected:	03/07/16 10:30:00	Sample Received:	03/09/16 15:55:00		
Test Start:	03/12/16 17:00:00	Test End:	03/16/16 17:00:00		

Initial Water Quality Parameters

Residual Chlorine:	< 0.01 mg/L	Temperature:	20 °C
pH:	7.84 units	Conductivity:	910 umhos/cm
Dissolved Oxygen (D.O.):	7.13 mg/L	Alkalinity:	198 mg/L
Hardness:	42 mg/L	Ammonia:	N/A

Sample Preparation

The sample was adjusted to test temperature.

Sample Adjustment During Analysis

No Supplemental aeration needed.

If needed, supplemental aeration to maintain required Dissolved Oxygen level is supplied via a low pressure oil-free pump connected to individual lines for each tank/chamber from a common manifold. Individual valves at each tank/chamber control the flow rate as required.

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date/Time Analyzed	QC Batch ID
391B	16-03-0698-11	03/07/16	Solid	03/12/16	03/16/16 17:00:00	

Parameter	Result	Units
Bioassay 750 mg/L (% Mortality)	100	%
Bioassay 250 mg/L (% Mortality)	100	%

Laboratory Notes

Sample was received within recommended holding time.

All testing was within method protocol.

LC 50 Results

SRT sample (mg/L):	22.50
Upper 95% confidence limit:	23.90
Lower 95% confidence limit:	21.10

SRT: Standard Reference Toxicant.



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Date Received: 03/09/16
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Preparation: N/A
Method: CA Fish and Game

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Test Species:	Fathead Minnow (<i>Pimephales Promelas</i>)	Mean Length:	44 mm	Mean Weight:	0.48 g
Sample Collected:	03/07/16 10:30:00	Sample Received:	03/09/16 15:55:00		
Test Start:	03/12/16 17:00:00	Test End:	03/16/16 17:00:00		

Initial Water Quality Parameters

Residual Chlorine:	< 0.01 mg/L	Temperature:	20 °C
pH:	7.83 units	Conductivity:	920 umhos/cm
Dissolved Oxygen (D.O.):	7.18 mg/L	Alkalinity:	200 mg/L
Hardness:	42 mg/L	Ammonia:	N/A

Sample Preparation

The sample was adjusted to test temperature.

Sample Adjustment During Analysis

No Supplemental aeration needed.

If needed, supplemental aeration to maintain required Dissolved Oxygen level is supplied via a low pressure oil-free pump connected to individual lines for each tank/chamber from a common manifold. Individual valves at each tank/chamber control the flow rate as required.

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date/Time Analyzed	QC Batch ID
392B	16-03-0698-12	03/07/16	Solid	03/12/16	03/16/16 17:00:00	

Parameter	Result	Units
Bioassay 750 mg/L (% Mortality)	0	%
Bioassay 250 mg/L (% Mortality)	0	%

Laboratory Notes

Sample was received within recommended holding time.

All testing was within method protocol.

LC 50 Results

SRT sample (mg/L):	22.50
Upper 95% confidence limit:	23.90
Lower 95% confidence limit:	21.10

SRT: Standard Reference Toxicant.



Calscience

Analytical Report

Yolo County District Attorney's Office
301 Second Street
Woodland, CA 95695-3415

Date Received: 03/09/16
Work Order: 16-03-0698
Preparation: N/A
Method: CA Fish and Game

Project: Bioassay Testing

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Test Species:	Fathead Minnow (Pimephales Promelas)	Mean Length:	44 mm	Mean Weight:	0.48 g
Sample Collected:	03/07/16 10:30:00	Sample Received:	03/09/16 15:55:00		
Test Start:	03/12/16 17:00:00	Test End:	03/16/16 17:00:00		

Initial Water Quality Parameters

Residual Chlorine:	< 0.01 mg/L	Temperature:	20 °C
pH:	7.84 units	Conductivity:	930 umhos/cm
Dissolved Oxygen (D.O.):	7.17 mg/L	Alkalinity:	202 mg/L
Hardness:	42 mg/L	Ammonia:	N/A

Sample Preparation

The sample was adjusted to test temperature.

Sample Adjustment During Analysis

No Supplemental aeration needed.

If needed, supplemental aeration to maintain required Dissolved Oxygen level is supplied via a low pressure oil-free pump connected to individual lines for each tank/chamber from a common manifold. Individual valves at each tank/chamber control the flow rate as required.

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date/Time Analyzed	QC Batch ID
393B	16-03-0698-13	03/07/16	Solid	03/12/16	03/16/16 17:00:00	

Parameter	Result	Units
Bioassay 750 mg/L (% Mortality)	0	%
Bioassay 250 mg/L (% Mortality)	0	%

Laboratory Notes

Sample was received within recommended holding time.

All testing was within method protocol.

LC 50 Results

SRT sample (mg/L):	22.50
Upper 95% confidence limit:	23.90
Lower 95% confidence limit:	21.10

SRT: Standard Reference Toxicant.

Analytical Report

Yolo County District Attorney's Office
301 Second Street
Woodland, CA 95695-3415

Date Received: 03/09/16
Work Order: 16-03-0698
Preparation: N/A
Method: CA Fish and Game

Project: Bioassay Testing

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Test Species:	Fathead Minnow (<i>Pimephales Promelas</i>)	Mean Length:	44 mm	Mean Weight:	0.47 g
Sample Collected:	03/07/16 10:30:00	Sample Received:	03/09/16 15:55:00		
Test Start:	03/17/16 16:00:00	Test End:	03/21/16 16:00:00		

Initial Water Quality Parameters

Residual Chlorine:	< 0.01 mg/L	Temperature:	19.9 °C
pH:	7.82 units	Conductivity:	910 umhos/cm
Dissolved Oxygen (D.O.):	7.21 mg/L	Alkalinity:	196 mg/L
Hardness:	42 mg/L	Ammonia:	N/A

Sample Preparation

The sample was adjusted to test temperature.

Sample Adjustment During Analysis

No Supplemental aeration needed.

If needed, supplemental aeration to maintain required Dissolved Oxygen level is supplied via a low pressure oil-free pump connected to individual lines for each tank/chamber from a common manifold. Individual valves at each tank/chamber control the flow rate as required.

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date/Time Analyzed	QC Batch ID
394B	16-03-0698-14	03/07/16	Solid	03/17/16	03/21/16 16:00:00	

Parameter	Result	Units
Bioassay 750 mg/L (% Mortality)	0	%
Bioassay 250 mg/L (% Mortality)	0	%

Laboratory Notes

Sample was received within recommended holding time.

All testing was within method protocol.

LC 50 Results

SRT sample (mg/L):	25.00
Upper 95% confidence limit:	26.40
Lower 95% confidence limit:	23.60

SRT: Standard Reference Toxicant.



Calscience

Analytical Report

Yolo County District Attorney's Office
301 Second Street
Woodland, CA 95695-3415

Date Received: 03/09/16
Work Order: 16-03-0698
Preparation: N/A
Method: CA Fish and Game

Project: Bioassay Testing

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Test Species:	Fathead Minnow (<i>Pimephales Promelas</i>)	Mean Length:	44 mm	Mean Weight:	0.47 g
Sample Collected:	03/07/16 10:30:00	Sample Received:	03/09/16 15:55:00		
Test Start:	03/17/16 16:00:00	Test End:	03/21/16 16:00:00		

Initial Water Quality Parameters

Residual Chlorine:	< 0.01 mg/L	Temperature:	19.9 °C
pH:	7.82 units	Conductivity:	910 umhos/cm
Dissolved Oxygen (D.O.):	7.17 mg/L	Alkalinity:	198 mg/L
Hardness:	42 mg/L	Ammonia:	N/A

Sample Preparation

The sample was adjusted to test temperature.

Sample Adjustment During Analysis

No Supplemental aeration needed.

If needed, supplemental aeration to maintain required Dissolved Oxygen level is supplied via a low pressure oil-free pump connected to individual lines for each tank/chamber from a common manifold. Individual valves at each tank/chamber control the flow rate as required.

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date/Time Analyzed	QC Batch ID
395B	16-03-0698-15	03/07/16	Solid	03/17/16	03/21/16 16:00:00	

Parameter	Result	Units
Bioassay 750 mg/L (% Mortality)	100	%
Bioassay 250 mg/L (% Mortality)	100	%

Laboratory Notes

Sample was received within recommended holding time.

All testing was within method protocol.

LC 50 Results

SRT sample (mg/L):	25.00
Upper 95% confidence limit:	26.40
Lower 95% confidence limit:	23.60

SRT: Standard Reference Toxicant.

Analytical Report

Yolo County District Attorney's Office
 301 Second Street
 Woodland, CA 95695-3415

Date Received: 03/09/16
 Work Order: 16-03-0698
 Preparation: N/A
 Method: CA Fish and Game

Project: Bioassay Testing

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Test Species:	Fathead Minnow (Pimephales Promelas)	Mean Length:	44 mm	Mean Weight:	0.47 g
Sample Collected:	03/07/16 10:30:00	Sample Received:	03/09/16 15:55:00		
Test Start:	03/17/16 16:00:00	Test End:	03/21/16 16:00:00		

Initial Water Quality Parameters

Residual Chlorine:	< 0.01 mg/L	Temperature:	19.9 °C
pH:	7.81 units	Conductivity:	910 umhos/cm
Dissolved Oxygen (D.O.):	7.18 mg/L	Alkalinity:	198 mg/L
Hardness:	42 mg/L	Ammonia:	N/A

Sample Preparation

The sample was adjusted to test temperature.

Sample Adjustment During Analysis

No Supplemental aeration needed.

If needed, supplemental aeration to maintain required Dissolved Oxygen level is supplied via a low pressure oil-free pump connected to individual lines for each tank/chamber from a common manifold. Individual valves at each tank/chamber control the flow rate as required.

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date/Time Analyzed	QC Batch ID
396B	16-03-0698-16	03/07/16	Solid	03/17/16	03/21/16 16:00:00	

Parameter	Result	Units
Bioassay 750 mg/L (% Mortality)	0	%
Bioassay 250 mg/L (% Mortality)	0	%

Laboratory Notes

Sample was received within recommended holding time.

All testing was within method protocol.

LC 50 Results

SRT sample (mg/L):	25.00
Upper 95% confidence limit:	26.40
Lower 95% confidence limit:	23.60

SRT: Standard Reference Toxicant.



Calscience

Analytical Report

Yolo County District Attorney's Office
301 Second Street
Woodland, CA 95695-3415

Date Received: 03/09/16
Work Order: 16-03-0698
Preparation: N/A
Method: CA Fish and Game

Project: Bioassay Testing

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Test Species:	Fathead Minnow (<i>Pimephales Promelas</i>)	Mean Length:	44 mm	Mean Weight:	0.47 g
Sample Collected:	03/07/16 10:30:00	Sample Received:	03/09/16 15:55:00		
Test Start:	03/17/16 16:00:00	Test End:	03/21/16 16:00:00		

Initial Water Quality Parameters

Residual Chlorine:	< 0.01 mg/L	Temperature:	19.9 °C
pH:	7.83 units	Conductivity:	910 umhos/cm
Dissolved Oxygen (D.O.):	7.15 mg/L	Alkalinity:	196 mg/L
Hardness:	42 mg/L	Ammonia:	N/A

Sample Preparation

The sample was adjusted to test temperature.

Sample Adjustment During Analysis

No Supplemental aeration needed.

If needed, supplemental aeration to maintain required Dissolved Oxygen level is supplied via a low pressure oil-free pump connected to individual lines for each tank/chamber from a common manifold. Individual valves at each tank/chamber control the flow rate as required.

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date/Time Analyzed	QC Batch ID
397B	16-03-0698-17	03/07/16	Solid	03/17/16	03/21/16 16:00:00	

Parameter	Result	Units
Bioassay 750 mg/L (% Mortality)	0	%
Bioassay 250 mg/L (% Mortality)	0	%

Laboratory Notes

Sample was received within recommended holding time.

All testing was within method protocol.

LC 50 Results

SRT sample (mg/L):	25.00
Upper 95% confidence limit:	26.40
Lower 95% confidence limit:	23.60

SRT: Standard Reference Toxicant.



Calscience

Analytical Report

Yolo County District Attorney's Office
301 Second Street
Woodland, CA 95695-3415

Date Received: 03/09/16
Work Order: 16-03-0698
Preparation: N/A
Method: CA Fish and Game

Project: Bioassay Testing

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Test Species:	Fathead Minnow (<i>Pimephales Promelas</i>)	Mean Length:	44 mm	Mean Weight:	0.47 g
Sample Collected:	03/07/16 10:30:00	Sample Received:	03/09/16 15:55:00		
Test Start:	03/17/16 16:00:00	Test End:	03/21/16 16:00:00		

Initial Water Quality Parameters

Residual Chlorine:	< 0.01 mg/L	Temperature:	19.9 °C
pH:	7.82 units	Conductivity:	910 umhos/cm
Dissolved Oxygen (D.O.):	7.16 mg/L	Alkalinity:	196 mg/L
Hardness:	42 mg/L	Ammonia:	N/A

Sample Preparation

The sample was adjusted to test temperature.

Sample Adjustment During Analysis

No Supplemental aeration needed.

If needed, supplemental aeration to maintain required Dissolved Oxygen level is supplied via a low pressure oil-free pump connected to individual lines for each tank/chamber from a common manifold. Individual valves at each tank/chamber control the flow rate as required.

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date/Time Analyzed	QC Batch ID
398B	16-03-0698-18	03/07/16	Solid	03/17/16	03/21/16 16:00:00	

Parameter	Result	Units
Bioassay 750 mg/L (% Mortality)	0	%
Bioassay 250 mg/L (% Mortality)	0	%

Laboratory Notes

LC 50 Results

SRT sample (mg/L): 25.00
Upper 95% confidence limit: 26.40
Lower 95% confidence limit: 23.60

SRT: Standard Reference Toxicant.



Calscience

Analytical Report

Yolo County District Attorney's Office
301 Second Street
Woodland, CA 95695-3415

Date Received: 03/09/16
Work Order: 16-03-0698
Preparation: N/A
Method: CA Fish and Game

Project: Bioassay Testing

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Test Species:	Fathead Minnow (<i>Pimephales Promelas</i>)	Mean Length:	44 mm	Mean Weight:	0.47 g
Sample Collected:	03/07/16 10:30:00	Sample Received:	03/09/16 15:55:00		
Test Start:	03/17/16 16:00:00	Test End:	03/21/16 16:00:00		

Initial Water Quality Parameters

Residual Chlorine:	< 0.01 mg/L	Temperature:	19.9 °C
pH:	7.84 units	Conductivity:	910 umhos/cm
Dissolved Oxygen (D.O.):	7.21 mg/L	Alkalinity:	196 mg/L
Hardness:	42 mg/L	Ammonia:	N/A

Sample Preparation

The sample was adjusted to test temperature.

Sample Adjustment During Analysis

No Supplemental aeration needed.

If needed, supplemental aeration to maintain required Dissolved Oxygen level is supplied via a low pressure oil-free pump connected to individual lines for each tank/chamber from a common manifold. Individual valves at each tank/chamber control the flow rate as required.

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date/Time Analyzed	QC Batch ID
399B	16-03-0698-19	03/07/16	Solid	03/17/16	03/21/16 16:00:00	

Parameter	Result	Units
Bioassay 750 mg/L (% Mortality)	0	%
Bioassay 250 mg/L (% Mortality)	0	%

Laboratory Notes

Sample was received within recommended holding time.

All testing was within method protocol.

LC 50 Results

SRT sample (mg/L):	25.00
Upper 95% confidence limit:	26.40
Lower 95% confidence limit:	23.60

SRT: Standard Reference Toxicant.



Calscience

Analytical Report

Yolo County District Attorney's Office
301 Second Street
Woodland, CA 95695-3415

Date Received: 03/09/16
Work Order: 16-03-0698
Preparation: N/A
Method: CA Fish and Game

Project: Bioassay Testing

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Test Species:	Fathead Minnow (Pimephales Promelas)	Mean Length:	44 mm	Mean Weight:	0.47 g
Sample Collected:	03/07/16 10:30:00	Sample Received:	03/09/16 15:55:00		
Test Start:	03/17/16 16:00:00	Test End:	03/21/16 16:00:00		

Initial Water Quality Parameters

Residual Chlorine:	< 0.01 mg/L	Temperature:	19.9 °C
pH:	7.82 units	Conductivity:	940 umhos/cm
Dissolved Oxygen (D.O.):	7.17 mg/L	Alkalinity:	204 mg/L
Hardness:	44 mg/L	Ammonia:	N/A

Sample Preparation

The sample was adjusted to test temperature.

Sample Adjustment During Analysis

No Supplemental aeration needed.

If needed, supplemental aeration to maintain required Dissolved Oxygen level is supplied via a low pressure oil-free pump connected to individual lines for each tank/chamber from a common manifold. Individual valves at each tank/chamber control the flow rate as required.

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date/Time Analyzed	QC Batch ID
400B	16-03-0698-20	03/07/16	Solid	03/17/16	03/21/16 16:00:00	

Parameter	Result	Units
Bioassay 750 mg/L (% Mortality)	0	%
Bioassay 250 mg/L (% Mortality)	0	%

Laboratory Notes

Sample was received within recommended holding time.

All testing was within method protocol.

LC 50 Results

SRT sample (mg/L):	25.00
Upper 95% confidence limit:	26.40
Lower 95% confidence limit:	23.60

SRT: Standard Reference Toxicant.



Calscience

Analytical Report

Yolo County District Attorney's Office
301 Second Street
Woodland, CA 95695-3415

Date Received: 03/09/16
Work Order: 16-03-0698
Preparation: N/A
Method: CA Fish and Game

Project: Bioassay Testing

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Test Species:	Fathead Minnow (<i>Pimephales Promelas</i>)	Mean Length:	43 mm	Mean Weight:	0.46 g
Sample Collected:	03/07/16 10:30:00	Sample Received:	03/09/16 15:55:00		
Test Start:	03/18/16 18:00:00	Test End:	03/22/16 18:00:00		

Initial Water Quality Parameters

Residual Chlorine:	< 0.01 mg/L	Temperature:	19.9 °C
pH:	7.84 units	Conductivity:	930 umhos/cm
Dissolved Oxygen (D.O.):	7.13 mg/L	Alkalinity:	202 mg/L
Hardness:	44 mg/L	Ammonia:	N/A

Sample Preparation

The sample was adjusted to test temperature.

Sample Adjustment During Analysis

No Supplemental aeration needed.

If needed, supplemental aeration to maintain required Dissolved Oxygen level is supplied via a low pressure oil-free pump connected to individual lines for each tank/chamber from a common manifold. Individual valves at each tank/chamber control the flow rate as required.

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date/Time Analyzed	QC Batch ID
401B	16-03-0698-21	03/07/16	Solid	03/18/16	03/22/16 18:00:00	

Parameter	Result	Units
Bioassay 750 mg/L (% Mortality)	95	%
Bioassay 250 mg/L (% Mortality)	0	%

Laboratory Notes

Sample was received within recommended holding time.

All testing was within method protocol.

LC 50 Results

SRT sample (mg/L):	23.00
Upper 95% confidence limit:	23.30
Lower 95% confidence limit:	22.70

SRT: Standard Reference Toxicant.



Calscience

Analytical Report

Yolo County District Attorney's Office
301 Second Street
Woodland, CA 95695-3415

Date Received: 03/09/16
Work Order: 16-03-0698
Preparation: N/A
Method: CA Fish and Game

Project: Bioassay Testing

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Test Species:	Fathead Minnow (<i>Pimephales Promelas</i>)	Mean Length:	43 mm	Mean Weight:	0.46 g
Sample Collected:	03/07/16 10:30:00	Sample Received:	03/09/16 15:55:00		
Test Start:	03/18/16 18:00:00	Test End:	03/22/16 18:00:00		

Initial Water Quality Parameters

Residual Chlorine:	< 0.01 mg/L	Temperature:	19.9 °C
pH:	7.82 units	Conductivity:	910 umhos/cm
Dissolved Oxygen (D.O.):	7.16 mg/L	Alkalinity:	196 mg/L
Hardness:	42 mg/L	Ammonia:	N/A

Sample Preparation

The sample was adjusted to test temperature.

Sample Adjustment During Analysis

No Supplemental aeration needed.

If needed, supplemental aeration to maintain required Dissolved Oxygen level is supplied via a low pressure oil-free pump connected to individual lines for each tank/chamber from a common manifold. Individual valves at each tank/chamber control the flow rate as required.

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date/Time Analyzed	QC Batch ID
402B	16-03-0698-22	03/07/16	Solid	03/18/16	03/22/16 18:00:00	

Parameter	Result	Units
Bioassay 750 mg/L (% Mortality)	0	%
Bioassay 250 mg/L (% Mortality)	0	%

Laboratory Notes

Sample was received within recommended holding time.

All testing was within method protocol.

LC 50 Results

SRT sample (mg/L):	23.00
Upper 95% confidence limit:	23.30
Lower 95% confidence limit:	22.70

SRT: Standard Reference Toxicant.



Calscience

Analytical Report

Yolo County District Attorney's Office
301 Second Street
Woodland, CA 95695-3415

Date Received: 03/09/16
Work Order: 16-03-0698
Preparation: N/A
Method: CA Fish and Game

Project: Bioassay Testing

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Test Species:	Fathead Minnow (<i>Pimephales Promelas</i>)	Mean Length:	43 mm	Mean Weight:	0.46 g
Sample Collected:	03/07/16 10:30:00	Sample Received:	03/09/16 15:55:00		
Test Start:	03/18/16 18:00:00	Test End:	03/22/16 18:00:00		

Initial Water Quality Parameters

Residual Chlorine:	< 0.01 mg/L	Temperature:	19.9 °C
pH:	7.83 units	Conductivity:	920 umhos/cm
Dissolved Oxygen (D.O.):	7.2 mg/L	Alkalinity:	200 mg/L
Hardness:	42 mg/L	Ammonia:	N/A

Sample Preparation

The sample was adjusted to test temperature.

Sample Adjustment During Analysis

No Supplemental aeration needed.

If needed, supplemental aeration to maintain required Dissolved Oxygen level is supplied via a low pressure oil-free pump connected to individual lines for each tank/chamber from a common manifold. Individual valves at each tank/chamber control the flow rate as required.

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date/Time Analyzed	QC Batch ID
403B	16-03-0698-23	03/07/16	Solid	03/18/16	03/22/16 18:00:00	

Parameter	Result	Units
Bioassay 750 mg/L (% Mortality)	0	%
Bioassay 250 mg/L (% Mortality)	0	%

Laboratory Notes

Sample was received within recommended holding time.

All testing was within method protocol.

LC 50 Results

SRT sample (mg/L):	23.00
Upper 95% confidence limit:	23.30
Lower 95% confidence limit:	22.70

SRT: Standard Reference Toxicant.



Calscience

Analytical Report

Yolo County District Attorney's Office
301 Second Street
Woodland, CA 95695-3415

Date Received: 03/09/16
Work Order: 16-03-0698
Preparation: N/A
Method: CA Fish and Game

Project: Bioassay Testing

Page 24 of 24

Test Species:	Fathead Minnow (<i>Pimephales Promelas</i>)	Mean Length:	43 mm	Mean Weight:	0.46 g
Sample Collected:	03/07/16 10:30:00	Sample Received:	03/09/16 15:55:00		
Test Start:	03/18/16 18:00:00	Test End:	03/22/16 18:00:00		

Initial Water Quality Parameters

Residual Chlorine:	< 0.01 mg/L	Temperature:	19.9 °C
pH:	7.83 units	Conductivity:	910 umhos/cm
Dissolved Oxygen (D.O.):	7.16 mg/L	Alkalinity:	198 mg/L
Hardness:	42 mg/L	Ammonia:	N/A

Sample Preparation

The sample was adjusted to test temperature.

Sample Adjustment During Analysis

No Supplemental aeration needed.

If needed, supplemental aeration to maintain required Dissolved Oxygen level is supplied via a low pressure oil-free pump connected to individual lines for each tank/chamber from a common manifold. Individual valves at each tank/chamber control the flow rate as required.

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date/Time Analyzed	QC Batch ID
404B	16-03-0698-24	03/07/16	Solid	03/18/16	03/22/16 18:00:00	

Parameter	Result	Units
Bioassay 750 mg/L (% Mortality)	100	%
Bioassay 250 mg/L (% Mortality)	100	%

Laboratory Notes

Sample was received within recommended holding time.

All testing was within method protocol.

LC 50 Results

SRT sample (mg/L):	23.00
Upper 95% confidence limit:	23.30
Lower 95% confidence limit:	22.70

SRT: Standard Reference Toxicant.



Calscience

Sample Analysis Summary Report

Work Order: 16-03-0698

Page 1 of 1

<u>Method</u>	<u>Extraction</u>	<u>Chemist ID</u>	<u>Instrument</u>	<u>Analytical Location</u>
CA Fish and Game	N/A	691	TANK	1


Return to Contents

Location 1: 7440 Lincoln Way, Garden Grove, CA 92841

Glossary of Terms and Qualifiers

Work Order: 16-03-0698

Page 1 of 1

<u>Qualifiers</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.



OFFICE OF THE DISTRICT ATTORNEY
YOLO COUNTY

301 2nd Street
Woodland, California 95695
Telephone: (530) 666-8424 Fax: (530) 666-8423

Please send results to:
Name: Investigator Heidi D'Agostino
Email: heidi.dagostino@yolocounty.org
Fax: 530-666-8185

16-03-0698

Testing Facility
Facility name: Eurofins Calscience Environmental Laboratories, Inc.
Facility address: 7440 Lincoln Way
Garden Grove, CA 92841-1427
Facility contact: Don Burley, Project Manager

CHAIN OF CUSTODY RECORD

Table with columns: L1 Sample Number, Description, Manufacturer, UPC, Quantity, Main Ingredient / Or Usage / NOTES, Date sampled, Time sampled, Method of sampling: Composite (C) Grab (G), Size of sample container (include units), Type of sample container: Plastic (P), Cardboard/box (C), Evidence tape: Yes (Y) No (N), Transported in iced cooler: Yes (Y) No (N), 96-hour fish bioassay.

NOTE: All Samples were taken at 301 2nd St. Woodland, CA 95695

Relinquished by: Rachel Hunter Legal Secretary 3/7/16 11:00am
Received by: [Signature] Lab Tech 3/9/16 1555

0698

FROM: (530) 666-8361
Rachel Hunter
YCDA CFEPD
301 Second St

SHIP DATE: 07MAR16
ACTWGT: 28.00 LB
CAD: 107912867/INET3730

Woodland CA 95695
US

BILL SENDER

TO Don Burley
Eurofins Calscience Inc
7440 Lincoln Way

GARDEN GROVE CA 92841
(714) 895-5494

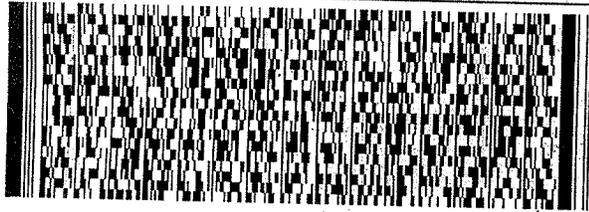
REF: RWATT

(US)

540.11/CF34727F

INV
PO:

DEPT:



FedEx
Ground



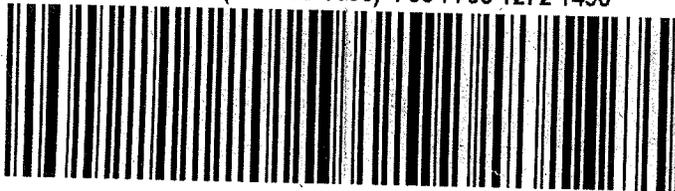
J161016020501uv

FedEx Ship Manager - Print Your Label(s)

TRK# 7758 1272 1490

92841

9622 0019 0 (000 180 1603) 4 00 7758 1272 1490



3/7/2016

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SAMPLE RECEIPT CHECKLIST

BOX COOLER 1 OF 1 PS 3/9/16 DATE: 03/09/2016

CLIENT: Yolo County

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC4B (CF: +0.3°C); Temperature (w/o CF): 21.5°C (w/ CF): 21.8°C; [] Blank [x] Sample

[x] Sample(s) outside temperature criteria (PM/APM contacted by: 836)

[] Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

[] Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: [] Air [] Filter

Checked by: 836

CUSTODY SEAL:

Cooler [] Present and Intact [] Present but Not Intact [x] Not Present [] N/A

Checked by: 836

Sample(s) [] Present and Intact [] Present but Not Intact [x] Not Present [] N/A

Checked by: 836

SAMPLE CONDITION:

Table with columns: Yes, No, N/A. Rows include Chain-of-Custody (COC) document(s) received with samples, COC document(s) received complete, Sampler's name indicated on COC, Sample container label(s) consistent with COC, Sample container(s) intact and in good condition, Proper containers for analyses requested, Sufficient volume/mass for analyses requested, Samples received within holding time, Aqueous samples for certain analyses received within 15-minute holding time, Proper preservation chemical(s) noted on COC and/or sample container, Container(s) for certain analysis free of headspace, Tedlar™ bag(s) free of condensation.

CONTAINER TYPE:

(Trip Blank Lot Number: _____)

Aqueous: [] VOA [] VOA h [] VOAna2 [] 100PJ [] 100PJna2 [] 125AGB [] 125AGBh [] 125AGBp [] 125PB [] 125PBz nna [] 250AGB [] 250CGB [] 250CGBs [] 250PB [] 250PBn [] 500AGB [] 500AGJ [] 500AGJs [] 500PB [] 1AGB [] 1AGBna2 [] 1AGBs [] 1PB [] 1PBna [] [] [] [] []

Solid: [] 4ozCGJ [] 8ozCGJ [] 16ozCGJ [] Sleeve () [] EnCores® () [] TerraCores® () []

Air: [] Tedlar™ [] Canister [] Sorbent Tube [] PUF [] Other Matrix (Product): [x] Various []

Container: A = Amber, B = Bottle, C = Clear, E = Envelope, G = Glass, J = Jar, P = Plastic, and Z = Ziploc/Resealable Bag

Preservative: b = buffered, f = filtered, h = HCl, n = HNO3, na = NaOH, na2 = Na2S2O3, p = H3PO4,

Labeled/Checked by: 836

s = H2SO4, u = ultra-pure, z nna = Zn(CH3CO2)2 + NaOH

Reviewed by: 679