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Supplemental Report 1

Additional requested analyses are reported as a stand-alone report.

# WORK ORDER NUMBER: 15-06-0704

*The difference is service*

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 07/08/2015 by:
Danielle Gonsman
Project Manager

ResultLink

Email your PM

Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

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Client Project Name: Bioassay Testing
Work Order Number: 15-06-0704


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# Work Order Narrative

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**Condition Upon Receipt:**

Samples were received under Chain-of-Custody (COC) on 06/09/15. They were assigned to Work Order 15-06-0704.

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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# Analytical Report

| | | | |
|---|---|---|---|
| Yolo County District Attorney's Office | | Date Received: | 06/09/15 |
| 301 Second Street | | Work Order: | 15-06-0704 |
| Woodland, CA 95695-3415 | | Preparation: | N/A |
| | | Method: | CA Fish and Game |
| Project: Bioassay Testing | | | Page 1 of 3 |

| | | | | | |
|---|---|---|---|---|---|
| Test Species: | Fathead Minnow (Pimephales Promelas) | Mean Length: | 43 mm | Mean Weight: | 0.47 g |
| Sample Collected: | 06/05/15 15:00:00 | Sample Received: | 06/09/15 12:00:00 | | |
| Test Start: | 06/27/15 13:00:00 | Test End: | 07/01/15 13:00:00 | | |

**Initial Water Quality Parameters**

| | | | |
|---|---|---|---|
| Residual Chlorine: | < 0.01 mg/L | Temperature: | 19.8 °C |
| pH: | 7.8 units | Conductivity: | 910 umhos/cm |
| Dissolved Oxygen (D.O.): | 7.19 mg/L | Alkanlinity: | 196 mg/L |
| Hardness: | 42 mg/L | Ammonia: | 0mg/L |

**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 |
|---|---|---|---|---|---|---|
| **266B** | **15-06-0704-1** | **06/05/15** | **Other** | **06/27/15** | **07/01/15 13:00:00** | |

| Parameter | Result | Units |
|---|---|---|
| Bioassay Definitive LC50 | 479 | mg/L |

**Laboratory Notes**

Sample was received within recommended holding time.

All testing was within method protocol.

**LC 50 Results**

| | | | |
|---|---|---|---|
| SRT sample (mg/L): | 23.30 | Sample (mg/L): | 479.0 |
| Upper 95% confidence limit: | 24.70 | Upper 95% confidence limit: | 489.0 |
| Lower 95% confidence limit: | 21.80 | Lower 95% confidence limit: | 470.0 |

SRT: Standard Reference Toxicant.



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# Analytical Report

| | | | |
|---|---|---|---|
| Yolo County District Attorney's Office | | Date Received: | 06/09/15 |
| 301 Second Street | | Work Order: | 15-06-0704 |
| Woodland, CA 95695-3415 | | Preparation: | N/A |
| | | Method: | CA Fish and Game |
| Project: Bioassay Testing | | | Page 2 of 3 |

| | | | | | |
|---|---|---|---|---|---|
| Test Species: | Fathead Minnow (Pimephales Promelas) | Mean Length: | 43 mm | Mean Weight: | 0.47 g |
| Sample Collected: | 06/05/15 15:00:00 | Sample Received: | 06/09/15 12:00:00 | | |
| Test Start: | 06/27/15 13:00:00 | Test End: | 07/01/15 13:00:00 | | |

**Initial Water Quality Parameters**

| | | | |
|---|---|---|---|
| Residual Chlorine: | < 0.01 mg/L | Temperature: | 19.8 °C |
| pH: | 7.82 units | Conductivity: | 910 umhos/cm |
| Dissolved Oxygen (D.O.): | 7.2 mg/L | Alkanlinity: | 196 mg/L |
| Hardness: | 42 mg/L | Ammonia: | 0mg/L |

**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 |
|---|---|---|---|---|---|---|
| **269B** | **15-06-0704-4** | **06/05/15** | **Other** | **06/27/15** | **07/01/15 13:00:00** | |

| Parameter | Result | Units |
|---|---|---|
| Bioassay Definitive LC50 | 38.1 | mg/L |

**Laboratory Notes**

Sample was received within recommended holding time.

All testing was within method protocol.

**LC 50 Results**

| | | | |
|---|---|---|---|
| SRT sample (mg/L): | 23.30 | Sample (mg/L): | 38.10 |
| Upper 95% confidence limit: | 24.70 | Upper 95% confidence limit: | 39.00 |
| Lower 95% confidence limit: | 21.80 | Lower 95% confidence limit: | 37.20 |

SRT: Standard Reference Toxicant.



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# Analytical Report

| | | | |
|---|---|---|---|
| Yolo County District Attorney's Office | | Date Received: | 06/09/15 |
| 301 Second Street | | Work Order: | 15-06-0704 |
| Woodland, CA 95695-3415 | | Preparation: | N/A |
| | | Method: | CA Fish and Game |
| Project: Bioassay Testing | | | Page 3 of 3 |

| | | | | | |
|---|---|---|---|---|---|
| Test Species: | Fathead Minnow (Pimephales Promelas) | Mean Length: | 43 mm | Mean Weight: | 0.47 g |
| Sample Collected: | 06/05/15 15:00:00 | Sample Received: | 06/09/15 12:00:00 | | |
| Test Start: | 06/27/15 13:00:00 | Test End: | 07/01/15 13:00:00 | | |

**Initial Water Quality Parameters**

| | | | |
|---|---|---|---|
| Residual Chlorine: | < 0.01 mg/L | Temperature: | 19.8 °C |
| pH: | 7.81 units | Conductivity: | 910 umhos/cm |
| Dissolved Oxygen (D.O.): | 7.21 mg/L | Alkanlinity: | 196 mg/L |
| Hardness: | 42 mg/L | Ammonia: | 0mg/L |

**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 |
|---|---|---|---|---|---|---|
| **270B** | **15-06-0704-5** | **06/05/15** | **Other** | **06/27/15** | **07/01/15 13:00:00** | |

| Parameter | Result | Units |
|---|---|---|
| Bioassay Definitive LC50 | 34.7 | mg/L |

**Laboratory Notes**

Sample was received within recommended holding time.

All testing was within method protocol.

**LC 50 Results**

| | | | |
|---|---|---|---|
| SRT sample (mg/L): | 23.30 | Sample (mg/L): | 34.70 |
| Upper 95% confidence limit: | 24.70 | Upper 95% confidence limit: | 37.70 |
| Lower 95% confidence limit: | 21.80 | Lower 95% confidence limit: | 31.60 |

SRT: Standard Reference Toxicant.



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# Glossary of Terms and Qualifiers

Work Order: 15-06-0704



| Qualifiers | Definition |
|---|---|
| * | 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. |

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# 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: 530-666-8423

**15-06-0704**

Testing Facility
Facility name: eurofins
Calscience Environmental Laboratories, Inc.
Facility address: 7440 Lincoln Way
Garden Grove, CA 92841-1427
Facility contact: Danielle Gonsman, Project Manager

## CHAIN OF CUSTODY RECORD

| L2 Sample Number | Description | Manufacturer | UPC | Quantity | 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: Plastic (P), Cardboard/box (C) | Evidence tape: Yes (Y) No (N) | Transported in iced cooler: Yes (Y) No (N) | Required analysis: 96-hour fish bioassay |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 266B | L'oreal Sleek It Iron Straight Heatspray, 5.7 fl oz | L'oreal USA Inc | 071249274699 | 1 | liquid | 6/5/2015 | 3:00 PM | n/a | 200g (min) | P | N | N | X |
| 267B | L'oreal Txt It Tousle Waves Spray, 6.8 fl oz | L'oreal USA Inc | 071249276860 | 1 | liquid | 6/5/2015 | 3:00 PM | n/a | 200g (min) | P | N | N | X |
| 268B | L'oreal Studio Line Melting Gel, 6.8 fl oz | L'oreal USA Inc | 071249119341 | 1 | liquid | 6/5/2015 | 3:00 PM | n/a | 200g (min) | P | N | N | X |
| 269B | L'oreal Color Vibrancy Instant Shock Treatment, 6.8 fl oz | L'oreal USA Inc | 071249265864 | 1 | liquid | 6/5/2015 | 3:00 PM | n/a | 200g (min) | P | N | N | X |
| 270B | L'oreal Smooth Intense Polishing Shampoo, 12.6 fl oz | L'oreal USA Inc | 071249239971 | 1 | liquid | 6/5/2015 | 3:00 PM | n/a | 200g (min) | P | N | N | X |
| 271B | L'oreal Smooth Intense Polishing Conditioner, 12.6 fl oz | L'oreal USA Inc | 071249239988 | 1 | liquid | 6/5/2015 | 3:00 PM | n/a | 200g (min) | P | N | N | X |
| 272B | CVS Complete Moisture Lotion, Soothing Oat Extract, 24.5 fl oz | CVS Pharmacy Inc | 050428088326 | 1 | liquid | 6/5/2015 | 3:00 PM | n/a | 200g (min) | P | N | N | X |
| | | | | | | | | n/a | 200g (min) | | N | N | X |
| | | | | | | | | n/a | 200g (min) | | N | N | X |
| | | | | | | | | n/a | 200g (min) | | N | N | X |
| | | | | | | | | n/a | 200g (min) | | N | N | X |
| | | | | | | | | n/a | 200g (min) | | N | N | X |
| | | | | | | | | n/a | 200g (min) | | N | N | X |
| | | | | | | | | n/a | 200g (min) | | N | N | X |
| | | | | | | | | n/a | 200g (min) | | N | N | X |
| | | | | | | | | n/a | 200g (min) | | N | N | X |
| | | | | | | | | n/a | 200g (min) | | N | N | X |
| | | | | | | | | n/a | 200g (min) | | N | N | X |
| | | | | | | | | n/a | 200g (min) | | N | N | X |

**NOTE:** All Samples were taken at 301 2nd Street, Woodland, CA 95695

| | Name | Title | Date | Time | Remarks |
|---|---|---|---|---|---|
| Relinquished by: | Rachel Hunter | Legal Secretary | 6/5/15 | 3:00 pm | |
| Received by: | [illegible] | SC Tech | 6/9/15 | 1200 | |
| Relinquished by: | | | | | |
| Received by: | | | | | |
| Relinquished by: | | | | | |
| Received by: | | | | | |

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0704

YOLO COUNTY D.A.
(530) 666-8180
THE UPS STORE #0533
STE A
1296 E GIBSON RD
WOODLAND CA 95776-6378

7 LBS 1 OF 1
SHP WT: 7 LBS
DATE: 05 JUN 2015

SHIP ATT DANIELLE GONSMAN
TO: CALSCIENCE ENVIRONMENTAL LAB
7440 LINCOLN WAY

GARDEN GROVE CA 92841-1427

CA 927 9-09

UPS GROUND
TRACKING #: 1Z 1Y9 57W 03 9933 5775

BILLING: P/P

REF #1: 060515MD
REF #2: 533

ISH 13.00N ZZP 450 63.5U 04/2015

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WORK ORDER NUMBER: 15-06- 0704

# SAMPLE RECEIPT CHECKLIST

~~COOLER~~ BOX 1 OF 1

CLIENT: Yolo Co. Office of Dist. Attorney

DATE: 06 / 09 / 2015

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

Thermometer ID: SC2 (CF:-0.3°C); Temperature (w/o CF): 21.3 °C (w/ CF): 21.0 °C; ☐ Blank ☑ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ 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: 15

**CUSTODY SEAL:**

| | | | | | |
|---|---|---|---|---|---|
| Cooler | ☐ Present and Intact | ☐ Present but Not Intact | ☑ Not Present | ☐ N/A | Checked by: 15 |
| Sample(s) | ☐ Present and Intact | ☐ Present but Not Intact | ☑ Not Present | ☐ N/A | Checked by: 8/6 |

**SAMPLE CONDITION:**

| | Yes | No | N/A |
|---|---|---|---|
| Chain-of-Custody (COC) document(s) received with samples | ☑ | ☐ | ☐ |
| COC document(s) received complete | ☑ | ☐ | ☐ |
| ☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers | | | |
| ☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished time | | | |
| 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 | | | |
| ☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen | ☐ | ☐ | ☑ |
| Proper preservation chemical(s) noted on COC and/or sample container | ☐ | ☐ | ☑ |
| Unpreserved aqueous sample(s) received for certain analyses | | | |
| ☐ Volatile Organics ☐ Total Metals ☐ Dissolved Metals | | | |
| Container(s) for certain analysis free of headspace | ☐ | ☐ | ☑ |
| ☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500) | | | |
| ☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach) | | | |
| Tedlar™ bag(s) free of condensation | ☐ | ☐ | ☑ |

**CONTAINER TYPE:** (Trip Blank Lot Number: _____)

**Aqueous:** ☐ VOA ☐ VOA**h** ☐ VOA**na$_2$** ☐ 100PJ ☐ 100PJ**na$_2$** ☐ 125AGB ☐ 125AGB**h** ☐ 125AGB**p** ☐ 125PB

☐ 125PB**znna** ☐ 250AGB ☐ 250CGB ☐ 250CGB**s** ☐ 250PB ☐ 250PB**n** ☐ 500AGB ☐ 500AGJ ☐ 500AGJ**s**

☐ 500PB ☐ 1AGB ☐ 1AGB**na$_2$** ☐ 1AGB**s** ☐ 1PB ☐ 1PB**na** ☐ _____ ☐ _____ ☐ _____ ☐ _____

**Solid:** ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (_____) ☐ EnCores® (_____) ☐ TerraCores® (_____) ☑ 200g PB

**Air:** ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ **Other Matrix** (_____): ☐ _____ ☐ _____

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** = $HNO_3$, **na** = NaOH, **na$_2$** = $Na_2S_2O_3$, **p** = $H_3PO_4$, Labeled/Checked by: 8/6

**s** = $H_2SO_4$, **u** = ultra-pure, **znna** = $Zn(CH_3CO_2)_2$ + NaOH Reviewed by: 681



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